Doc #70

"LarryEvans@bcpeabody.com"
<LarryEvans@bcpeabody.com>
12/03/2010 09:32 AM
Please respond to LarryEvans@bcpeabody.com

To <Marelisa_Rivera@fws.gov>, <Rafael_Gonzalez@fws.gov>, <edgar.w.garcia@usace.army.mil>
cc <Derek.Hengstenberg@tetratech.com>, <Osvaldo.Collazo@usace.army.mil>, <andrewgoetz@bcpeabody.com>,
bcc
Subject Notes from call with USFWS

History: This message has been replied to.

ALCON -

Attached are notes from our call yesterday with Rafael Gonzalez, USFWS. The principal purpose of the call was for Derek Hengstenberg and Rafael to discuss Derek's proposed survey protocol regarding Hawks of interest to the USFWS along the proposed Via Verde corridor.

Next week, Mr. Hengstenberg will be in Puerto Rico to participate in a flyover of the corridor route (on Tuesday) and to meet with Marelisa Rivera, USFWS in Boqueron (Wednesday) ... time for the meeting yet to be determined. Derek will submit a final draft of the survey plan/protocol to USFWS by Dec 20 for review and comment/acceptance. Rafael agreed he can provide final comments and acceptance by Jan 3, 2011. Field work for the survey will occur on, or before, January 10, 2011.

A copy of the notes has been provided to PREPA by Danny Pagan.

Lawrence C. Evans
503.781.7930 (cell)
larryevans@bcpeabody.com

iyutka53@aol.com NOTES FROM CONFERENCE CALL WITH USFWS.doc

NOTES FROM CONFERENCE CALL WITH USFWS
2 DECEMBER 2010

Call scheduled for 11:00AM – Puerto Rico

Callers included:
Rafael Gonzalez, USFWS
Derek Hengstenberg
Ken Caraccia, BCPeabody
Lawrence Evans, BCPeabody

Call opened by **L. Evans (LE)** – goals for this call were:

1) Discuss proposed procedures Derek will use to survey for hawks along proposed pipeline route
2) Set tentative timeline to submit proposal to USFWS, have review conducted and begin fieldwork
3) Inform Rafael of next week's schedule re: Derek's visit to Puerto Rico

After the opening remarks, the discussion was turned over to Derek and Rafael ....

Derek (D): He completed a desktop analysis regarding two focus areas where hawks were expected to be located. Were these the same areas USFWS was looking at?

Rafael (R): Agreed these were the same areas of interest to USFWS –
Adjuntas: important area for Sharp Shinned Hawk
Coastal North Karst Hills (Manati), Central Mountain Volcanic Region (Adjuntas) and Central Karst Region: important area(s) for Broad Wing Hawk

These areas are the same as Focal Area 1 and Area 2 in Derek's initial desktop analysis.

D: When he participates in flyover next week (Dec 7) he will focus on these areas. Derek proposes to undertake a "presence/absence" survey later in January 2011. January/February is the best time of the year due to birds' courtship. Derek said he will propose to identify X points within a period in January. The specific location and number of these points will be identified during the flight Tuesday. The survey proposal will be vetted with USFWS before field work begins. The survey will spot movements and territories and, ultimately, a GIS map layer will be developed.

Ken Caraccia (KC): Can Derek also develop a Habitat Quality Index (HQI) within the two focal areas?

R: A HQI would be a good tool and welcomed by USFWS. Derek's plan will address USFWS' three interests –

1) identify amount of habitat project will potentially impact,
2) develop breeding territory shape files and,
3) address presence/absence question

D: Confirmed his work will address the three USFWS actions (above). However, Derek pointed out he may not be able to identify specific nest sites (but questions the necessity

of this information for this project). Derek asked a general question – how best to model and identify specific numbers?

KC: Could use Derek's previous studies and incorporate the new data from the anuary survey.

D: The Sharp Shinned Hawk will be a challenge since no previous data exists.

R: USFWS understands that only the best information available can be used. If the pipeline will cross through habitat for either bird, then a simple R)W X length of crossing equation will be used to identify initial potential habitat impact. Again, only the best information available is the bar to be used. Rafael agreed Derek's proposed methodology sounded good. He asked when Derek could submit the draft proposal with the number of points, point locations and number of visits to USFWS for review?

D: Will provide Marelisa a tentative answer on number of points and locations after the flyover next week when we meet with USFWS on Dec 8. Derek felt he could submit a final draft of the survey proposal to USFWS for review by Dec 20. He wanted to have USFWS review and acceptance in time to begin fieldwork on or before January 10 2011.

R: He would like to participate in field visits in January 2011.

D: No problem, he will coordinate his schedule closely with Rafael and USFWS.

D: Expects he and his team will be using 10X40 binoculars and will also have spotting scopes and range finders, as well as GPS units. He hopes to hire local experts in Puerto Rico who he has trained in the past.

LE: In summary – does USFWS see any problems completing a review of the draft proposal Derek will submit on or before Dec 20 and having a final decision on accepting the protocol NLT Jan 3?

R: No, does not see any problem with reviewing proposal and having final agreement by January 3 (or sooner depending on when final draft is submitted by Derek).

LE: OK – then proposed timeline will be …

Dec 7 - flyover of proposed pipeline route
Dec 8 - meeting with USFWS (where number of points and locations may be provided)
NLT Dec 20 - final draft of survey protocol provided to USFWS for review
NLT Jan 3 - USFWS to give acceptance of protocol so field work can begin
NLT Jan 10 – field work for survey starts

LE: Any last alibis? None …. Call ended at 12:00 noon.

There are three constants in life...change, choice and principles.
Stephen R. Covey
Inactive hide details for "Ramos-Santiago, Luis J MAJ MIL USA MEDCOM EAMC" <santiago.luis.ramos@us.army.mil>"Ramos-Santiago, Luis J MAJ MIL USA MEDCOM EAMC" <santiago.luis.ramos@us.army.mil>

Doc # 71

"Ramos-Santiago, Luis J MAJ MIL USA MEDCOM EAMC" <santiago.luis.ramos@us.army.mil>

12/06/2010 12:01 PM

To

<marelisa_rivera@fws.gov>

cc

Subject

Contactos Cuerpo de Ingenieros (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Buenos dias,
Agradeceria me enviaras los contactos del Cuerpo de Ingenieros Para emitir nuestros comentarios referente al Gasoducto, Gracias.

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Doc # 72

-----Original Message-----
From: Marelisa_Rivera@fws.gov [mailto:Marelisa_Rivera@fws.gov]
Sent: Monday, December 06, 2010 12:38 PM
To: Ramos-Santiago, Luis J MAJ MIL USA MEDCOM EAMC
Subject: Re: Contactos Cuerpo de Ingenieros (UNCLASSIFIED)

Los contactos son:

Sindulfo Castillo - sindulfo.castillo@usace.army.mil

Edgar Garcia - edgar.w.garcia@usace.army.mil

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office P.O. Box 491 Boquerón, Puerto Rico 00622
(787) 851-7297 x 206 (direct)
(787) 851-7440 (fax)
(787) 510-5207 (mobile)
marelisa_rivera@fws.gov

Doc #73

From: Marelisa_Rivera@fws.gov
Sent: Monday, December 06, 2010 1:35 PM
To: LarryEvans@bcpeabody.com
Subject: Re: Notes from call with USFWS

Larry:

Thank you for the information. Be aware that the CFO will continue providing support and comments, but we cannot commit to provide responses to documents we have not see. Once we receive the information, we will evaluate it and then would be able to provide a possible response date. During the holidays I will be in AL and most of the staff will not be available. Although Rafael returns from travel, official comments need to be reviewed and approved by Edwin or me. January 3, 2011 is my first day in the office after two weeks off. Thus, we will not be able to provide a response / acceptance by that day.

Regarding Derek's visit, we would be available December 8th, 2010 in the afternoon.

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622
(787) 851-7297 x 206 (direct)
(787) 851-7440 (fax)
(787) 510-5207 (mobile)
marelisa_rivera@fws.gov

There are three constants in life...change, choice and principles.
Stephen R. Covey

src="cid:2__=8BBBFD62DFF6A23D8f9e8a93df938690@fws.gov" width=16

Doc # 74

"Hengstenberg, Derek" <Derek.Hengstenberg@tetratech.com>
12/06/2010 03:15 PM

To "Rafael_Gonzalez@fws.gov" <Rafael_Gonzalez@fws.gov>
cc
bcc
Subject RE: My e-mail

Here is my contact info.

-Derek

Derek Hengstenberg | Certified Wildlife Biologist

Main: 207.879.9496 | Cell: 908.616.0436

derek.hengstenberg@tetratech.com

Tetra Tech | Ecological Services

451 Presumpscot Street | Portland, Maine 04103 | www.tetratech.com

P Save a tree...Print only when necessary

PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: Rafael_Gonzalez@fws.gov [Rafael_Gonzalez@fws.gov]
Sent: Thursday, December 02, 2010 8:03 AM
To: Hengstenberg, Derek
Subject: My e-mail

Doc #61

Derek this is my e-mail.

Rafael Gonzalez
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622

(787) 851-7297 x 214 (voice)
(787) 851-7440 (fax)
rafael_gonzalez@fws.gov

Doc # 75

From: LarryEvans@bcpeabody.com [mailto:LarryEvans@bcpeabody.com]
Sent: Monday, December 06, 2010 4:21 PM
To: Marelisa_Rivera@fws.gov
Cc: daniel_paganrosa@yahoo.com; andrewgoetz@bcpeabody.com; Hengstenberg, Derek; drwetlands@hotmail.com ; edgar.w.garcia@usace.army.mil; johannawillis@bcpeabody.com; KenCaraccia@bcpeabody.com; Osvaldo.Collazo@usace.army.mil; Rafael_Gonzalez@fws.gov
Subject: Re: Notes from call with USFWS

Good afternoon Marelisa -

Thank you for the email and the information about your work schedule in the coming weeks. We are very appreciative of the opportunity you will have to meet with Derek this Wednesday while he is visiting the island and undertaking a preliminary look at the pipeline route.

We also understand your caution about not being able to commit to an absolute deadline to review the survey protocol Derek will provide to Rafael on December 20. It has always been our understanding Rafael was giving us his personal thought on his own capability to review the draft document Derek will submit. I'm not sure if the survey protocol would be considered an official document that requires formal or official agency approval but in the spirit of cooperation we look forward to the review Rafael will provide and any additional review you or Edwin might be able to give as well. Any input USFWS can provide upon your return would be invaluable as we move forward to collect all possible data in the field to meet your interests and provide the most complete information possible.

I will let Derek and Danny know of your confirmation for a meeting Wednesday afternoon. It is our understanding that, at this meeting, Derek may be able to provide you with more specific information on the number of points and their location in the field following his flyover of the pipeline corridor tomorrow.

Thank you again and best regards. If I don't see you or speak with you before the holidays, Feliz Navidad and Prospero Año Nuevo!

Lawrence C. Evans
503.781.7930 (cell)
larryevans@bcpeabody.com
iyutka53@aol.com

Doc # 76

From: "LarryEvans@bcpeabody.com" [LarryEvans@bcpeabody.com]
Sent: 12/06/2010 04:50 PM MST
To: Marelisa Rivera
Cc: <andrewgoetz@bcpeabody.com>; <daniel_paganrosa@yahoo.com>; <Derek.Hengstenberg@tetratech.com>; <edgar.w.garcia@usace.army.mil>; <johannawillis@bcpeabody.com>; <KenCaraccia@bcpeabody.com>; <Osvaldo.Collazo@usace.army.mil>; Rafael Gonzalez
Subject: Meeting with USFWS

Hi again Marelisa -

I spoke with Danny Pagan earlier this evening and he asked if the meeting time for Wednesday at your office in Boqueron could please be scheduled for 1:30 PM there.

Derek Hengstenberg, Mr. Pagan and Yousev Garcia will be coming over to meet with you. Dr. Axelrod will also be able to come so if Omar is available and can participate in the meeting we could discuss not only the hawks but also the plant issues, etc. Again, a great opportunity to continue to move forward to collect the information USFWS has asked be included in the surveys and we are very appreciative of your support and ability to set aside the time that afternoon.

If there is a phone number to call in on, we would be able to listen in via telephone from Florida as well.

Please let me know if this time is convenient for you and any members of your team who would benefit from participating. You can reply by email or call me at any time on my cell phone - 503.781.7930. Once you have confirmed this time, I will coordinate with Danny and the other team members.

Thank you again for your continued support and attention to this project.

Best regards.

Lawrence C. Evans
503.781.7930 (cell)
larryevans@bcpeabody.com
iyutka53@aol.com

Doc #77

"LarryEvans@bcpeabody.com"
<LarryEvans@bcpeabody.com>
12/06/2010 05:20 PM
Please respond to LarryEvans@bcpeabody.com

To <Marelisa_Rivera@fws.gov>
cc <daniel_paganrosa@yahoo.com>, <andrewgoetz@bcpeabody.com>, <Derek.Hengstenberg@tetratech.com>,
bcc
Subject Re: Notes from call with USFWS

Good afternoon Marelisa -

Thank you for the email and the information about your work schedule in the coming weeks. We are very appreciative of the opportunity you will have to meet with Derek this Wednesday while he is visiting the island and undertaking a preliminary look at the pipeline route.

We also understand your caution about not being able to commit to an absolute deadline to review the survey protocol Derek will provide to Rafael on December 20. It has always been our understanding Rafael was giving us his personal thought on his own capability to review the draft document Derek will submit. I'm not sure if the survey protocol would be considered an official document that requires formal or official agency approval but in the spirit of cooperation we look forward to the review Rafael will provide and any additional review you or Edwin might be able to give as well. Any input USFWS can provide upon your return would be invaluable as we move forward to collect all possible data in the field to meet your interests and provide the most complete information possible.

I will let Derek and Danny know of your confirmation for a meeting Wednesday afternoon. It is our understanding that, at this meeting, Derek may be able to provide you with more specific information on the number of points and their location in the field following his flyover of the pipeline corridor tomorrow.

Thank you again and best regards. If I don't see you or speak with you before the holidays, Feliz Navidad and Prospero Año Nuevo!

Lawrence C. Evans
503.781.7930 (cell)
larryevans@bcpeabody.com
iyutka53@aol.com

Doc #79

From: Marelisa_Rivera@fws.gov
Sent: Tuesday, December 07, 2010 4:38 AM
To: "LarryEvans" <LarryEvans@bcpeabody.com>
Subject: Re: Meeting with USFWS

130 pm is ok with me. Omar is hospitilized and would not be able to meet with dr axelrod.

Message sent from Blackberry

Doc # 80

daniel_paganrosa@yahoo.com

12/07/2010 08:07 AM

Please respond to daniel_paganrosa@yahoo.com

To Marelisa_Rivera@fws.gov, "Larry Evans" <LarryEvans@bcpeabody.com>

cc "Andrew Goetz" <andrewgoetz@bcpeabody.com>, "Derek Hengstenberg" <Derek.Hengstenberg@tetratech.com>, "edgar w garcia" <edgar.w.garcia@usace.army.mil>,

bcc

Subject Re: Meeting with USFWS

History: This message has been forwarded.

Marisela:I will coordinate with you as of a new possible date for they to meet. As you can see, PREPA is undertaking all efforts possible to address F&WLS concerns as soon as possible.See you all tomorrow.DannyThanks much

Sent via BlackBerry by AT&T

From: Marelisa_Rivera@fws.gov
Date: Tue, 7 Dec 2010 06:58:59 -0500
To: Daniel Pagan<daniel_paganrosa@yahoo.com>; Larry Evans<LarryEvans@bcpeabody.com>
Cc: Andrew Goetz<andrewgoetz@bcpeabody.com>; Derek Hengstenberg<Derek.Hengstenberg@tetratech.com>; edgar w garcia<edgar.w.garcia@usace.army.mil>; johannawillis<johannawillis@bcpeabody.com>; KenCaraccia<KenCaraccia@bcpeabody.com>; Osvaldo Collazo<Osvaldo.Collazo@usace.army.mil>; <Rafael_Gonzalez@fws.gov>; <Edwin_Muniz@fws.gov>; <Omar_Monsegur@fws.gov>
Subject: Re: Meeting with USFWS

It would be better if he can meet with Omar.

Message sent from Blackberry

Doc # 82

From: daniel_paganrosa
Sent: 12/07/2010 10:31 AM GMT
To: Marelisa Rivera; "Larry Evans" <LarryEvans@bcpeabody.com>
Cc: "Andrew Goetz" <andrewgoetz@bcpeabody.com>; "Derek Hengstenberg" <Derek.Hengstenberg@tetratech.com>; "edgar w garcia" <edgar.w.garcia@usace.army.mil>; "johannawillis" <johannawillis@bcpeabody.com>; "KenCaraccia" <KenCaraccia@bcpeabody.com>; "Osvaldo Collazo" <Osvaldo.Collazo@usace.army.mil>; Rafael Gonzalez; Edwin Muniz; Omar Monsegur
Subject: Re: Meeting with USFWS

Dear Marelisa:

Do you consider prudent to bring Dr. Axelrod to the meeting tomorrow???

Danny

Doc #81

"LarryEvans@bcpeabody.com"
<LarryEvans@bcpeabody.com>
12/07/2010 09:16 AM
Please respond to LarryEvans@bcpeabody.com

To <Marelisa_Rivera@fws.gov>
cc "andrewgoetz" <andrewgoetz@bcpeabody.com>, "Daniel Pagan" <daniel_paganrosa@yahoo.com>, "Derek Hengstenberg" <Derek.Hengstenberg@tetratech.com>,
bcc
Subject Re: Meeting with USFWS

History: This message has been replied to.

Good morning Marelisa -

I am sorry to hear about Omar and I hope it is nothing serious and he is soon back on his feet.

I see Danny has replied to your email and it appears Dr Axelrod will not be coming with him, Derek and Yousev. Thank you for the quick reply to my email from last night. I didn't see if there was a telephone number we could call in to from Florida for the 1:30PM meeting. If there is, and you could send it to me, we would be glad to listen in on the meeting and provide any support we could.

Best regards.

Lawrence C. Evans
503.781.7930 (cell)
larryevans@bcpeabody.com
iyutka53@aol.com

Doc #83

"LarryEvans@bcpeabody.com"
<LarryEvans@bcpeabody.com>
12/08/2010 11:31 AM
Please respond to LarryEvans@bcpeabody.com

To <Rafael_Gonzalez@fws.gov>
cc
bcc
Subject Re: Notes from call with USFWS

Good morning Rafael -

Is there a telephone number to call-in on for the meeting later this afternoon at 1:30PM? I would like to call and listen in on the discussion and/or provide support if necessary. I sent an earlier email to Marelisa but she may not have ssen it yet.

Thanks

Lawrence C. Evans
503.781.7930 (cell)
larryevans@bcpeabody.com
iyutka53@aol.com

Doc #78

From: Rafael_Gonzalez@fws.gov
Sent: Monday, December 06, 2010 10:17 PM
To: "LarryEvans@bcpeabody.com" <LarryEvans@bcpeabody.com>
Subject: Re: Notes from call with USFWS

Return Receipt

Your document:	Re: Notes from call with USFWS
was received by:	Rafael Gonzalez/R4/FWS/DOI
at:	12/06/2010 07:49:21 PM

DOC #84

United States Department of the Interior

FISH & WILDLIFE SERVICE
Boqueron Field Office
Carr. 301, KM 5.1, Bo. Corozo
P.O. Box 491
Boqueron, PR 00622

DEC 15 2010

Col. Alfred A. Pantano, Jr.
District Commander
Jacksonville District Corps of Engineers
701 San Marco Boulevard.
Jacksonville, FL 32207-0019

Re: SAJ 2010-02881 (IP-EWG), Via Verde Pipeline Project.

Dear Col. Pantano:

The U.S. Fish and Wildlife Service (the Service) has received a copy of the above referenced Public Notice (PN) dated November 19, 2010, for the construction of a natural gas pipeline from EcoEléctrica to the PR Electric Power Authority (PREPA) power plants on the north coast of Puerto Rico. The proposed project has been publicly named by the proponent as Via Verde. Our comments are issued in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et. seq.) and the Endangered Species Act (ESA) (16 U.S.C. 1531 et. seq. as amended).

The applicant is requesting a permit to construct an approximately 92-mile-long pipeline covering about 1,672 acres, crossing 235 rivers and covering 369 acres of jurisdictional wetlands. The Caribbean Ecological Services Field Office has been involved in providing technical assistance to PREPA and its consultants on the current proposal. We have provided preliminary comments to the Corps in October 2010, based on the information submitted with the applicant's Joint Permit Application. We also provided technical assistance to the applicant regarding appropriate methodologies to conduct surveys for listed species.

The Service supports PREPA's efforts toward reducing Puerto Rico's dependence on fossil oils and encourages the Applicant to look for alternate energy sources for Puerto Rico. In 2006, the Service issued an Incidental Take Permit to WindMar RE for take anticipated during the construction and operation of a proposed wind farm on federally-listed species. For this project, WindMar appropriately minimized possible adverse effects and developed a comprehensive mitigation plan for the affected species. In 2008, the Service consulted with the Corps on the Gasoducto del Sur project. For this last project, the Service provided guidance and technical assistance to the Applicant for 2 years to minimize possible effects of the project on the endangered Puerto Rican nightjar and avoid effects to two listed plant species. The conservation

plan for the project was formalized through a Memorandum of Agreement between the Applicant and the Puerto Rico Department of Natural and Environmental Resources. At the present time, the Service is reviewing several other energy projects in Puerto Rico.

The following comments and recommendations are based on the information provided in the PN and information we have in our files.

Purpose of the Project, Single and Complete Project, Federal Involvement and compliance with the National Environmental Policy Act (NEPA)

The public notice states that the overall proposed purpose of the project is to deliver an alternate fuel source to three existing electric power generating facilities located in Arecibo, Toa Baja and Palo Seco operated by PREPA. EcoEléctrica was the first and remains the only source of natural gas in Puerto Rico. We believe the proposal may not include all elements necessary to meet this purpose.

Based on the information in our files and recent discussions with EcoEléctrica's consultant (see Enclosure 1), it is our understanding that the only authorized source of natural gas in Puerto Rico needs to be upgraded in order to supply the additional gas needed for the proposed pipeline. In May 1996, the Federal Energy Regulatory Commission (FERC) authorized EcoEléctrica to construct, and operate a liquefied natural gas (LNG) import terminal in Peñuelas, Puerto Rico. Environmental Condition No.11 of the May 1996 Order specified that "EcoEléctrica shall commence construction on its LNG facilities within 3 years of the date of this Order, or file a motion to extend the deadline, with the specific reasons why additional time is necessary." Therefore, it appears that authorization for the construction of the second authorized storage tank and four of the six authorized vaporizers has lapsed, and for EcoEléctrica to build another LNG storage tank, or other related facilities, it must obtain prior FERC authorization.[1]

In its July 19, 2010, semiannual report[2] to FERC (see Enclosure 2), EcoEléctrica indicated that it is considering construction of the second LNG Storage tank to supply natural gas fuel to the Commonwealth for a future expansion. We note that in this report, EcoEléctrica only addresses the Terminal Modification project for delivering natural gas to Costa Sur as previously permitted by FERC. By letter dated November 15, 2010, EcoEléctrica indicated to the Service that the current modifications to their facilities are not part of PREPA's Via Verde pipeline project, and that they would need to request FERC's approval for any physical or operational modifications that might be necessary in their facilities to serve the newly proposed pipeline project.

The PN fails to discuss necessary changes to EcoEléctrica's currently authorized facilities and operations to supply natural gas to PREPA's three facilities in the north. The Service issued a Biological Opinion for the original development of the EcoEléctrica facility, and modifications

[1] FERC, Order Amending Authorization Under Section 3 of the Natural Gas Act, April 16, 2009, Footnote #3.
[2] EcoElectrica, L.P. LNG Import Terminal and Cogeneration Project Docket Number CP-95-35-000, Semi Annual Report LNG Operating Report, July 19, 2010.

to this facility would require a reinitiation of consultation under Section 7 of the Endangered Species Act, which we discuss latter in this letter.

Because the Via Verde pipeline would require additional storage and modifications to the EcoEléctrica terminal, these projects are interrelated and should be viewed as one single and complete project. Should EcoEléctrica fail to obtain FERC authorization for the physical and/or operational modifications that might be necessary to serve the pipeline, the Corps would be permitting a fragment of a project that could not fulfill the stated purpose and need and would have irreversible resource impacts.

In addition, this project should be evaluated as a major construction activity since it would affect about 1,672 acres of land, including about 369 acres of wetlands, several Commonwealth Forests or Reserves, forested mountain and karst areas, and known habitat for more than 30 federally listed threatened or endangered species. Only when the project enters the San Juan metropolitan area do the environmental impacts drop significantly. We believe that the Corps has sufficient control and responsibility to warrant Federal Review over the entire project from the EcoEléctrica terminal to the end of the pipeline, and therefore a Federal EIS for this project is warranted.

Alternatives Analysis

The applicant's alternative analysis does not include PREPA's original plan to build a new natural gas combined cycle power plant close to the existing Costa Sur facility, and to retro fit both Costa Sur and Aguirre power plants to use natural gas. This was the applicant's preferred alternative in the past and now is not mentioned in the applicant's alternatives analysis. We believe that this alternative is reasonable and practicable, as it is already permitted, would have lower environmental impacts, and would be more secure and easier to maintain than the currently proposed gas pipeline.

Habitat Impacts

The project will cut through the southern karst region, central mountains, and northern karst region of Puerto Rico. Many portions of the alignment are currently isolated and not subject to developmental pressures. These include the Rio Abajo Commonwealth forest and the Vega Commonwealth forest, the DNER designated north karst Priority Conservation Area (PCA), the Caño Tiburones PCA, and the San Pedro Swamp Critical Wildlife Area.

The construction right of way (ROW) width ranges from 100 to 150 feet, and more if needed, with a final permanent ROW of 50 feet. The "Declaración de Impacto Ambiental Preliminar"(DIA-P) states that all vegetation within the construction ROW will be cut and that the permanent 50 foot ROW will be maintained as a no-root zone with no woody vegetation. The DIA-P does not propose mitigation for impacts to previously undisturbed forested areas in this long corridor that will create an avenue for invasive and noxious species to enter previously

isolated areas of wildlife habitat. The DIA-P also does not describe methods for maintaining a 92-mile, 50-foot-wide no-root zone corridor through karst and mountainous topography.

The Service is concerned that the clearing of all vegetation in the 150 foot ROW as stated in the DIA-P, in areas of highly erodible or unstable lands would cause excessive erosion that could impair water quality and channel stability in streams and rivers along the route. Trenching is likely not feasible in many steep areas within the corridor, yet DIA-P includes no discussion of how these areas will be traversed.

Since the construction ROW varies in width, we believe that all project impacts should be based on the worst-case scenario of a 150-foot wide ROW. Generalized drawings as seen on sheet 2 of the PN do not clearly represent what is written in the DIA-P. The proposed permanent 50 foot ROW and its associated no root zone will require either mechanical or chemical maintenance, which implies construction of a permanent maintenance road with associated stream crossings along most of, if not the entire, ROW length. This is not addressed anywhere in the documents. Utilizing the full estimate of ROW impacts should also help account for staging areas along the project route.

The Service is concerned about the possible impacts of directional drilling in the karst portions of the pipeline corridor. Voids in the rock matrix may lead directly to the aquifer, and a "frac-out" of drilling muds in this type of terrain and geology could contaminate underground waters and adversely affect human health, unique subterranean fauna, and commerce.

Endangered Species

The Service concurs with the Corps' determination that the proposed project may affect the following 32 listed species: Puerto Rican nightjar (*Caprimulgus noctitherus*); Puerto Rican parrot (*Amazona vittatta vittatta*); Puerto Rican crested toad (*Peltophryne lemur)*; Puerto Rican boa (*Epicrates inornatus)*; Puerto Rican sharp-shinned hawk (*Accipiter striatus venator);* Puerto Rican broad-winged hawk (*Buteo platypterus brunnescens*); Puerto Rican plain pigeon (Patagioenas inornata wetmorei); and the listed plant species *Auerodendron pauciflorum*, palo de Ramón (*Banara vanderbiltii*), diablito de tres cuernos (*Buxus valhii*), *Cordia bellonis, Daphnopsis helleriana,* palo de rosa (*Ottoschulzia rhodoxylon*), *Myrcia paganii,* chupacallos *(Pleodendron macranthum*), *Shoepfia arenaria,* erubia (*Solanum drymophilum), Tectarea estremerana, Thelypteris inabonensis, Thelypteris verecunda, Thelypteris yaucoensis, Chamaecrista glandulosa,* cobana negra *(Stahlia monosperma), Polystichum calderoense,* nogal *(Juglans jamaicensis*), *Mitracarpus maxwelliae, Mitracarpus polycladus, Cordia rupicola, Catesbaea melanocarpa, Eugenia woodburyana,* bariaco *(Trichilia triacantha*), and St. Thomas prickly ash (*Zanthoxylun thomasianum).* No designated critical habitat is present along the proposed route for the project. The Service also continues to recommend surveys of the petitioned species coqui llanero (*Eleutherodactylus juanariveroi*) where the project crosses wetlands in Toa Baja.

In addition to the species listed above, the Corps also needs to make an effect determination with regards to the endangered Antillean manatee (*Trichechus manatus*). As we mentioned earlier in this letter, when EcoEléctrica was originally authorized, formal consultation under Section 7 of the ESA was concluded for the species. Since that time, the Environmental Baseline has changed; therefore, the Corps' biological assessment should also include an analysis of any necessary changes to current facilities and/or operation of the EcoEléctrica LNG terminal needed for the Via Verde project.

On October 18, 2010, the Service provided technical assistance to the Corps regarding the information included in the draft Biological Evaluation for the project. We concluded that the biological evaluation provided by the applicant did not rely upon survey methodologies that maximized detection probabilities for federally-listed species and did not include site-specific habitat characterization. Therefore, the Service could not concur with the determinations of the biological evaluation. We recommended that surveys for listed species be appropriately designed and conducted. We also recommended the development of a Biological Assessment, since we considered the project a major construction activity under NEPA. On November 10, 2010, December 2, 2010 and December 8, 2010, the Service provided additional technical assistance to the project applicant regarding appropriate survey methods for listed species along the proposed route.

At the present time, we continue to recommend that appropriate site-specific surveys be conducted along the proposed route to determine presence/absence of listed species within the project area and the amount of suitable habitat. Survey methodologies should be developed and surveys conducted by experienced and qualified personnel, and in close coordination with the Service. The Biological Assessment should include the results of such surveys and should be part of the Federal EIS. The Biological Assessment should consider the behaviors to be affected by the project, and proposed site-specific measures to avoid or minimize possible adverse effects.

Federal regulations at 50 CFR 402.12 provide guidance regarding Biological Assessments. A biological assessment shall evaluate the potential effects of the action on listed species and proposed species and designated and proposed critical habitat and determine whether any such species or habitat are likely to be adversely affected by the action and is used in determining whether formal consultation or a conference is necessary. The Biological Assessment shall be completed before any contract for construction is let, and before construction is begun (50 CFR 402.12(b)(2). The regulation also describes the information should be considered for inclusion in the Biological Assessment (see 50 CFR 402.12(f). The regulation recommends the following:

(1) The results of an on-site inspection of the area affected by the action to determine if listed or proposed species are present or occur seasonally.
(2) The views of recognized experts on the species at issue.
(3) A review of the literature and other information.
(4) An analysis of the effects of the action on the species and habitat, including consideration of cumulative effects, and the results of any related studies

(5) An analysis of alternate actions considered by the Federal agency for the proposed action.

The Federal agency or the designated non-Federal representative shall complete the Biological Assessment within 180 days after its initiation (receipt of or concurrence with the species list), unless a different period of time is agreed to by the Service and the Federal agency (50 CFR 402.12(i)). If a permit or license applicant is involved, the 180-day period may not be extended unless the agency provides the applicant, before the close of the 180-day period, with a written statement setting forth the estimated length of the proposed extension and the reasons why such an extension is necessary. Once the Service reviews the Biological Assessment and concurs in writing with the Corps's initiation letter, a biological opinion is provided to the Corps within 135 days.

We would like to provide the following technical assistance for the planning and implementation of the surveys to inform the Biological Assessment.

Habitat characterization for the Puerto Rican sharp-shinned hawk and Puerto Rican broad-winged hawk

We agree with the Applicant's approach of characterizing the suitable breeding habitat for the endangered raptors utilizing expert's opinion, maps of previously known breeding areas or home ranges, data from previous studies and published references. We recommend compiling these data within a digital Geographic Information System (GIS). We would like to meet with the species experts and discuss during a working meeting the areas to be included in the analysis to ensure that all available information is considered for the effects determination. We also would like to have the opportunity to visit the areas with contracted personnel. If surveys to determine breeding territories are not conducted, suitable breeding habitat for the species should be avoided. The alternative of avoiding impacts to potential nesting trees and tree species is not protective to the species if the breeding territory is not identified. We do not concur with the Applicant that it is possible to avoid impacts to breeding habitat and breeding behavior without first identifying the breeding territory. Under the assumption that suitable habitat is occupied for breeding, possible take as defined by the ESA should be anticipated. It is important to determine the number of breeding territories that would be affected by the project construction and operation in order to evaluate in a Biological Opinion whether the project jeopardizes the continued existence of the species.

Potential presence of endangered plants

We do not agree with the Applicant's proposal of surveying at intervals of 100 m within suitable habitat. Interval sampling and transects is appropriate for diversity inventories, but not to detect presence of listed plant species, due to their patchy distribution and similarity of appearance with other common species. We recommend that personnel trained to recognize the listed species systematically search all areas of suitable habitat within the project footprint. We propose a working meeting between our staff and the Applicant's contracted personnel to share information

and delineate together the survey areas. Once the areas are designated, we propose combined site visits to determine the suitability of the sampling approach for each area. The Service requests that if listed species are identified or found, duplicates of herbarium specimens are provided to our office for reference purposes.

Potential presence of coqui llanero in Toa Baja

We agree with PREPA's approach to search for this species. We would like to have the opportunity to visit the ROW of the proposed project within other wetland areas in northern Puerto Rico to identify whether habitat suitable for the coqui llanero is present in other areas of the route.

Potential presence of the Puerto Rican crested toad

We agree with PREPA's approach to search for the Puerto Rican crested toad in both the southern and northern limestone forest areas. We recommend that before surveys are initiated, survey areas are discussed and delineated between our staff and contracted species experts. We would like to also have the opportunity to visit the areas with contracted personnel. As we mentioned in our letter dated October 18, 2010, haystack hills between Manatí and Bayamón harbor suitable habitat for the Puerto Rican crested toad. These areas should be included in the survey plans.

Puerto Rican nightjar

We continue to recommend intensive surveys during the breeding season for the endangered Puerto Rican nightjar to determine the amount of suitable habitat and the number of singing males or territories that the project may affect.. This information is necessary to determine direct and indirect effects to the species, and to formulate measures to avoid and minimize adverse effects during construction and operations.

Puerto Rican boa

The Applicant should delineate and quantify the amount of suitable boa habitat within the project area. The applicant should first consider alternatives to avoid these areas and develop conservation measures to minimize possible adverse effects where avoidance is not possible. Once possible effects are appropriately minimized, the Service would work with the Applicant to develop a search and rescue protocol for relocating individual animals to suitable habitat outside of the project area prior to project construction.

Impacts to Landowner Incentive Programs

The present project goes throughout properties under the Service's Partners for Fish and Wildlife Program (PFWP). We have identified that at least three properties under a current Conservation Agreement with the Service that may be adversely affected by the proposed project: Hacienda

Pellejas in Adjuntas, Hacienda Esperanza in Manatí, and the US Navy Radio Station in Toa Baja. Current efforts at these highly ecologically valued properties include restoration of forest, riparian habitat and restoration of wetland areas. The Service has invested close to $180,000 of federal funds on these restoration activities, and we recommend modifying the project to avoid these areas. If avoidance is not practicable, the conservation investment in these properties must be compensated with comparable restoration efforts on other similar properties.

Wetland Impacts

Temporary wetland impacts in the Joint Permit Application were calculated using a 50-foot width, even though the ROW width is 150 feet. As stated above, we recommend using a 150-foot construction corridor width to estimate temporary impacts.

The Applicant states that all wetland impacts will be temporary. Because the project involves approximately 235 separate wetland and river crossings, poor construction techniques on even a fraction of these, such as failing to remove all matting or excess fill material, or to properly grade and revegetate disturbed areas, could easily result in substantial permanent impacts.. This makes calculating wetland and habitat impacts difficult since impacts to wetlands and streams depend largely on the construction technique the contractor will use and does not take into account operation and maintenance of the pipeline.

Some of the wetlands the project may affect are within areas designated by the Commonwealth of Puerto Rico as Natural Reserves and Critical Wildlife Areas, including: the Cucharillas Marsh PCA, San Pedro Swamp PCA, Caño Tiburones Natural Reserve, and Hacienda la Esperanza Natural Reserve. These areas lie within the northern karst, an area known for its underground streams, springs and shallow aquifer.

Directional drilling is proposed to minimize impacts on larger rivers and streams, wetlands, roads and other areas, which involves injecting drilling mud (bentonite clay and other substances) under pressure into the bore hole. A "frac-out" occurs when the drilling mud escapes the bore hole, and if it enters waters supporting aquatic life, micro particles of the clay can clog the gills of aquatic organisms. While there is a discussion regarding steps to take in the event of a frac-out, the Service is very concerned with the use of this method in karst topography, where voids in the substrate are common and often connected to ground- and surface-water systems.

The pipeline route crosses multiple low-order streams in mountainous areas. These streams are the headwaters of larger rivers and support a marine-derived native stream fauna composed of several species of freshwater shrimp, crabs and gobies. This diverse community is sensitive to disturbance, increased turbidity, and changes in channel morphology. Excessive erosion and sedimentation during construction or maintenance of the ROW could cause long-term or permanent impacts to these important wildlife areas.

Directional drilling is also proposed to avoid impacts to forested wetland areas. This includes an approximately 1-mile long crossing under the mangrove wetlands and the Rio Cocal in Toa Baja. However, all project drawings of wetland crossings show the 150-foot ROW and the permanent 50-foot no-root zone. It is not clear whether the 50-foot permanent ROW in forested wetlands could be used to access the pipeline in the future. If so, then this should be considered a permanent wetland impact. Because of the muck soils associated with some of these wetland types, additional staging areas will be needed for the drill rig, pipe, etc. There is no mention of how drilling mud will be managed, since there will be a need for sumps and other ground disturbances at the drill site to store drill muds.

Mitigation

The Corps has not yet verified the Applicant's jurisdictional determinations. The Applicant proposes a .01-to-1 compensatory mitigation ratio. This would amount to 4 acres of compensatory mitigation for an estimated 369 acres of "temporary" wetland impacts, which is inappropriate and unacceptable to the Service. A much higher ratio is necessary to compensate for the: 1) temporary loss of wetlands functions and values; 2) likely permanent loss of functions and values due to contractor errors; and 3) permanent habitat alteration by species such as cattails that rapidly invade disturbed wetland areas and out compete more beneficial wetland plants.

The Applicant should develop an adequate mitigation plan after the appropriate efforts have been implemented for avoidance and minimization. In addition we recommend that the Corps impose a performance bond to assure proper compliance with the mitigation and minimization measures.

The project area includes the mitigation area for the Gasoducto del Sur project, despite our repeated requests during the technical assistance process to avoid this area. This area was selected as a mitigation area to preserve its large amount of undisturbed, quality habitat. The Corps needs to assure compliance with previous permit conditions as part of considering this new permit action.

Summary and Conclusion

This project is one of the largest infrastructure projects proposed in Puerto Rico in decades. Its 92-mile corridor of temporary and permanent impacts would cross karst, mountain, and coastal habitats, a number of which are recognized in the Puerto Rico Comprehensive Wildlife Conservation Strategy as Critical Wildlife Areas important to conservation. The project could affect habitat for more than thirty federally-listed species and one species for which we are considering a petition for listing. Impacts to fauna and flora are not well documented, and maintenance for sensitive areas after construction is not well specified.

A broad spectrum of fish and wildlife resources occur within and adjacent to the proposed pipeline route, including migratory birds, amphidromous fish, endangered species, and wetlands. The karst areas of Puerto Rico are unique geological and ecological features in the United States,

and serve as an important aquifer recharge zone for the island. The haystack karst hills are a refugium for many native plant species. The project could adversely affect numerous streams and wetlands, and the Applicant's proposal does not appropriately consider alternatives to avoid, and measures to minimize, such impacts. The proposed 0.01-to-1 compensatory mitigation ratio is inadequate. Therefore, we are advising you, in accordance with part IV 3(a) of the 1992 Memorandum of Agreement between our agencies on the elevation of permit decisions under section 404(q) of the Clean Water Act, that the proposed project may result in substantial and unacceptable impacts to aquatic resources of national importance. We recommend that the Corps deny a permit for this action as currently proposed. The Service requests to be informed of any meetings with the applicant and the Corps or any additional documentation submitted to the Corps, regarding this permit action.

If you have any questions please contact Marelisa Rivera at 787 851 7297 x 206.

Sincerely,

Edwin Muñiz
Field Supervisor

Fhl/mtr

Enclosures

cc:
DNER, San Juan
EQB, San Juan
PRPB, Land Use Division, San Juan
PRPB, CZM, San Juan
EPA, San Juan
EPA, Dan Montella, New York
COE, Regulatory, San Juan
FWS, Atlanta
FERC, DC
PREPA, San Juan

Enclosure 1.

10 años EcoEléctrica
"Un mejor ambiente con gas natural"

November 15, 2010

Mr. Edwin Muñiz
Field Supervisor
Caribbean Field Office
U.S. Fish and Wildlife Service
P.O. Box 491
Boquerón, PR 00622

Re: EcoEléctrica Expansion Modification Project (Natural Gas Supply to PREPA Costa Sur Power Plant), FERC Doc# CP95-35-001

Dear Mr. Muñiz,

I would like to thank you and your staff for meeting with me on November 4, 2010 with respect to your office's letter to the Federal Energy Regulatory Commission (FERC) dated October 25, 2010. I appreciated the opportunity to clarify EcoEléctrica's current project work.

As we discussed, EcoEléctrica is currently moving forward with the Terminal Modification Project previously approved by FERC in its April 16, 2009 Order amending authorization under Section 3 of the Natural Gas Act (see Attachment). As part of the review process for the Modification Project, your office issued a clearance approval after consultation with us regarding the minimal work to be done onsite. This review was simplified inasmuch as the activity associated with the Modification Project that will enable EcoEléctrica to supply natural gas directly to the PREPA Costa Sur Power Plant, was also evaluated during the original NEPA review of the project in the mid-1990's and was described in EcoEléctrica's EIS.

I believe some confusion has arisen due to PREPA's decision a few years ago to route EcoEléctrica's natural gas to the Aguirre Power Plant, instead of the Costa Sur Power Plant, via the Gasoducto Del Sur system; a project which was later cancelled. PREPA then returned to the original plan of natural gas delivery to Costa Sur and thus EcoEléctrica has moved forward with the current Expansion Modification. In truth, the work onsite that was previously reviewed and approved by your office for the current Expansion Modification is all the same activity regardless of the change in delivery from Aguirre to Costa Sur.

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As we also discussed during our meeting, EcoEléctrica's current Expansion Modification is not a part of PREPA's recently announced Via Verde Pipeline Project. EcoEléctrica would need to request FERC's approval for any physical or operational modifications that might be necessary at its facility as a function of the Via Verde Pipeline Project. (See Attached Order from FERC).

Again, I appreciate the opportunity to clarify the current situation and understand from our discussion that your office is again satisfied with the review and concurs that the Expansion Modification Project presently underway as approved in FERC's April 16, 2009 Order satisfies your review criteria and approval.

If you have any questions, please feel free to call me at 207-620-2397 or write me at rwyattlng@yahoo.com

Respectfully,

Robert Wyatt

Robert C. Wyatt
Environmental Affairs Assistant

CC: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission

Attachment

EcoEléctrica, L.P. • Adm. Building • Firm Delivery • 641 Road 337 • Peñuelas, PR 00624-9804
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127 FERC ¶ 61,044
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Suedeen G. Kelly, Marc Spitzer,
and Philip D. Moeller.

EcoEléctrica, L.P. Docket No. CP95-35-001

ORDER AMENDING AUTHORIZATION UNDER SECTION 3
OF THE NATURAL GAS ACT

(Issued April 16, 2009)

1. On March 5, 2008, EcoEléctrica, L.P. (EcoEléctrica) filed an application to amend its previous authorizations under section 3 of the Natural Gas Act (NGA), issued by the Commission on May 15, 1996 (May 1996 Order), for the siting, construction, and operation of liquefied natural gas (LNG) facilities for the importation of natural gas into the Commonwealth of Puerto Rico (Puerto Rico).[1] EcoEléctrica seeks Commission approval of its Terminal Modification Project (project), which would install two additional vertical shell and tube heat exchange vaporizers at the EcoEléctrica LNG terminal in order to deliver a greater volume of natural gas to Puerto Rico Electric Power Authority's (Power Authority) Aguirre Combined Cycle Power Plant. During the course of reviewing EcoEléctrica's application a great deal of additional information was sought and provided that was necessary to complete Commission staff's environmental review of EcoEléctrica's proposal.[2] For the reasons discussed herein, we will approve the requested modifications to EcoEléctrica's previous authorizations under section 3 of the NGA, subject to the conditions discussed herein.

I. Background

2. In the May 1996 Order, the Commission authorized EcoEléctrica to site, construct, and operate LNG import terminal facilities, including: (1) a marine terminal with a

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[1] *EcoEléctrica, L.P.*, 75 FERC ¶ 61,157 (1996).

[2] EcoEléctrica responded to four Commission staff environmental information requests. The responses and supplements were filed on April 24, 2008, May 30, 2008, July 18, 2008, August 5, 2008, September 5, 2008, September 29, 2008, October 8, 2008, and November 13, 2008.

1,800-foot pier for unloading LNG tankers; (2) two 1-million-barrel LNG storage tanks;[3] (3) an LNG vaporization system;[4] and (4) various control systems, piping, and other ancillary equipment. The Commission found that EcoEléctrica's LNG terminal would provide an environmentally acceptable alternative to oil in meeting the increasing electric demands of Puerto Rico. In view of these considerations, the Commission found that the LNG terminal would not be inconsistent with the public interest.[5]

3. In conjunction with the LNG import terminal, EcoEléctrica also constructed: (1) a 461-megawatt electric cogeneration facility that uses vaporized LNG as a fuel source for power generation; (2) a desalination facility capable of producing up to 4 million gallons of fresh water per day; (3) other facilities necessary for the operation of the cogeneration facility, including a 2.3-mile, 230-kilovolt transmission line connecting the plant substation to an existing Power Authority substation and a gas line to serve the cogeneration facility; and (4) a gas line to serve the Power Authority's Costa Sur power plant.[6] The section 3 authorization granted in the May 1996 Order did not cover any of these facilities.

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[3] EcoEléctrica has only built one of the two LNG storage tanks approved in the May 1996 Order. EcoEléctrica has not commenced construction of the second storage tank or related facilities. Environmental Condition No. 11 of the May 1996 Order specified that "EcoEléctrica shall commence construction on its LNG facilities within 3 years of the date of this Order, or file a motion to extend the deadline, with the specific reasons why additional time is necessary." As noted, to date, over 12 years from issuance of the May 1996 Order, EcoEléctrica has not constructed the second authorized storage tank or four of the six authorized vaporizers. Nor did it ever file for an extension of time to construct these facilities. Therefore, the authorizations with respect to those facilities issued by the May 1996 Order have lapsed. Accordingly, should EcoEléctrica seek to build another LNG storage tank, or other related facilities, it must obtain prior Commission authorization.

[4] The May 1996 Order authorized EcoEléctrica to install up to six vaporizers (consisting of two vertical shell and tube heat exchanger vaporizers and four open rack vaporizers) in conjunction with the two approved LNG storage tanks. Since EcoEléctrica only constructed one LNG storage tank, it only installed two vaporizers. As stated above, if EcoEléctrica seeks to build another LNG storage tank, or other related facilities, it must at such time seek Commission authorization.

[5] *EcoEléctrica, L.P.*, 75 FERC at 61,515 and 61,518.

[6] The Power Authority's Costa Sur Power Plant was never converted to natural gas firing. Consequently, the pipeline intended to serve the plant was never constructed.

II. Proposal

4. In the instant proceeding, EcoEléctrica requests authority under section 3 of the NGA to construct two additional vertical shell and tube heat exchanger vaporizers within EcoEléctrica's existing 36-acre LNG facility site. EcoEléctrica also proposes to install other facilities associated with the vaporizers including: (1) one fixed speed, in-tank LNG sendout pump; (2) three seawater heat exchangers; (3) three water/glycol circulation pumps; (4) one water/glycol expansion tank at 1,800 gallons; (5) one seawater supply pump at 6,000 gallons per minute (gpm); and (6) three seawater circulation pumps.

5. The proposed modifications to EcoEléctrica's existing LNG terminal facilities would enable it to supply natural gas to the Power Authority's Aguirre Combined Cycle Power Plant (Aguirre electric plant), in Aguirre, Puerto Rico, once the plant's conversion from fuel oil to natural gas is completed. EcoEléctrica proposed to interconnect its existing 1.2-mile, 24-inch send-out pipeline, which extends to the fenceline of its 36-acre LNG terminal site, with a Power Authority pipeline that would carry the regasified LNG to its Aguirre electric plant.[7]

6. EcoEléctrica's proposed LNG terminal modifications would enable it to increase its regasified LNG send-out capacity by an additional 77.4 (average) to 93 (peak) million standard cubic feet per day (MMscf/day), resulting in a total send-out capacity of approximately 186 MMscf/day. The existing LNG storage tank has sufficient volume capacity to accommodate this additional send out. EcoEléctrica confirms that no new compressors, liquid nitrogen storage, or pipelines will be required to implement the planned increase in send out.

7. EcoEléctrica states there would be no net increase in the amount of water withdrawn or discharged as a result of the modifications. The proposed vaporization facilities would use a closed-loop vaporization system that draws heat as a side stream from the same volume of water as EcoEléctrica currently withdraws for its existing LNG facilities.

8. EcoEléctrica asserts that to accommodate the increased send out of vaporized LNG, a total of two LNG vessels per month would call at the EcoEléctrica LNG terminal;

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[7] The Power Authority began constructing a 42-mile-long, natural gas pipeline from the Aguirre electric plant in 2008. This pipeline will tap into EcoEléctrica's existing 1.2-mile long send-out pipeline. The Power Authority will own and operate the 42-mile long pipeline currently under construction. The Power Authority's new pipeline underwent separate environmental analyses conducted by the U.S. Army Corp of Engineers (Army Corp) and the Puerto Rico Environmental Quality Control Board.

this would be an increase of one LNG vessel per month over the historic level of traffic. EcoEléctrica consulted with the U.S. Coast Guard (Coast Guard), which expressed no objection to the increased frequency of LNG vessel deliveries related to EcoEléctrica's proposal.

9. EcoEléctrica states that the proposed modifications were designed, and would be constructed and operated according to U. S. Department of Transportation safety standards.[8] All construction activities would occur within the fenceline of the LNG terminal site. EcoEléctrica plans to place the facilities in service by the end of 2009.

III. Notice and Interventions

10. Public notice of EcoEléctrica's application was published in the *Federal Register* on March 24, 2008 (73 Fed. Reg. 15,511). Motions to intervene were due on or before April 8, 2008. Timely, unopposed motions to intervene were filed by Shell NA LNG LLC and Distrigas of Massachusetts LLC.[9] No comments or protests were filed regarding the application.

IV. Discussion

11. Because the proposed LNG terminal facilities will be used to import gas from foreign countries, the siting, construction and operation of the facilities require approval by the Commission under section 3 of the NGA.[10]

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[8] 49 C.F.R. Part 193 (2008).

[9] Timely, unopposed motions to intervene are granted by operation of Rule 214 of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.214 (2008).

[10] The regulatory functions of section 3 of the NGA were transferred to the Secretary of the U. S. Department of Energy (DOE) in 1977 pursuant to section 301(b) of the Department of Energy Organization Act (Pub. L. No. 95-91, 42 U.S.C. §§ 7101 *et seq.*). In reference to regulating the imports or exports of natural gas, the DOE Secretary has delegated to the Commission the authority to approve or disapprove the construction and operation of particular facilities, the site at which facilities shall be located and, with respect to natural gas that involves the construction of new domestic facilities, the place of entry or exit for exports. *See* DOE Delegation Order No. 00-044A.00 (2006), FERC Stats. & Regs. ¶ 9920 (reissuing, effective May 16, 2006, authorities contained in previous delegation orders). In addition, section 3(e)(1) of the NGA, as amended by section 311(c) of the Energy Policy Act of 2005 (EPAct 2005), Pub. L. 109-58, 119 Stat. 594, provides that the Commission has exclusive authority to approve or deny applications for the construction or operation of LNG terminals. DOE

(continued)

12. The Commission's authority over facilities constructed and operated under section 3 of the NGA includes the authority to apply terms and conditions as necessary and appropriate to ensure that the proposed construction and siting is in the public interest.[11] Section 3 provides that the Commission "shall issue such order on application" if it finds that the proposal "will not be inconsistent with the public interest."[12]

13. The Commission previously authorized EcoEléctrica to install six vaporizers on its LNG facility. Currently, only two vaporizers have been installed. The two proposed vaporizers are of the same type and function as two of those initially authorized and installed. Although the proposed modifications will increase EcoEléctrica's send-out capacity from 93 MMscf/day to 186 MMcsf/day, the send-out capacity will remain below the import capacity of 130 billion cubic feet (Bcf) per year currently authorized by DOE's Office of Fossil Energy (DOE/FE).[13] The proposed project will not change the authorized level of expansion capacity or the deliverability of the terminal.[14]

14. To achieve a greater send-out capacity, EcoEléctrica will need to increase the incoming volumes of LNG. This will be accomplished by increasing vessel traffic to 24 LNG vessels per year, from the historic level of 12 LNG vessels per year. However, we note that EcoEléctrica's original October 1994 application, as well as the Coast Guard's 1996 letter of recommendation, contemplated a much higher amount of vessel traffic (up to 60 LNG vessel unloadings per year), than what would result from the

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has retained authority to act on applications for authority to import or export natural gas. Such applications must be submitted to DOE's Office of Fossil Energy. The Commission does not authorize the importation of the commodity itself.

[11] *See* section 3(e)(3)(A) of the NGA, as enacted by section 311(c) of EPAct 2005. *See also Distragas Corporation v. FPC*, 495 F.2d 1057, 1063-64, *cert. denied*, 419 U.S. 834 (1974); *Dynegy LNG Production Terminal, L.P.*, 97 FERC ¶ 61,231 (2001).

[12] 15 U.S.C. § 717b(a) (2006).

[13] *EcoEléctrica, L.P.*, 75 FERC at 61,516. *See* DOE/FE Order No. 1042 (April 19, 1995) (granting EcoEléctrica authority to import 130 Bcf of LNG per year for a 40-year term).

[14] Since there will be no impact on Puerto Rico or local safety concerns, the pre-filing procedures for review of LNG terminals established in Order No. 665 are not implicated by the addition of vaporizers requested herein. *See Regulations Implementing Energy Policy Act of 2005, Pre-Filing Procedures for Review of LNG Terminals and Other Natural Gas Facilities,* Order No. 665, FERC Stats. & Regs. ¶ 31,195 (2005).

proposed project. In reviewing EcoEléctrica's current proposal, the Commission's staff has consulted with the Coast Guard and the U.S. Fish and Wildlife Service. Neither of these agencies have expressed any concerns with the increase in LNG vessel traffic that will result from approval of EcoEléctrica's proposal. The Commission finds that the additional LNG vessels calling on the LNG facility would not have an adverse impact on public interest or the environment.

15. EcoEléctrica's LNG terminal was the first, and remains the only, source of natural gas in Puerto Rico. EcoEléctrica's proposed project will enable it to deliver natural gas to the Power Authority's Aguirre plant, replacing No. 2 distillate oil as the plant's fuel for generating electricity. The increase in natural gas supply is an environmentally acceptable alternative to oil in meeting the anticipated increases in electric demand of Puerto Rico.

16. The instant proposal will not have an impact on landowners, since all of the construction is taking place within EcoEléctrica's existing LNG terminal site. Currently, all of the regasified LNG sent out from EcoEléctrica's LNG terminal is used as fuel at its own facilities. Thus, EcoEléctrica has no existing customers that might be adversely affected by the costs or risks of recovery of those costs from the proposed modifications. Therefore, we find that, subject to the conditions imposed in this Order, EcoEléctrica's proposal is not inconsistent with the public interest.

V. Environmental Assessment

17. On June 11, 2008, the Commission issued a *Notice of Intent to Prepare an Environmental Assessment for the proposed EcoEléctrica Terminal Modification Project and Request for Comments on Environmental Issues* (NOI). The notice was published in the *Federal Register* on June 18, 2008 (73 Fed. Reg. 34,720). The NOI was sent to affected landowners; federal, state/commonwealth, and local government agencies; elected officials; environmental and public interest groups; and local libraries and newspapers. No comments were received in response to our NOI.

18. Like the authorizations granted in the original Order, Commission staff's conclusions and recommendations in its 1996 environmental impact statement are out-of-date. As a result, the environmental staff was not able to rely on its environmental impact statement to the extent that EcoEléctrica contemplated, and materials which EcoEléctrica had not prepared at the time its application was filed were needed for staff to complete its environmental review. In the end, EcoEléctrica was required to file a substantial amount of new and updated information and mitigation plans.

19. To satisfy the requirements of the National Environmental Policy Act (NEPA), our staff prepared an environment assessment (EA) which was distributed for public comment and placed in the record on February 13, 2009. Issuance of the EA was published in the *Federal Register* on February 23, 2009 (74 Fed. Reg. 8,079). The

analysis in the EA addressed: geology; soils; water resources and wetlands; vegetation; fisheries and wildlife (including threatened and endangered species); essential fish habitat; land use, recreation and visual resources; cultural resources; air quality and noise; safety; socioeconomics; cumulative impacts; and alternatives. The public comment period ended on March 16, 2009. No comments were received.

20. In a letter dated March 6, 2009, the U.S. Fish and Wildlife Service (FWS) concurred with the determination presented in our staff's Biological Assessment, that the project was not likely to adversely affect the brown pelican or the Antillean manatee. Because our consultation with the FWS is complete, we have modified the EA's recommendation that the Director of the Office of Energy Projects withholds authorization for the commencement of construction until the staff completes its consultation with the National Oceanic and Atmospheric Administration National Marine Fisheries Service.

21. Any state/commonwealth or local permits issued with respect to the jurisdictional facilities authorized herein must be consistent with the conditions of this certificate. The Commission encourages cooperation between regulated entities and local authorities. However, this does not mean that state/commonwealth and local agencies, through application of state/commonwealth or local laws, may prohibit or unreasonably delay the construction of facilities approved by this Commission.[15]

22. Based on the discussion in the EA, we conclude that if constructed in accordance with EcoEléctrica's application and supplements and the conditions imposed herein, approval of this proposal would not constitute a major federal action significantly affecting the quality of the human environment.

VI. Conclusion

23. For the reasons set forth herein, and subject to the conditions set forth below in the Appendix, we find that EcoEléctrica's proposed modifications are not inconsistent with the public interest under section 3 of the NGA. Thus, we grant the requested authorization to EcoEléctrica.

24. At a hearing held on April 16, 2009, the Commission on its own motion received and made part of the record all evidence, including the application and exhibits thereto,

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[15] *See, e.g., Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293 (1988); *National Fuel Gas Supply v. Public Service Commission*, 894 F.2d 571 (2d Cir. 1990); and *Iroquois Gas Transmission System, L.P., et al.*, 52 FERC ¶ 61,091 (1990) and 59 FERC ¶ 61,094 (1992).

submitted in support of the authorization sought herein, and upon consideration of the record,

The Commission orders:

(A) EcoEléctrica's authorization under section 3 of the NGA, issued May 15, 1996, for its approved LNG terminal is amended as more fully described in EcoEléctrica's application and as conditioned herein.

(B) Except as provided herein, the authorization issued May 15, 1996, remains unchanged and EcoEléctrica must comply with all of the conditions applicable to the LNG terminal set forth in the Appendix to the May 15, 1996 Order.

(C) EcoEléctrica shall notify the Commission's environmental staff by telephone, e-mail, and/or facsimile of any environmental noncompliance identified by other federal, state/commonwealth, or local agencies on the same day that such agency notifies EcoEléctrica. EcoEléctrica shall file written confirmation of such notification with the Secretary of the Commission within 24 hours.

By the Commission.

(SEAL)

Kimberly D. Bose,
Secretary.

Appendix

Environmental Conditions for EcoEléctrica's LNG Terminal Modification Project Docket No. CP95-35-001

As recommended in the Environmental Assessment, this authorization includes the following conditions:

1. EcoEléctrica, L.P. (EcoEléctrica) shall follow the construction procedures and mitigation measures described in its application and supplements, including responses to staff data requests, and as identified in the Environmental Assessment (EA), unless modified by the order. EcoEléctrica must:

   a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
   b. justify each modification relative to site-specific conditions;
   c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
   d. receive approval in writing from the Director of the Office of Energy Projects (OEP) before using that modification.

2. The Director of OEP has delegated authority to take all steps necessary to ensure the protection of life, health, property, and all environmental resources during construction and operation of the project. This authority shall include:

   a. stop-work authority and authority to cease operation; and
   b. the design and implementation of any additional measures deemed necessary to assure continued compliance with the intent of the conditions of the Commission order.

3. **Prior to construction**, EcoEléctrica shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors, and contractor personnel will be informed of the environmental inspector's authority and have been or will be trained on the implementation of the environmental mitigation measures appropriate to their jobs before becoming involved with construction and restoration activities.

4. **Within 60 days of the acceptance of this certificate and before construction** begins, EcoEléctrica shall file an initial Implementation Plan with the Secretary for review and written approval by the Director of OEP. EcoEléctrica must file revisions to the plan as schedules change. The plan shall identify:

a. how EcoEléctrica will implement the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests), identified in the EA, and required by this Order;

b. how EcoEléctrica will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;

c. the number of environmental inspectors assigned to the project, and how the company will ensure that sufficient personnel are available to implement the environmental mitigation;

d. company personnel, including environmental inspectors and contractors, who will receive copies of the appropriate material;

e. the training and instructions EcoEléctrica will give to all personnel involved with construction and restoration (initial and refresher training as the project progresses and personnel change;

f. the company personnel (if known) and specific portion of EcoEléctrica's organization having responsibility for compliance;

g. the procedures (including use of contract penalties) EcoEléctrica will follow if noncompliance occurs; and

h. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:

(1) the completion of all required surveys and reports;
(2) the mitigation training of onsite personnel;
(3) the start of construction; and
(4) the start and completion of restoration.

5. Beginning with the filing of its initial Implementation Plan, EcoEléctrica shall file updated status reports with the Secretary on a monthly basis until all construction and restoration activities are complete. On request, these status reports will also be provided to other federal and state/commonwealth agencies with permitting responsibilities. Status reports shall include:

a. an update on EcoEléctrica's efforts to obtain the necessary federal authorizations;

b. the construction status of the project and work planned for the following reporting period;

c. a listing of all problems encountered and each instance of noncompliance observed by the environmental inspector during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other federal, state/commonwealth, or local agencies);

d. a description of the corrective actions implemented in response to all instances of noncompliance, and their cost;
e. the effectiveness of all corrective actions implemented;
f. a description of any landowner/resident complaints which may relate to compliance with the requirements of the order, and the measures taken to satisfy their concerns; and
g. copies of any correspondence received by EcoEléctrica from other federal, state/commonwealth, or local permitting agencies concerning instances of noncompliance, and EcoEléctrica's response.

6. EcoEléctrica must receive written authorization from the Director of OEP **before commencing service** from the project. Such authorization will only be granted following a determination that rehabilitation and restoration of the areas disturbed by the project are proceeding satisfactorily.

7. EcoEléctrica **shall not begin construction** until the FERC staff completes any necessary consultation with the National Oceanic and Atmospheric Administration National Marine Fisheries Service and EcoEléctrica requests and receives written notification from the Director of OEP that construction and/or use of mitigation (including implementation of conservation measures) may begin.

The following measures shall apply to the EcoEléctrica Terminal Modification Project design and construction details. Information pertaining to these specific recommendations shall be filed with the Secretary for review and approval by the Director of OEP either: prior to initial site preparation; prior to construction of final design; prior to commissioning; or prior to commencement of service as indicated by each specific condition. Specific engineering, vulnerability, or detailed design information meeting the criteria specified in Order No. 683 (Docket No. RM06-24-000), including security information, should be submitted as critical energy infrastructure information (CEII) pursuant to 18 C.F.R. § 388.112. *See Critical Energy Infrastructure Information*, Order No. 683, 71 Fed. Reg. 58,273 (October 3, 2006), FERC Stats. & Regs. ¶ 31,228 (2006). Information pertaining to items such as: offsite emergency response; procedures for public notification and evacuation; and construction and operating reporting requirements would be subject to public disclosure. This information should be submitted a minimum of 30 days before approval to proceed is required.

8. Complete plan drawings and a list of the hazard detection equipment shall be filed **prior to initial site preparation**. The list shall include the instrument tag number, type and location, alarm locations, and shutdown functions of the proposed hazard detection equipment. Plan drawings shall clearly show the location of all detection equipment.

9. Complete plan drawings and a list of the fixed and wheeled dry-chemical, fire extinguishing, and other hazard control equipment shall be filed **prior to initial site preparation**. The list shall include the equipment tag number, type, size, equipment covered, and automatic and manual remote signals initiating discharge of the units. Plan drawings shall clearly show the planned location of all fixed and wheeled extinguishers.

10. Facility plans showing the proposed location of, and area covered by, each monitor, hydrant, deluge system, hose, and sprinkler, as well as piping and instrumentation diagrams, of the firewater system shall be filed **prior to initial site preparation**.

11. The **final design** of the fixed and wheeled dry-chemical, fire extinguishing, and other hazard control equipment shall identify manufacturer and model.

12. The **final design** shall specify that dual temperature elements and transmitters are provided for low temperature alarm and shutdown at the discharge of each vaporizer.

13. The **final design** shall include a check valve between the LNG vaporizer discharge shutoff valve and the discharge manual isolation valve for all existing and proposed vaporizers.

14. The **final design** shall specify that for LNG and natural gas service, branch piping and piping nipples less than 2 inches are to be no less than schedule 160.

15. The **final design** shall include details of the shutdown logic, including cause and effect matrices for alarms and shutdowns.

16. The **final design** shall include details of the air gaps to be installed downstream of all seals or isolations installed at the interface between a flammable fluid system and an electrical conduit or wiring system. Each air gap shall vent to a safe location and be equipped with a leak detection device that: shall continuously monitor for the presence of a flammable fluid; shall alarm the hazardous condition; and shall shut down the appropriate systems.

17. The **final design** shall include a hazard and operability review of the completed design. A copy of the review and a list of the recommendations shall be filed with the Secretary.

18. The **final design** shall provide up-to-date Piping & Instrument Diagrams (P&IDs) including a description of the instrumentation and control philosophy, type of instrumentation (pneumatic, electronic), use of computer technology, and control

room display and operation. Drawings and all information should be clearly legible on 11- by 17-inch paper and the piping legend and symbology shall be in accordance with accepted practice. All drawings shall be filed in black and white. The following information shall be included on the P&IDs:

a. equipment tag number, name, size, duty, capacity and design conditions;
b. piping with line number, piping class specification, size and insulation;
c. LNG tank pipe penetration size or nozzle schedule;
d. piping specification breaks and insulation limits;
e. isolation flanges, blinds and insulating flanges;
f. valve type, in accordance with the piping legend symbol;
g. all control valves numbered;
h. all valve operator types and valve fail position;
i. instrumentation numbered;
j. control loops including software connections;
k. alarm and shutdown set points;
l. shutdown interlocks;
m. relief valves numbered, with set point;
n. relief valve inlet and outlet piping size;
o. car-sealed valves and blinds;
p. equipment insulation;
q. drawing revision number and date;
r. all manual valves numbered, including check, vent, drain, and car-sealed valves; and
s. alarm and shutdown set points.

19. The **final design** shall specify that all hazard detection equipment include redundancy, fault detection, and fault alarm monitoring.

20. All valves including drain, vent, main, and car-sealed valves shall be tagged in the field during construction and **prior to commissioning**.

21. A tabulated list of the proposed hand-held fire extinguishers shall be filed **prior to commissioning**. The information shall include a list with the equipment number, type, size, number, and location. Plan drawings shall include the type, size, and number of all hand-held fire extinguishers.

22. Updated Operation and Maintenance procedures and manuals, as well as safety procedure manuals, shall be filed **prior to commissioning**.

23. FERC staff shall be notified of any proposed revisions to the security plan and physical security of the facility **prior to commencement of service**.

24. Progress on construction of the LNG terminal modifications shall be reported in monthly reports filed with the Secretary. Details shall include a summary of activities, projected schedule for completion, problems encountered and remedial actions taken. Problems of significant magnitude shall be reported to the FERC **within 24 hours**.

In addition, the following measures should apply throughout the life of the facility:

25. The facility shall be subject to regular FERC staff technical reviews and site inspections on at least an annual basis or more frequently as circumstances indicate. Prior to each FERC staff technical review and site inspection, EcoEléctrica shall respond to a specific data request including information relating to possible design and operating conditions that may have been imposed by other agencies or organizations. Up-to-date detailed piping and instrumentation diagrams reflecting facility modifications and provision of other pertinent information not included in the semi-annual reports described below, including facility events that have taken place since the previously submitted semi-annual report, shall be submitted.

26. **Semi-annual** operational reports shall be filed with the Secretary to identify changes in facility design and operating conditions, abnormal operating experiences, activities (including ship arrivals, quantity and composition of imported LNG, vaporization quantities, boil-off/flash gas, etc.), and plant modifications including future plans and progress thereof. Abnormalities shall include, but not be limited to: unloading/shipping problems, potential hazardous conditions from off-site vessels, storage tank stratification or rollover, geysering, storage tank pressure excursions, cold spots on the storage tanks, storage tank vibrations and/or vibrations in associated cryogenic piping, storage tank settlement, significant equipment or instrumentation malfunctions or failures, non-scheduled maintenance or repair (and reasons therefore), relative movement of storage tank inner vessels, vapor or liquid releases, fires involving natural gas and/or from other sources, negative pressure (vacuum) within a storage tank and higher-than-predicted boiloff rates. Adverse weather conditions and the effect on the facility also shall be reported. Reports should be submitted **within 45 days** after each period ending **June 30 and December 31**. In addition to the above items, a section entitled "Significant plant modifications proposed for the next 12 months (dates)" also shall be included in the semi-annual operational reports. Such information would provide the FERC staff with early notice of anticipated future construction/maintenance projects at the LNG facility.

27. In the event the temperature of any region of any secondary containment becomes less than the minimum specified operating temperature for the material, the

Commission shall be notified **within 24 hours** and procedures for corrective action should be specified.

28. Significant non-scheduled events, including safety-related incidents (i.e., LNG or natural gas releases, fires, explosions, mechanical failures, unusual over pressurization, and major injuries) and security related incidents (i.e., attempts to enter site, suspicious activities) shall be reported to the FERC staff. In the event an abnormality is of significant magnitude to threaten public or employee safety, cause significant property damage, or interrupt service, notification shall be made **immediately**, without unduly interfering with any necessary or appropriate emergency repair, alarm, or other emergency procedure. In all instances, notification shall be made to the Commission staff **within 24 hours**. This notification practice shall be incorporated into the LNG facility's emergency plan. Examples of reportable LNG-related incidents include:

a. fire;
b. explosion;
c. estimated property damage of $50,000 or more;
d. death or personal injury necessitating in-patient hospitalization;
e. free flow of LNG that results in pooling;
f. unintended movement or abnormal loading by environmental causes, such as an earthquake, landslide, or flood, that impairs the serviceability, structural integrity, or reliability of an LNG facility that contains, controls, or processes gas or LNG;
g. any crack or other material defect that impairs the structural integrity or reliability of an LNG facility that contains, controls, or processes gas or LNG;
h. any malfunction or operating error that causes the pressure of a pipeline or LNG facility that contains or processes gas or LNG to rise above its maximum allowable operating pressure (or working pressure for LNG facilities) plus the build-up allowed for operation of pressure-limiting or control devices;
i. a leak in an LNG facility that contains or processes gas or LNG that constitutes an emergency;
j. inner tank leakage, ineffective insulation, or frost heave that impairs the structural integrity of an LNG storage tank;
k. any condition that could lead to a hazard and cause a 20 percent reduction in operating pressure or shutdown of operation of a pipeline or an LNG facility;
l. safety-related incidents to LNG vessels occurring at or en route to and from the LNG facility; or

m. an event that is significant in the judgment of the operator and/or management even though it did not meet the above criteria or the guidelines set forth in an LNG facility's incident management plan.

