

# Via Verde Natural Gas Pipeline

## SAJ-2010-02881 IP-EWG

Contact: Jose M. Soto, (787) 977-5829  
EPA-R2, Caribbean Environmental Protection Division

Date: February 3, 2010

### Background

The Puerto Rico Electric Power Authority (PREPA) has identified the use of natural gas as a viable alternative to diversify Puerto Rico's fuel portfolio for generation of electricity. This change would allow PREPA to reduce the cost of energy to its consumers and significantly reduce air pollutant emissions including greenhouse gases. The pipeline to convey natural gas from a facility in the southern coast of Puerto Rico to power plants along the north coast of the island was named Via Verde.

As part of the permitting process for the project, PREPA requested a permit under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act for the unavoidable impacts to water resources along the project's right of way. On November 19, 2010, the US Army Corps of Engineers (USACE) published a Public Notice for the Via Verde Project. The stated project purpose is "to deliver an alternate fuel source to three existing electric power generating facilities located in Peñuelas, Arecibo, and Toa Baja operated by the Puerto Rico Electric Power Authority (PREPA)". The proposed project entails the construction and installation of a an approximately 92 miles long 24-inch diameter steel natural gas pipeline traversing the island of Puerto Rico from north to south, then east. The total project area is approximately 1,672 acres. The proposed route would cross 235 rivers and wetland areas, potentially impacting 369 acres of jurisdictional waters of the United States. The pipeline route will include both private and public lands which include commercial, agricultural and industrial sites, as well as populated urban areas, roads and highways. The wetlands to be affected include herbaceous systems, approximately 8.5 acres of mangrove forests and mangrove forested canals, and estuarine salt flats dominated by dwarf black mangroves. The project may also affect some species of the 32 federally listed species in PR.

### EPA's Concerns

By letter dated December 20, 2010, we submitted our comments to the USACE. Our comments were based on the information contained in the Public Notice and are summarized as follows:

- 1) lack of an adequate alternatives analysis to justify the selected alternative in light of the Section 404(b)(1) guidelines. Better documentation of the alternatives analysis process, such as the construction of a natural gas terminal on the north coast of Puerto Rico, are required to justify the impacts of the proposed alternative,
- 2) the proposed use of directional drilling on karst terrain along the northern coast of Puerto Rico and potential spills of bentonite mud that may affect groundwater and/or other aquatic resources in the region,
- 3) lack of detailed information regarding the jurisdictional areas to be impacted, as well as a set ratio and established procedure to complete and monitor any required compensatory mitigation projects, and
- 4) based on the challenges, project size, safety issues and potentially extensive impacts of the project to wetlands, as well as to threatened and endangered species, EPA recommended the preparation of a Federal Environmental Impact Statement (EIS).

Based on the above, EPA recommended that the Corps not issue a permit for the project as proposed until PREPA addresses our concerns.

## **PREPA's Response**

On January 27, 2011 PREPA's Executive Director forwarded a letter to EPA's Region 2 Administrator. The letter stated that many of our concerns were addressed by the local Final-EIS, which was approved by the Puerto Rico Environmental Quality Board (PREQB) on November 29, 2010, and that a Federal EIS is, therefore, not necessary. In their letter, PREPA does not directly address our concerns but refers us to the local EIS for the information. However, the local EIS may not contain the elements required for compliance under NEPA.

On January 28, 2011, PREPA also sent a letter and attachment to the USACE's project manager. This letter also addressed most concerns from the USACE's resource agencies by referring them to the local Final-EIS approved by PREQB.

## **Current Status**

USACE convened a meeting between PREPA, its consultants and the resource agencies (EPA, Fish and Wildlife Service, State Historical Preservation Office, NOAA Fisheries and Federal Highway Administration) on February 1, 2011. During the meeting, agencies' comments were discussed, and additional concerns regarding the project were identified.

The applicant agreed to provide documentation regarding the alternatives analysis, specific width of the right-of-way (ROW) at the various ecosystems to be impacted, the drilling method in the Karst region, maintenance requirements of the ROWs, wetlands restoration and mitigation, modifications, if any, at the Ecoelectrica facility where the natural gas will be offloaded, and a Biological Evaluation concerning the various species identified by the USFWS and NMFS.

## **Future actions**

During the February 1, 2011 meeting, PREPA's consultant requested a meeting with us to present updated information which might address our concerns. However, the USACE was emphatic about circulating all information to the resource agencies through them to avoid differences in the information presented at the agencies. EPA offered to host the next meeting at our offices to allow for our counterparts in NY to participate by videoconference.

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### Background

*fuel portfolio for generation of electricity*

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The applicant agreed to provide documentation regarding the alternatives analysis, specific width of the right-of-way (ROW) at the various ecosystems to be impacted, the drilling method in the Karst region, maintenance requirements of the ROWs, wetlands restoration and mitigation, modifications, if any, at the Ecoelectrica facility where the natural gas will be offloaded, and a Biological Evaluation concerning the various species identified by the USFWS and NMFS.

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# Via Verde Natural Gas Pipeline

## SAJ-2010-02881 IP-EWG

Date: February 2, 2011

Contact: Jose M. Soto  
Region 2  
Caribbean Environmental Protection Division  
(787) 977-5829

### Background

The Puerto Rico Electric Power Authority (PREPA) has identified the use of natural gas as a viable alternative to diversify Puerto Rico's electric power infrastructure, which relies solely on the use of fuel oils. PREPA has estimated that the conversion of its power plants to natural gas would reduce the cost of energy, which is currently undermines the island's economy. Furthermore, this change would allow PREPA to significantly reduce pollutant emissions and greenhouse gases. The pipeline to convey natural gas from a facility in the <sup>southern</sup> northern coast of Puerto Rico to power plants along the north coast of the island was named Via Verde.

As part of the permitting process for the project, PREPA requested a permit under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act for the unavoidable impacts to water resources along the project's right of way. On November 19, 2010, the US Army Corps of Engineers (USACE) published a Public Notice for the Via Verde Project. The stated project purpose on the public notice is "to deliver an alternate fuel source to three existing electric power generating facilities located in Peñuelas, Arecibo, and Toa Baja operated by the Puerto Rico Electric Power Authority (PREPA)". The proposed project entails the construction and installation of ~~a~~ an approximately 92 miles long 24-inch diameter steel natural gas pipeline traversing the island of Puerto Rico from north to south, then east. The total project area is approximately 1,672 acres. <sup>the</sup> proposed route would cross 235 rivers and wetland areas, potentially impacting 369 acres of jurisdictional waters of the United States. The pipeline route will include both private and public lands which include commercial, agricultural and industrial sites, as well as populated urban areas, roads and highways. The wetlands to be affected include herbaceous systems, approximately 8.5 acres of mangrove forests and mangrove forested canals, and estuarine salt flats dominated by dwarf black mangroves. The project may also affect 82 federally listed species.

In the public notice, PREPA stated that alternative methods to deliver the natural gas to the power plants, as well as alternative routes for the pipeline were evaluated. In addition, PREPA also stated that horizontal directional drilling and vertical wall trenching would be used, where practicable, to reduce impacts to jurisdictional areas, but that the project had been designed to avoid impacts and thus all impacts to wetland areas would be temporary in nature. PREPA also stated that if additional compensatory mitigation was required due to any unavoidable impacts, they are prepared to identify uplands along the project corridor that can be converted to herbaceous wetlands, as per an agreed upon ratio.

