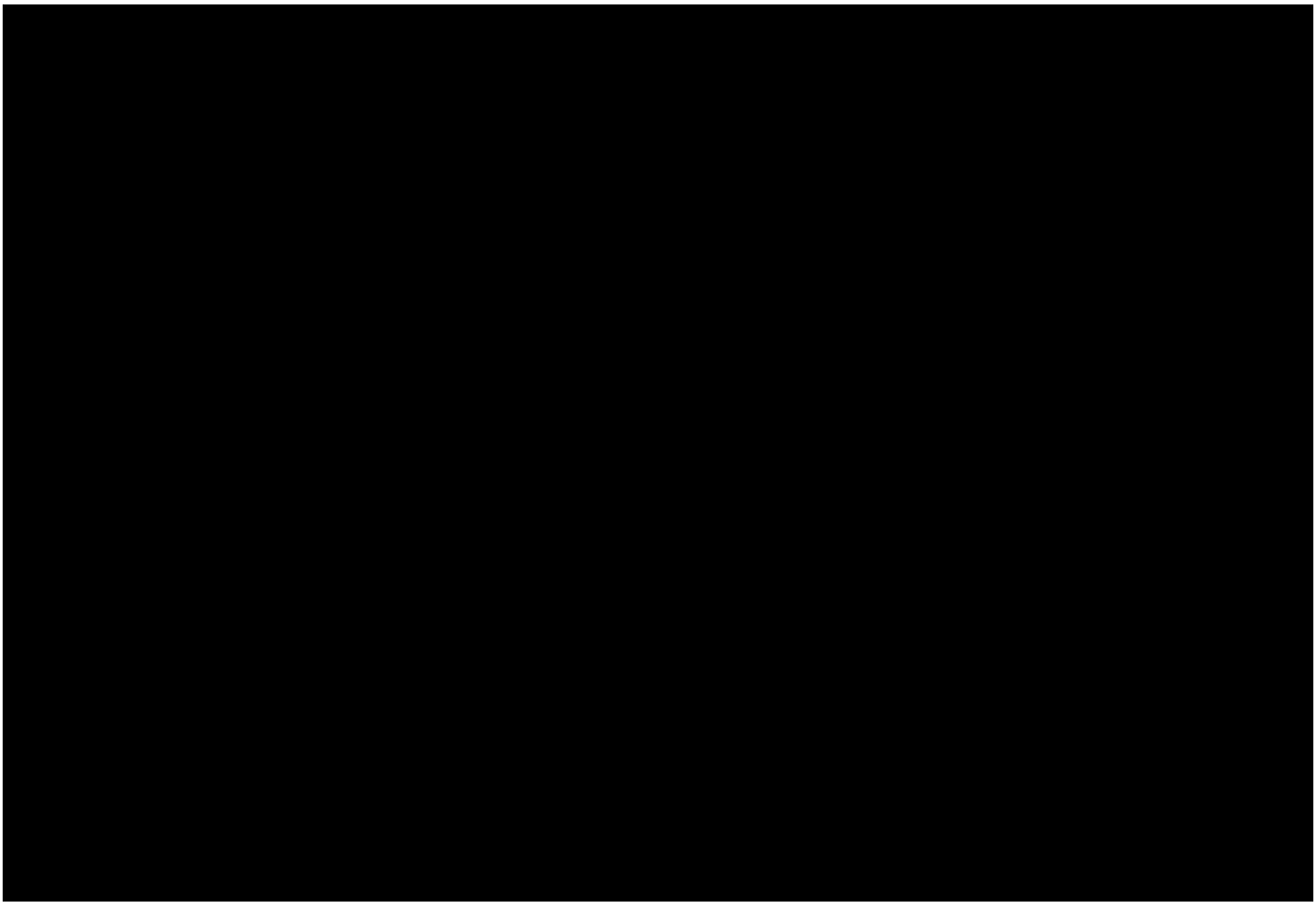
Board of Public Utilities
Offshore Wind Transmission Proposal Data Collection Form

Supplemental Information Requested to Support New Jersey Board of Public Utilities (BPU) in the Evaluation of Transmission Projects Proposed to be Developed Under the 2021 State Agreement Approach (SAA)

PJM Proposal ID #203

TABLE OF CONTENTS

I. Introduction



II. Project Proposal Identification

Proposing Entities shall include the following information in the BPU Supplemental Offshore Wind Transmission Proposal Data Collection Form:

Proposing Entity Name: LS Power Grid Mid-Atlantic[1]
Company ID: CNTLTM
Project Title: Broad Creek – Robinson Run 500/230 kV Transmission Project
PJM Proposal ID: 203

III. Project Summary

NARRATIVE DESCRIPTION OF PROPOSED PROJECT(S)

Provide a narrative description of the project(s) proposed in response to the PJM Problem Statements describing primary technical features, interconnection points (default or alternative POIs) and the associated transfer capability, timeframe for development, and how the project(s) will support New Jersey's policy to cost-effectively develop 7,500 MW of offshore wind.

