

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

Dear Mr. Rosado:

This is in response to permit application number SAJ-2010-02881 (IP-EWG) by Eng. Francisco E. Lopez on behalf of the Puerto Rico Electric Power Authority (PREPA) requesting authorization for the construction and installation of a 92 miles long, 24-inch diameter steel natural gas pipeline. The proposed pipeline would traverse the island of Puerto Rico from Peñuelas to Arecibo, continuing to the municipalities of Toa Baja and San Juan. The project area has been estimated to traverse approximately 1,672 acres. The proposed pipeline would cross 235 rives and/or wetland areas, resulting in an estimated impact to 369 acres of jurisdictional waters of the United States. This project is intended to deliver an alternate fuel source to three existing power plants.

Based upon our review of the information contained in the Public Notice for the project, it is the Environmental Protection Agency's (EPA) opinion that the applicant has not fully justified the need to impact aquatic resources along the proposed route, nor has he proposed adequate compensation for such impacts. Furthermore, EPA believes that an EIS is necessary to fully evaluate the impacts of this extensive project.

After evaluating the available information, we believe that the applicant has failed to adequately address the need to construct the proposed pipeline. While we strongly endorse the use of alternative energy sources that result in lesser environmental impacts, we believe that other green sources of energy that minimize PREPA's dependence on fossil fuels, such as eolic and solar energy, should also be explored. EPA understands the potential limitations of these technologies in Puerto Rico due to space issues and the high demand for electric power. We also understand PREPA's desire to continue operating existing power plants rather than construct new, expensive facilities. However, the use of liquefied natural gas (LNG) as an alternative to bunker fuel must be carefully weighed due to its handling and safety issues, which in this case pose significant challenges due to the distance and varied topography to be traversed by the proposed pipeline.

In addition to a proper justification for the use of LNG as an alternative fuel source, EPA has determined that other alternatives which may result in lesser impacts to

wetland areas appear to be available. While PREPA sustains that the construction of terminals to receive liquid natural gas (LNG) from tankers near the power plants were evaluated, no supporting data to determine the practicability of such alternative was presented. Since a facility for the delivery of LNG already exists at Peñuelas, PREPA should evaluate whether the construction of an alternative terminal near one of the north coast power plants, along with the installation of a shorter length of pipeline between Arecibo and Toa Baja, would satisfy the project purpose with less impacts to aquatic resources. While EPA agrees that impacts from the construction of a marine LNG terminal may also be significant, EPA estimates that suitable sites which may result in fewer impacts could be available and should be explored. In the case that a suitable location for such a facility is determined to be feasible, PREPA must also analyze impacts to the aquatic resources of the area and determine a way to offset such impacts through compensatory mitigation.

Upon our evaluation of the proposed project, concerns regarding the use of directional drilling methods to minimize impacts to jurisdictional waters of the United States arose, particularly in karst terrain areas. In the past, directional drilling has resulted in major impacts to the environment in other projects in the Caribbean 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 jurisdictional waters which were not evaluated as part of this review. If PREPA, manages to successfully demonstrate the need for the project and to bring the project to compliance with Section 404 (b)(1) guidelines, the risks of directional drilling should 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 and steps are taken to minimize potential impacts.

Furthermore, PREPA has failed to propose adequate compensation to offset any impacts to jurisdictional areas which would result from the proposed project. The wetlands to be traversed by the project are diverse, but all provide important functions such as flood water storage and the filtering of contaminants which may otherwise reach other aquatic resources. While PREPA has conceptually proposed the use of horizontal directional drilling and vertical wall trenching, among other measures, as means to avoid and minimize impacts to wetland areas, we believe that additional analysis to identify the nature and extent of both temporary and potentially permanent impacts at each jurisdictional area are needed in order to fully evaluate the project. While PREPA has offered to be vigilant of such impact in order to immediately determine whether compensatory mitigation is required at any area along the project corridor, there is no specific plan to address the need for such compensatory mitigation areas, nor is there an adequate plan to establish them, other than lowering elevations and establishing herbaceous wetland vegetation. EPA is concerned about this proposal, since there is no way to determine how the process of identifying the need for compensatory mitigation will be carried out. In a similar manner, we are also concerned about the measures to be taken to determine whether any mitigation site will be successful based on the criteria identified in the public notice. Furthermore, 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 strongly feels that an Environmental Impact Statement (EIS) would be more appropriate than an Environmental Assessment (EA) for the proposed Via Verde Natural Gas Pipe Line. As highlighted in the public notice, the project covers 1,672 acres and will traverse 235 rivers and wetlands, covering 369 acres of jurisdictional waters of the United States. Additionally, 32 threatened or endangered species occur throughout Puerto Rico. The public notice states that the impacts of the project are expected to be temporary in nature, however the impacts on threatened and endangered species could be extensive, as demonstrated by the fact that a formal versus informal Endangered Species Act consultation will be completed for the project. In light of the fact that the consultation has not been completed, and given the span and scope of the project, EPA feels that an EIS is necessary to evaluate the full impact of the project.

In summary, we consider that the project purpose, as stated by PREPA (“to deliver an alternate fuel source to three existing electric power generating facilities”) has not been fully justified by the applicant. EPA also believes that the Via Verde project could have substantial and unacceptable impacts to the aquatic resources in its right of way, and that adequate compensatory mitigation has not been offered to offset such impacts. Furthermore, it is EPA’s opinion that an EIS is needed in order to properly evaluate the project’s impacts. Therefore EPA recommends the denial of a permit for this project in its current form.

If you have any questions regarding this matter, please contact me at (787) 977-5870 or have your staff contact José Soto, of the Multimedia Permits and Compliance Branch, at (787) 977-5829.

Sincerely,

Car-Axel P. Soderberg  
Director

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