U.S. Department of the Interior National Park Service March 2023



# Finding of No Significant Impact for the Entergy Louisiana, LLC – Golden Meadow-Barataria Transmission Line Demolition and Rebuild Through Jean Lafitte National Historical Park & Preserve Jefferson Parish, Louisiana

Recommended:	CHARLES Digitally signed by CHARLES HUNT Date: 2023.03.09 15:28:51 -06'00'	Date:	
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Approved:		Date:	
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Interior Region 2, South Atlantic-Gulf

# INTRODUCTION

In accordance with the National Environmental Policy Act (NEPA), the National Park Service (NPS) has prepared an Environmental Assessment (EA) to evaluate the proposed demolition and rebuilding of the Golden Meadow-Barataria electrical transmission line within the Barataria Preserve of Jean Lafitte National Historical Park and Preserve (JELA or the Park). The EA and this Finding of No Significant Impact (FONSI) comprise the record of environmental impact analysis and decision-making process for this project.

The NPS proposes to issue a Special Use Permit (SUP) for construction to Entergy Louisiana, LLC (Entergy) to allow Entergy to re-establish the Golden Meadow-Barataria transmission line within the Barataria Preserve of JELA. The Golden Meadow-Barataria transmission line served as a primary pathway of power to the electrical transmission system that feeds southern Lafourche and Jefferson Parishes. Considerable damage to the line occurred during Hurricane Zeta in 2020 and Hurricane Ida in 2021. To re-establish the line, Entergy would demolish and rebuild the existing timber and steel supported 115kV transmission line crossing the Barataria Preserve.

This FONSI has been prepared in accordance with the requirements of NEPA, its implementing regulations (40 CFR 1500-1508), the Department of Interior NEPA regulations (43 CFR 46), NPS Director's Order 12, Conservation Planning, Environmental Impact Analysis and Decision-Making, and the NPS NEPA Handbook.

This FONSI summarizes the findings of the EA and incorporates the public input provided during the public comment period. The findings contained herein are based on the documentation and analysis presented in the EA. To the extent necessary, relevant sections of the EA are incorporated by reference below.

#### SELECTED ALTERNATIVE AND RATIONALE FOR THE DECISION

The NPS has selected the action alternative (the preferred alternative and proposed action identified in the EA; hereinafter referred to as the "selected alternative"). See Chapter 2 of the EA for a full description). A summary of the selected alternative is below:

The NPS will issue Entergy a SUP with conditions to demolish and rebuild approximately 2.63 miles of the Golden Meadow-Barataria 115kV line within the existing ROW which ranges from 100 feet to 175 feet wide inside the Preserve. The alternative will involve the removal and replacement of 29 support structures.

The initial construction phase (demolition) will involve all wires and exposed portions of the structures being removed. The below-grade portions of the structures (foundation pilings and guy wire anchors) will also be removed or cut off or driven down to 3 feet below grade. Structures will be dismantled and transported to nearby barges with marsh equipment.

The two (2) existing lattice structures (287 & 288), which are larger than the other existing support structures, will be removed using a combination of explosives and ground-based equipment. A licensed blasting contractor will first weaken each structure by cutting notches near the bases of the four (4) steel legs. Two (2) of the legs will then be wrapped in shaped explosive charges. A clear zone encompassing a 1,500-foot radius around each of the two structures will be established and personnel in boats will control marine traffic within this zone. Charges will be simultaneously triggered, and the two legs of the structure with the charges will sever, forcing that side of the structure upward. The two (2) opposite legs will hinge at the notches, allowing the structure to rotate over and drop within the existing ROW. Once these structures are safely lowered to ground level, hydraulic sheers will be utilized to dismantle them, and the resulting pieces will be hauled to nearby barges using marsh equipment.

Open water access routes will be utilized to the maximum extent practical by the marsh buggies and/or marsh cranes. Tugs and barges will access the project area from the south via the Gulf Intracoastal Waterway (GIWW) and utilize deep water areas (for example, Bayou Segnette Waterway) to stage equipment to the maximum extent practical. Bayou Segnette Waterway will also be utilized by airboats and outboard driven vessels to transport personnel to the project area from the north. Demo barges will be used to stage debris as well as housing bargemounted cranes which will remove the steel lattice structures that are in or near (and are accessible via) navigable waters. Airboat-mounted equipment will be utilized where practical. Where access routes traverse vegetated wetlands, marsh buggy/tracked equipment will attempt to achieve ingress and egress by remaining within the footprint of one equipment width track throughout the duration of the project. No laydown or equipment fuel storage areas will be located within the boundaries of JELA in the Proposed Action.

In the second phase of construction, twenty-seven (27) new single-pole (monopole) structures that meet 230kV specifications and are rated for 150 mph winds will be installed in close proximity to existing structure locations. Helicopters will be used to stage new pole structures near locations of installation. The new structures will be installed on baseplated vibratory caisson foundations with no additional excavation or fill required and the vibratory caisson foundations will be installed to a depth of approximately 36 feet below ground surface (bgs). The baseplated pole would be bolted directly onto the caisson once it is vibrated in place. The proposed self-supported, monopole structures will extend vertically approximately 85 feet above the ground.