In the event of an incident, the Director of OEP has delegated authority to take whatever steps are necessary to ensure operational reliability and to protect human life, health, property or the environment, including authority to direct the LNG facility to cease operations. Following the initial company notification, the Commission staff would determine the need for an on-site inspection by the Commission staff, and the timing of an initial incident report (normally within 10 days) and follow-up reports.

29. EcoEléctrica shall develop an updated Emergency Response Plan (ERP) (including evacuation) and coordinate procedures with the Coast Guard, state/commonwealth, county, and local emergency planning groups; fire departments; state/commonwealth and local law enforcement; and appropriate federal agencies. This plan shall include at a minimum:

a. designated contacts with state/commonwealth and local emergency response agencies;
b. scalable procedures for the prompt notification of appropriate local officials and emergency response agencies based on the level and severity of potential incidents;
c. procedures for notifying residents and recreational users within areas of potential hazard;
d. evacuation routes/methods for residents and other public use areas that are within any transient hazard areas along the route of the LNG vessel transit;
e. locations of permanent sirens and other warning devices; and
f. an "emergency coordinator" on each LNG vessel to activate sirens and other warning devices.

The ERP shall be filed with the Secretary for review and written approval by the Director of OEP **prior to initial site preparation**. EcoEléctrica shall notify the FERC staff of all planning meetings in advance and shall report progress on the development of its ERP at **3-month intervals**.

30. The ERP shall include a Cost-Sharing Plan identifying the mechanisms for funding all project-specific security/emergency management costs that would be imposed on state/commonwealth and local agencies. In addition to the funding of direct transit-related security/emergency management costs, this comprehensive plan shall include funding mechanisms for the capital costs associated with any necessary security/emergency management equipment and personnel base. The

Cost-Sharing Plan shall be filed with the Secretary for review and written approval by the Director of OEP **prior to initial site preparation**.

Enclosure 2.
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10 años EcoEléctrica

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COMMISSION
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FEDERAL ENERGY
REGULATORY COMMISSION

July 19th, 2010

Ms. Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

RE: OPR/DEER/ERC I
EcoElectrica, L.P. LNG Import Terminal and Cogeneration Project
Docket No. CP-95-35-000
Semi Annual LNG Operating Report

Dear Ms. Bose:

In accordance with Article 31 of the Appendix to Docket No. CP-95-35-000, EcoElectrica, L.P. hereby provides its 1st LNG Semi-Annual Report for 2010. This report covers the period of January 1st to June 30th, 2010.

If you have any questions, please advise.

Sincerely,

Carlos Reyes
General Manager- O&M

cc: Chris Zerby
Terry Turpin
Kenneth Frye
Phillip Suter
Oscar Cedeño

641 Road 337, km 3.7, Bo. Tallaboa Poniente Peñuelas, PR 00624-7501
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ISO 14001 & OHSAS 18001 Certified www.ecoelectrica.com

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EcoEléctrica

A better environment with natural gas

LNG Import Terminal
Peñuelas, Puerto Rico

SEMI-ANNUAL OPERATIONAL REPORT
FOR THE PERIOD OF
January 1st to June 30th, 2010

DOCKET NO. CP95-35-000
DATE: July 19th, 2010

Eng. Oscar Cedeño
LNG Terminal Manager

OPERATIONAL REPORT

1 LNG TERMINAL PERFORMANCE SUMMARY

During the reporting period from January 1st to June 30th, 2010, EcoElectrica maintained an excellent Safety, Environmental & Operational record of compliance. A total of six (6) LNG cargos were successfully offloaded at the LNG Terminal, representing a total energy value of 11,705,215 MMBtu.

During this reporting period, all LNG cargoes received at EcoElectrica were imported from Atlantic LNG in Trinidad. No significant Perlite contamination has been observed from the LNG Tank. The LNG tank monthly cold spot inspections were completed without any abnormal conditions reported.

On January 28th the US Coast Guard performed their annual compliance inspection related to Security and the LNG Terminal; no deficiencies were noted.

On Tuesday February 2nd, 2010 the 2009 Semi annual report of the LNG Terminal; was sent to the Commission covering the operational period of July 1st to December 31st, 2009.

On February 12th the LNG Vaporizers 102-A and 102-B were isolated for maintenance and existing block valves 1LNG-V-0516 and 1LNG-V-0519 were replaced with new valves. During this maintenance process the LNG Vaporizer 102-A was internally cleaned by recirculation of Kerosene on the heat exchanger gas side. During this scheduled Terminal maintenance three new block valves were installed at the LNG tank top related to the LNG Sendout Pump 101A. The replaced valves were: 1LNG-V-0290, 1LNG-V-0221 and 1LNG-V-0223 at the pump discharge pipelines. These new

Vanessa Valves were installed as an improvement for the pump maintenance. These valves has a better seal on the close position providing the opportunity to remove the pump from well without the need to shut down the Terminal. The new installed valves are the same design and didn't require any change in the operation or logic system.

On March 10th, as part of the scheduled LNG Terminal maintenance outage, the annual inspection of the Terminal ESD push button stations and the tests on each of the eleven LNG ESD actuators were performed by the Electrical & Instrumentation Maintenance Department. No deficiencies were noted and all test results were documented for record.

During this reporting period the Maritime Security (MARSEC) was maintained at Level 1 for all maritime operations.

During this reporting period a significant amount of work has been performed on the Terminal to complete the Corrosion Control Program. The LNG pipelines located on the trestle pipe rack were cleaned and BOG Blowers and Compressors paint touch-up work was completed.

During this reporting period the LNG Boil Off Gas Blowers and Compressors operated normally without significant events to be reported.

1.1 LNG Deliveries Summary:

DATE RECEIVED	SHIP	MMBtu OFFLOADED	Origin
January 26th , 2010	Matthew	2,668,528	Trinidad
March 18th, 2010	Matthew	2,715,453	Trinidad
April 22nd ,2010	Matthew	2,688,350	Trinidad
May 21st,2010	Matthew	447,652	Trinidad
May 29th,2010	Neptune	2,737,146	Trinidad
June 8th,2010	Neptune	448,086	Trinidad

Total energy in cargoes received during the reporting period was for 11,705,215 MMBtu.

2 LNG TERMINAL OPERATING CONDITIONS

2.1 Rollover

No rollover or conditions for possible rollover were observed. The LNG Tank has continually been re-circulated from bottom to top through the pier unloading line.

2.2 Geysering

No pressure change was observed to indicate Geysering.

2.3 Cold Spots

Monitoring of the LNG tank foundation temperatures has not shown any abnormal variation. Monthly visual inspections of the LNG tank exterior surface have not indicated any cold spots in the outer shell.

2.4 LNG Tank Vibration

No vibration detected.

2.5 Cryogenic Piping Vibration

No cryogenic piping vibrations have been observed.

2.6 Storage Tank Settlement

On March 19th, 2010, the EcoElectrica surveying contractor, Victor E. Rivera Associates collected data on the elevations for the 16 equally spaced survey monitoring points around the LNG Tank. The survey data was submitted to URS for geotechnical analysis and report. The URS report performed on May 18th, 2010, indicates that the West LNG tank continues to perform adequately with respect to the settlement specified by the tank designer.

2.7 LNG Terminal Incidents

No LNG incident has occurred at the Terminal during this reporting period.

2.8 Flaring events

From February 13th to 24th, the LNG Terminal was shut down for equipment maintenance; during this period of time the LNG storage tank pressure was maintained inside normal parameters by flaring the tank boil off gas excess pressure.

2.9 Non-Scheduled Maintenance or Repair

No unscheduled maintenance or repair has occurred at the Terminal during this reporting period.

3 Health and Safety

EcoEléctrica received the ISO 14001 and OHSAS 18001 certificates from ERM - CVS. With this achievement Ecoelectrica becomes the first LNG Terminal in the US

receiving those environmental, health and safety international standards certifications.

Ecoelectrica completed the Facility Security Officer (FSO) training for Operations Shift Supervisors and security guards.

Incident 10-24 – Operations were trying to start the Flare several times and the piping overheated and burned the piping insulation. The fire was extinguished with portable fire extinguishers. Nobody resulted injured. The Flare was ignited later and the insulation replaced.

Incident 10 - 43 – We experience a near miss incident when a contractor employee accidentally damaged the LNG Terminal DCS LAN FO while cutting the cable trays for replacement. The employee was cutting with an electric band saw the old metal cable tray. Communication fiber optic cable resulted damaged. Nobody was injured.

3.1 Fire

No LNG related fires were experienced during the reporting period.

3.2 LNG Release

No LNG releases occurred at the LNG Terminal during this reporting period.

4 Environmental

4.1 The U.S. Coast Guard performed its regular inspections on each of the two (2) ships offloaded during this reporting period and no deficiencies were reported.

5 Project Status

5.1 Installation of additional Hazard Detectors

During the scheduled Terminal maintenance EcoElectrica, LP installed four (4) additional flame detectors; two in the BOG Compressors building and two in the LNG-MCC to increase coverage of detection of the actual system. (Attached updated P&ID's)

5.2 LNG Terminal Expansion

In accordance with the April 16, 2009 Order Amending Authorization under Section 3 of the Natural Gas Act related to the Terminal Modification Project, EcoEléctrica filed its Initial Implementation Plan on June 15, 2009. On November 2, 2009 Mr. Miguel A. Cordero Lopez of the Puerto Rico Electric Power Authority (PREPA) filed a letter with the Commission outlining revisions to PREPA's Capacity Expansion Plan in consideration of key environmental and fuel diversification goals of the Government of Puerto Rico's Public Energy Policy Plan. In its letter, PREPA describes a change in the destination of natural gas from the Aguirre Combined Cycle Power Plant to a new Gas Combined Cycle power facility that will be constructed in the vicinity of the existing PREPA owned South Coast Steam Power Plant. The change in destination will not result in any changes to the design of the EcoEléctrica LNG terminal modification project as approved by the Commission in the Order. Additionally, no changes are required to the Implementation Plan.

6 Future Projects under Evaluation

6.1 Second LNG Storage Tank

The construction of the second LNG Storage Tank to supply Natural Gas Fuel to the Commonwealth remains one of EcoElectrica's considerations for a future expansion of the LNG Terminal.

7 Contact Person List

POSITION	NAME	TELEPHONE
General Manager - Operations	Carlos Reyes	787-836-2740, ext. 232 787-487-6002 (cellular)
LNG Terminal Manager	Oscar Cedeño	787-928-1009, ext 292 787-487-6042 (cellular) 787-835-0201 (home)
Operations Manager	Adolfo Antompietri	787-836-2740, ext. 236 787-487-6038 (cellular)
Health & Safety Manager	Pedro I. Martínez	787-836-2740, ext. 235 787-487-6043 (cellular)
Mechanical Maint. Manager	Wilbert de la Paz	787-836-2740, ext. 294 787-487-6011 (cellular)
Engineering, Electric, I&C Manager	Gaspar Bibiloni	787-836-2740, ext. 294 787-487-6010 (cellular)
Water Treatment Supervisor	José L. Rivera	787-836-2740, ext. 244 787-487-6038 (cellular) 787-264-0632 (home)
Shift Supervisor	José A. Santiago	787-836-2740, ext. 244 787-267-4925 (home)
Shift Supervisor	Alexis Díaz	787-836-2740, ext. 244 787-267-8372 (home)
Shift Supervisor	Davis Rivera	787-836-2740, ext. 244
Shift Supervisor	Luis Cruz	787-836-2740, ext. 244

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Shift Supervisor	Angel Rosado	787-836-2740, ext. 244
EcoEléctrica	Main Gate	787-836-2740, ext. 247
LNG Terminal	LNG Control Room	787-836-2740, ext. 289

Doc #85

Shipment Receipt
Address Information

Ship to:	**Ship from:**
COL. ALFRED A. PANTANO Jr.	MARELISA RIVERA
Jacksonville District COE	USFWS/BOQUERON FLD OFFICE
701 SAN MARCO BOULEVARD	CARR. 301, KM. 5.1, BO. COROZO
JACKSONVILLE, FL 32207-0019	BOQUERON, PR 00622
US	PR
904-232-2234	787-851-7297 206

Shipping Information
Tracking number: 794223178834
Ship date: 12/15/2010
Estimated shipping charges: 13.59

Package Information
Service type: International Priority
Package type: FedEx Envelope
Number of packages: 1
Total weight: 1LBS
Declared value: 0.00USD
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BOQUERON, PR 00622
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Ship Date: 15DEC10
ActWgt: 1.0 LB
CAD: 1967980/INET3090

REF:
DESC-1: Correspondence/No Customs Value
DESC-2:
DESC-3:
DESC-4:
EEI: NO EEI 30.37(a)
COUNTRY MFG: PR
CARRIAGE VALUE: 0.00 USD
CUSTOMS VALUE: 0.00 USD
T/C: S 104942393 D/T: R
SIGN: MARELISA RIVERA
EIN/VAT:
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Doc # 86

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Sent: Wednesday, December 15, 2010 2:32 PM
To: Garcia, Edgar W SAJ
Cc: Neida Pumarejo
Subject: Inventario Flora y Fauna Finca Foreman

Ing. García:

¡Saludos! Adjunto copia del inventario de flora y fauna levantado recientemente en la Finca Foreman.

Cualquier otra información no dude en dejarnos saber.

Gustavo A. Altieri Figueroa

Oficial de Adquisiciones, Servidumbres y Donaciones

Fideicomiso de Conservación de Puerto Rico

Tel. 787-722-5834 ext. 253

Cel. 787-366-6172

altierig@fideicomiso.org

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Classification: UNCLASSIFIED
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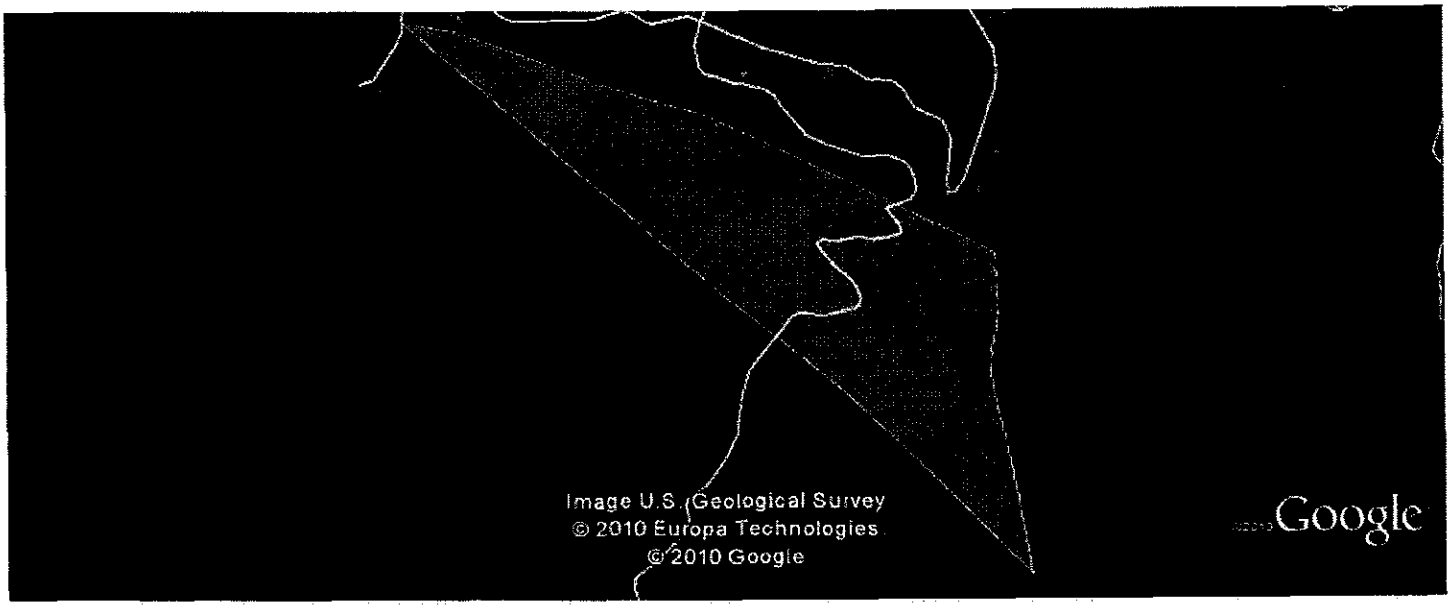
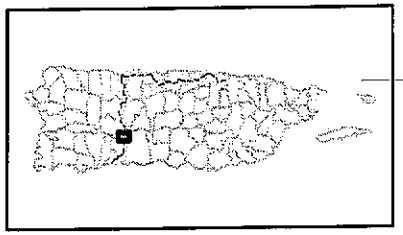
Finca_Foreman.kml foreman_verde_coe.pdf Preliminary Results - Flora and Fauna Inventory.pdf



Clark_Foreman_Final.shp

RUTA DE VÍA VERDE
EN LA COLINDANCIA DE LA
SC FOREMAN, ADJUNTAS



Via Verde

SC Foreman

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Fideicomiso de Conservación
de Puerto Rico

PRELIMINARY RESULTS

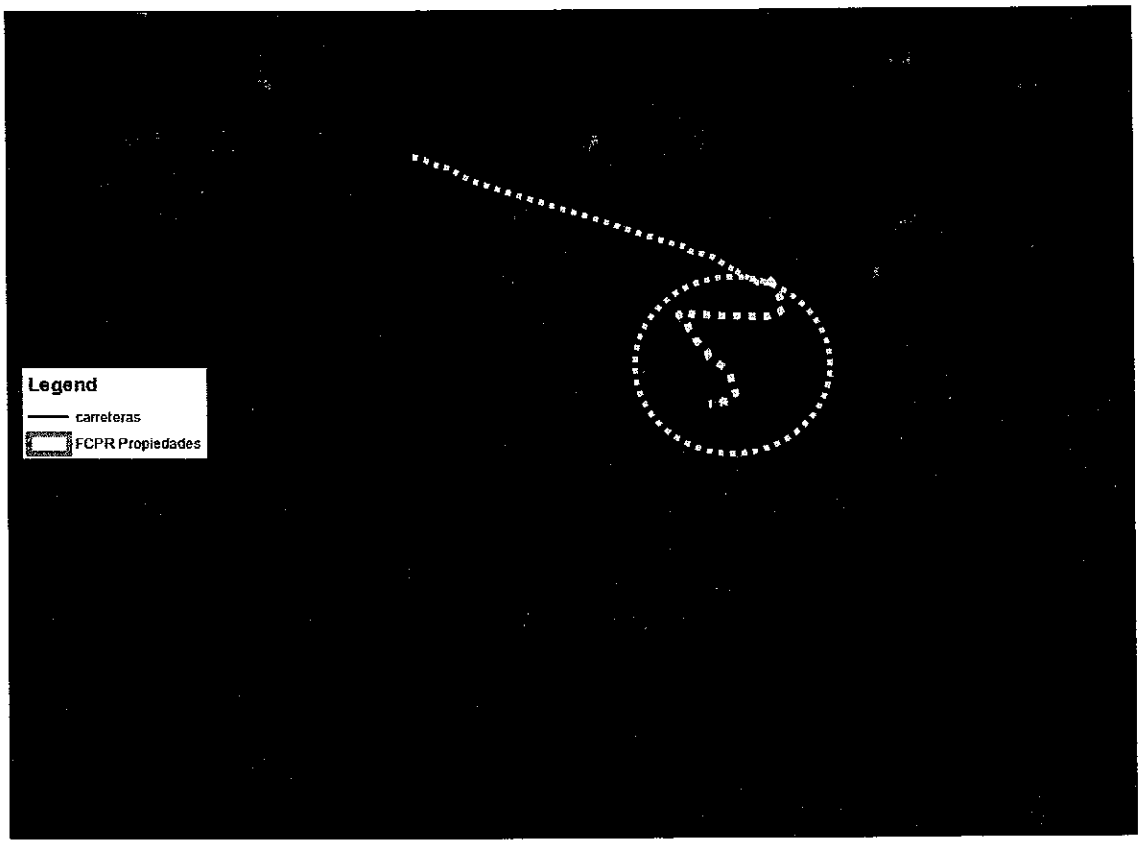
FLORA AND FAUNA INVENTORY

FOREMAN CONSERVATION EASEMENT

A. GENERAL DESCRIPTION AND METHODOLOGY

On October 21, 2010 representatives from the Conservation Trust of Puerto Rico (CTPR), including a group of consultants (conservation planners, biologists, ecologists, and natural resources scientists), visited the Foreman Conservation Easement to conduct a rapid flora and fauna inventory, as part of the development of a *Supplemental Baseline Documentation Report*.

The methodology of this inventory consisted in identifying all species of flora and fauna within areas that were accessible by foot during one single day (from 6:00 am to 3:00 pm). Access limitations due to steep slopes limited the scope of this inventory to areas highlighted in the following map:



Field data was summarized in a species listing that includes scientific name, Spanish common name, family, origin, and state and federal level legal protection status. Please see Table 1 and Table 2 for a complete listing of the property's preliminary flora and fauna inventory.

TABLE 1.
FLORA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Family	Scientific Name	Spanish Common Name	Origin	Legal Protection
Polypodiaceae	*Adiantum pyramidale* (L.) Willd. in L.	Helecho de pozo	N	N/A
Araucariaceae	*Agathis robusta* (F. J. Muell.) F. M. Bailey	Kauri	I	N/A
Euphorbiaceae	*Alchornea latifolia* Sw.	Achiotillo	N	N/A
Sapindaceae	*Allophylus crassinervis* Radlk. In Engl. & Prantl	D	N	N/A
Poaceae	*Andropogon bicornis* L.	Barba de indio	N	N/A
Araceae	*Anthurium dominicense* Schott	Lengua de vaca	N	N/A
Commelinaceae	*Aploleia monandra* (Sw.) H. E. Moore	Cohitre morado	N	N/A
Dryopteridaceae	*Arachniodes chaerophylloides* (Poir.) Proctor	D	N	N/A
Myrsinaceae	*Ardisia obovata* Desv. in Hamilton	Bádula	N	N/A
Poaceae	*Arthrostylidium sp.*			
Aspleniaceae	*Asplenium auriculatum* Sw.	D	N	N/A
Poaceae	*Bambusa vulgaris* Schrad. ex J. C. Wendl.	Bambúa	I	N/A
Begoniaceae	*Begonia decandra* Pavón ex DC.	Begonia nativa	E	N/A
Brunelliaceae	*Brunellia comocladiifolia* H. & B. ssp. *domingensis* Cuatrecasas	Palo bobo	N	N/A
	Bryophyte sp.			
Combretaceae	*Buchenavia tetraphylla* (Aublet) Howard	Granadillo	N	N/A
Combretaceae	*Bucida buceras* L.	Ucar	N	N/A
Flacourtiaceae	*Casearia arborea* (L. C. Rich.) Urban	Cabrilla	N	N/A
Flacourtiaceae	*Casearia sylvestris* Swartz	Laurel espada	N	N/A
Moraceae	*Cecropia schreberiana* Miq.	Yagrumo hembra	N	N/A
Sapotaceae	*Chrysophyllum argenteum* Jacq.	Caimitillo Verde	N	N/A
Rutaceae	*Citrus sp*		I	N/A
Melastomataceae	*Clidemia hirta* (L.) D. Don	Camasey Peludo	N	N/A
Guttiferae	*Clusia gundlachii* Stahl.	Cupey de altura	E	N/A
Polygonaceae	*Coccoloba pyrifolia* Desf.	Uvera	E	N/A
Polygonaceae	*Coccoloba rugosa* Desf.	Ortegón	E	EC, PE
Polygonaceae	*Coccoloba swartzii* Meissn. in DC.	Ortegón	N	N/A

TABLE 1.
FLORA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Family	Scientific Name	Spanish Common Name	Origin	Legal Protection
Palmae	*Cocos nucifera* L.	Palma de coco	I	N/A
Rubiaceae	*Coffea arabica* L.	Café	I	N/A
Gesneriaceae	*Columnea scadens* L. var. *tulae* (Urb.) Wiehler	Tibey parásito	N	N/A
Commelinaceae	*Commelina diffusa* Burm, f	Cohitre azul	N	N/A
Boraginaceae	*Cordia sulcata* DC.	Moral	N	N/A
Lythraceae	*Cuphea hyssopifolia* HBK.	D	I	N/A
Cyatheaceae	*Cyathea arborea* (L.) J. E. Smith	Camarón	N	N/A
Cyatheaceae	*Cyathea portoricensis* Spreng. ex Kuhn	Helecho gigante espinoso	E	N/A
Marattiaceae	*Danaea elliptica* J. E. Smith	D	N	N/A
Thymeleaceae	*Daphnopsis philippiana* Krug & Urban	Emajagua brava	E	N/A
Araliaceae	*Dendropanax laurifolius* (Marchal) Decaisne & Planchon ex R. C. Schneider	Gongolí	E	N/A
Araceae	*Dieffenbachia seguine* (Jacq.) Schott.	Rábano cimarrón	N	N/A
Dioscoreaceae	*Dioscorea alata* L.	Ñame	I	N/A
Dryopteridaceae	*Elaphoglossum peltatum* (Sw.) Urb.	D	N	N/A
Orchidaceae	*Epidendrum ciliare* L.	D	N	N/A
Araceae	*Epipremnum pinnatum* (L.) Engl.	D	I	N/A
Papilionoideae	*Erythrina peoppigiana* (Walp.) O. F. Cook	Brucayo	I	N/A
Myrtaceae	*Eugenia axillaris* Willd. in L.	Eugenia	N	N/A
Myrtaceae	*Eugenia domingensis* Berg.	Guasábara	N	N/A
Myrtaceae	*Eugenia eggersii* Kiaersk.	D	E	EC
Myrtaceae	*Eugenia stewardsonii* Britton	Hoja menuda	E	EC
Myrtaceae	*Eugenia stahlii* (Kiaersk) Krug & Urban	Guayabota	E	N/A
Cyperaceae	*Fimbristylis dichotoma* (L.) Vahl	Junquito	N	N/A
Grammitidaceae	*Grammitis taxifolia* (L.) Proctor	D	N	N/A
Meliaceae	*Guarea glabra* Vahl	Guaraguaíllo	N	N/A

TABLE 1.
FLORA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Family	Scientific Name	Spanish Common Name	Origin	Legal Protection
Bromeliaceae	*Guzmania berteriana* (R. & S.) Mez	D	N	N/A
Lycopodiaceae	*Huperzia linifolia* (L.) Trevis.	D	N	N/A
Balsaminaceae	*Impatiens walleriana* Hook. f. in Oliver	Miramelinda	I	N/A
Mimosoideae	*Inga laurina* (Sw.) Willd.	Guamá	N	N/A
Mimosoideae	*Inga quaternata* Poepp. & Endl.	Guamá venezolano	I	N/A
Mimosoideae	*Inga vera* Willd.	Guaba	N	N/A
Poaceae	*Lasiacis divaricata* (L.) Hitchcock	Yerba de Caña	N	N/A
Onagraceae	*Ludwigia octovalvis* (Jacquin) Raven	Yerba cangá	N	N/A
Bignoniaceae	*Macfadyena unguis-cati* (L.) A. Gentry	Bejuco de ajo	I	N/A
Papilionoideae	*Macroptilium lathyroides* (L.) Urban	Habichuela parada	N	N/A
Anacardiaceae	*Mangifera indica* L.	Mangó	I	N/A
Marcgraviaceae	*Marcgravia rectiflora* Triana & Planchon	Bejuco de Lira	N	N/A
Malpighiaceae	*Malpighia emarginata* Sessé & Mociño	Cereza colorada	I	N/A
Sapindaceae	*Matayba domingensis* (DC.) Radlkofer	Tea cimarrona	N	N/A
Poaceae	*Megathyrsus maximus* (Jacq.) R. D. Webster	Yerba de guinea	I	N/A
Melastomataceae	*Mecranium latifolium* (Cogniaux) Skean	Camasey Almendro	N	N/A
Compositae	*Melanthera aspera* (Jacq.) Small var. *aspera*	Salaíllo	N	N/A
Melastomataceae	*Miconia laevigata* (L.) D. Don	Camasey	N	N/A
Melastomataceae	*Miconia prasina* (Swartz) DC.	Camasey blanco	N	N/A
Melastomataceae	*Miconia tetrandra* (Sw.) D. Don	Camasey	N	N/A
Asteraceae	*Mikania fragilis* Urban	D	E	N/A
Mimosoideae	*Mimosa pudica* L.	Moriviví	N	N/A
Myrtaceae	*Myrcia deflexa* (Pioret) DC.	Cieneguillo	N	N/A
Myrtaceae	*Myrcia splendens* (Swartz) DC.	Hoja menuda	N	N/A
Myricaceae	*Myrica cerifera* L.	Arrayán	N	EC
Myrsinaceae	*Myrsine coriacea* (Sw.) R. Brown ex Roemer & Schultes	Mantecado	N	N/A
Lauraceae	*Nectandra coriacea* (Sw.) Griseb.	Avispillo	N	N/A

TABLE 1.
FLORA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Family	Scientific Name	Spanish Common Name	Origin	Legal Protection
Lauraceae	*Nectandra patens* (Sw.) Griseb.	Laurel geo colorado	N	N/A
Fabaceae	*Neorudolphia volubilis* (Willd.) Britton	Bejuco colorado	E	N/A
Polypodiaceae	*Nephrolepis multiflora* (Roxb.) Jarrett *ex* Morton	Helecho común	I	N/A
Lauraceae	*Ocotea leucoxylon* (Sw.) Lanesan	Laurel geo	N	N/A
Papilionoideae	*Ormosia krugii* Urban	Peronías	N	N/A
Poaceae	*Paspalum conjugatum* Berg.	Horquetilla blanca	N	N/A
Poaceae	*Paspalum millegrana* Schrad.	Cortadora	N	N/A
Sapindaceae	*Paullinia pinnata* L.	Bejuco de costilla	N	N/A
Poaceae	*Pennisetum purpureum* Schumach.	Yerba elefante	I	N/A
Piperaceae	*Peperomia distachya* (L.) A. Dietr.	D	N	N/A
Lauraceae	*Persea americana* Miller	Aguacate	I	N/A
Urticaceae	*Pilea inaequalis* (Juss. ex Poir.) Wedd.	D	N	N/A
Myrtaceae	*Pimenta racemosa* (Miller) J. W. Moore var. *racemosa*	Malagueta	N	N/A
Pinaceae	*Pinus caribaea* Morelet	Pino hondureño	I	N/A
Piperaceae	*Piper aduncum* L.	Higuillo	N	N/A
Piperaceae	*Piper amalago* L.	Higuillo de limón	N	N/A
Piperaceae	*Piper glabrescens* (Miq.) C. DC.	D	N	N/A
Labiatae	*Plectranthus scutellarioides* (L.) R. Br.	Vergüenza	I	N/A
Palmae	*Prestoea montana* (R. Graham) Nochols.	Palma de sierra	N	N/A
Verbenaceae	*Priva lappulacea* (L.) Pers.	Pega-pega	N	N/A
Myrtaceae	*Psidium amplexicaule* Persoon	Guayaba de Monte	N	EC
Rubiaceae	*Psychotria grandis* Sw.	Cachimbo grande	N	N/A
Cyperaceae	*Rhynchospora nervosa* (Vahl) Boeck. ssp. *ciliata* (Vahl) T. Koyama	Yerba de estrella	N	N/A
Rubiaceae	*Rondeletia portoricensis* Krug & Urban ex Urban	Juan Tomás	E	N/A
Rosaceae	*Rubus rosifolius* Smith	Fresa	I	N/A
Euphorbiaceae	*Sapium laurocerasus* Desf.	Tabaiba	E	N/A
Araliaceae	*Schefflera morototoni* (Aublet) Maguire, Steyermark & Frodin	Yagrumo macho	N	N/A

TABLE 1.
FLORA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Family	Scientific Name	Spanish Common Name	Origin	Legal Protection
Cyperaceae	*Scleria eggersiana* Boeck.	Cortadora de altura	N	N/A
Malvaceae	*Sida acuta* Burm. f.	Escoba blanca	N	N/A
Elaeocarpaceae	*Sloanea berteriana* Choisy in DC.	Cacaíllo	N	N/A
Smilaceceae	*Smilax coriacea* Spreng.	Dunguey blanco	N	N/A
Solanaceae	*Solanum torvum* Sw.	Berenjena cimarrona	I	N/A
Bignoniaceae	*Spathodea campanulata* Beauv.	Tulipán africano	I	N/A
Myrtaceae	*Syzygium jambos* (L.) Alst.	Pomarrosa	I	N/A
Bignoniaceae	*Tabebuia heterophylla* (DC.) Britt.	Roble nativo	N	N/A
Dryopteridaceae	*Tectaria trifoliata* (L.) Cav.	D	N	N/A
Thelypteridaceae	*Thelypteris reticulata* (L.) Proctor	D	N	N/A
Malvaceae	*Thespesia grandiflora* DC.	Maga	E	N/A
Bromeliaceae	*Tillandsia recurvata* (L.) L.	Nidos de gungulén	N	N/A
Boraginaceae	*Tournefortia hirsutissima* L.	Nigua	N	N/A
Malvaceae	*Urena lobata L.*	Cadillo	N	N/A
Urticaceae	*Urera baccifera* (L.) Wedd.	Ortiga	N	N/A
Compositae	*Wedelia trilobata* (L.) Hitchc.	Manzanilla de playa	I	N/A

LEYEND
N= Native
I= Introduced
E= Endemic
EC= Critical Element according to DNER
PE= Proposed for Federal listing

TABLE 2.
FAUNA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Familiy / Scientific Name	Spanish Common Name	Origin	Legal Protection
VERTEBRATES			
Birds			
Accipitridae			
Buteo jamaicensis	Guaraguao	R	N/A
Emberizidae			
Coereba flaveola	Reinita común	R	N/A
Icterus dominicensis	Calandria	R	ECR
Setophaga ruticilla	Candelita	M	N/A
Spindalis zena	Reina mora	R	N/A
Tiaris bicolor	Chamorro negro	R	N/A
Mimidae			
Margarops fuscatus	Zorzal pardo	R	N/A
Picidae			
Melanerpes portricensis	Pájaro Carpintero de PR	E	N/A
Todidae			
Todus mexicanus	San pedrito	E	N/A
Trochilidae			
Chlorostibon maugaeus	Zumbadorcito de P.R.	E	N/A
Vireonidae			
Vireo latimeri	Bien-te-veo	E	ECR
Reptiles			
Iguanidae			
Anolis cristatellus cristatellus	Lagartijo común	R	N/A
Anolis krugi	Lagartijo jardinero de las montañas	E	N/A
Anolis stratulus	Lagartijo manchado	R	N/A

TABLE 2.
FAUNA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Familiy / Scientific Name	Spanish Common Name	Origin	Legal Protection
Amphibians			
Leptodactylidae			
Eleutherodactylus antillensis	Coquí Churí	E	N/A
Eleutherodactylus brittoni	Coquí de las yerbas	E	N/A
Eleutherodactylus coqui	Coquí común	E	N/A
Eleutherodactylus portoricensis	Coquí de montaña	E	VU
Leptodactylus albilabris	Rana de labio blanco	R	N/A
INVERTEBRATES			
Insects			
Lepidoptera			
Pieridae			
Dismorphia spio	D		N/A
Nymphalidae			
Calisto nubila	Mariposa de ojos marrones		N/A
Molusks			
Camaenidae			
Caracolus caracola	Caracol		N/A

Leyend
R= Resident
E= Endemic
ECR= Critical Element According to DNER
VU= Vulnerable Element According to DNER

Doc #87

Marelisa Rivera/R4/FWS/DOI
12/15/2010 03:27 PM

To sindulfo.castillo@usace.army.mil, edgar.w.garcia@usace.army.mil, osvaldo.collazo@usace.army.mil
cc Edwin Muniz/R4/FWS/DOI@FWS, Dave Flemming/R4/FWS/DOI@FWS, Jerry Ziewitz/R4/FWS/DOI@FWS
bcc
Subject Response to PN SAJ 2010-02881 for Via Verde project

Attached please find response letter. Original will be submitted by regular mail.

Thanks

2010_12_15_viaverde_final.pdf Enclosure_2.pdf Enclosure_1.pdf

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622
(787) 851-7297 x 206 (direct)
(787) 851-7440 (fax)
(787) 510-5207 (mobile)
marelisa_rivera@fws.gov

There are three constants in life...change, choice and principles.
Stephen R. Covey

There are three constants in life...change, ch
Stephen R. Covey
----- Forwarded by Marelisa Rivera/R4/FWS/DOI

Doc #88

"Castillo, Sindulfo SAJ"
<Sindulfo.Castillo@usace.army.mil>

12/15/2010 04:07 PM

To <Marelisa_Rivera@fws.gov>, "Garcia, Edgar W SAJ" <Edgar.W.Garcia@usace.army.mil>, "Collazo, Osvaldo SAJ" <Osvaldo.Collazo@usace.army.mil>
cc <Edwin_Muniz@fws.gov>, <Dave_Flemming@fws.gov>, <Jerry_Ziewitz@fws.gov>
Subject RE: Response to PN SAJ 2010-02881 for Via Verde project (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Dear Marelisa,
Acknowledge receipt. Thanks.

Sindulfo Castillo, P.E.
Chief, Antilles Regulatory Section
400 Fernandez Juncos Avenue, San Juan, PR 00901
Tel: 787-729-6905 ext. 3054; Fax: 787-729-6906

Use the link below for: Map to our office, FAQ's, Contact info, Our Statutes, Regulations, AVATAR Guide To Fill Out Applications, Public Notices & More.
http://www.saj.usace.army.mil/Divisions/Regulatory/index.htm

Pending permit status is available online.
http://www.saj.usace.army.mil/Divisions/Regulatory/pendPermit/index.htm

Please assist us in better serving you! Please complete the customer survey by
clicking on the following link: http://per2.nwp.usace.army.mil/survey.html

Doc #89

-----Original Message-----
From: Garcia, Edgar W SAJ
Sent: Thursday, December 16, 2010 8:53 AM
To: Marelisa_Rivera@fws.gov
Cc: Rafael_Gonzalez@fws.gov; 'Edwin_Muniz@fws.gov'; 'Felix_Lopez@fws.gov'
Subject: FW: Inventario Flora y Fauna Finca Foreman (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Marelisa:

Attached is the Conservation Trust document that I mentioned in our telephone conversation about a lot that the Via Verde project will traverse.

The document included a detail inventory of the species that exist in the area. The exact location is still pending, but I will forward it as soon as I receive it.

Respectfully,

Edgar W. García
Project Manager
Antilles Regulatory Section

PRELIMINARY RESULTS

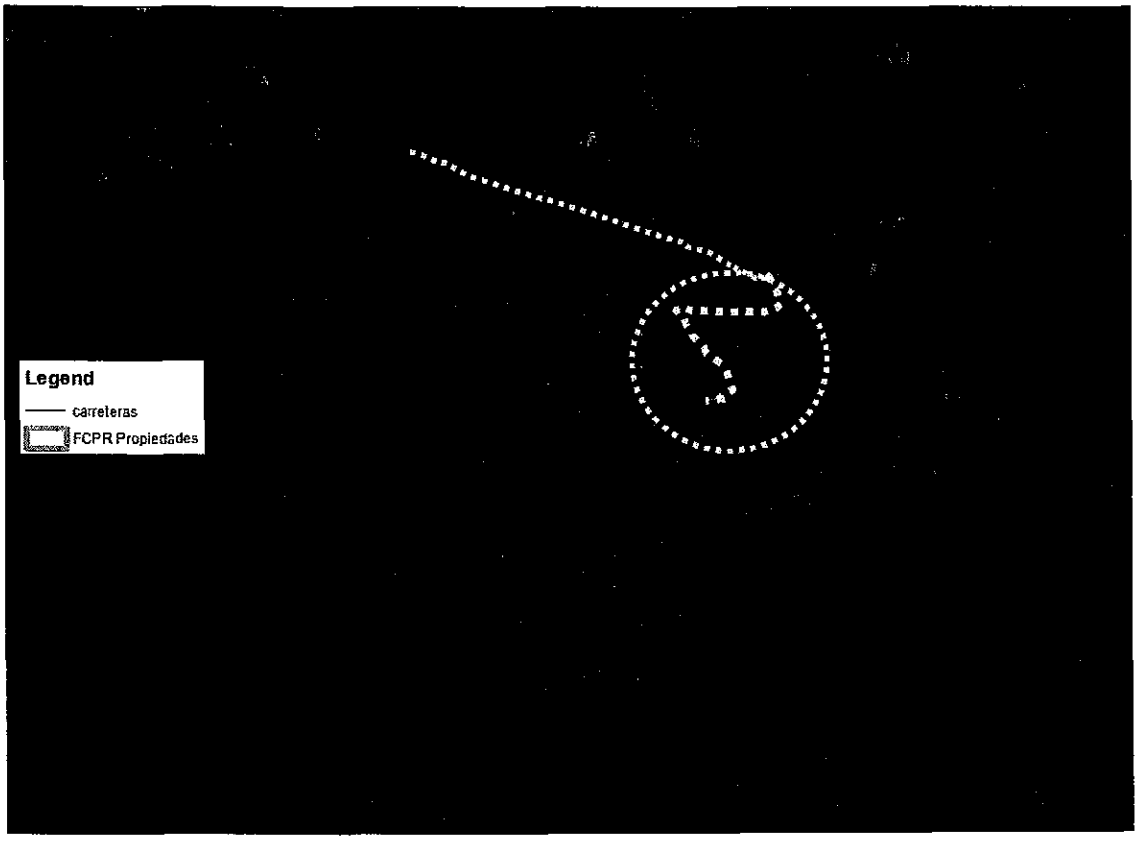
FLORA AND FAUNA INVENTORY

FOREMAN CONSERVATION EASEMENT

A. GENERAL DESCRIPTION AND METHODOLOGY

On October 21, 2010 representatives from the Conservation Trust of Puerto Rico (CTPR), including a group of consultants (conservation planners, biologists, ecologists, and natural resources scientists), visited the Foreman Conservation Easement to conduct a rapid flora and fauna inventory, as part of the development of a *Supplemental Baseline Documentation Report*.

The methodology of this inventory consisted in identifying all species of flora and fauna within areas that were accessible by foot during one single day (from 6:00 am to 3:00 pm). Access limitations due to steep slopes limited the scope of this inventory to areas highlighted in the following map:



Field data was summarized in a species listing that includes scientific name, Spanish common name, family, origin, and state and federal level legal protection status. Please see Table 1 and Table 2 for a complete listing of the property's preliminary flora and fauna inventory.

TABLE 1.
FLORA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Family	Scientific Name	Spanish Common Name	Origin	Legal Protection
Polypodiaceae	*Adiantum pyramidale* (L.) Willd. in L.	Helecho de pozo	N	N/A
Araucariaceae	*Agathis robusta* (F. J. Muell.) F. M. Bailey	Kauri	I	N/A
Euphorbiaceae	*Alchornea latifolia* Sw.	Achiotillo	N	N/A
Sapindaceae	*Allophylus crassinervis* Radlk. In Engl. & Prantl	D	N	N/A
Poaceae	*Andropogon bicornis* L.	Barba de indio	N	N/A
Araceae	*Anthurium dominicense* Schott	Lengua de vaca	N	N/A
Commelinaceae	*Aploleia monandra* (Sw.) H. E. Moore	Cohitre morado	N	N/A
Dryopteridaceae	*Arachniodes chaerophylloides* (Poir.) Proctor	D	N	N/A
Myrsinaceae	*Ardisia obovata* Desv. in Hamilton	Bádula	N	N/A
Poaceae	*Arthrostylidium sp.*			
Aspleniaceae	*Asplenium auriculatum* Sw.	D	N	N/A
Poaceae	*Bambusa vulgaris* Schrad. ex J. C. Wendl.	Bambúa	I	N/A
Begoniaceae	*Begonia decandra* Pavón ex DC.	Begonia nativa	E	N/A
Brunelliaceae	*Brunellia comocladiifolia* H. & B. ssp. *domingensis* Cuatrecasas	Palo bobo	N	N/A
	Bryophyte sp.			
Combretaceae	*Buchenavia tetraphylla* (Aublet) Howard	Granadillo	N	N/A
Combretaceae	*Bucida buceras* L.	Ucar	N	N/A
Flacourtiaceae	*Casearia arborea* (L. C. Rich.) Urban	Cabrilla	N	N/A
Flacourtiaceae	*Casearia sylvestris* Swartz	Laurel espada	N	N/A
Moraceae	*Cecropia schreberiana* Miq.	Yagrumo hembra	N	N/A
Sapotaceae	*Chrysophyllum argenteum* Jacq.	Caimitillo Verde	N	N/A
Rutaceae	*Citrus sp*		I	N/A
Melastomataceae	*Clidemia hirta* (L.) D. Don	Camasey Peludo	N	N/A
Guttiferae	*Clusia gundlachii* Stahl.	Cupey de altura	E	N/A
Polygonaceae	*Coccoloba pyrifolia* Desf.	Uvera	E	N/A
Polygonaceae	*Coccoloba rugosa* Desf.	Ortegón	E	EC, PE
Polygonaceae	*Coccoloba swartzii* Meissn. in DC.	Ortegón	N	N/A

TABLE 1.
FLORA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Family	Scientific Name	Spanish Common Name	Origin	Legal Protection
Palmae	*Cocos nucifera* L.	Palma de coco	I	N/A
Rubiaceae	*Coffea arabica* L.	Café	I	N/A
Gesneriaceae	*Columnea scadens* L. var. *tulae* (Urb.) Wiehler	Tibey parásito	N	N/A
Commelinaceae	*Commelina diffusa* Burm, f	Cohitre azul	N	N/A
Boraginaceae	*Cordia sulcata* DC.	Moral	N	N/A
Lythraceae	*Cuphea hyssopifolia* HBK.	D	I	N/A
Cyatheaceae	*Cyathea arborea* (L.) J. E. Smith	Camarón	N	N/A
Cyatheaceae	*Cyathea portoricensis* Spreng. ex Kuhn	Helecho gigante espinoso	E	N/A
Marattiaceae	*Danaea elliptica* J. E. Smith	D	N	N/A
Thymeleaceae	*Daphnopsis philippiana* Krug & Urban	Emajagua brava	E	N/A
Araliaceae	*Dendropanax laurifolius* (Marchal) Decaisne & Planchon ex R. C. Schneider	Gongolí	E	N/A
Araceae	*Dieffenbachia seguine* (Jacq.) Schott.	Rábano cimarrón	N	N/A
Dioscoreaceae	*Dioscorea alata* L.	Ñame	I	N/A
Dryopteridaceae	*Elaphoglossum peltatum* (Sw.) Urb.	D	N	N/A
Orchidaceae	*Epidendrum ciliare* L.	D	N	N/A
Araceae	*Epipremnum pinnatum* (L.) Engl.	D	I	N/A
Papilionoideae	*Erythrina peoppigiana* (Walp.) O. F. Cook	Brucayo	I	N/A
Myrtaceae	*Eugenia axillaris* Willd. in L.	Eugenia	N	N/A
Myrtaceae	*Eugenia domingensis* Berg.	Guasábara	N	N/A
Myrtaceae	*Eugenia eggersii* Kiaersk.	D	E	EC
Myrtaceae	*Eugenia stewardsonii* Britton	Hoja menuda	E	EC
Myrtaceae	*Eugenia stahlii* (Kiaersk) Krug & Urban	Guayabota	E	N/A
Cyperaceae	*Fimbristylis dichotoma* (L.) Vahl	Junquito	N	N/A
Grammitidaceae	*Grammitis taxifolia* (L.) Proctor	D	N	N/A
Meliaceae	*Guarea glabra* Vahl	Guaraguaíllo	N	N/A

TABLE 1.
FLORA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Family	Scientific Name	Spanish Common Name	Origin	Legal Protection
Bromeliaceae	*Guzmania berteriana* (R. & S.) Mez	D	N	N/A
Lycopodiaceae	*Huperzia linifolia* (L.) Trevis.	D	N	N/A
Balsaminaceae	*Impatiens walleriana* Hook. f. in Oliver	Miramelinda	I	N/A
Mimosoideae	*Inga laurina* (Sw.) Willd.	Guamá	N	N/A
Mimosoideae	*Inga quaternata* Poepp. & Endl.	Guamá venezolano	I	N/A
Mimosoideae	*Inga vera* Willd.	Guaba	N	N/A
Poaceae	*Lasiacis divaricata* (L.) Hitchcock	Yerba de Caña	N	N/A
Onagraceae	*Ludwigia octovalvis* (Jacquin) Raven	Yerba cangá	N	N/A
Bignoniaceae	*Macfadyena unguis-cati* (L.) A. Gentry	Bejuco de ajo	I	N/A
Papilionoideae	*Macroptilium lathyroides* (L.) Urban	Habichuela parada	N	N/A
Anacardiaceae	*Mangifera indica* L.	Mangó	I	N/A
Marcgraviaceae	*Marcgravia rectiflora* Triana & Planchon	Bejuco de Lira	N	N/A
Malpighiaceae	*Malpighia emarginata* Sessé & Mociño	Cereza colorada	I	N/A
Sapindaceae	*Matayba domingensis* (DC.) Radlkofer	Tea cimarrona	N	N/A
Poaceae	*Megathyrsus maximus* (Jacq.) R. D. Webster	Yerba de guinea	I	N/A
Melastomataceae	*Mecranium latifolium* (Cogniaux) Skean	Camasey Almendro	N	N/A
Compositae	*Melanthera aspera* (Jacq.) Small var. *aspera*	Salaíllo	N	N/A
Melastomataceae	*Miconia laevigata* (L.) D. Don	Camasey	N	N/A
Melastomataceae	*Miconia prasina* (Swartz) DC.	Camasey blanco	N	N/A
Melastomataceae	*Miconia tetrandra* (Sw.) D. Don	Camasey	N	N/A
Asteraceae	*Mikania fragilis* Urban	D	E	N/A
Mimosoideae	*Mimosa pudica* L.	Moriviví	N	N/A
Myrtaceae	*Myrcia deflexa* (Pioret) DC.	Cieneguillo	N	N/A
Myrtaceae	*Myrcia splendens* (Swartz) DC.	Hoja menuda	N	N/A
Myricaceae	*Myrica cerifera* L.	Arrayán	N	EC
Myrsinaceae	*Myrsine coriacea* (Sw.) R. Brown ex Roemer & Schultes	Mantecado	N	N/A
Lauraceae	*Nectandra coriacea* (Sw.) Griseb.	Avispillo	N	N/A

TABLE 1.
FLORA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Family	Scientific Name	Spanish Common Name	Origin	Legal Protection
Lauraceae	*Nectandra patens* (Sw.) Griseb.	Laurel geo colorado	N	N/A
Fabaceae	*Neorudolphia volubilis* (Willd.) Britton	Bejuco colorado	E	N/A
Polypodiaceae	*Nephrolepis multiflora* (Roxb.) Jarrett *ex* Morton	Helecho común	I	N/A
Lauraceae	*Ocotea leucoxylon* (Sw.) Lanesan	Laurel geo	N	N/A
Papilionoideae	*Ormosia krugii* Urban	Peronías	N	N/A
Poaceae	*Paspalum conjugatum* Berg.	Horquetilla blanca	N	N/A
Poaceae	*Paspalum millegrana* Schrad.	Cortadora	N	N/A
Sapindaceae	*Paullinia pinnata* L.	Bejuco de costilla	N	N/A
Poaceae	*Pennisetum purpureum* Schumach.	Yerba elefante	I	N/A
Piperaceae	*Peperomia distachya* (L.) A. Dietr.	D	N	N/A
Lauraceae	*Persea americana* Miller	Aguacate	I	N/A
Urticaceae	*Pilea inaequalis* (Juss. ex Poir.) Wedd.	D	N	N/A
Myrtaceae	*Pimenta racemosa* (Miller) J. W. Moore var. *racemosa*	Malagueta	N	N/A
Pinaceae	*Pinus caribaea* Morelet	Pino hondureño	I	N/A
Piperaceae	*Piper aduncum* L.	Higuillo	N	N/A
Piperaceae	*Piper amalago* L.	Higuillo de limón	N	N/A
Piperaceae	*Piper glabrescens* (Miq.) C. DC.	D	N	N/A
Labiatae	*Plectranthus scutellarioides* (L.) R. Br.	Vergüenza	I	N/A
Palmae	*Prestoea montana* (R. Graham) Nochols.	Palma de sierra	N	N/A
Verbenaceae	*Priva lappulacea* (L.) Pers.	Pega-pega	N	N/A
Myrtaceae	*Psidium amplexicaule* Persoon	Guayaba de Monte	N	EC
Rubiaceae	*Psychotria grandis* Sw.	Cachimbo grande	N	N/A
Cyperaceae	*Rhynchospora nervosa* (Vahl) Boeck. ssp. *ciliata* (Vahl) T. Koyama	Yerba de estrella	N	N/A
Rubiaceae	*Rondeletia portoricensis* Krug & Urban ex Urban	Juan Tomás	E	N/A
Rosaceae	*Rubus rosifolius* Smith	Fresa	I	N/A
Euphorbiaceae	*Sapium laurocerasus* Desf.	Tabaiba	E	N/A
Araliaceae	*Schefflera morototoni* (Aublet) Maguire, Steyermark & Frodin	Yagrumo macho	N	N/A

TABLE 1.
FLORA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Family	Scientific Name	Spanish Common Name	Origin	Legal Protection
Cyperaceae	*Scleria eggersiana* Boeck.	Cortadora de altura	N	N/A
Malvaceae	*Sida acuta* Burm. f.	Escoba blanca	N	N/A
Elaeocarpaceae	*Sloanea berteriana* Choisy in DC.	Cacaíllo	N	N/A
Smilaceceae	*Smilax coriacea* Spreng.	Dunguey blanco	N	N/A
Solanaceae	*Solanum torvum* Sw.	Berenjena cimarrona	I	N/A
Bignoniaceae	*Spathodea campanulata* Beauv.	Tulipán africano	I	N/A
Myrtaceae	*Syzygium jambos* (L.) Alst.	Pomarrosa	I	N/A
Bignoniaceae	*Tabebuia heterophylla* (DC.) Britt.	Roble nativo	N	N/A
Dryopteridaceae	*Tectaria trifoliata* (L.) Cav.	D	N	N/A
Thelypteridaceae	*Thelypteris reticulata* (L.) Proctor	D	N	N/A
Malvaceae	*Thespesia grandiflora* DC.	Maga	E	N/A
Bromeliaceae	*Tillandsia recurvata* (L.) L.	Nidos de gungulén	N	N/A
Boraginaceae	*Tournefortia hirsutissima* L.	Nigua	N	N/A
Malvaceae	*Urena lobata L.*	Cadillo	N	N/A
Urticaceae	*Urera baccifera* (L.) Wedd.	Ortiga	N	N/A
Compositae	*Wedelia trilobata* (L.) Hitchc.	Manzanilla de playa	I	N/A

LEYEND
N= Native
I= Introduced
E= Endemic
EC= Critical Element according to DNER
PE= Proposed for Federal listing

TABLE 2.
FAUNA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Familiy / Scientific Name	Spanish Common Name	Origin	Legal Protection
VERTEBRATES			
Birds			
Accipitridae			
Buteo jamaicensis	Guaraguao	R	N/A
Emberizidae			
Coereba flaveola	Reinita común	R	N/A
Icterus dominicensis	Calandria	R	ECR
Setophaga ruticilla	Candelita	M	N/A
Spindalis zena	Reina mora	R	N/A
Tiaris bicolor	Chamorro negro	R	N/A
Mimidae			
Margarops fuscatus	Zorzal pardo	R	N/A
Picidae			
Melanerpes portricensis	Pájaro Carpintero de PR	E	N/A
Todidae			
Todus mexicanus	San pedrito	E	N/A
Trochilidae			
Chlorostibon maugaeus	Zumbadorcito de P.R.	E	N/A
Vireonidae			
Vireo latimeri	Bien-te-veo	E	ECR
Reptiles			
Iguanidae			
Anolis cristatellus cristatellus	Lagartijo común	R	N/A
Anolis krugi	Lagartijo jardinero de las montañas	E	N/A
Anolis stratulus	Lagartijo manchado	R	N/A

TABLE 2.
FAUNA OBSERVED IN FOREMAN CONSERVATION EASEMENT

Familiy / Scientific Name	Spanish Common Name	Origin	Legal Protection
Amphibians			
Leptodactylidae			
Eleutherodactylus antillensis	Coquí Churí	E	N/A
Eleutherodactylus brittoni	Coquí de las yerbas	E	N/A
Eleutherodactylus coqui	Coquí común	E	N/A
Eleutherodactylus portoricensis	Coquí de montaña	E	VU
Leptodactylus albilabris	Rana de labio blanco	R	N/A
INVERTEBRATES			
Insects			
Lepidoptera			
Pieridae			
Dismorphia spio	D		N/A
Nymphalidae			
Calisto nubila	Mariposa de ojos marrones		N/A
Molusks			
Camaenidae			
Caracolus caracola	Caracol		N/A

Leyend
R= Resident
E= Endemic
ECR= Critical Element According to DNER
VU= Vulnerable Element According to DNER

Doc # 90

"Garcia, Edgar W SAJ" <Edgar.W.Garcia@usace.army.mil>

12/16/2010 10:00 AM

To <Marelisa_Rivera@fws.gov>

cc <Rafael_Gonzalez@fws.gov>, <Edwin_Muniz@fws.gov>, <Felix_Lopez@fws.gov>

bcc

Subject RE: Inventario Flora y Fauna Finca Foreman (UNCLASSIFIED)

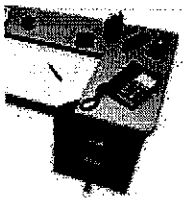
Classification: UNCLASSIFIED
Caveats: FOUO

As stated previously, attached is the location for the property.

Happy Holidays,

Edgar W. García
Project Manager
Antilles Regulatory Section

Doc #91



Sandra Perez/R4/FWS/DOI
12/16/2010 02:21 PM

To mrivera@vocero.com
cc Edwin Muniz/R4/FWS/DOI, Marelisa Rivera/R4/FWS/DOI, Lilibeth Serrano/R4/FWS/DOI
bcc
Subject Via Verde Letter to Corps of Engineers

Ms. Rivera,

Per your request, attached is a copy of the letter sent to Jacksonville District Corps of Engineers on December 15th, 2010.

Via_Verde_Letter_Dec_15_2010.pdf

Cordially,

Sandra Pérez
Administrative Assistant
Caribbean Ecological Services Field Office
U.S. Fish and Wildlife Service
787-851-7297 ext. 200

Doc #92

"Ramos-Santiago, Luis J MAJ MIL USA MEDCOM EAMC" <santiago.luis.ramos@us.army.mil>

12/17/2010 11:27 AM

To <Marelisa_Rivera@fws.gov>

cc <Silmarie_Padron@fws.gov>

bcc

Subject RE: Contactos Cuerpo de Ingenieros (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Buenos dias, le voy a enviar copia de la carta a usted, por favor enviasela al Director y al Comandante de USCOE en Jacksonville FL, gracias--dame 15 minutos..

Doc #93

"Ramos-Santiago, Luis J MAJ MIL USA MEDCOM EAMC" <santiago.luis.ramos@us.army.mil>

12/17/2010 01:33 PM

To <sindulfo.castillo@usace.army.mil>, <edgar.w.garcia@usace.army.mil>, <Silmarie_Padron@fws.gov>, <Marelisa_Rivera@fws.gov>,
cc <drpijuan@yahoo.com>
bcc

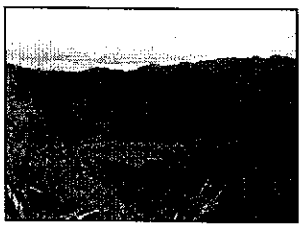
Subject Comments to Via Verde Project (UNCLASSIFIED)

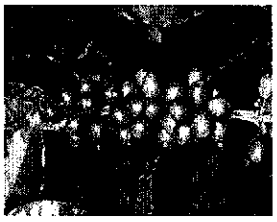
Classification: UNCLASSIFIED
Caveats: NONE

<<GanaderiaDonJuanSantiagoNieves2010.docx>> Dear COL Pantano and Chief Castillo,
Attached is our comments regarding the Via Verde Project. Feel free to contact us regarding any question, thanks.

Classification: UNCLASSIFIED
Caveats: NONE

GanaderiaDonJuanSantiagoNieves2010.docx





16 of December of 2010

Mr. Sindulfo Castillo
Chief Regulatory Section
US Army Corps of Engineers Antilles Office
400 Fernández Juncos Ave.
San Juan PR 00901-3299
sindulfo.castillo@usace.army.mil

REF: Comments Via Verde Project AEE #2010-62-0210-JGE-T

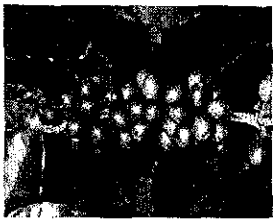
Dear Chief Castillo:

Ganaderia Don Juan Santiago Nieves, Inc (GDJSN) has been informed by the Autoridad de Energia Electrica (AEE), Commonwealth of Puerto Rico, of their intention to construct the Via Verde Project through our property known as Hacienda Central Pellejas (HCP) in Adjuntas, PR. These properties are identified by their catastral number: 240-000-005-04-901, 240-000-004-14, 240-000-005-04, and 240-000-009-39.

Hacienda Central Pellejas (HCP), referred as the "Jewel of the Mountains", is an ecological, agricultural, hydrological, scenic, and historical property certified by the Department of the Interior (DOI), the US Fish and Wildlife Service (FWS), the Department of Agriculture Commonwealth of PR, the US Forest Service, and the Department of Natural Resources of the Commonwealth of Puerto Rico (DRNA).

The 'Jewel of the Mountains' is rich in history, from being the last settlement of General Roy Stone during the Hispanic American war in 1898, to a prosperous sugar cane hacienda from the 1920s to 1960s, to a 1,000 certified charolais cattle ranch during the 1980's, and the film site of the movie Flight of Fancy in 1995. HCP is devoted primarily to shade grown 100% Arabica coffee and a working charolais/red brangus cattle ranch.

Since 2001, Dr. Luis J. Ramos Santiago, President of Ganaderia Don Juan Santiago Nieves, Inc. (*agricultor bonafide*) together with the United States Department of Agriculture (USDA-NRCS), the Forest Service (USFS), the Department of the Interior (DOI), the Fish and Wildlife Service (FWS), the International Institute of Tropical Forestry (IITF), the Department of Natural Resources of the Commonwealth of Puerto Rico (DRNA), and Puerto Rico's Department of Agriculture and Tourism Company has worked in partnership for the protection, conservation, restoration and enhancement of the natural resources within the hacienda.



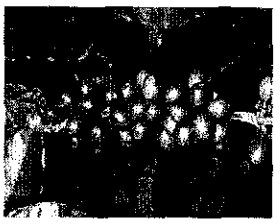
The United States Forest Service (FS) conducted the Forest Stewardship Management Plan which identified the rich ecological diversity of Hacienda Cental Pellejas: 466 acres of pristine primary forest, the birth of 45 water creeks and one (1) affluent river (Pellejas River: a major tributary to the Rio Grande de Arecibo Water Legacy Area), the existence of water tunnels that channels water from the Municipality of Adjuntas through the property towards the Municipality of Utuado, three (3) archeological sites, 1,400 acres of essential habitat to a total of 86 bird species, 15 of the 17 endemic bird species of Puerto Rico, and habitat to 12 species on the Federal and local endangered species act, an agricultural valley, numerous large water fall, minimum contamination from light and sound, and other important ecological attributes. More recently, the Hacienda Central Pellejas region and Adjuntas were designated by the Important Bird Areas (IBA) as Important Conservation Area for endemic and migratory bird species.

Besides the aforementioned ecological attributes, HCP has been committed to sensitive agricultural conservation practices. Such commitment granted HCP the White House Conservation Award in December 2006, and in 2005, the Private Stewardship Grant ($115,627) by the Fish and Wildlife Service Department of the Interior (FWS-DOI). This Private Stewardship Grant has been the largest single award given to a private for profit institution in Puerto Rico.

HCP is portrayed by the FWS-DOI at the national level as the model farm of the Partners Program of the FWS. Moreover, HCP signed an agreement with the United States Department of Agriculture and the Natural Resources and Conservation Services (NRCS) under the Conservation Reserve Program for the conservation and management of 800 acres, the largest contract area in Puerto Rico and the Caribbean region.

Recognizing HCP high ecological value and the increasing worldwide demand for ecotourism destinations, HCP submitted to the Tourism Company, the Economic Development Office of the Commonwealth of Puerto Rico, and the Department of Agriculture a plan for an Agro-Ecotourism development. This plan received preliminary endorsements by government agencies for the establishment of a sustainable agro-eco-friendly tourism project within 50 acres of the farm.

LTC Ramos Santiago's commitment with the preservation and conservation of HCP has lead to a signed agreement with four (4) leading conservation agencies including, the Department of the Interior (DOI 2010), the Atlantic Coast Joint Venture (www.acjv.org), the Trust for Public Land (www.tpl.org), and Casa Pueblo (www.casapueblo.org) for the establishment of a conservation easement on the entire property at perpetuity on Hacienda Central Pellejas.



Therefore, construction of the Via Verde Project through Hacienda Central Pellejas will have a direct and long term negative impact on the ecological, agricultural, hydrological, scenic, tourist, and historical characteristics of the "Jewel of the Mountains". As President of GDJSN, we are requesting the United States Army Corps of Engineers to consider an alternate route from Hacienda Central Pellejas.

Yours truly,

Luis J. Ramos Santiago

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Doc. #94

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
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(727) 824-5317; FAX (727) 824-5300
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December 19, 2010 F/SER4:JK/pw

(Sent via Electronic Mail)

Colonel Alfred Pantano
District Engineer, Jacksonville District
Department of the Army Corps of Engineers
Jacksonville Regulatory Office, South Permits Branch
PO Box 4970
Jacksonville, Florida 32232

Attention: Edgar W. Garcia

Dear Colonel Pantano:

NOAA's National Marine Fisheries Service (NMFS) reviewed the public notice dated November 19, 2010, for SAJ-2010-02881 (IP-EWG). The applicant, Autoridad de Energia Electrica, requests authorization from the Department of the Army to construct and install a 24-inch diameter, steel natural gas (NG) pipeline approximately 92 miles long with a construction right-of way (ROW) of 150 feet that traverses the island of Puerto Rico from the EcoEléctrica Liquid Natural Gas Terminal in the municipality of Peñuelas to the Cambalache Thermoelectric Power Plant in the municipality of Arecibo, and then eastward to the Palo Seco power plant facility in the municipalities of Toa Baja and San Juan. The total project area is about 1,672 acres and the pipeline will traverse 235 rivers and wetlands, including 369 acres of jurisdictional Waters of the United States. The public notice indicates that the work would impact approximately 28.5 acres of Estuarine Forested Wetland and Canals which are identified as essential fish habitat (EFH) by the Caribbean Fishery Management Council (CMFC). The need for compensatory mitigation is acknowledged by the applicant, but the applicant defers specific proposals until additional construction detail is available. Based on a preliminary review of this application, the Jacksonville District concludes an Environmental Impact Statement is not be required, and the District also concludes that the project would not adversely impact EFH or federally managed fishery resources. As the nation's federal trustee for the conservation and management of marine, estuarine, and anadromous fishery resources, the following comments and recommendations are provided pursuant to authorities of the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

Project Area
The public notice indicates that the work would impact approximately 28.5 acres of Estuarine Forested Wetland and Canals. NMFS also reviewed aerial imagery of the project site as part of our review of impacts to EFH. The public notice does not include results from a survey of estuarine inhabitants of the specific areas to be impacted.

Essential Fish Habitat at the Proposed Project Site
The site of the proposed project includes mangroves, seagrass, sandy bottom, and algal communities. CFMC indentifies these habitats as EFH for several species, including juvenile and adult gray snapper (*Lutjanus griseus*); juvenile mutton snapper (*Lutjanus analis*); juvenile nassau (*Epinephelus striatus*) and goliath grouper (*Epinephelus itajara*); and juvenile spiny lobster (*Panulirus argus*). Seagrass and mangrove directly benefit the fishery resources of the Atlantic Ocean and the Caribbean Sea by providing nursery habitat. Seagrass and mangrove habitats are part of a habitat complex that includes hard bottoms and coral reefs, and this habitat complex supports a diverse community of fish and invertebrates within the Atlantic Ocean and the Caribbean Sea. Seagrass and mangrove also provide important water quality maintenance functions (such as pollution uptake), stabilize sediments, attenuate wave action, and produce and export detritus (decaying organic material), which is an important component of marine and estuarine food chains. The cumulative loss of these habitats continues to reduce fisheries production within the waters of Puerto Rico.

Request for Additional Information
At this time, NMFS does not have sufficient information to complete a review of the proposed work; we request that the Jacksonville District provide the following:

1) Please clarify what is meant by "ALL wetland impacts will be temporary." The proposed ROW of 150 feet seems to imply that impacts to wetlands are not temporary.
2) Based on the answer to #1, please provide the total square footage of resource impacts (seagrass, other submerged vegetation, mangroves, and other benthic resources). The public notice indicates a total of 28.5 acres of EFH will be impacted but does not indicate the acreage for each habitat type.
3) Please provide additional explanation that can help us determine if HDD will be utilized when encountering "Estuarine Forested Wetland" and the other types of EFH habitats, such as seagrass and other submerged vegetation. This would help NMFS evaluate alternatives to the proposed action.
4) Please provide the results of an actual survey of the organisms in the estuarine areas that the proposed project impacts.

EFH Conservation Recommendations
Additional information is needed for NMFS to complete the EFH consultation. Based on the information provided this far, NMFS finds the project would have substantial adverse impacts on EFH. Section 305(b)(4)(A) of the Magnuson-Stevens Act requires NMFS to provide EFH conservation recommendations when an activity is expected to adversely impact EFH. Based on this requirement, NMFS provides the following:

EFH Conservation Recommendation

The Department of the Army shall not authorize the project as proposed. To make the project acceptable, the applicant shall revise the project to include the following items, which NMFS may revise based upon review of the additional information requested above.

1. No clearing shall be authorized in areas that support seagrass or mangroves.
2. Best management practices to minimize seagrass and mangrove impacts and water quality degradation shall be incorporated into the project design.
3. Once the final design for the project is set, the applicant shall develop a compensatory mitigation plan that offsets all direct and indirect impacts to EFH. The plan shall be based on a functional assessment and provided to NMFS for review and approval before the project is authorized.

Section 305(b)(4)(B) of the Magnuson-Stevens Act and implementing regulation at 50 CFR Section 600.920(k) require your office to provide a written response to this letter within 30 days of its receipt. If it is not possible to provide a substantive response within 30 days, in accordance with our "findings" with

your Regulatory Functions Branch, an interim response should be provided to NMFS. A detailed response then must be provided prior to final approval of the action. Your detailed response must include a description of measures proposed by your agency to avoid, mitigate, or offset the adverse impacts of the activity. If your response is inconsistent with our EFH Conservation Recommendation, you must provide a substantive discussion justifying the reasons for not following the recommendation.

Thank you for the opportunity to provide these comments. Related questions or comments should be directed to the attention of Mr. José A. Rivera at NOAA HCD, c/o US Army Corps of Engineers, 400 Fernandez Juncos Avenue, San Juan, Puerto Rico, 00901-3299. He may be reached by telephone at 787-501-7639 or by e-mail at Jose.A.Rivera@noaa.gov.