### Issue

Upon evaluation of the information contained in the project's public notice, EPA had reservations <sup>concerns</sup> regarding the issuance of a permit for the project. Our concerns included:

1. The lack of an adequate alternatives analysis to justify the selected alternative in light of the Section 404(b)(1) guidelines. <sup>Better</sup> Documentation of the alternatives analysis process, such as the evaluation of alternative fuel sources and the construction of a natural gas terminal on the north coast of Puerto Rico, are required to justify the selection of the proposed alternative.
2. Concerns regarding the ~~proposed~~ <sup>use of</sup> directional drilling <sup>on karst terrain</sup> along the northern coast of Puerto Rico and potential spills of bentonite mud that may affect groundwater and/or other aquatic resources in the region.
3. The lack of detailed information regarding the jurisdictional areas to be impacted, as well as a set ratio and established procedure to complete any required compensatory mitigation <sup>restoration of</sup> projects. Furthermore, the lack of established criteria to monitor and determine the success of <sup>impacted</sup> any ~~such~~ mitigation areas. <sup>wetlands</sup>
4. After considering the challenges, project size, safety issues and potentially extensive impacts of the project to wetlands, as well as to threatened and endangered species, EPA recommended the preparation of a Federal <sup>Environmental</sup> Impact Statement (EIS) <sup>rather than an</sup> ~~environmental assessment for the project.~~ <sup>and</sup>

Based on these concerns, EPA recommend that the Corps not issue a permit for the project as proposed until PREPA addressed our concerns.

### Status

On January 27, 2011 PREPA's Executive Director <sup>sent</sup> forwarded a letter to EPA's Region 2 Administrator. The letter stated PREPA's belief that EPA's evaluation was based on a review of the Preliminary EIS that was prepared for compliance with Puerto Rico Law 416, which is the local equivalent of NEPA. The letter further stated that many of our concerns were addressed by the local Final-EIS, which was approved by the Puerto Rico Environmental Quality Board (PREQB) on November 29, 2010. EPA's reaction was not based on any of these documents, but solely on the information provided by PREPA for the USACE's public notice.

PREPA's letter also made the case that the local Final-EIS contains a careful and professional analysis of the project's impacts, and therefore obviates the need for a Federal EIS. PREPA then addresses many of our concerns by referring to the aforementioned Final-EIS. It is our opinion that the local EIS does not necessarily contain the elements required for compliance under NEPA. Furthermore, the local EIS is in Spanish, precluding normal evaluation by Region 2's interdisciplinary team, who are not fluent in such language.

The initial letter from PREPA was followed by a copy of a January 28, 2011 letter and attachment to the USACE's project manager for the project. This letter also addressed most concerns from the USACE's resource agencies by referring them to the local Final-EIS approved by PREQB. However, the letter also states that despite the fact that the local Final-EIS contains the alternatives analysis for the project,



PREPA is rearranging and modifying the Alternatives Analysis to satisfy "Corps' expectations". In addition, the letter addresses some particular concerns from each resource agency.

In the case of EPA, the January 28 letter refers to our concerns as "fairly general in nature" and "a direct result of the evaluation of the preliminary EIS", despite the fact that PREPA's liaison for the project has been repeatedly informed that our comments were solely based on the information contained in the public notice. Once again, EPA's concerns are addressed elsewhere in the letter by referring to section of the local Final-EIS, which in addition to being in Spanish, had not been submitted in review. USACE convened a meeting between PREPA, its consultants and the resource agencies (EPA, Fish and Wildlife Service, State Historical Preservation Office, NOAA Fisheries and Federal Highway Administration) on February 1, 2011. During the meeting, agencies' comments were addressed, and additional concerns regarding the project arose. Among such concerns are:

1. The proposed 150 ft. right of way (ROW). PREPA clarified that the ROW was variable, depending on the terrain being traversed, and is intended more as a legal obstruction to future development as opposed to a perceived impact area. In some sections, the ROW is proposed to be 50 feet wide. However, during further clarification of the ROW issue, PREPA mentioned that at the directional drilling locations, the ROW needed to be 300 feet wide to accommodate equipment. These areas have not been properly identified, nor their impact quantified. PREPA still needs to provide accurate information regarding the actual ROW impacts, what provisions will be made to provide access and accommodate equipment during construction and future maintenance, and how any temporary or permanent impact areas will be mitigated for.
2. PREPA stated that through the use of advanced technology, there would be no need to revisit wetlands for eventual pipeline maintenance. PREPA's consultants believe that such work can be performed remotely from within the pipe itself. However, EPA believes that provisions for any situations that may result in additional impacts to wetland areas should be made. This determination was reached when considering technological limitations and/or potential failures that might necessitate direct human intervention.
3. PREPA consultants ascertained that three areas where directional drilling was considered had been discarded due to concerns about potential issues with karst or wetland areas. However, PREPA has made no determination as to how these areas will be completed at this time. To resolve the directional drilling issue, PREPA needs to provide a protocol for the monitoring of directional drilling activities. In addition, specific information regarding the location, problem issues and final determination as to a proper course of action should be provided for any areas where directional drilling was originally proposed and was discarded.
4. PREPA stated during the meeting that impacts to jurisdictional areas had been drastically reduced, resulting in only temporary impacts during construction, since all wetlands would be allowed to regrow as soon as construction was complete. PREPA needs to provide specific information regarding how this would be achieved, what measures would be put in place to avoid re-colonization of areas by nuisance and/or invasive species. Wetland enhancement opportunities should also be evaluated, when warranted.

5. While PREPA stated that a decision on the requirement of a Federal EIS was ultimately USACE's, they agreed that additional information to address the alternatives analysis issues was needed. All federal agencies concurred that the local Final-EIS has inconsistencies, plus a Federal EIS is much broader in scope to address safety and environmental concerns. USACE stated that at this point, additional information is required before making a decision regarding NEPA compliance. If such required information is not provided, USACE would not hesitate to require a Federal EIS. At this point, USACE has determined that the local Final-EIS cannot be incorporated by reference. In addition, NEPA compliance documents must be written in English to facilitate a broad review by concerned agencies.
6. USACE and FWS have already determined that the information contained in PREPA's January 28 letter in response to the agencies' comments does not address their concerns.
7. USACE raised an additional concern regarding natural gas supplies. While PREPA has stated repeatedly that the natural gas would be received at the existing EcoElectrica terminal, this company has stated that they do not possess the capacity to provide for the Via Verde project, nor have they been approached regarding connections to their system. USACE is concerned regarding potential issues with the Federal Energy Regulatory Commission (FERC), and has started coordination with them. USACE's position is that if no specifics regarding the natural gas supply for the pipeline are available, the project is not viable.
8. USACE is concerned regarding comments to the public interest review process which were received after PREQB approved the local Final-EIS, and therefore are not addressed in the document.
9. Agencies are concerned about PREPA and its consultants further delaying the process by not providing information on a timely basis, opting instead for assuming an adversarial position and insisting on the validity of the local Final-EIS, which was not prepared for NEPA compliance. PREPA was advised to come forth with the required information in order to avoid additional delays and/or the denial of the USACE's permit.
10. FWS and USACE raised concerns regarding PREPA's compliance history on a similar project, the "Gasoducto Del Sur". This other gas pipeline project along the south coast of Puerto Rico is in noncompliance with its USACE permit, since "temporary" structures and impacts have not been reduced/mitigated on a timely manner. In addition, EPA has issues regarding the project's compliance with MS-4 requirements. ~~Despite these issues, USACE has determined to continue evaluating the Via Verde Project.~~

### Future actions

During the February 1, 2011 meeting, PREPA's consultant, Mr. Daniel Pagan, requested a date for a meeting with EPA's office in San Juan to present updated information which might address our concerns. A date for this meeting will be provided as soon as practicable.

*USACE objection*

EPA remains available to continue working with PREPA on the environmental issues surrounding this project. Provided that PREPA timely provides all the requested information to successfully address our concerns, a final determination regarding our recommendation on the possible issuance of a USACE permit for the project will be made.

