United States Department of the Interior

FISH AND WILDLIFE SERVICE
Caribbean Ecological Services
Field Office
P.O. Box 491
Boqueron, PR 00622

OCT 03 2012

In Reply Refer To:
FWS/R4/CESFO/72067-015

Fernando L. Pagés Rangel
Director
Tetra Tech, Inc.
P.O. Box 79192
Carolina, Puerto Rico 00984

Re: Aguirre Offshore GasPort Project
Baseline Benthic Characterization,
Jobos Bay, Salinas, Puerto Rico.

Dear Mr. Pagés

This is in reply of your request for comments on the Report of Baseline Benthic Characterization Study prepared by Tetra Tech Inc. for the Aguirre Offshore GasPort Project. Our comments are provided as technical assistance under the Endangered Species Act (Act) of 1973, as amended (87 Stat. 884, as amended; 16 United States Code 1531 *et seq.*), the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*), and the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 *et seq.*)

Excelerate Energy L.P., in cooperation with the Puerto Rico Electric Power Authority (PREPA), is proposing to develop, construct, and operate the Aguirre Offshore GasPort Project. The proposed project is located within approximately 4 miles offshore of the Central Aguirre Power Plant in Salinas and 1 mile outside of the Jobos Bay National Estuarine Research Reserve (JBNERR).

The Aguirre Offshore GasPort Project would consist of two main components: 1) an Offshore Terminal comprised of an offshore marine liquefied natural gas (LNG) receiving facility consisting of a floating storage and regasification unit (FSRU) moored at an offshore berthing platform; and 2) a subsea pipeline connecting the Offshore Terminal to the Central Aguirre Power Plant.

On August 31, 2012, Tetra Tech Inc., on behalf of Excelerate Energy L.P, provided to this office the results of the benthic characterization study that identify and delineate sensitive natural resources within the proposed project area. Tetra Tech Inc. requested comments on this study and data necessary to support preparation of the Federal Energy Regulatory Commission (FERC)

application and National Environmental Policy Act (NEPA) process, as well as impacts analysis for federal and state permits.

We reviewed the above referenced document and have following comments and recommendations:

1) The proposed project lies within the range of the endangered Antillean manatee (*Trichechus manatus manatus*). Manatees are frequently observed along the southern and eastern coast of Puerto Rico. Areas that consistently present a high number of observations include Jobos Bay in the south, the eastern coast of the former Roosevelt Roads Naval Station, the northwest coast of Vieques, and Guayanilla in the southwest. The Service has been conducting manatee aerial surveys for two decades and has consistently counted high number of manatees within Jobos Bay area (6 to 13 manatees per survey). Manatee aerial survey data also shows, although to a lesser degree, manatees within the Boca del Infierno area and south of the cays in Jobos Bay.

The proposed project site has been identified by the Service as a manatee hot spot. We contracted the USGS North Carolina Cooperative Research Unit from the North Carolina State University to gathered available data on manatee distribution, manatee habitat criteria and characteristic, and conducted a structured decision process to compile information from species experts. Based on that analysis, the USGS identified areas which include the specific ecological attributes necessary for manatee long-term survival and identified areas where "take" of manatees can be reduce through the designation of manatee protection areas (MPAs) under the current regulatory framework (50CFR 17 subpart J; 44 FR 60964, Oct 22, 1979). The key ecological attribute defined for manatees in Puerto Rico are sea grass beds, fresh water and sheltered areas. The USGS has identified a total of thirteen potential MPA regions for Puerto Rico (Drew et al, 2011). Using a less conservative 80th percentile (top 20%) threshold to identify MPA regions for the island, the top ranked MPA region in Puerto Rico is located from Santa Isabel to Jobos Bay (attached figure 17 from Drew *et al*. 2012, under review). Please find in Appendix I of this letter some references that support Jobos Bay as a hotspot for manatees.

2) Based on the results of the benthic study, aquatic resources may be adversely affected by the construction of the proposed project. The result of the study shows that sea grasses are the most abundant epibenthic biota in the project area, being turtle grass (*Thalassia testudinum*) the most abundant species recorded. Sea grasses and their associated epiphytes are highly productive, produce a structural matrix on which many other species depend, improve water quality, and stabilize sediments. Sea grass beds are among the most productive valuable habitat for numerous recreational and commercially important fishery resources, and listed species including sea turtle and manatee. As mentioned above, the USGS has defined sea grass beds as a key ecological attribute for manatee habitat.

Based on the above we recommend that direct, indirect and cumulative impacts to sea grass beds and other benthic resources be carefully evaluated. We recommend the applicant evaluatesconstruction alternatives that would avoid or minimize sea grass impacts.

In addition, we have concerns about possible effects of the proposed project on the Antillean manatee and its habitats. Since the project requires federal permits, consultation under Section 7 of the ESA will be required. We recommend the development of a Biological Assessment that discusses in details impacts to the Antillean manatee and its habitats.

Thank you for the opportunity to comment on this project. It is the Service mission to work with others to conserve, protect and enhance fish, wildlife, plants, and their habitats for the continuing benefit of our people. Please do not hesitate to contact us at 787/851-7297, if you have any question concerning our comments. You may also visit our website http://www.fws.gov/caribbean for additional information on threatened and endangered species under jurisdiction.

Sincerely yours,

for Edwin E. Muñiz
Field Supervisor

cp

Enclosure: Figure 17 from Drew et al. 2012, under review.
Appendix I: List of references.