Two (2) larger Pyramax structures will be installed to replace the lattice structures on the West and East banks of Bayou Segnette Waterway on Jones Point and extend vertically approximately 250 feet above the ground. Each new Pyramax structure will be installed on four (4) baseplated vibratory caisson foundations which will result in a small surface area impact with no excavation or fill required. Each new structure will have a total surface impact of +/-0.004 acres (each caisson having a 7-foot diameter), and the vibratory caisson foundations will be installed to a depth of approximately 74 feet bgs.

The replacement for Structure 287, which is currently within the boundaries of archaeological

site 16JE80, will be relocated into open water to the southwest outside of park boundaries. Structure 288 will be shifted to the southwest within park boundaries. The foundation pillars associated with the lattice Structure 287 within the boundaries of archaeological site 16JE80 will remain in place to ensure that no additional ground disturbance occurs within archeological site 16JE80.

# OTHER ALTERNATIVES CONSIDERED

# **NO ACTION ALTERNATIVE:**

Under the No Action Alternative, the NPS would not issue a SUP or allow Entergy to demolish and rebuild the existing 2.63 miles of the Golden Meadow-Barataria 115kV transmission line through JELA. The No Action Alternative would not eliminate the potential hazards that result from the presence of damaged structures within the Preserve. The No Action Alternative would also not re-establish one of the primary pathways of power in the electrical transmission system and provide increased transmission grid reliability and future load serving capabilities for the Golden Meadow-Barataria line. Due to the condition of the line following recent storm events, no continual maintenance activities would be required under the No Action Alternative, resulting in abandonment in place of the existing 2.63 miles of the Golden Meadow-Barataria 115kV transmission line through JELA.

#### RATIONALE FOR THE DECISION

The preferred alternative was selected because it best meets the purpose and need for action by issuing a special use permit (SUP) to Entergy Louisiana, LLC (Entergy) to demolish and rebuild the existing timber and steel supported transmission lines within Entergy's existing right-of-way (ROW) which crosses the Barataria Preserve of JELA. The Golden Meadow-Barataria transmission line provided a critical pathway of power to the electrical transmission system in southeast Louisiana and was damaged during Hurricane Zeta in 2020 and Hurricane Ida in 2021. The proposed new structures will re-establish one of the primary pathways of power in the electrical transmission system and provide increased transmission grid reliability and future load serving capabilities for the Golden Meadow-Barataria line.

# **MITIGATION MEASURES**

The selected action incorporates several best management practices intended to protect park resources by avoiding or reducing impacts during demolition and construction. Specific best management practices, mitigation measures, and monitoring are listed in Appendix B.

Under its Organic Act, the NPS has the authority to develop and direct mitigation for impacts to resources under its jurisdiction. This is in addition to the requirements that may be created through the need to comply with laws and regulations managing resource impacts that are overseen by other agencies. To meet these obligations, the NPS has developed Management Policies and Director's Orders that identify the authorities (laws, regulations, and executive orders) directing how impacts and mitigation to resources shall be managed, as well as identify the policies and procedures by which the NPS shall comply with these authorities. A full listing of the NPS policies is available from the NPS Office of Policy website at:

# https://npspolicy.nps.gov/index.cfm.

The NPS NEPA Handbook Section 4.3E and NEPA's implementing regulations 40 CFR § 1508.1 direct federal agencies to use the NEPA process to identify and assess the reasonable alternatives to Proposed Actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment. 40 CFR § 1508.1(s) further defines mitigation to include:

- Avoiding the impact altogether by not taking a certain action or parts of an action
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action
- Compensating for the impact by replacing or providing substitute resources or environments

A summary of wetlands restoration, rehabilitation, and compensatory mitigation for temporal loss to wetlands in the ROW are listed in Appendix B, with more detail and success criteria included in the Wetlands Statement of Findings (WSOF). Compensation for temporal wetland impacts is authorized by NPS Director's Order 77-1 Section 5.2.3.

# FINDING OF NO SIGNIFICANT IMPACT

As described in the EA, the selected alternative will not result in significant loss of park resources or have significant adverse impacts on visitor experience. No highly uncertain or controversial impacts, unique risks or elements of precedence were identified. Implementation of the project will not violate any federal, state, local, or environmental protection laws.

No potential for significant adverse impacts to park resources as a result of implementation of the selected alternative has been identified. The conclusion of no significant impact was determined based on analysis compiled from a combination of scientific data and professional judgement from NPS staff and documented in the EA. The EA examined potential impacts on Visitor Use and Experience & Aesthetic Environment, Cultural Resources, Soils and Geology, Water Resources, Soundscapes, Wildlife and Protected Species, and Coastal Zone and Wetlands. Impacts to those resources are summarized below.

#### Visitor Use and Experience & Aesthetic Environment

No long-term adverse impacts to the Park's visitor experience or aesthetic environment are anticipated from the Selected Action because there is already an existing transmission line through the Park. The addition of taller poles does not substantially change the viewshed, and the steel color of the new poles is considered a beneficial impact as they are less visible than the existing wooden poles against the sky where no backdrop exists.