*However, the USACE has requested that, as is normally done, all info to various agencies be sent through them to avoid miscomm. + delays.*

# Via Verde Natural Gas Pipeline

## SAJ-2010-02881 IP-EWG

Date: February 2, 2011

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Region 2  
Caribbean Environmental Protection Division  
(787) 977-5829

### Background

*from 20 kilowatt hours to 12 kilowatt hours*

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*energy portfolio for power generation currently 72% is the power is generated from fuel oil*

As part of the permitting process for the project, PREPA requested a permit under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act for the unavoidable impacts to water resources along the project's right of way. On November 19, 2010, the US Army Corps of Engineers (USACE) published a Public Notice for the Via Verde Project. The stated project purpose on the public notice is "to deliver an alternate fuel source to three existing electric power generating facilities located in Peñuelas, Arecibo, and Toa Baja operated by the Puerto Rico Electric Power Authority (PREPA)". The proposed project entails the construction and installation of a an approximately 92 mile<sup>s</sup> long 24-inch diameter steel natural gas pipeline traversing the island of Puerto Rico from north to south, then east. The total project area is approximately 1,672 acres. The proposed route would cross 235 rivers and wetland areas, potentially impacting 369 acres of jurisdictional waters of the United States. The pipeline route will include both private and public lands which include commercial, agricultural and industrial sites, as well as populated urban areas, roads and highways. The wetlands to be affected include herbaceous systems, approximately 8.5 acres of mangrove forests and mangrove forested canals, and estuarine salt flats dominated by dwarf black mangroves. The project may also affect 32 federally listed species.

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### Issue

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- 4. After considering the challenges, project size, safety issues and potentially extensive impacts of the project to wetlands, as well as to threatened and endangered species, EPA recommended the preparation of a Federal environmental Impact Statement (EIS), rather than an environmental assessment for the project.

*was to be implemented in the project groundwater and other aspects in region*

*identified reservations needed to properly evaluate the project*

*In a letter dated [redacted] EPA issued a letter to the COC expressing our concerns on 17 community*

Based on these concerns, EPA recommends that the Corps not issue a permit for the project as proposed until PREPA addressed our concerns.

**Status**

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1. The proposed 150 ft. right of way (ROW). PREPA clarified that the ROW was variable, depending on the terrain being traversed, and is intended more as a legal obstruction to future development as opposed to a perceived impact area. In some sections, the ROW is proposed to be 50 feet wide. However, during further clarification of the ROW issue, PREPA mentioned that at the directional drilling locations, the ROW needed to be 300 feet wide to accommodate equipment. These areas have not been properly identified, nor their impact quantified. PREPA still needs to provide accurate information regarding the actual ROW impacts, what provisions will be made to provide access and accommodate equipment during construction and future maintenance, and how any temporary or permanent impact areas will be mitigated for.
2. PREPA stated that through the use of advanced technology, there would be no need to revisit wetlands for eventual pipeline maintenance. PREPA's consultants believe that such work can be performed remotely from within the pipe itself. However, EPA believes that provisions for any situations that may result in additional impacts to wetland areas should be made. This determination was reached when considering technological limitations and/or potential failures that might necessitate direct human intervention.
3. PREPA consultants ascertained that three areas where directional drilling was considered had been discarded due to concerns about potential issues with karst or wetland areas. However, PREPA has made no determination as to how these areas will be completed at this time. To resolve the directional drilling issue, PREPA needs to provide a protocol for the monitoring of directional drilling activities. In addition, specific information regarding the location, problem issues and final determination as to a proper course of action should be provided for any areas where directional drilling was originally proposed and was discarded.
4. PREPA stated during the meeting that impacts to jurisdictional areas had been drastically reduced, resulting in only temporary impacts during construction, since all wetlands would be allowed to regrow as soon as construction was complete. PREPA needs to provide specific information regarding how this would be achieved, what measures would be put in place to avoid re-colonization of areas by nuisance and/or invasive species. Wetland enhancement opportunities should also be evaluated, when warranted.

5. While PREPA stated that a decision on the requirement of a Federal EIS was ultimately USACE's, they agreed that additional information to address the alternatives analysis issues was needed. All federal agencies concurred that the local Final-EIS has inconsistencies, plus a Federal EIS is much broader in scope to address safety and environmental concerns. USACE stated that at this point, additional information is required before making a decision regarding NEPA compliance. If such required information is not provided, USACE would not hesitate to require a Federal EIS. At this point, USACE has determined that the local Final-EIS cannot be incorporated by reference. In addition, NEPA compliance documents must be written in English to facilitate a broad review by concerned agencies.
6. USACE and FWS have already determined that the information contained in PREPA's January 28 letter in response to the agencies' comments does not address their concerns.
7. USACE raised an additional concern regarding natural gas supplies. While PREPA has stated repeatedly that the natural gas would be received at the existing EcoElectrica terminal, this company has stated that they do not possess the capacity to provide for the Via Verde project, nor have they been approached regarding connections to their system. USACE is concerned regarding potential issues with the Federal Energy Regulatory Commission (FERC), and has started coordination with them. USACE's position is that if no specifics regarding the natural gas supply for the pipeline are available, the project is not viable.
8. USACE is concerned regarding comments to the public interest review process which were received after PREQB approved the local Final-EIS, and therefore are not addressed in the document.
9. Agencies are concerned about PREPA and its consultants further delaying the process by not providing information on a timely basis, opting instead for assuming an adversarial position and insisting on the validity of the local Final-EIS, which was not prepared for NEPA compliance. PREPA was advised to come forth with the required information in order to avoid additional delays and/or the denial of the USACE's permit.
10. FWS and USACE raised concerns regarding PREPA's compliance history on a similar project, the "Gasoducto Del Sur". This other gas pipeline project along the south coast of Puerto Rico is in noncompliance with its USACE permit since "temporary" structures and impacts have not been reduced/mitigated on a timely manner. In addition, EPA has issues regarding the project's compliance with MS-4 requirements. Despite these issues, USACE has determined to continue evaluating the Via Verde Project.

**Future actions**

During the February 1, 2011 meeting, PREPA's consultant, Mr. Daniel Pagan, requested a date for a meeting with EPA's office in San Juan to present updated information which might address our concerns. A date for this meeting will be provided as soon as practicable. *include Prepa*

EPA remains available to continue working with PREPA on the environmental issues surrounding this project. ~~Provided that PREPA timely provides all the requested information to successfully address our concerns, a final determination regarding our recommendation on the possible issuance of a USACE permit for the project will be made.~~

# Via Verde Natural Gas Pipeline

## SAJ-2010-02881 IP-EWG

Contact: Jose M. Soto, (787) 977-5829  
EPA-R2, Caribbean Environmental Protection Division

Date: February 3, 2010

### **Background**

The Puerto Rico Electric Power Authority (PREPA) has identified the use of natural gas as a viable alternative to diversify Puerto Rico's fuel portfolio for generation of electricity. This change would allow PREPA to reduce the cost of energy to its consumers and significantly reduce air pollutant emissions including greenhouse gases. The pipeline to convey natural gas from a facility in the southern coast of Puerto Rico to power plants along the north coast of the island was named Via Verde.

As part of the permitting process for the project, PREPA requested a permit under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act for the unavoidable impacts to water resources along the project's right of way. On November 19, 2010, the US Army Corps of Engineers (USACE) published a Public Notice for the Via Verde Project. The stated project purpose is "to deliver an alternate fuel source to three existing electric power generating facilities located in Peñuelas, Arecibo, and Toa Baja operated by the Puerto Rico Electric Power Authority (PREPA)". The proposed project entails the construction and installation of a an approximately 92 miles long 24-inch diameter steel natural gas pipeline traversing the island of Puerto Rico from north to south, then east. The total project area is approximately 1,672 acres. The proposed route would cross 235 rivers and wetland areas, potentially impacting 369 acres of jurisdictional waters of the United States. The pipeline route will include both private and public lands which include commercial, agricultural and industrial sites, as well as populated urban areas, roads and highways. The wetlands to be affected include herbaceous systems, approximately 8.5 acres of mangrove forests and mangrove forested canals, and estuarine salt flats dominated by dwarf black mangroves. The project may also affect some species of the 32 federally listed species in PR.