Sincerely,

Pace Wilber

/ for

Miles M. Croom
Assistant Regional Administrator
Habitat Conservation Division

cc:

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Doc # 95

Edwin Muniz/R4/FWS/DOI
12/20/2010 09:00 AM

To Jerry Ziewitz/R4/FWS/DOI@FWS
cc Dave Flemming/R4/FWS/DOI@FWS, Marelisa Rivera/R4/FWS/DOI@FWS
bcc
Subject Re: Fw: Response to PN SAJ 2010-02881 for Via Verde project (UNCLASSIFIED)

Correct.

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Jerry Ziewitz/R4/FWS/DOI

Doc # 96

Edwin Muniz/R4/FWS/DOI
12/20/2010 02:05 PM

To michael_bean@ios.doi.gov
cc Jack Arnold/R4/FWS/DOI@FWS, Dave Flemming/R4/FWS/DOI, Marelisa Rivera/R4/FWS/DOI
bcc
Subject Proposed Pipeline Project - Puerto Rico

Mr. Bean:

In your last visit to Puerto Rico, you asked us to copy you with our correspondence on the subject project.

I am attaching copy of our letter to the Corps of Engineers in response to the Public Notice for the project.

20101215_PR Gaspipeline Proposal_Via_Verde.pdf

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United States Department of the Interior

FISH & WILDLIFE SERVICE
Boqueron Field Office
Carr. 301, KM 5.1, Bo. Corozo
P.O. Box 491
Boqueron, PR 00622

DEC 15 2010

Col. Alfred A. Pantano, Jr.
District Commander
Jacksonville District Corps of Engineers
701 San Marco Boulevard.
Jacksonville, FL 32207-0019

Re: SAJ 2010-02881 (IP-EWG), Via Verde Pipeline Project.

Dear Col. Pantano:

The U.S. Fish and Wildlife Service (the Service) has received a copy of the above referenced Public Notice (PN) dated November 19, 2010, for the construction of a natural gas pipeline from EcoEléctrica to the PR Electric Power Authority (PREPA) power plants on the north coast of Puerto Rico. The proposed project has been publicly named by the proponent as Via Verde. Our comments are issued in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et. seq.) and the Endangered Species Act (ESA) (16 U.S.C. 1531 et. seq. as amended).

The applicant is requesting a permit to construct an approximately 92-mile-long pipeline covering about 1,672 acres, crossing 235 rivers and covering 369 acres of jurisdictional wetlands. The Caribbean Ecological Services Field Office has been involved in providing technical assistance to PREPA and its consultants on the current proposal. We have provided preliminary comments to the Corps in October 2010, based on the information submitted with the applicant's Joint Permit Application. We also provided technical assistance to the applicant regarding appropriate methodologies to conduct surveys for listed species.

The Service supports PREPA's efforts toward reducing Puerto Rico's dependence on fossil oils and encourages the Applicant to look for alternate energy sources for Puerto Rico. In 2006, the Service issued an Incidental Take Permit to WindMar RE for take anticipated during the construction and operation of a proposed wind farm on federally-listed species. For this project, WindMar appropriately minimized possible adverse effects and developed a comprehensive mitigation plan for the affected species. In 2008, the Service consulted with the Corps on the Gasoducto del Sur project. For this last project, the Service provided guidance and technical assistance to the Applicant for 2 years to minimize possible effects of the project on the endangered Puerto Rican nightjar and avoid effects to two listed plant species. The conservation

plan for the project was formalized through a Memorandum of Agreement between the Applicant and the Puerto Rico Department of Natural and Environmental Resources. At the present time, the Service is reviewing several other energy projects in Puerto Rico.

The following comments and recommendations are based on the information provided in the PN and information we have in our files.

Purpose of the Project, Single and Complete Project, Federal Involvement and compliance with the National Environmental Policy Act (NEPA)

The public notice states that the overall proposed purpose of the project is to deliver an alternate fuel source to three existing electric power generating facilities located in Arecibo, Toa Baja and Palo Seco operated by PREPA. EcoEléctrica was the first and remains the only source of natural gas in Puerto Rico. We believe the proposal may not include all elements necessary to meet this purpose.

Based on the information in our files and recent discussions with EcoEléctrica's consultant (see Enclosure 1), it is our understanding that the only authorized source of natural gas in Puerto Rico needs to be upgraded in order to supply the additional gas needed for the proposed pipeline. In May 1996, the Federal Energy Regulatory Commission (FERC) authorized EcoEléctrica to construct, and operate a liquefied natural gas (LNG) import terminal in Peñuelas, Puerto Rico. Environmental Condition No.11 of the May 1996 Order specified that "EcoEléctrica shall commence construction on its LNG facilities within 3 years of the date of this Order, or file a motion to extend the deadline, with the specific reasons why additional time is necessary." Therefore, it appears that authorization for the construction of the second authorized storage tank and four of the six authorized vaporizers has lapsed, and for EcoEléctrica to build another LNG storage tank, or other related facilities, it must obtain prior FERC authorization.[1]

In its July 19, 2010, semiannual report[2] to FERC (see Enclosure 2), EcoEléctrica indicated that it is considering construction of the second LNG Storage tank to supply natural gas fuel to the Commonwealth for a future expansion. We note that in this report, EcoEléctrica only addresses the Terminal Modification project for delivering natural gas to Costa Sur as previously permitted by FERC. By letter dated November 15, 2010, EcoEléctrica indicated to the Service that the current modifications to their facilities are not part of PREPA's Via Verde pipeline project, and that they would need to request FERC's approval for any physical or operational modifications that might be necessary in their facilities to serve the newly proposed pipeline project.

The PN fails to discuss necessary changes to EcoEléctrica's currently authorized facilities and operations to supply natural gas to PREPA's three facilities in the north. The Service issued a Biological Opinion for the original development of the EcoEléctrica facility, and modifications

[1] FERC, Order Amending Authorization Under Section 3 of the Natural Gas Act, April 16, 2009, Footnote #3.
[2] EcoElectrica, L.P. LNG Import Terminal and Cogeneration Project Docket Number CP-95-35-000, Semi Annual Report LNG Operating Report, July 19, 2010.

to this facility would require a reinitiation of consultation under Section 7 of the Endangered Species Act, which we discuss latter in this letter.

Because the Via Verde pipeline would require additional storage and modifications to the EcoEléctrica terminal, these projects are interrelated and should be viewed as one single and complete project. Should EcoEléctrica fail to obtain FERC authorization for the physical and/or operational modifications that might be necessary to serve the pipeline, the Corps would be permitting a fragment of a project that could not fulfill the stated purpose and need and would have irreversible resource impacts.

In addition, this project should be evaluated as a major construction activity since it would affect about 1,672 acres of land, including about 369 acres of wetlands, several Commonwealth Forests or Reserves, forested mountain and karst areas, and known habitat for more than 30 federally listed threatened or endangered species. Only when the project enters the San Juan metropolitan area do the environmental impacts drop significantly. We believe that the Corps has sufficient control and responsibility to warrant Federal Review over the entire project from the EcoEléctrica terminal to the end of the pipeline, and therefore a Federal EIS for this project is warranted.

Alternatives Analysis

The applicant's alternative analysis does not include PREPA's original plan to build a new natural gas combined cycle power plant close to the existing Costa Sur facility, and to retro fit both Costa Sur and Aguirre power plants to use natural gas. This was the applicant's preferred alternative in the past and now is not mentioned in the applicant's alternatives analysis. We believe that this alternative is reasonable and practicable, as it is already permitted, would have lower environmental impacts, and would be more secure and easier to maintain than the currently proposed gas pipeline.

Habitat Impacts

The project will cut through the southern karst region, central mountains, and northern karst region of Puerto Rico. Many portions of the alignment are currently isolated and not subject to developmental pressures. These include the Rio Abajo Commonwealth forest and the Vega Commonwealth forest, the DNER designated north karst Priority Conservation Area (PCA), the Caño Tiburones PCA, and the San Pedro Swamp Critical Wildlife Area.

The construction right of way (ROW) width ranges from 100 to 150 feet, and more if needed, with a final permanent ROW of 50 feet. The "Declaración de Impacto Ambiental Preliminar"(DIA-P) states that all vegetation within the construction ROW will be cut and that the permanent 50 foot ROW will be maintained as a no-root zone with no woody vegetation. The DIA-P does not propose mitigation for impacts to previously undisturbed forested areas in this long corridor that will create an avenue for invasive and noxious species to enter previously

isolated areas of wildlife habitat. The DIA-P also does not describe methods for maintaining a 92-mile, 50-foot-wide no-root zone corridor through karst and mountainous topography.

The Service is concerned that the clearing of all vegetation in the 150 foot ROW as stated in the DIA-P, in areas of highly erodible or unstable lands would cause excessive erosion that could impair water quality and channel stability in streams and rivers along the route. Trenching is likely not feasible in many steep areas within the corridor, yet DIA-P includes no discussion of how these areas will be traversed.

Since the construction ROW varies in width, we believe that all project impacts should be based on the worst-case scenario of a 150-foot wide ROW. Generalized drawings as seen on sheet 2 of the PN do not clearly represent what is written in the DIA-P. The proposed permanent 50 foot ROW and its associated no root zone will require either mechanical or chemical maintenance, which implies construction of a permanent maintenance road with associated stream crossings along most of, if not the entire, ROW length. This is not addressed anywhere in the documents. Utilizing the full estimate of ROW impacts should also help account for staging areas along the project route.

The Service is concerned about the possible impacts of directional drilling in the karst portions of the pipeline corridor. Voids in the rock matrix may lead directly to the aquifer, and a "frac-out" of drilling muds in this type of terrain and geology could contaminate underground waters and adversely affect human health, unique subterranean fauna, and commerce.

Endangered Species

The Service concurs with the Corps' determination that the proposed project may affect the following 32 listed species: Puerto Rican nightjar (*Caprimulgus noctitherus*); Puerto Rican parrot (*Amazona vittatta vittatta*); Puerto Rican crested toad (*Peltophryne lemur)*; Puerto Rican boa (*Epicrates inornatus)*; Puerto Rican sharp-shinned hawk (*Accipiter striatus venator);* Puerto Rican broad-winged hawk (*Buteo platypterus brunnescens*); Puerto Rican plain pigeon (Patagioenas inornata wetmorei); and the listed plant species *Auerodendron pauciflorum*, palo de Ramón (*Banara vanderbiltii*), diablito de tres cuernos (*Buxus valhii*), *Cordia bellonis, Daphnopsis helleriana,* palo de rosa (*Ottoschulzia rhodoxylon*), *Myrcia paganii,* chupacallos *(Pleodendron macranthum*), *Shoepfia arenaria,* erubia (*Solanum drymophilum), Tectarea estremerana, Thelypteris inabonensis, Thelypteris verecunda, Thelypteris yaucoensis, Chamaecrista glandulosa,* cobana negra *(Stahlia monosperma), Polystichum calderoense,* nogal *(Juglans jamaicensis*), *Mitracarpus maxwelliae, Mitracarpus polycladus, Cordia rupícola, Catesbaea melanocarpa, Eugenia woodburyana,* bariaco *(Trichilia triacantha*), and St. Thomas prickly ash (*Zanthoxylun thomasianum).* No designated critical habitat is present along the proposed route for the project. The Service also continues to recommend surveys of the petitioned species coqui llanero (*Eleutherodactylus juanariveroi*) where the project crosses wetlands in Toa Baja.

In addition to the species listed above, the Corps also needs to make an effect determination with regards to the endangered Antillean manatee (*Trichechus manatus*). As we mentioned earlier in this letter, when EcoEléctrica was originally authorized, formal consultation under Section 7 of the ESA was concluded for the species. Since that time, the Environmental Baseline has changed; therefore, the Corps' biological assessment should also include an analysis of any necessary changes to current facilities and/or operation of the EcoEléctrica LNG terminal needed for the Via Verde project.

On October 18, 2010, the Service provided technical assistance to the Corps regarding the information included in the draft Biological Evaluation for the project. We concluded that the biological evaluation provided by the applicant did not rely upon survey methodologies that maximized detection probabilities for federally-listed species and did not include site-specific habitat characterization. Therefore, the Service could not concur with the determinations of the biological evaluation. We recommended that surveys for listed species be appropriately designed and conducted. We also recommended the development of a Biological Assessment, since we considered the project a major construction activity under NEPA. On November 10, 2010, December 2, 2010 and December 8, 2010, the Service provided additional technical assistance to the project applicant regarding appropriate survey methods for listed species along the proposed route.

At the present time, we continue to recommend that appropriate site-specific surveys be conducted along the proposed route to determine presence/absence of listed species within the project area and the amount of suitable habitat. Survey methodologies should be developed and surveys conducted by experienced and qualified personnel, and in close coordination with the Service. The Biological Assessment should include the results of such surveys and should be part of the Federal EIS. The Biological Assessment should consider the behaviors to be affected by the project, and proposed site-specific measures to avoid or minimize possible adverse effects.

Federal regulations at 50 CFR 402.12 provide guidance regarding Biological Assessments. A biological assessment shall evaluate the potential effects of the action on listed species and proposed species and designated and proposed critical habitat and determine whether any such species or habitat are likely to be adversely affected by the action and is used in determining whether formal consultation or a conference is necessary. The Biological Assessment shall be completed before any contract for construction is let, and before construction is begun (50 CFR 402.12(b)(2). The regulation also describes the information should be considered for inclusion in the Biological Assessment (see 50 CFR 402.12(f). The regulation recommends the following:

(1) The results of an on-site inspection of the area affected by the action to determine if listed or proposed species are present or occur seasonally.
(2) The views of recognized experts on the species at issue.
(3) A review of the literature and other information.
(4) An analysis of the effects of the action on the species and habitat, including consideration of cumulative effects, and the results of any related studies

(5) An analysis of alternate actions considered by the Federal agency for the proposed action.

The Federal agency or the designated non-Federal representative shall complete the Biological Assessment within 180 days after its initiation (receipt of or concurrence with the species list), unless a different period of time is agreed to by the Service and the Federal agency (50 CFR 402.12(i)). If a permit or license applicant is involved, the 180-day period may not be extended unless the agency provides the applicant, before the close of the 180-day period, with a written statement setting forth the estimated length of the proposed extension and the reasons why such an extension is necessary. Once the Service reviews the Biological Assessment and concurs in writing with the Corps's initiation letter, a biological opinion is provided to the Corps within 135 days.

We would like to provide the following technical assistance for the planning and implementation of the surveys to inform the Biological Assessment.

Habitat characterization for the Puerto Rican sharp-shinned hawk and Puerto Rican broad-winged hawk

We agree with the Applicant's approach of characterizing the suitable breeding habitat for the endangered raptors utilizing expert's opinion, maps of previously known breeding areas or home ranges, data from previous studies and published references. We recommend compiling these data within a digital Geographic Information System (GIS). We would like to meet with the species experts and discuss during a working meeting the areas to be included in the analysis to ensure that all available information is considered for the effects determination. We also would like to have the opportunity to visit the areas with contracted personnel. If surveys to determine breeding territories are not conducted, suitable breeding habitat for the species should be avoided. The alternative of avoiding impacts to potential nesting trees and tree species is not protective to the species if the breeding territory is not identified. We do not concur with the Applicant that it is possible to avoid impacts to breeding habitat and breeding behavior without first identifying the breeding territory. Under the assumption that suitable habitat is occupied for breeding, possible take as defined by the ESA should be anticipated. It is important to determine the number of breeding territories that would be affected by the project construction and operation in order to evaluate in a Biological Opinion whether the project jeopardizes the continued existence of the species.

Potential presence of endangered plants

We do not agree with the Applicant's proposal of surveying at intervals of 100 m within suitable habitat. Interval sampling and transects is appropriate for diversity inventories, but not to detect presence of listed plant species, due to their patchy distribution and similarity of appearance with other common species. We recommend that personnel trained to recognize the listed species systematically search all areas of suitable habitat within the project footprint. We propose a working meeting between our staff and the Applicant's contracted personnel to share information

and delineate together the survey areas. Once the areas are designated, we propose combined site visits to determine the suitability of the sampling approach for each area. The Service requests that if listed species are identified or found, duplicates of herbarium specimens are provided to our office for reference purposes.

Potential presence of coqui llanero in Toa Baja

We agree with PREPA's approach to search for this species. We would like to have the opportunity to visit the ROW of the proposed project within other wetland areas in northern Puerto Rico to identify whether habitat suitable for the coqui llanero is present in other areas of the route.

Potential presence of the Puerto Rican crested toad

We agree with PREPA's approach to search for the Puerto Rican crested toad in both the southern and northern limestone forest areas. We recommend that before surveys are initiated, survey areas are discussed and delineated between our staff and contracted species experts. We would like to also have the opportunity to visit the areas with contracted personnel. As we mentioned in our letter dated October 18, 2010, haystack hills between Manatí and Bayamón harbor suitable habitat for the Puerto Rican crested toad. These areas should be included in the survey plans.

Puerto Rican nightjar

We continue to recommend intensive surveys during the breeding season for the endangered Puerto Rican nightjar to determine the amount of suitable habitat and the number of singing males or territories that the project may affect.. This information is necessary to determine direct and indirect effects to the species, and to formulate measures to avoid and minimize adverse effects during construction and operations.

Puerto Rican boa

The Applicant should delineate and quantify the amount of suitable boa habitat within the project area. The applicant should first consider alternatives to avoid these areas and develop conservation measures to minimize possible adverse effects where avoidance is not possible. Once possible effects are appropriately minimized, the Service would work with the Applicant to develop a search and rescue protocol for relocating individual animals to suitable habitat outside of the project area prior to project construction.

Impacts to Landowner Incentive Programs

The present project goes throughout properties under the Service's Partners for Fish and Wildlife Program (PFWP). We have identified that at least three properties under a current Conservation Agreement with the Service that may be adversely affected by the proposed project: Hacienda

Pellejas in Adjuntas, Hacienda Esperanza in Manatí, and the US Navy Radio Station in Toa Baja. Current efforts at these highly ecologically valued properties include restoration of forest, riparian habitat and restoration of wetland areas. The Service has invested close to $180,000 of federal funds on these restoration activities, and we recommend modifying the project to avoid these areas. If avoidance is not practicable, the conservation investment in these properties must be compensated with comparable restoration efforts on other similar properties.

Wetland Impacts

Temporary wetland impacts in the Joint Permit Application were calculated using a 50-foot width, even though the ROW width is 150 feet. As stated above, we recommend using a 150-foot construction corridor width to estimate temporary impacts.

The Applicant states that all wetland impacts will be temporary. Because the project involves approximately 235 separate wetland and river crossings, poor construction techniques on even a fraction of these, such as failing to remove all matting or excess fill material, or to properly grade and revegetate disturbed areas, could easily result in substantial permanent impacts.. This makes calculating wetland and habitat impacts difficult since impacts to wetlands and streams depend largely on the construction technique the contractor will use and does not take into account operation and maintenance of the pipeline.

Some of the wetlands the project may affect are within areas designated by the Commonwealth of Puerto Rico as Natural Reserves and Critical Wildlife Areas, including: the Cucharillas Marsh PCA, San Pedro Swamp PCA, Caño Tiburones Natural Reserve, and Hacienda la Esperanza Natural Reserve. These areas lie within the northern karst, an area known for its underground streams, springs and shallow aquifer.

Directional drilling is proposed to minimize impacts on larger rivers and streams, wetlands, roads and other areas, which involves injecting drilling mud (bentonite clay and other substances) under pressure into the bore hole. A "frac-out" occurs when the drilling mud escapes the bore hole, and if it enters waters supporting aquatic life, micro particles of the clay can clog the gills of aquatic organisms. While there is a discussion regarding steps to take in the event of a frac-out, the Service is very concerned with the use of this method in karst topography, where voids in the substrate are common and often connected to ground- and surface-water systems.

The pipeline route crosses multiple low-order streams in mountainous areas. These streams are the headwaters of larger rivers and support a marine-derived native stream fauna composed of several species of freshwater shrimp, crabs and gobies. This diverse community is sensitive to disturbance, increased turbidity, and changes in channel morphology. Excessive erosion and sedimentation during construction or maintenance of the ROW could cause long-term or permanent impacts to these important wildlife areas.

Directional drilling is also proposed to avoid impacts to forested wetland areas. This includes an approximately 1-mile long crossing under the mangrove wetlands and the Rio Cocal in Toa Baja. However, all project drawings of wetland crossings show the 150-foot ROW and the permanent 50-foot no-root zone. It is not clear whether the 50-foot permanent ROW in forested wetlands could be used to access the pipeline in the future. If so, then this should be considered a permanent wetland impact. Because of the muck soils associated with some of these wetland types, additional staging areas will be needed for the drill rig, pipe, etc. There is no mention of how drilling mud will be managed, since there will be a need for sumps and other ground disturbances at the drill site to store drill muds.

Mitigation

The Corps has not yet verified the Applicant's jurisdictional determinations. The Applicant proposes a .01-to-1 compensatory mitigation ratio. This would amount to 4 acres of compensatory mitigation for an estimated 369 acres of "temporary" wetland impacts, which is inappropriate and unacceptable to the Service. A much higher ratio is necessary to compensate for the: 1) temporary loss of wetlands functions and values; 2) likely permanent loss of functions and values due to contractor errors; and 3) permanent habitat alteration by species such as cattails that rapidly invade disturbed wetland areas and out compete more beneficial wetland plants.

The Applicant should develop an adequate mitigation plan after the appropriate efforts have been implemented for avoidance and minimization. In addition we recommend that the Corps impose a performance bond to assure proper compliance with the mitigation and minimization measures.

The project area includes the mitigation area for the Gasoducto del Sur project, despite our repeated requests during the technical assistance process to avoid this area. This area was selected as a mitigation area to preserve its large amount of undisturbed, quality habitat. The Corps needs to assure compliance with previous permit conditions as part of considering this new permit action.

Summary and Conclusion

This project is one of the largest infrastructure projects proposed in Puerto Rico in decades. Its 92-mile corridor of temporary and permanent impacts would cross karst, mountain, and coastal habitats, a number of which are recognized in the Puerto Rico Comprehensive Wildlife Conservation Strategy as Critical Wildlife Areas important to conservation. The project could affect habitat for more than thirty federally-listed species and one species for which we are considering a petition for listing. Impacts to fauna and flora are not well documented, and maintenance for sensitive areas after construction is not well specified.

A broad spectrum of fish and wildlife resources occur within and adjacent to the proposed pipeline route, including migratory birds, amphidromous fish, endangered species, and wetlands. The karst areas of Puerto Rico are unique geological and ecological features in the United States,

and serve as an important aquifer recharge zone for the island. The haystack karst hills are a refugium for many native plant species. The project could adversely affect numerous streams and wetlands, and the Applicant's proposal does not appropriately consider alternatives to avoid, and measures to minimize, such impacts. The proposed 0.01-to-1 compensatory mitigation ratio is inadequate. Therefore, we are advising you, in accordance with part IV 3(a) of the 1992 Memorandum of Agreement between our agencies on the elevation of permit decisions under section 404(q) of the Clean Water Act, that the proposed project may result in substantial and unacceptable impacts to aquatic resources of national importance. We recommend that the Corps deny a permit for this action as currently proposed. The Service requests to be informed of any meetings with the applicant and the Corps or any additional documentation submitted to the Corps, regarding this permit action.

If you have any questions please contact Marelisa Rivera at 787 851 7297 x 206.

Sincerely,

Edwin Muñiz
Field Supervisor

Fhl/mtr

Enclosures

cc:
DNER, San Juan
EQB, San Juan
PRPB, Land Use Division, San Juan
PRPB, CZM, San Juan
EPA, San Juan
EPA, Dan Montella, New York
COE, Regulatory, San Juan
FWS, Atlanta
FERC, DC

Doc # 97

GOVERNMENT OF PUERTO RICO
Puerto Rico Electric Power Authority

SAN JUAN, PUERTO RICO

PO Box 364267
San Juan, PR 00936-4267

www.prepa.com

U.S. Fish & Wildlife Service
DEC 21 2010

December 20, 2010

EXPRESS MAIL EB 078636801 US

Mr. Edwin Muñiz
Field Supervisor
Caribbean Office
Fish & Wildlife Service
Boquerón, PR 00622

Dear Mr. Muniz:

Re: SAJ 2010-02881 (IP-EWG), Vía Verde Pipeline Project
Final Environmental Impact Statement

As agreed during the telephone conversation that you had with our Environmental Consultant, Eng. Daniel Pagán on December 17, 2010, enclosed please find an electronic copy of the Final Environmental Impact Statement (EIS) for the referenced project. The EIS was filed before the Environmental Quality Board (EQB) last November 29, 2010, and approved on November 30, 2010, after the PREPA´s compliance with the procedures established by the EQB, and the required evaluation by this agency. Please note that the document under consideration has been posted at the Webpage of the EQB since its filing date and available to the general public since then.

The comments presented in your December 15, 2010 letter to the United States Army Corp of Engineers (USACE), were based on the preliminary EIS and not on the Final document approved by the EQB. Please note that most of the comments presented in your communication to the USACE were addressed in the approved final document.

PREPA reiterates its commitment to undertake all efforts required to address each and every one of the regulatory requirements presented by the Fish & Wildlife personnel, related with the Vía Verde Pipeline Project. Moreover, all efforts will be made to facilitate the implementation of the Work Plan jointly developed by the USACE, Fish & Wildlife Service and PREPA, aimed to supplement the Biological Assessment previously presented as part of the Joint Permit Application and the EIS developed for this project.

Cordially,

Ángel L. Rivera Santana, Director
Planning and Environmental Protection

Enclosure

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Doc # 99

Edwin Muniz/R4/FWS/DOI
12/21/2010 10:46 AM

To Marelisa Rivera/R4/FWS/DOI, Rafael Gonzalez/R4/FWS/DOI@FWS
cc
bcc
Subject Fw: Via Verde comment letter

FYI. Please place in our file.

Edwin E. Muñiz
Field Supervisor
Caribbean Field Office
U.S. Fish and Wildlife Service
(W) 787-851-7297
(C) 787-405-3641
(F) 787-851-7440
edwin_muniz@fws.gov
Visit us at http://www.fws.gov/caribbean/es/

----- Forwarded by Edwin Muniz/R4/FWS/DOI on 12/21/2010 10:45 AM ----- Doc # 98

Mendez.Sandra@epamail.epa.gov
12/21/2010 10:31 AM

To edwin_muniz@fws.gov
cc
Subject Fw: Via Verde comment letter

Enclosed please find EPA's comment letter regarding the Via Verde project.

VIA VERDE LETTER.pdf

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF REGIONAL COUNSEL
CENTRO EUROPA BUILDING, SUITE 207
1492 PONCE DE LEON AVENUE, STOP 22
SAN JUAN, PR 00907-4127

December 21, 2010

Mr. José M. Rosado
Deputy District Engineer for the Antilles
U.S. Army Corps of Engineers
Antilles Office
400 Fernandez Juncos Ave,
San Juan, PR 00901-3299

RE: Public Notice Number SAJ-2010-02881 (IP-EWG)

Dear Mr. Rosado:

We are in receipt of the above Public Notice (PN) describing the Puerto Rico Electric Power Authority's (PREPA) request to obtain Department of the Army authorization for construction of a natural gas pipeline project that will pass through the municipalities of Peñuelas, Adjuntas, Utuado, Arecibo, Barceloneta, Manatí, Vega Alta, Vega Baja, Dorado, Toa Baja, Cataño, Bayamón, and Guaynabo, Puerto Rico. The pipeline, known as Vía Verde, would be approximately 92 miles long and 24 inches in diameter with a right-of-way 150 feet wide. The total project area is approximately 1,672 acres and the pipeline would traverse 235 rivers and wetlands, resulting in an estimated impact to 369 acres of jurisdictional waters of the United States. The applicant's stated purpose for this project is to deliver an alternate fuel source to three existing electric power generating facilities located in Peñuelas, Arecibo, and Toa Baja.

After evaluating the information contained in the November 19, 2010 PN, the Environmental Protection Agency (EPA) believes that the applicant has not adequately demonstrated the need for the proposed pipeline in accordance with the Clean Water Act Section 404(b)(1) Guidelines requirements. The applicant must better document the need for a natural gas pipeline by presenting a more thorough alternatives analysis. Such analysis should evaluate other fuel sources other than natural gas since the stated purpose does not specify fuel type, the construction of an alternative terminal near one of the north coast power plants and the installation of a shorter length pipeline between Arecibo and Toa Baja.

EPA also has concerns regarding the use of directional drilling, particularly in karst terrain areas. In the past and on other projects in the Caribbean, directional drilling has resulted in major impacts when the drilling mud leaked into the surrounding environment. Due to the nature of karst terrain, we are concerned that any spill of drilling mud may contaminate groundwater or reach other aquatic resources which were not evaluated as part of this review.

If PREPA complies with the needs requirement of the Clean Water Act Section 404 (b)(1) guidelines, the risks of directional drilling must be thoroughly analyzed. In conjunction with such analysis, PREPA must establish appropriate mechanisms to monitor

the drilling operations so that any escape of drilling mud is detected immediately as well as identify steps to be taken to minimize potential impacts of an escape.

Furthermore, PREPA has not proposed adequate compensation to offset any impacts to jurisdictional areas which would result from the proposed project. While PREPA has proposed the use of horizontal directional drilling and vertical wall trenching, among other measures, to avoid and minimize impacts to wetlands, additional analysis to identify the nature and extent of both temporary and potentially permanent impacts at each jurisdictional area will be needed. We acknowledge that PREPA has offered to be vigilant of such impacts in order to immediately determine whether mitigation is required at any area along the project corridor; but, specific plans to address the need for mitigation must be identified in advance. EPA is also concerned about the criteria identified in the PN for determining whether mitigation sites will be successful. Finally with regard to mitigation, EPA believes that any compensatory mitigation required for permanent impacts should be at a minimum of a 1:1 ratio.

After carefully considering the challenges associated with this project, EPA recommends that an environmental impact statement (EIS) rather than an environmental assessment (EA) be prepared for this project. As highlighted in the PN, the project covers a large area and impacts many rivers and wetlands. Though the wetlands to be traversed are diverse in nature, all provide the important functions of flood water storage and filtration of contaminants that would otherwise reach other aquatic resources. These indirect impacts associated with the loss of wetlands also need to be evaluated. The PN states that the impacts of the project are expected to be temporary in nature; however, the impacts to threatened and endangered species could be extensive, as demonstrated by the fact that a formal versus informal Endangered Species Act (ESA) consultation is being undertaken for the project.

In summary, EPA believes that the Via Verde project could have substantial impacts to aquatic resources and that adequate compensatory mitigation has not been offered to offset such impacts. Furthermore, an EIS is needed to properly evaluate the project's impacts. Therefore, it is EPA's position that a permit for this project be held in abeyance until our concerns are addressed.

If you have any questions regarding this matter, please contact me at (787) 977-5801 or have your staff contact José Soto of the Multimedia Permits and Compliance Branch at (787) 977-5829.

Sincerely,

Carl-Axel P. Soderberg, P.E.
Director
Caribbean Environmental Protection Division

cc: USFWS - Boquerón, PR
DNER - San Juan, PR
PRPB - San Juan, PR
PREQB-San Juan, PR

Doc #100

"Hengstenberg, Derek" <Derek.Hengstenberg@tetratech.com>

"Hengstenberg, Derek" <Derek.Hengstenberg@tetratech.com>
12/21/2010 01:24 PM

To "Rafael_Gonzalez@fws.gov" <Rafael_Gonzalez@fws.gov>, "Marelisa_Rivera@fws.gov" <Marelisa_Rivera@fws.gov>
cc "daniel_paganrosa@yahoo.com" <daniel_paganrosa@yahoo.com>, Yousev Garcia <yousevgr@yahoo.com>
Subject RE: Raptor Survey Work Plan

Hello Rafael,

Attached is the work plan for Broad-winged Hawk and Sharp-shinned Hawk surveys along the Via Verde pipeline project. Please review and let me know if you have any questions. We intend to begin surveys on January 12.

I look forward to working with you on this project.

Regards,

Derek

Derek Hengstenberg | Certified Wildlife Biologist

Main: 207.879.9496 | Cell: 908.616.0436
derek.hengstenberg@tetratech.com

Tetra Tech | Ecological Services
451 Presumpscot Street | Portland, Maine 04103 | www.tetratech.com
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TETRA TECH

Via Verde Pipeline Project: 2011 Puerto Rican Broad-winged Hawk and Puerto Rican Sharp-shinned Hawk surveys

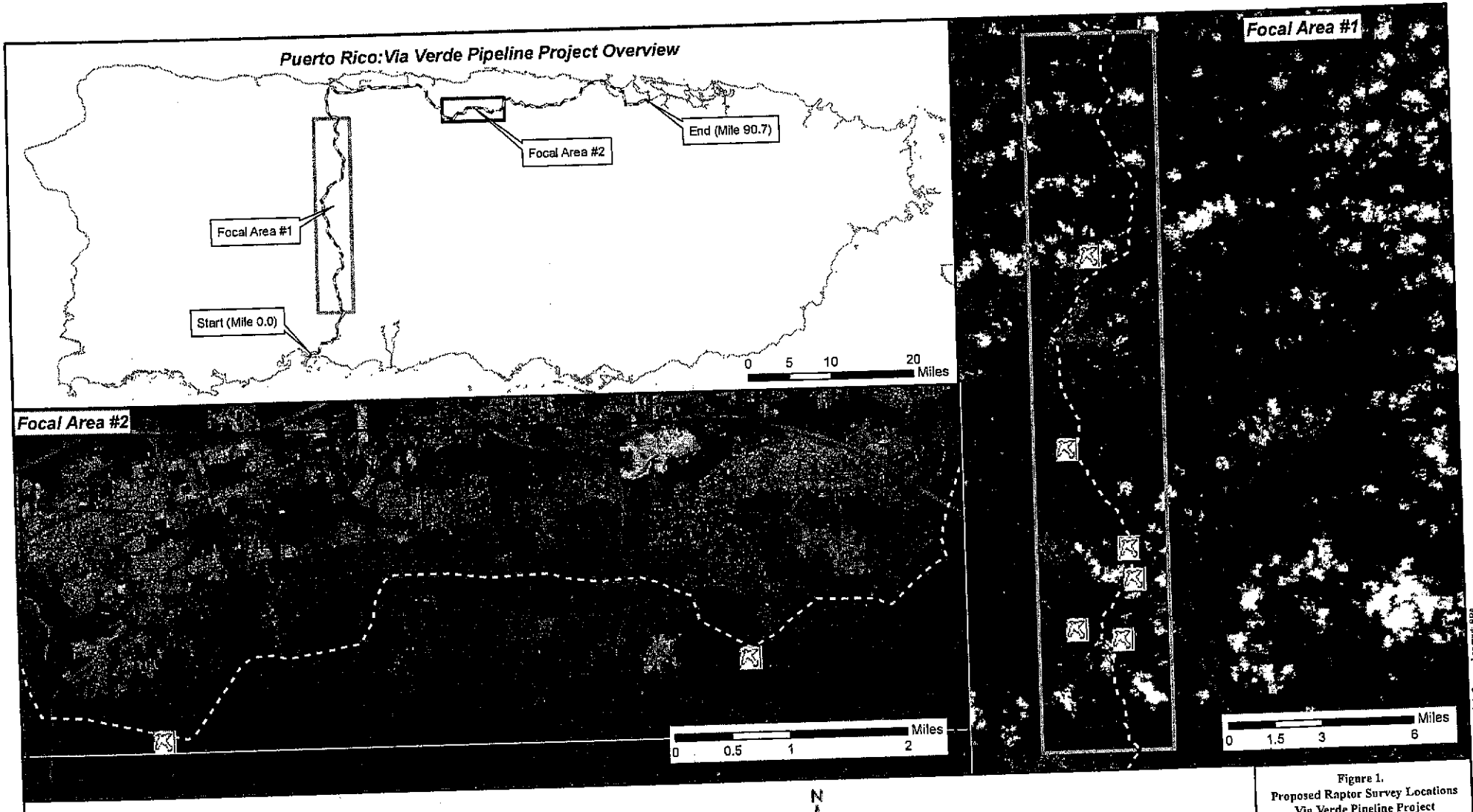
DRAFT: December 20, 2010

1.0 Introduction

This work plan describes the proposed raptor surveys along the Via Verde Pipeline (Project area) within the municipalities of Manati, Utuado, and Adjuntas, Puerto Rico. The function of these surveys is to document occurrence of the Puerto Rican Broad-winged Hawk and Puerto Rican Sharp-shinned Hawk within the two focal areas of concern. Both endangered raptors are non-migratory and remain on Puerto Rico year-round. They are federally endangered and protected under the Endangered Species Act. The proposed raptor surveys will provide a baseline data set on these species in forested areas of concern along the Project area. The survey will also evaluate how much raptor habitat could be affected by the proposed Project. This data may provide useful information to help minimize potential environmental impacts from the proposed Project.

1.1 Project Background

The Puerto Rico Electric Power Authority (PREPA) is proposing to construct a 24" natural gas pipeline from the municipality of Peñuelas, crossing the island through the central mountain region from the south to north towards San Juan (Figure 1). USFWS has commented on the project and has requested additional surveys for endangered raptors to be conducted in areas of potential habitat along the pipeline corridor. During consultation, USFWS has stated that it is important to determine the number of breeding territories that may be affected by project construction and the amount of habitat to be affected. Until further studies demonstrate differently, the USFWS assumes suitable habitat within the proposed pipeline corridor is occupied by endangered raptors for breeding and potential take may be anticipated in those areas. The following work plan describes how Tetra Tech will evaluate the Project area for endangered raptors.



Legend

- Puerto Rico
- Via Verde Pipeline
- Proposed Raptor Survey Locations
- Endangered Raptors Focal Area #1 (Miles 9.6 - 37.6)
- Endangered Raptors Focal Area #2 (Miles 58.9 - 68.3)

N

Projection/Coordinate System:
North American Datum of 1983,
Puerto Rico State Plane, US Feet

Sources:
U.S. Dept. of Transportation; World Imagery
(http://services.arcgisonline.com/arcgis/services)

Figure 1.
Proposed Raptor Survey Locations
Via Verde Pipeline Project

Prepared For:
Asesores Ambientales y Educativos

Prepared By: TETRA TECH

Date: 12/15/2010

2.0 Endangered Raptor Surveys

2.1 Objectives

Tetra Tech biologists will conduct direct, visual observations of raptor movements and document species composition, flight heights, flight patterns, flight direction, movements, and habitat use patterns in the project area. Documented territories will be spot-mapped and the percentage of habitat to be impacted by the Project will be evaluated.

2.2 Methods

Tetra Tech will conduct raptor surveys for Broad-winged Hawks and Sharp-shinned Hawks from vantage points in forested areas along the Project area (Figure 1.0). Areas selected for surveys were identified during an initial biological evaluation (Focal Areas 1 and 2) and ground-truthed during a site-reconnaissance trip in December 2010. Raptor surveys will be conducted from 8 to 10 vantage points located within forested sections of the Project area during the month of January 2011. Surveys will be conducted from the morning to early afternoon hours (~0700 to ~1300) when both species of raptors are engaged in aerial displays above the canopy. Surveys will be conducted on days with suitable weather conditions with minimal precipitation and fog.

Each vantage point will be surveyed twice during the survey period of January 12 to January 26, 2011. This time period is when both species are engaged in epigamic and territorial aerial displays. Surveys will be designed to cover areas identified to have potential habitat for these species. Potential habitat of concern were identified through a desktop biological evaluation and confirmed through USFWS consultation as well as a site-reconnaissance survey.

Tetra Tech biologists will use high quality binoculars (10x42 mm), spotting scopes (15-46x60 mm), and range finders to record data on species composition, flight heights, habitat use patterns, and movements of raptors in the project area. Raptors will be spot-mapped and their GPS position will be recorded on field maps. If a surveyed area confirms presence of either Broad-winged Hawk and/or Sharp-shinned Hawk, biologists will conduct areas searches to further evaluate those habitats for the presence of a nest site.

Tetra Tech will compile all data from the January surveys and provide a site summary report. This report will include all relevant information including: i.e. nesting territories, amount of raptor habitat to be impacted by the pipeline, maps of vantage points, area search maps, raptor spot maps, and potential nest sites. This information can be used by AAE and the USFWS to determine the anticipated effects on these species by the pipeline.

Doc # 101

"Hengstenberg, Derek" <Derek.Hengstenberg@tetratech.com>

12/21/2010 01:27 PM

To "Rafael_Gonzalez@fws.gov" <Rafael_Gonzalez@fws.gov>

cc "daniel_paganrosa@yahoo.com" <daniel_paganrosa@yahoo.com>, Yousev Garcia <yousevgr@yahoo.com>

bcc

Subject Raptor Survey Work Plan

Rafael,

Here is my second attempt of delivering this work plan. I received an error message.

-Derek

Derek Hengstenberg | Certified Wildlife Biologist
Main: 207.879.9496 | Cell: 908.616.0436
derek.hengstenberg@tetratech.com

Tetra Tech | Ecological Services
451 Presumpscot Street | Portland, Maine 04103 | www.tetratech.com

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Raptor Survey Work Plan- Via Verde Project.pdf

Doc # 102

Rafael Gonzalez/R4/FWS/DOI
12/22/2010 05:28 PM

To "Hengstenberg, Derek" <Derek.Hengstenberg@tetratech.com>
cc "daniel_paganrosa@yahoo.com" <daniel_paganrosa@yahoo.com>, "Marelisa_Rivera@fws.gov" <Marelisa_Rivera@fws.gov>,
bcc
Subject RE: Raptor Survey Work Plan

Hello Derek,

Thanks for the work plan. As soon as we review it we will contact you.

Best regards,

Rafael

Rafael Gonzalez
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622

(787) 851-7297 x 214 (voice)
(787) 851-7440 (fax)
rafael_gonzalez@fws.gov

12/21/2011.

TETRA TECH

Via Verde Pipeline Project: 2011 Puerto Rican Broad-winged Hawk and Puerto Rican Sharp-shinned Hawk surveys

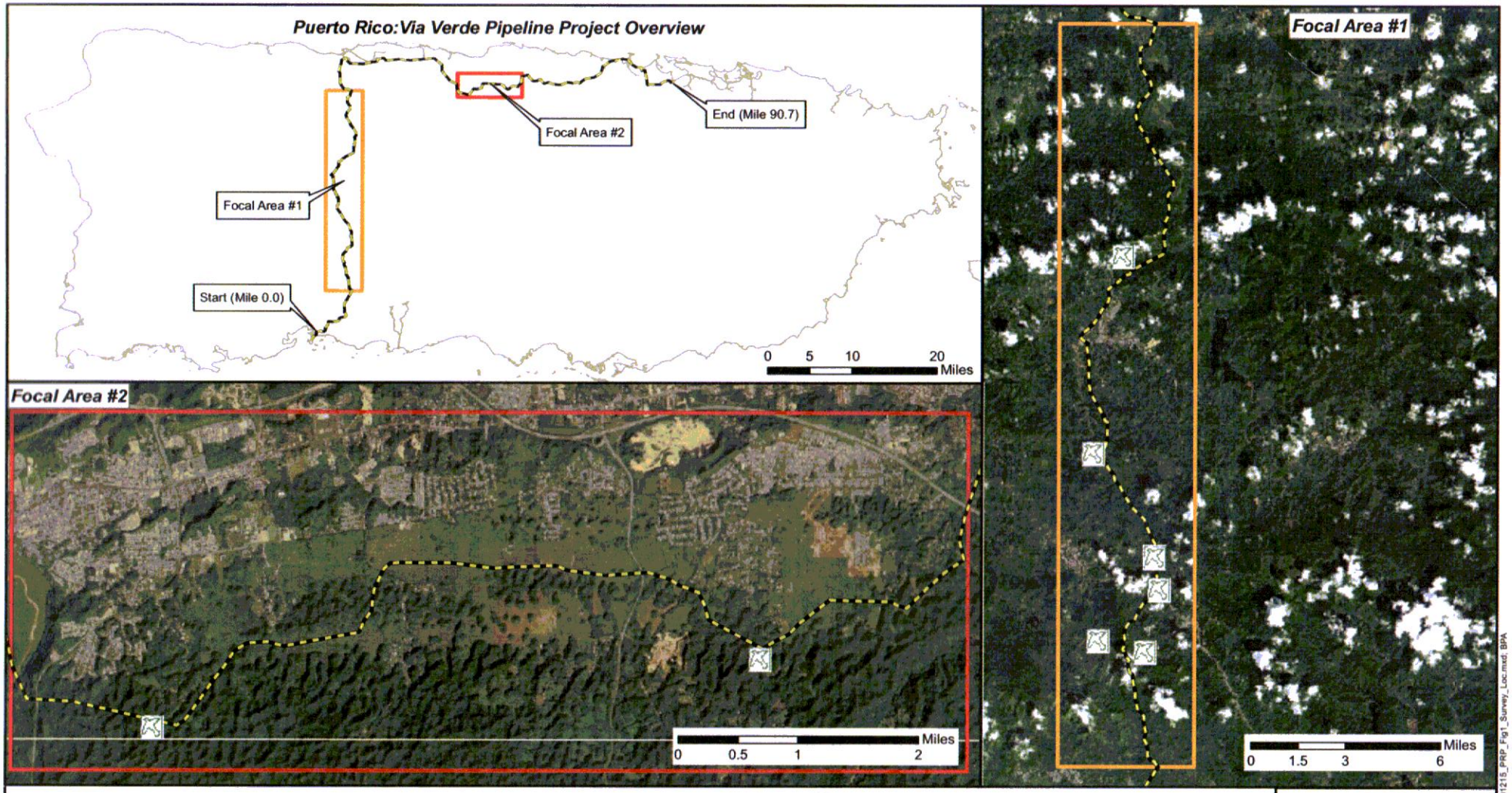
DRAFT: December 20, 2010

1.0 Introduction

This work plan describes the proposed raptor surveys along the Via Verde Pipeline (Project area) within the municipalities of Manati, Utuado, and Adjuntas, Puerto Rico. The function of these surveys is to document occurrence of the Puerto Rican Broad-winged Hawk and Puerto Rican Sharp-shinned Hawk within the two focal areas of concern. Both endangered raptors are non-migratory and remain on Puerto Rico year-round. They are federally endangered and protected under the Endangered Species Act. The proposed raptor surveys will provide a baseline data set on these species in forested areas of concern along the Project area. The survey will also evaluate how much raptor habitat could be affected by the proposed Project. This data may provide useful information to help minimize potential environmental impacts from the proposed Project.

1.1 Project Background

The Puerto Rico Electric Power Authority (PREPA) is proposing to construct a 24" natural gas pipeline from the municipality of Peñuelas, crossing the island through the central mountain region from the south to north towards San Juan (Figure 1). USFWS has commented on the project and has requested additional surveys for endangered raptors to be conducted in areas of potential habitat along the pipeline corridor. During consultation, USFWS has stated that it is important to determine the number of breeding territories that may be affected by project construction and the amount of habitat to be affected. Until further studies demonstrate differently, the USFWS assumes suitable habitat within the proposed pipeline corridor is occupied by endangered raptors for breeding and potential take may be anticipated in those areas. The following work plan describes how Tetra Tech will evaluate the Project area for endangered raptors.



Legend

- Puerto Rico
- Via Verde Pipeline
- Proposed Raptor Survey Locations
- Endangered Raptors Focal Area #1 (Miles 9.6 - 37.6)
- Endangered Raptors Focal Area #2 (Miles 58.9 - 68.3)

N

Projection/Coordinate System:
North American Datum of 1983,
Puerto Rico State Plane, US Feet

Sources:
U.S. Dept. of Transportation; World Imagery
(http://services.arcgisonline.com/arcgis/services)

Figure 1.
Proposed Raptor Survey Locations
Via Verde Pipeline Project

Prepared For:
Asesores Ambientales y Educativos

Prepared By: TETRA TECH

Date: 12/15/2010

Z:\projects\PRPipeline\MXDs\20100121 5_PRP_Fig1_Survey_Loc.mxd, BPA

2.0 Endangered Raptor Surveys

2.1 Objectives

Tetra Tech biologists will conduct direct, visual observations of raptor movements and document species composition, flight heights, flight patterns, flight direction, movements, and habitat use patterns in the project area. Documented territories will be spot-mapped and the percentage of habitat to be impacted by the Project will be evaluated.

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Each vantage point will be surveyed twice during the survey period of January 12 to January 26, 2011. This time period is when both species are engaged in epigamic and territorial aerial displays. Surveys will be designed to cover areas identified to have potential habitat for these species. Potential habitat of concern were identified through a desktop biological evaluation and confirmed through USFWS consultation as well as a site-reconnaissance survey.

Tetra Tech biologists will use high quality binoculars (10x42 mm), spotting scopes (15-46x60 mm), and range finders to record data on species composition, flight heights, habitat use patterns, and movements of raptors in the project area. Raptors will be spot-mapped and their GPS position will be recorded on field maps. If a surveyed area confirms presence of either Broad-winged Hawk and/or Sharp-shinned Hawk, biologists will conduct areas searches to further evaluate those habitats for the presence of a nest site.

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Doc #103

DEPARTMENT OF DEFENSE
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
ATILLES OFFICE
400 FERNANDEZ JUNCOS AVENUE
SAN JUAN, PUERTO RICO 00901-3299
December 22, 2010

Antilles Regulatory Section
SAJ-2010-02881 (IP-EWG)

Eng. Francisco E. Lopez
Autoridad de Energía Eléctrica
P.O. Box 364267
San Juan 00936-4267

Dear Mr. Lopez:

Reference is made to your Department of the Army (DA) permit application, submitted through Joint Permit Application Number 1059, of September 20, 2010 for the Via Verde Natural Gas Pipeline (NGPL) project. The proposal is to construct and install a 24-inch diameter steel NGPL for approximately 92 miles with a construction right-of way (ROW) of 150 feet wide, that transverses the island of Puerto Rico from the Eco Eléctrica Liquid Natural Gas Terminal in municipality of Peñuelas, to the Cambalache Termoeléctrica electric power plant in the municipality of Arecibo, then east to the Palo Seco facility in the municipalities of Toa Baja and San Juan. The pipeline route will encompass both private and public lands which include commercial, industrial, and agricultural land uses. The total project area is about 1,672 acres that will impact 235 river and wetland crossings, for a total of 369 acres of jurisdictional Waters of the United States. Please refer to case number SAJ-2010-02881 (IP-EWG) in future correspondence regarding this project.

We also make reference to meetings held on October 26, 27 and 28, 2010 with US Fish and Wildlife Service (FWS), State Historic Preservation Office (SHPO) and Federal Highway Administration (FHA) respectively, in which the requirements managed by each agency were discussed with members of your consulting firm.

A careful review of your project and preliminary review of the comments from resource agencies and the public has revealed various environmental and public interest concerns which cannot be adequately evaluated with the information at hand. As discussed with your contractor and the other resource agencies in previous meetings, the information on record does not fully address the public interest factors and information of the Via Verde NGPL project regarding public safety, environmental impacts, endangered species, habitat conservation and historic properties required for the Corps to adopt a position in the review process at this point.

Although you provided information with your permit application that address some of the comments herein provided, please be advised that the information and or referenced materials provided is largely deficient, very conceptual, and failed to adequately address the issues raised by the agencies and the general public. We believe PREPA (Spell)

needs to provide a more comprehensive and detailed response to address the issues of concern. Furthermore, the Corps believes that project impacts have not been adequately quantified; thus precluding proper evaluation of the project's direct and secondary impacts on the aquatic environment. We are concerned about the potential direct, indirect, and cumulative impacts of the project on the aquatic resources.

As part of the permit application you provided detailed maps and drawings depicting locations of most of the jurisdictional areas within the proposed route and ROW. However, a review of the National Wetland inventories revealed the existence of jurisdictional areas that were not identified or accounted for in the Jurisdictional Determination (JD) submitted as part of the permit application. Please be advised that these areas will be eventually ground-truth during a jurisdictional determination site visit, which would be coordinated in the near future.

The Corps evaluated the alternative analysis submitted as part of the permit application, and found it deficient in scope and detail, as it does not focus on minimization of impacts to jurisdictional areas and it rather provides a route selection matrix overview of additional project routes. Although the applicant's has outlined other alternatives considered for the development of the alignment, we still believe that the analysis is largely qualitative and lacks sufficient details for an adequate review. The analysis mentions the rationale for the final selection of the preferred route; however, it fails to provide a quantification of the impacts, costs, and other issues that were crucial in the final selection.

Also, as per FWS letter of December 15, 2010, enclosure 1, the Eco Eléctrica facility has not contemplated the construction of a connection or modification to connect the Via Verde Project. Also, the letter stated that the storage capacity of the facility is not sufficient to provide services to the new Via Verde Project. Furthermore, informal conversations with Mr. Daniel Pagan on December 20, 2010, revealed that PREPA has contemplated a natural gas barge offload option off a small key near the Eco Eléctrica plant that can provide the capacity needed to provide natural gas to the Via Verde project with modification to the infrastructure of the key. Such infrastructure modification would have to be part of this permit evaluation, and the aforementioned option has not been discussed in the alternative analysis provided with permit application. The U.S. Army Corps of Engineers (Corps) believes that without an actual connection to a natural gas supply system the Via Verde natural gas pipeline cannot be considered under the National Environmental Policy Act as a single and complete project.

The Postal Office returned several Public Notices due to insufficient addresses. It is the Corps responsibility to notify the public of projects adjoining their properties. You could either, obtain correct mailing addresses and forward it to this office or hand deliver it to the adjoining property owner. If to be delivered, then a return receipt is requested. Be advised that we would grant these neighbors an additional 30-day comment period.

Attached is a list of the letters received in response to the Public Notice issued for the above referenced permit application. Copies of the response letters are also enclosed. The following paragraphs summarize the comments provided in those letters. Please review and provide a detailed written response to each of the issues raised in said letters. To expedite the evaluation of your permit application, we request your response be provided in English.

The National Marine Fisheries Service (NMFS), Protected Resources Division (PRD) by email dated November 19, 2010, indicated that a preliminary review of the available documentation suggested that the project will likely require consultation with said agency pursuant to Section 7 of the Endangered Species Act. Furthermore NMFS Essential Fish Habitat by letter dated December 19, 2010, stated that the service would require consultation under Magnuson Stevens Act due to the potential presence of important essential fish habitats.

FWS, by letter dated December 15, 2010, Boquerón Field Office stressed the need for the development of a Biológical Assessment to address more than 32 ESA species potentially encountered on the project path, adherence with NEPA requirements of a single and complete project, alternative analysis, habitat impacts and mitigation. FWS further recommends that the permit be denied as currently proposed.

Federal Highway Administration (FHWA), by email dated December 17, 2010, stated that the "Policy on the Accommodation of Utilities on Highways Right of Way" adopted by the Puerto Rico Highway and Transportation Authority (PRHTA) and approved by FHWA on May 30, 1990 does not include longitudinal installation of pipeline conveying gas, oil, gasoline and other flammable or dangerous substances within the control access lines of controlled-access highways nor within tunnels or on major bridges. Hence, a project level agreement for this particular utility accommodation would be needed.

SHPO, by letter dated September 17, 2010, stated that in accordance with the consultation requirements pursuant to Section 106 of the National Historic Preservation Act (NHPA), a Cultural Resource Assessment (Phase 1A and Phase 1B) will be required to identify the presence/absence of cultural resources of archaeological/historic significance within the project's area of potential effects. No position can be provided until Phase 1A and 1B are finalized and the data is evaluated.

The Environmental Protection Agency (EPA) by letter of December 21, 2010, recommended the permit for the project be denied, since the project has the potential to cause or contribute to significant degradation of waters of the U.S., including aquatic resources of national importance, and therefore, does not comply with Section 404(b)1 Guidelines. Also EPA recommends the development of an Environmental Impact Statement EIS).

The College of Engineers and Surveyors of Puerto Rico (CIAPR) by letter of December 17, 2010 suggest that there are other alternatives such as the use of the Costa Sur complex in combination with the Aguirre Power Plant which can generate 73% of the Island electricity.

The Sierra Club stressed by way of its membership that they are opposed to the project and requested that Corps hold public hearings (PH) and prepare an EIS.

The general public, interest groups, and others, sustained that they are opposed to the project, the project has not addressed property rights, environmental impacts, ESA, EFH, habitat conservation, potential safety risks, health hazards and its effects on the nearby communities; the lack of discussion of alternatives regarding alternative renewable resources, which also minimize impacts to the aquatic resources.

After reviewing the responses stated above, the Corps agrees with the comments from the resource agencies and the general public, and reserves the option to request an EIS and hold a PH. A comprehensive and detailed rebuttal on the comments from the agencies must be provided. Any other information you feel may be helpful in order to fully justify the proposal should also be submitted at this time.

As required by NEPA and the Clean Water Act (CWA) Section 404(b)(1) Guidelines, the Corps must consider a broad range of alternatives during the evaluation of a permit application. Under these regulations, the Corps must give detailed consideration to practicable alternatives that focus on the accomplishment of the applicant's and the public's interest and needs. The regulations define a practicable alternative as an alternative that is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purpose. The Corps is neither a proponent nor an opponent of the applicant's proposal which will be identified as the "applicant's preferred alternative." However, 40 CFR Part 230.10(a) allows permit issuance for only the least environmentally damaging practicable project alternative. That is, no discharge of dredged or fill material shall be permitted if there is a practicable alternative, which would have less adverse impact on the aquatic ecosystem providing the alternative does not have other significant adverse environmental consequences.

Further, pursuant to 33 CFR Part 320.4, the Corps must evaluate the project to ensure that it would not be contrary to the public interest. In that regard, the Corps must assess the relative extent of the public and private need for the project, and the extent and permanence of the beneficial and/or detrimental effects that the project is likely to have on the public and private uses to which the area is suited. In addition, the Corps must evaluate the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed work or structure.

We are concerned about the potential direct, indirect, and cumulative impacts of the proposed project on the aquatic resources. In order to implement the procedural provisions of NEPA and complete our regulatory analysis of compliance with Section 404(b)(1) guidelines and the public interest review factors we request your submittal of the following information:

a) Alternative Sites Analysis: Please submit an analysis describing alternative energy solutions, alternative sites considered to locate the proposed project, including the Gasoducto del Sur. The purpose of such analysis is to clearly establish and document that the preferred and proposed alternative is the least environmentally damaging practicable project alternative. As part of this alternatives analysis we request that you: (1) define a set of criteria for site evaluation; (2) define a system to rate a site against each of the criteria; (3) describe a method to comparatively weigh each rating as to its importance; and (4) prepare a report describing the search for the sites, identification of their location and rating, and a narrative which shows which site is the preferred alternative.

b) Avoidance and Minimization: Please provide documentation of your evaluation of practicable modifications or alternatives to the project layout or design, which could prevent and/or minimize impacts to waters of the United States and the aquatic environment, and discuss why the proposed impacts could not be minimized any further. In this regard, please evaluate and discuss the practicability of reducing the size of the proposed structures, and relocating, modifying or eliminating some of the project components to avoid and minimize the project's direct, indirect and cumulative impacts.

c) Compensatory Mitigation Your application did not include any compensatory mitigation plan designed to offset impacts to 369 acres of waters of the U.S. As outlined in the 1990 Memorandum of Agreement between the DA and EPA concerning the determination of mitigation under the CWA, mitigation should only be considered after all practicable measures have been made to avoid and/or minimize wetlands impacts. Upon demonstrating that the proposed project represents the least-environmentally damaging practicable alternative, and after all effort has been made to avoid and/or minimize wetland impacts, you must provide a mitigation plan to offset unavoidable wetland impacts. The Compensatory Mitigation Plan shall discuss feasible measures, which would be implemented to compensate for the project's unavoidable direct, indirect and cumulative impacts to the aquatic environment. This is for proposed impacts that cannot be avoided or minimized. The purpose of this plan is to show how compensatory work would balance the impacts of the project. Your mitigation and monitoring plan must be approved prior to issuance of a DA permit. Your mitigation and monitoring plan should include the following twelve fundamental components: 1) objectives (restoration, enhancement, etc.), 2) site selection

criteria, 3) site protection instruments (e.g., conservation easement), 4) baseline information for impact and compensation sites (reference to each wetland impact and mitigation polygon should be based on an accepted wetland classification system (i.e., FLUCCS, or FNAI)), 5) credit determination methodology, 6) mitigation work plan (e.g., a description of all wetland and upland enhancement and restoration activities to include prescribed fire, pine canopy thinning, exotics removal, culvert installation, grading, gyro-tracking, and planting, and timeframes for initiation and completion), 7) maintenance plan with schedule 8) ecological performance standards (e.g., should be measurable and attainable). 9) monitoring requirements (e.g., quantitative and qualitative vegetative community analysis), 10) long-term management plan, 11) adaptive management plan, and 12) financial assurances (e.g., please reference Regulatory Guidance Letter 05-1: *Guidance on the Use of Financial Assurances, and Suggested Language for Special Conditions for Department of the Army Permits Requiring Performance Bonds* for your edification on types of financial assurance).

d) Wetlands: Please provide an assessment of all direct, indirect, and secondary impacts, and mitigation activities. Secondary impacts should be assessed for all wetlands (except those targeted for direct impact) both on and off the project impact site, which fall within 300' of the development footprint. We request that as part of the above mentioned mitigation efforts (including avoidance, minimization and compensation) for the proposed project you consider further measures to prevent and minimize impacts, and offset the project's unavoidable impacts to jurisdictional areas. Also, please describe which measures would be implemented during the construction and operation of the project to minimize such impacts.

e) The Corps concurs with the comments expressed by the agencies with regards to Horizontal Directional Drilling (HDD). As stated by the agencies, the use of HDD in the Karst region shall be fully assessed and evaluated. In previous projects the Corps has discovered that bentonite mud was accidentally released, resulting in detrimental consequences. Also, as part of the permit application a Frac-Out Plan was provided that stated that "pits" would be constructed to collect return mud. The plan also states that the mud would be collected from the "pits" and taken to a sedimentation pond where the sterile residuals are separated to be reused. Residuals are listed as bentonite, polymers, and surfactants. It is not clear if the "pits" or the sedimentation ponds are lined to avoid contaminant discharge, nor how many sedimentation ponds would be constructed. Also, the plan mentions the use of dye tracers, the use of such tracer would need to be coordinated with the EPA.

f) Fish and Wildlife Values: Please respond to the comments provided by FWS and NMFS in the attached communications. All the concerns presented by these resource agencies would have to be fully addressed during our evaluation and coordination of the permit application to initiate consultation under Magnuson Stevens Act.

g) Threatened & Endangered Species: Please review FWS and NMFS in the attached letters. This information will be necessary to initiate consultation with NMFS and FWS, under Section 7 of the ESA.

h) Cultural Resources: Please inform us of the progress with regards to providing a complete Phase IA and Phase IB Archaeological Studies for the project; we request that you please provide us with copies of any pertaining correspondence and documentation exchanged with SHPO.

i) Infrastructure and Utilities – Please provide evidence of your coordination with the appropriate Commonwealth of Puerto Rico government agencies for the evaluation of the project's proposed plan for obtaining and providing utilities and services including to carry out your project.

j) Cumulative Impacts: In order for the Corps to consider environmental cumulative impacts of the proposed project, we request to provide information regarding other existing, in progress or proposed projects that could affect the aquatic resources to be impacted by the development of the proposed project. In particular, please provide information regarding your evaluation of potential past, present and foreseeable future environmental impacts of the proposed action in relation to such projects and describe the corresponding minimization and mitigation measurements being proposed. In this regard future expansions of PR-22, construction of PR-10, Waste to Energy plant in Arecibo are examples of projects that need to be considered in the analysis.

k) Please provide a map depicting the proposed staging areas and access roads. The Corps is concerned about the presence of wetland areas in or immediately adjacent to the proposed right-of-ways. Please explain what preventive measure would be implemented by PREPA to avoid additional impacts into these areas during construction activities.

l) Water Quality: Please describe the potential impacts of the proposed project on water quality and the measures to be implemented during the project construction and operation to avoid and minimize such impacts. In this regard, please describe in particular the measures that would be implemented to avoid and minimize the potential adverse environmental effects of accidental leaks into the aquatic environment.

m) You are reminded that two necessary prerequisites to the issuance of a DA permit for your project are the issuance Water Quality Certification and a Coastal Zone Management (CZM) Consistency Certification by Puerto Rico's Environmental Quality Board, and the Planning Board, CZM office. Therefore, keep this office informed of the status of your applications for these certifications. In this regard, please provide us with copies of any requests for information that you may have received from any of these agencies and your corresponding responses, and clarify any project modifications that may have resulted from your coordination.

Please provide information pursuant to Section 176(c) of the Clean Air Act regarding whether your proposal will not exceed de minimis levels of direct or indirect emissions of a criteria pollutant or its precursors and are exempted by 40 CFR Part 93.153.

Your application will be held in abeyance for 45 days pending receipt of your response. If within the next 45 days from the date of this letter we have not received a written communication from you, we will take final action on your Department of the Army permit application. Final action could include withdrawal or denial of your permit application. Should the file be withdrawn, it will be retained for a period of one year.

You are cautioned that any work performed below the mean high waterline or ordinary high waterline in waters of the United States, or the discharge of dredged or fill material into adjacent wetlands, without a DA permit could be subject to enforcement action. Receipt of a permit or endorsement from other agency does not obviate the requirement for obtaining a DA permit for the work described above prior to commencing work.

If you have any questions or comments regarding this case, you may contact Mr. Edgar W. García, at telephone numbers 729-6905/6944 ext. 3059, or at the letterhead address.

Sincerely,

Edgar W. Garcia
Antilles Regulatory Section

Enclosures – Attached CD

Copy to:
Mr. Larry Evans
BC Peabody Consulting, P.A.
509 Guisando de Avila, Suite 100
Tampa, FL 33613

Doc # 105

Edwin Muniz/R4/FWS/DOI
12/23/2010 08:28 AM

To Marelisa Rivera/R4/FWS/DOI, Felix Lopez/R4/FWS/DOI@FWS, Rafael Gonzalez/R4/FWS/DOI@FWS
cc
bcc
Subject Fw: Autoridad de Enegia Electrica, NMFS comments

FYI

Edwin E. Muñiz
Field Supervisor
Caribbean Field Office
U.S. Fish and Wildlife Service
(W) 787-851-7297
(C) 787-405-3641
(F) 787-851-7440
edwin_muniz@fws.gov
Visit us at http://www.fws.gov/caribbean/es/

----- Forwarded by Edwin Muniz/R4/FWS/DOI on 12/23/2010 08:28 AM ----- Doc # 104

Robin Wiebler
<Robin.Wiebler@noaa.gov>
12/22/2010 11:36 AM

To PR FWS Edwin Muniz <Edwin_Muniz@fws.gov>, PR EPA Carl Soderberg <soderberg.carl@epa.gov>
cc
Subject Autoridad de Enegia Electrica, NMFS comments

AutoridadEnergiaElectrico-ViaVerdeNG_2010-02881_EFH_FINAL.pdf Robin_Wiebler.vcf

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
(727) 824-5317; FAX (727) 824-5300
http://sero.nmfs.noaa.gov/

December 19, 2010 F/SER4:JK/pw

(Sent via Electronic Mail)

Colonel Alfred Pantano
District Engineer, Jacksonville District
Department of the Army Corps of Engineers
Jacksonville Regulatory Office, South Permits Branch
PO Box 4970
Jacksonville, Florida 32232

Attention: Edgar W. Garcia

Dear Colonel Pantano:

NOAA's National Marine Fisheries Service (NMFS) reviewed the public notice dated November 19, 2010, for SAJ-2010-02881 (IP-EWG). The applicant, Autoridad de Energia Electrica, requests authorization from the Department of the Army to construct and install a 24-inch diameter, steel natural gas (NG) pipeline approximately 92 miles long with a construction right-of way (ROW) of 150 feet that traverses the island of Puerto Rico from the EcoEléctrica Liquid Natural Gas Terminal in the municipality of Peñuelas to the Cambalache Thermoelectric Power Plant in the municipality of Arecibo, and then eastward to the Palo Seco power plant facility in the municipalities of Toa Baja and San Juan. The total project area is about 1,672 acres and the pipeline will traverse 235 rivers and wetlands, including 369 acres of jurisdictional Waters of the United States. The public notice indicates that the work would impact approximately 28.5 acres of Estuarine Forested Wetland and Canals which are identified as essential fish habitat (EFH) by the Caribbean Fishery Management Council (CMFC). The need for compensatory mitigation is acknowledged by the applicant, but the applicant defers specific proposals until additional construction detail is available. Based on a preliminary review of this application, the Jacksonville District concludes an Environmental Impact Statement is not be required, and the District also concludes that the project would not adversely impact EFH or federally managed fishery resources. As the nation's federal trustee for the conservation and management of marine, estuarine, and anadromous fishery resources, the following comments and recommendations are provided pursuant to authorities of the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

Project Area
The public notice indicates that the work would impact approximately 28.5 acres of Estuarine Forested Wetland and Canals. NMFS also reviewed aerial imagery of the project site as part of our review of impacts to EFH. The public notice does not include results from a survey of estuarine inhabitants of the specific areas to be impacted.

Essential Fish Habitat at the Proposed Project Site
The site of the proposed project includes mangroves, seagrass, sandy bottom, and algal communities. CFMC indentifies these habitats as EFH for several species, including juvenile and adult gray snapper (*Lutjanus griseus*); juvenile mutton snapper (*Lutjanus analis*); juvenile nassau (*Epinephelus striatus*) and goliath grouper (*Epinephelus itajara*); and juvenile spiny lobster (*Panulirus argus*). Seagrass and mangrove directly benefit the fishery resources of the Atlantic Ocean and the Caribbean Sea by providing nursery habitat. Seagrass and mangrove habitats are part of a habitat complex that includes hard bottoms and coral reefs, and this habitat complex supports a diverse community of fish and invertebrates within the Atlantic Ocean and the Caribbean Sea. Seagrass and mangrove also provide important water quality maintenance functions (such as pollution uptake), stabilize sediments, attenuate wave action, and produce and export detritus (decaying organic material), which is an important component of marine and estuarine food chains. The cumulative loss of these habitats continues to reduce fisheries production within the waters of Puerto Rico.

Request for Additional Information
At this time, NMFS does not have sufficient information to complete a review of the proposed work; we request that the Jacksonville District provide the following:

1) Please clarify what is meant by "ALL wetland impacts will be temporary." The proposed ROW of 150 feet seems to imply that impacts to wetlands are not temporary.
2) Based on the answer to #1, please provide the total square footage of resource impacts (seagrass, other submerged vegetation, mangroves, and other benthic resources). The public notice indicates a total of 28.5 acres of EFH will be impacted but does not indicate the acreage for each habitat type.
3) Please provide additional explanation that can help us determine if HDD will be utilized when encountering "Estuarine Forested Wetland" and the other types of EFH habitats, such as seagrass and other submerged vegetation. This would help NMFS evaluate alternatives to the proposed action.
4) Please provide the results of an actual survey of the organisms in the estuarine areas that the proposed project impacts.

EFH Conservation Recommendations
Additional information is needed for NMFS to complete the EFH consultation. Based on the information provided this far, NMFS finds the project would have substantial adverse impacts on EFH. Section 305(b)(4)(A) of the Magnuson-Stevens Act requires NMFS to provide EFH conservation recommendations when an activity is expected to adversely impact EFH. Based on this requirement, NMFS provides the following:

EFH Conservation Recommendation

The Department of the Army shall not authorize the project as proposed. To make the project acceptable, the applicant shall revise the project to include the following items, which NMFS may revise based upon review of the additional information requested above.

1. No clearing shall be authorized in areas that support seagrass or mangroves.
2. Best management practices to minimize seagrass and mangrove impacts and water quality degradation shall be incorporated into the project design.
3. Once the final design for the project is set, the applicant shall develop a compensatory mitigation plan that offsets all direct and indirect impacts to EFH. The plan shall be based on a functional assessment and provided to NMFS for review and approval before the project is authorized.

Section 305(b)(4)(B) of the Magnuson-Stevens Act and implementing regulation at 50 CFR Section 600.920(k) require your office to provide a written response to this letter within 30 days of its receipt. If it is not possible to provide a substantive response within 30 days, in accordance with our "findings" with

your Regulatory Functions Branch, an interim response should be provided to NMFS. A detailed response then must be provided prior to final approval of the action. Your detailed response must include a description of measures proposed by your agency to avoid, mitigate, or offset the adverse impacts of the activity. If your response is inconsistent with our EFH Conservation Recommendation, you must provide a substantive discussion justifying the reasons for not following the recommendation.