#### **Cultural Resources**

Only one cultural resource site is known within the project area. Site 16JE80 is a prehistoric site located on Jones Point on either side of the Bayou Segnette Waterway. The Proposed Action includes relocating the lattice Structure 287 on Jones Point currently within the boundaries of archaeological site 16JE80 to the southwest and out into open water. This will remove the structure from the boundaries of the archeological site and JELA. The foundation pillars associated with Structure 287 will remain in place to ensure that no additional ground disturbance will occur within archeological site 16JE80 and reduce the potential impacts to the archaeological site. Site 16JE80 was determined to be ineligible for listing on the NRHP with concurrence by the SHPO in a letter dated December 28, 2021. In addition, the site was heavily disturbed prior to NPS ownership and enactment of the NHPA, first by dredging activity in the 1950s, later by the construction of the high voltage transmission tower in the mid-1960s, and finally by erosion.

NPS has determined that the proposed undertaking will not adversely affect cultural resources and that the proposed construction will have "No Adverse Effect" on historic properties eligible for the National Register of Historic Places (NRHP). The Louisiana State Historic Preservation Officer (SHPO) concurred on November 3, 2022, that the proposed undertaking will have no adverse effect on historic properties. There will be no adverse effects to cultural resources because the project scope will avoid and minimize impacts to all known archaeological resources.

#### Soils and Geology

Overall, minor impacts to shallow soils within JELA due to equipment use during demolition and construction will be long term. However, the overall footprint of the steel monopole replacement structures will occupy a smaller area than that of the existing structures, and the net decrease will be beneficial to soils and geology. No significant adverse impacts to the Park's soils and geology are anticipated from the Selected Action.

#### **Water Resources**

Overall, the impacts to water resources within JELA due to project activities will be short term. Any increases in turbidity caused by water bottom disturbance or soil erosion due to equipment use will subside in a short period of time once equipment is demobilized and the project area is restored to pre-project conditions. Best management practices and other mitigation designed for the prevention and control of spills will reduce the potential for impacts to water resources and sources of accidental releases of oils and fuels will be eliminated once equipment is demobilized. No significant impacts to the Park's water resources are anticipated from the Selected Action.

#### **Soundscapes**

Although temporary increases in noise levels are expected to result from the Selected Action, no significant impacts to ambient sound quality of the Barataria Preserve will occur. Wildlife in the area may be temporarily displaced to nearby habitats due to noise during demolition and construction but are expected to return to the area once activities are complete. Furthermore,

no significant adverse impacts are anticipated even under speculative circumstances where multiple projects occur during the same time frame in and near Jones Point as impacts will be short-term, limited to the time of construction.

# Wildlife and Protected Species

Except for the installation of Structure 287, the project area is within an existing ROW within Park boundaries that is similar and directly connected to adjacent habitats. Most wildlife within and near the ROW are expected to readily relocate to adjacent habitat and return once project activities on the ROW are complete. Nearby waterbodies and shorelines will be temporarily impacted by the proposed activities, but these impacts will be short-term and are expected to subside in a short period of time once equipment is demobilized and the project area is restored to pre-project conditions. The installation of Structure 287 outside the Park boundaries off Jones Point will create a long-term beneficial impact to the benthic fauna and fishes present in this area by creating a hard substrate for colonization, protection for fry and invertebrates, and will introduce a new, permanent artificial habitat. Foraging opportunities could increase near the structure which could enhance naturally occurring species populations. Because of these beneficial effects and the limitation of adverse effects to disturbance during construction, no long-term adverse significant impacts to the Park's wildlife and protected species are anticipated from the Selected Action.

#### Wetlands

The demolition and construction of the proposed transmission line will result in temporary, moderate adverse impacts to approximately 13.86 acres of wetlands project-wide, including 0.02 acres of permanent wetland impacts from new structure installation. Best management practices and mitigation measures as described in Appendix B and above will be implemented to minimize impacts to wetlands.

The NPS finds that there are no practicable alternatives to disturbing approximately 13.86 acres of wetlands within the proposed project area in the existing ROW. Wetlands will be avoided to the maximum practicable extent, and any wetland impacts that cannot be avoided will be minimized. Wetlands will be adversely affected by equipment access into the project area, but wetlands in the project area are expected to recover their functions and values over time. Temporal losses due to unavoidable impacts to wetlands will be compensated at a ratio of 5:1 as described in the WSOF and EA and per NPS policy (see Section 5.2.3 of NPS Procedural Manual #77-1 Wetland Protection). Therefore, the compensatory mitigation plan is consistent with NPS no net loss of wetlands policy. Because wetland impacts will be avoided to the maximum extent practicable, and wetlands are expected to recover their functions and values over time, no significant impacts to the Park's wetlands are anticipated from implementation of the Selected Action.

#### PUBLIC INVOLVEMENT AND AGENCY COORDINATION

#### **PUBLIC INVOLVEMENT**

Availability of the EA was advertised on the NPS' Planning, Environment and Public Comment

(PEPC) website and was open for public review from December 1, 2022, until December 31, 2022. A press release and media links via the Park's website were created and shared with the public. Two (2) comments were submitted to PEPC (Appendix C). Comments were not substantive and did not require changes to the document.

# **AGENCY COORDINATION AND PERMITS**

# **Water Quality Certification**

The Louisiana Department of Environmental Quality (LDEQ) issued a State Water Quality Certification (WQC Number) on January 10, 2022, for the Selected Action.