### **EPA's Concerns**

By letter dated December 20, 2010, we submitted our comments to the USACE. Our comments were based on the information contained in the Public Notice and are summarized as follows:

- 1) lack of an adequate alternatives analysis to justify the selected alternative in light of the Section 404(b)(1) guidelines. Better documentation of the alternatives analysis process, such as the construction of a natural gas terminal on the north coast of Puerto Rico, are required to justify the impacts of the proposed alternative,
- 2) the proposed use of directional drilling on karst terrain along the northern coast of Puerto Rico and potential spills of bentonite mud that may affect groundwater and/or other aquatic resources in the region,
- 3) lack of detailed information regarding the jurisdictional areas to be impacted, as well as a set ratio and established procedure to complete and monitor any required compensatory mitigation projects, and
- 4) based on the challenges, project size, safety issues and potentially extensive impacts of the project to wetlands, as well as to threatened and endangered species, EPA recommended the preparation of a Federal Environmental Impact Statement (EIS).

Based on the above, EPA recommended that the Corps not issue a permit for the project as proposed until PREPA addresses our concerns.





## **PREPA's Response**

On January 27, 2011 PREPA's Executive Director forwarded a letter to EPA's Region 2 Administrator. The letter stated that many of our concerns were addressed by the local Final-EIS, which was approved by the Puerto Rico Environmental Quality Board (PREQB) on November 29, 2010, and that a Federal EIS is, therefore, not necessary. In their letter, PREPA does not directly address our concerns but refers us to the local EIS for the information. However, the local EIS may not contain the elements required for compliance under NEPA.

On January 28, 2011, PREPA also sent a letter and attachment to the USACE's project manager. This letter also addressed most concerns from the USACE's resource agencies by referring them to the local Final-EIS approved by PREQB.

## **Current Status**

USACE convened a meeting between PREPA, its consultants and the resource agencies (EPA, Fish and Wildlife Service, State Historical Preservation Office, NOAA Fisheries and Federal Highway Administration) on February 1, 2011. During the meeting, agencies' comments were discussed, and additional concerns regarding the project were identified.

The applicant agreed to provide documentation regarding the alternatives analysis, specific width of the right-of-way (ROW) at the various ecosystems to be impacted, the drilling method in the Karst region, maintenance requirements of the ROWs, wetlands restoration and mitigation, modifications, if any, at the Ecoelectrica facility where the natural gas will be offloaded, and a Biological Evaluation concerning the various species identified by the USFWS and NMFS.

## **Future actions**

During the February 1, 2011 meeting, PREPA's consultant requested a meeting with us to present updated information which might address our concerns. However, the USACE was emphatic about circulating all information to the resource agencies through them to avoid differences in the information presented at the agencies. EPA offered to host the next meeting at our offices to allow for our counterparts in NY to participate by videoconference.



# Via Verde Natural Gas Pipeline

## SAJ-2010-02881 IP-EWG

Date: February 2, 2011

Contact: Jose M. Soto  
Region 2  
Caribbean Environmental Protection Division  
(787) 977-5829

### **Background**

The Puerto Rico Electric Power Authority (PREPA) has identified the use of natural gas as a viable alternative to diversify Puerto Rico's electric power infrastructure, which relies solely on the use of fuel oils. PREPA has estimated that the conversion of its power plants to natural gas would reduce the cost of energy, which is currently undermines the island's economy. Furthermore, this change would allow PREPA to significantly reduce pollutant emissions and greenhouse gases. The pipeline to convey natural gas from a facility in the northern coast of Puerto Rico to power plants along the north coast of the island was named Via Verde.

As part of the permitting process for the project, PREPA requested a permit under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act for the unavoidable impacts to water resources along the project's right of way. On November 19, 2010, the US Army Corps of Engineers (USACE) published a Public Notice for the Via Verde Project. The stated project purpose on the public notice is "to deliver an alternate fuel source to three existing electric power generating facilities located in Peñuelas, Arecibo, and Toa Baja operated by the Puerto Rico Electric Power Authority (PREPA)". The proposed project entails the construction and installation of a an approximately 92 miles long 24-inch diameter steel natural gas pipeline traversing the island of Puerto Rico from north to south, then east. The total project area is approximately 1,672 acres. He proposed route would cross 235 rivers and wetland areas, potentially impacting 369 acres of jurisdictional waters of the United States. The pipeline route will include both private and public lands which include commercial, agricultural and industrial sites, as well as populated urban areas, roads and highways. The wetlands to be affected include herbaceous systems, approximately 8.5 acres of mangrove forests and mangrove forested canals, and estuarine salt flats dominated by dwarf black mangroves. The project may also affect 32 federally listed species.

In the public notice, PREPA stated that alternative methods to deliver the natural gas to the power plants, as well as alternative routes for the pipeline were evaluated. In addition, PREPA also stated that horizontal directional drilling and vertical wall trenching would be used, where practicable, to reduce impacts to jurisdictional areas, but that the project had been designed to avoid impacts and thus all impacts to wetland areas would be temporary in nature. PREPA also stated that if additional compensatory mitigation was required due to any unavoidable impacts, they are prepared to identify uplands along the project corridor that can be converted to herbaceous wetlands, as per an agreed upon ratio.

### **Issue**



Upon evaluation of the information contained in the project's public notice, EPA had reservations regarding the issuance of a permit for the project. Our concerns included:

1. The lack of an adequate alternatives analysis to justify the selected alternative in light of the Section 404(b)(1) guidelines. Better documentation of the alternatives analysis process, such as the evaluation of alternative fuel sources and the construction of a natural gas terminal on the north coast of Puerto Rico, are required to justify the selection of the proposed alternative.
2. Concerns regarding the proposed use of directional drilling on karst terrain along the northern coast of Puerto Rico and potential spills of bentonite mud that may affect groundwater and/or other aquatic resources in the region.
3. The lack of detailed information regarding the jurisdictional areas to be impacted, as well as a set ratio and established procedure to complete any required compensatory mitigation projects. Furthermore, the lack of established criteria to monitor and determine the success of any such mitigation areas.
4. After considering the challenges, project size, safety issues and potentially extensive impacts of the project to wetlands, as well as to threatened and endangered species, EPA recommended the preparation of a Federal environmental Impact Statement (EIS) rather than an environmental assessment for the project.

Based on these concerns, EPA recommend that the Corps not issue a permit for the project as proposed until PREPA addressed our concerns.

### **Status**

On January 27, 2011 PREPA's Executive Director forwarded a letter to EPA's Region 2 Administrator. The letter stated PREPA's belief that EPA's evaluation was based on a review of the Preliminary EIS that was prepared for compliance with Puerto Rico Law 416, which is the local equivalent of NEPA. The letter further stated that many of our concerns were addressed by the local Final-EIS, which was approved by the Puerto Rico Environmental Quality Board (PREQB) on November 29, 2010. EPA's reaction was not based on any of these documents, but solely on the information provided by PREPA for the USACE's public notice.

PREPA's letter also made the case that the local Final-EIS contains a careful and professional analysis of the project's impacts, and therefore obviates the need for a Federal EIS. PREPA then addresses many of our concerns by referring to the aforementioned Final-EIS. It is our opinion that the local EIS does not necessarily contain the elements required for compliance under NEPA. Furthermore, the local EIS is in Spanish, precluding normal evaluation by Region 2's interdisciplinary team, who are not fluent in such language.

The initial letter from PREPA was followed by a copy of a January 28, 2011 letter and attachment to the USACE's project manager for the project. This letter also addressed most concerns from the USACE's resource agencies by referring them to the local Final-EIS approved by PREQB. However, the letter also states that despite the fact that the local Final-EIS contains the alternatives analysis for the project,



PREPA is rearranging and modifying the Alternatives Analysis to satisfy "Corps' expectations". In addition, the letter addresses some particular concerns from each resource agency.