Thank you for the opportunity to provide these comments. Related questions or comments should be directed to the attention of Mr. José A. Rivera at NOAA HCD, c/o US Army Corps of Engineers, 400 Fernandez Juncos Avenue, San Juan, Puerto Rico, 00901-3299. He may be reached by telephone at 787-501-7639 or by e-mail at Jose.A.Rivera@noaa.gov.

Sincerely,

Pam Wells

/ for

Miles M. Croom
Assistant Regional Administrator
Habitat Conservation Division

cc:

COE, Edgar.W.Garcia@ucase.army.mil
FWS, Hobgood_Winston@fws.gov
EPA, Miedema.Ron@epa.gov
CFMC, Miguel.A.Rolon@noaa.gov
F/SER3, Lisamarie.Carubba@noaa.gov
F/SER4, David.Dale@noaa.gov
F/SER47, Jocelyn.Karazsia@noaa.gov
F/SER47, Jose.A.Rivera@noaa.gov

Doc # 106

Via Verde

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P.O. Box 4970
JACKSONVILLE, FLORIDA 32232-0019

REPLY TO
ATTENTION OF

DEC 23 2010

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Dear Mrs. Bose:

RE: Via Verde Natural Gas Pipe Line SAJ-2010-02881

The US Army Corps of Engineers (USACE) has received a permit application submitted by PREPA. The applicant proposes to construct and install a 24-inch diameter steel natural gas (NG) pipeline approximately 92 miles long with a construction right-of way (ROW) of 150 feet wide, that traverses the island of Puerto Rico from the EcoEléctrica Liquid Natural Gas Terminal in the municipality of Peñuelas, to the Cambalache Thermoelectric Power Plant in the municipality of Arecibo, then east to the Palo Seco power plant facility in the municipalities of Toa Baja and San Juan. The total project area is about 1,672 acres and the pipeline will traverse 235 rivers and wetlands, covering 369 acres of jurisdictional Waters of the United States. A copy of the public notice for this proposal is enclosed.

In accordance with the National Environmental Policy Act (NEPA) and our environmental policies and procedures, an environmental document will be prepared to document the evaluation of alternatives, including the no action and public involvement. The majority of the potential environmental impacts of the proposed project are within the jurisdiction of the USACE. The USACE is taking the lead for NEPA review, as well as to any consultation required under ESA, EFH, and Sec 106 of the NHPA.

We hereby extend an invitation to become a cooperating agency with the USACE in the development of the NEPA document for the proposed project in accordance to 40CFR1501.6 of the Council on Environmental Quality's regulations for the implementation of procedural provision of NEPA. Pursuant to NEPA **Sec. 1501**, cooperating agencies are responsible for identifying as early as practicable any issues of concern regarding the project's potential environmental or socioeconomic impacts that could substantially delay or prevent an agency from granting a permit or other approval that is needed for the project. We suggest that your agency's role in the development of this project should include the following activities as they relate to your area of expertise:

1. Provide meaningful and early input on agency concerns.
2. Participate in monthly coordination meetings, quarterly interdisciplinary team meetings, and joint field reviews, as appropriate.
3. Timely review and comment on pre-draft and pre-final NEPA documents to reflect views and concerns of your agency on the adequacy of the document, alternatives considered, and the anticipated impacts and mitigation.

Please provide a written response indicating your acceptance or denial of this invitation no later than 30 days from the receipt of this letter. If you accept, please identify the appropriate contact person within your organization for future coordination. If your agency declines, the response should state the reason(s) for declining the invitation. Federal agency that chooses to decline the invitation to be a cooperating agency must specifically state in its response that it:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; and
- Does not intend to submit comments on the project.

If you have any questions or would like to discuss the project or our agencies' respective roles in more detail, please contact Mr. Edgar W. Garcia, Project Manager, at 787-729-6905, extension 3059. Thank you for your cooperation and interest in this project.

Sincerely,

12/23

Donald W. Kinard
Chief, Regulatory Division

Encl

cc:
FWS
NMFS - ESA
NMFS - EFH
SHPO
EPA

Doc # 107

Via Verde

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
P.O. Box 4970
JACKSONVILLE, FLORIDA 32232-0019

U.S. Fish & Wildlife Service DEC 28 2010

REPLY TO
ATTENTION OF

DEC 23 2010

Carlos Machado
Assistant Division Administrator
Federal Highway Administration
350 Ave Carlos Chardon Suite 210
San Juan PR 00918-2148

Dear Mr. Machado:

RE: Via Verde Natural Gas Pipe Line SAJ-2010-02881

The US Army Corps of Engineers (USACE) has received a permit application submitted by PREPA. The applicant proposes to construct and install a 24-inch diameter steel natural gas (NG) pipeline approximately 92 miles long with a construction right-of way (ROW) of 150 feet wide, that traverses the island of Puerto Rico from the EcoEléctrica Liquid Natural Gas Terminal in the municipality of Peñuelas, to the Cambalache Thermoelectric Power Plant in the municipality of Arecibo, then east to the Palo Seco power plant facility in the municipalities of Toa Baja and San Juan. The total project area is about 1,672 acres and the pipeline will traverse 235 rivers and wetlands, covering 369 acres of jurisdictional Waters of the United States. A copy of the public notice for this proposal is enclosed.

In accordance with the National Environmental Policy Act (NEPA) and our environmental policies and procedures, an environmental document will be prepared to document the evaluation of alternatives, including the no action and public involvement. The majority of the potential environmental impacts of the proposed project are within the jurisdiction of the USACE. The USACE is taking the lead for NEPA review, as well as to any consultation required under ESA, EFH, and Sec 106 of the NHPA.

We hereby extend an invitation to become a cooperating agency with the USACE in the development of the NEPA document for the proposed project in accordance to 40CFR1501.6 of the Council on Environmental Quality's regulations for the implementation of procedural provision of NEPA. Pursuant to NEPA **Sec. 1501**, cooperating agencies are responsible for identifying as early as practicable any issues of concern regarding the project's potential environmental or socioeconomic impacts that could substantially delay or prevent an agency from granting a permit or other approval that is needed for the project. We suggest that your agency's role in the development of this project should include the following activities as they relate to your area of expertise:

1. Provide meaningful and early input on agency concerns.
2. Participate in monthly coordination meetings, quarterly interdisciplinary team meetings, and joint field reviews, as appropriate.

3. Timely review and comment on pre-draft and pre-final NEPA documents to reflect views and concerns of your agency on the adequacy of the document, alternatives considered, and the anticipated impacts and mitigation.

Please provide a written response indicating your acceptance or denial of this invitation no later than 30 days from the receipt of this letter. If you accept, please identify the appropriate contact person within your organization for future coordination. If your agency declines, the response should state the reason(s) for declining the invitation. Federal agency that chooses to decline the invitation to be a cooperating agency must specifically state in its response that it:

- Has no jurisdiction or authority with respect to the project;
- Has no expertise or information relevant to the project; and
- Does not intend to submit comments on the project.

If you have any questions or would like to discuss the project or our agencies' respective roles in more detail, please contact Mr. Edgar W. Garcia, Project Manager, at 787-729-6905, extension 3059. Thank you for your cooperation and interest in this project.

Sincerely,

12/23

Donald W. Kinard
Chief, Regulatory Division

Encl

cc:
FWS
NMFS - ESA
NMFS - EFH
SHPO
EPA

Doc #108

Rafael Gonzalez/R4/FWS/DOI
12/29/2010 10:07 AM

To "Hengstenberg, Derek" <Derek.Hengstenberg@tetratech.com>
cc "daniel_paganrosa@yahoo.com" <daniel_paganrosa@yahoo.com>, "Marelisa_Rivera@fws.gov" <Marelisa_Rivera@fws.gov>,
bcc
Subject RE: Raptor Survey Work Plan

Derek,

Before the Service can accurately evaluate the hawks survey proposal. We need to know the following information:

1. Are you going to survey each point for six hours (~0700 to ~1300)?
2. How many biologists you are going to have during the hawk survey?
3. Are the biologist train to work with hawks?

In addition, surveys on north of focal area #1 and focal area # 2 can be improve by adding more survey points.

Please let me know if you have any questions,

Rafael Gonzalez
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622

(787) 851-7297 x 214 (voice)
(787) 851-7440 (fax)
rafael_gonzalez@fws.gov

Doc #109

Daniel Pagan
<daniel_paganrosa@yahoo.com>
12/29/2010 09:23 PM

To Rafael_Gonzalez@fws.gov, "Hengstenberg, Derek" <Derek.Hengstenberg@tetratech.com>
cc "Marelisa_Rivera@fws.gov" <Marelisa_Rivera@fws.gov>, Yousev Garcia <yousevgr@yahoo.com>, Edwin_Muniz@fws.gov, LarryEvans@bcpeabody.com
bcc
Subject Re: Raptor Survey Work Plan

Dear Rafael:

In regard to your last E-Mail we contacted Mr. Edwin Muñiz and ask if we could have a site visit to the selected observation post included in Derek Hengstenberg Work Plan. It is considered that visiting the identified locations before making a final determination will allow F&WLS to validate that no further sites are needed to implement the Work Plan presented for needed consideration.

I recommend that we coordinate said site visit as soon as possible so we could initiate the implementation of the Work Plan within the time frame agreed upon during our last meeting at your Boqueron Offices.

To accomplish our mutual goals, I called my partner Mr. Yousev Garcia to call you up tomorrow and coordinate said visit in accordance with your schedule.

Happy Holidays,

Danny Pagan

Doc #110

"Hengstenberg, Derek" <Derek.Hengstenberg@tetratech.com>

"Hengstenberg, Derek" <Derek.Hengstenberg@tetratech.com>

12/30/2010 12:03 PM

To "Rafael_Gonzalez@fws.gov" <Rafael_Gonzalez@fws.gov>

cc "daniel_paganrosa@yahoo.com" <daniel_paganrosa@yahoo.com>, "Marelisa_Rivera@fws.gov" <Marelisa_Rivera@fws.gov>, Yousev Garcia <yousevgr@yahoo.com>, "Edwin_Muniz@fws.gov" <Edwin_Muniz@fws.gov>, "LarryEvans@bcpeabody.com" <LarryEvans@bcpeabody.com>

Subject RE: Raptor Survey Work Plan

Rafael,

Rafael,

Here are my answers for the work plan.

1. Are you going to survey each point for six hours (~0700 to ~1300)? Yes, each survey day will be 6 hours

2. How many biologists you are going to have during the hawk survey? 2 Biologists per survey locations

3. Are the biologist train to work with hawks? All biologists working on the project will be familiar with identification of both species of raptors.

At the current scope there are 8 survey points spread throughout, I guess the site visit will confirm these locations.

Thanks

Derek

Doc # 111

Rafael Gonzalez/R4/FWS/DOI
12/30/2010 12:34 PM

To "Hengstenberg, Derek" <Derek.Hengstenberg@tetratech.com>
cc "daniel_paganrosa@yahoo.com" <daniel_paganrosa@yahoo.com>, "Edwin_Muniz@fws.gov" <Edwin_Muniz@fws.gov>, "LarryEvans@bcpeabody.com"
bcc
Subject RE: Raptor Survey Work Plan

Derek,

Thanks for the answers!

Rafael Gonzalez
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622

(787) 851-7297 x 214 (voice)
(787) 851-7440 (fax)
rafael_gonzalez@fws.gov

Doc #120

daniel_paganrosa@yahoo.com
01/07/2011 03:45 PM
Please respond to daniel_paganrosa@yahoo.com

To "MarElisa Rivera" <Marelisa_Rivera@fws.gov>, "Yousef Garcia" <yousevgr@yahoo.com>
cc
bcc
Subject Re: Letter covering the addition of two observation locations into the Hawksupplemental field study

MarelisaWe will sent you the map either today in the afternoon or tomorrow morning so you have it when you are back from the weekend.Thanks Much for your supportDanny

Sent via BlackBerry by AT&T

Doc #119

From: Marelisa_Rivera@fws.gov
Date: Fri, 7 Jan 2011 15:41:48 -0400
To: Daniel Pagan<daniel_paganrosa@yahoo.com>
Cc: FRANCISCO E. LOPEZ GARCIA<FLOPEZ1075@PREPA.COM>; IVELISSE SANCHEZ SOULTAIRE<I-SANCHEZ@PREPA.COM>; Jousef Garcia<yousevgr@yahoo.comEdwinMuniz/R4/FWS/DOIRafaelGonzalez/R4/FWS/DOIOmarMonsegur/R4/FWS/DOI>
Subject: Re: Letter covering the addition of two observation locations into the Hawk supplemental field study

Dear Danny:

Thank you for the information. Omar and Rafael are out of the office today. We called Rafael and shared with his (over the phone) the two additional observation points mentioned in the letter. He agrees that during the site visit the need for additional observation points were discussed in these two areas; however we would like to see the map of the areas in order for us to concur with the final location of these points. Rafael also mentioned that during the visit Jousef mentioned possible impacts to a forested area (sinkhole) in Manati which supports suitable habitat for the broad-winged hawk. We would like to discuss with you this specific area.

Rafael will be in the office on Monday. If you send me the map, we can evaluate it and send the information on Monday. If we have any questions, we will call you.

Thanks

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622
(787) 851-7297 x 206 (direct)
(787) 851-7440 (fax)

Doc # 122

Marelisa Rivera/R4/FWS/DOI
01/10/2011 08:11 AM

To Rafael Gonzalez/R4/FWS/DOI@FWS
cc
bcc
Subject Fw: Raptor work

For your Action

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622
(787) 851-7297 x 206 (direct)
(787) 851-7440 (fax)
(787) 510-5207 (mobile)
marelisa_rivera@fws.gov

There are three constants in life...change, choice and principles.
Stephen R. Covey
----- Forwarded by Marelisa Rivera/R4/FWS/DOI on 01/10/2011 08:10 AM -----

Doc # 121

Daniel Pagan <daniel_paganrosa@yahoo.com>
01/07/2011 05:12 PM

To "Marelisa_Rivera@fws.gov" <Marelisa_Rivera@fws.gov>
cc Jousef Garcia <yousevgr@yahoo.com>
Subject Fw: Raptor work

Dear Marelisa:

As requested, enclosed please find the map identifying the additional observation locations mentioned in our previous letter. Hope that it provides the additional information requested.

Best Regards

Danny

Derek:

Please see attachment with the two aditional observations points requested by USFWS. See you Next Week.

Yousev

--- On **Fri, 1/7/11, Hengstenberg, Derek** <***Derek.Hengstenberg@tetratech.com***> wrote:

From: Hengstenberg, Derek <Derek.Hengstenberg@tetratech.com>

Doc # 115

Subject: RE: Raptor work
To: "Daniel Pagan" <daniel_paganrosa@yahoo.com>, "Yousev Garcia" <yousevgr@yahoo.com>
Cc: "LarryEvans@bcpeabody.com" <LarryEvans@bcpeabody.com>
Date: Friday, January 7, 2011, 11:25 AM

Can you send me GPS coordinates for these locations quicky? Or a map pinpointing the location. I am printing maps of the survey sites and would like to include these points (spot mapping).

Thanks

Derek Hengstenberg | Certified Wildlife Biologist

Main: 207.879.9496 | Cell: 908.616.0436

derek.hengstenberg@tetratech.com

Tetra Tech | Ecological Services

451 Presumpscot Street | Portland, Maine 04103 | www.tetratech.com

Save a tree...Print only when necessary

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From: Daniel Pagan [mailto:daniel_paganrosa@yahoo.com]
Sent: Friday, January 07, 2011 11:33 AM
To: Hengstenberg, Derek; Yousev Garcia
Cc: LarryEvans@bcpeabody.com
Subject: Re: Raptor work

Doc # 117

Derek:

The service are requesting us to add 2 additional observation sites (9th and 10th). These are to be located in the following areas:

1. One at the east side of the Rio Grande de Arecibo, up stream of the Dos Bocas Dam. (This will be utilized to observe the Via Verde pipeline segment that is aligned with PR-10) and,
2. The other one will be located in the Puente Blanco sector in the municipal boundary between Utuado and

Adjuntas (This will be utilized to observe the area where the Via Verde Pipeline alignment crosses the Pellejas River).

We will be confirming this information in writing to Marelisa this afternoon.

I spoke with the Secretary of the Department of Natural and Environmental Resources and Ivan will be available from Wednesday of said week (Jan 12, 2011). He will be taking care of this personally on Tuesday January 11, 2011

Have a safe trip.

Danny

Doc # 116

From: "Hengstenberg, Derek" <Derek.Hengstenberg@tetratech.com>
To: Daniel Pagan <daniel_paganrosa@yahoo.com>; Yousev Garcia <yousevgr@yahoo.com>
Cc: "LarryEvans@bcpeabody.com" <LarryEvans@bcpeabody.com>
Sent: Fri, January 7, 2011 11:28:41 AM
Subject: Raptor work

All,

I have lined up 2 biologists to work with me over the next couple of weeks. I am flying down there on Monday and plan to conduct a site tour on Tuesday with everyone to familiarize ourselves with the survey points and if need be to find a second survey point in focal area 2. Our current scope of work consists of 8 different sites. I just want to be sure that is going to work for the Service. Yousev mentioned that Service would like a 9th point.

Do we have final go ahead from USFWS on our protocol?

Thanks

Derek Hengstenberg | Certified Wildlife Biologist

Main: 207.879.9496 | Cell: 908.616.0436

derek.hengstenberg@tetratech.com

Tetra Tech | Ecological Services

451 Presumpscot Street | Portland, Maine 04103 | www.tetratech.com

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Utuado Observation Point.jpg Puente Blanco Observation Point.jpg

Doc #118

Daniel Pagan
<daniel_paganrosa@yahoo.com>

01/07/2011 01:43 PM

To "Marelisa_Rivera@fws.gov" <Marelisa_Rivera@fws.gov>

cc Jousef Garcia <yousevgr@yahoo.com>, IVELISSE SANCHEZ SOULTAIRE <I-SANCHEZ@PREPA.COM>, "FRANCISCO E. LOPEZ GARCIA"

bcc

Subject Letter covering the addition of two observation locations into the Hawk suplemental field study

History: This message has been replied to and forwarded.

Dear Marelisa:

Attached please find the letter accepting Rafael Gonzalez recommendations associated with including two additional observation locations into the supplemental field study presented back on December 21, 2010.

Hope that this will address all pending F&WLS concerns and allow us to initiate the field studies by next week as originally planned.

Best Regards

Danny Pagan

Carta al F&WLS additional observation locations 1-7-11.pdf

Doc #123

Lilibeth Serrano/R4/FWS/DOI

01/12/2011 02:47 PM

To Rafael_Gonzalez@fws.gov, Sandra Perez/R4/FWS/DOI@FWS, martin_ramos@fws.gov, ricardo_colon-merced@fws.gov, Michelle

cc

bcc

Subject Noticia: Estocada federal a la Vía Verde
January 5, 2011

Estocada federal a la Vía Verde
Maricelis Rivera Santos, EL VOCERO

La Agencia federal de Protección Ambiental (EPA, por sus siglas en ingles) acaba de atestar una estocada al proyecto Vía Verde al solicitar al Cuerpo de Ingenieros del Ejército (USCOE) que no apruebe el permiso de construcción solicitado por la Autoridad de Energía Eléctrica (AEE).

La EPA se convierte así en la segunda agencia federal en oponerse al llamado Gasoducto del Norte, luego de que EL VOCERO reveló en exclusiva hace tres semanas que el Servicio federal de Pesca y Vida Silvestre (USFWS) hizo lo propio.

El director de la EPA para Puerto Rico y el Caribe, Carl Axel Soderberg, escribió en una carta dirigida a José Rosado, ingeniero auxiliar del Distrito de las Antillas del USCOE, que la AEE no ha demostrado que el Gasoducto del Norte sea un proyecto necesario para Puerto Rico, y que la propuesta no cumple con la Ley federal de Agua Limpia, impatactaría adversamente los recursos acuáticos y no provee una mitigación adecuada para compensar los daños ambientales.

"Después de evaluar la información contenida en la Notificación Pública (NP) del 19 de noviembre de 2010, la EPA considera que el solicitante no ha demostrado adecuadamente la necesidad de la propuesta tubería conforme a las Guías de la sección 404 (b) (1) de la Ley federal de Agua Limpia", señaló el funcionario federal en la misiva con fecha del 21 de diciembre en poder de EL VOCERO.

Al igual que hizo el director del USFWS, Edwin Muñiz, el Director de la EPA recomendó que el USCOE requiera a la AEE el equivalente a una declaración de impacto ambiental federal (EIS) y no una evaluación ambiental (EA) que fue lo que sometió el proponente.

Si el USCOE acoge esa recomendación, se inicia un proceso de permiso formal que podría retrasar el calendario anunciado por el Gobernador para el inicio del proyecto en enero.

"Una EIS es necesaria para poder evaluar los impactos del proyecto", subrayó.

Soderberg sostuvo que la AEE debe analizar otras alternativas de energía más allá del gas natural dado que la solicitud de construcción ante el USCOE no expresa en sus motivos el tipo de combustible a usarse, la construcción de un terminal alterno cerca de las centrales de la AEE en el norte del país, y la construcción de una tubería más corta entre Arecibo y Toa Baja.

"La EPA además está preocupada por el barrenado direccional, particularmente en las areas de terrenos del Karso. En el pasado en otros proyectos del Caribe, el barrendado direccional ha tenido impactos mayores cuando el lodo producto del barrenado ha provocado derrames en el medioambiente. Dada la naturaleza de los terrenos del Karso, estamos preocupados de que cualquier barrenado pueda contaminar con el lodo el agua subterránea y otros recursos acuáticos y eso no ha sido evaluado como parte del análisis", declaró el ingeniero.

Soderberg planteó que la compensación que debe exigirse a la AEE debe ser de un mínimo de un radio de uno a uno por cada acre impactado.

Se estima que el gasoducto, de unas 92 millas de largo y 24 pulgadas de ancho, tendrá una huella de impacto sobre 150 pies de ancho por todo el proyecto, para un área total de 1,672 acres, de los cuales 235 son ríos y se afectarán 369 acres de humedales.

La EPA no compró la teoría de la AEE de que los impactos de Vía Verde serán temporeros. Por el contrario, puntualizó que los daños a especies bajo amenaza o en peligro de extinción protegidos federalmente pueden ser extensos y exigió un análisis de los daños temporeros y permanentes a los ecosistemas acuáticos que son jurisdicción federal.

Recomendó que el USCOE deje en suspenso la evaluación del proyecto hasta que la AEE conteste todas las preocupaciones de la EPA.

Doc # 125

Marelisa Rivera/R4/FWS/DOI
01/12/2011 04:31 PM

To Rafael Gonzalez/R4/FWS/DOI@FWS
cc
bcc
Subject Fw: AEE Reply

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622
(787) 851-7297 x 206 (direct)
(787) 851-7440 (fax)
(787) 510-5207 (mobile)
marelisa_rivera@fws.gov

There are three constants in life...change, choice and principles.
Stephen R. Covey

----- Forwarded by Marelisa Rivera/R4/FWS/DOI on 01/12/2011 04:31 PM -----

Doc # 124

Felix Lopez/R4/FWS/DOI
01/12/2011 08:37 AM

To Marelisa Rivera/R4/FWS/DOI
cc
Subject AEE Reply

Comparison between Draft and Final EIS of Via Verde and FWS concerns.doc FEIS reply.doc

Felix Lopez
USFWS
Boqueron FO
787 510 5208

"No one seems to know what it is we do, but what ever it is, we are the only ones that can do it, and we do it well"

Comparison between Draft and Final EIS of Via Verde and FWS concerns:

Draft EIS did not discuss wetland mitigation, frac out, or any form of compensatory mitigation.

The COE Public Notice mentioned a nominal .01 to 1 mitigation for temporal wetland losses; the FEIS mentions a possible 3:1 mitigation for wetland impacts pending final decision from the Corps of Engineers. This however is not part of the existing COE permit application. The FEIS states that on site compensatory mitigation is being considered however the exact requirement for wetland mitigation will depend on verification of the Wetland Delineation and US Army Corps of Engineers final decision.

A frac out plan is now included in the FEIS as well as the use of a flourecine dye to detect any loss of drill mud under rivers and streams. It still does not really address our concern of loss of drill mud in karst.

The FEIS mentions a 10:1 habitat compensatory mitigation for the guabairo already negotiated with DNER.

A better description of the proposed construction through karst is provided, but it is still very poorly worded how AEE will avoid impacts to T&E plant species.

The lack of a final determination of impacts from the ROW land clearing continues, a 150 foot maintenance right of way is claimed by AEE along the entire route within this is a 100 foot construction right of way, however the document states that this construction right of way may expand out to a maximum of 300 depending on construction methods. The document states that the ROW will be cleaned of all vegetation and obstructions and leveled prior to construction activities. A 3:1 forested upland mitigation is being proposed for unavoidable impacts but there are no specifics other than it will be coordinated with DNER, we believe that the species list for any possible reforestation efforts should also be coordinated with the Service.

Section 6 states that forested areas will be planted with species that were present in the cleared areas or with similar species found in the forest.

Page 6.63 states that via verde will require the patrolling of the 50 permanent ROW, this will be used by biologist to determine the success of upland forest mitigation.

Section 6 of the document makes reference to a compensation and mitigation plan, however this plan is not included in the FEIS.

The formula used to estimate the extent of forested impacts may be slightly flawed: 18 miles x 30 meters = 221 cuerdas. If you use only feet instead of meters then the proposed 100 foot construction right of way x 18 miles; the estimated impacts are 224 cuerdas. We recommend that measurement units be standardized when making calculations.

One of FWS concerns was the maintenance of the 50 foot ROW. The need to patrol the pipeline is mentioned in several sections in the FEIS. The pipeline will be patrolled at least once a year or more. Patrols will be carried out by foot, vehicle or aircraft. This will require permanent vehicle access points and the maintenance of the ROW for vehicular traffic. FWS remains concerns include the method of ROW maintenance and the method of vehicular access to be used in the numerous stream crossings since no permanent vehicular stream crossings will be left.

Mr. Angel Rivera Santana
Director, Planning and Environmental Protection
PR Electric Power Authority
PO Box 364267
San Juan, Puerto Rico 00936-4267

Re: SAJ 2010-02881 IP-EWG, Via Verde Gas Pipeline, Final Environmental Impact Statement

Dear Mr. Rivera:

Thank you for your December 20, 2010 letter providing a copy of the Final EIS for the Via Verde gas pipeline. Our comments are issued as technical assistance in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. as amended).

Our comments to the US Army Corps of Engineers were based on the information provided in the Joint Permit Application. Since the Commonwealth of Puerto Rico did not send us a copy of the FEIS, we based our comments on the information previously provided to us and that in the Corps Public Notice. After reviewing the FEIS we believe that our comments made to the Corps on December 15, 2010 still stand. Wetland impacts as stated in the FEIS may range from the 150 foot corridor to 300 feet in areas where HDD takes place, a mitigation for wetland impacts is proposed but this was not stated in the Corps Public Notice, nor has this plan been developed. Other mitigation plans for impacts to fauna and flora are mentioned in the document but none have been developed or approved. Chapter 8, Section 8.5 has listed the agency comments and PREPA's response. Of the numerous concerns the Service expressed in previous letter regarding the Preliminary EIS, only one is listed in section 8.5, our concerns regarding the existing flora fauna studies, and the additional studies which are still ongoing. The final answer to the listed FWS concern is that this will be resolved during the ongoing Corps of Engineers Joint Permit review. Section 8.5 makes about 8 references to the Joint Permit process and delegates wetland impacts, mitigation, and other concerns to the ongoing Corps Joint Permit review. Therefore while the FEIS provides some additional information, it leaves most if not all of the Service's concerns made in two previous letters to the ongoing federal permit review process. We hope that PREPA will

adequately answer these concerns in the near future as part of their comments to the Corps Joint Permit review.

If you have any questions please contact Ms. Marelisa Rivera at 787 851 7297 x 206.

Sincerely,

Edwin Muñiz
Field Supervisor

fhl
cc:
DNER, San Juan
EQB, San Juan
PRPB, Land Use Division, San Juan
PRPB, CZM, San Juan
EPA, San Juan
EPA, Dan Montella, New York
USFS, IITF, San Juan
USGS, San Juan
COE, Regulatory, Jacksonville
FWS, Atlanta

Doc # 129

Marelisa Rivera/R4/FWS/DOI
01/13/2011 09:26 AM

To Rafael Gonzalez/R4/FWS/DOI@FWS, Omar Monsegur/R4/FWS/DOI@FWS, Carlos Pacheco/R4/FWS/DOI@FWS
cc
bcc
Subject Fw: Comments FWS regarding raptors and plants

Please evaluate response.

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622
(787) 851-7297 x 206 (direct)
(787) 851-7440 (fax)
(787) 510-5207 (mobile)
marelisa_rivera@fws.gov

There are three constants in life...change, choice and principles.
Stephen R. Covey
----- Forwarded by Marelisa Rivera/R4/FWS/DOI on 01/13/2011 09:25 AM -----

Doc # 126

Daniel Pagan <daniel_paganrosa@yahoo.com>
01/12/2011 10:44 PM

To Marelisa_Rivera@fws.gov
cc Jousef Garcia <yousevgr@yahoo.com>, EdgarGarcia@yahoo.com, OmarMonsegur/R4/FWS/DOI@yahoo.com, RafaelGonzalez/R4/FWS/DOI@yahoo.com, EdwinMuniz/R4/FWS/DOI@yahoo.com, CarlosPacheco/R4/FWS/DOI@yahoo.com, LarryEvans@bcpeabody.com, Johanna R Willis <johannawillis@bcpeabody.com>, Ken Caraccia <KenCaraccia@bcpeabody.com>, "FRANCISCO E. LOPEZ GARCIA" <FLOPEZ1075@PREPA.COM>, IVELISSE SANCHEZ SOULTAIRE <I-SANCHEZ@PREPA.COM>, EDWIN BAEZ <E-BAEZ@PREPA.COM>
Subject Re: Comments FWS regarding raptors and plants

Marelisa:

Thanks for your support and prompt response.

Attached please find our responce to USF&WL additional request.

Hope that this will address all concerns.

Best Regards.

Danny

Doc #127

From: "Marelisa_Rivera@fws.gov" <Marelisa_Rivera@fws.gov>
To: Daniel Pagan <daniel_paganrosa@yahoo.com>
Cc: Jousef Garcia <yousevgr@yahoo.com>; EdgarGarcia@yahoo.com; OmarMonsegur/R4/FWS/DOI@yahoo.com; RafaelGonzalez/R4/FWS/DOI@yahoo.com; EdwinMuniz/R4/FWS/DOI@yahoo.com; CarlosPacheco/R4/FWS/DOI@yahoo.com
Sent: Wed, January 12, 2011 4:55:19 PM
Subject: Comments FWS regarding raptors and plants

Danny:

We have reviewed the information provided on January 7, 2011 regarding the proposed protocol to survey raptors and maps, and would like to provide the following comments. These comments and recommendations are based on observations/ recommendations from Service biologists during site visit conducted on January 4, 2011.

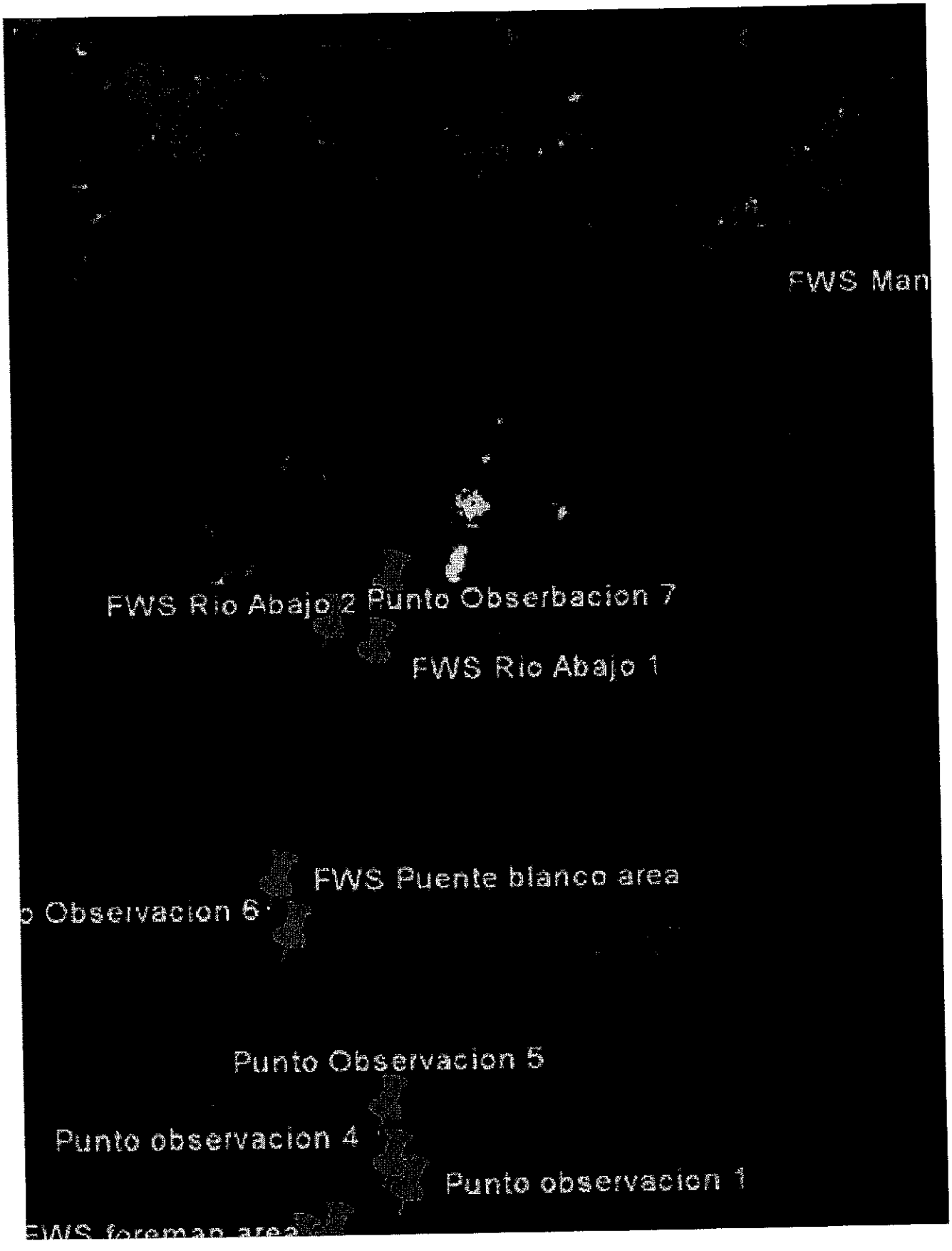
1. Add six new observation points to the endangered raptors study. Focal area surveys can be improved by adding more observation points. Even though the species participate in epigamic and territorial aerial displays during breeding season they do not stay most of the time over the canopy. The suggested points are shown in Figure 1 with the prefix FWS (coordinates of suggested points can be found on attach KMZ file, suggested point can be relocated within the suggested area).

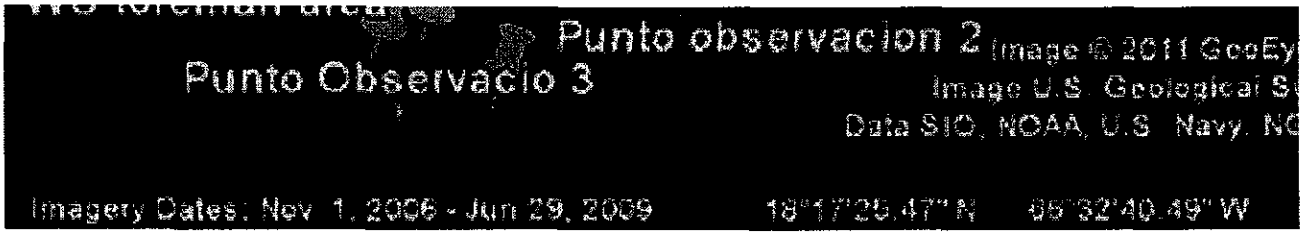
2. Observation points by geographic location should be surveyed simultaneously. We suggest the next group of points to be studies at the same time:

a. Points 2, 3 and FWS foreman.
b. Points 1 and 4.
c. Points 5, 6 and FWS Puente Blanco.
d. Point 7, FWS Rio Abajo1 and 2.
e. Point 8 and FWS Manati 1 and 2.

3. Conduct surveys for the Puerto Rican Parrot simultaneously with the raptor survey near the Rio Abajo Forest. The endangered Puerto Rican Parrot has been reported around the Rio Abajo Forest, parrot observation includes feeding, flying and sheltering. Survey points near the Rio Abajo Forest are point 7, FWS Rio Abajo1 and 2.

Figure 1.


FWS Man
FWS Rio Abajo 2
Punto Obserbacion 7
FWS Rio Abajo 1
FWS Puente blanco area
o Observacion 6
Punto Observacion 5
Punto observacion 4
Punto observacion 1
FWS foreman area



We also would like to provide comments regarding the plant surveys. We have provided technical assistance to PREPA regarding the surveys to identify suitable habitat for federally listed plants along the propose route for the Via Verde. On a meeting with PREPA on December 8, 2010 we agreed to conduct preliminary assessments for the Peñuelas area on December 13 and December 20, 2010.

The following comments are based on the points discussed on the December 8, 2010 meeting and the site visits to the Peñuelas area:

1. PREPA agreed to submit to the USFWS a detailed schedule of the site visits. The purpose of this schedule is to allow the USFWS personnel to conduct joint site visit to determine the quality of the habitat and the potential for the presence of Federally Listed plants. At present time, PREPA have failed to provide this schedule.
2. The Service expressed to PREPA our interest of evaluating the habitat within the following areas: the dry limestone forest of Peñuelas, the montane forest between Pico Cerrote and the town of Adjuntas and the limestone area between Manati and Vega Alta. At present time, we have only evaluated the area of Peñuelas (two sites).
3. During the December 13 and December 20, 2010 site visits we evaluated the Peñuelas area and confirmed the presence of suitable habitat comparable to the Guánica Forest Reserve. This area harbors suitable habitat for the following plant species: *Ottoschulzia rhodoxylon* (palo de rosa), *Trichilia triacantha* (bariaco), *Buxus valhii* (diablito de tres cuernos), *Eugenia woodburyana* , *Catesbaea melanocarpa* and *Cordia rupicola* . Furthermore, the structure of the vegetation at Peñuelas indicates that the area has remained undisturbed for at least 50 years and that the previous disturbance was limited to the extraction of wood for charcoal. This is evidenced by the presence of a well developed forest with an open understory and little evidence of exotic species. The Service has identified transects between the following reference points as highly valuable habitat for the previously mentioned plants: 18° 1' 14.65"N, 66 °42' 30.05"W - 18° 1' 25.69"N, 66° 41' 41.23"W and 18° 1' 25.69"N, 66° 41' 41.23"W - 18° 2' 44.56"N, 66° 41' 50.73"W. The Service is also interested in a comprehensive survey of the following transect: 18° 1' 9.19"N, 66 °42' 22.04"W - 18° 1' 2.77"N, 66° 42' 23.09"W.
4. PREPA have failed to provide a comprehensive written methodology and a schedule for the specific survey of threatened and endangered plants. We have urged PREPA consultant Yousev Garcia about the importance of providing the methodology. PREPA have only provided a brief summary related to plants

survey on a letter dated November 5, 2010.
5. The Service has recommended that the surveys for threatened and endangered plants in areas with suitable habitat should be conducted within the entire expected footprint of the project. A general survey of the area is not recommended since it should result in the fail to detect viable populations of listed plants. Therefore, the surveys should be systematic and conducted by a group of trained botanists. The surveys of areas that are outside the footprint are unacceptable. Areas with suitable habitat should be entirely surveyed.
6. As we mentioned in previous occasions, we are concerned regarding impacts to listed species in the northern karst region, particularly on "mogotes". Any possible impact to the vegetation of a "mogote" should require an exhaustive survey for listed plants.

If you need additional information, please let us know. Thanks

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622
(787) 851-7297 x 206 (direct)
(787) 851-7440 (fax)
(787) 510-5207 (mobile)
marelisa_rivera@fws.gov

There are three constants in life...change, choice and principles.
Stephen R. Covey

Daniel Pagan <daniel_paganrosa@yahoo.com>

Daniel Pagan
<daniel_paganrosa@yahoo.com>

To"Marelisa_Rivera@fws.gov"

01/07/2011 05:12 PM <Marelisa_Rivera@fws.gov>

ccJousef Garcia <yousevgr@yahoo.com>

SubjectFw: Raptor work

Dear Marelisa:

As requested, enclosed please find the map identifying the additional observation locations mentioned in our previous letter. Hope that it provides the additional information requested.

Best Regards

Danny

Derek:

Please see attachment with the two aditional observations points requested by USFWS. See you Next Week.

Yousev

--- On **Fri, 1/7/11, Hengstenberg, Derek** ***<Derek.Hengstenberg@tetratech.com>*** wrote:

From: Hengstenberg, Derek <Derek.Hengstenberg@tetratech.com>
Subject: RE: Raptor work
To: "Daniel Pagan" <daniel_paganrosa@yahoo.com>, "Yousev Garcia" <yousevgr@yahoo.com>
Cc: "LarryEvans@bcpeabody.com" <LarryEvans@bcpeabody.com>
Date: Friday, January 7, 2011, 11:25 AM

Can you send me GPS coordinates for these locations quicky? Or a map pinpointing the location. I am printing maps of the survey sites and would like to include these points (spot mapping).

Thanks

Derek Hengstenberg | Certified Wildlife Biologist

Main: 207.879.9496 | Cell: 908.616.0436

derek.hengstenberg@tetratech.com

Tetra Tech | Ecological Services

451 Presumpscot Street | Portland, Maine 04103 | www.tetratech.com

Save a tree...Print only when necessary

PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: Daniel Pagan [mailto:daniel_paganrosa@yahoo.com]
Sent: Friday, January 07, 2011 11:33 AM
To: Hengstenberg, Derek; Yousev Garcia
Cc: LarryEvans@bcpeabody.com
Subject: Re: Raptor work

Derek:

The service are requesting us to add 2 additional observation sites (9th and 10th). These are to be located in the following areas:

1. One at the east side of the Rio Grande de Arecibo, up stream of the Dos Bocas Dam. (This will be utilized to observe the Via Verde pipeline segment that is aligned with PR-10) and,
2. The other one will be located in the Puente Blanco sector in the municipal boundary between Utuado and Adjuntas (This will be utilized to observe the area where the Via Verde Pipeline alignment crosses the Pellejas River).

We will be confirming this information in writing to Marelisa this afternoon.

I spoke with the Secretary of the Department of Natural and Environmental Resources and Ivan will be available from Wednesday of said week (Jan 12, 2011). He will be taking care of this personally on Tuesday January 11, 2011

Have a safe trip.

Danny

From: "Hengstenberg, Derek" <Derek.Hengstenberg@tetratech.com>
To: Daniel Pagan <daniel_paganrosa@yahoo.com>; Yousev Garcia <yousevgr@yahoo.com>
Cc: "LarryEvans@bcpeabody.com" <LarryEvans@bcpeabody.com>
Sent: Fri, January 7, 2011 11:28:41 AM
Subject: Raptor work

All,

I have lined up 2 biologists to work with me over the next couple of weeks. I am flying down there on Monday and plan to conduct a site tour on Tuesday with everyone to familiarize ourselves with the survey points and if need be to find a second survey point in focal area 2. Our current scope of work consists of 8 different sites. I just want to be sure that is going to work for the Service. Yousev mentioned that Service would like a 9th point.

Do we have final go ahead from USFWS on our protocol?

Thanks

Derek Hengstenberg | Certified Wildlife Biologist

Main: 207.879.9496 | Cell: 908.616.0436

derek.hengstenberg@tetratech.com

Tetra Tech | Ecological Services

451 Presumpscot Street | Portland, Maine 04103 | www.tetratech.com

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[attachment "Utuado Observation Point.jpg" deleted by Marelisa Rivera/R4/FWS/DOI]
[attachment "Puente Blanco Observation Point.jpg" deleted by Marelisa Rivera/R4/FWS/DOI]

Marelisa:

Thanks for your pront responce

Marelisa[1]letter with recommendations .doc Cerrote Study Area.jpg Dry Limestone Study Area.jpg

Via Verde LP-012 File

U. S. FISH AND WILDLIFE SERVICE - SOUTHEAST REGION (4)
ECOLOGICAL SERVICES

TO: Doc #128 **DATE:**

U.S. Fish & Wildlife Service JAN 24 2011

ASHEVILLE, NC	CONWAY, AR	LAFAYETTE, LA
ATHENS, GA	DAPHNE, AL	PANAMA CITY, FL
BOQUERON, PR	FRANKFORT, KY	RALEIGH, NC
CHARLESTON, SC	JACKSON, MS	RIO GRANDE, PR
CLEMSON, SC	JACKSONVILLE, FL	VERO BEACH, FL
COOKEVILLE, TN		

Attn: Edwin Muniz - FYI

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1875 Century Boulevard
Atlanta, Georgia 30345

JAN 13 2011

In Reply Refer To:
FWS/R4/ES

Colonel Alfred A. Pantano, Jr.
District Commander
Jacksonville District Corps of Engineers
701 San Marco Boulevard
Jacksonville, Florida 32207-0019

RE: Public Notice SAJ-2010-02881 (IP-EWG), dated November 19, 2010, Via Verde Natural Gas Pipeline Project, Puerto Rico

Dear Colonel Pantano:

In accordance with the 1992 404(q) Memorandum of Agreement (MOA) between our agencies, the enclosed letter report provides the recommendations of the Department of the Interior in response to the above application for a Department of the Army Permit.

Pursuant to part IV 3(b) of the MOA, I have determined that the proposed work will have substantial and unacceptable impacts on aquatic resources of national importance, if permitted as specified in the public notice without incorporating our recommendations. I strongly encourage a mutual resolution of the identified wetland/wildlife concerns at the field level before you make a decision to issue the permit.

If you have any questions, please contact Edwin Muniz, Field Supervisor, Caribbean Ecological Services Field Office, at (787) 851-7297, extension 204.

Sincerely yours,

"for" Cynthia K. Dohner
Regional Director

Enclosure

TAKE PRIDE IN AMERICA

DEPARTMENT OF DEFENSE
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
ATILLES OFFICE
400 FERNANDEZ JUNCOS AVENUE
SAN JUAN, PUERTO RICO 00901-3299
December 22, 2010

Antilles Regulatory Section
SAJ-2010-02881 (IP-EWG)

Eng. Francisco E. Lopez
Autoridad de Energía Eléctrica
P.O. Box 364267
San Juan 00936-4267

Dear Mr. Lopez:

Reference is made to your Department of the Army (DA) permit application, submitted through Joint Permit Application Number 1059, of September 20, 2010 for the Via Verde Natural Gas Pipeline (NGPL) project. The proposal is to construct and install a 24-inch diameter steel NGPL for approximately 92 miles with a construction right-of way (ROW) of 150 feet wide, that transverses the island of Puerto Rico from the Eco Eléctrica Liquid Natural Gas Terminal in municipality of Peñuelas, to the Cambalache Termoeléctrica electric power plant in the municipality of Arecibo, then east to the Palo Seco facility in the municipalities of Toa Baja and San Juan. The pipeline route will encompass both private and public lands which include commercial, industrial, and agricultural land uses. The total project area is about 1,672 acres that will impact 235 river and wetland crossings, for a total of 369 acres of jurisdictional Waters of the United States. Please refer to case number SAJ-2010-02881 (IP-EWG) in future correspondence regarding this project.

We also make reference to meetings held on October 26, 27 and 28, 2010 with US Fish and Wildlife Service (FWS), State Historic Preservation Office (SHPO) and Federal Highway Administration (FHA) respectively, in which the requirements managed by each agency were discussed with members of your consulting firm.

A careful review of your project and preliminary review of the comments from resource agencies and the public has revealed various environmental and public interest concerns which cannot be adequately evaluated with the information at hand. As discussed with your contractor and the other resource agencies in previous meetings, the information on record does not fully address the public interest factors and information of the Via Verde NGPL project regarding public safety, environmental impacts, endangered species, habitat conservation and historic properties required for the Corps to adopt a position in the review process at this point.

Although you provided information with your permit application that address some of the comments herein provided, please be advised that the information and or referenced materials provided is largely deficient, very conceptual, and failed to adequately address the issues raised by the agencies and the general public. We believe PREPA (Spell)

needs to provide a more comprehensive and detailed response to address the issues of concern. Furthermore, the Corps believes that project impacts have not been adequately quantified; thus precluding proper evaluation of the project's direct and secondary impacts on the aquatic environment. We are concerned about the potential direct, indirect, and cumulative impacts of the project on the aquatic resources.

As part of the permit application you provided detailed maps and drawings depicting locations of most of the jurisdictional areas within the proposed route and ROW. However, a review of the National Wetland inventories revealed the existence of jurisdictional areas that were not identified or accounted for in the Jurisdictional Determination (JD) submitted as part of the permit application. Please be advised that these areas will be eventually ground-truth during a jurisdictional determination site visit, which would be coordinated in the near future.

The Corps evaluated the alternative analysis submitted as part of the permit application, and found it deficient in scope and detail, as it does not focus on minimization of impacts to jurisdictional areas and it rather provides a route selection matrix overview of additional project routes. Although the applicant's has outlined other alternatives considered for the development of the alignment, we still believe that the analysis is largely qualitative and lacks sufficient details for an adequate review. The analysis mentions the rationale for the final selection of the preferred route; however, it fails to provide a quantification of the impacts, costs, and other issues that were crucial in the final selection.

Also, as per FWS letter of December 15, 2010, enclosure 1, the Eco Eléctrica facility has not contemplated the construction of a connection or modification to connect the Via Verde Project. Also, the letter stated that the storage capacity of the facility is not sufficient to provide services to the new Via Verde Project. Furthermore, informal conversations with Mr. Daniel Pagan on December 20, 2010, revealed that PREPA has contemplated a natural gas barge offload option off a small key near the Eco Eléctrica plant that can provide the capacity needed to provide natural gas to the Via Verde project with modification to the infrastructure of the key. Such infrastructure modification would have to be part of this permit evaluation, and the aforementioned option has not been discussed in the alternative analysis provided with permit application. The U.S. Army Corps of Engineers (Corps) believes that without an actual connection to a natural gas supply system the Via Verde natural gas pipeline cannot be considered under the National Environmental Policy Act as a single and complete project.

The Postal Office returned several Public Notices due to insufficient addresses. It is the Corps responsibility to notify the public of projects adjoining their properties. You could either, obtain correct mailing addresses and forward it to this office or hand deliver it to the adjoining property owner. If to be delivered, then a return receipt is requested. Be advised that we would grant these neighbors an additional 30-day comment period.

Attached is a list of the letters received in response to the Public Notice issued for the above referenced permit application. Copies of the response letters are also enclosed. The following paragraphs summarize the comments provided in those letters. Please review and provide a detailed written response to each of the issues raised in said letters. To expedite the evaluation of your permit application, we request your response be provided in English.

The National Marine Fisheries Service (NMFS), Protected Resources Division (PRD) by email dated November 19, 2010, indicated that a preliminary review of the available documentation suggested that the project will likely require consultation with said agency pursuant to Section 7 of the Endangered Species Act. Furthermore NMFS Essential Fish Habitat by letter dated December 19, 2010, stated that the service would require consultation under Magnuson Stevens Act due to the potential presence of important essential fish habitats.

FWS, by letter dated December 15, 2010, Boquerón Field Office stressed the need for the development of a Biological Assessment to address more than 32 ESA species potentially encountered on the project path, adherence with NEPA requirements of a single and complete project, alternative analysis, habitat impacts and mitigation. FWS further recommends that the permit be denied as currently proposed.

Federal Highway Administration (FHWA), by email dated December 17, 2010, stated that the "Policy on the Accommodation of Utilities on Highways Right of Way" adopted by the Puerto Rico Highway and Transportation Authority (PRHTA) and approved by FHWA on May 30, 1990 does not include longitudinal installation of pipeline conveying gas, oil, gasoline and other flammable or dangerous substances within the control access lines of controlled-access highways nor within tunnels or on major bridges. Hence, a project level agreement for this particular utility accommodation would be needed.

SHPO, by letter dated September 17, 2010, stated that in accordance with the consultation requirements pursuant to Section 106 of the National Historic Preservation Act (NHPA), a Cultural Resource Assessment (Phase 1A and Phase 1B) will be required to identify the presence/absence of cultural resources of archaeological/historic significance within the project's area of potential effects. No position can be provided until Phase 1A and 1B are finalized and the data is evaluated.

The Environmental Protection Agency (EPA) by letter of December 21, 2010, recommended the permit for the project be denied, since the project has the potential to cause or contribute to significant degradation of waters of the U.S., including aquatic resources of national importance, and therefore, does not comply with Section 404(b)(1) Guidelines. Also EPA recommends the development of an Environmental Impact Statement (EIS).

The College of Engineers and Surveyors of Puerto Rico (CIAPR) by letter of December 17, 2010 suggest that there are other alternatives such as the use of the Costa Sur complex in combination with the Aguirre Power Plant which can generate 73% of the Island electricity.

The Sierra Club stressed by way of its membership that they are opposed to the project and requested that Corps hold public hearings (PH) and prepare an EIS.

The general public, interest groups, and others, sustained that they are opposed to the project, the project has not addressed property rights, environmental impacts, ESA, EFH, habitat conservation, potential safety risks, health hazards and its effects on the nearby communities; the lack of discussion of alternatives regarding alternative renewable resources, which also minimize impacts to the aquatic resources.

After reviewing the responses stated above, the Corps agrees with the comments from the resource agencies and the general public, and reserves the option to request an EIS and hold a PH. A comprehensive and detailed rebuttal on the comments from the agencies must be provided. Any other information you feel may be helpful in order to fully justify the proposal should also be submitted at this time.

As required by NEPA and the Clean Water Act (CWA) Section 404(b)(1) Guidelines, the Corps must consider a broad range of alternatives during the evaluation of a permit application. Under these regulations, the Corps must give detailed consideration to practicable alternatives that focus on the accomplishment of the applicant's and the public's interest and needs. The regulations define a practicable alternative as an alternative that is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purpose. The Corps is neither a proponent nor an opponent of the applicant's proposal which will be identified as the "applicant's preferred alternative." However, 40 CFR Part 230.10(a) allows permit issuance for only the least environmentally damaging practicable project alternative. That is, no discharge of dredged or fill material shall be permitted if there is a practicable alternative, which would have less adverse impact on the aquatic ecosystem providing the alternative does not have other significant adverse environmental consequences.

Further, pursuant to 33 CFR Part 320.4, the Corps must evaluate the project to ensure that it would not be contrary to the public interest. In that regard, the Corps must assess the relative extent of the public and private need for the project, and the extent and permanence of the beneficial and/or detrimental effects that the project is likely to have on the public and private uses to which the area is suited. In addition, the Corps must evaluate the practicability of using reasonable alternative locations and methods to accomplish the objective of the proposed work or structure.

We are concerned about the potential direct, indirect, and cumulative impacts of the proposed project on the aquatic resources. In order to implement the procedural provisions of NEPA and complete our regulatory analysis of compliance with Section 404(b)(1) guidelines and the public interest review factors we request your submittal of the following information:

a) Alternative Sites Analysis: Please submit an analysis describing alternative energy solutions, alternative sites considered to locate the proposed project, including the Gasoducto del Sur. The purpose of such analysis is to clearly establish and document that the preferred and proposed alternative is the least environmentally damaging practicable project alternative. As part of this alternatives analysis we request that you: (1) define a set of criteria for site evaluation; (2) define a system to rate a site against each of the criteria; (3) describe a method to comparatively weigh each rating as to its importance; and (4) prepare a report describing the search for the sites, identification of their location and rating, and a narrative which shows which site is the preferred alternative.

b) Avoidance and Minimization: Please provide documentation of your evaluation of practicable modifications or alternatives to the project layout or design, which could prevent and/or minimize impacts to waters of the United States and the aquatic environment, and discuss why the proposed impacts could not be minimized any further. In this regard, please evaluate and discuss the practicability of reducing the size of the proposed structures, and relocating, modifying or eliminating some of the project components to avoid and minimize the project's direct, indirect and cumulative impacts.

c) Compensatory Mitigation Your application did not include any compensatory mitigation plan designed to offset impacts to 369 acres of waters of the U.S. As outlined in the 1990 Memorandum of Agreement between the DA and EPA concerning the determination of mitigation under the CWA, mitigation should only be considered after all practicable measures have been made to avoid and/or minimize wetlands impacts. Upon demonstrating that the proposed project represents the least-environmentally damaging practicable alternative, and after all effort has been made to avoid and/or minimize wetland impacts, you must provide a mitigation plan to offset unavoidable wetland impacts. The Compensatory Mitigation Plan shall discuss feasible measures, which would be implemented to compensate for the project's unavoidable direct, indirect and cumulative impacts to the aquatic environment. This is for proposed impacts that cannot be avoided or minimized. The purpose of this plan is to show how compensatory work would balance the impacts of the project. Your mitigation and monitoring plan must be approved prior to issuance of a DA permit. Your mitigation and monitoring plan should include the following twelve fundamental components: 1) objectives (restoration, enhancement, etc.), 2) site selection

criteria, 3) site protection instruments (e.g., conservation easement), 4) baseline information for impact and compensation sites (reference to each wetland impact and mitigation polygon should be based on an accepted wetland classification system (i.e., FLUCCS, or FNAI)), 5) credit determination methodology, 6) mitigation work plan (e.g., a description of all wetland and upland enhancement and restoration activities to include prescribed fire, pine canopy thinning, exotics removal, culvert installation, grading, gyro-tracking, and planting, and timeframes for initiation and completion), 7) maintenance plan with schedule 8) ecological performance standards (e.g., should be measurable and attainable). 9) monitoring requirements (e.g., quantitative and qualitative vegetative community analysis), 10) long-term management plan, 11) adaptive management plan, and 12) financial assurances (e.g., please reference Regulatory Guidance Letter 05-1: *Guidance on the Use of Financial Assurances, and Suggested Language for Special Conditions for Department of the Army Permits Requiring Performance Bonds* for your edification on types of financial assurance).

d) Wetlands: Please provide an assessment of all direct, indirect, and secondary impacts, and mitigation activities. Secondary impacts should be assessed for all wetlands (except those targeted for direct impact) both on and off the project impact site, which fall within 300' of the development footprint. We request that as part of the above mentioned mitigation efforts (including avoidance, minimization and compensation) for the proposed project you consider further measures to prevent and minimize impacts, and offset the project's unavoidable impacts to jurisdictional areas. Also, please describe which measures would be implemented during the construction and operation of the project to minimize such impacts.

e) The Corps concurs with the comments expressed by the agencies with regards to Horizontal Directional Drilling (HDD). As stated by the agencies, the use of HDD in the Karst region shall be fully assessed and evaluated. In previous projects the Corps has discovered that bentonite mud was accidentally released, resulting in detrimental consequences. Also, as part of the permit application a Frac-Out Plan was provided that stated that "pits" would be constructed to collect return mud. The plan also states that the mud would be collected from the "pits" and taken to a sedimentation pond where the sterile residuals are separated to be reused. Residuals are listed as bentonite, polymers, and surfactants. It is not clear if the "pits" or the sedimentation ponds are lined to avoid contaminant discharge, nor how many sedimentation ponds would be constructed. Also, the plan mentions the use of dye tracers, the use of such tracer would need to be coordinated with the EPA.

f) Fish and Wildlife Values: Please respond to the comments provided by FWS and NMFS in the attached communications. All the concerns presented by these resource agencies would have to be fully addressed during our evaluation and coordination of the permit application to initiate consultation under Magnuson Stevens Act.

g) Threatened & Endangered Species: Please review FWS and NMFS in the attached letters. This information will be necessary to initiate consultation with NMFS and FWS, under Section 7 of the ESA.

h) Cultural Resources: Please inform us of the progress with regards to providing a complete Phase IA and Phase IB Archaeological Studies for the project; we request that you please provide us with copies of any pertaining correspondence and documentation exchanged with SHPO.

i) Infrastructure and Utilities – Please provide evidence of your coordination with the appropriate Commonwealth of Puerto Rico government agencies for the evaluation of the project's proposed plan for obtaining and providing utilities and services including to carry out your project.

j) Cumulative Impacts: In order for the Corps to consider environmental cumulative impacts of the proposed project, we request to provide information regarding other existing, in progress or proposed projects that could affect the aquatic resources to be impacted by the development of the proposed project. In particular, please provide information regarding your evaluation of potential past, present and foreseeable future environmental impacts of the proposed action in relation to such projects and describe the corresponding minimization and mitigation measurements being proposed. In this regard future expansions of PR-22, construction of PR-10, Waste to Energy plant in Arecibo are examples of projects that need to be considered in the analysis.

k) Please provide a map depicting the proposed staging areas and access roads. The Corps is concerned about the presence of wetland areas in or immediately adjacent to the proposed right-of-ways. Please explain what preventive measure would be implemented by PREPA to avoid additional impacts into these areas during construction activities.

l) Water Quality: Please describe the potential impacts of the proposed project on water quality and the measures to be implemented during the project construction and operation to avoid and minimize such impacts. In this regard, please describe in particular the measures that would be implemented to avoid and minimize the potential adverse environmental effects of accidental leaks into the aquatic environment.

m) You are reminded that two necessary prerequisites to the issuance of a DA permit for your project are the issuance Water Quality Certification and a Coastal Zone Management (CZM) Consistency Certification by Puerto Rico's Environmental Quality Board, and the Planning Board, CZM office. Therefore, keep this office informed of the status of your applications for these certifications. In this regard, please provide us with copies of any requests for information that you may have received from any of these agencies and your corresponding responses, and clarify any project modifications that may have resulted from your coordination.

Please provide information pursuant to Section 176(c) of the Clean Air Act regarding whether your proposal will not exceed de minimis levels of direct or indirect emissions of a criteria pollutant or its precursors and are exempted by 40 CFR Part 93.153.

Your application will be held in abeyance for 45 days pending receipt of your response. If within the next 45 days from the date of this letter we have not received a written communication from you, we will take final action on your Department of the Army permit application. Final action could include withdrawal or denial of your permit application. Should the file be withdrawn, it will be retained for a period of one year.

You are cautioned that any work performed below the mean high waterline or ordinary high waterline in waters of the United States, or the discharge of dredged or fill material into adjacent wetlands, without a DA permit could be subject to enforcement action. Receipt of a permit or endorsement from other agency does not obviate the requirement for obtaining a DA permit for the work described above prior to commencing work.

If you have any questions or comments regarding this case, you may contact Mr Edgar W. Garcia, at telephone numbers 729-6905/6944 ext. 3059, or at the letterhead address.

Sincerely,

Edgar W. Garcia
Antilles Regulatory Section

Enclosures - Attached CD

Copy to
Mr. Larry Evans
BC Peabody Consulting, P.A.
509 Guisando de Avila, Suite 100
Tampa, FL 33613

Doc # 130

Marelisa Rivera/R4/FWS/DOI
01/13/2011 09:48 AM

To Edwin Muniz/R4/FWS/DOI@FWS, Omar Monsegur/R4/FWS/DOI@FWS, Carlos Pacheco/R4/FWS/DOI@FWS, Rafael
cc
bcc
Subject Fw: Comments FWS regarding raptors and plants

----- Forwarded by Marelisa Rivera/R4/FWS/DOI on 01/13/2011 09:47 AM -----

Doc # 131

Marelisa Rivera/R4/FWS/DOI
01/14/2011 04:00 PM

To Daniel Pagan <daniel_paganrosa@yahoo.com>
cc CarlosPacheco/R4/FWS/DOI@yahoo.com, EDWIN BAEZ <E-BAEZ@PREPA.COM>, EdgarGarcia@yahoo.com, EdwinMuniz/R4/FWS/DOI@yahoo.com, "FRANCISCO E.
bcc
Subject Re: Comments FWS regarding raptors and plants

Dany:

We acknowledge the information regarding the raptors. Based on the information provided, our recommendations have been adopted by your staff.

However, the attached response does not address our concerns regarding surveys for plants. Since the begining, we have requested the development of an appropriate methodology for the intensive surveys for listed plants. We have not received it yet. Conducting surveys without appropriate methodology and personnel to maximize the coverage for rare species with patchy distribution may result in lack of time and resources. Since we have limited staff, we cannot continue dedicating resources until we receive the approrpiate methodology for the surveys of plants. It is important to continue clarifying that the purpose of my staff visiting the areas with your people and experts is to identify suitable habitat for conducting the intensive surveys and not to survey the area for the species. During these visits our staff noticed that most of the time, the group was outside of the center line of the proposed pipeline. From your staff present in these visits, only Dr. Axelrod has the experience and expertise to identify federally-listed plants. We would like to learn more about the expertise of Mr. Alberto Molina and his experience identifying federally-listed plants.

Be aware that the purpose of requested surveys for plants, raptors, PRCT, and nightjars are for the development of the Biological Assessment. As part of the formal consultation process both the Service and the Corps need to approve the BA. The Corps can share with you copy of the BA for the Gasoducto del Sur or Valenciano Project so you can see the level of analysis and the information needed. Until the BA is not complete the process does not start.

Thanks

Marelisa

Doc # 132

JUNTA DE PLANIFICACIÓN
OFICINA DEL GOBERNADOR
GOBIERNO DE PUERTO RICO

CENTRO GUBERNAMENTAL ROBERTO SÁNCHEZ VILELLA
AVE. DE DIEGO PDA. 22, SANTURCE
P.O. BOX 41119, SAN JUAN, PUERTO RICO 00940-1119

U.S. Fish & Wildlife Service
JAN 24 2011

18 de enero de 2011

Ing. Edwin Muñiz
Supervisor
Servicio de Pesca y Vida Silvestre
PO Box 491
Boquerón, Puerto Rico 00622

Solicitud de Certificación de Compatibilidad Federal
Número de caso: CZ-2011-0921-021
Número de Solicitud Conjunta: 1059
Proyecto: Vía Verde
Municipio: Peñuelas, Adjuntas, Utuado, Arecibo, Barceloneta, Manatí, Vega Alta, Vega Baja, Dorado, Toa Baja, Cataño, Bayamón y Guaynabo

Estimado ingeniero Muñiz:

La Junta de Planificación tiene ante su consideración la Solicitud de referencia para Certificación de Compatibilidad Federal con el Programa de Manejo de la Zona Costanera de Puerto Rico. A los fines de contar con suficientes elementos de juicio en el estudio y análisis requerido para evaluar el proyecto de referencia, es nuestro interés que esa instrumentalidad nos ofrezca sus comentarios sobre los siguientes aspectos:

- Determinar si cumple con los requisitos establecidos por su Agencia.
- Determinar si cumple con los objetivos y políticas públicas incluidas en el Programa de Manejo de la Zona Costanera, específicamente los relacionados con la conservación de recursos naturales y de valor histórico o arqueológico.

Aprovechamos para solicitarle estos comentarios en un término de treinta (30) días a partir de esta comunicación.

De no recibir comentarios sobre el caso de referencia durante el tiempo estipulado, y de no mediar comunicación alguna solicitando tiempo adicional, asumiremos que no tiene objeción al respecto por lo que la Junta de Planificación tomará la acción que corresponda en relación al asunto bajo su consideración.

Adjunto copia de los documentos que nos fueran radicados sobre este asunto.

Cordialmente,

Max L. Vidal Vázquez

Max L. Vidal Vázquez
Director Interino
Subprograma de Planes de Usos de Terrenos

Anejo

Doc # 134

Marelisa Rivera/R4/FWS/DOI
01/18/2011 11:04 AM

To "Garcia, Edgar W SAJ" <Edgar.W.Garcia@usace.army.mil>
cc "Carlos Monroig" <c-monroig-tdcar@prepa.com>, carlos.machado@dot.gov, "Carlos A. Rubio" <carubio@prshpo.gobierno.pr>,
bcc
Subject Re: SAJ-2010-02881 Via Verde Meeting (UNCLASSIFIED)

Edgar:

Fron the Ecological Services Field Office the following staff will be participating:

Edwin Muñiz - Field Supervisor
Marelisa Rivera - Assistant Field Supervisor
Rafael Gonzalez and Omar Monsegur - F&W Biologists

Thanks

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622
(787) 851-7297 x 206 (direct)
(787) 851-7440 (fax)
(787) 510-5207 (mobile)
marelisa_rivera@fws.gov

There are three constants in life...change, choice and principles.
Stephen R. Covey
"Garcia, Edgar W SAJ" <Edgar.W.Garcia@usace.army.mil>

Doc. # 133

"Garcia, Edgar W SAJ" <Edgar.W.Garcia@usace.army.mil>
01/18/2011 10:32 AM

To "lisamarie carrubba" <Lisamarie.Carrubba@noaa.gov>, "Carl Soderberg" <Soderberg.carl@epa.gov>, "Carlos A. Rubio" <carubio@prshpo.gobierno.pr>, "Miguel Bonini" <mbonini@prshpo.gobierno.pr>, <Felix_Lopez@fws.gov>, <jaime.torres@dot.gov>, <iyutka53@aol.com>, <carlos.machado@dot.gov>, <Marelisa_Rivera@fws.gov>, <rafael_gonzalez@fws.gov>, <daniel_paganrosa@yahoo.com>, "Carlos Monroig" <c-monroig-tdcar@prepa.com>, <Edwin_Muniz@fws.gov>, <Soto.Jose@epamail.epa.gov>, <larryevans@bcpeabody.com>, <flopez1075@prepa.com>, "MADELINE RAMOS CARO" <M-RAMOS@PREPA.COM>
cc "Castillo, Sindulfo SAJ" <Sindulfo.Castillo@usace.army.mil>, "Collazo, Osvaldo SAJ" <Osvaldo.Collazo@usace.army.mil>, "Garcia, Edgar W SAJ" <Edgar.W.Garcia@usace.army.mil>
Subject SAJ-2010-02881 Via Verde Meeting (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Ladies and Gentlemen:

Your agency is cordially invited to our Interagency Meeting on the Via Verde Natural Gas Pipe Line project.

As previously agreed at the end of October 2010 with each agency, the meeting is necessary to discuss the technical status of the project in relation to each agency area of jurisdiction. It is urged that only personnel and or supervisors directly related to the project be present for this meeting as space would be limited.

We are scheduling subject meeting at the US Army Corps of Engineers (USACOE) Patio Conference Room on Tuesday **February 1, 2011** at **9:30AM**.

The USACOE is located at the following address:

Stop 7½
400 Ave Fernández Juncos, San Juan, PR 00901-3223

For a Map use the following link:

http://maps.google.com/maps?f=q&source=s_q&hl=en&geocode=&q=18.462660+-66.094082&sll=37.0625,-95.677068&sspn=30.819956,56.337891&ie=UTF8&t=h&z=16

Please confirm who will be attending from your agency by email at your earliest convenience.

Respectfully,

Edgar W. García
Project Manager
Army Corps of Engineers
Jacksonville District
Antilles Regulatory Section
Tel: (787) 729-6905 Ext. 3059
Fax: (787) 729-6906

Classification: UNCLASSIFIED
Caveats: NONE

Doc # 135

Marelisa Rivera/R4/FWS/DOI
01/18/2011 01:23 PM

To Carlos Pacheco/R4/FWS/DOI@FWS, Rafael Gonzalez/R4/FWS/DOI@FWS, Omar Monsegur/R4/FWS/DOI@FWS, Edwin

cc

bcc

Subject Fw: Comments FWS regarding raptors and plants

----- Forwarded by Marelisa Rivera/R4/FWS/DOI on 01/18/2011 01:21 PM -----

Doc #136

Marelisa Rivera/R4/FWS/DOI
01/18/2011 03:14 PM

To daniel_paganrosa@yahoo.com
cc Edwin Muniz/R4/FWS/DOI@FWS, edgar.w.garcia@usace.army.mil, Rafael Gonzalez/R4/FWS/DOI@FWS
bcc
Subject raptor surveys

Danny:

We have an emergency in the office and Rafael cannot go with Derek tomorrow to the surveys. They may need to re-schedule for Friday. Rafael mentioned that only three people are conducting the surveys. It is my recollection that we agreed with the protocol based on 4 people, two by observation point. We recommended surveys to be conducted at the same time in Adjuntas, Manati and Rio Abajo. Multiple observation points were recommended in each area. You agreed with these recommendations in you email dated January 12, 2011. Based on the information we have, surveys will be conducted in these three areas at the same time. If three observation points are established in each area, with only three people the observation points cannot be surveyed consecutively. If you are going to have only three observers, they should cover the observation points in each area consecutively. Please clarify this issue ASAP.