#### **Coastal Zone Consistency**

Pursuant to the Coastal Zone Management Act (CZMA), Section 307, a Consistency Determination was prepared for the proposed project and submitted to Louisiana Department of Natural Resources (LDNR) for the Proposed Action. LADNR authorized the Coastal Use Permit / Consistency Determination (P20210693) on June 23, 2022, with revision and replacement on October 28, 2022, due to a permit amendment that was submitted July 29, 2022. The Coastal Use Permit states that, for LADNR's purposes, requirements for compensatory mitigation for impacts to marsh habitat would be determined after one full growing season (March 1 to November 1) following completion of the permitted activities. This compensatory mitigation has been anticipated and included in the WSOF and summarized in Appendix B. NPS staff will monitor the entire project area using criteria in above section, Mitigation Measures, and in Appendix B.

#### **Clean Water Act**

The U.S. Army Corps of Engineers (USACE) stated on August 25, 2021, that the work proposed in the Joint Permit Application P20210693 may be accomplished under maintenance provisions under the existing Department of the Army Nationwide Permit #33 (NWP 33). The NWP 33 includes manatee avoidance measures which must be adhered to during work activities. A permit amendment was submitted July 29, 2022, and USACE has not offered any additional comments.

# **Endangered Species Act (ESA) Compliance**

USFWS concurred that the proposed action may affect, but is not likely to adversely affect, the West Indian Manatee on November 4, 2021. Standard manatee avoidance protocol for inwater work will be followed.

USFWS concurred that the project as proposed may affect but is not likely to adversely affect the Threatened Eastern Black Rail on December 13, 2021.

In a letter dated December 10, 2021, the Louisiana Department of Wildlife and Fisheries (LDWF) Coastal and Nongame Resources Division stated that no impacts to rare, threatened, or endangered species or critical habitats are anticipated for the proposed project.

# National Historic Preservation Act (NHPA) Compliance

Section 106 consultation for the project area has been completed with the Louisiana SHPO and with Federally recognized Tribes.

The Park previously communicated with the SHPO occurred on May 21, 2021, March 21, 2022, and May 25, 2022. SHPO stated no historic properties affected on January 9, 2022, via the Louisiana Office of Coastal Management (OCM) Strategic Online Natural Resources Information System (SONRIS). Since the January 9, 2022, SHPO concurrence, Entergy changed their methods for demolition for two structures (287 and 288), proposing the use of a combination of explosives and ground-based equipment (described in more detail in Section 3.0). The Park reconsulted with SHPO October 14, 2022, and SHPO concurred with the updated demolition plan on November 3, 2022, having no adverse effect on historic properties.

#### **Native American Tribes Consultation**

In accordance with its responsibilities under the NHPA Section 106 process and Executive Order (E.O.) 13175, NPS provided the following Federally-recognized Indian tribes an opportunity to review and comment on the proposed action on March 21, 2021 and March 21, 2022: Alabama-Coushatta Tribe of Texas, Alabama-Quassarte Tribal Town, Caddo Nation of Oklahoma, Chitimacha Tribe of Louisiana, The Choctaw Nation of Oklahoma, Coushatta Tribe of Louisiana, Jena Band of Choctaw Indians, Kialegee Tribal Town, Mississippi Band of Choctaw Indians, Poarch Band of Creek Indians, Seminole Nation of Oklahoma, Seminole Tribe of Florida, Thlopthlocco Tribal Town, Tunica-Biloxi Tribe of Louisiana, and Eastern Shawnee Tribe of Oklahoma. The Seminole Tribe of Florida (May 24, 2021), had no objections and the Choctaw National of Oklahoma (July 2, 2021), concurred with the finding of no adverse effect for the geotechnical investigations in support of the project. Muscogee (Creek) Nation responded that the area of potential effect was outside of their historic area of interest (July 28, 2021). The park corresponded with the tribes again on October 18, 2022 but received no other correspondence from tribal governments.

# **CONCLUSION**

As described above, the selected alternative does not constitute an action meeting the criteria that normally requires preparation of an Environmental Impact Statement (EIS).

The selected alternative will not have a significant effect on the human environment in accordance with Section 102(2)(c) of NEPA.

Based on these factors, NPS has determined that an EIS is not required for this project.

# APPENDIX A Non-Impairment Determination

# Why is a Non-Impairment Determination Required?

Section 1.4.7 of NPS Management Policies 2006 states that:

Before approving a proposed action that could lead to an impairment of Park resources and values, an NPS decision-maker must consider the impacts of the proposed action and determine, in writing, that the activity will not lead to an impairment of Park resources and values.

Actions that require preparation of Environmental Assessments (EAs) and Environmental Impact Statements (EISs) may have the potential to impair Park resources or values. Therefore, a non-impairment determination must be made for any action selected in a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) that could affect Park resources and values and to which the NPS is a signatory. The non-impairment determination is completed only for the selected action.

## What is Impairment?

Sections 1.4.5 and 1.4.6 of NPS Management Policies 2006 provide an explanation of impairment. Section 1.4.5 defines impairment as:

... an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of Park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values.