In the case of EPA, the January 28 letter refers to our concerns as "fairly general in nature" and "a direct result of the evaluation of the preliminary EIS", despite the fact that PREPA's liaison for the project has been repeatedly informed that our comments were solely based on the information contained in the public notice. Once again, EPA's concerns are addressed elsewhere in the letter by referring to section of the local Final-EIS.

USACE convened a meeting between PREPA, its consultants and the resource agencies (EPA, Fish and Wildlife Service, State Historical Preservation Office, NOAA Fisheries and Federal Highway Administration) on February 1, 2011. During the meeting, agencies' comments were addressed, and additional concerns regarding the project arose. Among such concerns are:

1. The proposed 150 ft. right of way (ROW). PREPA clarified that the ROW was variable, depending on the terrain being traversed, and is intended more as a legal obstruction to future development as opposed to a perceived impact area. In some sections, the ROW is proposed to be 50 feet wide. However, during further clarification of the ROW issue, PREPA mentioned that at the directional drilling locations, the ROW needed to be 300 feet wide to accommodate equipment. These areas have not been properly identified, nor their impact quantified. PREPA still needs to provide accurate information regarding the actual ROW impacts, what provisions will be made to provide access and accommodate equipment during construction and future maintenance, and how any temporary or permanent impact areas will be mitigated for.
2. PREPA stated that through the use of advanced technology, there would be no need to revisit wetlands for eventual pipeline maintenance. PREPA's consultants believe that such work can be performed remotely from within the pipe itself. However, EPA believes that provisions for any situations that may result in additional impacts to wetland areas should be made. This determination was reached when considering technological limitations and/or potential failures that might necessitate direct human intervention.
3. PREPA consultants ascertained that three areas where directional drilling was considered had been discarded due to concerns about potential issues with karst or wetland areas. However, PREPA has made no determination as to how these areas will be completed at this time. To resolve the directional drilling issue, PREPA needs to provide a protocol for the monitoring of directional drilling activities. In addition, specific information regarding the location, problem issues and final determination as to a proper course of action should be provided for any areas where directional drilling was originally proposed and was discarded.
4. PREPA stated during the meeting that impacts to jurisdictional areas had been drastically reduced, resulting in only temporary impacts during construction, since all wetlands would be allowed to regrow as soon as construction was complete. PREPA needs to provide specific information regarding how this would be achieved, what measures would be put in place to avoid re-colonization of areas by nuisance and/or invasive species. Wetland enhancement opportunities should also be evaluated, when warranted.





5. While PREPA stated that a decision on the requirement of a Federal EIS was ultimately USACE's, they agreed that additional information to address the alternatives analysis issues was needed. All federal agencies concurred that the local Final-EIS has inconsistencies, plus a Federal EIS is much broader in scope to address safety and environmental concerns. USACE stated that at this point, additional information is required before making a decision regarding NEPA compliance. If such required information is not provided, USACE would not hesitate to require a Federal EIS. At this point, USACE has determined that the local Final-EIS cannot be incorporated by reference. In addition, NEPA compliance documents must be written in English to facilitate a broad review by concerned agencies.
6. USACE and FWS have already determined that the information contained in PREPA's January 28 letter in response to the agencies' comments does not address their concerns.
7. USACE raised an additional concern regarding natural gas supplies. While PREPA has stated repeatedly that the natural gas would be received at the existing EcoElectrica terminal, this company has stated that they do not possess the capacity to provide for the Via Verde project, nor have they been approached regarding connections to their system. USACE is concerned regarding potential issues with the Federal Energy Regulatory Commission (FERC), and has started coordination with them. USACE's position is that if no specifics regarding the natural gas supply for the pipeline are available, the project is not viable.
8. USACE is concerned regarding comments to the public interest review process which were received after PREQB approved the local Final-EIS, and therefore are not addressed in the document.
9. Agencies are concerned about RPEPA and its consultants further delaying the process by not providing information on a timely basis, opting instead for assuming an adversarial position and insisting on the validity of the local Final-EIS, which was not prepared for NEPA compliance. PREPA was advised to come forth with the required information in order to avoid additional delays and/or the denial of the USACE's permit.
10. FWS and USACE raised concerns regarding PREPA's compliance history on a similar project, the "Gasoducto Del Sur". This other gas pipeline project along the south coast of Puerto Rico is in noncompliance with its USACE permit, since "temporary" structures and impacts have not been reduced/mitigated on a timely manner. In addition, EPA has issues regarding the project's compliance with MS-4 requirements. Despite these issues, USACE has determined to continue evaluating the Via Verde Project.

### **Future actions**

During the February 1, 2011 meeting, PREPA's consultant, Mr. Daniel Pagan, requested a date for a meeting with EPA's office in San Juan to present updated information which might address our concerns. A date for this meeting will be provided as soon as practicable.

EPA remains available to continue working with PREPA on the environmental issues surrounding this project. Provided that PREPA timely provides all the requested information to successfully address our concerns, a final determination regarding our recommendation on the possible issuance of a USACE permit for the project will be made.



# Via Verde Natural Gas Pipeline

## SAJ-2010-02881 IP-EWG

Contact: Jose M. Soto, (787) 977-5829  
EPA-R2, Caribbean Environmental Protection Division

Date: February 3, 2010

### **Background**

The Puerto Rico Electric Power Authority (PREPA) has identified the use of natural gas as a viable alternative to diversify Puerto Rico's fuel portfolio for generation of electricity. This change would allow PREPA to reduce the cost of energy to its consumers and significantly reduce air pollutant emissions including greenhouse gases. The pipeline to convey natural gas from a facility in the southern coast of Puerto Rico to power plants along the north coast of the island was named Via Verde.

As part of the permitting process for the project, PREPA requested a permit under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act for the unavoidable impacts to water resources along the project's right of way. On November 19, 2010, the US Army Corps of Engineers (USACE) published a Public Notice for the Via Verde Project. The stated project purpose is "to deliver an alternate fuel source to three existing electric power generating facilities located in Peñuelas, Arecibo, and Toa Baja operated by the Puerto Rico Electric Power Authority (PREPA)". The proposed project entails the construction and installation of a an approximately 92 miles long 24-inch diameter steel natural gas pipeline traversing the island of Puerto Rico from north to south, then east. The total project area is approximately 1,672 acres. The proposed route would cross 235 rivers and wetland areas, potentially impacting 369 acres of jurisdictional waters of the United States. The pipeline route will include both private and public lands which include commercial, agricultural and industrial sites, as well as populated urban areas, roads and highways. The wetlands to be affected include herbaceous systems, approximately 8.5 acres of mangrove forests and mangrove forested canals, and estuarine salt flats dominated by dwarf black mangroves. The project may also affect some species of the 32 federally listed species in PR.

### **EPA's Concerns**

By letter dated December 20, 2010, we submitted our comments to the USACE. Our comments were based on the information contained in the Public Notice and are summarized as follows:

- 1) lack of an adequate alternatives analysis to justify the selected alternative in light of the Section 404(b)(1) guidelines. Better documentation of the alternatives analysis process, such as the construction of a natural gas terminal on the north coast of Puerto Rico, are required to justify the impacts of the proposed alternative,
- 2) the proposed use of directional drilling on karst terrain along the northern coast of Puerto Rico and potential spills of bentonite mud that may affect groundwater and/or other aquatic resources in the region,
- 3) lack of detailed information regarding the jurisdictional areas to be impacted, as well as a set ratio and established procedure to complete and monitor any required compensatory mitigation projects, and
- 4) based on the challenges, project size, safety issues and potentially extensive impacts of the project to wetlands, as well as to threatened and endangered species, EPA recommended the preparation of a Federal Environmental Impact Statement (EIS).

Based on the above, EPA recommended that the Corps not issue a permit for the project as proposed until PREPA addresses our concerns.