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
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(787) 851-7440 (fax)
(787) 510-5207 (mobile)
marelisa_rivera@fws.gov

There are three constants in life...change, choice and principles.
Stephen R. Covey

Doc # 137

Felix Lopez/R4/FWS/DOI
01/18/2011 04:19 PM

To rafael_gonzalez@fws.gov, Omar Monsegur/R4/FWS/DOI
cc
bcc
Subject Via Verde

Ya que Uds son los que van a la gran reunion, aqui hay algunas preguntas sobre los impactos a rios, quebradas y humedales que quiero que les hagan durante el dia:

No todo es endangered species :)

El documento dice que todo los impactos a humedales, rios y quebradas son temporeros:

Como van a patrullar o reparar la via sin tener cruces de rios y quebradas? Cruces permanentes requieren permisos del COE permanentes. Dicen que van a usar helicopteros, vehiculos y patrullaje a pie, cuales son las secciones.

Como van a mantener toda la ruta de la via 50 pies de ancho en grama muy bonita o arbustos chiquitos? Uso de yerbicidas (possible contaminacion de cuerpos de agua y impactos a bosque natural) y como lo van a applicar si no tienen acesso, o le van a pasar maquina estilo Energia Electrica, cortando todo al suelo? Como van a cruzar la quebradas las podadoras mecanizadas? yo recomiendo el uso de cabras con pastores a lo largo de la ruta y que vivan en chozas, seria muy pintoresco y muy verde.

En el karso, la via va a subir y bajar como un roller coaster, o van a tener que cortar y rellenar (sumideros) para tener un nivel atravez del karso?

Porque tiene que estar enterrada toda la ruta? Se podira disminuir el impacto si se construye sobre tierra??

El gaseoducto del sur tiene varios problemas con cumplimiento del COE, especialmente en los lugres de humedales. Habla con Jose Cedeño.

Suerte :)

Felix Lopez
USFWS
Boqueron FO
787 510 5208

"No one seems to know what it is we do, but what ever it is, we are the only ones that can do it, and we do it well"

Doc # 138

PROPUESTA PARA LA EVALUACION DE LA PRESENCIA Y ABUNDANCIA DEL GUABAIRO DE PUERTO RICO (*Caprimulgus noctitherus*) EN GUAYANILLA Y AREAS ADYACENTES, PUERTO RICO

Preparado para:

Asesores Ambientales y Educativos
Autoridad de Energía Eléctrica
Proyecto Vía Verde

19 de enero de 2011

Preparado por:

Julio E. Cardona
José L. Chabert
804 C. Diez de Andino 212
San Juan, Puerto Rico 00912

INTRODUCCION / TRASFONDO:

El Guabairo de Puerto Rico (*Caprimulgus noctitherus*) es un ave endémica secretiva de hábitos crepusculares que se alimenta de insectos capturados al vuelo, volando de rama en rama sobre el dosel del bosque. El canto es un "uip" enfático, normalmente entre dos a 15 veces en secuencia, que puede escucharse a través del año. Las noches muy oscuras o muy claras no son las mejores para escuchar su canto (Raffaele et al., 1998). Al presente su distribución geográfica en la Isla se encuentra restringida a determinadas zonas en el suroeste de Puerto Rico. El ave se encuentra protegida por estatutos legales federales y estatales que la clasifican como especie en peligro de extinción. Las poblaciones identificadas del ave se encuentran principalmente en el corredor costero del suroeste de la Isla, a partir de unos 20 metros sobre el nivel medio del mar, dependiendo de la localidad (González, 2010). La actividad propuesta objeto de este estudio se encuentra entre unos 50 a 300 metros de altura en las colinas de Peñuelas, donde ha sido documentada la presencia del Guabairo.

El Gobierno de Puerto Rico por medio de la Autoridad de Energía Eléctrica (AEE) ha propuesto la construcción de un proyecto de tubería de transferencia de gas natural conocido como Vía Verde. Este se desplaza de sur a norte de la Isla y luego a lo largo de los llanos costeros del norte hasta llegar a las plantas de generación de electricidad propiedad de la AEE localizadas en el norte de Puerto Rico. Debido a lo expuesto anteriormente, se ha requerido por las autoridades gubernamentales ampliar la Evaluación Biológica determinar la presencia del Guabairo, si alguna, en el área objeto de este estudio.

OBJETIVO DEL ESTUDIO;

El objetivo de esta evaluación preliminar de población es revelar información acerca de la presencia del Guabairo, si alguna, en el área de interés mediante estudios de campo durante las horas de mayor actividad de la especie, al amanecer y anochecer en rutas establecidas.

De encontrarse el ave en el área de estudio, los datos a recopilar y la metodología a utilizar permitirán aproximar la abundancia del guabairo en el área de interés.

METODOLOGIA:

Se llevará a cabo una sesión de reconocimiento en los terrenos de interés para familiarización con el área y decidir la ubicación de estaciones de muestreo a lo

largo de veredas establecidas en el área del proyecto. Las veredas se encuentran en la servidumbre de paso propuesta el proyecto de Via Verde. Basado en experiencias anteriores y las características de la vegetación de área bajo consideración, las estaciones de muestreo serán establecidas en áreas de presencia potencial del guabairo.

Siguiendo la metodología establecida para la especie en la literatura científica más reciente, se establecerá estaciones de campo a intervalos de aproximadamente unos 100 a 200 metros de distancia. La longitud de cada transecto a muestrear dependerá de los rasgos topográficos y la dificultad de acceso entre puntos de conteo. Debido a que la duración de actividad de canto para el mes de enero es entre 30 y 45 minutos aproximadamente (Noble et al, 1986) se establecerá un mínimo de dos estaciones de muestreo por ruta, dependiendo del largo de cada vereda establecida para el proyecto por el proponente.

Las estaciones de muestreo serán ubicadas utilizando cinta métrica siguiendo la vereda y marcadas claramente con cinta de agrimensura (flagging). Las estaciones serán registradas con un instrumento de GPS (Global Position System) para su identificación geográfica. Cada estación establecida será muestreada durante el periodo crepuscular de tres amaneceres y tres anocheceres, para maximizar la oportunidad de detección del Guabairo en el área, si alguno.

Una vez comenzando el muestreo en cada estación el observador mantendrá dos minutos de silencio, seguido por un minuto de reproducción de la grabación del canto de un guabairo, y dos minutos escuchando para detectar su presencia, si alguna. En todos los casos en que el ave sea detectada, se estimará la distancia y dirección en relación al observador. Los datos serán anotados en formularios desarrollados específicamente para este proyecto. La densidad relativa será determinada contando los individuos identificados en un radio de 75 metros para una detección mas efectiva de estas aves (González, 2010).

En el mes de enero, la salida del sol en el área de Peñuelas es alrededor de las 7:00 AM y se pone a las 6:30 PM aproximadamente. Una vez los observadores se encuentren en la primera estación de muestreo, los censos matutinos comenzaran cinco minutos después de la detección del primer guabairo cantando, o 60 minutos antes de la salida del sol, lo que ocurra primero. Los censos vespertinos comenzarán por lo menos 30 minutos después de la caída del sol, o cinco minutos después que se escuche el primer guabairo, lo que sea primero.

La información obtenida durante los estudios de campo será utilizada para determinar la presencia del Guabairo en el área de estudio. Los datos obtenidos en horas del amanecer serán analizados por separado de los obtenidos en horas del anochecer. Los datos donde se detecte una mayor abundancia del

Guabairo, si alguna, serán informados como la abundancia estimada del ave en el área de estudio. La metodología propuesta cumple con las normas establecidas y el cuidado prevaleciente en estudios de este tipo.

INFORME DE TRABAJO:

Una vez completado los trabajos de campo se redactara un informe el cual incluirá un resumen de los hallazgos, así como un estimado de la cantidad de individuos identificados.

REFERENCIAS

Gonzalez, Rafael. 2010. Population estimation and landscape ecology of the Puerto Rican Nightjar. MS Thesis, Mississippi State University.

Noble, R. E, F, J. Vilella, y P. J. Zwank. 1986. Status of the endangered Puerto Rican Nightjar in 1985. Caribbean Journal of Science. 22: 137-143.

Raffaele H., J. Wiley, O, Garrido, A. Keith, J. Raffaele. 1998. A guide to the Birds of the West Indies. Princenton University Press, NJ.

Doc # 139

United States Department of the Interior

FISH & WILDLIFE SERVICE
Boqueron Field Office
Carr. 301, KM 5.1, Bo. Corozo
P.O. Box 491
Boqueron, PR 00622

JAN 20 2011

Mr. Angel Rivera Santana
Director, Planning and Environmental Protection
PR Electric Power Authority
PO Box 364267
San Juan, Puerto Rico 00936-4267

Re: SAJ 2010-02881 IP-EWG, Via Verde Gas Pipeline, Final Environmental Impact Statement (Final EIS)

Dear Mr. Rivera:

Thank you for your letter dated December 20, 2010, providing a copy of the Final EIS for the Via Verde gas pipeline. Our comments are issued as technical assistance in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. as amended).

In the letter, you mentioned that the comments raised by the Service on the December 15, 2010, letter to the U.S. Army Corps of Engineers were based on the preliminary EIS and not the Final EIS. You also mentioned that most of the comments raised in our December 15, 2010 letter were addressed in the approved Final EIS.

You should be aware that our December 15, 2010 letter is in response to the U.S. Army Corps of Engineers Public Notice requesting comments and our comments were based on the information provided by Puerto Rico Electric and Power Authority in the Joint Permit Application (JPA) and the documents referenced and attached to the JPA. The Final EIS was not part of the JPA; however, the preliminary EIS was part.

We have reviewed the information in the Final EIS and we have concluded that the document does not address the Service concerns regarding the Via Verde Project. Therefore, our comments made to the Corps on December 15, 2010 still stand. Furthermore, the Final EIS increased our concerns regarding possible effects to wetland since the document states that the project corridor may range from the 150 foot corridor to 300 feet in areas where HDD takes place. The JPA only mentioned a 150 foot corridor. Regarding the proposed mitigation for wetlands, the JPA and the final EIS are

not consistent. Other mitigation plans for impacts to fauna and flora are mentioned in the document but none have been developed or approved.

We have reviewed Chapter 8, Section 8.5 which listed the agency comments and PREPA's response. Of the numerous concerns the Service expressed regarding the proposed project, the Final EIS listed our comments regarding the lack of appropriateness of flora fauna studies, and the response consists of mentioning that additional studies will be conducted. The document mentioned that as the final answer to the Service concern is that it will be resolved during the ongoing Corps of Engineers Joint Permit Application review. Be aware that at present time, this issue has not been appropriately addressed. For example surveys with appropriate methodology for listed plants and the endangered nightjars have not been conducted. The Section 8.5 makes reference to the Joint Permit process, and defers addressing resolution of wetland impacts, mitigation, and other concerns to the ongoing Corps Joint Permit review.

The comments provided by the Service on December 15, 2010 are comprehensive and complex. While the Final EIS provides some additional information, the document does not provide an in-depth analysis of the direct, indirect, cumulative, interrelated and interdependent effects on our listed species and their habitats, aquatic resources (wetland, streams, etc.), forested lands and sinkholes in the northern karst region of Puerto Rico. We continue to believe that the project as currently proposed constitutes a major construction activity with potential significant adverse effects to the human environment. Therefore, we continue recommending the development of a federal Environmental Impacts Statement, as required under NEPA.

As we expressed before, the Service supports alternatives to the use of fuel as the main energy source in Puerto Rico. We recommend PREPA to continue identifying alternative sources, construction methods and project sites to minimize adverse effects of energy projects into our natural resources.

If you have any questions please contact Ms. Marelisa Rivera at 787 851 7297 x 206.

Sincerely,

Edwin E. Muñiz
Field Supervisor
Caribbean Ecological Services
Field Office

Fhl/mtr
cc:
COE, Regulatory, Jacksonville
COE, Regulatory, San Juan

DNER, San Juan
EQB, San Juan
PRPB, Land Use Division, San Juan
PRPB, CZM, San Juan
EPA, San Juan
EPA, New York
FWS, Atlanta

Doc #141

Marelisa Rivera/R4/FWS/DOI
01/24/2011 04:16 PM

To Rafael Gonzalez/R4/FWS/DOI@FWS
cc
bcc
Subject Fw: Via Verde Project

Please review and provide me comments. Thanks

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622
(787) 851-7297 x 206 (direct)
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marelisa_rivera@fws.gov

There are three constants in life...change, choice and principles.
Stephen R. Covey
---- Forwarded by Marelisa Rivera/R4/FWS/DOI on 01/24/2011 04:15 PM ----

Doc # 140

Daniel Pagan
<daniel_paganrosa@yahoo.com>
01/23/2011 10:53 PM

To "Marelisa_Rivera@fws.gov" <Marelisa_Rivera@fws.gov>, Edwin_Muniz@fws.gov
cc IVELISSE SANCHEZ SOULTAIRE <I-SANCHEZ@PREPA.COM>, Jousef Garcia <yousevgr@yahoo.com>, EDWIN BAEZ <E-BAEZ@PREPA.COM>, "FRANCISCO E. LOPEZ GARCIA" <FLOPEZ1075@PREPA.COM>, LarryEvans@bcpeabody.com
Subject Via Verde Project

Dear Marelisa:

Sorry that I was not able to go back to you earlier, but believe me I was not able to do so.

Raptor Field Study:
First; thanks for the information related with Mr. Llerandi's participation on the raptors study being undertaken by Derek Hengstenberg of Tetra-Tech.

As you are aware, we are expecting to complete the field work on January 27, 2011, including all additional sites recommended by your office personnel. Instructions were given to Mr. Hengstenberg to update the protocol of the Work Plan developed and approved by your staff to include additional sites evaluated aimed to ensure the record reflects the work developed and completed. *We h* ope to have *the* updated document in your office before January 25, 2011.

Guabairo Field Study:
We are including a Proposal aimed to evaluate the Guabairo Habitat on the segments of the alignment that may be considered suitable habitat for this endangered species. The proposal written by Julio Cardona and José L. (Tito) Chavert considers a scientific approach that has proven to be effective in undertaking the task requested by your office. In light of the above, we are pleas*ed* to present the Proposal for *your_* consideration and approval. Please note that Mr. Cardona & *Mr._* Chavert are ready to initiate the required field work two days after the approval and acceptance of the document included herein is secured from the Fish &Wildlife Service. (See Attachment # 1)

The Proposal was written in Spanish, since it is the official language of the Commonwealth of Puerto Rico.

In the event additional information related with this subject is needed, please do not hesitate to contact us at your convenience.

Thank you for your support in this important project.

I will call you tomorrow to discuss these subjects in more detail.

Regards

Danny Pagan

Propuesta para Estudio de Guabairo - Via Verde-19 de enero de 2011[1].pdf

Doc # 143

Marelisa Rivera/R4/FWS/DOI
01/26/2011 09:04 AM

To Rafael Gonzalez/R4/FWS/DOI@FWS
cc
bcc
Subject Fw: Updated Raptors Work Plan

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622
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marelisa_rivera@fws.gov

There are three constants in life...change, choice and principles.
Stephen R. Covey
----- Forwarded by Marelisa Rivera/R4/FWS/DOI on 01/26/2011 09:04 AM -----

Doc # 142

Daniel Pagan
<daniel_paganrosa@yahoo.com>
01/25/2011 06:47 PM

To "Marelisa_Rivera@fws.gov" <Marelisa_Rivera@fws.gov>, Edwin_Muniz@fws.gov
cc Jousef Garcia <yousevgr@yahoo.com>, Derek Hengstenberg <Derek.Hengstenberg@tetratech.com>, Paul Myers <Paul.Myers@tetratech.com>, LarryEvans@bcpeabody.com, Ken Caraccia <KenCaraccia@bcpeabody.com>, Johanna R Willis <johannawillis@bcpeabody.com>, sindulfo.castillo@usace.army.mil, edgard.garcia@usace.army.mil, osvaldo.collazo@usace.army.mil
Subject Updated Raptors Work Plan

Dear Marelisa:

As indicated in our previous E- Mail attached please find the updated Raptors Work Plan aimed to address the additional observation locations added as a result of your staff recommendations.

The document is being presented in an effort to have the record reflecting the actual work provided in accordance with F&WS recommendations.

Best Regards

Danny

Updated Raptor Survey Work Plan- Via Verde Project 1-25-11[1].pdf

TETRA TECH

Via Verde Pipeline Project: 2011 Puerto Rican Broad-winged Hawk and Puerto Rican Sharp-shinned Hawk surveys

FINAL: January 25, 2011

1.0 Introduction

This work plan describes the proposed raptor surveys along the Via Verde Pipeline (Project area) within the municipalities of Manati, Utuado, and Adjuntas, Puerto Rico. The function of these surveys is to document occurrence of the Puerto Rican Broad-winged Hawk and Puerto Rican Sharp-shinned Hawk within the two focal areas of concern. Both endangered raptors are non-migratory and remain on Puerto Rico year-round. They are federally endangered and protected under the Endangered Species Act. The proposed raptor surveys will provide a baseline data set on these species in forested areas of concern along the Project area. The survey will also evaluate how much raptor habitat could be affected by the proposed Project. This data may provide useful information to help minimize potential environmental impacts from the proposed Project.

1.1 Project Background

The Puerto Rico Electric Power Authority (PREPA) is proposing to construct a 24" natural g pipeline from the municipality of Peñuelas, crossing the island through the central mount region from the south to north towards San Juan (Figure 1). USFWS has commented on project and has requested additional surveys for endangered raptors to be conducted in of potential habitat along the pipeline corridor. During consultation, USFWS has stated th important to determine the number of breeding territories that may be affected by construction and the amount of habitat to be affected. Until further studies dem differently, the USFWS assumes suitable habitat within the proposed pipeline c occupied by endangered raptors for breeding and potential take may be anticipate areas. The following work plan describes how Tetra Tech will evaluate the Proje endangered raptors.

Puerto Rico: Via Verde Pipeline P...

TETRA TECH

Via Verde Pipeline Project: 2011 Puerto Rican Broad-winged Hawk and Puerto Rican Sharp-shinned Hawk surveys

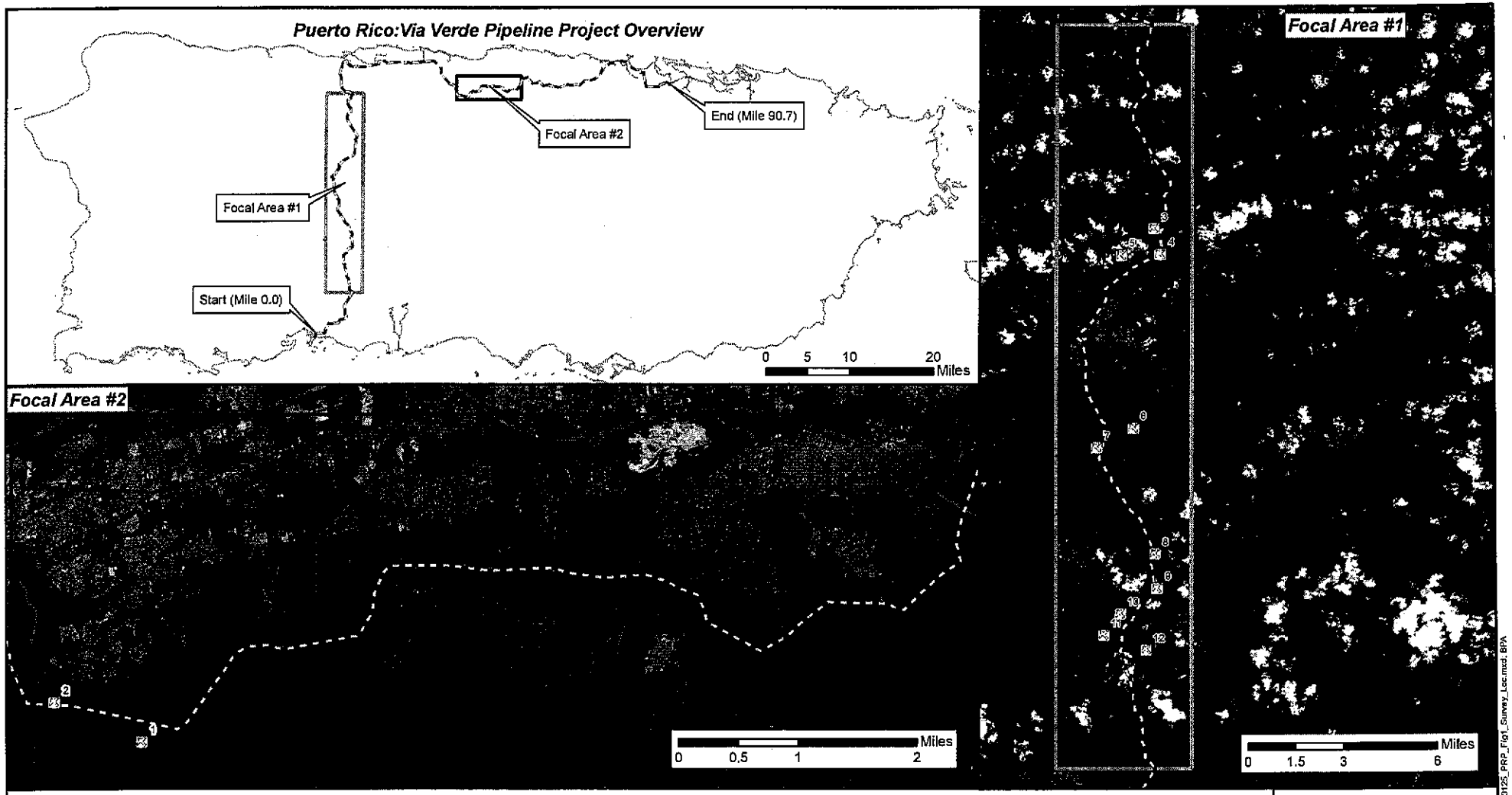
FINAL: January 25, 2011

1.0 Introduction

This work plan describes the proposed raptor surveys along the Via Verde Pipeline (Project area) within the municipalities of Manati, Utuado, and Adjuntas, Puerto Rico. The function of these surveys is to document occurrence of the Puerto Rican Broad-winged Hawk and Puerto Rican Sharp-shinned Hawk within the two focal areas of concern. Both endangered raptors are non-migratory and remain on Puerto Rico year-round. They are federally endangered and protected under the Endangered Species Act. The proposed raptor surveys will provide a baseline data set on these species in forested areas of concern along the Project area. The survey will also evaluate how much raptor habitat could be affected by the proposed Project. This data may provide useful information to help minimize potential environmental impacts from the proposed Project.

1.1 Project Background

The Puerto Rico Electric Power Authority (PREPA) is proposing to construct a 24" natural gas pipeline from the municipality of Peñuelas, crossing the island through the central mountain region from the south to north towards San Juan (Figure 1). USFWS has commented on the project and has requested additional surveys for endangered raptors to be conducted in areas of potential habitat along the pipeline corridor. During consultation, USFWS has stated that it is important to determine the number of breeding territories that may be affected by project construction and the amount of habitat to be affected. Until further studies demonstrate differently, the USFWS assumes suitable habitat within the proposed pipeline corridor is occupied by endangered raptors for breeding and potential take may be anticipated in those areas. The following work plan describes how Tetra Tech will evaluate the Project area for endangered raptors.



Legend

- Puerto Rico
- Via Verde Pipeline
- Final Raptor Survey Locations
- Endangered Raptors Focal Area #1 (Miles 9.6 - 37.6)
- Endangered Raptors Focal Area #2 (Miles 58.9 - 68.3)

Survey Location Names

Manati East (1)	Tangue de Agua (7)
Manati West (2)	Curva (8)
Entrada (3)	Rt 143 (9)
Planta (4)	Foreman Finca (10)
Finca de Raul (5)	West Face (11)
Puente Blanco (6)	East Face (12)

N

Projection/Coordinate System:
North American Datum of 1983,
Puerto Rico State Plane, US Feet

Sources:
U.S. Dept. of Transportation; World Imagery
(http://services.arcgisonline.com/arcgis/services)

Figure 1.
Final Raptor Survey Locations
Via Verde Pipeline Project

Prepared For:
Asesores Ambientales y Educativos

Prepared By: TETRA TECH

Date: 01/25/2011

Z:\projects\PRPipeline\MXDs\20110125_PRP_Fig1_Survey_Loc.mxd, BPA

20110126-5380 FERC PDF (Unofficial) 1/26/2011 2:47:32 PM

Doc # 144

FULBRIGHT
Jaworski L.L.P.
Attorneys at Law

Lisa Tonery
Partner

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ltonery@fulbright.com • Direct: 212 318 3009 • Main: 212 318 3000 • Facsimile: 212 318 3400

January 26, 2011

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A
Washington, D.C. 20426

Re: EcoEléctrica, L.P.
EcoEléctrica Terminal Modification Project,
Docket No. CP95-35-001

Dear Ms. Bose:

On April 16, 2009, the Federal Energy Regulatory Commission ("Commission") granted authorization under Section 3 of the Natural Gas Act in the above referenced docket ("April 16 Order") for EcoEléctrica, L.P. ("EcoEléctrica") to construct its LNG Import Terminal Modification Project ("Modification Project"). EcoEléctrica's Modification Project is a key component of the Governor of Puerto Rico's energy plan which calls for the use of natural gas in order to reduce energy costs and diversify fuel options on the Island.

In accordance with the April 16 Order, EcoEléctrica must receive written authorization from the Commission prior to constructing the Modification Project. In this regard, EcoEléctrica had planned to file a request with the Commission in the fourth quarter of 2010 for authorization to commence site preparation activities for the Modification Project in the first quarter of 2011. On November 9, 2010, the Director of the Commission's Office of Energy Projects sent EcoEléctrica a letter stating that on July 7 and 16, 2010, the Pipeline and Hazardous Materials Safety Administration ("PHMSA") of the U.S. Department of Transportation ("DOT") issued two written interpretations concerning the flammable vapor-gas exclusion zone requirements contained in Title 49, Code of Federal Regulations, Part 193.2059, and that such interpretations are applicable to any liquefied natural gas facility, including EcoEléctrica's Modification Project, that are not yet in existence or under construction. The November 9 Letter also included the following two data requests and stated that prior to requesting construction authorization for the Modification Project, EcoEléctrica must provide the following information to the Commission staff:

1. A revised vapor dispersion exclusion zone analysis that demonstrates that the facilities associated with the above referenced docket that are not yet in existence or under construction would be in compliance with Title 49, Code of Federal Regulations, Part 193 and the July 7 and 16, 2010 written interpretations issued by the Pipeline and Hazardous

20110126-5380 FERC PDF (Unofficial) 1/26/2011 2:47:32 PM

Materials Safety Administration. This analysis should include vapor dispersion from: jetting and flashing; conveyance of LNG to impoundments; and LNG in impoundments.

2. An interpretation from the Pipeline and Hazardous Materials Safety Administration on the suitability of the specific source term model used to satisfy the flammable vapor dispersion requirements of Title 49, Code of Regulations, Part 193.2059.

EcoEléctrica submits herewith a report entitled, "Effects of Flashing and Jetting on Vapor Production Rate in the Event of An LNG Leak at the EcoEléctrica LNG Import Terminal" ("Report") as a preliminary partial response to the above-referenced data request No. 1.[1]

Certain information included in the Report is considered commercially-sensitive, business confidential information. Pursuant to Rule 388.112 of the Commission's regulations, 18 C.F.R. § 388.112 (2010), EcoEléctrica, requests confidential treatment for this material, which has been marked as "Privileged and Confidential – Do Not Release." Certain other information included herein constitutes Critical Energy Infrastructure Information as defined in 18 C.F.R. § 388.113 (2010) of the Commission's regulations. Pursuant to Order No. 702 and 18 C.F.R. § 388.112, EcoEléctrica has marked the contents of the CEII documents as "Contains Critical Energy Infrastructure Information (CEII) – Do Not Release."

Should you have any questions about the instant filing, please do not hesitate to contact the undersigned at (212) 318-3009.

Respectfully submitted,

/s/ Lisa M. Tonery
Lisa M. Tonery
Attorney for EcoEléctrica, L.P.
Enclosure
cc: Terry Turpin

[1] As detailed in the jetting and flashing calculation included in the Report, PHAST, a commercially available software, was utilized to calculate the dispersion following a two-phased pressurized release. PHAST has been submitted by its developer for review by the Administrator of DOT under the Model Evaluation Protocol process pursuant to which the Administrator may approve an alternative vapor-gas dispersion model for use in calculating exclusion zones. See *Liquefied Natural Gas Facilities: Obtaining Approval of Alternative Vapor-Gas Dispersion Models*, 75 Fed. Reg. 168 (Aug 31, 2010).

Doc # 145

Lilibeth Serrano/R4/FWS/DOI

01/26/2011 03:59 PM

To James Padilla/R4/FWS/DOI@FWS, Rafael_Gonzalez@fws.gov, Sandra Perez/R4/FWS/DOI@FWS, martin_ramos@fws.gov,

cc

bcc

Subject Noticia: Otro golpe federal a Vía Verde (sobre carta USFWS 20 de enero) Vocero 01/26/2011

Otro golpe federal a Vía Verde

Otro golpe federal a Vía Verde
Maricelis Rivera Santos, EL VOCERO

El Servicio federal de Pesca y Vida Silvestre (USFWS) acaba de advertir en una carta de hace seis días que se han incrementado sus preocupaciones sobre Vía Verde y que siguen considerando que éste es uno de los proyectos con más potencial de impactos adversos al ambiente humano, por lo que se sostienen su posición anterior de que no debe ser aprobado por el Cuerpo de Ingenieros del Ejército (USCOE).

Esa información sale a relucir hoy luego de que el lunes EL VOCERO publicó en exclusiva que el USCOE dejó en suspenso el llamado Gasoducto del Norte por 45 días hasta que la Autoridad de Energía Eléctrica (AEE) conteste las preocupaciones de esa agencia federal, que es la que determina si se autoriza o no la construcción a nivel federal. Ello por considerar que la solicitud de permiso es bien deficiente y no ha cuantificado adecuadamente los impactos de la obra.

El director del USFWS, Edwin Muñiz, declaró en una misiva enviada hace siete días (20 de enero) al director de Planificación y Protección Ambiental de la Autoridad de Energía Eléctrica (AEE), Ángel Rivera Santana, que le recomiendan a la corporación pública que continúen buscando alternativas de energía con proyectos y métodos de construcción que minimizan los efectos negativos en los recursos naturales.

"Nosotros revisamos la información de la DIA-F y nosotros concluimos que el documento no responde las preocupaciones del Servicio concernientes al proyecto Vía Verde. Además, nos sostenemos en nuestros comentarios hechos al Cuerpo (USCOE) el 15 de diciembre de 2010. Más allá, la DIA-F aumenta nuestras preocupaciones con respecto a los posibles efectos en los humedales", expresó Muñiz en la carta en poder de EL VOCERO.

En la misiva del 15 de diciembre Muñiz le dijo la AEE que "este proyecto puede afectar

numerosas quebradas y humedales y la propuesta del proponente no considera alternativas para evitarlo apropiadamente ni medidas para minimizar los impactos... Nosotros recomendamos que el USCOE deniegue el permiso de este proyecto como está propuesto", explicó el funcionario federal en ese momento.

El USFWS, la Agencia federal de Protección Ambiental (EPA) y el USCOE han expresado objeciones a Vía Verde, según ha publicado EL VOCERO.

En la carta del 20 de enero Muñiz aclara que no son ciertas las expresiones de los ejecutivos de la AEE de que la opinión vertida el 15 de diciembre por el USFWS está fundamentada en la Declaración de Impacto Ambiental Preliminar (DIA-P).

Doc # 146

Lilibeth Serrano/R4/FWS/DOI

01/27/2011 11:27 AM

To James Padilla/R4/FWS/DOI@FWS, Rafael_Gonzalez@fws.gov, Sandra Perez/R4/FWS/DOI@FWS, martin_ramos@fws.gov,

cc

bcc

Subject Noticia: Vía Verde preocupa al Servicio federal de Pesca y Vida Silvestre (Primera Hora)

Vía Verde preocupa al Servicio federal de Pesca y Vida Silvestre

La AEE busca cumplir con todos los requerimientos que le pide el federal Servicio de Pesca y Vida Silvestre para que le aprueben el proyecto Vía Verde. (Primera Hora / Archivo / Edgar Vázquez Colón)

jueves, 27 de enero de 2011
Sara M. Justicia Doll / Primera Hora

Vuelve a caer el peso de las agencias federales sobre la propuesta Vía Verde.

En una carta con fecha del 20 de enero de 2011, el Servicio federal de Pesca y Vida Silvestre (USFWS) informó nuevamente a la Autoridad de Energía Eléctrica (AEE) que ha revisado la Declaración de Impacto Ambiental Final del proyecto, lo que aumentó las preocupaciones que ya habían expresado.

Resulta que el ancho del terreno que será utilizado para excavar e instalar la tubería pudiera llegar hasta los 300 pies, lo que representa un alto potencial de impacto a los cuerpos de agua y el karso. En la Declaración de Impacto Ambiental Preliminar se hablaba de un ancho de 150 pies.

En cuanto a la mitigación por esos impactos, la solicitud del permiso y la Declaración de Impacto Ambiental Final no son consistentes. No se mencionan en el documento planes de mitigación por los impactos a la flora y la fauna.

En específico, el USFWS menciona como ejemplo que no se precisaron las metodologías para las listas de plantas y especies amenazadas como el guabario.

"El documento no provee un análisis profundo de los efectos directos, indirectos, acumulativos, interrelacionados e interdependientes a las especies, los hábitats, los recursos de agua, los bosques y el karso", dice el documento firmado por el director de la Oficina de Servicio Ecológico del USFWS, en Puerto Rico, Edwin Muñiz.

De su parte, el consultor de la AEE para el proyecto Vía Verde, Daniel Pagán, aseguró que "seguimos enfocados en atender todas las preocupaciones de las agencias federales. Vamos a hacer todo para cumplir con los requisitos ambientales", dijo.

Pagán indicó que se ha reunido con personal del USFWS y a raíz de las observaciones hechas han contratado más peritos para cumplir con los requerimientos.

La AEE tiene en planes entregar toda la información adicional solicitada por las autoridades federales durante el mes de febrero para que ellos le puedan dar una determinación en marzo.

La Vía Verde consiste de una tubería que llevaría gas natural desde Guayanilla hasta Cataño. Contempla un gasoducto de 92 millas de largo.

Lilibeth Serrano Vélez,
Public Affairs Specialist
U.S. Fish and Wildlife Service
Caribbean Ecological Service Field Office
PO Box 491, Boquerón, PR 00622
P: 787-851-7297 ext. 212
C: 787-505-4397

lilibeth_serrano@fws.gov
http://www.fws.gov/caribbean

Doc # 147

United States Department of the Interior

FISH & WILDLIFE SERVICE
Boqueron Field Office
Carr. 301, KM 5.1, Bo. Corozo
P.O. Box 491
Boqueron, PR 00622

JAN 27 2011

Daniel Pagán Rosa
Asesores Ambientales y Educativos Inc.
130 Winston Churchill Ave.
PMB 145
San Juan, Puerto Rico 00926-6018

Re: Raptor and Nightjar Surveys
Via Verde, Project

Dear Mr. Pagán:

This letter is in response to your email dated January 23, 2011, regarding Raptor Field Surveys and Guabairo Field Study, and your email dated January 25, 2011, regarding the Updated Raptor Survey for the above-mentioned project. As requested, our comments are issued as technical assistance in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. as amended).

Puerto Rican Nightjar (Guabairo) Field Study:

We have the following comments to the proposed protocol to survey Puerto Rican Nightjars:

1. The text included in the email mentioned that this is a proposal to evaluate Nightjar habitat, but the attached proposal mentioned that the purpose of the proposal is to evaluate nightjar presence and abundance. Be aware that the evaluation of nightjar habitat and evaluation of presence, absence and abundance are different types of studies with different methodologies.

2. The Nightjar studies should address the following areas as mentioned in the previous letters of October 18, 2010, November 10, 2010, and December 15, 2010:

    a. Detect presence of the species,
    b. Determine number of singing males to be affected by the project,
    c. Quantify nightjar habitat size to be affected by the ROW of the project,
    d. Determine possible direct or indirect effects on the species.

3. The Service recommends that surveys are conducted in Nightjar suitable habitat areas and should be conducted within the entire right of way of the project. Areas with suitable habitat should be surveyed in it's entirely.

4. Provide a detailed schedule of the site visits. The Service would like to participate in some site visits to determine quality of the habitat and the potential for the presence of the federal listed species.

5. The currently proposed evaluation is an effective method for nightjar presence but not for population estimates. The current method could be used as an index of males singing abundance. To obtain population estimates the applicant should use any method that account for potential detection bias (e.g. distance sampling).

6. We continue to be concerned with potential nightjar habitat impacts proposed destruction within the area identified for the mitigation area for the Gasoducto del Sur and nearby areas. As we have mentioned previously, this area has been identified by species expert as the best habitat to be protected in the Guayanilla-Peñuelas area. We continue recommending the project route to be modified to avoid fragmentation of this important habitat.

Raptor Surveys:

1. On January 12, 2011, the Service recommended additional points to be surveyed. On that same day, you submitted a letter accepting the Service recommendations. The new protocol submitted January 25, 2011, left out a point in the Manati area recommended by the Service. We continue recommending that the Manati area be surveyed appropriately. In addition, the new protocol eliminated one point suggested by the applicant in Vega Alta and accepted by the Service.

2. New proposed raptor survey does not mention if observation points were simultaneously surveyed by area as suggested in our communication dated January 12, 2011. Instead mentions "depending on site locations viewshed coverage, one to three surveys locations will be conducted on daily basis".

3. An e-mail by Tetra tech on 12/30/2010 indicates that survey locations will be survey by 2 biologists per survey location, but your proposed survey does not mention the amount of biologists per survey location. On January 18, 2011, we expressed this concerned since we became aware that only three biologists were conducting the surveys instead of four. Furthermore, we are aware that the Principal Investigator left the island last week and only two biologists remain in the field. Be aware that the amount of "survey effort" is one variable that can affect the results of any study.

Regarding surveys of listed plants, we are still waiting for the methodology to be submitted to the Service for our review.

In serveral meetings and site visits, when the Service has expressed concerns regarding a particular area, the consultants have expressed that the route would be changed or has been changed. However, at present time, we have not received any updated information regarding the final route.

Thank you for the opportunity to provide input. If you have any questions, please call Marelisa Rivera at 787-851-7297 extension 206.

Sincerely yours,

Edwin Muñiz
Field Supervisor

Cc: COE, San Juan
PREPA, San Juan

Doc # 148

Sandra Perez/R4/FWS/DOI
01/27/2011 05:23 PM

To daniel_paganrosa@yahoo.com
cc Marelisa Rivera/R4/FWS/DOI, Edwin Muniz/R4/FWS/DOI
bcc
Subject Raptor and Nightjar Surveys - Via Verde, Project

Mr. Pagán,

Attached is the letter regarding Raptor and Nightjar Surveys.

Raptor and Nightjar Surveys_Via Verde.pdf

Cordially,

Sandra Pérez
Administrative Assistant
Caribbean Ecological Services Field Office
U.S. Fish and Wildlife Service
787-851-7297 ext. 200

United States Department of the Interior

FISH & WILDLIFE SERVICE
Boqueron Field Office
Carr. 301, KM 5.1, Bo. Corozo
P.O. Box 491
Boqueron, PR 00622

JAN 27 2011

Daniel Pagán Rosa
Asesores Ambientales y Educativos Inc.
130 Winston Churchill Ave.
PMB 145
San Juan, Puerto Rico 00926-6018

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Sincerely yours,

Edwin Muñiz
Field Supervisor

Cc: COE, San Juan
PREPA, San Juan

Doc #149

NEWS RELEASE

U.S. ARMY CORPS OF ENGINEERS | Jacksonville District **BUILDING STRONG®**

Release No.:	NR 11-004	**For Release:**	January 27, 2011
Contact:	Nancy J. Sticht	**Phone:**	(904) 232-1667 (904) 334-1054
Email:	Nancy.J.Sticht@usace.army.mil	**FAX:**	(904) 232-2237

FOR IMMEDIATE RELEASE

U.S. Army Corps of Engineers clarifies position on Via Verde permit application

JACKSONVILLE, Fla. – The U.S. Army Corps of Engineers, Jacksonville District has informed Puerto Rico Electric and Power Authority that its application for a Department of the Army permit to construct and install a natural gas pipe line transversing the island of Puerto Rico will be held in abeyance pending receipt of additional information and documentation.

The proposed 1,672-acre project area would impact 235 river and wetlands crossings, a total of 369 acres of jurisdictional Waters of the United States. The Corps renders permit decisions under Section 404 of the Clean Water Act of 1972, which regulates the discharge of dredged or fill material into waters of the United States, including wetlands.

The Corps informed the permit applicant, in a Dec. 22 letter, that its initial review of the project proposal and a preliminary review of comments received from resource agencies and the public following a Nov. 19 public notice revealed environmental and public interest concerns that cannot be adequately evaluated with the information initially submitted by the applicant. Among these concerns are public safety, environmental impacts, endangered species, habitat conservation and historic properties.

The National Environmental Policy Act requires that these concerns be properly addressed. Further, the Corps must coordinate with resource agencies, as appropriate, to satisfy Endangered Species Act (ESA), National Historic Properties Act and other legal requirements. At the direction of the Corps, the applicant is currently conducting cultural resources and ESA surveys, evaluating impacts and meeting with various agencies to address concerns.

The Corps will resume its evaluation once the applicant submits the required information. There is no estimate at this time of when the Corps expects to make a permit decision.

For more information, including a copy of the Corps' Dec. 22 letter, please visit www.saj.usace.army.mil/Divisions/Regulatory/interest.htm and click on the link for Via Verde Natural Gas Pipe Line.

###

US ARMY CORPS OF ENGINEERS | Jacksonville District
P.O. Box 4970 • Jacksonville, FL 32232-0019
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Doc # 150

CN 078-04479
REV. 3/99

GOVERNMENT OF PUERTO RICO

Puerto Rico Electric Power Authority

SAN JUAN, PUERTO RICO

www.aeepr.com

PO BOX 364267
SAN JUAN, PUERTO RICO 00936-4267

January 28, 2011

Mr. Edgar W. García
Regulatory Project Manager
Antilles Regulatory Section
Jacksonville District Corps of Engineers
400 Fernández Juncos Avenue
San Juan, Puerto Rico 00901-3299

Dear Mr. García:

RE: SAJ 2010-02881 IP-EWG, Vía Verde Gas Pipeline

This correspondence responds to the letter you sent on December 22, 2010 with regard to Department of the Army permit application SAJ-2010-02881 (IP-EWG). The letter requested a comprehensive and detailed written response to issues of concern the U.S. Army Corps of Engineers (Corps) has and issues raised in letters and documents received during the public notice (PN) comment period. These comment letters and emails were included on a CD sent with your letter. This response consists of two documents. The first is a point by point response to the issues in your letter. The second is an attachment with additional information in response to the issues raised in some of the comment letters to the Corps PN.

The Puerto Rico Electric Power Authority (PREPA), the applicant, will continue to work closely with the Corps and all regulatory agencies, both federal and local. In this letter we will address the issues you raised and provide information in response to those issues. However, we must point out that it is difficult, if not impossible, to properly address issues of concern if the Corps does not clearly and specifically identify those substantive issues pertinent to its review responsibility. Advising PREPA the information previously provided does not "... fully address the public interest factors ..." and "... is largely deficient ..." does not help us provide the specific detailed response you may need on a particular issue.

You express a concern that project impacts have not been adequately quantified. We must profess some confusion on this point since Chapter VI in the Final Environmental Impact Statement (FEIS) approved on November 30, 2010 by the

"We are an equal opportunity employer and do not discriminate on the basis of race, color, gender, age, national or social origin, social status, political ideas or affiliation, religion; for being or perceived to be a victim of domestic violence, sexual aggression or harassment; for physical or mental disability or veteran status or genetic information."

Environmental Quality Board (EQB) is quite detailed in discussing impacts expected to occur from the project. As publicly announced, the FEIS can be found on the Vía Verde website at **http://www.aeepr.com/viaverde_DIAP2.asp**. The document has also been posted on the EQB webpage since November 29, 2010. PREPA submitted a copy of the Preliminary Environmental Impact Statement and of the said FEIS to the Corps, since parts of those documents have been incorporated by reference to the Joint Permit Application (JPA). With regard to impacts specific to the aquatic resource, additional information is provided further in this correspondence, Item d. Wetlands. After reviewing the information provided in Chapter 6 of the FEIS and the "Wetlands" section of this letter, if the Corps determines further, detailed information will be required, the applicant and its agents request a meeting be scheduled to discuss what additional, specific information is necessary.

We agree the use of National Wetlands inventory maps to ascertain the existence of jurisdictional areas for Puerto Rico, particularly along the north coast, is challenging. Recognizing that fact, Mr. Jorge Coll (Coll Rivera Environmental) determined the extent of waters of the U.S. (WoUS) for the project after completing a detailed field survey. The methodology employed for this site specific field study followed the 1987 Corps of Engineers Wetland Delineation Manual and the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Caribbean Islands Region (the Caribbean supplement). In areas where differences between the Manual and the Caribbean supplement occurred, the Caribbean supplement took precedence. The *Jurisdictional Wetlands and U.S. Waters Determination Study – Vía Verde Pipeline, August 2010* and *Vía Verde Wetland Data Determination Forms – Caribbean Islands* sections found in the Preliminary EIS, included with the original JPA submittal, detail the limits of the jurisdictional wetlands. There were areas where a determination was difficult, due to past or recent land use, or other reasons. In those cases, Mr. Coll based his determination on the best information available, interpreted in light of his professional experience and knowledge of the ecology of wetlands in the area, as stated in the Caribbean supplement. The applicant's wetland scientists acknowledge that minor discrepancies may exist and welcome the opportunity to field verify (ground-truth) any questionable wetland signatures during a jurisdictional determination site visit. Since this has been the procedure utilized by the Corp to address challenges, we would like to coordinate the field visits (ground-truth) at your earliest convenience so any concerns can be immediately addressed.

You state that the Alternative Analysis provided with the permit application packet is qualitative and lacks sufficient detail for review. After multiple public meetings were held to discuss the project and involve the public, PREPA published a Public Notice in local newspapers to advise the general public of the availability of the FEIS. The applicant also delivered a copy of this document to the 13 municipalities to benefit from the project and placed the FEIS on its website (**http://www.aeepr.com/viaverde_DIAP2.asp**). Concurrently, the EQB posted the

complete FEIS on its webpage to allow all interested parties to access the document under consideration. Chapter 6 of the FEIS discusses the "Study of Alternatives and Selection of Alignment" PREPA prepared. This Chapter also includes an Annex with Criteria Maps and a Selection Matrix for the pipeline routes that were evaluated. The applicant believes many of the comments directed at the alternatives analysis in the Preliminary EIS were addressed in the FEIS approved by the EQB (which has been available to the general public since November 29, 2010). However, in response to your request, PREPA is rearranging and modifying the Alternative Analysis so it will satisfy the Corps' expectations.

You referred to the U.S. Fish and Wildlife Service letter of December 15, 2010 and asked for clarification on how natural gas will be delivered to the pipeline. As mentioned in PREPA's letter dated December 17, 2010, the evaluation and comments presented by the USFWS were based on the Preliminary (Draft) EIS dated September 9, 2010. Two editions of the EIS (Preliminary and Final) were written, presented and finally approved by all local regulatory agencies. At this time PREPA intends to meet gas delivery requirements for the project using the existing EcoEléctrica Facility. There is no plan to construct a separate barge offload operation. It is the applicant's position that EcoEléctrica will be able to fully meet delivery needs. If the Corps disagrees with this position, a meeting is requested to further discuss these concerns.

Regarding the returned public notices and the list of addresses you provided, PREPA identified updated addresses and hand delivered the documents. The proof of delivery for all delivered letters is attached to this correspondence. We recognize the need for an additional 30-day comment period **exclusively** for these members of the public.

In regard to the concerns of the general public presented in the other letters provided and received by the Corps as part of the PN process, we would like to refer you to Chapter 8 of the FEIS. This Chapter provides a summary of responses related to the comments received from the general public. The Chapter also includes additional responses to comments received from the state regulatory agencies as well as from the Environmental Sub Committee designated by Commonwealth Law 76 of May 5, 2000.

In the following paragraphs we will address the issues you summarized from the comment letters received:

National Marine Fisheries Service (NMFS) – The applicant's agent, BCPeabody Consulting (BCP), is responding to the request for additional information in the NMFS letter dated December 19, 2010. As part of this process, BCP staff met with Mr. Miles M. Croom, NMFS Assistant Regional Administrator, on January 6, 2011. The project, as currently designed, will not result in any impacts to estuarine forested or

seagrass habitats and will likely not require an extended NMFS project review. Direct responses to the NMFS December 19, 2010 letter are included in the Attachment.

It is important to clarify one aspect of the NMFS comment letter that resulted from the public notice. A major concern of NMFS was perceived impact to estuarine forested habitats associated with the Vía Verde Pipeline alignment. There will be no impacts to estuarine forested habitat from construction of the pipeline. To avoid impacts and to protect the estuarine forested habitats, the Horizontal Directional Drilling (HDD) construction approach will be utilized. In addition, PREPA will undertake a detailed supplemental site evaluation at three areas along the alignment to validate that no threatened or endangered species are located in any estuarine forested area and to establish a baseline in these areas. Data collected as a result of this supplemental field work will be provided to the NMFS and the Corps once it becomes available.

US Fish and Wildlife Service (USFWS) – At the present time (with full knowledge of the Corps and the USFWS), the applicant has a team of regional scientific experts conducting site specific, appropriate surveys along the proposed route to determine presence/absence of listed plant and animal species within the project area and the amount of suitable habitat. The survey methodologies developed and the surveys conducted are being carried out by experienced and qualified personnel reviewed by the USFWS. Members of the USFWS staff have been actively involved in the development of the ESA species survey protocols and have participated in some of the field studies. The draft Biological Evaluation (BE) included with the Joint Permit Application will be appended to include the results of all supplemental surveys and will be the basis for future consultations with the Service. Direct responses to the concerns expressed in the USFWS December 15, 2010 letter, are included in the Attachment. Moreover, we must stress that comments presented in the USFWS December 15, 2010 letter appear to be drafted after their evaluation of the Preliminary (Draft) EIS presented back on September 9, 2010 before the EQB. These comments were not based on an evaluation of the FEIS approved on November 30, 2010. A copy of the FEIS was delivered to the USFWS on December 20, 2010.

Federal Highways Administration (FHWA) – CMA Architects & Engineers LLP is currently working to collect the detailed pipeline information related to construction within the local highways right-of-way (ROW) as part of the final alignment of the Vía Verde project. The applicant's goal is to have the Waiver Application presented before the local Highway Authority (HA) by January 21, 2011. Requisite coordination will be established with the HA so the Vía Verde waiver Application will be evaluated as soon as it is received, with an effort to have it approved at the local level by the end of January 2011. Simultaneously, a Draft of the Waiver Application will be delivered to the Federal Highway Administration (FHWA) so that any recommendation can be included in the final application to be filed for necessary approval.

Once local approval is secured for the Waiver Application, the final local endorsement and approval will be delivered to the FHWA for necessary approval. Preliminary information secured from the FHWA personnel indicates it will take approximately 30 days to secure the federal approval required.

State Historic and Preservation Office (SHPO) – As recommended by the SHPO, PREPA recently authorized the implementation of a 1B archaeological study aimed to further evaluate the areas and sites recommended in the completed 1A study, included in the Final Environmental Impact Statement approved on November 30, 2010 by the Environmental Quality Board. The results of this additional evaluation will be presented to the SHPO as soon as the 1B report is available.

Efforts related to the 1B Study will be completed by licensed archaeologists Marisol Rodriguez and Carlos Ayes. They are the professionals hired to undertake the efforts related with the recently completed 1A Study.

Environmental Protection Agency (EPA) – The EPA letter is fairly general in nature and is a direct result of the evaluation of the Preliminary EIS presented back on September 9, 2010 before the EQB. The agency's comments are not based on the FEIS (available since November 30, 2010). As previously mentioned, the applicant has iteratively worked to avoid high quality wetlands and other jurisdictional aquatic areas. Although there is some confusion as to what aquatic resources should be classified as "aquatic resources of national importance", the applicant feels the ROW selection process has essentially avoided such resources, by any definition.

The applicant continues to work with the USFWS and the NMFS to address outstanding issues regarding threatened and endangered species. As part of these consultations, both agencies have recommended that supplementary studies and field efforts be undertaken. It has been agreed that upon completion of these studies, a revised and updated BE will be provided to the Corps. This updated document will be sufficient to allow for the completion of the project review.

The concerns expressed by the EPA with respect to the use of Horizontal Directional Drilling (HHD) in karst environments have been addressed in Item e) Horizontal Directional Drilling which follows.

Puerto Rico Engineers and Surveyors Association (CIAPR, in Spanish) - the overall project purpose is to deliver an alternate fuel source to the three existing electric power generating facilities located on the north coast. Attempting to use the Costa Sur complex in combination with the Aguirre Power Plant would be inconsistent with the overall purpose of this project, and therefore is not a practicable alternative. The operational requirements of the Island's electric system preclude PREPA from generating all or most of its energy only on the south coast. It is our understanding the

scope for an alternatives analysis is driven by the Corps' definition of overall project purpose. On that basis, the applicant does not feel this alternative warrants further review.

With regard to other options to deliver alternative fuel sources to the three power plants on the north coast, we note that PREPA cannot reasonably consider the use of other fuels for electric generation, such as coal or nuclear fuels. The use of coal for PREPA's large generating units was not considered due to the limitations imposed by laws already enacted in Puerto Rico, like PR Law 82 of July 19, 2010, among others, and to EPA's new Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, of November, 2010, which regulate carbon dioxide (CO_2) and other greenhouse gases emissions. Even using the newest clean technology for burning coal, the amount of CO_2 emissions is approximately 30% lower when natural gas is burned instead of coal. CO_2 sequestering technology for coal-burning power plants is far from fully developed.

Regarding nuclear fuels, it must be noted that harvesting energy from this type of fuel is expressly excluded by the Puerto Rico Energy Policy established by the Governor's Executive Order OE-1993-57. It must also be noted that the alternatives analysis does consider the use of renewable energy sources to meet PREPA's generating needs, as was requested during the public comment period, and that Puerto Rico's substantial plans to develop renewable generation is discussed in detail in Chapter 4 of the Final EIS, Section 4.4, which was not included in the Preliminary EIS. The Final Environmental Impact Statement developed by PREPA can be found on the Vía Verde website at **http://www.aeepr.com/viaverde_DIAP2.asp**, as well as on the EQB website since November 30, 2010.

Additional information on alternative methods of delivery, such as Gravity Based Structures and Floating Storage and Re-gasification Unit (FSRU), aka: boats and buoys system, is provided for the Corps' consideration in the Attachment. This information was also included in Chapter 4 of the approved FEIS.

PREPA wants to reiterate that, considering the modifications already approved by the Federal Regulatory Commission (FERC), the EcoEléctrica facility will be able to supply the Vía Verde natural gas needs; determined at full capacity, for the San Juan 5 & 6 and Cambalache Combined Cycled Units. Additional product will be available to fuel the Costa Sur 5 & 6 steam units based on PREPA's operating determination. Moreover, approved FERC modifications will allow PREPA to fully utilize available natural gas to fuel its entire north coast facilities based on the capacity established factor, which considers individual heat rates and predetermined fuel mixtures operating characteristics.

Sierra Club – The Sierra Club expressed several concerns that PREPA would like to address. Their first concern involves the number of wetlands and surface waters

allegedly being affected by construction of the pipeline. It is important to stress that all impacts to the wetlands and surface waters will be temporary in nature. Furthermore, some surface waters will not be impacted since they will be crossed using the HDD technology. Also, PREPA will use construction methodologies that will allow the process to advance with minimal impact, such as use of timber mats to gain access for the equipment and using float and pull technique for positioning the pipeline in wetlands. At all times PREPA´s concept for this project has included all measures to minimize wetland impacts. More specifically, for forested wetlands, PREPA opted to use HDD technology even when such technology required the investment of additional capital. After the construction and installation of each pipeline segment, wetlands and surface waters will be restored to their original pre-construction state and allowed to naturally recruit with native species. Maintenance and new access roads will not be necessary within wetlands or other areas after construction is completed. All inspections and light maintenance of the pipeline will be conducted using a remote controlled, robotic pipeline inspection gauge (PIG). PIG launchers and receivers will be located outside wetlands and other surface waters.

Additionally, the Sierra Club expressed concern regarding endangered species. PREPA and their consultants are working closely with USFWS to ensure that all necessary surveys for endangered species are conducted. This will ensure that all endangered and threatened species and their habitat are known and quantified within the pipeline corridor.

The Sierra Club form letters also requested the Corps hold public hearings. PREPA recognizes public hearings are held at the discretion of the District Engineer when a hearing provides additional information that is necessary for a thorough evaluation of pertinent issues not otherwise available. The applicant believes the public meetings already held, the detailed information posted on the Corps, EQB and PREPA websites, and the public notice issued by the Corps, as well as those published by the PREPA, Planning Board and EQB, fully address the Sierra Club's reason for a public hearing. No apparent further benefit would be derived from holding public hearings given their cost and logistics. This is validated by the fact that all comments received for the JPA had already been made at the EQB public process for the FEIS approval. No comments on new matters were received by the Corps.

General public comments – PREPA provided over 1,867 pages of information in the FEIS it prepared. This document is located on the applicant's website (**http://www.aeepr.com/viaverde_DIAP2.asp**) as well as on the EQB webpage. We believe the issues raised in the comments submitted are fully addressed in this document and in particular in Chapter 8. If the Corps has made a determination that a particular issue raised by a member of the public is not addressed, please identify what that specific issue is, and PREPA will work further with you to provide whatever detailed information may be necessary.

We recognize the Corps' responsibility to consider a range of practical alternatives that would meet the overall project purpose. We also recognize that 40 CFR Part 230.10(a) of the Guidelines for Specification of Disposal Sites for Dredged or Fill Material (Guidelines) states that the amount of information needed to make a determination and the level of scrutiny required by the Guidelines is commensurate with the severity of the environmental impact. The Vía Verde project has been designed to avoid any permanent discharge of fill material in the aquatic resource and PREPA is confident it can demonstrate that impacts from the proposed route will be no more than minimal. We remain committed to work closely with the Corps as it identifies specific unanswered issues of concern.

You have advised PREPA that the Corps "... agrees with the comments from the resource agencies and the general public, and reserves the option to request an EIS and hold a PH." We must take issue with such a broad, generic statement that implies every single comment sent in by the public has been determined by the Corps to constitute a pertinent, substantive issue that the applicant must rebut. Given the volume of information we have reviewed on the CD enclosed with your letter, we must ask if this statement (above) represents the Corps' official position for the administrative record. PREPA also recognizes the decision to hold a public hearing is at the discretion of the District Engineer when a hearing would provide additional information that is necessary for a thorough evaluation of pertinent issues. As was discussed above, when we addressed the comments the CIAPR submitted, multiple public meetings were held to present the project and solicit public input during the local established review process. PREPA is not sure what additional, pertinent issues have been identified by the Corps that dictates the need for a public hearing. However, we are prepared to assist the Corps in any way possible to provide whatever information may be necessary to address those issues once they are identified.

In the remaining part of this correspondence we will address the requests you made for information on the following topics:

a. **Alternatives Analysis:** The overall project purpose is to deliver an alternate fuel source to the three existing electric power generating facilities located on the north coast of Puerto Rico. Attempting to use the *Gasoducto del Sur* would be inconsistent with the overall purpose of the project, and therefore is not a practicable alternative. Unless the Corps officially disagrees with our understanding of the scope for an alternatives analysis, and officially notifies PREPA what additional review is required, *Gasoducto del Sur* will not be discussed further.

   Regarding other options to deliver an alternative fuel source to the three power plants, PREPA updated Chapter 4 after multiple public meetings were held and it believes many of the comments directed at the alternatives analysis in the Preliminary DIA have been addressed. The FEIS

can be found on the Vía Verde website at **http://www.aeepr.com/viaverde_DIAP2.asp**, as well as on the EQB webpage.

Additional information on alternative methods of delivery, such as Gravity Based Structures and Floating Storage and Re-gasification Unit (FSRU), aka: boats and buoys system, is provided for the Corps' consideration in the Attachment. Notwithstanding that, PREPA is working on restructuring and reformatting the Alternative Analysis, so that it can be presented in the forthcoming weeks to the Corps using the format that meets its expectations.

b. **Avoidance and Minimization:** The location of the pipeline corridor as proposed has been extensively driven by statutory compliance and/or consideration of the following concerns:

Health, safety, and welfare concerns: - avoidance of major population centers pursuant to a de facto public policy established by the Honorable Governor of Puerto Rico for the design of this project and regulations and constraints for co-locating a utility line within existing rights-of-way under the jurisdiction of the Federal Highway Administration (FHWA). This public policy will be implemented by maintaining a 150 foot clearance between the pipeline and any residential structure, even when not required by the applicable federal regulation for Natural Gas Pipelines (49 CFR).

Use of environmentally sound, minimally invasive construction techniques and methodologies: – the extensive use of horizontal directional drills and trench box cuts, limited sizing of rights-of-way (ROW), allowances for extensive natural vegetative recruitment within the permanent ROW;

Avoidance of existing conservation lands: – lands subject to oversight by the Conservation Trust of Puerto Rico (CTPR), the Department of Natural and Environmental Resources (DNER), and/or by the United States Fish and Wildlife Conservation Service (USFWS); and

Avoidance of historic properties for the Puerto Rico State Historic Preservation Office (SHPO): – realignment of proposed pipeline corridor to avoid impacts to archeological sites of significance and/or historic properties that are listed or potentially eligible for inclusion in the National Register of Historic Places, as required in Section 106 of the National Historic Preservation Act of 1966.

PREPA believes that Avoidance and Minimization standards for the project have been met through re-alignments and design changes; complying with

health, safety, welfare, and public ROW constraints; and adopting environmentally sound, minimally invasive construction techniques and methodologies (HDD, vertical trenches).

Reductions in the size of the proposed pipeline would not reduce and/or minimize impacts to waters of the United States and the aquatic environment. The minimum size equipment required to install smaller diameter pipelines (< 24-inch) is currently proposed and the trench width differential on the near vertical cuts proposed is negligible. The number and distance between valve and PIG locations and access points is regulated by the USDOT Pipeline and Hazardous Materials Safety Administration (PHMSA). The project's direct, indirect, and cumulative impacts have effectively been restricted to the limits of the established construction ROW, with future maintenance limited to within the 50-foot wide permanent utility easement except in wetlands where no maintenance to the utility easement will be done.

c. **Compensatory Mitigation:** From the very beginning of planning for this project, avoidance and minimization were central goals around which alternative routes for the pipeline were reviewed and then selected. Indeed, in the ongoing effort to avoid and minimize, the applicant continues to look at alignment changes in some areas to further this goal. Examples can be found in Chapter 4 of the FEIS PREPA prepared (**http://www.aeepr.com/viaverde_DIAP2.asp**), as well as on the EQB webpage.

Each crossing of Corps jurisdictional areas has also undergone a series of reviews to propose construction methods to absolutely minimize any temporary or permanent alterations. A primary method adopted was diagonal drilling from upland to upland, and placing the pipeline crossing outside all Corps jurisdiction. Where trenching was found to be the only practicable method of construction (in the Guidelines definition of the concept), PREPA will ensure the selected contractor takes special precautions regarding the construction area, width of trench, use of native refill material, and minimum requirements for ROW maintenance to be employed.

The 369 acre of temporary impact you identify in your letter is more accurately represented as approximately 152 acres. This is derived from multiplying the length of each expected jurisdictional crossing by the 50-foot width we will operate within when locating the pipeline in WoUS. In addition, it must be remembered that most of the jurisdictional crossings are lands declared wetlands, but historically manipulated for agricultural purposes. These practices will not be allowed in the ROW, allowing native vegetation to become reestablished within one or two growing seasons. The only

exception will be the periodic management of a 50-foot wide ROW in uplands to regulate vegetation with deeply penetrating root systems.

Many of the components of your proposed mitigation and monitoring plan request are already built into the proposed plan. It is on these bases, PREPA does not feel a comprehensive mitigation plan is warranted. However, the applicant is certainly willing to entertain any specific, concrete suggestions the Corps feels are necessary to provide additional measures to those already incorporated into the designs. PREPA has already started working on draft mitigation plans for the different impacts to essential habitats, trees and wetlands. These plans will be turned in for the Corps approval in the forthcoming weeks.

d. **Wetlands**: An assessment and listing of wetland impacts was previously provided in the documentation provided to the USACE. Please reference the Tables listed below:

Table 5- Temporary Impacts to Waters of the US (Page 44 to 46)
Table 6- Temporary Impacts to Wetlands (Page 46 to 50)

Discussions of avoidance and minimization, project design considerations, and best management practices (BMPs) to be used were also included with the original submittal. Additional turbidity and erosion control measures and BMPs to be implemented during the project construction, to avoid and/or minimize wetland impacts in and adjacent to the construction right-of-way, are discussed in Item I - Water Quality section of this document. All these measures will be implemented during the construction phase, since the operation phase carries no impacts. PREPA is currently working to develop a more specific assessment of all possible direct, indirect, and secondary impacts to the jurisdictional wetland areas related to Vía Verde, including both on and off the project impact site, which fall within 300 feet of the development footprint. This assessment will be presented to the Corps in the forthcoming weeks.

e. **Horizontal Directional Drilling (HDD)**: It is recognized due care must be taken to ensure contractors adhere to prudent practices to avoid the accidental release of bentonite mud. The North American Society for Trenchless Technology (NASTT) provides guidance for the analysis and design of tooling essential reduce the incidence of hydro fractures (frac-outs) in karst environments. Hydro fractures, or frac-outs, result when fluid pressures built up in the borehole exceed the overburden effect of the surrounding soil medium. Several drilling factors and procedures will be monitored to preclude the development of hydro fractures. Eight significant factors will be evaluated at each HDD. These include: annular space;

backream rate; borehole pressure; depth of cover; reamer type; reamer diameter; soil composition; and soil density.

To insure the Horizontal Directional Drilling (HDD) operations to be conducted with the Vía Verde Pipeline will comply with all regulatory permits and standards, proper pre-construction geotechnical investigations will be conducted on the *in situ* soil formations along the proposed installation route. Tooling used in HDD installations will then be matched to the soil medium to be encountered

The Frac-Out Plan and will be amended to stipulate lined pits, and all environmental details which depict the sedimentation ponds will be revised.

In summary, HDD operation to be utilized on the Vía Verde pipeline will include proper preconstruction geotechnical investigations, limit drill fluid application rates, utilize an appropriate type reamer to reduce the extent and magnitude of the drilling fluid dispersed, carefully monitor drilling mud pressure increases until the midpoint of the installation is attained, and insure proper containment, recycling, and/or reuse of drilling mud. All HDD operations for the Vía Verde Pipeline will be conducted in accordance with the guidelines and recommendations of the North American Society for Trenchless Technology (NASTT) for karst environments.

f. **Fish and Wildlife Values:** Direct responses to the comments provided by the USFWS (December 15, 2010 letter) and by the NMFS (December 19, 2010 letter) are included in the Attachment.

g. **Threatened and Endangered Species:** Direct responses to the concerns expressed in the USFWS December 15, 2010 letter and in the NMFS December 19, 2010 letter are included in the Attachment.

h. **Cultural resources:** As recommended by the State Historic and Preservation Office, PREPA recently authorized the implementation of a 1B archaeological study aimed to further evaluate the areas and sites recommended in the completed 1A study included in the Final Environmental Impact Statement approved on November 29, 2010 by the Environmental Quality Board. The results of this additional evaluation will be presented to the SHPO as soon as the 1B report is available.

Efforts related to the 1B Study will be completed by licensed archaeologists Marisol Rodríguez and Carlos Ayes. They were the professionals hired to undertake the efforts related with the recently completed 1A Study.

i. **Infrastructure and Utilities:** PREPA will provide all water, water disposal, communications and electrical needs of the project with its own permanent or temporary infrastructure or equipment. There will be no need to coordinate with other agencies and companies, except for the Highway Authority (both federal and state) and the Port Authority, for the use of their infrastructure. Coordination of excavations as required by the Public Service Commission Regulation for Coordination of Excavations and Demolitions will also occur. All excavations will be coordinated through the "One Call Service", by calling 811 and complying with all requirements of the applicable regulation. Regarding the Highway and Ports Authorities, PREPA will comply with all requirements including a waiver from the Highway Authority (federal and state) for locating natural gas pipelines within a highway ROW and a Management of Traffic Plan when major highways and roads are to be impacted.

j. **Cumulative Impacts:** As indicated earlier, wetlands impacts during construction have been repeatedly evaluated to minimize direct aquatic resource impacts. Also, as mentioned, native vegetation should reestablish naturally after construction and site restoration. Many of the proposed temporary wetland impacts within the ROW are to agricultural fields or farmlands; which while designated as wetlands are routinely maintained, planted, harvested, and drained. The post construction ROW will have restrictions on the types of activities allowed during the active life of the project thereby improving wetland quality and functions in these areas. Temporal loss of wetland function during construction will be addressed and will be weighed against the net gains associated with restricted activities and elevated levels of protection afforded within the post construction ROW. Potential aquatic resource impacts at some distance in time, or reasonably certain to occur are difficult to imagine, much less predict. PREPA will evaluate cumulative impacts considering other major projects like PR-10 and PR-22, even when a preliminary assessment was made and it was determined that no cumulative impact will occur. This assessment will be presented to the Corps within the forthcoming weeks.

k. **Map depicting staging areas and access roads**: PREPA is working with the contractor, Gulf Interstate Engineering (GIE)/Ray Engineering, to procure the information the Corps requested regarding the proposed staging areas and the access roads. This information is incorporated in the Erosion and Sedimentation Control (CES) Plan. The data will be presented to the Corps as soon as it becomes available.

l. **Water quality**: A discussion of the measures to avoid accidental leaks of bentonite mud into aquatic environments associated with the HDDs has been included in Item e) above. Turbidity and erosion control measures are

addressed in the project Stormwater Pollution and Prevention Plan (SWPPP). BMPs for individual pipeline installation methods have been include in the FEIS and the JPA document. Additional construction notes have also been provided on the Environmental Detail Sheets.

The following additional measures turbidity and erosion control measures and BMPs may be implemented during the project construction to avoid and/or minimize sediment entering the water body from the construction right-of-way.

Temporary Erosion and Sediment Control: - The Contractor shall install sediment barriers across the entire construction right-of-way at all flowing waterbody crossings in accordance with an EQB approved CES Plan. The Contractor shall install sediment barriers immediately after initial disturbance of the waterbody or adjacent upland. Sediment barriers will be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration of adjacent upland areas is complete. Where waterbodies are adjacent to the construction right-of-way, the Contractor shall install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil and sediment within the construction right-of-way.

The Contractor shall place all spoil from minor and intermediate waterbody crossings, and upland spoil from major waterbody crossings in the construction right-of-way at least 10 feet from the water's edge or in additional extra work areas. No trench spoil, including spoil from the portion of the trench across the stream channel, shall be stored within a waterbody unless the crossing cannot be reasonably completed without doing so.

The Contractor shall install and maintain sediment barriers around spoil piles to prevent the flow of spoil into the waterbody. Spoil removed during ditching shall be used to backfill the trench usually with a backhoe, clamshell or a dragline working from the waterbody bank. Sand, gravel, rockshield, or fill padding shall be placed around the pipe where rock is present in the channel bottom. As required, monthly inspections will be scheduled by an independent professional engineer to ensure the control measures and practices included in the approved CES Plan are followed and observed. A compliance Monthly Report will be prepared and provided to the EQB as required by the applicable regulation.

Trenching - The following requirements apply to all waterbody crossings except those being installed by non-flowing open cut crossing methods. All equipment and materials shall be on site before trenching in the active channel of all waterbodies. All activities shall proceed in an orderly manner without delays until the trench is backfilled and the stream banks stabilized.