#### Section 1.4.5 goes on to state that:

...an impact to any Park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the Park
- Key to the natural or cultural integrity of the Park or to opportunities for enjoyment of the Park
- Identified as a goal in the Park's general management plan or other relevant NPS planning documents as being of significance

An impact would be less likely to constitute an impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of Park resources or values and it cannot be further mitigated.

Section 1.4.6 of NPS Management Policies 2006 identifies the Park resources and values that are subject to the non-impairment standard. The "Park resources and values" that are subject to the non-impairment standard include: the Park's scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the Park: the ecological, biological, and physical processes that created the Park and continue

to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structure, and objects; museum collections; and native plants and animals. appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them the Park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national Park system, and the benefit and inspiration provided to the American people by the national Park system any additional attributes encompassed by the specific values and purposes for which the Park was established

# How is a Non-Impairment Determination Made?

Section 1.4.7 of NPS Management Policies 2006 states that:

... in making a determination of whether there would be an impairment, an NPS decision maker must use his or her professional judgment. This means that the decision-maker must consider any environmental assessments or environmental impact statements required by the National Environmental Policy Act of 1969 (NEP A); consultations required under Section 106 of the National Historic Preservation Act (NHPA); relevant scientific and scholarly studies; advice or insights offered by subject matter experts and others who have relevant knowledge or experience; and the results of civic engagement and public involvement activities relating to the decision.

NPS Management Policies 2006 further define "professional judgment" as:

... a decision or opinion that is shaped by study and analysis and full consideration of all the relevant facts, and that takes into account the decision-maker's education, training, and experience; advice or insights offered by subject matter experts and others who have relevant knowledge and experience; good science and scholarship; and, whenever appropriate, the results of civic engagement and public involvement activities relation to the decision.

#### Non-Impairment Determination for the Selected Alternative

This determination on impairment has been prepared for the Selected alternative as described in the EA. An impairment determination is made for all resource impact topics analyzed for the selected alternative. An impairment determination is not made for Visitor Use and Experience & Aesthetic Environment and Soundscapes, because impairment findings relate back to Park resources and values, and these impact areas are not generally considered to be Park resources or values according to the Organic Act and cannot be impaired in the same way.

# **IMPAIRMENT OF PRESERVE RESOURCES OR VALUES**

In addition to reviewing the list of significance criteria, the NPS determined that implementation of the selected alternative will not constitute an impairment to the Preserve resources and values. This determination is based on a thorough analysis of the impacts described in the EA and Finding of No Significant Impact, agency and public comments received, and professional judgment of the decision-maker guided by direction in the NPS Management

Policies 2006. As described in the EA and Finding of No Significant Impact, impairment will not occur because implementation of the selected alternative will not result in major adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation of Jean Lafitte National Historical Park and Preserve; (2) key to the natural or cultural integrity of the Preserve or to opportunities for enjoyment of the Preserve; or (3) identified as a goal in the Park's General Management Plan or other relevant NPS planning documents.

The EA examined potential impacts on Visitor Use and Experience & Aesthetic Environment, Cultural Resources, Soils and Geology, Water Resources, Soundscapes, Wildlife and Protected Species, and Wetlands.

#### **Cultural Resources**

The Selected Action includes relocating the lattice Structure 287 on Jones Point currently within the boundaries of archaeological site 16JE80 to the southwest and out into open water, and replacement of existing infrastructure with monopoles in the same general location. The new electrical transmission structures will be installed in the same general locations as the existing ones, except for Structure 287, and NPS has determined that the proposed undertaking would not adversely affect cultural resources and that the proposed construction will have "No Adverse Effect" on historic properties eligible to the National Register. There will be no adverse effects to cultural resources because the project scope will avoid and minimize impacts to all known archaeological resources. Therefore, there would be no impairment to cultural resources from the implementation of the selected alternative.

# **Soils and Geology**

Overall, minor impacts to shallow soils within JELA due to equipment use during demolition and construction will be long term. However, the overall footprint of the steel monopole replacement structures will occupy a smaller area than that of the existing structures, and the net decrease will be beneficial to soils and geology. No significant adverse impacts to the Park's soils and geology are anticipated from the Selected Action. Because there will be a net benefit to soils due to the smaller footprint required, there will be no impairment of JELA resources from the implementation of the selected alternative.

## **Water Resources**

Overall, the impacts to water resources within JELA due to project activities will be short term. Any increases in turbidity caused by water bottom disturbance or soil erosion due to equipment use will subside in a short period of time once equipment is demobilized and the project area is restored to pre-project conditions. Best management practices and other mitigation designed for the prevention and control of spills will reduce the potential for impacts to water resources and sources of accidental releases of oils and fuels will be eliminated once equipment is demobilized. No significant impacts to the Park's water resources are anticipated from the Selected Action. Because impacts to water quality will be avoided where possible by using deeper water access routes and increases to turbidity in shallower areas will be temporary and

return to pre-project conditions after construction, there would be no impairment of JELA resources from the implementation of the selected alternative.