Appendix I

List of references:

Drew et al. 2011. Science Summary and Recommendations in Support of Manatee Protection Area (MPA) design in Puerto Rico. Pp.135

PBS&J. 2010. Puerto Rico Synoptic Manatee Aerial Survey, Results of the October 29th and 30th, 2010 Survey. Pp.22

ATKINS. 2011. Puerto Rico Synoptic Manatee Aerial Survey, Results of the September 1st through 3rd, 2011. Pp.24

UNEP: Regional Management Plan for the West Indian Manatee (Trichechus manatus) compiled by Ester Quintana-Rizzo and John Reynolds III. CEP Technical Report No. 48. UNEP Caribbean Environment Programme, Kingston, Jamaica. 2010]

Miksis-Olds et al. 2007. Noise level correlates with manatee use of foraging habitats. Acoustical Society of America. DOI: 10.1121/1.2713555. Pages 3011-3020

DNER. 2000. Management Plan for the Jobos Bay National Estuarine Research Reserve. Pp.226.

Regulations (50CFR 17 subpart J; 44 FR 60964, Oct 22, 1979) authorize the designation of MPAs in areas where restrictions or prohibitions on certain waterborne activities are needed to prevent the take of manatees

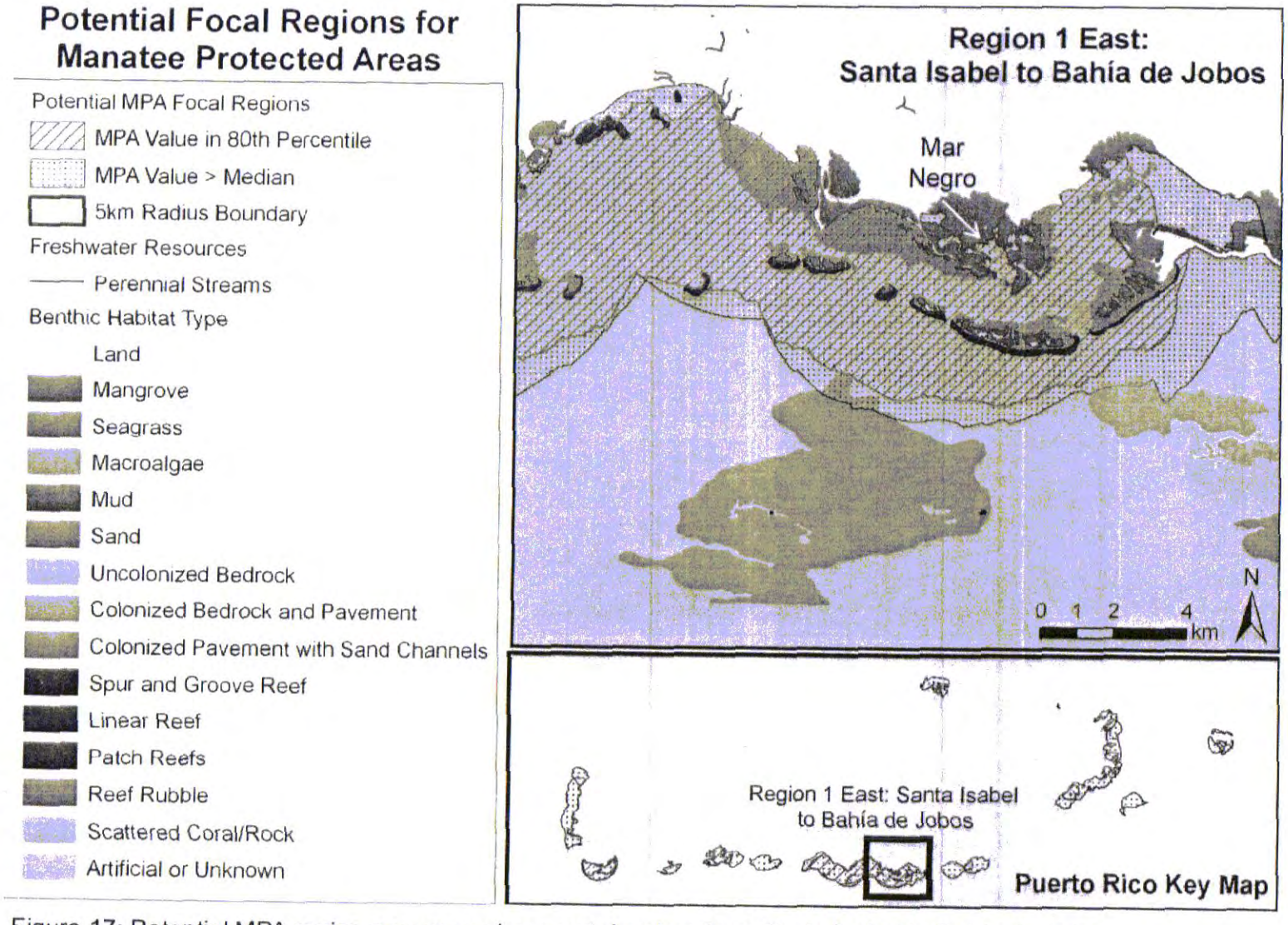

Figure 17: Potential MPA region encompassing coastal waters from Santa Isabel to Bahía de Jobos. Landmarks named on map are features associated with published manatee observations. The western half of this same area is shown in Figure 18.