The Contractor shall not begin in-stream activity until the in-stream pipe section is complete and ready to be installed in the waterbody. The Contractor shall use trench plugs at the end of the excavated trench to prevent the diversion of water into upland portions of the pipeline trench and to keep any accumulated upland trench water out of the waterbody. Trench plugs must be of sufficient size to withstand upslope water pressure.

The Contractor shall conduct as many in-stream activities as possible from the banks of the waterbodies. The Contractor shall limit the use of equipment operating in waterbodies to that needed to construct each crossing. This will be done in full compliance with the approved CES Plan for the Vía Verde Project. As indicated previously, monthly inspections will be scheduled by an independent professional engineer to ensure the control measures and practices included in the approved CES Plan area followed and observed. A compliance Monthly Report will be filed before the EQB as required by the applicable regulation.

Trench Dewatering - During the course of construction activities, the open pipeline trench will, on occasion, accumulate water, either from groundwater intrusion or precipitation. The trench may be periodically dewatered, as necessary to prevent sedimentation of perennial waterbodies or rivers and allow for proper construction. Generally, a pump will be placed alongside the trench with an intake hose suspended into the water-filled trench. In areas with a very high water table and soils prone to sloughing, a well point system may have to be installed. Water may be pumped from the trench into vegetated upland areas within the ROW to prevent sediment-laden water from flowing directly into any waterbody. All dewatering areas will include suitable temporary turbidity and erosion controls. If adequately vegetated areas are too far removed from the dewatering site, the water may be discharged into straw bale or sediment fence containment areas, or into sediment bags.

The Contractor shall preserve as much vegetation as possible along the waterbody banks while allowing for safe equipment operation. Clearing and grubbing for temporary vehicle access and equipment crossings shall be carefully controlled to minimize sediment entering the waterbody from the construction right-of-way. This will be done in accordance with the CES Plan approved for the Vía Verde Project. Clearing and grading shall be performed on both sides of the waterbody prior to initiating any trenching work. All trees shall be felled away from watercourses. Plant debris or soil inadvertently deposited within the high water mark of waterbodies shall be promptly removed in a manner that minimizes disturbance of the waterbody bed and bank. Excess floatable debris shall be removed above the high water mark from areas immediately above crossings. Vegetation adjacent to waterbodies

which are to be installed by horizontal directional drill or boring methods shall not be disturbed except by hand clearing as necessary for drilling operations.

Grading - The construction right-of-way adjacent to the waterbody shall be graded so that soil is pushed away from the waterbody rather than towards it when possible. To minimize disturbance to woody riparian vegetation within extra workspaces adjacent to the construction right-of-way at waterbody crossings, the Contractor shall minimize grading and grubbing of waterbody banks. Grubbing shall be limited to the ditchline plus an appropriate width to accommodate the safe installation of vehicle access and the crossing to the extent practicable and in accordance with the approved CES Plan approved for the Vía Verde Project.

Pipe Installation - The following requirements apply to all waterbody crossings except those being installed by the non-flowing open cut crossing method. A "free stress" pipe profile shall be used at all minor, intermediate, and major waterbodies with gradually sloping stream banks. The "box bend" pipe profile shall be used for intermittent and major waterbodies with steep stream banks. The trench shall be closely inspected to confirm that the specified cover and that adequate bottom support can be achieved, and shall require construction inspection and on-site approval prior to the pipe being installed. Such inspections shall be performed by visual inspection and/or measurement by PREPA and or by its designated construction manager. In rock trench, the ditch shall be adequately padded with clean granular material to provide continuous support for the pipe. The pipe shall be pulled into position or lowered into the trench and shall, where necessary, be held down by weights, as-built recorded and backfilled immediately to prevent the pipe from floating.

The Contractor shall provide sufficient approved lifting equipment to perform the pipe installation in a safe and efficient manner. As the coated pipe is lowered in, it shall be prevented from swinging or rubbing against the sides of the trench. Only properly manufactured slings, belts and cradles suitable for handling coated pipe shall be used. All pipes shall be inspected for coating flaws and/or damage as it is being lowered into the trench. Any damage to the pipe and/or coating shall be repaired.

Backfilling - The following requirements will apply to all waterbody crossings except those being installed by the non-flowing open cut crossing method. Trench spoil excavated from waterbodies shall be used to backfill the trench across waterbodies. After lowering-in of the pipeline has been completed, but before backfilling, the line shall be re-inspected to ensure that no skids, brush, stumps, trees, boulders or other debris is in the trench. If discovered, such materials or debris shall be removed from the trench prior to backfilling.

For each waterbody crossed, the Contractor shall install a trench breaker at the base of slopes near the waterbody and in full accordance with the CES Plan approved, unless otherwise directed by the Project Engineer based on site specific conditions. The base of slopes at intermittent waterbodies shall be assessed on-site and trench breakers installed only where necessary. Slurred muck or debris shall not be used for backfill. At locations where the excavated native material is not acceptable for backfill or must be supplemented, the Project Engineer shall review and approve any granular material to be used.

If specified in the Construction Drawings, the top of the backfill in the stream shall be armored with rock riprap or biostabilization materials as appropriate as described in the approved CES Plan by the EQB.

Stabilization and Restoration of Stream Banks and Slopes: - The stream bank contour shall be re-established. All debris shall be removed from the streambed and banks. Stream banks shall be stabilized and temporary sediment barriers shall be installed within 24 hours of completing the crossing if practicable and as required in the approved CES Plan. Approach slopes shall be graded to an acceptable slope for the particular soil type and surface run off controlled by installation of permanent slope breakers. Where considered necessary, the integrity of the slope breakers shall be ensured by lining with erosion control blankets. Immediately following reconstruction of the stream banks, the Contractor shall, at the discretion of the Project Engineer, install a native seed mix to aid in bank stabilization.

If the original stream bank is excessively steep and unstable and/or flow conditions are severe or if specified on the Construction Drawings, the banks shall be stabilized with rock riprap, gabions, stabilizing cribs or bio-stabilization measures to protect backfill prior to reestablishing vegetation. Stream bank riprap structures, if required, shall consist of a layer of stone underlain with approved filter fabric or a gravel filter blanket. Rip rap shall extend from the stabilized streambed to the top of the stream bank, where practicable, native rock shall be utilized. The Contractor shall remove equipment bridges as soon as possible after final clean up.

m. Water **Quality Certification (WQC) and Coastal Zone Management (CZM) Consistency Certificate:** These certificates were requested through submittal of the JPA. In regard to the CZM, the applicant was advised the Puerto Rico Planning Board is already working on the evaluation and final approval of the CZM Certification. In relation to the WQC, PREPA will present all necessary documentation before the EQB. We will keep you

informed as we work with the Environmental Quality Board and Planning Board, CZM office.

You also requested information pursuant to Section 176(c) of the Clean Air Act regarding emissions that may result from the project. Section 6.18.2 of the FEIS approved on November 30, 2010 by the Environmental Quality Board considered a summary of Air Impacts related with the proposed conversion of PREPA's power plants located in the northern part of Puerto Rico. The results achieved through the analysis represent a significant reduction in the criteria's pollutants covered under the federal and state regulations.

Emission estimates developed were based on the AP-42 Emission Factors and based on a 100% percent operating load. All emission factors considered in the analysis included in the FEIS will be validated once contracts related with the plants fire box modifications are issued. Emission factors will be specifically evaluated considering specific design considerations associated with the particular burners and fire box configuration selected.

In the event that, after detailed evaluation and fire box design considerations, it is determined any of the plant modifications are affected by the applicable Prevention of Significant Deterioration (PSD) regulations or by the New Source Performance Standards, necessary pollution control strategies will be considered by PREPA. These additional/new pollution controls, if required, and /or modifications related to the existing operating conditions if needed, will be part of the operation permits requested and part of Title V permit conditions for said facilities.

To assist in the evaluation of the analysis developed below please find three tables that summarize the changes (reduction / increases) related with the modifications of the Cambalache Combine Cycle plant as well as the Palo Seco and San Juan Steam Plants. These are the plants that will be connected to the Vía Verde Pipeline Project.

Table # 1 Palo Seco Steam Plant PSD Emissions Evaluation

Preliminary PSD Analysis for Palo Seco Units 3 & 4 Fuel S, % 1.5						
Pollutants	Existing Allowable Emissions (One Unit)* (ton/yr)	Existing Allowable Emissions Units 3 & 4 (ton/yr)	Projected NG Emissions (ton/yr)**	Increment Netting (ton/yr)	PSD Significant Emission Rate (ton/yr)	PSD, Yes or No
PM	979.00	1,958.00	32	-1,925.8	25	No
PM10	118.00	236.00	129	-107.3	15	No
SO2	13,554.00	27,108.00	10	-27,097.8	40	No
H2SO4	602.80	1,205.60	16	-1,190.0	7	No
Nox	2,417.00	4,834.00	4,740	-94.3	40	No
CO	288.00	576.00	1,422	845.9	100	Yes
VOC	44.00	88.00	93	5.1	40	No
Pb	0.24	0.48	0	-0.5	0.6	No
Fluoride	2.16	4.32	-	-	3	-

Table # 2 San Juan Steam Plant PSD Emissions Evaluation

Preliminary PSD Analysis for San Juan Units 7, 8, 9, 10 & San Juan Combined Cycle Units 5 & 6									
	SJ 7, 8, 9, & 10		SJCC5 & 6						
Pollutants	**Natural Gas Emission Factors * (lb/106 scf)**	**Emissions NG Conversion (ton/yr)**	**Natural Gas Emission Factors (lb/106 scf)**	**Emissions NG Conversion (ton/yr)**	***Total Emissions NG Conversion (ton/yr)***	**PSD Significant Emission Rate (ton/yr)**	***Existing Allowable Emissions****	**Increment Netting**	**PSD Applicability**
PM	1.9	32.87	1.94	28.19	*61.07*	25	*2,946.22*	-2,885.15	No
PM10	7.6	131.49	6.73	97.94	*229.43*	15	*1,430.51*	-1,201.08	No
SO2 **	0.6	10.38	3.47	50.45	*60.84*	40	*7,619.76*	-7,558.92	No
H2SO4	0.92	15.9	5.31	77.26	*93.15*	7	*1,592.26*	-1,499.11	No
NOx	280	4,844.52	326.4	4,748.62	*9,593.14*	40	*6,739.20*	2,853.94	Yes
CO	84	1,453.36	83.64	1,216.83	*2,670.19*	100	*1,654.73*	1,015.46	Yes
VOC	5.5	95.16	2.14	31.16	*126.32*	40	*190.7*	-64.38	No
Pb	n/a	n/a	n/a	n/a	*n/a*	0.6	*3.54*	-	-
Fluoride	No info	No info	No info	No info	*No info*	3	-	-	-

Table # 3 Cambalache Combine Cycle Plant PSD Emissions Evaluation

Preliminary PSD Analysis Cambalache 1, 2 & 3						
Pollutants	Emission Factors (lb/106 scf)*	Emissions NG Conversion (ton/yr)	PSD Significant Emission Rate (ton/yr)	Baseline Actual Emissions (ton/yr)	Increment Netting	PSD Applicability
	Cambalache 1,2 & 3					
PM	1.94	21.15	25	113.9	-92.76	No
PM10	6.73	73.46	15	290.45	-216.99	No
SO2	3.47	37.84	40	780.23	-742.39	No
H2SO4	5.31	57.94	7	182.24	-124.3	No
NOx	326.4	3561.47	40	120.28	3,441.18	Yes
CO	83.64	912.63	100	207.75	704.87	Yes
VOC	2.14	23.37	40	71.8	-48.43	No
Pb	n/a	n/a	0.6	0.12		n/a
Fluoride	No info	No info	3	-		No info

The construction and maintenance activities associated with this project will use conventional construction equipment and procedures. We do not feel this activity will

contribute more than *de minimis* direct and indirect pollutant emissions above levels already existing due to regular private and commercial road transportation activities.

In summary, the applicant and its consultants remain most willing to do what we can to help the Corps review pertinent issues and information relevant to the Corps regulatory review under its' decision making criteria. If the information provided in this letter does not fully address your request for a comprehensive and detailed response, please do not hesitate to let us know. We remain committed to continuing to provide information as the review process moves forward to enable the Corps to expeditiously complete its evaluation process.

Cordially,

Francisco E. López García, Head
Environmental Protection and
Quality Assurance Division

ATTACHMENT - Public Notice Comment letters

Sierra Club Form Letter/Email:

Issue - there appeared to be two versions of a form letter. For the purpose of this response we place both in this category. The first, a Spanish version, was comprised of four principle issues:

a. Request denial of a permit because impacts outweigh benefits.
b. Request a public hearing for the single reason that the project is extensive and the public must have the opportunity to learn about impacts and express an opinion
c. Request an Environmental Impact Statement be prepared because 32 Threatened and Endangered Species may be impacted
d. Expressed concern that the local review process was "rushed"

PUERTO RICO ELECTRIC POWER AUTHORITY (PREPA) response –

a. With respect, the statement that impacts outweigh benefits is vague and does not provide a specific substantive concern we can respond to. The FEIS posted on the Via Verde webpage provides a detailed analysis of the project and presents information on the steps PREPA will take to minimize impacts. In aquatic areas the pipe will be placed with no permanent impact, and we expect the environment to fully grow back within one or two seasons. In the upland sections, only a 50-foot wide corridor will be maintained to regulate the growth of large, deep rooted vegetation. The initial 100-foot wide construction and maintenance corridors required to safely install and maintain the pipeline will be allowed to revegetate and will be utilized in the reforestation / mitigation areas for the project. Further details of the construction steps, and benefits the pipeline will provide, can be found in the FEIS.
b. The reason(s) for holding a public hearing as requested in the form letter have already been met and addressed. First, the public notice and the information posted on both PREPA's and the US Army Corps of Engineers' (Corps) website provide detailed information to the public about the project. Multiple public meetings were also held by PREPA across the island as part of the local review process (as evidenced by several of the comments submitted by people who participated in those meetings). The public notice issued by the Corps clearly has provided the public the opportunity to express opinions, as did the multiple public meetings PREPA participated in.
c. PREPA is working closely with the US Fish and Wildlife Service (USFWS) and the Corps to address possible effects the project may have on listed Threatened and Endangered Species and/or critical habitat. The list of 32 species initially identified by the USFWS was never meant to be a final determination of those species presence. Instead, it was a guidance list that was used by the biologist contracted by PREPA to undertake a Flora and Fauna Study. The study and its findings were included in the FEIS. Also, the list has been used as PREPA works collaboratively with both

agencies in a supplementary effort to identify what species may actually be found within four specifically identified sections of the project corridor and what the true potential for effect may be. PREPA believes the Corps, through its review authority and consultation with USFWS, will fully supplement the Biological Assessment included in the FEIS, approved by the EQB, and will also consider it adequate, allowing the completion of the evaluation under the JPA.

d. PREPA disagrees with the opinion that the local process was rushed. It questions what direct knowledge many of the individuals who submitted the form letter/email actually have regarding the process conducted by the Commonwealth agencies regarding the project. As we are all aware, the public comment process completed by the EQB, as well as the Planning Board, provided ample opportunity to all interested parties to participate in said process and provide any comments prior to the final approval of the EIS drafted and approved on November 30, 2010. The commenting period of thirty days allowed for the EIS by the EQB, as requested by PREPA, was equal to the period required by the EQB regulations.

Puerto Rico Engineers and Surveyors Association (CIAPR, in Spanish)

Issues – the CIAPR sent in two letters (Nov and Dec) and a 22 page evaluation of the Preliminary Environmental Impact Statement (DIA-P). Points raised by CIAPR that appear to be pertinent to this project include:

a. Concurrence that with today's technology it is possible to build and install a safe pipeline, provided that appropriate measures are taken during the design, manufacture of pipe and components, construction and operation.
b. The possibility of using buoys and / or transfer platforms, particularly in the areas of San Juan, Aguirre and Arecibo should be reassessed.
c. A request that the three alternative land routes considered in the Alternatives Analysis be depicted on maps.
d. Converting the South Coast complex (Costa del Sur) by modifying permits, converting the boilers, possibly constructing a second tank, and increasing frequency supplied. Parallel with this project, converting the Port of "Las Mareas" (formerly Phillips Petroleum Corporation (PPC)) to receive gas (LNG) by modifying connection points, additional piping, constructing a storage tank and dredging the west side of the bay. To supply Aguirre from this port, it would take only one route (approximately 5 km.), primarily using abandoned cane fields and an old train route. With these two changes CIAPR estimates 73% of the production capacity of electric power to gas Puerto Rico could be achieved.

PREPA response –

a. PREPA appreciates CIAPR's acknowledgement that a pipeline can be installed safely if appropriate measures are taken during construction and installation. We want to emphasize that the pipeline will adhere to all

safety standards set by the Pipeline and Hazardous Materials Safety Administration (PHMSA) and/or 49 CFR 192 regulations.

b. PREPA has conducted a thorough analysis of the alternative of using buoys and/or transfer platforms and this analysis is in Chapter 4 of the FEIS. Additional information for consideration is:

Gravity-Based Structure

GBS technology is potentially useable in water depths from about 60 to 85 feet, in areas with appropriate seafloor topography and substrates for placement of the structure. In addition, GBS facilities must be located in areas with no substantial shipping activities. Use of this technology involves the transfer of LNG to the terminal from a carrier located directly alongside the terminal. GBS terminals involve LNG storage in tanks within the GBS structure and, thus, allow continuous gas transportation out of the terminal, even when LNG carriers are not offloading at the terminal. A critical requirement of GBS terminals is the unloading of LNG from the carrier to the terminal using articulated loading arms under a range of wind and wave conditions. These arms have movement limits that can be exceeded by high winds and large waves.

Availability is also limited by the wind and wave forces reacting against the ship and the fixed GBS structure. GBS structures are typically constructed using steel or concrete. Use of this technology requires construction of the GBS structure at a graving dock at a coastal location. Following construction, the GBS structure is towed to the location of the terminal and placed on the sea bottom. The topside facilities, including vaporization facilities, unloading facilities and other terminal components, are then installed on the top of the GBS structure. The conditions suitable for a GBS have not been identified in the region, and if such a site were available, the environmental impacts are not likely to be lower than the proposed PREPA project. Also, as considered in the FEIS for Vía Verde, the receiving and regasifying system could be installed offshore and a holding tank of CNG could be installed on land. This alternative also has significant environmental impacts and thus, was not the selected alternative.

Issues of concern for a GBS option:

- Increased security risks, i.e. terrorism
- Interruption to delivery and operation due to inclement weather
- High construction costs due to requirement for more than one structure (to serve three separate power plants)
- Does not address principal public concern over safety of pipeline since pipeline still needed to deliver gas to onshore facility and/or to other facilities from point of delivery

- Significant environmental impacts to sensitive marine environment including coral reefs
- Additional impacts to T&E species (marine and anadromous) and/or critical habitat
- Risks to, or conflict with, commercial sea traffic,
- Time required to complete the construction and permit process will be 5 to 7 times longer that the Construction and Permit process associated with Via Verde.

Floating Storage and Re-gasification Unit

The FSRU technology involves the use of specialized ships as LNG terminals. Use of this technology involves the transfer of LNG to the ship from a carrier located directly alongside the FSRU. This technology involves the use of mooring facilities using anchor leg systems and swiveling connections to allow the movement of the ship in response to changing wind and current conditions. They generally need to be located in areas with water depths of at least 160 feet to allow for a flexible gas pipeline connection between the FSRU and the subsea sendout pipeline. The specialized ships include all required terminal facilities, including vaporization units, offloading facilities, gas storage, and other components. FSRU systems have some significant operational limitations based on wind and wave conditions and potential adverse effects on the use of the loading arms and mooring systems under poor conditions. Although FSRU's have been proposed, no FSRU has been constructed and operated in North America. The conditions suitable for a FSRU have not been identified in the region, and if such a site were available, the environmental impacts are not likely to be lower than the proposed PREPA project.

In some locations, an offshore receiving terminal may provide a better alternative due to the use of existing offshore facilities and pipelines, easier access for LNG tankers, and more flexibility to adapt to regulated exclusion zones. None of these apply at any of the three power facility sites. There are also some possible drawbacks or hurdles such as limited or distant access to natural gas distribution pipelines, lack of onshore services and in most instances, higher initial investments. One key issue is that offshore facilities are "new". Crude oil has been produced, stored and transported from offshore fields for many decades. Advances in technology, marine operations know how, safety and environmental protection, and onshore support for construction and maintenance are among the many aspects of accumulated experience that can be and are being borrowed from the crude oil industry in support of offshore LNG development. However, the newness of offshore LNG introduces new complexities, costs, and questions about feasibility.

A number of distinct challenges affect offshore LNG operations. Marine operations for offshore LNG facilities present new and different hazards and design specifications that must be dealt with and accommodated. This can increase the cost associated with LNG import operations. If subsea pipeline connections must be developed, additional design and cost considerations are introduced. Offshore LNG operations also face a different jurisdictional environment under the Deepwater Port Act (DWPA).

Issues: building two or more offshore facilities would not remove the safety concerns expressed by the public since interior pipelines would still be required to transport compressed natural gas between power plants. Costs of constructing multiple facilities would far exceed cost of a single pipeline for delivery to multiple locations. Increased risk associated with exposed facilities, i.e. terrorism, vs. buried pipeline. US Coast Guard (USCG) requires a 500m safety zone surrounding an offshore LNG terminal and the facility must be located away from shipping fairways and other areas of activity on the Outer Continental Shelf (OCS) to avoid interference.

Issues of concern for a FSRU option:

- Increased security risks, i.e. terrorism
- Interruption to delivery and operation due to inclement weather
- High construction costs due to requirement for more than one structure (to serve three separate power plants)
- Does not address principal public concern over safety of pipeline since pipeline still needed to deliver gas to onshore facility and/or to other facilities from point of delivery
- Significant environmental impacts to sensitive marine environment including coral reefs
- Additional impacts to T&E species (marine and anadromous) and/or critical habitat
- Risks to, or conflict with, commercial sea traffic,
- Time required to complete the construction and permit process will be 5 to 7 times longer that the Construction and Permit process associated with Via Verde.

c. The Attachments (Anejos) in Chapter 4, FEIS includes in section 4.1 "Mapas de Criterios" which depict the land routes considered for the project.

d. The overall project purpose is to deliver an alternate fuel source to the three existing electric power generating facilities located on the north coast. Attempting to use the Costa Sur complex in combination with the Aguirre Power Plant would be inconsistent with the overall purpose of the project, and therefore is not a practicable alternative. It is not practicable because generating most of the energy the island needs on the south coast would create a situation which destabilizes the electrical system and

could cause frequent collapses of the electric network. This, in turn, would adversely affect Puerto Rico's economy. Unless the Corps officially disagrees with this understanding of the Via Verde scope for an alternatives analysis, as approved in the FEIS back on November 30, 2010 by the EQB, and officially notifies PREPA that additional review is required, *Gasoducto del Sur* will not be discussed further.

Finally, PREPA would submit the following as additional information regarding the "No-Action Alternative" since there was some critique of this option's write-up.

No-Action Alternative

The No-Action Alternative would result in not constructing the project. The No-Action Alternative would eliminate the short- and long-term project environmental impacts identified in the resource reports. However, selection of the No-Action Alternative would mean that the energy supply benefits of the project would either go unrealized or would have to be accomplished through other means with potentially greater environmental impacts elsewhere. A no-action alternative although required under the state EIS regulations, is not germane to the alternatives analysis under the Clean Water Act 404 (b) (1) guidelines because it is, by definition, inconsistent with the overall purpose of the project, and therefore not a practicable alternative.

The No-Action Alternative does not achieve the stated overall purpose of the project, which is to deliver an alternate fuel source to three existing electric power generating facilities located in Arecibo, Toa Baja and San Juan Steam plant operated by PREPA. If adequate supplies of natural gas are not available, PREPA would have forced to maintain the existing dependency on the use of petroleum derived fuels resulting in potentially more costly and environmentally damaging fuels options, with their deleterious local economic consequences. Alternative approaches to finding and delivering sources of energy to supply the growing demand for electricity in the Puerto Rico present very real adverse environmental impacts and are neither superior nor preferable to the proposed project. Moreover the Via Verde project is consistent with the Energy Diversification Policy developed for Puerto Rico by the Administration of Energy Affairs.

National Marine Fisheries Service (NMFS):

The following is information developed in response to the NMFS request for additional information.

Issues –

1) Please clarify what is meant by "ALL wetland impacts will be temporary". The proposed ROW of 150 feet seems to imply that impacts to wetlands are not temporary.

RESPONSE: As the statement implies, all impacts associated with the construction of the pipeline will be temporary in nature within wetlands and other surface waters. After the construction and installation of each pipeline segment, all wetlands and surface waters will be restored to their original pre-construction state and will be allowed to naturally recruit with native species.

The proposed right-of-way (ROW) is necessary only for the purposed of entitlement. PREPA will have entitlement rights for the entire ROW. Maintenance and new access roads will not be necessary within wetlands or other surface after completion of construction. All maintenance in wetlands and other surface waters will be conducted using a computerized robotic system identified as PIG. PIG launchers and receivers will be located outside wetlands and other surface waters. It will allow the data gathering efforts as well as the identification of any area where additional preventive or regular maintenance efforts are required.

2) Based on the answer to #1, please provide the total square footage of resource impacts (seagrass, other submerged vegetation, mangroves and other benthic resources). The public notice indicates a total of 28.5 acres of EFH will be impacted but does not indicate the acreage for each habitat type.

RESPONSE: The following is a breakdown of proposed temporary impacts to wetlands and other surface waters:

- Canals 0.67 acre
- Canals with Mangrove shorelines 0.00 acre
- Estuarine Forested- Mangroves 0.00 acre
- Estuarine- Supratidal Saltflat 0.56 acre
- Rivers, Creeks, Tributaries 1.39 acres
- Unnamed Creeks (in Karst Region) 0.90 acre
- Ditches (within herbaceous wetlands) 0.08 acre

Our calculated total temporary impact to EFH is approximately 3.8 acres. Forested estuarine habitat will not be impacted because Horizontal Directional Drilling (HDD) will be utilized in those systems.

3) Please provide additional explanation that can help us determine if HDD will be utilized with encountering "Estuarine Forested Wetland" and the other types of EFH habitats, such as seagrasses and submerged vegetation. This would help NMFS evaluate alternatives to the proposed action.

RESPONSE: Table 7 of the JPA Report, which was submitted with the Joint Application, has been modified. The table includes only those temporary impacts

associated with potential EFH impacts. The crossing methods, including HDD, are identified for each habitat type. Type 1= HDD, Type 2= Open Cut Waterbody Crossing, Type 3= Open Cut Waterbody Crossing (Minor Waterbody), and Wetland= Open/Box Cut Crossing.

4) Please provide results of an actual survey of the organisms in the estuarine areas that the proposed project impacts.

RESPONSE: Results from the Flora and Fauna study conducted by Coll Environmental were included in the Joint Application Package. Additionally, surveys are currently being conducted at the request of USFWS. Any further survey results that involve estuarine organisms will be provided promptly upon completion.

U.S. Fish and Wildlife Service (USFWS):

Before addressing USFWS specific comments included in the December 15, 2010 letter, it is important to point out that comments presented were based on the Draft of the EIS (Sept. 9, 2010) and not on the FEIS approved by the EQB on November 30, 2010. However in an effort to address them out we are presenting the following comments, clarifications and responses aimed to address pertinent issues pulled from the aforementioned USFWS letter.

Issues –

1. Purpose of the Project, Single and Complete Project, Federal Involvement and compliance with the National Environmental Policy Act (NEPA)

- The PN fails to discuss necessary changes to EcoElectrica's currently authorized facilities and operations to supply natural gas to PREP A's three facilities in the north. Because the Via Verde pipeline would require additional storage and modifications to the EcoElectrica terminal, these projects are interrelated and should be viewed as one single and complete project. Should EcoElectrica fail to obtain FERC authorization for the physical and / or operational modifications that might be necessary to serve the pipeline, the Corps would be permitting a fragment of a project that could not fulfill the stated purpose and need and would have irreversible resource impacts.

  RESPONSE: Additional modifications to the EcoElectrica terminal which may be required to provide natural gas to the Via Verde project have previously been reviewed and permitted by Federal Energy Regulatory Commission (FERC) during 2009 as parts of past projects. These modifications to be completed during the last quarter of 2011 can be constructed independent of the existence of the Via Verde project. The overall project purpose is to deliver an alternate fuel source, which already

exists at the EcoElectrica terminal, to the three existing electric power generating facilities located on the north coast of Puerto Rico. This will allow PREPA to select based on power demand and heat rates characteristics the most efficient unit to be utilized to meet the daily power generation demands to be serviced by PREPA.

- This project should be evaluated as a major construction activity since it would affect about 1,672 acres of land, including about 369 acres of wetlands, several Commonwealth Forests or Reserves, forested mountain and karst areas, and known habitat for more than 30 federally listed threatened or endangered species.

  RESPONSE: The proposed project will result in only temporary impacts to approximately 152 acres of waters of the U.S. (WoUS) with no permanent fill or net loss. This is derived from multiplying the length of each expected jurisdictional crossing by the 50-foot width the contractor will operate within when locating the pipeline in WoUS. The limits of the project area (1,672 acres of land) reflect the limits of an enlarged utility right-of way (ROW) to be established for safety purposes. The ROW is required to ensure that no future encroachment occurs adjacent to the gas transmission line and should not be construed as cleared ROW corridor such as that required for a transportation project. All but 50 feet of this ROW will be allowed to naturally revegetate to preconstruction conditions and at the same time areas located in up lands will be utilized to plant trees as part of the Mitigation efforts required by the Department of Natural & Environmental Resources (DNER). Within the remaining 50-foot zone, only deep rooted vegetation, i.e. large trees, will be restricted. As such, the applicant questions how the Service has determined the project constitutes a "major construction activity or the criteria's utilized to reach such conclusion."

  Surveys for federally Threatened and Endangered species **that may be present** in the project area, have been carefully refined to address species of concern and key habitat areas through several meetings with the Service. Presently, field surveys (including the participation of USF&WS personnel) are being performed (utilizing regional experts and protocols approved by the USFWS) within the project ROW. These surveys have been and continue to be closely coordinated with the USFWS to ensure that all species of concern (flora and fauna) are assessed. To date, no threatened and endangered plant species have been identified and only six faunal species of concern have been identified; two of which (PR Nightjar and PR boa) have been positively identified as occurring within the ROW. Surveys for the following six species remain on-going; Puerto Rican (PR) broadwinged hawk, PR sharp-shinned hawk, PR crested toad, PR Nightjar, PR Boa, and the Coqui Illanero.

2. Alternatives Analysis

- The applicant's alternative analysis does not include PREPA's original plan to build a new natural gas combined cycle power plant close to the existing Costa Sur facility, and to retro fit both Costa Sur and Aguirre power plants to use natural gas. This was the applicant's preferred alternative in the past and now is not mentioned in the applicant's alternatives analysis.

  RESPONSE: The overall project purpose is to deliver an alternate fuel source to the three existing electric power generating facilities located on the north coast of Puerto Rico. Attempting to use the *Gasoducto del Sur* would be inconsistent with the overall purpose of the project, and therefore is not a practicable alternative. It is not practicable because generating most of the energy the island needs on the south coast would create a situation which destabilizes the electrical system and could cause frequent collapses of the electric network. This, in turn, would adversely affect Puerto Rico´s economy. Also, at the time the *Gasoducto del Sur* was considered, natural gas prices were similar to those of Bunker C. This meant the conversion of the South Coast Plant units would not be practicable. Therefore, converting the Aguirre's Combined Cycle was selected because natural gas would replace the more expensive and polluting Diesel Fuel. With natural gas prices plunging, even lower than Bunker C prices, it is preferable today to convert the Bunker C fired units which have a greater generating capacity. Today, with the South Coast completely converted to natural gas, and the geographical limitations imposed by our electric system, Aguirre´s conversion is not a priority for PREPA, and is therefore not considered as part of Vía Verde. Unless the Corps officially disagrees with this understanding of the Via Verde scope for an alternatives analysis, as approved in the FEIS back on November 30, 2010 by the EQB, and officially notifies PREPA that additional review is required, *Gasoducto del Sur* will not be discussed further.

  The alternatives analysis provided reflects and supports the project purpose and scope provided in the current Joint Permit Application presently under review by the USACE (SAJ 2010-02881 (IP-EWG), Via Verde Pipeline Project. PREPA's previous plan to build a new natural gas combined cycle power plant close to the existing Costa Sur facility, and to retrofit both Costa Sur and Aguirre power plants to use natural gas are not part of this project and is not being considered. Moreover the construction of a combine cycle plant close to the existing Costa Sur facility is a project that will be developed by a private entity to be selected under an independent bid process being developed by the Private Public Alliance Office outside the PREPA.

3. Habitat Impacts

- The construction right of way (ROW) width ranges from 100 to 150 feet, and more if needed, with a final permanent ROW of 50 feet. The "Declaracion de Impacto Ambiental Preliminar"(DIA-P) states that all vegetation within the construction ROW will be cut and that the permanent 50 foot ROW will be maintained as a no-root zone with no woody vegetation. The DIA-P does not propose mitigation for impacts to previously undisturbed forested areas in this long corridor that will create an avenue for invasive and noxious species to enter previously isolated areas of wildlife habitat. The DIA-P also does not describe methods for maintaining a 92-mile, 50-foot-wide no-root zone corridor through karst and mountainous topography.

  RESPONSE: The no-root zone was incorrectly described in the DIA-P and has subsequently been revised in the FEIS approved on November 30, 2010 by the EQB. The original right-of way (ROW) design allowed for only shallow rooted herbaceous and/or shrub vegetation within the permanent right-of-way. PREPA as clearly indicated in the FEIS will be utilizing the ROW to implement the Mitigation Plan requested by the DNER. This concept has since been modified to allow for the natural recruitment of all native vegetation (herbs, shrubs, and trees) within the ROW corridor. Only within the 50-foot zone immediately above the pipeline will vegetation be regulated to restrict the growth of deep rooted trees.

  All inspections and light maintenance of the pipeline will be conducted internally, using a remote controlled robotic pipeline inspection gauge (PIG). PIG launchers and receivers will be located outside wetlands and other surface waters, typically in disturbed upland areas within the project ROW. If surface supported maintenance is required for any section of the pipeline, only vegetation clearing in that limited area will occur. The area would then be allowed to naturally recruit or be reforested as part of the Mitigation Plan developed.

- The Service is concerned that the clearing of all vegetation in the 150 foot ROW as stated in the DIA-P, in areas of highly erodible or unstable lands would cause excessive erosion that could impair water quality and channel stability in streams and rivers along the route. Trenching is likely not feasible in many steep areas within the corridor, yet DIA-P includes no discussion of how these areas will be traversed.

  RESPONSE: We must advise that all comments included in the USFWS were based on the evaluation of the first Draft of the EIS and not on the evaluation of the FEIS approved by the EQB on November 30, 2010. Sediment and Erosion control methods will be utilized throughout the construction of the pipeline to prevent excessive erosion that could impair

water quality and channel stability in streams and rivers along the route. Specific information related with the sediment control options is included in section 6.4.2 of the FEIS. We must alert the USF&WS that the sediment control options were developed utilizing criteria's that had being approved by the EQB and the EPA in the past for similar projects and that had met and address all the USF&WS concerns in this particular area.

- Generalized drawings as seen on sheet 2 of the PN do not clearly represent what is written in the DIA-P. The proposed permanent 50 foot ROW and its associated no root zone will require either mechanical or chemical maintenance, which implies construction of a permanent maintenance road with associated stream crossings along most of, if not the entire, ROW length. This is not addressed anywhere in the documents. Utilizing the full estimate of ROW impacts should also help account for staging areas along the project route.

  RESPONSE: **As previously stated, the proposed pipeline does not require a no-root zone**. At no point was it implied that permanent maintenance roads will be required for any water body crossing; stream, wetland, river, or otherwise. A permanent maintenance road has never been considered as part of the project and there is no plan, intent or need for such a road. After the pipeline is built, PREPA will use alternative methods, such as helicopters, to reach remote or isolated sections of the project. The idea of a "maintenance highway" is far from what PREPA envisions, and has never been part of the project.

- The Service is concerned about the possible impacts of directional drilling in the karst portions of the pipeline corridor. Voids in the rock matrix may lead directly to the aquifer, and a "frac-out" of drilling muds in this type of terrain and geology could contaminate underground waters and adversely affect human health, unique subterranean fauna, and commerce.

  RESPONSE: It is recognized that due care must to taken to ensure that contractors adhere to prudent practices to avoid the accidental release of bentonite mud. The North American Society for Trenchless Technology (NASTT) provides guidance for the analysis and design of tooling essential in reducing the incidence of hydro fractures (frac-outs) in karst environments. Hydro fracture or "frac outs" result when the fluid pressures built up in the borehole exceed the overburden effect of the surround soil medium. Several drilling factors and procedures will be monitored to preclude the development of hydro fractures. Eight significant factors will be evaluated at each HDD. These include: annular space; backream rate; borehole pressure; depth of cover; reamer type; reamer diameter; soil composition; and soil density.

  To ensure the Horizontal Directional Drilling (HDD) operations to be conducted in association with the Via Verde Pipeline will comply with all

regulatory permits and standards, proper pre-construction geotechnical investigations will be conducted on the insitu soil formations along the proposed installation route. Tooling used in HDD installations will be matched to the soil medium to be encountered. The Frac-Out Plan (Draft included in the FEIS approved on November 30, 2010) will be enhanced to stipulate lined pits and all environmental details depicted for the sedimentation ponds.

In summary, the HDD operation to be utilized on the Via Verde pipeline will include proper pre-construction geotechnical investigations, limit drill fluid application rates, utilize an appropriate type reamer to reduce the extent and magnitude of the drilling fluid dispersed, carefully monitor drilling mud pressures increased until the midpoint of the installation is attained, and insure proper containment, recycling, and/or reuse of drilling muds. All HDD operations for the Via Verde Pipeline will be conducted in accordance with the guidelines and recommendations of the North American Society for Trenchless Technology (NASTT) for karst environments. Regardless, PREPA is willing to include any specific recommendations provided by the USCOE to improve the Frac-Out Plan included in the FEIS.

4. Endangered Species

- The Service also continues to recommend surveys of the coqui llanero *(Eleutherodactylus juanariveroi)* where the project crosses wetlands in Toa Baja.

  RESPONSE: The applicant has met and/or engaged in teleconferences with the Service on six occasions to date. Surveys for federally listed Threatened and Endangered species, utilizing regional experts approved by the USFWS, have been and continue to be performed by PREPA within the project ROW. These site specific field surveys have been coordinated with the USFWS as to protocols and individual species to be assessed. To date, no threatened and endangered plant species have been identified and the list of faunal species of concern have been narrowed to six species, two of which have been positively documented as occurring within the ROW. Surveys for the six species previously identified remain on-going.

- The Corps needs to make an effect determination with regards to the endangered Antillean manatee (Trichechus manatus). The Corps' biological assessment (BA) should include an analysis of any necessary changes to current facilities and/or operation of the EcoElectrica LNG terminal needed for the Via Verde project.

RESPONSE: A response to the USFWS position regarding the EcoElectrica facility was provided above and PREPA sees no valid reason why a BA would include this analysis. Since no construction that has the potential to harm or disturb the manatee is proposed as part of this project, the applicant believes a "no effect" determination by the Corps is appropriate for the endangered Antillean manatee *(Trichechus manatus).* Moreover this concern was to be considered and evaluated at the time EcoElectrica requested a Plant Modification Permit that was granted in 2009 with the endorsement of the Service.

- USFWS recommended the development of a Biological Assessment, since it considered the project a major construction activity under NEPA.

  RESPONSE: On October 18, 2010, the Service provided technical assistance to the Corps regarding information included in the draft Biological Evaluation for the project. It was concluded that additional biological evaluations to be provided by the applicant must rely upon survey methodologies that maximized detection probabilities for federally-listed species and must include site-specific habitat characterization. On November 10, December 2, and December 8, 2010, the Service provided additional technical assistance to the project applicant regarding appropriate survey methods for listed species along the proposed route.

  The proposed project will result in only temporary impacts to approximately 152 acres of wetlands and no permanent fill or net loss to Waters of the United States (WoUS) will occur. After completing the environmental assessment and developing a plan to address the temporal loss of wetland functions (if required) the applicant believes the project will not result in any substantial effects on the aquatic environment and therefore a Finding of No Significant Impact (FONSI) is appropriate.

  At the present time, with full knowledge and approval of the Service, the applicant has a team of regional scientific experts conducting site specific, appropriate surveys along the proposed route to determine presence/absence of listed species within the project area and the amount of suitable habitat. The survey methodologies developed and the surveys being conducted are being carried out by experienced and qualified personnel, and in close coordination with the Service. The draft Biological Assessment (Evaluation) will be appended to include the results of such surveys and will be the basis for all future consultations with the Service.

  In addition to the above, the DNER requested that, to further ensure no federally-listed species is affected as a result of this project, a regional Biologist be assigned to each of the segments of Via Verde to be constructed. He, as well as an interdisciplinary group of professionals (Soil experts, Geologist and Hydrologist), will inspect the construction areas to ensure federally-listed species are fully protected.

- USFWS would like to provide technical assistance for the planning and implementation of the surveys to inform the Biological Assessment.

  RESPONSE: The applicant wishes to thank the USFWS for the technical assistance provided to date and includes the information (below) as an update to on-going surveys and project research. The applicant recognizes that some of the information included has previously been provided to the Service and/or the USACE.

Habitat characterization for the Puerto Rican sharp-shinned hawk and Puerto Rican broad-winged hawk

- USFWS wanted to meet with the species experts and discuss, during a working meeting, the areas to be included in the analysis to ensure that all available information is considered for the effects determination. USFWS also wanted to have the opportunity to visit the areas with contracted personnel. The agency did not concur with the applicant that it is possible to avoid impacts to breeding habitat and breeding behavior without first identifying the breeding territory. Under the assumption that suitable habitat is occupied for breeding, possible take as defined by the ESA would be anticipated.

  RESPONSE: PREPA committed to complete the requested raptor studies using Mr. Derek Hengstenberg, an acknowledged expert acceptable to the USFWS. As requested, Mr. Hengstenberg and the PREPA Team participated in working meetings (December 2010 to date) with the USFWS and agreed to field survey protocols, site locations, survey locations and times. Prior to the December USFWS meeting and teleconference, Mr. Hengstenberg prepared a GIS map with proposed raptor observation locations for review and approval by USFWS. In addition, Mr. Hengstenberg has agreed to share any and all available relevant raptor data with USFWS in dbf/xls file format. Mr. Hengstenberg commenced field surveys the week of January 10, 2011. The surveys were completed on January 27. The results of the surveys will be provided to the USFWS on or about February 11, 2011. Upon receipt of the surveys, the applicant will meet with the USFWS to evaluate the number of breeding territories that could be affected by the project construction (if any).

Potential presence of endangered plants

- USFWS did not agree with the Applicant's proposal of surveying at intervals of 100 m within suitable habitat. It recommends that personnel trained to recognize the listed species systematically search all areas of suitable habitat within the project footprint. It proposed a working meeting

between its staff and the applicant's contracted personnel to share information and delineate together the survey areas.

RESPONSE: The field review protocols to be utilized by Dr. Frank Axelrod and a team of qualified professionals were revised, with prior concurrence of the USFWS, to maximize the likelihood of locating special status plant species or special status natural communities that may be present. The protocols include intensive, systematic surveys targeted to detect the rare plant species in areas that harbor suitable habitat in the regions identified by USFWS. The target species will include those species identified in the USFWS letter to the applicant dated June 30, 2010. The level of effort required per given area and habitat will be dependent upon the vegetation and its overall diversity and structural complexity, which will determine the distance at which plants can be identified. Biologists will walk parallel transects spaced 5 to 10 meters (16 to 33 feet) apart throughout the entire site (in areas where suitable habitat exists) thereby entirely and systematically screening the area. Transects will be stratified by topography or plant community for convenience. All field survey crews will include at least one member who has the ability to identify sterile specimens of listed plant species and who has seen the target species growing in its natural habitat. Other team members may be trained using photographs and/or herbarium specimens but all must be accompanied in the field by the aforementioned experienced crew member during all surveys. Prior to conducting the field surveys, a working meeting will be held between the PREPA team and the USFWS. The purpose of this meeting will be to share information and to clearly identify the limits of those areas to receive intensive, systematic surveys.

Survey reports to be prepared will document the locations that were visited, the date of the visit, and the observability and phenology of the target species at that time, plus the date of the survey, the abundance and distribution of all rare species in the survey area. The current status and abundance of any known populations visited as well as any new populations discovered will also be reported. The surveys performed in accordance with the agreed upon species-specific guidelines to be developed by Dr. Axelrod will suffice to provide reasonable evidence that the specified plant taxa do or do not occur in the project area. Surveys that employ methods or timing other than those agreed upon or recommended herein may be used as evidence of the presence (but not absence) of rare plant species.

Final determination as to whether voucher specimens are to be collected will be the responsibility of Dr. Axelrod. All voucher specimens collected will be shared amongst the PREPA Team and the USFWS.

To date, Dr. Axelrod and his team have not found any federally listed species of concern within the limits of, or adjacent to, the Via Verde

Pipeline right-of-way. Dr. Axelrod's fieldwork is currently being completed and a final copy of the team's findings will be presented to the Service in February, 2011.

Potential presence of coqui llanero in Toa Baja

- USFWS wanted the opportunity to visit the proposed project ROW within other wetland areas in northern Puerto Rico to identify whether habitat suitable for the coqui llanero is present in other areas of the route.

  RESPONSE: The locations for the surveys for this species have been coordinated with the Service will be limited to that segment of the project located at the Rio Cocal flood plain in the Toa Baja Municipality at this time. Ms. Vega and Mr. Puente will conduct the field surveys after having conferred with Dr. Rafael Jogular, Dr. Neftali Rios, and the Department of Natural & Environmental Resources of Puerto Rico as to the likelihood that this species exists within other sections of the northern ROW. Based upon the guidance of these leading experts; other areas of the ROW may be examined. A written report will be submitted to the USFWS in February 2011. This report will address all concerns and recommendations on this species. This species is presently listed as Critically Endangered by The Department of Natural & Environmental Resources of Puerto Rico and its critical habitat has been identified, PREPA will comply with all State requirements for this species until such time as its review status under the Endangered Species Act has been finalized (Reference: DEPARTMENT OF THE INTERIOR, Fish and Wildlife Service, 50 CFR Part 17, [FWS-R4-ES-2009-0022; 92210-1117-000-B4], Federal Register: July 8, 2009 (Volume 74, Number 129)). The concerns and recommendations generated in the final report will be incorporated into the project design, construction plans, and final permits issued for the project. We must consider that in this particular regard, the DNER evaluated and approved the assessment presented for this particular specie included in the FEIS approved on November 30, 2010.

Potential presence of the Puerto Rican crested toad

- USFWS agreed with PREPA's approach to search for the Puerto Rican crested toad in both the southern and northern limestone forest areas. It recommended that before surveys are initiated, survey areas are discussed and delineated between its staff and contracted species experts. The agency wanted the opportunity to visit the areas with contracted personnel.

  RESPONSE: Specific field evaluations for the Puerto Rican Crested Toad (PRCT) - Sapo Concho de Puerto Rico (Peltophryne lemur) have been initiated within the municipalities of Vega Baja (Rio Indio), Manatí (karst area south of town), and Peñuelas dry karst as recommended by the

USFWS. The surveys are being conducted by a team of biologists, led by Ms. Sondra Vega and Mr. Alberto Puente. The survey methodologies and protocols have been discussed and approved by the USFWS. The results of the final study, including all survey data, will be will be submitted to the USFWS in February 2011. This report will address all concerns and recommendations on this species.

Puerto Rican night jar

- USFWS recommended intensive surveys during the breeding season for the endangered Puerto Rican night jar to determine the amount of suitable habitat and the number of singing males or territories that the project may affect.

  RESPONSE: Field surveys for Puerto Rican Nightjar were agreed to by the applicant. In light of this agreement, the applicant presented a detailed protocol and methodology to implement the field work agreed upon. This protocol was commented by the USFWS and applicant is incorporating those recommendations to the final protocol which will be filed in the near future. All field work will be conducted and completed during the month on February 2011. All field surveys will be conducted by a regional expert with prior approval of the USFWS. All field findings will be presented in a report to the USFWS for final review and approval.

  The amount of dry forest to be cleared within the limits of the project ROW will be carefully calculated and these areas will be surveyed in their entirety. It is conceivable that no nightjar will be technically harmed by the PREPA Vía Verde pipeline. Existing published and USFWS accepted data available from the WindMar project together with the field data to be collected as part of the study to be carried out by PREPA will be used to develop an impact analysis for this species. It has been previously documented that nightjars at the WindMar site have already demonstrated that they can adapt positively to cleared roads. Unlike WindMar, the proposed PREPA ROW will remain vegetated, have leaf litter present, and should act as a viable foraging area for the nightjar.

  Upon completion of the field surveys by the PREPA Team, the project site plan will be evaluated for its potential impact to the existing PR Nightjar territories identified, and facilitate the development of a mitigation plan.

Puerto Rican boa

- The applicant should delineate and quantify the amount of suitable boa habitat within the project area. The applicant should first consider alternatives to avoid these areas and develop conservation measures to minimize possible adverse effects where avoidance is not possible. Once possible effects are appropriately minimized, the Service would work with

the Applicant to develop a search and rescue protocol for relocating individual animals to suitable habitat outside of the project area prior to project construction.

RESPONSE: As requested, the PREPA Team has agreed to quantify the potential habitat for the boa. The project will not result in any habitat loss to the snake; although direct impacts to forested systems may result in changes to community structure. Mr. Alberto Puentes will review the pre- and post-project conditions for potential habitation by the boa. Since the boa is found in all habitats; a weighted number could be generated for individual habitat types (based upon existing species occurrence data). Habitat conversion (i.e. forested to herbaceous ROW) could then be addressed by taking the pre- and post-construction acreage for each habitat type times the habitat utilization value to ascertain net change. Any habitat compensation required could be similarly assessed should non-type for type offsets be proposed. Relocation of the pipeline within the proposed ROW will not result in any significant impact and further re-alignment of the ROW is not a viable option due to the need to avoid major population centers pursuant to the requirements of the USDOT Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations and constraints for co-locating a utility line within existing rights-of-way under the jurisdiction of the Federal Highway Administration (FHA). The standard boa construction and preservation conditions provided with the original JPA submittal will address on-going construction once the permit is issued.

5. Impacts to Landowner Incentive Programs

- The present project goes throughout properties under the Service's Partners for Fish and Wildlife Program (PFWP). USFWS identified that at least three properties under a current Conservation Agreement with the Service that may be adversely affected by the proposed project: Hacienda Pellejas in Adjuntas, Hacienda Esperanza in Manati, and the US Navy Radio Station in Toa Baja. Current efforts at these highly ecologically valued properties include restoration of forest, riparian habitat and restoration of wetland areas. The Service has invested close to $180,000 of federal funds on these restoration activities, and we recommend modifying the project to avoid these areas. If avoidance is not practicable, the conservation investment in these properties must be compensated with comparable restoration efforts on other similar properties.

  RESPONSE: As a result of both public comments and regulatory agency concerns, the pipeline was relocated to avoid impacts within the Hacienda Esperanza in Manati. In regard to Hacienda Pellejas and US Navy Radio

Station in Toa Baja, the selected pipeline route avoids the areas where Conservations Agreements have been developed.

6. Wetland Impacts

- USFWS recommended using a 150-foot construction corridor width to estimate temporary impacts.

  RESPONSE: PREPA does not agree that a 150-foot wide width should be used to calculate impacts. Best Management Practices (BMP) for construction techniques for the overall project have been provided. In addition, construction techniques and stabilization techniques for individual water crossing types and upland installations were included together with the JPA documentation. The Service has accepted these techniques for past and recent construction activities. If these are no longer acceptable, the Corps should define which specific elements of the BMP, SWPPP and or Frac-Out Plan are deficient and the applicant will gladly meet with the Corps to develop revised conditions based upon current industry standards.

  It has been repeatedly stated within multiple sections of the local Environmental Impact Statements approved back on November 30, 2010 and the Joint Permit Application that all disturbed areas within WoUS will be restored to natural (pre-construction) grades and the areas will be restored using the native topsoil. Native seed mixes will be used as necessary to ensure these areas are properly restored.

- The USFWS stated some of the wetlands the project may affect are within areas designated by the Commonwealth of Puerto Rico as Natural Reserves and Critical Wildlife Areas, including: the Cucharillas Marsh PCA, San Pedro Swamp PCA, Cano Tiburones Natural Reserve, and Hacienda la Esperanza Natural Reserve. These areas lie within the northern karst, an area known for its underground streams, springs and shallow aquifer.

  RESPONSE: The USFWS comment and concerns are noted. All work conducted in the northern karst area will use due care with respect to disturbance of underground streams, springs and the shallow aquifer. The trenches required to embed the pipeline are in most cases shallower than the surrounding agricultural ditches and canalized streams in the areas of concern. A large percentage of the wetland areas the project corridor crosses are previously disturbed wetlands used in the past for ranching, cattle grazing and/or farming activities.

- The Service is very concerned with the use of HDD in karst topography, where voids in the substrate are common and often connected to ground- and surface-water systems.

RESPONSE: It is recognized that due care must be taken to ensure that contractors adhere to prudent practices to avoid the accidental release of bentonite mud. The North American Society for Trenchless Technology (NASTT) provides guidance for the analysis and design of tooling essential in reducing the incidence of hydro fractures (frac-outs) in karst environments. Hydro fracture or frac outs result when the fluid pressures built up in the borehole exceed the overburden effect of the surround soil medium. Several drilling factors and procedures will be monitored to preclude the development of hydro fractures. Eight significant factors will be evaluated at each HDD. These include: annular space; backream rate; borehole pressure; depth of cover; reamer type; reamer diameter; soil composition; and soil density.

To ensure that the Horizontal Directional Drilling (HDD) operations to be conducted in association with the Via Verde Pipeline will comply with all regulatory permits and standards, proper pre-construction geotechnical investigations will be conducted on the insitu soil formations along the proposed installation route. Tooling used in HDD installations will then be matched to the soil medium to be encountered. The Frac-Out Plan and will be amended to stipulate lined pits and all environmental details which depict the sedimentation ponds will be revised.

In summary, the HDD operation to be utilized on the Via Verde pipeline will include proper pre-construction geotechnical investigations, limit drill fluid application rates, utilize an appropriate type reamer to reduce the extent and magnitude of the drilling fluid dispersed, carefully monitor drilling mud pressures increased until the midpoint of the installation is attained, and insure proper containment, recycling, and/or reuse of drilling muds. Strict adherence to the North American Society for Trenchless Technology (NASTT) guidelines for HDD operations in karst environments will be maintained.

- The pipeline route crosses multiple low-order streams in mountainous areas. These streams are the headwaters of larger rivers and support a marine-derived native stream fauna composed of several species of freshwater shrimp, crabs and gobies. Excessive erosion and sedimentation during construction or maintenance of the ROW could cause long-term or permanent impacts to these important wildlife areas.

  RESPONSE: The agency's concerns are noted. Due to the relatively small sizes of the low-order streams to be crossed, the extent and duration of the temporary impacts to these areas will be minimal. The applicant will utilize all applicable turbidity and erosion control measures to insure water quality parameters are in compliance with permit standards. Erosion and sedimentation during construction within the ROW is not expected to cause long-term or permanent impacts to these important

wildlife areas. If the contractor operates improperly the Corps as well as the EPA and the EQB has the authority to bring an appropriate enforcement action aimed to correct any deficiency or deviation into the approved Sedimentation and Erosion Plan noted.

- It is not clear whether the 50-foot permanent ROW in forested wetlands could be used to access the pipeline in the future. If so, then this should be considered a permanent wetland impact. Because of the muck soils associated with some of these wetland types, additional staging areas will be needed for the drill rig, pipe, etc. There is no mention of how drilling mud will be managed, since there will be a need for sumps and other ground disturbances at the drill site to store drill muds.

  RESPONSE: Drilling mud management will be accomplished through lined ponds located in upland areas whenever possible. Access to the pipeline through the ROW for surface based maintenance will not occur since the project has been designed so that all inspections and light maintenance of the pipeline can be conducted using a remote controlled, robotic pipeline inspection gauge (PIG). PIG launchers and receivers will be located outside wetlands and other surface waters. After the construction and installation of each pipeline segment, wetlands and surface waters will be restored to their original pre-construction state and allowed to naturally recruit with native species. No permanent fill, net loss of wetlands, or significant changes to community types will occur as a result of the construction of the pipeline.

  Construction considerations - Where wetland or special constraints exist, the drilling contractor has the option to use closed containerized vessels for drill mud storage and segregation. Any required staging areas for tanks etc. will be located in upland areas.

7. Mitigation

- The Applicant proposes a .01-to-l compensatory mitigation ratio. This would amount to 4 acres of compensatory mitigation for an estimated 369 acres of "temporary" wetland impacts, which is inappropriate and unacceptable to the Service. A much higher ratio is necessary to compensate for the: 1) temporary loss of wetlands functions and values; 2) likely permanent loss of functions and values due to contractor errors; and 3) permanent habitat alteration by species such as cattails that rapidly invade disturbed wetland areas and compete with more beneficial wetland plants.

  RESPONSES:
  1) As indicated in the JPA information and materials provided, wetland disturbance during construction has been repeatedly evaluated to minimize direct aquatic resource impacts. After construction and site

restoration, native vegetation should reestablish naturally. Many of the proposed temporary wetland impacts within the ROW will occur in agricultural fields or farmlands; which while designated as wetlands are routinely maintained, planted, harvested, and drained. The post construction ROW will have restrictions on the types of activities allowed during the active life of the project thereby improving the wetland quality and functions in these areas. Temporal loss of wetland function during construction will be addressed and will be weighed against the net gains associated with restricted activities and elevated levels of protection afforded within the post construction ROW. Potential aquatic resource impacts at some distance in time, or reasonably certain to occur are difficult to imagine, much less predict. The applicant disagrees with USFWS' general statement that a higher ratio of mitigation is required. Notwithstanding, PREPA has agreed to develop a plan requested by the DNER. This is established in the FEIS, at a 3:1 mitigation ratio, for any permanent impact to be done in wetland areas.

2) Losses due to contractor errors will be unacceptable to the applicant and constitute an enforceable violation to the regulatory agencies. As required by law, the applicant will notify all appropriate regulatory agencies with its Notice of Intent to commence construction and will make all contractors working on the project aware of the limitations and constraints contained in all permits issued for the project.

3) The applicant recognizes that cattails can rapidly invade disturbed wetland areas and compete with more beneficial wetland plants. The applicant will be amenable to any reasonable restrictions that the Corps may require regarding maintenance and minimum acceptable standards for percent cover by non-native and/or nuisance wetland species.

- The project area includes the mitigation area for the *Gasoducto del Sur* project, despite our repeated requests during the technical assistance process to avoid this area. This area was selected as a mitigation area to preserve its large amount of undisturbed, quality habitat. The Corps needs to assure compliance with previous permit conditions as part of considering this new permit action.

  RESPONSE:
  The Via Verde project WIL NOT impact the mitigation area selected for the *Gasoducto del Sur.* At this time PREPA is requesting the DNER to complete the purchase of the identified property, according to the survey completed may house an additional parcel of land that could be utilized as a mitigation site for the Via Verde project as well. PREPA has complied with all actions required on its part by the mitigation plans for the *Gasoducto del Sur.*

Antilles Regulatory Section

Doc # 151

-----Original Message-----
From: LarryEvans@bcpeabody.com [mailto:LarryEvans@bcpeabody.com]
Sent: Saturday, January 29, 2011 8:22 PM
To: Collazo, Osvaldo SAJ; Garcia, Edgar W SAJ
Cc: andrewgoetz@bcpeabody.com; daniel_paganrosa@yahoo.com; E-BAEZ@PREPA.COM; I-SANCHEZ@PREPA.COM; johannawillis@bcpeabody.com; johnhall@bcpeabody.com; KenCaraccia@bcpeabody.com
Subject: Respones to Corps' Dec 22 "issues" letter for SAJ-2010-02881 (IP-EWG)
Importance: High

Gentlemen -

Attached are three files that comprise a response to the letter the Corps sent on Dec 22, 2011 re: PREPA's Via Verde Project. The .pdf file is a letter signed by Mr. Francisco E. Lopes Garcia, the .doc file is an Attachment to the letter with additional information and the .xls file is a spreadsheet with information on delivery of the PN to those individuals whose address was originally undeliverable.

The original documents will be provided to you in hard copy the first part of next week (Feb 1). We are sending this email, with the attached files, to you now so you have this information prior to next Tuesday's meeting. If you wish to distribute the documents email to the Federal Resource agencies, or other participating agencies prior to the meeting, please feel free to do so.

If you have any questions about any of the documents, please do not hesitate to contact us by phone or email. We look forward to meeting with you next Tuesday and appreciate the opportunity it will present to further address any questions you may have.

Best regards.

Lawrence C. Evans
503.781.7930 (cell)
larryevans@bcpeabody.com
iyutka53@aol.com

Classification: UNCLASSIFIED
Caveats: NONE

Via Verde Response Letter Jan 29 2011.pdf Via Verde Appendix A final for response letter Jan 29 2011.doc

20110203-9019 FERC PDF (Unofficial) 02/03/2011

Doc # 152

ORIGINAL

EcoEléctrica

A better environment with natural gas

January 31th, 2011

FILED
SECRETARY OF THE
COMMISSION
2011 FEB -3 P 2:23
FEDERAL ENERGY
REGULATORY COMMISSION

Ms. Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

RE: OPR/DEER/ERC I
EcoElectrica, L.P. LNG Import Terminal and Cogeneration Project
Docket No. CP-95-35-000
Semi Annual LNG Operating Report

Dear Ms. Bose:

In accordance with Article 31 of the Appendix to Docket No. CP-95-35-000, EcoElectrica, L.P. hereby provides its 2nd LNG Semi-Annual Report for 2010. This report covers the period of July 1st to December 31st, 2010.

If you have any questions, please advise.

Sincerely,

Carlos Reyes
Co-President & General Manager- Operations

cc: Chris Zerby
Terry Turpin
Kenneth Frye
Phillip Suter
Oscar Cedeño

EcoEléctrica, L.P. • Adm. Building • Firm Delivery • 641 Road 337 • Peñuelas, PR 00624-9804
Tel: (787) 836-2740 • Fax Finance: (787) 282-6986 • Fax Adm: (787) 836-2250

20110203-0019 FERC PDF (Unofficial) 02/03/2011

EcoEléctrica

A better environment with natural gas

LNG Import Terminal
Peñuelas, Puerto Rico

SEMI-ANNUAL OPERATIONAL REPORT FOR THE PERIOD OF July 1st to December 31 st, 2010

DOCKET NO. CP95-35-000
DATE: January 31st, 2011

Oscar Cedeño, P.E.
LNG Terminal Manager

OPERATIONAL REPORT

1 LNG TERMINAL PERFORMANCE SUMMARY

During the reporting period from July 1st to December 31st, 2010, EcoElectrica maintained an excellent Safety, Environmental & Operational record of compliance. A total of six (6) LNG cargoes were successfully offloaded at the LNG Terminal, representing a total energy value of 16,560,961 MMBtu.

During this reporting period, all LNG cargoes received at EcoElectrica were imported from Atlantic LNG in Trinidad. No significant Perlite contamination has been observed from the LNG Tank. The LNG tank monthly cold spot inspections were performed without any abnormal conditions reported.

During this reporting period the Maritime Security (MARSEC) was maintained Level 1 during all maritime operations.

On July 20th, 2010 EcoEléctrica filed its 1st semi-annual report covering the Terminal operations from January 1st to June 30th, 2010.

During this reporting period a significant amount of work has been performed on the Terminal to complete the Corrosion Control Program. At the end of July, 2010 EcoEléctrica completed a project to replace cable trays at the Import Terminal. The original galvanized steel cables trays were severely corroded and were replaced with new fiberglass trays. The LNG pipelines located on the trestle pipe rack were cleaned, the BOG Blowers & Compressors building and the Unloading Arms paint touch-up work was completed by mid December, 2010.

Late on the evening of Monday August 30th, 2010 the center of Hurricane Earl traveled approximately 100 miles northeast of the island of Puerto Rico. Storm winds affected the north coast of the island from early Monday morning until Tuesday August 31st, 2010. EcoEléctrica activated the Atmospheric Disturbance Hurricane Contingency Plan in coordination with PREPA. No damage, incidents or accidents were experienced at the Terminal due to the atmospheric disturbance.

On Tuesday September 7th, 2010 the Shuttle Regasification Vessel (SRV) GDF Suez Excelerate was received at the EcoElectrica dock. This was the first visit of this vessel at the EcoEléctrica Terminal and also its first time in the Caribbean. The vessel was safely berthed and moored to receive an LNG cargo imported from Atlantic LNG in Trinidad. The fuel transfer was completed without any problems.

On September 21st, 2010 EcoEléctrica met with FERC Staff to introduce a proposed LNG Supply Pipeline Project that it will construct, own and operate to supply LNG to a proposed LNG Truck Loading Facility that will be owned by a non-EcoEléctrica entity. A further meeting was held with DOT PHMSA Staff on November 2nd, 2010 to discuss jurisdictional issues related to the proposed project and also applicability of 49CFR Part 193 to the EcoEléctrica Import Terminal.

During the month of November, 2010 EcoEléctrica received from the Ponce Fire Department (PFD) and the Environmental Quality Board (EQB) signed Memorandums Of Understanding (MOU) in which EcoEléctrica committed to providing additional training and support to these emergency response agencies as part of a Cost Sharing Plan that EcoEléctrica prepared in response to certain conditions included in the FERC April 16, 2009 Order related to EcoEléctrica's LNG Terminal Modification Project.

Additionally, EcoEléctrica updated its Emergency Response Plan and prepared a Cross Reference Matrix to demonstrate compliance with other conditions included in the same FERC Order.

During this reporting period the LNG Boil Off Gas Blowers and Compressors at the LNG Terminal have undergone significant maintenance efforts to maintain the reliability of the equipment in accordance with the plan of action previously implemented per vendor recommendations. No significant malfunction or failures have occurred with this equipment during this reporting period.

1.1 LNG Deliveries Summary:

DATE RECEIVED	SHIP	MMBtu OFFLOADED	Origin
July 6th , 2010	Matthew	2,715,453	Trinidad
August 10th, 2010	Matthew	2,699,033	Trinidad
September 7th,2010	Excelerate	2,688,350	Trinidad
October 10st,2010	Neptune	2,931,527	Trinidad
November 8th,2010	Matthew	2,699,837	Trinidad
December 9th,2010	Matthew	2,555,545	Trinidad

Total energy in cargoes received during the reporting period was for 16,560,961 MMBtu.

2 LNG TERMINAL OPERATING CONDITIONS

2.1 Rollover

No rollover or conditions for possible rollover were observed. The LNG Tank has continually been re-circulated from bottom to top through the pier unloading line.

2.2 Geysering

No pressure change was observed to indicate Geysering.

2.3 Cold Spots

Monitoring of the LNG tank foundation temperatures has not shown any abnormal variation. Monthly visual inspections of the LNG tank exterior surface have not indicated any cold spots in the outer shell.

2.4 LNG Tank Vibration

No vibration detected.

2.5 Cryogenic Piping Vibration

No cryogenic piping vibrations have been observed.

2.6 Storage Tank Settlement

On September 10th, 2010, the EcoElectrica surveying contractor, Victor E. Rivera Associates collected data on the elevations for the 16 equally spaced survey monitoring points around the LNG Tank. The survey data was submitted to URS for geotechnical analysis and report. The URS report performed on October 25th, 2010, indicates that the West LNG tank continues to perform adequately with respect to the settlement specified by the tank designer.

2.7 LNG Terminal Incidents

No LNG incident has occurred at the Terminal during this reporting period.

2.8 Flaring events

No natural gas flaring events had been observed during this reported period. EcoEléctrica contracted CH-IV International to perform a study of the LNG Terminal

Design and Operating Procedures to identify opportunities to reduce the amount of flaring that EcoEléctrica experiences during scheduled Terminal shutdown activities. EcoEléctrica will evaluate and consider recommendations made by CH·IV in its preparations for the next scheduled shutdown activities.

During December, 2010 the Flare stack system was shut down for replacement of the flare tip burner as recommended by the OEM. During the fourteen (14) hours while the flare was out of service the LNG storage tank pressure was maintained by consuming the boil off gases on CT2. The CT1 was also undergoing scheduled maintenance. The internal tip section of the flare stack was disassembled and replaced with a new one of the same kind.

2.9 Non-Scheduled Maintenance or Repair

No non scheduled maintenance or repair activities have occurred at the Terminal during this reporting period.

3 Health and Safety

3.1 No Health & Safety Incidents occurred at the LNG Terminal during this reporting period.

3.2 Fire

No LNG related fires were experienced during the reporting period.

3.3 LNG Release

No LNG releases occurred at the LNG Terminal during this reporting period.

4 Environmental

4.1 The U.S. Coast Guard performed regular inspections on each of the six (6) ships offloaded during this reporting period and no deficiencies were noted.

5 Project Status

5.1 Car Seal Program

In response to the Commissions recommendation included in its 2009 post-certificate inspection report, EcoEléctrica contracted CH·IV International to prepare a car seal program for EcoEléctrica's use. As-Built P&IDs were updated to indicate all car seal valves (CSO / CSC) and a database was prepared that will be used to log and monitor the position of all car seals. During December, 2010 EcoEléctrica started to install car seals in accordance with the P&IDs and the car seal database. A procedure will be developed to administer the car seal system.

5.2 LNG Terminal Expansion

On August 24th, 2010, EcoEléctrica filed a letter with the Commission indicating that, although the destination of the natural gas as referenced in the April 16th, 2009 Order would change to supply natural Gas to the modified units Costa Sur #5 and #6 owned by PREPA, this would not result in any changes to the design of the EcoEléctrica Terminal Modification Project or the natural gas sendout volume approved by FERC in its April 16, 2009 Order.

Detailed Engineering Design of the Terminal Modification Project commenced during the period and EcoEléctrica has been filing monthly status reports and an updated schedule as required by the FERC Order.

On November 9, 2010 EcoEléctrica received an Information Request from FERC related to the Terminal Modification Project. The Information Request requires that EcoEléctrica perform revised flammable vapor dispersion analysis in consideration of recent guidance issued by DOT PHMSA, which analysis must be reviewed by FERC prior to authorizing EcoEléctrica to commence construction. EcoEléctrica has contracted CH·IV International to perform the analysis with its subcontractor Exponent Inc.

On September 12th, 2010, environmental construction permits including soil extraction, solid waste generation, fugitive dust and erosion and sedimentation control were issued by the Permit Management Office, which are required to commence site preparation activities. Construction of the Terminal Modification Project is scheduled to commence the first quarter of 2011.

5.3 Emergency Response Plan and Cost Sharing Plan

During the reporting period EcoEléctrica updated its Emergency Response Plan in response to Conditions included in the FERC April 16, 2009 Order related to the Terminal Modification Project. EcoEléctrica also prepared a cross reference matrix to demonstrate compliance with FERC's September, 2006 Draft Emergency Response Plan preparation guidelines.

EcoEléctrica made presentations to the Ponce Fire Department and the Environmental Quality Board and consulted with these and other local and federal organization to prepare a Cost Sharing Plan in response to Conditions included in the FERC April 16, 2009 Order related to the Terminal Modification Project. Memorandums of Understanding (MOUs) were signed between EcoEléctrica and emergency response organizations, copies of which have been included in the Cost Sharing Plan that will be filed with FERC.

6 Future Projects under Evaluation

6.1 LNG Supply Pipeline Project

EcoEléctrica met with FERC Staff on September 21st, 2010 to introduce a proposed LNG Supply Pipeline Project that will supply LNG to a proposed LNG Truck Loading Facility that will be owned by a non-EcoEléctrica entity. A further meeting was held with DOT PHMSA Staff on November 2nd, 2010 to discuss jurisdictional issues related to the proposed project and also applicability of 49CFR Part 193 to the EcoEléctrica Import Terminal.

EcoEléctrica has contracted CH-IV International to prepare the Front End Engineering Design package for the proposed project and is also preparing environmental resource reports.