## Wildlife and Protected Species

Except for the installation of Structure 287, the project area is within an existing ROW within Park boundaries that is similar and directly connected to adjacent habitats. Most wildlife within and near the ROW are expected to readily relocate to adjacent habitat and return once project activities on the ROW are complete. Nearby waterbodies and shorelines will be temporarily impacted by the proposed activities, but these impacts will be short-term and are expected to subside in a short period of time once equipment is demobilized and the project area is restored to pre-project conditions. The installation of Structure 287 outside the Park boundaries off Jones Point will create a long-term beneficial impact to the benthic fauna and fishes present in this area by creating a hard substrate for colonization, protection for fry and invertebrates, and will introduce a new, permanent artificial habitat. Foraging opportunities could increase near the structure which could enhance naturally occurring species populations. Because of these beneficial effects and the limitation of adverse effects to disturbance during construction, no long-term adverse significant impacts to the Park's wildlife and protected species are anticipated from the Selected Action. Because, impacts will be short-term, and conditions will be restored to pre-project conditions, there would be no impairment of JELA resources from the implementation of the selected alternative.

#### Wetlands

The demolition and construction of the proposed transmission line will result in temporary, moderate adverse impacts to approximately 13.86 acres of wetlands project-wide, including 0.02 acres of permanent wetland impacts from new structure installation. Best management practices and mitigation measures as described in Appendix B and above will be implemented to minimize impacts to wetlands.

The NPS finds that there are no practicable alternatives to disturbing approximately 13.86 acres of wetlands within the proposed project area in the existing ROW. Wetlands will be avoided to the maximum practicable extent, and any wetland impacts that cannot be avoided will be minimized. Wetlands will be adversely affected by equipment access into the project area, but wetlands in the project area are expected to recover their functions and values over time. Temporal losses due to unavoidable impacts to wetlands will be compensated at a ratio of 5:1 as described in the WSOF and EA and per NPS policy (see Section 5.2.3 of NPS Procedural Manual #77-1 Wetland Protection). Therefore, the compensatory mitigation plan is consistent with NPS no net loss of wetlands policy. Because wetland impacts will be avoided to the maximum extent practicable, and wetlands are expected to recover their functions and values over time, no significant impacts to the Park's wetlands are anticipated from implementation of the Selected Action. Because impacts will be largely temporary and there will be no permanent loss or degradation of wetland function there would be no impairment of wetland resources from the implementation of the selected alternative.

# **CONCLUSION**

In conclusion, as guided by this analysis, it is the Superintendent's professional judgment that there will be no impairment of park resources and values from implementation of the selected action. The NPS has determined that implementation of the selected action will not constitute an impairment of the resources or values of JELA. This conclusion is based on consideration of the Park's purpose and significance, a thorough analysis of the environmental impacts described in the EA, and the professional judgment of the decision maker guided by the direction of NPS Management Policies 2006.

#### APPENDIX B

#### **MITIGATION MEASURES**

The selected action incorporates a number of mitigation measures intended to protect park resources, by avoiding or reducing impacts during demolition and construction.

In order to protect natural and cultural resources, the following mitigation measures and best management practices (BMPs) will be included for the Selected Alternative:

- 1. Entergy has incorporated the following into the design of this project in order to reduce impacts to the aesthetic value of the project area following construction:
- Proposed structures would be installed at an equal distance to current structures visible from existing observation points within JELA.
- New monopole structures would occupy a smaller percentage of the horizontal viewscape than the current H-frame wooden structures and require no guy wires.
- Proposed structures would not be equipped with lighting, bird reflectors, or aerial marker balls which would create a negative impact on the current viewscape experience, unless required by the Federal Aviation Administration (FAA).
- The proposed self-supported steel monopole structures are designed to withstand higher wind loads and be more resilient in the coastal environment. This would eliminate the potential for visibly damaged structures (i.e. leaning H-frame wooden structures) within sight of Bayou Segnette Waterway and LA Hwy 301.
- Proposed structures would have a light gray surface coating and non-reflective conductors and insulators. The coating and hardware would blend in better with the backdrop of clear sky.
- 2. Entergy would follow the U.S. Fish and Wildlife Service (FWS) <u>Nationwide Standard Conservation Measures</u>, which are simple, low to no cost measures that would help to protect all birds and their resources regardless of the type or location of the activity. Entergy would also utilize best practices from the Avian Power Line Interaction Committee (APLIC). As a part of the Avian Protection Plan, Entergy would install avian friendly "bird domes" on the top of each pole structure within JELA. These domes, or cone shaped caps, have proven effective in deterring avian nesting on pole structures. Eliminating avian nesting on these structures would reduce mortality caused by contact with energized electrical transmission lines.
- 3. Entergy would be required to follow standard manatee conditions for in-water activities under the terms of their authorization for the project by the US Army Corps of Engineers (USACE), which would also be included in a SUP for the project by the NPS.
- 4. Inadvertent Discovery Entergy would be required to follow Inadvertent Discovery procedures. Although an attempt has been made to locate and evaluate archaeological sites and/or components prior to construction activities, there is a potential that previously unidentified archeological sites, components, and/or human remains would be identified

during construction activities.

In the event that construction activities inadvertently discover historic or archaeological artifacts, such as but not limited to, pottery or ceramics, stone tools or metal implements, dugout canoes, human bone or any other physical remains that could indicate a previously unidentified archeological site, component, and/or human remains, all construction work will stop in the immediate area. Work shall not resume in the immediate area until the appropriate authorities and tribes are notified and consulted on the artifacts of interest.