## **PREPA's Response**

On January 27, 2011 PREPA's Executive Director forwarded a letter to EPA's Region 2 Administrator. The letter stated that many of our concerns were addressed by the local Final-EIS, which was approved by the Puerto Rico Environmental Quality Board (PREQB) on November 29, 2010, and that a Federal EIS is, therefore, not necessary. In their letter, PREPA does not directly address our concerns but refers us to the local EIS for the information. However, the local EIS may not contain the elements required for compliance under NEPA. Furthermore, the local EIS is in Spanish, precluding normal evaluation by Region 2's interdisciplinary team, who are not fluent in such language.

On January 28, 2011, PREPA also sent a letter and attachment to the USACE's project manager. This letter also addressed most concerns from the USACE's resource agencies by referring them to the local Final-EIS approved by PREQB.

## **Current Status**

USACE convened a meeting between PREPA, its consultants and the resource agencies (EPA, Fish and Wildlife Service, State Historical Preservation Office, NOAA Fisheries and Federal Highway Administration) on February 1, 2011. During the meeting, agencies' comments were discussed, and additional concerns regarding the project were identified.

The applicant agreed to provide documentation regarding the alternatives analysis, specific width of the right-of-way (ROW) at the various ecosystems to be impacted, the drilling method in the Karst region, maintenance requirements of the ROWs, wetlands restoration and mitigation, modifications, if any, at the Ecoelectrica facility where the natural gas will be offloaded, and a Biological Evaluation concerning the various species identified by the USFWS and NMFS.

## **Future actions**

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## **Current Status**

USACE convened a meeting between PREPA, its consultants and the resource agencies (EPA, Fish and Wildlife Service, State Historical Preservation Office, NOAA Fisheries and Federal Highway Administration) on February 1, 2011. During the meeting, agencies' comments were discussed, and additional concerns regarding the project were identified.

The applicant agreed to provide documentation regarding the alternatives analysis, specific width of the right-of-way (ROW) at the various ecosystems to be impacted, the drilling method in the Karst region, maintenance requirements of the ROWs, wetlands restoration and mitigation, modifications, if any, at the Ecoelectrica facility where the natural gas will be offloaded, and a Biological Evaluation concerning the various species identified by the USFWS and NMFS.

## **Future actions**

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# Via Verde Natural Gas Pipeline

## SAJ-2010-02881 IP-EWG

Contact: Jose M. Soto, (787) 977-5829  
EPA-R2, Caribbean Environmental Protection Division

Date: February 3, 2010

### Background

The Puerto Rico Electric Power Authority (PREPA) has identified the use of natural gas as a viable alternative to diversify Puerto Rico's fuel portfolio for generation of electricity. This change would allow PREPA to reduce the cost of energy to its consumers and significantly reduce air pollutant emissions including greenhouse gases. The pipeline to convey natural gas from a facility in the southern coast of Puerto Rico to power plants along the north coast of the island was named Via Verde.

As part of the permitting process for the project, PREPA requested a permit under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act for the unavoidable impacts to water resources along the project's right of way. On November 19, 2010, the US Army Corps of Engineers (USACE) published a Public Notice for the Via Verde Project. The stated project purpose is "to deliver an alternate fuel source to three existing electric power generating facilities located in Peñuelas, Arecibo, and Toa Baja operated by the Puerto Rico Electric Power Authority (PREPA)". The proposed project entails the construction and installation of a an approximately 92 miles long 24-inch diameter steel natural gas pipeline traversing the island of Puerto Rico from north to south, then east. The total project area is approximately 1,672 acres. The proposed route would cross 235 rivers and wetland areas, potentially impacting 369 acres of jurisdictional waters of the United States. The pipeline route will include both private and public lands which include commercial, agricultural and industrial sites, as well as populated urban areas, roads and highways. The wetlands to be affected include herbaceous systems, approximately 8.5 acres of mangrove forests and mangrove forested canals, and estuarine salt flats dominated by dwarf black mangroves. The project may also affect some species of the 32 federally listed species in PR.

### EPA's Concerns

By letter dated December 20, 2010, we submitted our comments to the USACE. Our comments were based on the information contained in the Public Notice and are summarized as follows:

- 1) lack of an adequate alternatives analysis to justify the selected alternative in light of the Section 404(b)(1) guidelines. Better documentation of the alternatives analysis process, such as the construction of a natural gas terminal on the north coast of Puerto Rico, are required to justify the impacts of the proposed alternative,
- 2) the proposed use of directional drilling on karst terrain along the northern coast of Puerto Rico and potential spills of bentonite mud that may affect groundwater and/or other aquatic resources in the region,
- 3) lack of detailed information regarding the jurisdictional areas to be impacted, as well as a set ratio and established procedure to complete and monitor any required compensatory mitigation projects, and
- 4) based on the challenges, project size, safety issues and potentially extensive impacts of the project to wetlands, as well as to threatened and endangered species, EPA recommended the preparation of a Federal Environmental Impact Statement (EIS).

Based on the above, EPA recommended that the Corps not issue a permit for the project as proposed until PREPA addresses our concerns.





## **PREPA's Response**

On January 27, 2011 PREPA's Executive Director forwarded a letter to EPA's Region 2 Administrator. The letter stated that many of our concerns were addressed by the local Final-EIS, which was approved by the Puerto Rico Environmental Quality Board (PREQB) on November 29, 2010, and that a Federal EIS is, therefore, not necessary. In their letter, PREPA does not directly address our concerns but refers us to the local EIS for the information. However, the local EIS may not contain the elements required for compliance under NEPA. Furthermore, the local EIS is in Spanish, precluding normal evaluation by Region 2's interdisciplinary team, who are not fluent in such language.

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As part of the permitting process for the project, PREPA requested a permit under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act for the unavoidable impacts to water resources along the project's right of way. On November 19, 2010, the US Army Corps of Engineers (USACE) published a Public Notice for the Via Verde Project. The stated project purpose is "to deliver an alternate fuel source to three existing electric power generating facilities located in Peñuelas, Arecibo, and Toa Baja operated by the Puerto Rico Electric Power Authority (PREPA)". The proposed project entails the construction and installation of a an approximately 92 miles long 24-inch diameter steel natural gas pipeline traversing the island of Puerto Rico from north to south, then east. The total project area is approximately 1,672 acres. The proposed route would cross 235 rivers and wetland areas, potentially impacting 369 acres of jurisdictional waters of the United States. The pipeline route will include both private and public lands which include commercial, agricultural and industrial sites, as well as populated urban areas, roads and highways. The wetlands to be affected include herbaceous systems, approximately 8.5 acres of mangrove forests and mangrove forested canals, and estuarine salt flats dominated by dwarf black mangroves. The project may also affect some species of the 32 federally listed species in PR.

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USACE convened a meeting between PREPA, its consultants and the resource agencies (EPA, Fish and Wildlife Service, State Historical Preservation Office, NOAA Fisheries and Federal Highway Administration) on February 1, 2011. During the meeting, agencies' comments were addressed, and additional concerns regarding the project were discussed.

The applicant agreed to provide documentation regarding the alternatives analysis, specific width of the right-of-way (ROW) at the various ecosystems to be impacted, the drilling method in the Karst region, maintenance requirements of the ROWs, wetlands restoration and mitigation, modifications, if any, at the Ecoelectrica facility where the natural gas will be offloaded, and a Biological Evaluation concerning the various species identified by the USFWS and NMFS.

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During the February 1, 2011 meeting, PREPA's consultant requested a meeting with us to present updated information which might address our concerns. However, the USACE was emphatic about circulating all information to the resource agencies through them to avoid differences in the information presented at the agencies. EPA offered to host the next meeting at our offices to allow for our counterparts in NY to participate by videoconference.



# Via Verde Natural Gas Pipeline

## SAJ-2010-02881 IP-EWG

Date: February 2, 2011

Contact: Jose M. Soto  
Region 2  
Caribbean Environmental Protection Division  
(787) 977-5829

### Background

The Puerto Rico Electric Power Authority (PREPA) has identified the use of natural gas as a viable alternative to diversify Puerto Rico's electric power infrastructure, which relies solely on the use of fuel oils. PREPA has estimated that the conversion of its power plants to natural gas would reduce the cost of energy, which is currently undermines the island's economy. Furthermore, this change would allow PREPA to significantly reduce pollutant emissions and greenhouse gases. The pipeline to convey natural gas from a facility in the northern coast of Puerto Rico to power plants along the north coast of the island was named Via Verde.