6.2 Second LNG Storage Tank

The construction of the second LNG Storage Tank to supply Natural Gas Fuel to the Commonwealth remains one of EcoElectrica's considerations for a future expansion of the LNG Terminal.

7 Contact Person List

POSITION	NAME	TELEPHONE
General Manager - Operations	Carlos Reyes	787-836-2740, ext. 232 787-487-6002 (cellular)
LNG Terminal Manager	Oscar Cedeño	787-928-1009, ext 292 787-487-6042 (cellular) 787-835-0201 (home)
Environmental Manager	Damaris Negron	787-836-2740, ext. 231 787-487-6034 (cellular)
Operations Manager	Adolfo Antompietri	787-836-2740, ext. 236 787-487-6009 (cellular) 787-843-1507 (home)
Health & Safety Manager	Pedro I. Martínez	787-836-2740, ext. 235 787-487-6043 (cellular)
Mechanical Maint. Manager	Wilbert de la Paz	787-836-2740, ext. 291 787-487-6011 (cellular)
Engineering, Electric, I&C Manager	Gaspar Bibiloni	787-836-2740, ext. 224 787-487-6010 (cellular)
Water Treatment Supervisor	José L. Rivera	787-836-2740, ext. 244 787-487-6038 (cellular) 787-264-0632 (home)
Shift Supervisor	José A. Santiago	787-836-2740, ext. 244 787-267-4925 (home)
Shift Supervisor	Alexis Díaz	787-836-2740, ext. 244 787-267-8372 (home)
Shift Supervisor	Davis Rivera	787-836-2740, ext. 244
Shift Supervisor	Luis Cruz	787-836-2740, ext. 244
Shift Supervisor	Angel Rosado	787-836-2740, ext. 244
EcoEléctrica	Main Gate	787-836-2740, ext. 247
LNG Terminal	LNG Control Room	787-836-2740, ext. 289

Doc # 154

Edwin Muniz/R4/FWS/DOI
01/31/2011 12:05 PM

To Felix Lopez/R4/FWS/DOI@FWS, Rafael Gonzalez/R4/FWS/DOI@FWS, Omar Monsegur/R4/FWS/DOI@FWS, Marelisa
cc
bcc
Subject Fw: SAJ-2010-02881 (IP-EWG) Respones to Corps' Dec 22 "issues" letter (UNCLASSIFIED)

History: This message has been forwarded.

Please review ASAP

Edwin E. Muñiz
Field Supervisor
Caribbean Field Office
U.S. Fish and Wildlife Service
(W) 787-851-7297
(C) 787-405-3641
(F) 787-851-7440
edwin_muniz@fws.gov
Visit us at http://www.fws.gov/caribbean/es/

----- Forwarded by Edwin Muniz/R4/FWS/DOI on 01/31/2011 12:04 PM -----

Doc # 153

"Garcia, Edgar W SAJ" <Edgar.W.Garcia@usace.army.mil>
01/31/2011 11:41 AM

To "lisamarie carrubba" <Lisamarie.Carrubba@noaa.gov>, "Carl Soderberg" <Soderberg.carl@epa.gov>, "Carlos A. Rubio" <carubio@prshpo.gobierno.pr>, "Miguel Bonini" <mbonini@prshpo.gobierno.pr>, <jaime.torres@dot.gov>, <carlos.machado@dot.gov>, <Marelisa_Rivera@fws.gov>, <rafael_gonzalez@fws.gov>, <Edwin_Muniz@fws.gov>, <Soto.Jose@epamail.epa.gov>
cc "Castillo, Sindulfo SAJ" <Sindulfo.Castillo@usace.army.mil>, "Garcia, Edgar W SAJ" <Edgar.W.Garcia@usace.army.mil>
Subject FW: SAJ-2010-02881 (IP-EWG) Respones to Corps' Dec 22 "issues" letter (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Ladies and Gentlemen,

The Corps received today the enclosed advanced copy of the PREPA response letter to the Corps Dec 22, 2010 letter.

The Corps is forwarding a copy of subject letter in an effort to clarify certain aspect of the letter during our meeting tomorrow. Also, the proponent suggested that the Federal Agencies involved with this project have a copy of the letter before the meeting.

At this moment we have not received the original letter in our office, nor have we evaluated the supplied information.

Respectfully,

Edgar W. García
Project Manager

Doc # 156

Marelisa Rivera/R4/FWS/DOI
01/31/2011 08:28 PM

To "Daniel Pagan" <daniel_paganrosa@yahoo.com>
cc Edwin Muniz/R4/FWS/DOI@FWS, "Larry Evans" <iyutka53@aol.com>, "LarryEvans" <LarryEvans@bcpeabody.com>, "Sindulfo Castillo"
bcc
Subject Re: Raptor and Nightjar Surveys - Vía Verde, Project

Please print the document and bring it tomorrow. I cannot read the attachment in the blackberry. Thanks

Message sent from Blackberry

Doc # 155

From: Daniel Pagan [daniel_paganrosa@yahoo.com]
Sent: 01/31/2011 04:24 PM PST
To: Marelisa Rivera
Cc: Edwin Muniz; Larry Evans <iyutka53@aol.com>; LarryEvans@bcpeabody.com; sindulfo.castillo@usace.army.mil; osvaldo.collazo@usace.army.mil; IVELISSE SANCHEZ SOULTAIRE <I-SANCHEZ@PREPA.COM>; EDWIN BAEZ <E-BAEZ@PREPA.COM>; Jousef Garcia <yousevgr@yahoo.com>; Edgar W SAJ Garcia <Edgar.W.Garcia@usace.army.mil>; "FRANCISCO E. LOPEZ GARCIA" <FLOPEZ1075@PREPA.COM>
Subject: Re: Raptor and Nightjar Surveys - Vía Verde, Project

Dear Marelisa:

As requested, attached please find a letter from Tetratech covering the concerns presented by the Service recently and related with the Raptors Field Study. Hope that this addresses the concerns included in Mr. Muñiz communication.

Best regard,

Danny Pagan

From: "Sandra_Perez@fws.gov" <Sandra_Perez@fws.gov>
To: daniel_paganrosa@yahoo.com
Cc: Marelisa_Rivera@fws.gov; Edwin_Muniz@fws.gov
Sent: Thu, January 27, 2011 5:23:14 PM
Subject: Raptor and Nightjar Surveys - Vía Verde, Project

Mr. Pagán,

Attached is the letter regarding Raptor and Nightjar Surveys.

(See attached file: Raptor and Nightjar Surveys_Via Verde.pdf)

Cordially,

Doc #157

file Via verde

RG

U.S. Fish & Wildlife Service FEB 7 2011

US ARMY CORPS OF ENGINEERS 2011 FEB -2 A 11:25 ANTILLES REGULATORY SECTION

February 2, 2011

Mr. Edgar W. García
Antilles Regulatory Section
Department of Defense
Jacksonville District Corps of Engineers
Antilles Office
400 Fernandez Juncos Avenue
San Juan, Puerto Rico 00901-3299

Asociación de Legisladores Municipales de Puerto Rico, Inc.

PO Box 1768
Caguas PR
00726-1768

Tel. (787) 703 - 0088
Fax (787) 703 - 2177

www.almpr.com

Dear Mr. García:

The Municipal Legislators Association of Puerto Rico vehemently opposes to the Department of the Army (DA) permit application submitted through Joint Permit Application Number 1059 on September 20, 2010 for the Via Verde Natural Gas Pipeline (NGPL) project. This project consists of a proposal to construct and install a 24-inch diameter steel NGPL for approximately 92 miles, with a construction right of way (ROW) of 150 feet wide that transverses the island of Puerto Rico throughout Arecibo, Palo Seco, Toa Baja and San Juan. This construction will cover about 1,672 acres, crossing 235 rivers and covering 369 acres of jurisdictional wetlands. Our opposition is based on several considerations.

First, the U.S. Fish and Wildlife Service emphasized on important concerns regarding the impact this project will represent to the southern karst region, central mountains, and northern karst region of Puerto Rico. Cutting through these regions will impact some 32 endangered species and numerous streams and wetlands. The project also fails to appropriately consider alternatives to avoid and minimize such impacts, nor provides adequate compensatory mitigation ratio to the fauna and flora.

Furthermore, your Department noted that the referred permit application is "largely deficient, very conceptual, and failed to adequately address the issues raised by the agencies and the general public". There are also concerns regarding an appropriate connection to a natural gas supply system; failure to comply with notifying the public of projects adjoining their properties, depriving the citizens of their right to know; and, more importantly, risking one of the most important resources for humans' survival: water. This project will have an impact on more than 235 rivers and tributaries, and will cut through our karst region, which is largely responsible for the accumulation of precious subterranean water.

Moreover, there are serious considerations regarding the safety and wellbeing of our residents for the proximity this pipeline will have to human life activity. The Puerto Rico Power Authority has approved a ROW or minimum distance of a mere 75 feet from the pipeline to adjoining residences and other centers of commercial and

secular activity. Based on the Federal Pipeline Safety Regulation, the Pipeline and Hazardous Materials Safety Administration of the U.S. Department of Transportation and the Canadian Standards Association, there is a recommended distance of, at least, 660 feet for the development, planning and use of lands where such pipelines exist.

Based on the aforementioned criteria and exercising the power invested by State Law 81 of August 30, 1991, the Municipal Legislators Association of Puerto Rico has approved the Resolution number 2010-2011-01 to vehemently oppose to the construction of the Via Verde project. We are also encouraging each and every municipal legislature to approve local laws to limit the construction of these pipelines to conform with the above mentioned standards. Our responsibility is to ensure the safety and wellbeing of our citizens, thus will continue to oppose to this construction, based on its deficiencies and lack of technical in-depth studies of the referred Joint Permit Application, which may represent a clear and present danger to human life, and a threat to dozens of species and our treasured water resources.

Given the factual information provided and the risks this project may pose to human life, endangered species and national resources, we respectfully request your denial of the Joint Permit Application Number 1059 of September 20, 2010 for the Via Verde Natural Gas Pipeline (NGPL) project.

Asociación de Legisladores Municipales de Puerto Rico, Inc.

PO Box 1768
Caguas PR
00726-1768

Tel. (787) 703 - 0088
Fax (787) 703 - 2177

www.almpr.com

Respectfully,

Reinaldo Castellanos
Acting President

Liliam Maldonado
Executive Director

c: Col. Alfred A. Patano, Jr.
District Commander
Jacksonville District Corps of Engineers

Edwin Muñiz
Field Supervisor
U.S. Fish & Wildlife

Doc #158

Soto.Jose@epamail.epa.gov
02/02/2011 08:39 AM

To edwin_muniz@fws.gov, marelisa_rivera@fws.gov
cc
bcc
Subject Via vVrde

Attached is a letter from Miguel Cordero to our RA. via verde 1-27-2011.pdf

GOVERNMENT OF PUERTO RICO
Puerto Rico Electric Power Authority

Miguel A. Cordero López, P.E.
Executive Director & CEO

m-cordero@prepa.com

January 27, 2011

Sent Via E-Mail: enck.judith@epa.gov

Ms. Judith Enck
Regional Administrator
U.S. Environmental Protection Agency, Region 2
290 Broadway, 27th Floor
New York, NY 10007-1866

Dear Ms. Enck:

RE: Puerto Rico Electric Power Authority
Vía Verde Natural Gas Project
Public Notice Number SAJ-2010-02881 (IP-EWG)

Regarding the Environmental Protection Agency's (EPA) December 21, 2010 letter (EPA letter) expressing concerns about the Joint Permit Application (JPA) for the proposed construction of the Via Verde Project (Project), the Puerto Rico Electric Power Authority (PREPA) states that this project is urgently needed to respond to the energy infrastructure crisis that Puerto Rico faces at this time. The project will allow PREPA to generate electricity by burning the much cleaner and cost effective fuel natural gas instead of fuel oils. Electric power produced in Puerto Rico costs 21 cents per kilowatt/hour compared to an average cost in the United States of only 9 cents, a situation that is directly undermining Puerto Rico's economy. The shift from oil to natural gas-based power that would be enabled by the Via Verde project would allow PREPA to reduce criteria pollutants by a significant 64%, which would greatly improve air quality for Puerto Rico. Also, greenhouse gas emissions will be reduced by up to 30%. The Government of Puerto Rico, accordingly, has identified Via Verde, along with the development of renewable generation, as top priority for the island.

The JPA was filed with the United States Army Corps of Engineers, Antilles Office (USACE) on September 20, 2010. USACE issued a public notice (USACE PN) of the JPA on November 19, 2010. Pursuant to Puerto Rico Law 416 (PR Law 416), dated September 22, 2004, which establishes a NEPA-like environmental evaluation process for the Project, PREPA conducted a detailed environmental study of the Project, including the opportunity for public comment and participation at three public hearings, and drafted an environmental impact statement (EIS). This environmental study culminated in the release of a final version of the EIS (Final EIS) on November 29, 2010, which was approved by the Puerto Rico Environmental Quality Board (EQB) as the Final EIS (DIA-F) for the Project. (See Enclosure, Electronic Copy of Final EIS.)

"We are an equal opportunity employer and do not discriminate on the basis of race, color, gender, age, national or social origin, social status, political ideas or affiliation, religion; for being or perceived to be victim of domestic violence, sexual aggression or harassment; for physical or mental disability or veteran status or for genetic information."

The EPA letter, filed in response to the USACE PN, makes several points concerning the environmental study of the Project. Prior to addressing them individually, though, we note that the EPA letter appears to be based on an evaluation of only the First Draft of the EIS (*Borrador de Declaración de Impacto Ambiental Preliminar*, DIA-P). In fact, the First Draft of the EIS was revised twice in preparing the Final EIS, with PREPA incorporating changes based on and responding to public comments received at three public hearings, via the public press, and through direct input from relevant federal and state government agencies. PREPA assures that the EPA's concerns have been addressed in the Final EIS, which was published on the webpage of the EQB and PREPA, and that the Project does not require any further environmental studies or analyses. Notwithstanding this, PREPA will address each individual comment included in the EPA letter.

A Final EIS already has been Completed for the Project

The EPA letter states that an environmental impact statement (EIS) rather than an environmental assessment (EA), needs to be prepared for this Project, in order to properly evaluate its environmental impacts. PREPA strongly disagrees with this statement, since it has already conducted a highly detailed and professional NEPA-like environmental study, pursuant to PR Law 416, and prepared a comprehensive EIS for the Project, not an EA. This environmental impact study process has been used in Puerto Rico consistently for the last forty years by all state and federal agencies evaluating projects requiring governmental approval, as codified by federal and state agencies. The evaluation performed by the federal agencies has historically been carried out under the *Federal and Commonwealth Joint Permit Application for Water Resource Alterations in Waters, Including Wetlands, of Puerto Rico* (JPA).

In conducting the environmental evaluation for both, the EIS, pursuant to PR Law 416, and the JPA, pursuant to Clean Water Act, PREPA carefully evaluated environmental impacts from the Project and determined the nature and level of mitigation efforts required. Recognized professionals were contracted to perform the required scientific studies and surveys. Also, PREPA listened, analyzed and considered all comments received through state and local administrative and judicial processes, and via the public press. The resulting analyses and determinations were incorporated into both, the Final EIS and the Project design and specifications. Also, pursuant to the Clean Water Act, PREPA will address all new comments received through the USACE PN prior to USACE's final evaluation of the JPA.

In particular, the Final EIS includes a Socioeconomic Study (Chapter 7), undertaken pursuant to the EPA Region 2, Interim Environmental Justice Policy and the President's Executive Order Number 12898, that is intended to satisfy the same need as is met by the Environmental Justice Analysis required under NEPA, which is consistent with the position of EPA Region 2 to use a socioeconomic analysis in lieu of the Environmental Justice Analysis for ethnically homogeneous populations like those in Puerto Rico.[1]

[1] United States EPA Region 2 Interim Policy on Identifying EJ Areas, December, 2000

We note that USACE determined, in page 5 of the USACE PN, that an EIS under NEPA is not necessary for the Project. We agree. We believe that the Final EIS completed pursuant to PR Law 416 (which addresses the specific concerns expressed in the EPA letter) definitively obviates the need for conducting a new EIS under NEPA, as this largely would duplicate the work already completed and unnecessarily delay the benefits of this important Project.

Alternatives to the Project

The EPA letter states that a more thorough alternatives analysis, including the use of other fuel sources and the construction of an alternative terminal near one of the north coast power plants (with the installation of a shorter length pipeline between Arecibo and Toa Baja), should be considered for the JPA. We understand that 40 CFR 1502.14 provides that an EIS should examine all reasonable alternatives to the Project, with reasonable alternatives including those that are practical or feasible from the technical and economic standpoint and using common sense.[2] We conducted just this type of evaluation of alternatives, as described in Chapter 4 of the Final EIS, and also included in the JPA.

With regard to our Final EIS Chapter 4 alternatives analysis, we note that PREPA cannot reasonably consider the use of other fuels for electric generation, such as coal or nuclear fuels. The use of coal for PREPA's large generating units was not considered due to the limitations imposed by laws already enacted in Puerto Rico, like PR Law 82 of July 19, 2010, among others, and to EPA's new Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, of November, 2010, which regulate carbon dioxide (CO_2) and other greenhouse gas emissions. Even using the newest clean technology for burning coal, the amount of CO_2 emissions is around 30% lower when natural gas is burned instead of coal. CO_2 sequestering technology for coal-burning power plants is far from fully developed.

Regarding nuclear fuels, it must be noted that harvesting energy from this type of fuel is expressly excluded by the Puerto Rico Energy Policy established by the Governor's Executive Order OE-1993-57. It must also be noted that the alternatives analysis does consider the use of renewable energy sources to meet PREPA's generating needs, as was requested during the public comment period, and that Puerto Rico's substantial plans to develop renewable generation is discussed in detail in Chapter 4 of the Final EIS, Section 4.4, which was not included in the Preliminary EIS.

Horizontal Drilling in Karst Areas

EPA expresses concerns regarding the use of Horizontal Directional Drilling (HDD) in karst areas, due to past experiences that are not specified. EPA also requests that PREPA establishes mechanisms to monitor drilling operations, so that any escape of drilling mud is detected immediately, as well as to identify steps to be taken to minimize potential impacts of an escape.

---

[2] Council on Environmental Quality, http://ceq.hss.doe.gov/nepa/regs/40/1-10.HTM#2, as recovered from the Internet on December 22, 2010.

It must be clarified that the utilization of the HDD technology as described in the *DIA - F* will be mostly geared to cover construction of the Vía Verde Pipeline on areas associated with river and highway crossings. Special precautions and care must be taken to ensure that contractors adhere to prudent practices to avoid the accidental release of bentonite mud within the above-mentioned areas.

It is recognized that contractors must take due care and adhere to prudent practices to avoid the accidental release of bentonite mud. The North American Society for Trenchless Technology (NASTT) provides guidance for the analysis and design of tooling essential in reducing the incidence of hydro fractures (frac-outs) in karst environments. Hydro fracture or "frac outs" result when the fluid pressures built up in the borehole exceed the overburden effect of the surround soil medium. Several drilling factors and procedures will be monitored to preclude the development of hydro fractures. Eight significant factors will be evaluated at each HDD. These include: annular space; back ream rate; borehole pressure; depth of cover; reamer type; reamer diameter; soil composition; and soil density.

To ensure that the HDD operations to be conducted in association with the Vía Verde pipeline will comply with all regulatory permits and standards, proper preconstruction geotechnical investigations will be conducted on the *in situ* soil formations along the proposed installation route. Tooling used in HDD installations will be matched to the soil medium to be encountered. The Frac-Out Plan (Draft included in the approved FEIS) will be updated to stipulate lined pits and all environmental details depicted for the sedimentation ponds.

In summary, the HDD operation to be utilized on the Vía Verde pipeline will include proper preconstruction geotechnical investigations, limit drill fluid application rates, utilize an appropriate type reamer to reduce the extent and magnitude of the drilling fluid dispersed, carefully monitor drilling mud pressures increased until the midpoint of the installation is attained, and insure proper containment, recycling, and/or reuse of drilling muds. All HDD operations for the Vía Verde pipeline will be conducted in accordance with the guidelines and recommendations of the NASTT for karst environments. Regardless, PREPA is willing to include any specific recommendations provided by the USCOE aimed to improve the Frac-Out Plan included in the FEIS. Condition monitor

Construction associated with the Vía Verde pipeline within the Manatí karst area will be undertaken in accordance with the procedures established in the FEIS Chapter #6 pages 6-18. The construction approach within this area will include the utilization of small construction equipment, as well as pulling the pipeline into the required open trenches. Together with the above PREPA will either avoid entirely the "Mogotes" hills located within said area, or will use the bore technique to go under nice them. Vía Verde pipeline alignment will be adjusted as required to prevent any impact to the karst area hill potential habitat for plants listed in the endangered species list.

The approaches mentioned above address all concerns presented by the Fish and Wildlife Service (FWS), as well as other federal regulatory agencies.

Compensation and Mitigation Offsets

EPA indicates concerns regarding the adequacy of the compensation to offset any impacts to jurisdictional areas; the need for specific plans to address mitigation in advance; and criteria identified in the USACE PN for "determining whether mitigation sites will be successful." PREPA addressed each of these issues in the Final EIS, where it committed to a mitigation ratio of 3:1 regarding forested and wetland areas. This ratio is greater than the one that would be the minimum accepted by EPA (1:1). These commitments are included on pages 6-2, 6-6, and 6-18 of the Final EIS. This document also considers the compensation to the offset of protected habitats that are part of a Work Plan that was jointly developed and agreed upon by USACE, PREPA and the FWS. PREPA is developing the required mitigation plans and will submit them in the near future for the USACE review and needed action.

Endangered Species Impact

The EPA letter states that a formal Endangered Species Act consultation has been required. However, as of the date of this letter, PREPA has not been notified of any such determination, which we understand falls within the jurisdiction of USACE. Based on the information gathered by field surveyors, including those from FWS, such action is not warranted. Moreover, comments on the Project by the Puerto Rico Department of Natural and Environmental Resources (DNER) indicate that they do not believe that the Project would pose a significant impact to resources covered by the Endangered Species Act (ESA). Thus, to our knowledge, USACE has not modified its original determination to use an informal consultation process under ESA.

In closing, PREPA reemphasizes the seminal importance of the Via Verde Project to Puerto Rico, both environmentally and economically. Once fully implemented, this project will allow PREPA to eliminate over 129 MM pounds of regulated pollutant emissions into the environment, or 64% of our current total and up to 30% of CO_2 emissions. In addition, transitioning away from oil-fired generation will free our people and businesses from being hostage to the international price of oil, which rise has rendered our manufacturing and other business sectors virtually uncompetitive, contributed to the devastating 15% unemployment rate currently being suffered by our workforce, and been punishing our families, half of whom live below the federal poverty line, with energy costs so high that many are unable to afford basic electric service.

PREPA is committed to continue to scrupulously examine the environmental impact of the Project, as shown by our public study process and the release of our Final EIS. PREPA respectfully requests to meet with you and your staff to discuss the concerns expressed in the EPA letter at the soonest possible time, in order that you can be assured of the quality and completeness of our environmental examination.

Cordially,

Enclosure

Doc #163

Edwin Muniz/R4/FWS/DOI
02/02/2011 12:37 PM

To Dave Flemming/R4/FWS/DOI
cc
bcc
Subject PREPA Letter

History: This message has been forwarded.

Via Verde Response Letter Jan 29 2011.pdf Via Verde Appendix A final for response letter Jan 29 2011.doc

Edwin E. Muñiz
Field Supervisor
Caribbean Field Office
U.S. Fish and Wildlife Service
(W) 787-851-7297
(C) 787-405-3641
(F) 787-851-7440
edwin_muniz@fws.gov
Visit us at http://www.fws.gov/caribbean/es/

Doc # 164

Patrick Leonard/R4/FWS/DOI
02/02/2011 01:32 PM

To Dave Flemming/R4/FWS/DOI@FWS
cc edwin_muniz@fws.gov, Marelisa Rivera/R4/FWS/DOI@FWS
bcc
Subject Re: Fw: Draft Briefing paper Via Verde

You mean 2 pages . . . but Edwin's phone number goes on to page 3 (the way my computer formats it). I might delete "Puerto Rico" after "Caribbean Field Office".

Doc #162

Dave Flemming/R4/FWS/DOI

02/02/2011 12:26 PM

To Patrick Leonard/R4/FWS/DOI@FWS
cc edwin_muniz@fws.gov, Marelisa Rivera/R4/FWS/DOI@FWS
Subject Re: Fw: Draft Briefing paper Via Verde Link

Overall, it is fine, I too out some spaces to fit on 1 page and changed one word.

David P. Flemming
Ecological Services Supervisor
U.S. Fish and Wildlife Service
1875 Century Boulevard
Atlanta, GA 30345
Phone: (404) 679- 7096
(404)661-2429 (C)
Fax: (404) 679- 7081
e-mail: dave_flemming@fws.gov

Doc # 161

Patrick Leonard/R4/FWS/DOI

02/02/2011 12:14 PM

To Dave Flemming/R4/FWS/DOI@FWS
cc edwin_muniz@fws.gov, Marelisa Rivera/R4/FWS/DOI@FWS
Subject Re: Fw: Draft Briefing paper Via Verde Link

I did a little editing/streamlining--let me know if I screwed it up. Also, mooring buoys? Thanks,

p.l.

Dave Flemming/R4/FWS/DOI

To "Patrick Leonard" <patrick_leonard@fws.gov>
cc edwin_muniz@fws.gov, Marelisa Rivera/R4/FWS/DOI@FWS

Doc #160

02/02/2011 10:43 AM

Subject Fw: Draft Briefing paper Via Verde

Patrick
I have reviewed and made a few edits in the attached draft.
Dave

David P. Flemming
Ecological Services Supervisor
U.S. Fish and Wildlife Service
1875 Century Boulevard
Atlanta, GA 30345
Phone: (404) 679- 7096
(404)661-2429 (C)
Fax: (404) 679- 7081
e-mail: dave_flemming@fws.gov

Doc # 159

----- Forwarded by Dave Flemming/R4/FWS/DOI on 02/02/2011 10:42 AM -----

Edwin Muniz/R4/FWS/DOI

To Dave Flemming/R4/FWS/DOI, Patrick Leonard/R4/FWS/DOI@FWS
cc

02/02/2011 10:05 AM

Subject Draft Briefing paper Via Verde

Attached is a draft Briefing paper for the gas pipeline project. It provides an update of the status basically y from yesterday's meeting.

Also, yesterday at the meeting Danny Pagan (former Secretary of PR DNER) consultant for PREPA on this project indicated to us that he will be in Atlanta in the meeting tomorrow.

He stated to us that he wanted to be transparent with us and what is going to be said at the meeting and said he would provide us with information on. However we have not received anything yet. If I receive I will forward. I would not be surprised if some of their comments or concerns are of a personal nature to ES staff in PR.

At the meeting yesterday, after the applicant left, the other Federal agencies expressed that PR Government is putting pressure on all the way to Washington with regard to this project.

Edwin E. Muñiz
Field Supervisor
Caribbean Field Office
U.S. Fish and Wildlife Service
(W) 787-851-7297

(C) 787-405-3641
(F) 787-851-7440
edwin_muniz@fws.gov
Visit us at http://www.fws.gov/caribbean/es/ [attachment "20110202_Briefing Paper Update Via Verde Gas Pipeline.docx" deleted by Patrick Leonard/R4/FWS/DOI]

20110202_Briefing Paper Update Via Verde Gas Pipeline_PLdraft.docx

Doc #165

BRIEFING FOR REGIONAL DIRECTOR

PREPARED BY: Field Supervisor, Caribbean Ecological Services Field Office, Boquerón PR

TO: Regional Director, Southeast Region, Atlanta, GA

DATE: February 2, 2011

SUBJECT: Update on the Proposed Via Verde Gas Pipeline (Puerto Rico)

PURPOSE OF BRIEFING DOCUMENT: Provide an update on pending issues associated with the proposed Via Verde Gas Pipeline.

BACKGROUND

- The Puerto Rico Electric Power Authority (PREPA) is proposing a natural gas pipeline from the EcoEléctrica Liquid Natural Gas (LNG) facility in Peñuelas on the south coast of Puerto Rico to its power plants on the north coast (see map attached).
- The 92-mile-long pipeline would cross 235 streams and wetlands. A 150-foot-wide right-of-way makes the total project footprint about 1,672 acres, including 369 acres of jurisdictional wetlands, making this project one of the largest infrastructure projects proposed in Puerto Rico in decades.
- The Corps issued a Public Notice (PN) for a proposed permit on 11/19/2010. The Corps indicated in the PN that they will initiate formal consultation under Section 7.
- We provided preliminary comments to the Corps in October 2010, and responded to the Corps' PN by letter dated 12/15/2010, which included our determination that the project may have substantial and unacceptable impacts to ARNIs (a 3(a) letter under our permit elevation MOA with the Corps), and concurred with the Corps' determination that the project may affect 32 listed species. The RO sent the 3b letter under our permit elevation MOA on January 13, 2011.
- In December 22, 2010, the Corps sent PREPA a letter summarizing the comments they received during the comment period. They asked the applicant to address the concerns raised during the comment period.

STATUS

- On January 28, 2011, PREPA provided to the Corps a response to their December 22, 2010 letter.
- On February 1, 2011, the Corps conducted a meeting with the applicant and resource agencies to discuss the technical status of the project in relation to each agency area of jurisdiction.
- PREPA believes that all the concerns identified by the Service and other Federal agencies were appropriately addressed in a local EIS they prepared for the PR Environmental Quality Board. However, the agencies do not agree. For example, the Service raised a number of concerns about biological and aquatic resources; rather than address these concerns directly, the local EIS indicates they will be addressed in the permit application

with the Corps. There are additional discrepancies between what PREPA requested in the permit application, what they stated in their local EIS, and correspondence provided by PREPA or their consultants.

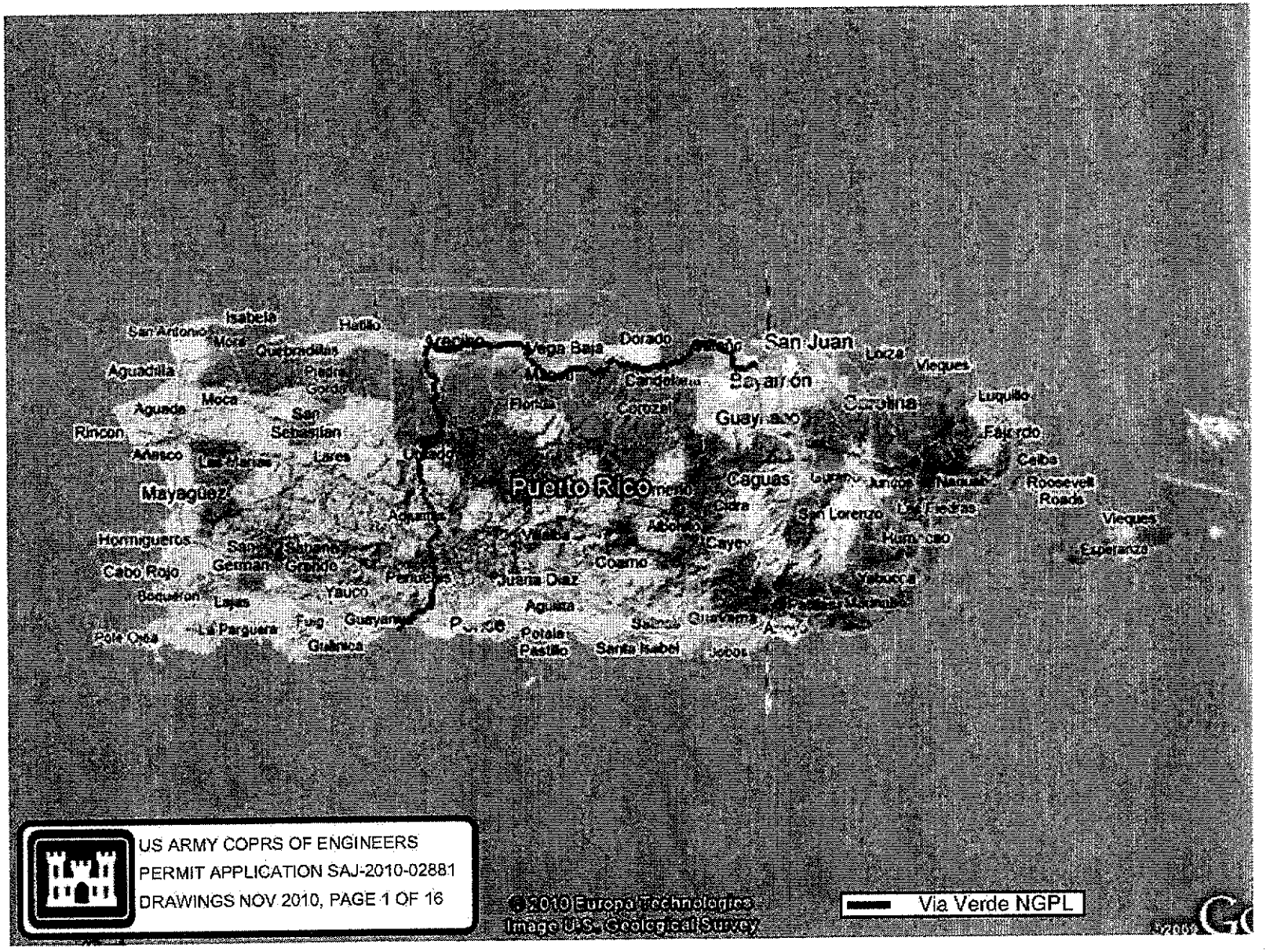
- The Corps has only conducted a preliminary review of the PREPA letter of January 28; however, they expressed concern that the document is not responsive to their letter, especially in the following ways:
  - The applicant needs to satisfy the information requirements of the Corps;
  - The information available so far was not sufficient to conduct a NEPA review (the Corps has not yet determined if a Federal EIS will be required);
  - Alternatives to minimize impacts, including alternatives discussed in the meeting, need to be considered.
  - The right-of-way for the proposed project (which will determine the overall impact of the project) is still not clear.
  - The source of a gas supply for the project needs to be addressed.
  - Mitigation still needs to be developed and incorporated in the project.
- A portion of the proposed route is located within a right-of-way of two Federal Highway Administration (FHWA) projects (PR-10 and PR-22). FHWA has a prohibition of placing gas pipelines within their right of way. PREPA has requested FHWA to make a change to their agreement. FHWA indicated that they would also need to do an EA or EIS to implement this change.
- PREPA is conducting surveys to determine presence or absence of protected species along the proposed route. The Service has recommended that surveys not be limited to pipeline route but should also include access road and staging areas.
- The Service asked PREPA to consider above ground pipeline installation for areas of concern for habitat and species. They indicated they considered that but discarded the alternative due to safety concerns.
- Sections 106 of the Historic Preservation Act requirements have not been completed.

OTHER ISSUES

- The Field Office has received several requests for documents under FOIA, some of which are still being processed. We understand that other agencies are receiving requests as well.
- The proposed project is receiving aggressive media coverage. Response letters provided by the Service and other involved Federal agencies have been published in local news papers.
- The applicant's consultants have expressed their concerns that our office has been the source of some of the information the media has received. We informed them of our procedures for releasing information to FOIA requests. We recently contacted the Solicitor on this matter and continue to work with them.
- Due to the visibility of the project and to avoid unauthorized releases of information, we have placed additional controls (who has access and where it is filed) ~~to~~on the administrative record and have advised staff of the office procedures for providing information to the public.

Contact: Edwin E. Muñiz, Field Supervisor, Caribbean ES Field Office, Puerto Rico,

787 - 851-7297 x 204



US ARMY COPRS OF ENGINEERS
PERMIT APPLICATION SAJ-2010-02881
DRAWINGS NOV 2010, PAGE 1 OF 16

Doc # 166

Puerto Rico Electric Power Authority

Vía Verde Pipeline Project
SAJ-2010-02881 (IP-EWG)

Government of Puerto Rico Environmental Team

February 3, 2011

Project´s Objective

- Vía Verde considers the construction of 92 miles, 24" diameter pipeline, for transferring natural gas in its gaseous state, from the EcoEléctrica facilities on Peñuelas, to PREPA´s generating plants in operation on the Puerto Rico north coast:
  - Cambalache - Arecibo
  - Palo Seco – Toa Baja
  - San Juan – San Juan
- The units at these plants will be converted to dual fuel so that they can use either natural gas, Bunker C / Diesel, or a mixture of both.
- This project is a step forward on PREPA´s promise to provide Puerto Rico with the most efficient, environmentally clean and affordable electric energy service.

Project´s Objective

- Puerto Rico Electric Power Authority generates around 99% of its power utilizing petroleum liquid fuels, that release a significant amount of gases into the environment,
- Puerto Rico's overall economy is dramatically affected by sudden increases in fuel oil costs, such as the one being faced in recent days,
- At this time Power cost in Puerto Rico is in the range of 21.69 cents / Kwh Vs. less than 10.00 cents / Kwh in the USA,
- Via Verde project will reduce air emissions in over 129 MM of pounds / year.

PROJECT STATUS

- Pipeline corridor has been adjusted to avoid impacts to:
  - Historical and Cultural Resource Sites
  - Habitat Concerns (wetlands, rivers, mangroves and treated and endangered species habitats)
  - Maintain a 150 feet ROW from any structure within the selected alignment for Vía Verde
- PREPA is committed and continues its effort to refine the project alignment to address any public and federal agencies issues.

PROJECT STATUS

- Response Letter sent to USACE on January 29,2011
  - Addressed comments included in USACE December 22, 2010 letter
  - Addressed comments as well as request of Supplemental Biological Studies from the F&WS, (Partial)
  - Committed with all federal agencies to undertake all efforts possible to address, in a timely fashion, all technical concerns required under the Act.

Supplemental Information Delivery schedule

Tasks in Progress before F&WS	Expected Completion Date
Plant Protocol and Potential Habitat Field Work	2/28/2011
Raptors Potential Habitat Field Study Report	2/10/ 2011
PR Nightjar Potential Habitat Protocol discussion	2/07/2011
PR Nightjar Potential Habitat Field Work & Report	2/28/2011
PR Boa Potential Habitat Report	2/22/ 2011
Crested Toad Potential Habitat Field Report	2/22/2011
Coqui Llanero (Not a federal listed specie)	

Preliminary Findings

- Plant Protocol and Potential Habitat Field Work:
- The initial survey area proposed by **USFWS treated the entire southern section of Peñuelas as one piece**. The initial reconnaissance of this area found that only the southern third, which happens to be the older section, has a strong possibility to contain endangered plants. During the preliminary field visit with the USFWS botanist, an exceedingly rare vine (not currently listed on the federal register) was observed in this southern section of this area. The middle section was extensively disturbed and did not warrant further field surveys. The northern section is composed of younger vegetative associations (tree diameter much smaller, with fewer older trees) of woods with a different composition of plants and in the opinion of Dr. Axelrod is unlikely to have the listed endangered species, but is probably worth a closer look.
- **The Adjuntas section has been disturbed** in the recent past (some old and abandoned houses) and is honeycombed with jeep trails. Due to these man induced impacts the vegetation is not representative of areas in which the target species of endangered plants occur elsewhere in the region.

Preliminary Findings

- **The limestone hill region of Manatí is thoroughly disturbed,** including an old dump in the lower slopes. The lower elevations in this area do not warrant intensive surveys. However, the upper slopes do contain *Ottoschulziarhodoxylon (a target species and listed on the federal register).* Three different individuals of *Ottoshulziawere were identified in this area by Dr. Axelrod and it is* suspected that more are present. One of the individuals is near the current alignment and the other two are far to the north. The last two were located during an inspection for a potential access road. ***Changes to the pipeline right-of-way alignment and /or drilling through hills in this area may be possible***.

Preliminary Findings

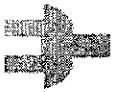
- Raptors Potential Habitat Field Study Report:

" During the Raptors Field Survey period ***NO COURSTHIP DISPLAY, which indicates nesting activity and allow researchers to identify areas for active nest searches, were observed***".

Request before the Fish & Wildlife Service

- Assign the highest level of priority within the F&WS permit evaluation process,
- Since Via Verde is a important project for the Government of Puerto Rico, we are counting with the support of the F&WS in allocating all needed human resources to achieve our common goals, aimed to develop this project in compliance with the Endangered Species Act (ESA) and in a timely fashion,
- There is a need to be prudent in handling of official information presented to the local press since in two occasions PREPA have being forced to address public issues without timely receiving a copy of the F&WS communications required as project proponents.

Vía Verde



30 de agosto de 2010

Doc # 167

Omar Monsegur/R4/FWS/DOI

02/07/2011 12:12 PM

To daniel_paganrosa@yahoo.com, Edgar.W.Garcia@usace.army.mil

cc Marelisa Rivera/R4/FWS/DOI@FWS, Edwin Muniz/R4/FWS/DOI@FWS, Rafael Gonzalez/R4/FWS/DOI@FWS

bcc

Subject Comments for the threatened and endangered vegetation assessment protocol for Via Verde.

Dear Daniel,

Attached please find Service recommendations for the protocol for the search of threatened and endangered plants along the interest areas.

Omar A. Monsegur Rivera
Fish & Wildlife Biologist - Botanist
Ecological Service Field Office, Boquerón Puerto Rico
Phone (787) 851-7297 ext 217

20110207Threatened and endangered vegetation assessments protocol for Via Verde.pdf

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Boqueron Field Office
Carr. 301, KM 5.1, Bo. Corozo
P.O. Box 491
Boqueron, PR 00622

MEMORANDUM

From: Omar A. Monsegur Rivera, Fish and Wildlife Biologist, USFWS, Caribbean Field Office

To: Via Verde File

Date: 02/07/2011

Subject: Threatened and endangered vegetation assessments protocol for Via Verde.

On January 31, 2011 PREPA submitted a protocol for the search of threatened and endangered plant species along the propose route of the Via Verde project. The following recommendations are provided as assistance to the Applicant to better assess possible presence of listed plants along the proposed route.

1. The Service agrees with the proposed approach of parallel transects to survey target areas for threatened and endangered plant species. However, the Service recommends that the protocol include four parallel transects instead of three, and that the personnel is evenly spaced to appropriately cover the width of the Right of way. Based on our site visits and habitat evaluation, the forest at target areas shows dense and close vegetation that will require four people to appropriately survey for rare species. This is highlighted due to the fact that some of the species are difficult to identify and are easily confused with common species. The use of four people will allow each member to survey a track of 12.5 meters wide along the 150 feet ROW. In areas where the ROW is expected to be wider than 150 feet, we recommend additional survey efforts to cover appropriately the entire ROW.

2. The protocol does not clarify the length of the parallel transects or if they are designed to cover the entire target area. Do to the patchy distribution of rare and

endangered plants the Service recommends that the whole length of the interest area be surveyed.

3. The Service considers PREPA use of experts from the academia as an appropriate approach. We also acknowledge the expertise of Dr. Frank Axelrod on the rare and endangered plants of Puerto Rico. We recommend that another local expert with extensive knowledge on endangered and rare species be included as part of the surveys. This will increase the chance of finding rare plants and will assist graduate students to identify the plant material.

4. In order to appropriately evaluate the effectiveness of a protocol for the search of endangered species, it is important to know the complete scope of a project. In a meeting held on December 8, 2010 PREPA stated that the mogotes from Manati to Vega Alta will not be impacted. However, PREPA have failed to provide documentation that clearly indicates if the mogotes will be impacted due to the use of horizontal directional drilling, open trenching, access road and staging areas. The protocol provided on January 31, 2011 indicates that individuals of palo de rosa (*Ottoschulzia rhodoxylon*) have been located along a potential access road and along the alignment. The presence of individuals of palo de rosa at several sites within Manati highlights the quality of the habitat and the possible presence of additional endangered plant species. Since there is a potential of impacts to mogotes and that the presence of endangered species has been confirmed, the Service urges the applicant to consider the whole mogote area, including the base of the mogote along the alignment as target areas to be surveyed as well as the access roads and staging areas (figure 1).

5. During our sites visits to the Peñuelas area it was noted that some of the habitat assessment was conducted outside the center line of the project. All parallel transects should be market using a GPS and provided as a GIS layer to be included as part of the final report. This GIS layer should be overlaid over the ROW of the project. This will allow us to evaluate if the surveyed sites are within the area to be impacted, and if further evaluations are required. Plant experts and surveyors should be provided with the latest pipeline alignment so they can evaluate the precise area.

6. The Service continues recommending surveying the Adjuntas area (figure 2). The area of Pico Cerrote harbors a remnant of old forest with some rocky outcrops that can remain as a depository of rare and endangered species. Available information indicates that this area have remained forested for a long period. Ferns dependence on spores for dispersion contributes to the possibility that this area is occupied by our interest species. Despite that the only known population of nogal (*Juglans jamaicensis*) is located several kilometers west of Pico Cerrote, the

former land use of this area may let to the possibility that Pico Cerrote is a depository of the species. In fact, there is an historical collection of nogal by the german collector Paul Sintenis at this area. Due to the extremely rarity of our interest species in Adjuntas, the Service strongly recommend surveying those areas to avoid impacts to the species.

7. The area to be surveyed on Peñuelas does not correspond to the area identified by the Service as a target area. Depicted areas only show a small fraction of the area that the Service recommends to be extensively surveyed. Attached, please find a map that illustrates the areas that require to be surveyed (figure 3).

8. The Service still interested in conducting site visits to evaluate the habitat for endangered species and provide technical assistance to PREPA. The Service recommends that PREPA provide a detailed schedule to allow Service staff to joint Frank Axelrod in the field.

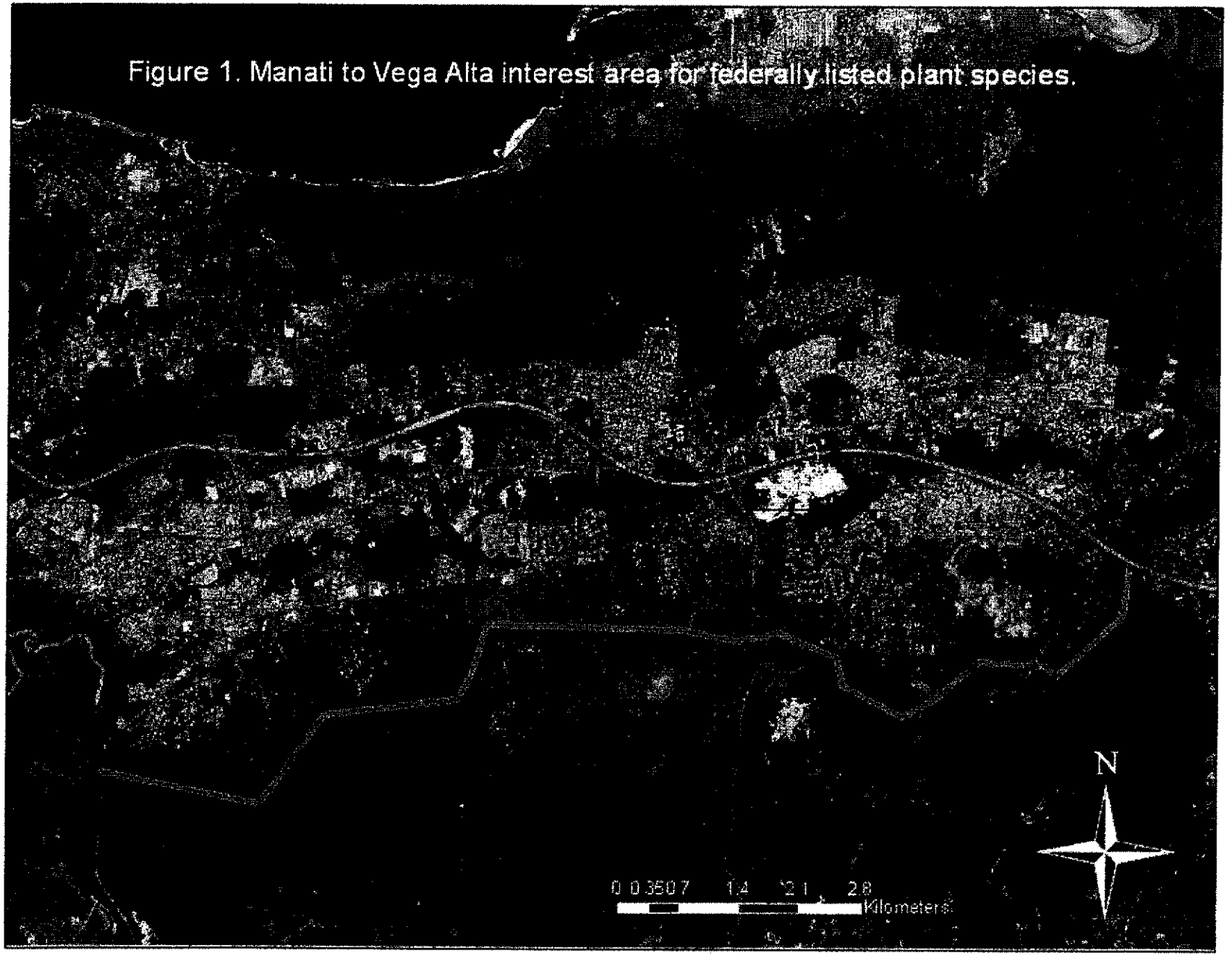


Figure 1. Manati to Vega Alta interest area for federally listed plant species.

Figure 2. Adjuntas interest area for federally listed plant species.

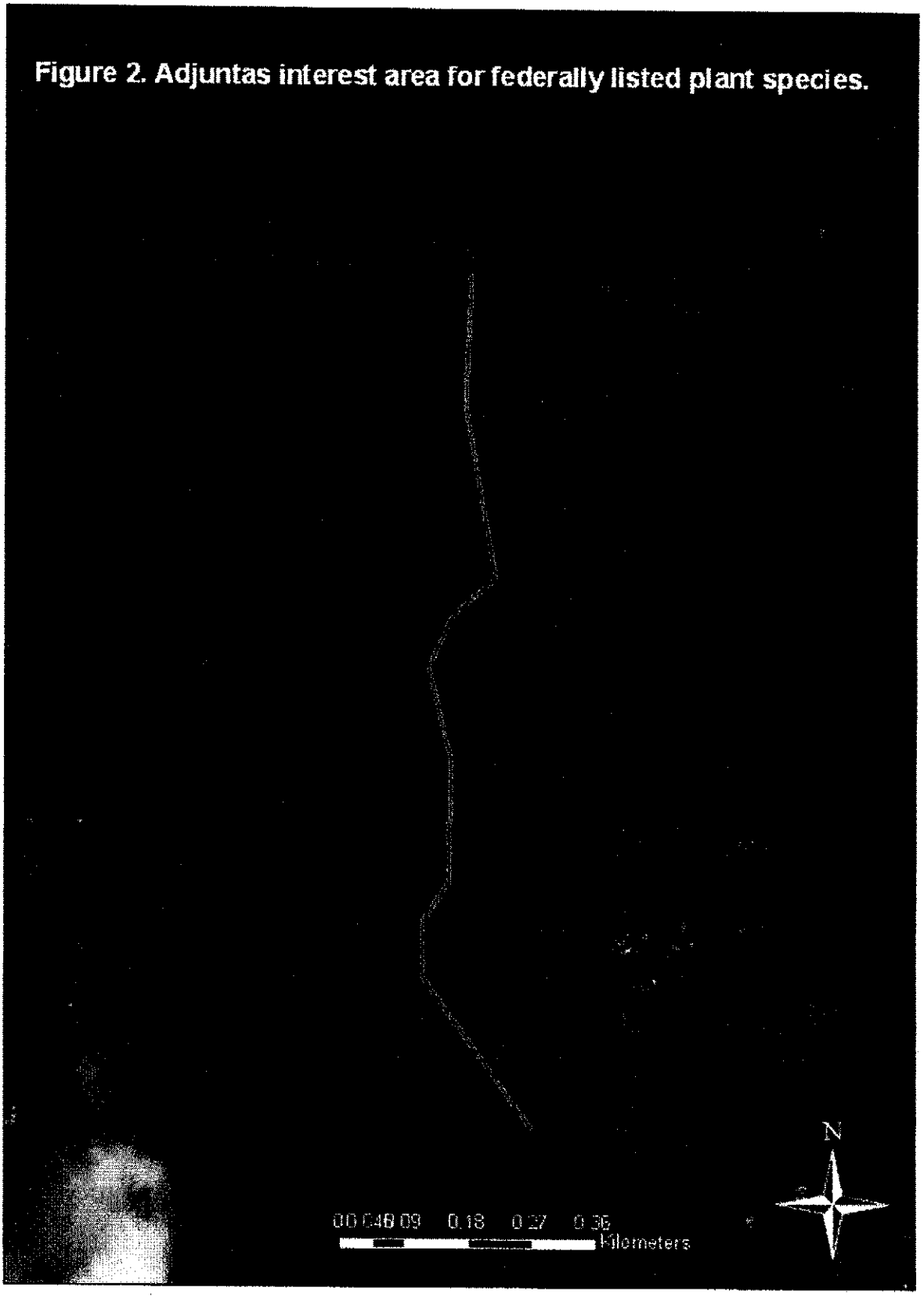
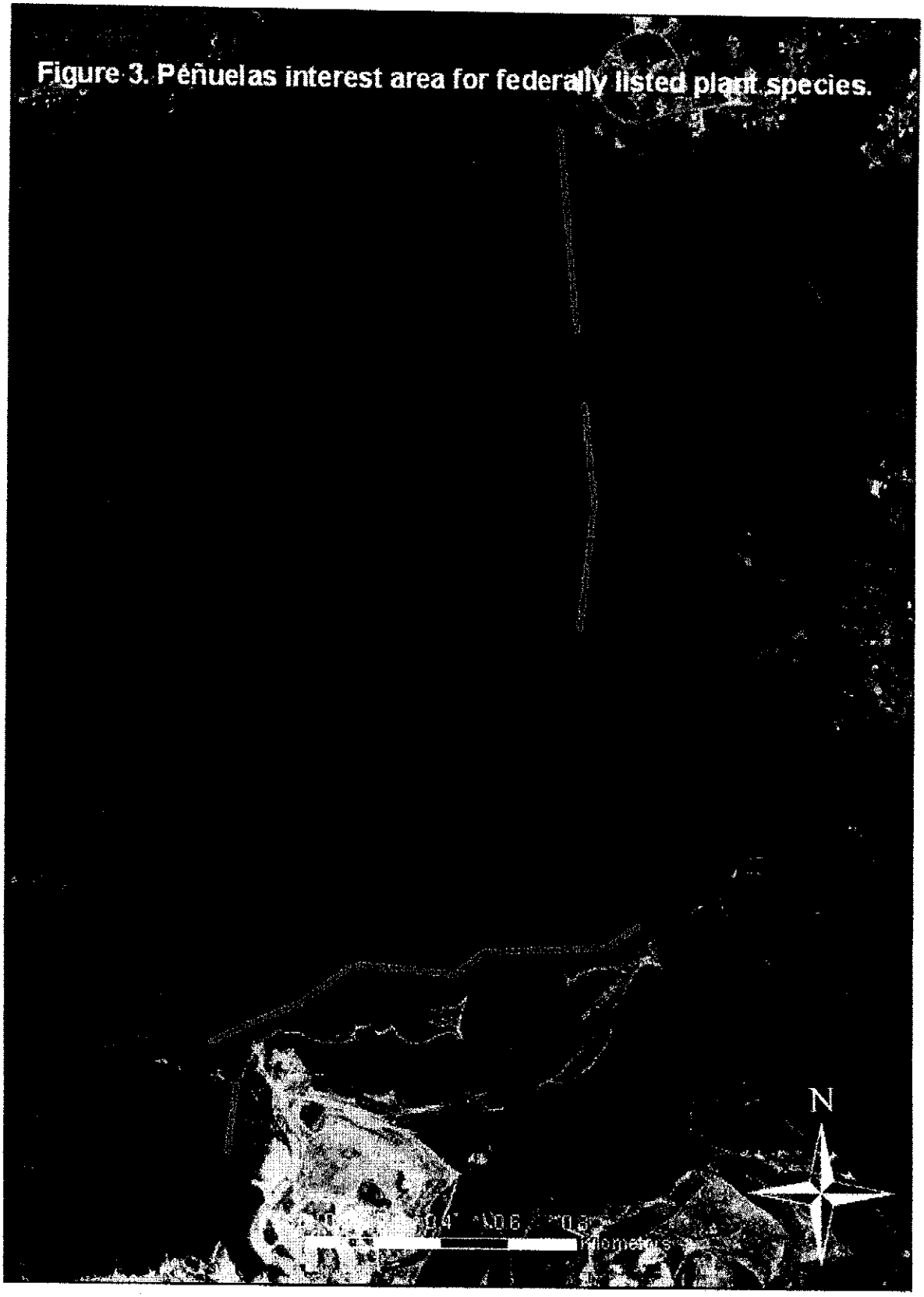


Figure 3. Péñuelas interest area for federally listed plant species.



Doc # 168

"Garcia, Edgar W SAJ" <Edgar.W.Garcia@usace.army.mil>
02/08/2011 07:17 AM

To <larryevans@bcpeabody.com>
cc <Marelisa_Rivera@fws.gov>, <Edwin_Muniz@fws.gov>, <Rafael_Gonzalez@fws.gov>, <Omar_Monsegur@fws.gov>,
bcc
Subject RE: Comments for the threatened and endangered vegetation assessment protocol for Via Verde. (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Larry,

Enclosed find the requested document. A copy was emailed to Mr. D. Pagan, and I provided him with a copy in person.

Respectfully,

Edgar W. García
Project Manager
Antilles Regulatory Section

-----Original Message-----
From: Omar_Monsegur@fws.gov [mailto:Omar_Monsegur@fws.gov]
Sent: Monday, February 07, 2011 12:13 PM
To: daniel_paganrosa@yahoo.com; Garcia, Edgar W SAJ
Cc: Marelisa_Rivera@fws.gov; Edwin_Muniz@fws.gov; Rafael_Gonzalez@fws.gov
Subject: Comments for the threatened and endangered vegetation assessment protocol for Via Verde.

Dear Daniel,

Attached please find Service recommendations for the protocol for the search of threatened and endangered plants along the interest areas.

Omar A. Monsegur Rivera
Fish & Wildlife Biologist - Botanist
Ecological Service Field Office, Boquerón Puerto Rico Phone (787) 851-7297 ext 217

(See attached file: 20110207Threatened and endangered vegetation assessments protocol for Via Verde.pdf)

Classification: UNCLASSIFIED
Caveats: NONE

20110207Threatened and endangered vegetation assessments protocol for Via Verde.pdf

Doc # 172

Edwin Muniz/R4/FWS/DOI
02/10/2011 07:07 PM

To "Dave Flemming" <Dave_Flemming@fws.gov>, patrick_leonard@fws.gov
cc
bcc
Subject Re: Via Verde

By the way before we responded we advised PREPA of the request from the media and our response.

Sent from my BlackBerry Wireless Handheld

Edwin Muniz---02/10/2011 04:06 PM MST---

Doc # 170

From: Edwin Muniz
To: Dave Flemming; Patrick Leonard
Date: 02/10/2011 04:06 PM MST
Subject: Via Verde

Today, Lilibeth received a call to comfirn information that the Via Verde consultants had met with our Regional Office and that the RO had supported our position.

We clarfied to the reporter that the consultants had met with our mamagers to presnt the project and that they indicated they would be working towards addressing our concerns and regulatory requirements.

Sent from my BlackBerry Wireless Handheld

Doc #173

Edwin Muniz/R4/FWS/DOI
02/10/2011 08:07 PM

To Bryan Arroyo/ARL/R9/FWS/DOI@FWS, Cynthia Dohner/R4/FWS/DOI@FWS, Mark Musaus/R4/FWS/DOI@FWS, Patrick
cc
bcc
Subject Re: Meeting with the PR reps about Via Verde project

Bryan:

Thanks for the info. FYI Michael Beam during his last visit to PR he asked us brief him on the proposed project.

Edwin

Sent from my BlackBerry Wireless Handheld

Doc #169

Bryan Arroyo---02/10/2011 03:29 PM MST---

From: Bryan Arroyo
To: Cynthia Dohner; Mark Musaus; Patrick Leonard; Edwin Muniz
Cc:
Date: 02/10/2011 03:29 PM MST
Subject: Meeting with the PR reps about Via Verde project

Good Afternoon Everybody:

I just met with Mr. Pedro Nieves (PR GOV), Jed Bullock (Congressman Pierluisi), Mr. Daniel Galan (PR DNR), Colleen Newman (Governor's DC office), and Mr. Bryan Cave (outside counsel). Ms. Kristen Oleyte from DOI Insular Affairs office joined us. They walked me through the same ppt they used with the RO folks last week (I am getting electronically so I can forward) and explained the importance of the project and the built-in protections and mitigation. They are willing to do field site visits to look at issues first hand. They were in an informative mode and requested that this project be a priority. Seems the COE needs to make a few decisions regarding section 7 approach if any and NEPA compliance issues. I advised them to work with our folks closely and to share information. I made sure they understood that how we do business with our FO structure and RO oversight and leadership. This was mostly a courtesy visit. So the project is with you out there and I am here a little more informed and ready to support you in your approach as needed. Cindy let me know if you need anything from me on this one, but until I hear from you I will assume all is good. Hope you are doing well.

Take care,
Bryan

Doc #174

Cynthia Dohner/R4/FWS/DOI
02/14/2011 12:25 PM

To Bryan Arroyo/ARL/R9/FWS/DOI
cc Edwin Muniz/R4/FWS/DOI@FWS, Mark Musaus/R4/FWS/DOI@FWS, Patrick Leonard/R4/FWS/DOI@FWS
bcc
Subject Re: Meeting with the PR reps about Via Verde project

Thanks Bryan,

Will let you know if there are any issues as it progresses -

cindy
Bryan Arroyo/ARL/R9/FWS/DOI

Doc #171

Bryan Arroyo/ARL/R9/FWS/DOI
02/10/2011 05:29 PM

To Cynthia Dohner/R4/FWS/DOI, Mark Musaus/R4/FWS/DOI@FWS, Patrick Leonard/R4/FWS/DOI@FWS, Edwin Muniz/R4/FWS/DOI@FWS
cc
Subject Meeting with the PR reps about Via Verde project

Good Afternoon Everybody:

I just met with Mr. Pedro Nieves (PR GOV), Jed Bullock (Congressman Pierluisi), Mr. Daniel Galan (PR DNR), Colleen Newman (Governor's DC office), and Mr. Bryan Cave (outside counsel). Ms. Kristen Oleyte from DOI Insular Affairs office joined us. They walked me through the same ppt they used with the RO folks last week (I am getting electronically so I can forward) and explained the importance of the project and the built-in protections and mitigation. They are willing to do field site visits to look at issues first hand. They were in an informative mode and requested that this project be a priority. Seems the COE needs to make a few decisions regarding section 7 approach if any and NEPA compliance issues. I advised them to work with our folks closely and to share information. I made sure they understood that how we do business with our FO structure and RO oversight and leadership. This was mostly a courtesy visit. So the project is with you out there and I am here a little more informed and ready to support you in your approach as needed. Cindy let me know if you need anything from me on this one, but until I hear from you I will assume all is good. Hope you are doing well.

Take care,
Bryan

Doc # 176

Marelisa Rivera/R4/FWS/DOI
02/14/2011 05:42 PM

To yousevgr@yahoo.com, daniel_paganrosa@yahoo.com
cc Edwin Muniz/R4/FWS/DOI@FWS, edgar.w.garcia@usace.army.mil
bcc
Subject Fw: Via Verde - Puerto Rican Nigthjar Study

Edwin's email is edwin_muniz@fws.gov not Edwin Muñiz <edwin.e.muniz@saj02.usace.army.mil. Please change his email in the mailing list.

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622
(787) 851-7297 x 206 (direct)
(787) 851-7440 (fax)
(787) 510-5207 (mobile)
marelisa_rivera@fws.gov

There are three constants in life...change, choice and principles.
Stephen R. Covey
----- Forwarded by Marelisa Rivera/R4/FWS/DOI on 02/14/2011 05:40 PM -----

Doc # 175

Yousev Garcia
<yousevgr@yahoo.com>
02/14/2011 03:08 PM

To "Marelisa T. Rivera" <Marelisa_Rivera@fws.gov>, "Edgar W. Garcia" <edgar.w.garcia@usace.army.mil>, Edwin Muñiz <edwin.e.muniz@saj02.usace.army.mil>, Larry Evans <LarryEvans@bcpeabody.com>
cc Daniel Pagan <daniel_paganrosa@yahoo.com>, IVELISSE SANCHEZ <I-SANCHEZ@PREPA.COM>, EDWIN BAEZ <E-BAEZ@PREPA.COM>, Francisco Lopez <flopez1075@prepa.com>, rafael_gonzalez@fws.gov
Subject Via Verde - Puerto Rican Nigthjar Study

Dear Marelisa:
Please see attached, the proposed transects to perfom the Puerto Rican Nigthjar Study at the Peñuelas area.

Yousev

Don't be flakey. Get Yahoo! Mail for Mobile and always stay connected to friends.

USFWS Proposed Nigthjar transects.pdf

ASESORES
Ambientales
y Educativos Inc.

February 14, 2011

Mr. Edwin Muñiz, Supervisor
Fish & Wildlife Service
Caribbean Filed Office
Boquerón, Puerto Rico 00623

Dear Mr. Muñiz:

Proposed Transects for Puerto Rican Nightjar Presence Study
Via Verde Project Case # SAJ-2010-02881 (IP-EWG)

Reference is made to the meeting held at the Boquerón Offices last Thursday February 10, 2011, between Mr. Rafael González of the Fish & Wildlife Service (Service), and the consultants for the Puerto Rico Electric Power Authority (PREPA), Mr. Jose Chabert and myself. As previously agreed, the meeting was aimed to discuss the extent of the field work required, as well as, to reach a final agreement that will allow the implementation of the Protocol Methodology previously presented before the initiation of the Nightjar nesting period.

This was a continuation of the meeting held at the Corp of Engineers offices last February 7, 2011, where the Field Work and Sampling Methodology related with the abovementioned task was discussed in detail. At said meeting the parties agreed that a field trip was needed (Scheduled for February 9 2011) to identify the suitable Nightjar habitat to be sampled, since the Service was in agreement with the methodology presented.

As agreed attached please find a map (See Attachment # 1) summarizing the transect areas to be sampled as required in the last meeting held at the Boquerón Service Office. These areas represents a total of 900 meters equivalent to 24% of the area to be studied (3.8 km, excluding 500 meters of Leucaenas Specie described as the yellow segments in the figure attached). Consistent with the Protocol and Methodology previously presented, sampling will be undertaken at a minimum of 160 meters intervals, within the study areas, for a total of 7 survey points described as follows:

1. Transect # 1 will have a 200 meters lengths and two survey points will be located,

130 WINSTON CHURCHILL AVE. • PMB 145 • SAN JUAN, PR 00926
PHONE: 787 960 2002 E-MAIL YOUSEVGR@YAHOO.COM

2. Transect # 2 will have a 500 meters lengths and three survey points will be located, &
3. Transect # 3 will have a 200 meters lengths and two survey points will be located.

We confident that the information included herein addressed all pending items related with the required Nightjar Field study that will allow us to initiate this critical study before the forthcoming nesting period. PREPA will be able to initiate the field study mentioned above on February 16, 2011 if approval from the service is secured not later that February 15, 2011 at 11:00 AM. This will allow the consultants to complete all field work planning and preparations needed to implement the Work Plan presented.

PREPA will provide the Service with a detail Working Schedule as requested, to facilitate the participation of service personnel as needed.

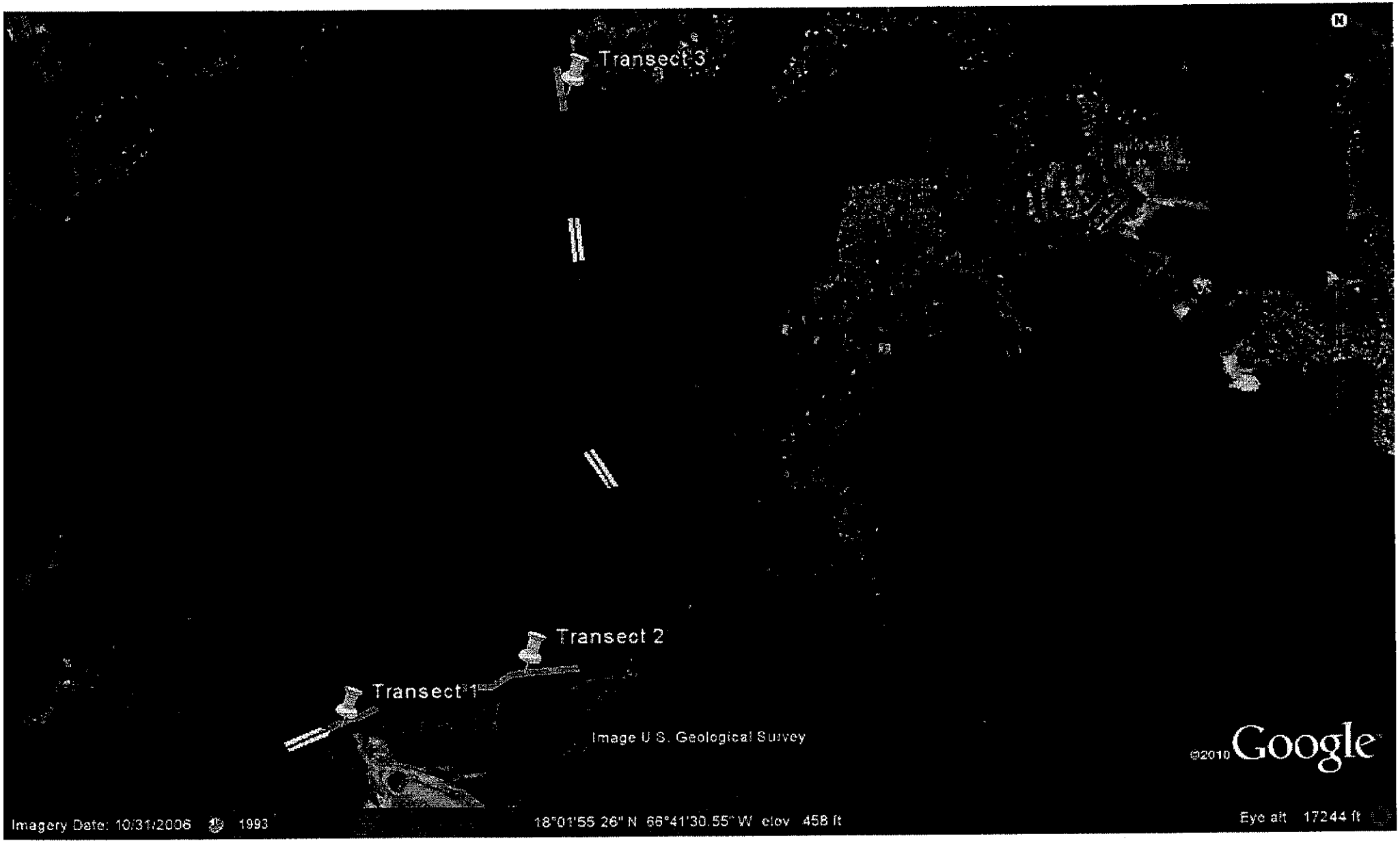
Please do not hesitate to contact Eng. Daniel Pagan at 787-382-7330 at your convenience, in the event additional information related with this important subject is needed.