The Project Director, Construction Foreman, or their designee would immediately notify the NPS. No construction work would continue in the area until the archeological site, component, and/or human remains were evaluated by the NPS to determine if it meets eligibility criteria of the National Register of Historic Places (NRHP). Consultation with the appropriate State Historic Preservation Office (SHPO), Tribal Historic Preservation Office (THPO)s and other interested Native American groups would be initiated by the NPS and a determination as to the disposition of these remains and/or associated funerary objects would be determined in consultation with the SHPO/THPOs. Any willful destruction of the archeological site, component, and/or human remains could result in the prosecution of individuals under the Archeological Resource Protection Act of 1979 (16 U.S.C. 470), and other statutes that protect the Park's cultural resources.

- 5. Environmental Awareness Training One of the primary goals of Entergy during this project would be to develop policies and procedures intended to minimize impacts to the resources within the Park to the greatest extent possible. An "Environmental Awareness Training" program would be developed on the sensitive nature of the Preserve which would be developed and approved with the assistance of JELA. The training program would be required for all personnel working on the Preserve. No personnel would be allowed on the project site without participating in the training program. Elements from the training program would be periodically reinforced as the project progresses at safety meetings and the like.
- a) Ground crews would be instructed by park staff on how to avoid damaging any part or whole of wetland vegetation in the Preserve.
- Regularly monitor to ensure non-target wetland vegetation is not damaged during activities.
- 6. Minimization of Potential Surface and Subsurface Geologic Impacts Due to the project being proposed within freshwater marsh, rutting and soil compaction impacts are expected to be minimal.

Temporary effects to surface soils are expected on the northern and southern ends of the proposed project in the form of erosion of exposed soils during storm events. A Storm Water Pollution Prevention Plan (SWPPP) would be prepared in accordance with the requirements of the Louisiana Pollutant Discharge Elimination System (LPDES) Storm Water General Permit for Construction Activities 5 Acres or Greater (Permit No. LAR100000). The objective of the storm water plan is the reduction or elimination of surface water pollution

through implementation of Best Management Practices (BMPs). BMP's may include but are not limited to silt fencing, straw wattles, erosion control mats, maintaining established vegetation, and vehicle track pads.

Contaminants that could potentially affect surface soils include diesel, oil, and grease from heavy equipment and temporary storage tanks, which could be released during construction. Under the Proposed Build Alternative, these petroleum-based products would be utilized for the operation of construction equipment within the ROW, and no bulk storage of these products would occur within JELA.

In the event that the above listed contaminants are released into the surface soils of the project area, traditional spill recovery equipment (boom, absorbent pads, oil skimmers) would first be utilized to recover spilled product. Volumes of contaminants released in quantities that are above what are considered de minimis would be reported to the appropriate regulatory agencies. Soil could potentially require excavation and disposal according to local, state, and federal regulations in the event that traditional spill recovery equipment is not effective. Confirmatory sampling could be required to verify that concentrations fall below the Risk Evaluation Corrective Action Plan (RECAP) standards established by LDEQ.

7. Minimization of Potential Hydrologic Impacts - Temporary effects to surface water could occur from equipment movement on land disturbing soils or sediments and potentially degrading water quality in adjacent waterbodies by increasing turbidity. Equipment movement in waterways could also disturb bottom sediments and increase turbidity. Increased turbidity could potentially limit necessary light penetration and nutrient transport within the water column which is necessary for plant recovery following disturbance. Oxygen levels within the water could also be depleted.

A SWPPP would be prepared for the project. The objective of the storm water plan is the reduction or elimination of surface water pollution through implementation of BMPs. BMP's may include but are not limited to silt fencing, straw wattles, erosion control mats, maintaining established vegetation, and vehicle track pads.

The OCM Coastal Use Permit indicates that water bottoms shall not be disturbed during access to the proposed work location other than that authorized and shown on the permit plats whether it be by dredging, wheel washing, prop washing, jetting, mucking, plowing, bull dozing or any other means of moving bottom material. The permit also requires powered vessels to be operated so as not to disturb the water bottom by propeller or jet action.

8. Minimization of Potential Vegetation Impacts - All equipment utilized to perform construction activities would stay within the access routes and designated ROW. Where access routes traverse vegetated wetlands, marsh buggies/tracked equipment would attempt to achieve ingress and egress by remaining within the footprint of one equipment

width track throughout the duration of the project ("one pass"). In the event that ingress and egress could not be achieved within the same equipment track footprint, contractors would be allowed to utilize an additional pass under the condition that a minimum of one buggy width is maintained between tracks. It is expected that native wetland vegetation would recolonize the area.