As part of the permitting process for the project, PREPA requested a permit under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act for the unavoidable impacts to water resources along the project's right of way. On November 19, 2010, the US Army Corps of Engineers (USACE) published a Public Notice for the Via Verde Project. The stated project purpose on the public notice is "to deliver an alternate fuel source to three existing electric power generating facilities located in Peñuelas, Arecibo, and Toa Baja operated by the Puerto Rico Electric Power Authority (PREPA)". The proposed project entails the construction and installation of a an approximately 92 miles long 24-inch diameter steel natural gas pipeline traversing the island of Puerto Rico from north to south, then east. The total project area is approximately 1,672 acres. He proposed route would cross 235 rivers and wetland areas, potentially impacting 369 acres of jurisdictional waters of the United States. The pipeline route will include both private and public lands which include commercial, agricultural and industrial sites, as well as populated urban areas, roads and highways. The wetlands to be affected include herbaceous systems, approximately 8.5 acres of mangrove forests and mangrove forested canals, and estuarine salt flats dominated by dwarf black mangroves. The project may also affect 32 federally listed species.

In the public notice, PREPA stated that alternative methods to deliver the natural gas to the power plants, as well as alternative routes for the pipeline were evaluated. In addition, PREPA also stated that horizontal directional drilling and vertical wall trenching would be used, where practicable, to reduce impacts to jurisdictional areas, but that the project had been designed to avoid impacts and thus all impacts to wetland areas would be temporary in nature. PREPA also stated that if additional compensatory mitigation was required due to any unavoidable impacts, they are prepared to identify uplands along the project corridor that can be converted to herbaceous wetlands, as per an agreed upon ratio.

### Issue





Upon evaluation of the information contained in the project's public notice, EPA had reservations regarding the issuance of a permit for the project. Our concerns included:

1. The lack of an adequate alternatives analysis to justify the selected alternative in light of the Section 404(b)(1) guidelines. Better documentation of the alternatives analysis process, such as the evaluation of alternative fuel sources and the construction of a natural gas terminal on the north coast of Puerto Rico, are required to justify the selection of the proposed alternative.
2. Concerns regarding the proposed use of directional drilling on karst terrain along the northern coast of Puerto Rico and potential spills of bentonite mud that may affect groundwater and/or other aquatic resources in the region.
3. The lack of detailed information regarding the jurisdictional areas to be impacted, as well as a set ratio and established procedure to complete any required compensatory mitigation projects. Furthermore, the lack of established criteria to monitor and determine the success of any such mitigation areas.
4. After considering the challenges, project size, safety issues and potentially extensive impacts of the project to wetlands, as well as to threatened and endangered species, EPA recommended the preparation of a Federal environmental Impact Statement (EIS) rather than an environmental assessment for the project.

Based on these concerns, EPA recommend that the Corps not issue a permit for the project as proposed until PREPA addressed our concerns.

### **Status**

On January 27, 2011 PREPA's Executive Director forwarded a letter to EPA's Region 2 Administrator. The letter stated PREPA's belief that EPA's evaluation was based on a review of the Preliminary EIS that was prepared for compliance with Puerto Rico Law 416, which is the local equivalent of NEPA. The letter further stated that many of our concerns were addressed by the local Final-EIS, which was approved by the Puerto Rico Environmental Quality Board (PREQB) on November 29, 2010. EPA's reaction was not based on any of these documents, but solely on the information provided by PREPA for the USACE's public notice.

PREPA's letter also made the case that the local Final-EIS contains a careful and professional analysis of the project's impacts, and therefore obviates the need for a Federal EIS. PREPA then addresses many of our concerns by referring to the aforementioned Final-EIS. It is our opinion that the local EIS does not necessarily contain the elements required for compliance under NEPA. Furthermore, the local EIS is in Spanish, precluding normal evaluation by Region 2's interdisciplinary team, who are not fluent in such language.

The initial letter from PREPA was followed by a copy of a January 28, 2011 letter and attachment to the USACE's project manager for the project. This letter also addressed most concerns from the USACE's resource agencies by referring them to the local Final-EIS approved by PREQB. However, the letter also states that despite the fact that the local Final-EIS contains the alternatives analysis for the project,



PREPA is rearranging and modifying the Alternatives Analysis to satisfy "Corps' expectations". In addition, the letter addresses some particular concerns from each resource agency.

In the case of EPA, the January 28 letter refers to our concerns as "fairly general in nature" and "a direct result of the evaluation of the preliminary EIS", despite the fact that PREPA's liaison for the project has been repeatedly informed that our comments were solely based on the information contained in the public notice. Once again, EPA's concerns are addressed elsewhere in the letter by referring to section of the local Final-EIS.

USACE convened a meeting between PREPA, its consultants and the resource agencies (EPA, Fish and Wildlife Service, State Historical Preservation Office, NOAA Fisheries and Federal Highway Administration) on February 1, 2011. During the meeting, agencies' comments were addressed, and additional concerns regarding the project arose. Among such concerns are:

1. The proposed 150 ft. right of way (ROW). PREPA clarified that the ROW was variable, depending on the terrain being traversed, and is intended more as a legal obstruction to future development as opposed to a perceived impact area. In some sections, the ROW is proposed to be 50 feet wide. However, during further clarification of the ROW issue, PREPA mentioned that at the directional drilling locations, the ROW needed to be 300 feet wide to accommodate equipment. These areas have not been properly identified, nor their impact quantified. PREPA still needs to provide accurate information regarding the actual ROW impacts, what provisions will be made to provide access and accommodate equipment during construction and future maintenance, and how any temporary or permanent impact areas will be mitigated for.
2. PREPA stated that through the use of advanced technology, there would be no need to revisit wetlands for eventual pipeline maintenance. PREPA's consultants believe that such work can be performed remotely from within the pipe itself. However, EPA believes that provisions for any situations that may result in additional impacts to wetland areas should be made. This determination was reached when considering technological limitations and/or potential failures that might necessitate direct human intervention.
3. PREPA consultants ascertained that three areas where directional drilling was considered had been discarded due to concerns about potential issues with karst or wetland areas. However, PREPA has made no determination as to how these areas will be completed at this time. To resolve the directional drilling issue, PREPA needs to provide a protocol for the monitoring of directional drilling activities. In addition, specific information regarding the location, problem issues and final determination as to a proper course of action should be provided for any areas where directional drilling was originally proposed and was discarded.
4. PREPA stated during the meeting that impacts to jurisdictional areas had been drastically reduced, resulting in only temporary impacts during construction, since all wetlands would be allowed to regrow as soon as construction was complete. PREPA needs to provide specific information regarding how this would be achieved, what measures would be put in place to avoid re-colonization of areas by nuisance and/or invasive species. Wetland enhancement opportunities should also be evaluated, when warranted.