Best Regards,

Yousev García
Director

Attachment # 1

c. Mr. Edgar García (USCOE)
Mrs. Marelisa Rivera (F&WS)
Eng. Francisco Lopez (PREPA)
Eng. Larry Evans (BC Peabody)
Eng. Daniel Pagan (Asesores Ambientales y Educativos)
File Vía Verde – FWS - PREPA


Transect 3
Transect 2
Transect 1
Image U.S. Geological Survey
©2010 Google
Imagery Date: 10/31/2006 1993
18°01'55.26" N 66°41'30.55" W elev 458 ft
Eye alt 17244 ft

Doc # 177

daniel_paganrosa@yahoo.com
02/14/2011 05:45 PM
Please respond to daniel_paganrosa@yahoo.com

To "MarElisa Rivera" <Marelisa_Rivera@fws.gov>, "Yousef Garcia" <yousevgr@yahoo.com>
cc "Edwin Muniz" <edwin_muniz@fws.gov>, edgar.w.garcia@usace.army.mil
bcc
Subject Re: Via Verde - Puerto Rican Nigthjar Study

Marelisa:Sorry for the mistake. Your instruction were taken care Already.ThanksDanny

Sent via BlackBerry by AT&T

From: Marelisa_Rivera@fws.gov
Date: Mon, 14 Feb 2011 17:42:56 -0400
To: <yousevgr@yahoo.com>; <daniel_paganrosa@yahoo.com>
Cc: <Edwin_Muniz@fws.gov>; <edgar.w.garcia@usace.army.mil>
Subject: Fw: Via Verde - Puerto Rican Nigthjar Study

Edwin's email is edwin_muniz@fws.gov not Edwin Muñiz <edwin.e.muniz@saj02.usace.army.mil. Please change his email in the mailing list.

Marelisa Rivera
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622
(787) 851-7297 x 206 (direct)
(787) 851-7440 (fax)
(787) 510-5207 (mobile)
marelisa_rivera@fws.gov

There are three constants in life...change, choice and principles.
Stephen R. Covey
----- Forwarded by Marelisa Rivera/R4/FWS/DOI on 02/14/2011 05:40 PM -----

Yousev Garcia <yousevgr@yahoo.c

To"Marelisa T. Rivera" <Marelisa_Rivera@fws.gov>, "Edgar W. Garcia" <edgar.w.garcia@usace.army.mil>, Edwin Muñiz <edwin.e.muniz@saj02.usace.army.mil>, Larry Evans <LarryEvans@bcpeabody.com>
ccDaniel Pagan <daniel_paganrosa@yahoo.com>, IVELISSE SANCHEZ <I-SANCHEZ@PREPA.COM>, EDWIN BAEZ <E-BAEZ@PREPA.COM>, Francisco Lopez <flopez1075@prepa.com>, rafael_gonzalez@fws.gov
SubjectVia Verde - Puerto Rican Nigthjar Study

om
>

02/
14/
201
1
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PM

Dear Marelisa:
Please see attached, the proposed transects to perfom the Puerto Rican Nigthjar Study at the Peñuelas area.

Yousev

Don't be flakey. Get Yahoo! Mail for Mobile and
always stay connected to friends.*(See attached file: USFWS Proposed Nigthjar transects.pdf)*

Doc # 178

Rafael Gonzalez/R4/FWS/DOI
02/15/2011 05:05 PM

To Marelisa Rivera/R4/FWS/DOI@FWS
cc
bcc
Subject Nightjar surveys

Nigthjar recommendations 2.doc

Rafael Gonzalez
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622

(787) 851-7297 x 214
(787) 851-7440 (fax)
rafael_gonzalez@fws.gov

Daniel Pagán Rosa
Asesores Ambientales y Educativos Inc.
130 Winston Churchill Ave.
PMB 145
San Juan, Puerto Rico 00926- 6018

Re: Proponed Transects for Puerto Rican Nightjar Presence Study Via Verde Project Case # SAJ-2010-02881 (IP-EWG)

Dear Mr. Pagán:

This letter is in response to your letter dated February 14, 2011, regarding Puerto Rican nightjar Field Study. As Requested, our comments are issued as technical assistance in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. as amended).

We have the following comments to the proposed field study to survey the Puerto Rican nightjar:

1. The Service will like to clarify that we do not required nightjar surveys to start previously the nesting season. Nightjar surveys can occur simultaneously with the nesting season.

2. Nightjar study transects 1 and 3 should start at least 150 m from forest edge. The 150 meter will serve as a buffer zone to minimize or avoid edge, human, road, or trails effect on the survey.

3. Provide a detail map and coordinates of survey points in the field.

4. The Service would gladly accept the working schedule as soon is provided, and will coordinate with the applicant to participate during the surveys.

5. The Service will like to make clear that Leucaena patches do not provide nesting habitat for the nightjars as previously mention on the meeting held at the Corp of

Engineering last February 1, 2011. But be aware Leucaina patches do can provide foraging and roosting habitat for the species particularly when the patches are surround by nightjar nesting habitat.

6. We continue to be concerned with potential nightjar habitat impacts proposed destruction within the area identified as mitigation area for the Gasoducto del Sur and nearby areas. As we mentioned previously, this area has been identified by species expert as the best habitat to be protected in the Guayanilla-Peñuelas area. We continue recommending the project route to be modified to avoid fragmentation of this important habitat.

Thank you for the opportunity to provide input. If you have any question, please contact Marelisa Rivera at 787-851-7297 extension 206.

Sincerely yours,

Edwin E. Muñiz
Field Supervisor
Caribbean Field Office

rg

cc:

CoE, San Juan
PREPA, San Juan

Doc # 179

Marelisa Rivera/R4/FWS/DOI
02/15/2011 09:34 PM

To edwin_muniz@fws.gov, rafael_gonzalez@fws.gov
cc
bcc
Subject letter

- Nigthjar recommendations 2.doc

Engineers last February 1, 2011. But be aware that Leucaina patches can provide foraging and roosting habitat for the species particularly when the patches are surround by nightjar nesting habitat.

6. We continue to be concerned with potential impacts to nightjar habitat within the area identified for the establishment of a mitigation area for the Gasoducto del Sur and nearby areas. As we mentioned previously, this area (not a specific parcel) has been identified by species expert as the best habitat to be protected in the Guayanilla-Peñuelas area. We continue recommending the project route to be modified to avoid fragmentation of this important habitat.

Thank you for the opportunity to provide input. If you have any question, please contact Marelisa Rivera at 787-851-7297 extension 206.

Sincerely yours,

Edwin E. Muñiz
Field Supervisor
Caribbean Field Office

rg

cc:

CoE, San Juan
PREPA, San Juan

Doc #180

Edwin Muniz
<edwin.muniz@gmail.com>
02/15/2011 11:07 PM

To marelisa_rivera@fws.gov
cc
bcc
Subject Draft Nightjar Proocol

History: This message has been replied to.

Here is the draft with my comments. Please review to ensure that my changes do not change the substance of the information.

Danny called me late in the afternoon and I told him we would have a response by tomorrow afternoon.

20110215_PR NightJar Protocol Comments_EEM Revision.doc

Daniel Pagán Rosa
Asesores Ambientales y Educativos Inc.
130 Winston Churchill Ave.
PMB 145
San Juan, Puerto Rico 00926- 6018

Re: Proponed Transects for Puerto Rican Nightjar Presence Study Via Verde Project Case # SAJ-2010-02881 (IP-EWG)

Dear Mr. Pagán:

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We have the following comments to the proposed field study to survey the Puerto Rican nightjar:

1. The Service needs to ~~will like to~~ clarify that we do not required nightjar surveys to start previously to the nesting season. Nightjar surveys can occur simultaneously with the nesting season.

2. Nightjar study transects 1 and 3 should start at least 150 meters from forest edge. The 150 meters zone will serve as a buffer ~~zone~~ to minimize or avoid edge, human, road, or trails effect on the survey.

3. A detailed map containing ~~and~~ GPS coordinates for each ~~of~~ survey points in the field should be provided.

4. The Service requests that the field work schedule ~~would gladly accept the working schedule~~ be provided as soon possible ~~is provided,~~ and we will coordinate with your staff ~~the applicant~~ to participate during the surveys.

5. As previously mentioned at the meeting held at the Corps of Engineers last February 1, 2011,~~T~~the Service restates ~~will like to make clear~~ that Leucaena patches do not provide nesting habitat for the nightjars, ~~as previously mention on the meeting held at the Corps of Engineers last February 1, 2011~~. However, ~~But be aware that~~ Leucaina patches ~~can~~ provide foraging and roosting habitat for the species particularly when the patches are surround by nightjar nesting habitat. The staff performing surveys need to be aware.

6. As we stated in the past, w~~W~~e continue to be concerned with potential impacts to nightjar habitat within the entire area identified for the establishment of a mitigation area for the Gasoducto del Sur and surrounding ~~nearby~~ areas that support night jar habitat. As we mentioned previously, our concern is not limited only to the area that will be acquired ~~this area~~ (not a specific parcel) but expands to the entire area that was ~~has been~~ identified by species expert as the best habitat to be protected in the Guayanilla-Peñuelas area. We continue recommending the project route to be modified to avoid fragmentation of this important habitat.

Thank you for the opportunity to provide input. If you have any question, please contact Marelisa Rivera at 787-851-7297 extension 206.

Sincerely yours,

Edwin E. Muñiz
Field Supervisor
Caribbean Field Office

rg

cc:

CoE, San Juan
PREPA, San Juan

Doc # 181

United States Department of the Interior

FISH & WILDLIFE SERVICE
Boqueron Field Office
Carr. 301, KM 5.1, Bo. Corozo
P.O. Box 491
Boqueron, PR 00622

FEB 16 2011

Daniel Pagán Rosa
Asesores Ambientales y Educativos Inc.
130 Winston Churchill Ave.
PMB 145
San Juan, Puerto Rico 00926- 6018

Re: Proponed Transects for Puerto Rican Nightjar Presence Study Via Verde Project Case # SAJ-2010-02881 (IP-EWG)

Dear Mr. Pagán:

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1. The Service needs to clarify that we do not required nightjar surveys to start previously to the nesting season. Nightjar surveys can occur simultaneously with the nesting season.

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3. A detailed map containing GPS coordinates for each survey point in the field should be provided.

4. The Service requests that the field work schedule be provided as soon possible and we will coordinate with your staff to participate during the surveys.

5. As previously mentioned at the meeting held at the Corps of Engineers last February 1, 2011,the Service restates that Leucaena patches do not provide nesting habitat for the nightjars,. However, Leucaena patches provide foraging and roosting habitat for the species particularly when the patches are surround by nightjar nesting habitat. The staff performing surveys need to be aware.

6. As we stated in the past, we continue to be concerned with potential impacts to nightjar habitat within the entire area identified for the establishment of a mitigation area for the Gasoducto del Sur and surrounding areas that support night jar habitat. As we mentioned previously, our concern is not limited only to the area that will be acquired (not a specific parcel) but expands to the entire area that was identified by species expert as the best habitat to be protected in the Guayanilla-Peñuelas area. We continue recommending the project route to be modified to avoid fragmentation of this important habitat.

Thank you for the opportunity to provide input. If you have any question, please contact Marelisa Rivera at 787-851-7297 extension 206.

Sincerely yours,

for Edwin E. Muñiz
Field Supervisor
Caribbean Field Office

rg

cc:

CoE, San Juan
PREPA, San Juan

Doc # 182

Michelle Ramos/R4/FWS/DOI

02/16/2011 12:04 PM

To daniel_paganrosa@yahoo.com, edgar.w.garcia@usace.army.mil

cc Edwin Muniz/R4/FWS/DOI@FWS, Marelisa Rivera/R4/FWS/DOI@FWS, Rafael Gonzalez/R4/FWS/DOI@FWS

bcc

Subject Proponed Transects for Puerto Rican Nightjar Presence Study

Good Morning!

Attached please find the Proponed Transects for Puerto Rican Nightjar Presence Study letter. If you have any question, please contact Marelisa Rivera at 787-851-7297 ext. 206.

Proponed Transects for Puerto Rican Nightjar Presence Study, Via Verde.pdf

Cordially;

Michelle Ramos
STEP Student-Administrative Clerk
U.S. Fish and Wildlife Service
Caribbean Ecological Services
P.O. Box 491
Boqueron, Puerto Rico 00622

michelle_ramos@fws.gov
Phone: (787)851-7297 Ext. 213
Fax: (787) 851-7440

"The achievements of a team are the
results of the combined efforts of each individual".

Doc #183

Daniel Pagan
<daniel_paganrosa@yahoo.com>
02/16/2011 12:38 PM

To "Marelisa_Rivera@fws.gov" <Marelisa_Rivera@fws.gov>
cc
bcc
Subject Re: Proponed Transects for Puerto Rican Nightjar Presence Study

Marelisa:

Gracias por la respuesta rapida en este asunto. Trabajo con ello y te llamo mas tarde, con unas sugerencias adicionales.

danny

From: "Michelle_Ramos@fws.gov" <Michelle_Ramos@fws.gov>
To: daniel_paganrosa@yahoo.com; edgar.w.garcia@usace.army.mil
Cc: Edwin_Muniz@fws.gov; Marelisa_Rivera@fws.gov; Rafael_Gonzalez@fws.gov
Sent: Wed, February 16, 2011 12:03:57 PM
Subject: Proponed Transects for Puerto Rican Nightjar Presence Study

Good Morning!

Attached please find the Proponed Transects for Puerto Rican Nightjar Presence Study letter. If you have any question, please contact Marelisa Rivera at 787-851-7297 ext. 206.

(See attached file: Proponed Transects for Puerto Rican Nightjar Presence Study, Via Verde.pdf)

Cordially;

Michelle Ramos
STEP Student-Administrative Clerk
U.S. Fish and Wildlife Service
Caribbean Ecological Services
P.O. Box 491
Boqueron, Puerto Rico 00622

michelle_ramos@fws.gov
Phone: (787)851-7297 Ext. 213
Fax: (787) 851-7440

"The achievements of a team are the
results of the combined efforts of each individual".

Doc # 184

Rafael Gonzalez/R4/FWS/DOI
02/22/2011 11:56 AM

To Marelisa Rivera/R4/FWS/DOI@FWS
cc
bcc
Subject CZM letter

LP-012 CZM Via Verde.doc

Rafael Gonzalez
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Ecological Services Caribbean Field Office
P.O. Box 491
Boquerón, Puerto Rico 00622

(787) 851-7297 x 214
(787) 851-7440 (fax)
rafael_gonzalez@fws.gov

Mr. Max L. Vidal Vazquez
Director Interno
Subprograma Planes de Usos de Terrenos
P.O. Box 41119,
San Juan, Puerto Rico 00940-1119

Re: Solicitud de certificación de Compatibilidad Federal, Via Verde

Dear Mr.Vidal

Thank you for you letter dated December 3, 2010, received in our office on December 13, 2010, requesting comments on the proposed project. Our comments are provided as technical assistance under the Endangered Species Act (ESA)(87 Stat. 884, as amended; 16 United States Code 1531 et seq.) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The Service maintains the comments and recommendations about Via Verde project provide to the US Army Corps of Engineering on the letter of December 15, 2010. (see attachment).

It is our mission to work with others, to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of our people. If you have any additional question regarding this issue, please do not hesitate to contact Rafael González at 787-851-7297 extension 214. You may also visit our website http://www.fws.gov/caribbean for additional information on threatened and endangered species under jurisdiction and the programs to conserve them.

Sincerely yours,

Edwin E. Muñiz
Field Supervisor
Caribbean Field Office

rg

cc:

CBRA was originally authored by U.S. Representative Thomas B. Evans, Jr. and Senator John Chafee, who kept three objectives in mind: 1) to minimize the loss of human life by discouraging development in high risk areas vulnerable to storm surges and hurricane winds; 2) to reduce wasteful expenditure of Federal resources; and 3) to protect the natural resources associated with undeveloped coastal barriers.

The Coastal Barrier Resource Act states that all new work carried out within a barrier unit will not be eligible for federal funds, loans, disaster relief or FEMA insurance (see attached maps).

https://kellycareernetwork.tms.hrdepartment.com/cgi-bin/a/highlightjob.cgi?jobid=62674&referrer=&site_id=148&view_language=en-US

https://kellycareernetwork.tms.hrdepartment.com/cgi-bin/a/highlightjob.cgi?jobid=65061&referrer=&site_id=148&view_language=en-US

http://www.indeed.com/job/Analista-Financiero-(Entry-Level)-at-Mendez-&-Co.-in-Guaynabo,-PR-3691b37ec8a194a7

Doc #185

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Boqueron Field Office
Carr. 301, KM 5.1, Bo. Corozo
P.O..Box 491
Boqueron, PR 00622

FEB 23 2011

Mr. Max L. Vidal Vázquez
Director Interno
Subprograma Planes de Usos de Terrenos
P.O. Box 41119,
San Juan, Puerto Rico 00940-1119

Re: Application for CZM Compatibility Certificate, Via Verde Project CZ-2011-0921-021

Dear Mr.Vidal:

Thank you for you letter dated December 3, 2010, received in our office on December 13, 2010, requesting comments on the proposed project. The project consists of the construction of an approximately 92-mile-long natural gas pipeline from EcoEléctrica to the Puerto Rico Electric Power Authority (PREPA) power plants on the north coast of Puerto Rico. Our comments are provided as technical assistance under the Endangered Species Act (ESA)(87 Stat. 884, as amended; 16 United States Code 1531 et seq.) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The documents attached to the application for the CZM Compatibility Certificate include the Joint Permit Application (JPA) and the Preliminary EIS for the project. The Service has reviewed the JPA, Preliminary EIS and Final EIS and provided comments to the Corps of Engineers and PREPA on December 15, 2010 and January 20, 2011, respectively. Copies of the letters are attached. As of today, our comments on those letters prevail.

Based on the above, the Service does not recommend the CZM Compatibility Certificate be issued until the environmental issues are addressed and adverse impacts are appropriately evaluated, minimized and compensated.

It is our mission to work with others, to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of our people. If you have any additional question regarding this issue, please do not hesitate to contact Marelisa Rivera, Deputy Field Supervisor at 787-851-7297 extension 206.

You may also visit our website http://www.fws.gov/caribbean for additional information on threatened and endangered species under jurisdiction and the programs to conserve them.

Sincerely yours,

Edwin E. Muñiz
Field Supervisor
Caribbean Field Office

Enclosures

Rg/mtr

cc: PREPA, San Juan
COE, San Juan

United States Department of the Interior

FISH & WILDLIFE SERVICE
Boqueron Field Office
Carr. 301, KM 5.1, Bo. Corozo
P.O. Box 491
Boqueron, PR 00622

JAN 20 2011

Mr. Angel Rivera Santana
Director, Planning and Environmental Protection
PR Electric Power Authority
PO Box 364267
San Juan, Puerto Rico 00936-4267

Re: SAJ 2010-02881 IP-EWG, Via Verde Gas Pipeline, Final Environmental Impact Statement (Final EIS)

Dear Mr. Rivera:

Thank you for your letter dated December 20, 2010, providing a copy of the Final EIS for the Via Verde gas pipeline. Our comments are issued as technical assistance in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. as amended).

In the letter, you mentioned that the comments raised by the Service on the December 15, 2010, letter to the U.S. Army Corps of Engineers were based on the preliminary EIS and not the Final EIS. You also mentioned that most of the comments raised in our December 15, 2010 letter were addressed in the approved Final EIS.

You should be aware that our December 15, 2010 letter is in response to the U.S. Army Corps of Engineers Public Notice requesting comments and our comments were based on the information provided by Puerto Rico Electric and Power Authority in the Joint Permit Application (JPA) and the documents referenced and attached to the JPA. The Final EIS was not part of the JPA; however, the preliminary EIS was part.

We have reviewed the information in the Final EIS and we have concluded that the document does not address the Service concerns regarding the Via Verde Project. Therefore, our comments made to the Corps on December 15, 2010 still stand. Furthermore, the Final EIS increased our concerns regarding possible effects to wetland since the document states that the project corridor may range from the 150 foot corridor to 300 feet in areas where HDD takes place. The JPA only mentioned a 150 foot corridor. Regarding the proposed mitigation for wetlands, the JPA and the final EIS are

not consistent. Other mitigation plans for impacts to fauna and flora are mentioned in the document but none have been developed or approved.

We have reviewed Chapter 8, Section 8.5 which listed the agency comments and PREPA's response. Of the numerous concerns the Service expressed regarding the proposed project, the Final EIS listed our comments regarding the lack of appropriateness of flora fauna studies, and the response consists of mentioning that additional studies will be conducted. The document mentioned that as the final answer to the Service concern is that it will be resolved during the ongoing Corps of Engineers Joint Permit Application review. Be aware that at present time, this issue has not been appropriately addressed. For example surveys with appropriate methodology for listed plants and the endangered nightjars have not been conducted. The Section 8.5 makes reference to the Joint Permit process, and defers addressing resolution of wetland impacts, mitigation, and other concerns to the ongoing Corps Joint Permit review.

The comments provided by the Service on December 15, 2010 are comprehensive and complex. While the Final EIS provides some additional information, the document does not provide an in-depth analysis of the direct, indirect, cumulative, interrelated and interdependent effects on our listed species and their habitats, aquatic resources (wetland, streams, etc.), forested lands and sinkholes in the northern karst region of Puerto Rico. We continue to believe that the project as currently proposed constitutes a major construction activity with potential significant adverse effects to the human environment. Therefore, we continue recommending the development of a federal Environmental Impacts Statement, as required under NEPA.

As we expressed before, the Service supports alternatives to the use of fuel as the main energy source in Puerto Rico. We recommend PREPA to continue identifying alternative sources, construction methods and project sites to minimize adverse effects of energy projects into our natural resources.

If you have any questions please contact Ms. Marelisa Rivera at 787 851 7297 x 206.

Sincerely,

Edwin E. Muñiz
Field Supervisor
Caribbean Ecological Services
Field Office

Fhl/mtr
cc:
COE, Regulatory, Jacksonville
COE, Regulatory, San Juan

DNER, San Juan
EQB, San Juan
PRPB, Land Use Division, San Juan
PRPB, CZM, San Juan
EPA, San Juan
EPA, New York
FWS, Atlanta

United States Department of the Interior

FISH & WILDLIFE SERVICE
Boqueron Field Office
Carr. 301, KM 5.1, Bo. Corozo
P.O. Box 491
Boqueron, PR 00622

DEC 15 2010

Col. Alfred A. Pantano, Jr.
District Commander
Jacksonville District Corps of Engineers
701 San Marco Boulevard.
Jacksonville, FL 32207-0019

Re: SAJ 2010-02881 (IP-EWG), Via Verde Pipeline Project.

Dear Col. Pantano:

The U.S. Fish and Wildlife Service (the Service) has received a copy of the above referenced Public Notice (PN) dated November 19, 2010, for the construction of a natural gas pipeline from EcoEléctrica to the PR Electric Power Authority (PREPA) power plants on the north coast of Puerto Rico. The proposed project has been publicly named by the proponent as Via Verde. Our comments are issued in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et. seq.) and the Endangered Species Act (ESA) (16 U.S.C. 1531 et. seq. as amended).

The applicant is requesting a permit to construct an approximately 92-mile-long pipeline covering about 1,672 acres, crossing 235 rivers and covering 369 acres of jurisdictional wetlands. The Caribbean Ecological Services Field Office has been involved in providing technical assistance to PREPA and its consultants on the current proposal. We have provided preliminary comments to the Corps in October 2010, based on the information submitted with the applicant's Joint Permit Application. We also provided technical assistance to the applicant regarding appropriate methodologies to conduct surveys for listed species.

The Service supports PREPA's efforts toward reducing Puerto Rico's dependence on fossil oils and encourages the Applicant to look for alternate energy sources for Puerto Rico. In 2006, the Service issued an Incidental Take Permit to WindMar RE for take anticipated during the construction and operation of a proposed wind farm on federally-listed species. For this project, WindMar appropriately minimized possible adverse effects and developed a comprehensive mitigation plan for the affected species. In 2008, the Service consulted with the Corps on the Gasoducto del Sur project. For this last project, the Service provided guidance and technical assistance to the Applicant for 2 years to minimize possible effects of the project on the endangered Puerto Rican nightjar and avoid effects to two listed plant species. The conservation

plan for the project was formalized through a Memorandum of Agreement between the Applicant and the Puerto Rico Department of Natural and Environmental Resources. At the present time, the Service is reviewing several other energy projects in Puerto Rico.

The following comments and recommendations are based on the information provided in the PN and information we have in our files.

Purpose of the Project, Single and Complete Project, Federal Involvement and compliance with the National Environmental Policy Act (NEPA)

The public notice states that the overall proposed purpose of the project is to deliver an alternate fuel source to three existing electric power generating facilities located in Arecibo, Toa Baja and Palo Seco operated by PREPA. EcoEléctrica was the first and remains the only source of natural gas in Puerto Rico. We believe the proposal may not include all elements necessary to meet this purpose.

Based on the information in our files and recent discussions with EcoEléctrica's consultant (see Enclosure 1), it is our understanding that the only authorized source of natural gas in Puerto Rico needs to be upgraded in order to supply the additional gas needed for the proposed pipeline. In May 1996, the Federal Energy Regulatory Commission (FERC) authorized EcoEléctrica to construct, and operate a liquefied natural gas (LNG) import terminal in Peñuelas, Puerto Rico. Environmental Condition No.11 of the May 1996 Order specified that "EcoEléctrica shall commence construction on its LNG facilities within 3 years of the date of this Order, or file a motion to extend the deadline, with the specific reasons why additional time is necessary." Therefore, it appears that authorization for the construction of the second authorized storage tank and four of the six authorized vaporizers has lapsed, and for EcoEléctrica to build another LNG storage tank, or other related facilities, it must obtain prior FERC authorization.[1]

In its July 19, 2010, semiannual report[2] to FERC (see Enclosure 2), EcoEléctrica indicated that it is considering construction of the second LNG Storage tank to supply natural gas fuel to the Commonwealth for a future expansion. We note that in this report, EcoEléctrica only addresses the Terminal Modification project for delivering natural gas to Costa Sur as previously permitted by FERC. By letter dated November 15, 2010, EcoEléctrica indicated to the Service that the current modifications to their facilities are not part of PREPA's Via Verde pipeline project, and that they would need to request FERC's approval for any physical or operational modifications that might be necessary in their facilities to serve the newly proposed pipeline project.

The PN fails to discuss necessary changes to EcoEléctrica's currently authorized facilities and operations to supply natural gas to PREPA's three facilities in the north. The Service issued a Biological Opinion for the original development of the EcoEléctrica facility, and modifications

[1] FERC, Order Amending Authorization Under Section 3 of the Natural Gas Act, April 16, 2009, Footnote #3.
[2] EcoElectrica, L.P. LNG Import Terminal and Cogeneration Project Docket Number CP-95-35-000, Semi Annual Report LNG Operating Report, July 19, 2010.

to this facility would require a reinitiation of consultation under Section 7 of the Endangered Species Act, which we discuss latter in this letter.

Because the Via Verde pipeline would require additional storage and modifications to the EcoEléctrica terminal, these projects are interrelated and should be viewed as one single and complete project. Should EcoEléctrica fail to obtain FERC authorization for the physical and/or operational modifications that might be necessary to serve the pipeline, the Corps would be permitting a fragment of a project that could not fulfill the stated purpose and need and would have irreversible resource impacts.

In addition, this project should be evaluated as a major construction activity since it would affect about 1,672 acres of land, including about 369 acres of wetlands, several Commonwealth Forests or Reserves, forested mountain and karst areas, and known habitat for more than 30 federally listed threatened or endangered species. Only when the project enters the San Juan metropolitan area do the environmental impacts drop significantly. We believe that the Corps has sufficient control and responsibility to warrant Federal Review over the entire project from the EcoEléctrica terminal to the end of the pipeline, and therefore a Federal EIS for this project is warranted.

Alternatives Analysis

The applicant's alternative analysis does not include PREPA's original plan to build a new natural gas combined cycle power plant close to the existing Costa Sur facility, and to retro fit both Costa Sur and Aguirre power plants to use natural gas. This was the applicant's preferred alternative in the past and now is not mentioned in the applicant's alternatives analysis. We believe that this alternative is reasonable and practicable, as it is already permitted, would have lower environmental impacts, and would be more secure and easier to maintain than the currently proposed gas pipeline.

Habitat Impacts

The project will cut through the southern karst region, central mountains, and northern karst region of Puerto Rico. Many portions of the alignment are currently isolated and not subject to developmental pressures. These include the Rio Abajo Commonwealth forest and the Vega Commonwealth forest, the DNER designated north karst Priority Conservation Area (PCA), the Caño Tiburones PCA, and the San Pedro Swamp Critical Wildlife Area.

The construction right of way (ROW) width ranges from 100 to 150 feet, and more if needed, with a final permanent ROW of 50 feet. The "Declaración de Impacto Ambiental Preliminar"(DIA-P) states that all vegetation within the construction ROW will be cut and that the permanent 50 foot ROW will be maintained as a no-root zone with no woody vegetation. The DIA-P does not propose mitigation for impacts to previously undisturbed forested areas in this long corridor that will create an avenue for invasive and noxious species to enter previously

isolated areas of wildlife habitat. The DIA-P also does not describe methods for maintaining a 92-mile, 50-foot-wide no-root zone corridor through karst and mountainous topography.

The Service is concerned that the clearing of all vegetation in the 150 foot ROW as stated in the DIA-P, in areas of highly erodible or unstable lands would cause excessive erosion that could impair water quality and channel stability in streams and rivers along the route. Trenching is likely not feasible in many steep areas within the corridor, yet DIA-P includes no discussion of how these areas will be traversed.

Since the construction ROW varies in width, we believe that all project impacts should be based on the worst-case scenario of a 150-foot wide ROW. Generalized drawings as seen on sheet 2 of the PN do not clearly represent what is written in the DIA-P. The proposed permanent 50 foot ROW and its associated no root zone will require either mechanical or chemical maintenance, which implies construction of a permanent maintenance road with associated stream crossings along most of, if not the entire, ROW length. This is not addressed anywhere in the documents. Utilizing the full estimate of ROW impacts should also help account for staging areas along the project route.

The Service is concerned about the possible impacts of directional drilling in the karst portions of the pipeline corridor. Voids in the rock matrix may lead directly to the aquifer, and a "frac-out" of drilling muds in this type of terrain and geology could contaminate underground waters and adversely affect human health, unique subterranean fauna, and commerce.

Endangered Species

The Service concurs with the Corps' determination that the proposed project may affect the following 32 listed species: Puerto Rican nightjar (*Caprimulgus noctitherus*); Puerto Rican parrot (*Amazona vittatta vittatta*); Puerto Rican crested toad (*Peltophryne lemur)*; Puerto Rican boa (*Epicrates inornatus)*; Puerto Rican sharp-shinned hawk (*Accipiter striatus venator);* Puerto Rican broad-winged hawk (*Buteo platypterus brunnescens*); Puerto Rican plain pigeon (Patagioenas inornata wetmorei); and the listed plant species *Auerodendron pauciflorum*, palo de Ramón (*Banara vanderbiltii*), diablito de tres cuernos (*Buxus valhii*), *Cordia bellonis, Daphnopsis helleriana,* palo de rosa (*Ottoschulzia rhodoxylon*), *Myrcia paganii,* chupacallos *(Pleodendron macranthum*), *Shoepfia arenaria,* erubia (*Solanum drymophilum), Tectarea estremerana, Thelypteris inabonensis, Thelypteris verecunda, Thelypteris yaucoensis, Chamaecrista glandulosa,* cobana negra *(Stahlia monosperma), Polystichum calderoense,* nogal *(Juglans jamaicensis*), *Mitracarpus maxwelliae, Mitracarpus polycladus, Cordia rupícola, Catesbaea melanocarpa, Eugenia woodburyana,* bariaco *(Trichilia triacantha*), and St. Thomas prickly ash (*Zanthoxylun thomasianum)*. No designated critical habitat is present along the proposed route for the project. The Service also continues to recommend surveys of the petitioned species coqui llanero (*Eleutherodactylus juanariveroi*) where the project crosses wetlands in Toa Baja.

In addition to the species listed above, the Corps also needs to make an effect determination with regards to the endangered Antillean manatee (*Trichechus manatus*). As we mentioned earlier in this letter, when EcoEléctrica was originally authorized, formal consultation under Section 7 of the ESA was concluded for the species. Since that time, the Environmental Baseline has changed; therefore, the Corps' biological assessment should also include an analysis of any necessary changes to current facilities and/or operation of the EcoEléctrica LNG terminal needed for the Via Verde project.

On October 18, 2010, the Service provided technical assistance to the Corps regarding the information included in the draft Biological Evaluation for the project. We concluded that the biological evaluation provided by the applicant did not rely upon survey methodologies that maximized detection probabilities for federally-listed species and did not include site-specific habitat characterization. Therefore, the Service could not concur with the determinations of the biological evaluation. We recommended that surveys for listed species be appropriately designed and conducted. We also recommended the development of a Biological Assessment, since we considered the project a major construction activity under NEPA. On November 10, 2010, December 2, 2010 and December 8, 2010, the Service provided additional technical assistance to the project applicant regarding appropriate survey methods for listed species along the proposed route.

At the present time, we continue to recommend that appropriate site-specific surveys be conducted along the proposed route to determine presence/absence of listed species within the project area and the amount of suitable habitat. Survey methodologies should be developed and surveys conducted by experienced and qualified personnel, and in close coordination with the Service. The Biological Assessment should include the results of such surveys and should be part of the Federal EIS. The Biological Assessment should consider the behaviors to be affected by the project, and proposed site-specific measures to avoid or minimize possible adverse effects.

Federal regulations at 50 CFR 402.12 provide guidance regarding Biological Assessments. A biological assessment shall evaluate the potential effects of the action on listed species and proposed species and designated and proposed critical habitat and determine whether any such species or habitat are likely to be adversely affected by the action and is used in determining whether formal consultation or a conference is necessary. The Biological Assessment shall be completed before any contract for construction is let, and before construction is begun (50 CFR 402.12(b)(2). The regulation also describes the information should be considered for inclusion in the Biological Assessment (see 50 CFR 402.12(f). The regulation recommends the following:

(1) The results of an on-site inspection of the area affected by the action to determine if listed or proposed species are present or occur seasonally.
(2) The views of recognized experts on the species at issue.
(3) A review of the literature and other information.
(4) An analysis of the effects of the action on the species and habitat, including consideration of cumulative effects, and the results of any related studies

(5) An analysis of alternate actions considered by the Federal agency for the proposed action.

The Federal agency or the designated non-Federal representative shall complete the Biological Assessment within 180 days after its initiation (receipt of or concurrence with the species list), unless a different period of time is agreed to by the Service and the Federal agency (50 CFR 402.12(i)). If a permit or license applicant is involved, the 180-day period may not be extended unless the agency provides the applicant, before the close of the 180-day period, with a written statement setting forth the estimated length of the proposed extension and the reasons why such an extension is necessary. Once the Service reviews the Biological Assessment and concurs in writing with the Corps's initiation letter, a biological opinion is provided to the Corps within 135 days.

We would like to provide the following technical assistance for the planning and implementation of the surveys to inform the Biological Assessment.

Habitat characterization for the Puerto Rican sharp-shinned hawk and Puerto Rican broad-winged hawk

We agree with the Applicant's approach of characterizing the suitable breeding habitat for the endangered raptors utilizing expert's opinion, maps of previously known breeding areas or home ranges, data from previous studies and published references. We recommend compiling these data within a digital Geographic Information System (GIS). We would like to meet with the species experts and discuss during a working meeting the areas to be included in the analysis to ensure that all available information is considered for the effects determination. We also would like to have the opportunity to visit the areas with contracted personnel. If surveys to determine breeding territories are not conducted, suitable breeding habitat for the species should be avoided. The alternative of avoiding impacts to potential nesting trees and tree species is not protective to the species if the breeding territory is not identified. We do not concur with the Applicant that it is possible to avoid impacts to breeding habitat and breeding behavior without first identifying the breeding territory. Under the assumption that suitable habitat is occupied for breeding, possible take as defined by the ESA should be anticipated. It is important to determine the number of breeding territories that would be affected by the project construction and operation in order to evaluate in a Biological Opinion whether the project jeopardizes the continued existence of the species.

Potential presence of endangered plants

We do not agree with the Applicant's proposal of surveying at intervals of 100 m within suitable habitat. Interval sampling and transects is appropriate for diversity inventories, but not to detect presence of listed plant species, due to their patchy distribution and similarity of appearance with other common species. We recommend that personnel trained to recognize the listed species systematically search all areas of suitable habitat within the project footprint. We propose a working meeting between our staff and the Applicant's contracted personnel to share information

and delineate together the survey areas. Once the areas are designated, we propose combined site visits to determine the suitability of the sampling approach for each area. The Service requests that if listed species are identified or found, duplicates of herbarium specimens are provided to our office for reference purposes.

Potential presence of coqui llanero in Toa Baja

We agree with PREPA's approach to search for this species. We would like to have the opportunity to visit the ROW of the proposed project within other wetland areas in northern Puerto Rico to identify whether habitat suitable for the coqui llanero is present in other areas of the route.

Potential presence of the Puerto Rican crested toad

We agree with PREPA's approach to search for the Puerto Rican crested toad in both the southern and northern limestone forest areas. We recommend that before surveys are initiated, survey areas are discussed and delineated between our staff and contracted species experts. We would like to also have the opportunity to visit the areas with contracted personnel. As we mentioned in our letter dated October 18, 2010, haystack hills between Manatí and Bayamón harbor suitable habitat for the Puerto Rican crested toad. These areas should be included in the survey plans.

Puerto Rican nightjar

We continue to recommend intensive surveys during the breeding season for the endangered Puerto Rican nightjar to determine the amount of suitable habitat and the number of singing males or territories that the project may affect.. This information is necessary to determine direct and indirect effects to the species, and to formulate measures to avoid and minimize adverse effects during construction and operations.

Puerto Rican boa

The Applicant should delineate and quantify the amount of suitable boa habitat within the project area. The applicant should first consider alternatives to avoid these areas and develop conservation measures to minimize possible adverse effects where avoidance is not possible. Once possible effects are appropriately minimized, the Service would work with the Applicant to develop a search and rescue protocol for relocating individual animals to suitable habitat outside of the project area prior to project construction.

Impacts to Landowner Incentive Programs

The present project goes throughout properties under the Service's Partners for Fish and Wildlife Program (PFWP). We have identified that at least three properties under a current Conservation Agreement with the Service that may be adversely affected by the proposed project: Hacienda

Pellejas in Adjuntas, Hacienda Esperanza in Manatí, and the US Navy Radio Station in Toa Baja. Current efforts at these highly ecologically valued properties include restoration of forest, riparian habitat and restoration of wetland areas. The Service has invested close to $180,000 of federal funds on these restoration activities, and we recommend modifying the project to avoid these areas. If avoidance is not practicable, the conservation investment in these properties must be compensated with comparable restoration efforts on other similar properties.

Wetland Impacts

Temporary wetland impacts in the Joint Permit Application were calculated using a 50-foot width, even though the ROW width is 150 feet. As stated above, we recommend using a 150-foot construction corridor width to estimate temporary impacts.

The Applicant states that all wetland impacts will be temporary. Because the project involves approximately 235 separate wetland and river crossings, poor construction techniques on even a fraction of these, such as failing to remove all matting or excess fill material, or to properly grade and revegetate disturbed areas, could easily result in substantial permanent impacts.. This makes calculating wetland and habitat impacts difficult since impacts to wetlands and streams depend largely on the construction technique the contractor will use and does not take into account operation and maintenance of the pipeline.

Some of the wetlands the project may affect are within areas designated by the Commonwealth of Puerto Rico as Natural Reserves and Critical Wildlife Areas, including: the Cucharillas Marsh PCA, San Pedro Swamp PCA, Caño Tiburones Natural Reserve, and Hacienda la Esperanza Natural Reserve. These areas lie within the northern karst, an area known for its underground streams, springs and shallow aquifer.

Directional drilling is proposed to minimize impacts on larger rivers and streams, wetlands, roads and other areas, which involves injecting drilling mud (bentonite clay and other substances) under pressure into the bore hole. A "frac-out" occurs when the drilling mud escapes the bore hole, and if it enters waters supporting aquatic life, micro particles of the clay can clog the gills of aquatic organisms. While there is a discussion regarding steps to take in the event of a frac-out, the Service is very concerned with the use of this method in karst topography, where voids in the substrate are common and often connected to ground- and surface-water systems.

The pipeline route crosses multiple low-order streams in mountainous areas. These streams are the headwaters of larger rivers and support a marine-derived native stream fauna composed of several species of freshwater shrimp, crabs and gobies. This diverse community is sensitive to disturbance, increased turbidity, and changes in channel morphology. Excessive erosion and sedimentation during construction or maintenance of the ROW could cause long-term or permanent impacts to these important wildlife areas.

Directional drilling is also proposed to avoid impacts to forested wetland areas. This includes an approximately 1-mile long crossing under the mangrove wetlands and the Rio Cocal in Toa Baja. However, all project drawings of wetland crossings show the 150-foot ROW and the permanent 50-foot no-root zone. It is not clear whether the 50-foot permanent ROW in forested wetlands could be used to access the pipeline in the future. If so, then this should be considered a permanent wetland impact. Because of the muck soils associated with some of these wetland types, additional staging areas will be needed for the drill rig, pipe, etc. There is no mention of how drilling mud will be managed, since there will be a need for sumps and other ground disturbances at the drill site to store drill muds.

Mitigation

The Corps has not yet verified the Applicant's jurisdictional determinations. The Applicant proposes a .01-to-1 compensatory mitigation ratio. This would amount to 4 acres of compensatory mitigation for an estimated 369 acres of "temporary" wetland impacts, which is inappropriate and unacceptable to the Service. A much higher ratio is necessary to compensate for the: 1) temporary loss of wetlands functions and values; 2) likely permanent loss of functions and values due to contractor errors; and 3) permanent habitat alteration by species such as cattails that rapidly invade disturbed wetland areas and out compete more beneficial wetland plants.

The Applicant should develop an adequate mitigation plan after the appropriate efforts have been implemented for avoidance and minimization. In addition we recommend that the Corps impose a performance bond to assure proper compliance with the mitigation and minimization measures.

The project area includes the mitigation area for the Gasoducto del Sur project, despite our repeated requests during the technical assistance process to avoid this area. This area was selected as a mitigation area to preserve its large amount of undisturbed, quality habitat. The Corps needs to assure compliance with previous permit conditions as part of considering this new permit action.

Summary and Conclusion

This project is one of the largest infrastructure projects proposed in Puerto Rico in decades. Its 92-mile corridor of temporary and permanent impacts would cross karst, mountain, and coastal habitats, a number of which are recognized in the Puerto Rico Comprehensive Wildlife Conservation Strategy as Critical Wildlife Areas important to conservation. The project could affect habitat for more than thirty federally-listed species and one species for which we are considering a petition for listing. Impacts to fauna and flora are not well documented, and maintenance for sensitive areas after construction is not well specified.

A broad spectrum of fish and wildlife resources occur within and adjacent to the proposed pipeline route, including migratory birds, amphidromous fish, endangered species, and wetlands. The karst areas of Puerto Rico are unique geological and ecological features in the United States,

and serve as an important aquifer recharge zone for the island. The haystack karst hills are a refugium for many native plant species. The project could adversely affect numerous streams and wetlands, and the Applicant's proposal does not appropriately consider alternatives to avoid, and measures to minimize, such impacts. The proposed 0.01-to-1 compensatory mitigation ratio is inadequate. Therefore, we are advising you, in accordance with part IV 3(a) of the 1992 Memorandum of Agreement between our agencies on the elevation of permit decisions under section 404(q) of the Clean Water Act, that the proposed project may result in substantial and unacceptable impacts to aquatic resources of national importance. We recommend that the Corps deny a permit for this action as currently proposed. The Service requests to be informed of any meetings with the applicant and the Corps or any additional documentation submitted to the Corps, regarding this permit action.

If you have any questions please contact Marelisa Rivera at 787 851 7297 x 206.

Sincerely,

Edwin Muñiz
Field Supervisor

Fhl/mtr

Enclosures

cc:
DNER, San Juan
EQB, San Juan
PRPB, Land Use Division, San Juan
PRPB, CZM, San Juan
EPA, San Juan
EPA, Dan Montella, New York
COE, Regulatory, San Juan
FWS, Atlanta
FERC, DC
PREPA, San Juan

Doc # 186

Michelle Ramos/R4/FWS/DOI

02/23/2011 03:47 PM

To edgar.w.garcia@usace.army.mil, Daniel Pagan <daniel_paganrosa@yahoo.com>

cc Edwin Muniz/R4/FWS/DOI@FWS, Marelisa Rivera/R4/FWS/DOI@FWS, Rafael Gonzalez/R4/FWS/DOI@FWS

bcc

Subject Application for CZM Compatibility Certificate, Via Verde Project

Good afternoon:

Attached you will find our comments on the proposed project.

LP-012 CZM Via Verde 02-23-2011.pdf

Cordially;

Michelle Ramos
STEP Student-Administrative Clerk
U.S. Fish and Wildlife Service
Caribbean Ecological Services
P.O. Box 491
Boqueron, Puerto Rico 00622

michelle_ramos@fws.gov
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"The achievements of a team are the
results of the combined efforts of each individual".

United States Department of the Interior

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P.O. Box 491
Boqueron, PR 00622

FEB 23 2011

Mr. Max L. Vidal Vázquez
Director Interno
Subprograma Planes de Usos de Terrenos
P.O. Box 41119,
San Juan, Puerto Rico 00940-1119

Re: Application for CZM Compatibility Certificate, Via Verde Project
CZ-2011-0921-021

Dear Mr. Vidal:

Thank you for you letter dated December 3, 2010, received in our office on December 13, 2010, requesting comments on the proposed project. The project consists of the construction of an approximately 92-mile-long natural gas pipeline from EcoEléctrica to the Puerto Rico Electric Power Authority (PREPA) power plants on the north coast of Puerto Rico. Our comments are provided as technical assistance under the Endangered Species Act (ESA)(87 Stat. 884, as amended; 16 United States Code 1531 et seq.) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

The documents attached to the application for the CZM Compatibility Certificate include the Joint Permit Application (JPA) and the Preliminary EIS for the project. The Service has reviewed the JPA, Preliminary EIS and Final EIS and provided comments to the Corps of Engineers and PREPA on December 15, 2010 and January 20, 2011, respectively. Copies of the letters are attached. As of today, our comments on those letters prevail.

Based on the above, the Service does not recommend the CZM Compatibility Certificate be issued until the environmental issues are addressed and adverse impacts are appropriately evaluated, minimized and compensated.

It is our mission to work with others, to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of our people. If you have any additional question regarding this issue, please do not hesitate to contact Marelisa Rivera, Deputy Field Supervisor at 787-851-7297 extension 206.

You may also visit our website http://www.fws.gov/caribbean for additional information on threatened and endangered species under jurisdiction and the programs to conserve them.

Sincerely yours,

Edwin E. Muñiz
Field Supervisor
Caribbean Field Office

Enclosures

Rg/mtr

cc: PREPA, San Juan
COE, San Juan

United States Department of the Interior

FISH & WILDLIFE SERVICE
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Boqueron, PR 00622

JAN 20 2011

Mr. Angel Rivera Santana
Director, Planning and Environmental Protection
PR Electric Power Authority
PO Box 364267
San Juan, Puerto Rico 00936-4267

Re: SAJ 2010-02881 IP-EWG, Via Verde Gas Pipeline, Final Environmental Impact Statement (Final EIS)

Dear Mr. Rivera:

Thank you for your letter dated December 20, 2010, providing a copy of the Final EIS for the Via Verde gas pipeline. Our comments are issued as technical assistance in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq. as amended).

In the letter, you mentioned that the comments raised by the Service on the December 15, 2010, letter to the U.S. Army Corps of Engineers were based on the preliminary EIS and not the Final EIS. You also mentioned that most of the comments raised in our December 15, 2010 letter were addressed in the approved Final EIS.

You should be aware that our December 15, 2010 letter is in response to the U.S. Army Corps of Engineers Public Notice requesting comments and our comments were based on the information provided by Puerto Rico Electric and Power Authority in the Joint Permit Application (JPA) and the documents referenced and attached to the JPA. The Final EIS was not part of the JPA; however, the preliminary EIS was part.

We have reviewed the information in the Final EIS and we have concluded that the document does not address the Service concerns regarding the Via Verde Project. Therefore, our comments made to the Corps on December 15, 2010 still stand. Furthermore, the Final EIS increased our concerns regarding possible effects to wetland since the document states that the project corridor may range from the 150 foot corridor to 300 feet in areas where HDD takes place. The JPA only mentioned a 150 foot corridor. Regarding the proposed mitigation for wetlands, the JPA and the final EIS are

not consistent. Other mitigation plans for impacts to fauna and flora are mentioned in the document but none have been developed or approved.

We have reviewed Chapter 8, Section 8.5 which listed the agency comments and PREPA's response. Of the numerous concerns the Service expressed regarding the proposed project, the Final EIS listed our comments regarding the lack of appropriateness of flora fauna studies, and the response consists of mentioning that additional studies will be conducted. The document mentioned that as the final answer to the Service concern is that it will be resolved during the ongoing Corps of Engineers Joint Permit Application review. Be aware that at present time, this issue has not been appropriately addressed. For example surveys with appropriate methodology for listed plants and the endangered nightjars have not been conducted. The Section 8.5 makes reference to the Joint Permit process, and defers addressing resolution of wetland impacts, mitigation, and other concerns to the ongoing Corps Joint Permit review.

The comments provided by the Service on December 15, 2010 are comprehensive and complex. While the Final EIS provides some additional information, the document does not provide an in-depth analysis of the direct, indirect, cumulative, interrelated and interdependent effects on our listed species and their habitats, aquatic resources (wetland, streams, etc.), forested lands and sinkholes in the northern karst region of Puerto Rico. We continue to believe that the project as currently proposed constitutes a major construction activity with potential significant adverse effects to the human environment. Therefore, we continue recommending the development of a federal Environmental Impacts Statement, as required under NEPA.

As we expressed before, the Service supports alternatives to the use of fuel as the main energy source in Puerto Rico. We recommend PREPA to continue identifying alternative sources, construction methods and project sites to minimize adverse effects of energy projects into our natural resources.

If you have any questions please contact Ms. Marelisa Rivera at 787 851 7297 x 206.

Sincerely,

Edwin E. Muñiz
Field Supervisor
Caribbean Ecological Services
Field Office

Fhl/mtr
cc:
COE, Regulatory, Jacksonville
COE, Regulatory, San Juan

DNER, San Juan
EQB, San Juan
PRPB, Land Use Division, San Juan
PRPB, CZM, San Juan
EPA, San Juan
EPA, New York
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United States Department of the Interior

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DEC 15 2010

Col. Alfred A. Pantano, Jr.
District Commander
Jacksonville District Corps of Engineers
701 San Marco Boulevard.
Jacksonville, FL 32207-0019

Re: SAJ 2010-02881 (IP-EWG), Via Verde Pipeline Project.

Dear Col. Pantano:

The U.S. Fish and Wildlife Service (the Service) has received a copy of the above referenced Public Notice (PN) dated November 19, 2010, for the construction of a natural gas pipeline from EcoEléctrica to the PR Electric Power Authority (PREPA) power plants on the north coast of Puerto Rico. The proposed project has been publicly named by the proponent as Via Verde. Our comments are issued in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et. seq.) and the Endangered Species Act (ESA) (16 U.S.C. 1531 et. seq. as amended).

The applicant is requesting a permit to construct an approximately 92-mile-long pipeline covering about 1,672 acres, crossing 235 rivers and covering 369 acres of jurisdictional wetlands. The Caribbean Ecological Services Field Office has been involved in providing technical assistance to PREPA and its consultants on the current proposal. We have provided preliminary comments to the Corps in October 2010, based on the information submitted with the applicant's Joint Permit Application. We also provided technical assistance to the applicant regarding appropriate methodologies to conduct surveys for listed species.

The Service supports PREPA's efforts toward reducing Puerto Rico's dependence on fossil oils and encourages the Applicant to look for alternate energy sources for Puerto Rico. In 2006, the Service issued an Incidental Take Permit to WindMar RE for take anticipated during the construction and operation of a proposed wind farm on federally-listed species. For this project, WindMar appropriately minimized possible adverse effects and developed a comprehensive mitigation plan for the affected species. In 2008, the Service consulted with the Corps on the Gasoducto del Sur project. For this last project, the Service provided guidance and technical assistance to the Applicant for 2 years to minimize possible effects of the project on the endangered Puerto Rican nightjar and avoid effects to two listed plant species. The conservation

plan for the project was formalized through a Memorandum of Agreement between the Applicant and the Puerto Rico Department of Natural and Environmental Resources. At the present time, the Service is reviewing several other energy projects in Puerto Rico.

The following comments and recommendations are based on the information provided in the PN and information we have in our files.

Purpose of the Project, Single and Complete Project, Federal Involvement and compliance with the National Environmental Policy Act (NEPA)

The public notice states that the overall proposed purpose of the project is to deliver an alternate fuel source to three existing electric power generating facilities located in Arecibo, Toa Baja and Palo Seco operated by PREPA. EcoEléctrica was the first and remains the only source of natural gas in Puerto Rico. We believe the proposal may not include all elements necessary to meet this purpose.

Based on the information in our files and recent discussions with EcoEléctrica's consultant (see Enclosure 1), it is our understanding that the only authorized source of natural gas in Puerto Rico needs to be upgraded in order to supply the additional gas needed for the proposed pipeline. In May 1996, the Federal Energy Regulatory Commission (FERC) authorized EcoEléctrica to construct, and operate a liquefied natural gas (LNG) import terminal in Peñuelas, Puerto Rico. Environmental Condition No.11 of the May 1996 Order specified that "EcoEléctrica shall commence construction on its LNG facilities within 3 years of the date of this Order, or file a motion to extend the deadline, with the specific reasons why additional time is necessary." Therefore, it appears that authorization for the construction of the second authorized storage tank and four of the six authorized vaporizers has lapsed, and for EcoEléctrica to build another LNG storage tank, or other related facilities, it must obtain prior FERC authorization.[1]

In its July 19, 2010, semiannual report[2] to FERC (see Enclosure 2), EcoEléctrica indicated that it is considering construction of the second LNG Storage tank to supply natural gas fuel to the Commonwealth for a future expansion. We note that in this report, EcoEléctrica only addresses the Terminal Modification project for delivering natural gas to Costa Sur as previously permitted by FERC. By letter dated November 15, 2010, EcoEléctrica indicated to the Service that the current modifications to their facilities are not part of PREPA's Via Verde pipeline project, and that they would need to request FERC's approval for any physical or operational modifications that might be necessary in their facilities to serve the newly proposed pipeline project.

The PN fails to discuss necessary changes to EcoEléctrica's currently authorized facilities and operations to supply natural gas to PREPA's three facilities in the north. The Service issued a Biological Opinion for the original development of the EcoEléctrica facility, and modifications

[1] FERC, Order Amending Authorization Under Section 3 of the Natural Gas Act, April 16, 2009, Footnote #3.
[2] EcoElectrica, L.P. LNG Import Terminal and Cogeneration Project Docket Number CP-95-35-000, Semi Annual Report LNG Operating Report, July 19, 2010.

to this facility would require a reinitiation of consultation under Section 7 of the Endangered Species Act, which we discuss latter in this letter.

Because the Via Verde pipeline would require additional storage and modifications to the EcoEléctrica terminal, these projects are interrelated and should be viewed as one single and complete project. Should EcoEléctrica fail to obtain FERC authorization for the physical and/or operational modifications that might be necessary to serve the pipeline, the Corps would be permitting a fragment of a project that could not fulfill the stated purpose and need and would have irreversible resource impacts.

In addition, this project should be evaluated as a major construction activity since it would affect about 1,672 acres of land, including about 369 acres of wetlands, several Commonwealth Forests or Reserves, forested mountain and karst areas, and known habitat for more than 30 federally listed threatened or endangered species. Only when the project enters the San Juan metropolitan area do the environmental impacts drop significantly. We believe that the Corps has sufficient control and responsibility to warrant Federal Review over the entire project from the EcoEléctrica terminal to the end of the pipeline, and therefore a Federal EIS for this project is warranted.

Alternatives Analysis

The applicant's alternative analysis does not include PREPA's original plan to build a new natural gas combined cycle power plant close to the existing Costa Sur facility, and to retro fit both Costa Sur and Aguirre power plants to use natural gas. This was the applicant's preferred alternative in the past and now is not mentioned in the applicant's alternatives analysis. We believe that this alternative is reasonable and practicable, as it is already permitted, would have lower environmental impacts, and would be more secure and easier to maintain than the currently proposed gas pipeline.

Habitat Impacts

The project will cut through the southern karst region, central mountains, and northern karst region of Puerto Rico. Many portions of the alignment are currently isolated and not subject to developmental pressures. These include the Rio Abajo Commonwealth forest and the Vega Commonwealth forest, the DNER designated north karst Priority Conservation Area (PCA), the Caño Tiburones PCA, and the San Pedro Swamp Critical Wildlife Area.

The construction right of way (ROW) width ranges from 100 to 150 feet, and more if needed, with a final permanent ROW of 50 feet. The "Declaración de Impacto Ambiental Preliminar"(DIA-P) states that all vegetation within the construction ROW will be cut and that the permanent 50 foot ROW will be maintained as a no-root zone with no woody vegetation. The DIA-P does not propose mitigation for impacts to previously undisturbed forested areas in this long corridor that will create an avenue for invasive and noxious species to enter previously

isolated areas of wildlife habitat. The DIA-P also does not describe methods for maintaining a 92-mile, 50-foot-wide no-root zone corridor through karst and mountainous topography.

The Service is concerned that the clearing of all vegetation in the 150 foot ROW as stated in the DIA-P, in areas of highly erodible or unstable lands would cause excessive erosion that could impair water quality and channel stability in streams and rivers along the route. Trenching is likely not feasible in many steep areas within the corridor, yet DIA-P includes no discussion of how these areas will be traversed.

Since the construction ROW varies in width, we believe that all project impacts should be based on the worst-case scenario of a 150-foot wide ROW. Generalized drawings as seen on sheet 2 of the PN do not clearly represent what is written in the DIA-P. The proposed permanent 50 foot ROW and its associated no root zone will require either mechanical or chemical maintenance, which implies construction of a permanent maintenance road with associated stream crossings along most of, if not the entire, ROW length. This is not addressed anywhere in the documents. Utilizing the full estimate of ROW impacts should also help account for staging areas along the project route.

The Service is concerned about the possible impacts of directional drilling in the karst portions of the pipeline corridor. Voids in the rock matrix may lead directly to the aquifer, and a "frac-out" of drilling muds in this type of terrain and geology could contaminate underground waters and adversely affect human health, unique subterranean fauna, and commerce.

Endangered Species

The Service concurs with the Corps' determination that the proposed project may affect the following 32 listed species: Puerto Rican nightjar (*Caprimulgus noctitherus*); Puerto Rican parrot (*Amazona vittatta vittatta*); Puerto Rican crested toad (*Peltophryne lemur)*; Puerto Rican boa (*Epicrates inornatus)*; Puerto Rican sharp-shinned hawk (*Accipiter striatus venator);* Puerto Rican broad-winged hawk (*Buteo platypterus brunnescens*); Puerto Rican plain pigeon (Patagioenas inornata wetmorei); and the listed plant species *Auerodendron pauciflorum*, palo de Ramón (*Banara vanderbiltii*), diablito de tres cuernos (*Buxus valhii*), *Cordia bellonis, Daphnopsis helleriana,* palo de rosa (*Ottoschulzia rhodoxylon*), *Myrcia paganii,* chupacallos *(Pleodendron macranthum*), *Shoepfia arenaria,* erubia (*Solanum drymophilum), Tectarea estremerana, Thelypteris inabonensis, Thelypteris verecunda, Thelypteris yaucoensis, Chamaecrista glandulosa,* cobana negra *(Stahlia monosperma), Polystichum calderoense,* nogal *(Juglans jamaicensis*), *Mitracarpus maxwelliae, Mitracarpus polycladus, Cordia rupicola, Catesbaea melanocarpa, Eugenia woodburyana,* bariaco *(Trichilia triacantha),* and St. Thomas prickly ash (*Zanthoxylum thomasianum).* No designated critical habitat is present along the proposed route for the project. The Service also continues to recommend surveys of the petitioned species coqui llanero (*Eleutherodactylus juanariveroi*) where the project crosses wetlands in Toa Baja.

In addition to the species listed above, the Corps also needs to make an effect determination with regards to the endangered Antillean manatee (*Trichechus manatus*). As we mentioned earlier in this letter, when EcoEléctrica was originally authorized, formal consultation under Section 7 of the ESA was concluded for the species. Since that time, the Environmental Baseline has changed; therefore, the Corps' biological assessment should also include an analysis of any necessary changes to current facilities and/or operation of the EcoEléctrica LNG terminal needed for the Via Verde project.

On October 18, 2010, the Service provided technical assistance to the Corps regarding the information included in the draft Biological Evaluation for the project. We concluded that the biological evaluation provided by the applicant did not rely upon survey methodologies that maximized detection probabilities for federally-listed species and did not include site-specific habitat characterization. Therefore, the Service could not concur with the determinations of the biological evaluation. We recommended that surveys for listed species be appropriately designed and conducted. We also recommended the development of a Biological Assessment, since we considered the project a major construction activity under NEPA. On November 10, 2010, December 2, 2010 and December 8, 2010, the Service provided additional technical assistance to the project applicant regarding appropriate survey methods for listed species along the proposed route.

At the present time, we continue to recommend that appropriate site-specific surveys be conducted along the proposed route to determine presence/absence of listed species within the project area and the amount of suitable habitat. Survey methodologies should be developed and surveys conducted by experienced and qualified personnel, and in close coordination with the Service. The Biological Assessment should include the results of such surveys and should be part of the Federal EIS. The Biological Assessment should consider the behaviors to be affected by the project, and proposed site-specific measures to avoid or minimize possible adverse effects.

Federal regulations at 50 CFR 402.12 provide guidance regarding Biological Assessments. A biological assessment shall evaluate the potential effects of the action on listed species and proposed species and designated and proposed critical habitat and determine whether any such species or habitat are likely to be adversely affected by the action and is used in determining whether formal consultation or a conference is necessary. The Biological Assessment shall be completed before any contract for construction is let, and before construction is begun (50 CFR 402.12(b)(2). The regulation also describes the information should be considered for inclusion in the Biological Assessment (see 50 CFR 402.12(f). The regulation recommends the following:

(1) The results of an on-site inspection of the area affected by the action to determine if listed or proposed species are present or occur seasonally.
(2) The views of recognized experts on the species at issue.
(3) A review of the literature and other information.
(4) An analysis of the effects of the action on the species and habitat, including consideration of cumulative effects, and the results of any related studies

(5) An analysis of alternate actions considered by the Federal agency for the proposed action.

The Federal agency or the designated non-Federal representative shall complete the Biological Assessment within 180 days after its initiation (receipt of or concurrence with the species list), unless a different period of time is agreed to by the Service and the Federal agency (50 CFR 402.12(i)). If a permit or license applicant is involved, the 180-day period may not be extended unless the agency provides the applicant, before the close of the 180-day period, with a written statement setting forth the estimated length of the proposed extension and the reasons why such an extension is necessary. Once the Service reviews the Biological Assessment and concurs in writing with the Corps's initiation letter, a biological opinion is provided to the Corps within 135 days.

We would like to provide the following technical assistance for the planning and implementation of the surveys to inform the Biological Assessment.

Habitat characterization for the Puerto Rican sharp-shinned hawk and Puerto Rican broad-winged hawk

We agree with the Applicant's approach of characterizing the suitable breeding habitat for the endangered raptors utilizing expert's opinion, maps of previously known breeding areas or home ranges, data from previous studies and published references. We recommend compiling these data within a digital Geographic Information System (GIS). We would like to meet with the species experts and discuss during a working meeting the areas to be included in the analysis to ensure that all available information is considered for the effects determination. We also would like to have the opportunity to visit the areas with contracted personnel. If surveys to determine breeding territories are not conducted, suitable breeding habitat for the species should be avoided. The alternative of avoiding impacts to potential nesting trees and tree species is not protective to the species if the breeding territory is not identified. We do not concur with the Applicant that it is possible to avoid impacts to breeding habitat and breeding behavior without first identifying the breeding territory. Under the assumption that suitable habitat is occupied for breeding, possible take as defined by the ESA should be anticipated. It is important to determine the number of breeding territories that would be affected by the project construction and operation in order to evaluate in a Biological Opinion whether the project jeopardizes the continued existence of the species.

Potential presence of endangered plants

We do not agree with the Applicant's proposal of surveying at intervals of 100 m within suitable habitat. Interval sampling and transects is appropriate for diversity inventories, but not to detect presence of listed plant species, due to their patchy distribution and similarity of appearance with other common species. We recommend that personnel trained to recognize the listed species systematically search all areas of suitable habitat within the project footprint. We propose a working meeting between our staff and the Applicant's contracted personnel to share information

and delineate together the survey areas. Once the areas are designated, we propose combined site visits to determine the suitability of the sampling approach for each area. The Service requests that if listed species are identified or found, duplicates of herbarium specimens are provided to our office for reference purposes.

Potential presence of coqui llanero in Toa Baja

We agree with PREPA's approach to search for this species. We would like to have the opportunity to visit the ROW of the proposed project within other wetland areas in northern Puerto Rico to identify whether habitat suitable for the coqui llanero is present in other areas of the route.

Potential presence of the Puerto Rican crested toad

We agree with PREPA's approach to search for the Puerto Rican crested toad in both the southern and northern limestone forest areas. We recommend that before surveys are initiated, survey areas are discussed and delineated between our staff and contracted species experts. We would like to also have the opportunity to visit the areas with contracted personnel. As we mentioned in our letter dated October 18, 2010, haystack hills between Manatí and Bayamón harbor suitable habitat for the Puerto Rican crested toad. These areas should be included in the survey plans.

Puerto Rican nightjar

We continue to recommend intensive surveys during the breeding season for the endangered Puerto Rican nightjar to determine the amount of suitable habitat and the number of singing males or territories that the project may affect.. This information is necessary to determine direct and indirect effects to the species, and to formulate measures to avoid and minimize adverse effects during construction and operations.

Puerto Rican boa

The Applicant should delineate and quantify the amount of suitable boa habitat within the project area. The applicant should first consider alternatives to avoid these areas and develop conservation measures to minimize possible adverse effects where avoidance is not possible. Once possible effects are appropriately minimized, the Service would work with the Applicant to develop a search and rescue protocol for relocating individual animals to suitable habitat outside of the project area prior to project construction.

Impacts to Landowner Incentive Programs

The present project goes throughout properties under the Service's Partners for Fish and Wildlife Program (PFWP). We have identified that at least three properties under a current Conservation Agreement with the Service that may be adversely affected by the proposed project: Hacienda

Pellejas in Adjuntas, Hacienda Esperanza in Manati, and the US Navy Radio Station in Toa Baja. Current efforts at these highly ecologically valued properties include restoration of forest, riparian habitat and restoration of wetland areas. The Service has invested close to $180,000 of federal funds on these restoration activities, and we recommend modifying the project to avoid these areas. If avoidance is not practicable, the conservation investment in these properties must be compensated with comparable restoration efforts on other similar properties.

Wetland Impacts

Temporary wetland impacts in the Joint Permit Application were calculated using a 50-foot width, even though the ROW width is 150 feet. As stated above, we recommend using a 150-foot construction corridor width to estimate temporary impacts.

The Applicant states that all wetland impacts will be temporary. Because the project involves approximately 235 separate wetland and river crossings, poor construction techniques on even a fraction of these, such as failing to remove all matting or excess fill material, or to properly grade and revegetate disturbed areas, could easily result in substantial permanent impacts.. This makes calculating wetland and habitat impacts difficult since impacts to wetlands and streams depend largely on the construction technique the contractor will use and does not take into account operation and maintenance of the pipeline.

Some of the wetlands the project may affect are within areas designated by the Commonwealth of Puerto Rico as Natural Reserves and Critical Wildlife Areas, including: the Cucharillas Marsh PCA, San Pedro Swamp PCA, Caño Tiburones Natural Reserve, and Hacienda la Esperanza Natural Reserve. These areas lie within the northern karst, an area known for its underground streams, springs and shallow aquifer.

Directional drilling is proposed to minimize impacts on larger rivers and streams, wetlands, roads and other areas, which involves injecting drilling mud (bentonite clay and other substances) under pressure into the bore hole. A "frac-out" occurs when the drilling mud escapes the bore hole, and if it enters waters supporting aquatic life, micro particles of the clay can clog the gills of aquatic organisms. While there is a discussion regarding steps to take in the event of a frac-out, the Service is very concerned with the use of this method in karst topography, where voids in the substrate are common and often connected to ground- and surface-water systems.

The pipeline route crosses multiple low-order streams in mountainous areas. These streams are the headwaters of larger rivers and support a marine-derived native stream fauna composed of several species of freshwater shrimp, crabs and gobies. This diverse community is sensitive to disturbance, increased turbidity, and changes in channel morphology. Excessive erosion and sedimentation during construction or maintenance of the ROW could cause long-term or permanent impacts to these important wildlife areas.

Directional drilling is also proposed to avoid impacts to forested wetland areas. This includes an approximately 1-mile long crossing under the mangrove wetlands and the Rio Cocal in Toa Baja. However, all project drawings of wetland crossings show the 150-foot ROW and the permanent 50-foot no-root zone. It is not clear whether the 50-foot permanent ROW in forested wetlands could be used to access the pipeline in the future. If so, then this should be considered a permanent wetland impact. Because of the muck soils associated with some of these wetland types, additional staging areas will be needed for the drill rig, pipe, etc. There is no mention of how drilling mud will be managed, since there will be a need for sumps and other ground disturbances at the drill site to store drill muds.

Mitigation

The Corps has not yet verified the Applicant's jurisdictional determinations. The Applicant proposes a .01-to-1 compensatory mitigation ratio. This would amount to 4 acres of compensatory mitigation for an estimated 369 acres of "temporary" wetland impacts, which is inappropriate and unacceptable to the Service. A much higher ratio is necessary to compensate for the: 1) temporary loss of wetlands functions and values; 2) likely permanent loss of functions and values due to contractor errors; and 3) permanent habitat alteration by species such as cattails that rapidly invade disturbed wetland areas and out compete more beneficial wetland plants.

The Applicant should develop an adequate mitigation plan after the appropriate efforts have been implemented for avoidance and minimization. In addition we recommend that the Corps impose a performance bond to assure proper compliance with the mitigation and minimization measures.

The project area includes the mitigation area for the Gasoducto del Sur project, despite our repeated requests during the technical assistance process to avoid this area. This area was selected as a mitigation area to preserve its large amount of undisturbed, quality habitat. The Corps needs to assure compliance with previous permit conditions as part of considering this new permit action.

Summary and Conclusion

This project is one of the largest infrastructure projects proposed in Puerto Rico in decades. Its 92-mile corridor of temporary and permanent impacts would cross karst, mountain, and coastal habitats, a number of which are recognized in the Puerto Rico Comprehensive Wildlife Conservation Strategy as Critical Wildlife Areas important to conservation. The project could affect habitat for more than thirty federally-listed species and one species for which we are considering a petition for listing. Impacts to fauna and flora are not well documented, and maintenance for sensitive areas after construction is not well specified.

A broad spectrum of fish and wildlife resources occur within and adjacent to the proposed pipeline route, including migratory birds, amphidromous fish, endangered species, and wetlands. The karst areas of Puerto Rico are unique geological and ecological features in the United States,

and serve as an important aquifer recharge zone for the island. The haystack karst hills are a refugium for many native plant species. The project could adversely affect numerous streams and wetlands, and the Applicant's proposal does not appropriately consider alternatives to avoid, and measures to minimize, such impacts. The proposed 0.01-to-1 compensatory mitigation ratio is inadequate. Therefore, we are advising you, in accordance with part IV 3(a) of the 1992 Memorandum of Agreement between our agencies on the elevation of permit decisions under section 404(q) of the Clean Water Act, that the proposed project may result in substantial and unacceptable impacts to aquatic resources of national importance. We recommend that the Corps deny a permit for this action as currently proposed. The Service requests to be informed of any meetings with the applicant and the Corps or any additional documentation submitted to the Corps, regarding this permit action.

If you have any questions please contact Marelisa Rivera at 787 851 7297 x 206.

Sincerely,

Edwin Muñiz
Field Supervisor

Fhl/mtr

Enclosures

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PRPB, CZM, San Juan
EPA, San Juan
EPA, Dan Montella, New York
COE, Regulatory, San Juan
FWS, Atlanta
FERC, DC
PREPA, San Juan

Doc #187

Jan Zegarra/R4/FWS/DOI
02/24/2011 12:19 PM

To Rafael Gonzalez/R4/FWS/DOI@FWS
cc
bcc
Subject puntos y ruta de anoche

ruta censo Guabairo Feb232011.gdb

Esto lo puedes abrir en Google Earth...

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