- 9. Best Management Practices (BMPs) would be implemented during construction to help reduce impacts to wetlands during construction. These BMPs include:
- Buffers between areas of soil disturbance and wetlands or waterways would be planned and maintained;
- Soil erosion BMPs such as sediment traps, erosion check screen filters, and hydro mulch would be used to prevent the entry of sediment into wetlands;
- Any hazardous waste that would be generated in the project area would be promptly removed and properly disposed of;
- Equipment would be inspected for leaks of oil, fuels, or hydraulic fluids before and during use to prevent soil and water contamination. Contractors would be required to implement a plan to promptly clean up any leaks or spills from equipment, such as hydraulic fluid, oil, fuel, or antifreeze:
- Onsite fueling and maintenance would be minimized. If these activities could not be
  avoided, fuels and other fluids would be stored in a restricted/designated area and fueling
  and maintenance would be performed in designated areas that would be bermed and lined
  to contain spills. Provisions for the containment of spills and the removal and safe disposal
  of contaminated materials, including soil, would be required;
- Actions would be taken to minimize effects on site hydrology and fluvial processes, including flow, circulation, water level fluctuations, and sediment transport. Steps would be taken to avoid any rutting caused by vehicles or equipment;
- Measures would be employed to prevent or control spills of fuels, lubricants, or other contaminants from entering wetland areas. Action would be consistent with state water quality standards and CWA Section 401 certification requirements;
- Appropriate erosion and siltation controls would be maintained during construction; and
- Fill material would be properly maintained to avoid adverse impacts on aquatic environments.

# 10. Exotic Vegetation and Noxious Weeds

- Weed control measures (e.g., cleaning / washing of vehicles / vessels, equipment, and personal equipment before entering / re-entering the Preserve) will be implemented to help minimize the potential for the introduction and spread of nonnative species.
- The Contractor shall ensure that no equipment will be allowed to off-road or off load if dirt or other contaminants with the potential to harbor seeds are apparent. Any equipment which departs the project site must repeat a cleaning and inspection process, including formal acceptance by the Contracting Officer or their Local Designee prior to being remobilized and offloaded at the project site(s).

- 11. Photographic Documentation Photographs documenting conditions in the project site at the time of construction would be collected at least annually. At least two photos would be taken at each structure location with the view of each photo consistently oriented in the same general direction from one monitoring event to the next.
- 12. Wetlands Best management practices will be implemented to avoid impacts to wetlands. For those impacts that cannot be avoided, restoration and rehabilitation actions are required. In addition, compensatory mitigation for temporal loss to wetlands in the ROW for this project is the treatment of invasive plant species at a 5:1 ratio. The total area to be treated for compensation is 69.2 acres. The mitigation actions and success criteria of restoration, rehabilitation, and compensatory mitigation for temporal loss are detailed in the WSOF and summarized below.
- Open Water (Restoration) It is anticipated that natural processes would feed open water areas with adjacent material and would result in natural restoration. No addition of outside fill to the project site is proposed. Pre and post- project photographic documentation in winter season would be required. Mitigation success criteria are detailed in the WSOF.
- Fill Equipment Ruts (Rehabilitation) Ruts could be created within the area as tracked vehicles ingress and egress the ROW. Mitigation would consist of fixing the ruts by filling them in with adjacent material immediately upon completing construction activities at the specific work site. No material would be brought in from off-site. Natural recruitment is expected to occur, but recovery within the ROW is expected to vary based upon levels and frequencies of past disturbances. Planting of native marsh species may be required should the mitigation success criteria for native vegetation cover not be achieved through natural recruitment. Addition of geotextile fabric to damaged areas could allow marsh grass to root and return the area to emergent wetland habitat. Pre and post- project photographic documentation would be required. Mitigation success criteria are detailed in the WSOF.
- Compensatory Mitigation for Temporal Loss The temporal wetland impacts are
  anticipated to be caused from ingress and egress and compression of vegetation from
  equipment within the length of the ROW during the demolition and construction.
  Approximately 13.86 acres of total temporal wetland impacts are estimated to occur and
  are proposed to be mitigated by a 5:1 ratio resulting in 69.2 (5 times 13.86) acres of
  invasive plant treatment.
- Two locations within the Barataria Preserve totaling +/- 204 acres have been identified as areas where invasive non-native plant species are to be treated. Entergy will submit a work plan of the final invasive plant treatment mitigation areas totaling 69.2 acres from within the +/-204-acre areas to be reviewed and approved by NPS prior to beginning treatment. Temporal mitigation through invasive plant treatment will occur twice at least 2 years apart, and the final determination of success would be surveyed during the growing season after the second treatment. The park will determine mitigation success, based on the criteria detailed in the WSOF. Monitoring and reports would include pre and post-treatment photographs and total number of treated target species. NPS monitors would take photographs of the treatment area before and after each treatment. At least two photos would be taken at each treatment area location with the view of each photo always

oriented in the same general direction from one monitoring event to the next.					

# APPENDIX C PUBLIC COMMENTS

**Comment #1** – A commenter suggested that directional drilling as an alternative construction methodology be considered as it would allow Entergy to remove above ground structures and improve the viewshed on the existing right of way.

• Response: Directional drilling was addressed as an alternative considered but dismissed, see page 14 in EA.

# APPENDIX D ERRATA

On page 16 of the EA, change "Alternatives B and C" in sentence "In order to protect natural and cultural resources, the following mitigation measures and best management practices (BMPs) would be included for Alternatives B and C:" to "In order to protect natural and cultural resources, the following mitigation measures and best management practices (BMPs) will be included for the Selected Alternative:"

On page 16 of the EA, change "Proposed structures would not be equipped with lighting, bird reflectors, or aerial marker balls which would create a negative impact on the current viewscape experience" to "Proposed structures would not be equipped with lighting, bird reflectors, or aerial marker balls which would create a negative impact on the current viewscape experience, unless required by the Federal Aviation Administration (FAA)."