5. While PREPA stated that a decision on the requirement of a Federal EIS was ultimately USACE's, they agreed that additional information to address the alternatives analysis issues was needed. All federal agencies concurred that the local Final-EIS has inconsistencies, plus a Federal EIS is much broader in scope to address safety and environmental concerns. USACE stated that at this point, additional information is required before making a decision regarding NEPA compliance. If such required information is not provided, USACE would not hesitate to require a Federal EIS. At this point, USACE has determined that the local Final-EIS cannot be incorporated by reference. In addition, NEPA compliance documents must be written in English to facilitate a broad review by concerned agencies.
6. USACE and FWS have already determined that the information contained in PREPA's January 28 letter in response to the agencies' comments does not address their concerns.
7. USACE raised an additional concern regarding natural gas supplies. While PREPA has stated repeatedly that the natural gas would be received at the existing EcoElectrica terminal, this company has stated that they do not possess the capacity to provide for the Via Verde project, nor have they been approached regarding connections to their system. USACE is concerned regarding potential issues with the Federal Energy Regulatory Commission (FERC), and has started coordination with them. USACE's position is that if no specifics regarding the natural gas supply for the pipeline are available, the project is not viable.
8. USACE is concerned regarding comments to the public interest review process which were received after PREQB approved the local Final-EIS, and therefore are not addressed in the document.
9. Agencies are concerned about RPEPA and its consultants further delaying the process by not providing information on a timely basis, opting instead for assuming an adversarial position and insisting on the validity of the local Final-EIS, which was not prepared for NEPA compliance. PREPA was advised to come forth with the required information in order to avoid additional delays and/or the denial of the USACE's permit.
10. FWS and USACE raised concerns regarding PREPA's compliance history on a similar project, the "Gasoducto Del Sur". This other gas pipeline project along the south coast of Puerto Rico is in noncompliance with its USACE permit, since "temporary" structures and impacts have not been reduced/mitigated on a timely manner. In addition, EPA has issues regarding the project's compliance with MS-4 requirements. Despite these issues, USACE has determined to continue evaluating the Via Verde Project.

### **Future actions**

During the February 1, 2011 meeting, PREPA's consultant, Mr. Daniel Pagan, requested a date for a meeting with EPA's office in San Juan to present updated information which might address our concerns. A date for this meeting will be provided as soon as practicable.

EPA remains available to continue working with PREPA on the environmental issues surrounding this project. Provided that PREPA timely provides all the requested information to successfully address our concerns, a final determination regarding our recommendation on the possible issuance of a USACE permit for the project will be made.



# Via Verde Natural Gas Pipeline

## SAJ-2010-02881 IP-EWG

Contact: Jose M. Soto, (787) 977-5829  
EPA-R2, Caribbean Environmental Protection Division

Date: February 3, 2010

### Background

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As part of the permitting process for the project, PREPA requested a permit under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act for the unavoidable impacts to water resources along the project's right of way. On November 19, 2010, the US Army Corps of Engineers (USACE) published a Public Notice for the Via Verde Project. The stated project purpose is "to deliver an alternate fuel source to three existing electric power generating facilities located in Peñuelas, Arecibo, and Toa Baja operated by the Puerto Rico Electric Power Authority (PREPA)". The proposed project entails the construction and installation of an approximately 92 miles long 24-inch diameter steel natural gas pipeline traversing the island of Puerto Rico from north to south, then east. The total project area is approximately 1,672 acres. The proposed route would cross 235 rivers and wetland areas, potentially impacting 369 acres of jurisdictional waters of the United States. The pipeline route will include both private and public lands which include commercial, agricultural and industrial sites, as well as populated urban areas, roads and highways. The wetlands to be affected include herbaceous systems, approximately 8.5 acres of mangrove forests and mangrove forested canals, and estuarine salt flats dominated by dwarf black mangroves. The project may also affect some species of the 32 federally listed species in PR.

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- 4) based on the challenges, project size, safety issues and potentially extensive impacts of the project to wetlands, as well as to threatened and endangered species, EPA recommended the preparation of a Federal Environmental Impact Statement (EIS).

Based on the above, EPA recommended that the Corps not issue a permit for the project as proposed until PREPA addresses our concerns.

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EPA-R2, Caribbean Environmental Protection Division

Date: February 3, 2010

memo - John F  
attending meeting  
with Nancy  
Stoner 2/11  
Call  
② Judith meeting with  
Resident Commissioner  
Pedro Pierluisi  
2/11

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Via Verde

Re: Via Verde Meeting Summary 

Judith Enck to: Kevin Bricke

02/13/2011 11:24 AM

Cc: George Pavlou, Lisa Plevin, Bonnie Bellow, Carl Soderberg, Barbara Finazzo,  
Joann Brennan-McKee, John Filippelli

Thanks. I also have a letter from prepa requesting a mtg and saying that our letter was based on an older version of the local eis. Let's see if indeed they will address the substantive concerns raised in our letter. I think a lot of this discussion can happen by phone and teleconference and they don't need to fly to nyc. Pipelines are notorious for impacting streams and wetlands. That should be our focus along with the need for effective regulatory oversight during construction and operation. The govt is such a vigerous proponent of the project (which I understand for air quality elements) it will be up to independent federal agencies to exercise proper oversight so corners are not cut, etc. John, thanks for your work on this  
Sent by EPA Wireless E-Mail Services

**From:** Kevin Bricke

**Sent:** 02/13/2011 10:18 AM EST

**To:** Judith Enck

**Cc:** George Pavlou; Lisa Plevin; Bonnie Bellow; Carl Soderberg; Barbara Finazzo; Joann Brennan-McKee; John Filippelli

**Subject:** Fw: Via Verde Meeting Summary

-----Forwarded by Kevin Bricke/R2/USEPA/US on 02/13/2011 10:16AM -----  
To: "Kevin Bricke" <Bricke.Kevin@epamail.epa.gov>  
From: John Filippelli/R2/USEPA/US  
Date: 02/11/2011 04:58PM  
Cc: "Joann Brennan-McKee" <Brennan-McKee.Joann@epamail.epa.gov>  
Subject: Via Verde Meeting Summary

Kevin,

Following is a summary of today's Via Verde meeting in HQ:

Puerto Rico Attendees:

- Miguel Cordero, Exec Dir, PREPA
- Daniel Galan, Secretary, DNER
- Pedro Nieves, EQB
- Jed Bullock, Cong Delegate's staff
- Colleen Newman, Federal Affairs
- Jeffery Berman, Consultant
- Daniel Pagan, Consultant

EPA Attendees:

- Nancy Stoner, Acting AA OW
- Jack Bowles, OCIR
- John Filippelli, Region 2

Daniel Pagan lead the presentation for the project with other members of the group contributing. His key points were:

- The project meets the Corps nationwide permit parameters and does not even need an individual permit, but the Corps has chosen to go that route.
- PREPA has already addressed EPA concerns in the final EIS and its 1/28/11 letter to the Corps.
- The project only has 2 acres of wetlands impacts and those are temporary.
- Trenching, rather than directional drilling will be used in karst terrain. Directional drilling will only be used under roads and other appropriate situations.
- An alternatives analysis was done. Building a new import facility on the north coast is not feasible. Because of the size of the safety exclusion zone and impacts to shipping an appropriate site is not available. Also this alt would cost \$1B vs. \$450M for Via Verde.
- PREPA does have contracts for various alternative energy projects but needs Via Verde for base load.
- Via Verde has major CO2 and other air quality benefits.
- The project will cut electric rates substantially.
- PREPA is in a hurry. It wanted to start the project in January 2011.
- The NEPA-like nature of the Commonwealth's EIS process was defended. The need for a Federal EIS was challenged.

The Puerto Rico reps were a half hour late, so Nancy needed to leave halfway through the meeting because of other commitments. Consequently, I lead most of the discussion for EPA and raises the following points;

- Our main concern is protecting the environment. In this case, water quality, wetlands, karst terrain and endangered species (via wetland and water quality linkages) are our main concerns.
- We recognize the air quality benefits of the project, but EPA must protect both and cannot trade between media.
- Once we see that our concerns are being addressed we can work out the process (i.e., EIS) issue.

Next steps:

- We agreed to work together to identify and resolve technical issues.
- PREPA will send us the final EIS in Spanish. I told the group we are working on arrangements to review it, in house.
- PREPA will send us key sections of the EIA translated into English.
- PREPA will send us its January letter to the Corp.
- PREPA said they would send technical staff to New York to meet with us if necessary. I said that could be useful.
- I committed to brief our Regional Administrator on the issue.

Please let me know if you have any questions. Have a good weekend.

John

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Sent from my BlackBerry Wireless Device