The Project establishes a new 500 kV connection between [redacted] The Project will consist of the following components:

- New 500/230 kV substation (Broad Creek) located [redacted]
  - Interconnects both Graceton – Bagley 230 kV transmission lines
  - Six position, breaker and a half arranged 230 kV switchyard;
  - Three position, ring bus arranged 500 kV switchyard;
  - Two new 500/230 kV transformers;
  - Associated protection and control equipment, line termination structures, and ancillary systems.
- New 500 kV substation (Robinson Run) located northwest [redacted]
  - Interconnect the Delta Power Plant – Peach Bottom 500kV transmission line
  - Three position, ring bus arranged 500 kV switchyard;
  - Associated protection and control equipment, line termination structures, and ancillary systems.

[1] [redacted]

- New [redacted] 500 kV transmission line from Broad Creek Substation to Robinson Run Substation to be primarily located [redacted]

[redacted]

PROJECT OPTIONALITY, FLEXIBILITY, AND MODULARITY

Describe the optionality, flexibility, and modularity offered by the proposed projects, including: ability of project proposals to achieve efficient outcomes through combinations of solutions for Options 1a, 1b, 2 and 3 needs, or ways in which proposed solutions, or portions of proposed solutions, can be combined, integrated, and sequenced to more cost effectively achieve the State's overall public policy and risk mitigation objectives; ability of the proposed solution to accommodate future increases in offshore wind generation above current plans; innovative solutions that yield a transmission investment schedule that is optimally aligned with the planned schedule of offshore wind generation procurements

[redacted]

INTERDEPENDENCY OF OPTIONS

Describe any interdependence issues or benefits associated with any other proposal also submitted by your company. Namely, describe whether selection of another specific proposal will impact this proposal, and if so – how. Describe whether your project is severable, and the conditions that would be associated with selection of this single proposal (i.e. one option 1b proposal for one POI). Describe any benefits to cost, cost-containment mechanisms, phasing, or other relevant elements of the proposal that would stem from co-selection of other proposals. Explain any benefits from selection of multiple proposals that may not be available if a single proposal is selected.

[redacted]

OVERVIEW OF PROJECT BENEFITS

Describe the benefits that the project offers in support of New Jersey's policy goals to reduce customer costs, advance offshore wind, maintain reliability, mitigate environmental impacts, and achieve other policy goals as outlined above. Explain how any project options or alternatives offered may create value in furtherance of the BPU's stated policy goals as described above.

[redacted]

OVERVIEW OF MAJOR RISKS AND STRATEGIES TO LIMIT RISKS

Identify and describe project-related risks, such as: (a) uncertainties that may cause timeline delays or budget increases; (b) uncertainties that may reduce or delay the benefits to New Jersey customers; and (c) project-on-project risks that may exist between this project and other transmission or offshore wind projects. Describe the strategies that will be utilized to limit these risks and the impacts to New Jersey customers.

[redacted]

OVERVIEW OF PROJECT COSTS, COST CONTAINMENT PROVISIONS, AND COST RECOVERY PROPOSALS

Summarize the project cost, any cost containment provisions that will be utilized to limit cost impacts on New Jersey customers, and the cost recovery approach.

The Project is estimated to cost $104.2 million (2021 dollars) or $126.0 million (nominal year of occurrence dollars). These estimates are inclusive of all development, financing (AFUDC), commissioning, and other costs necessary to place the Project in-service.

[redacted]

[redacted]

[redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]
- [redacted]

[redacted]

IV. Proposal Benefits

The PJM submission form provides space to identify the reliability criteria violations that the solution resolves and the Market Efficiency flowgate(s) the proposed project mitigates. We provide an opportunity here to identify additional information concerning the benefits of the proposed project.

[redacted]

V. Proposal Costs, Cost Containment Provisions, and Cost Recovery

Developers can propose several (equally-acceptable) alternative cost control and cost recovery mechanisms for each proposal. Such cost control and cost recovery alternative may include:

[redacted]

Based on the approach, please provide the following information for the BPU to evaluate the costs of the proposed solutions to New Jersey ratepayers:

- *Any additional cost information not included in PJM's submission forms, including ongoing capital expenditures:*

  [redacted]

- *For the cost estimates submitted via PJM's submission forms, the cost estimate classification and expected accuracy range consistent with AACE International standards:*

  [redacted]

- *The estimated energy losses of the proposed facilities:*

  [redacted]

- *The physical life and/or economic life (i.e., length over which the facility will request cost recovery) of the facilities:*

  [redacted]

- *A description of each cost structure proposed for the project, including cost containment mechanisms and cost recovery approach:*

[redacted]

- *If a fixed revenue requirement is being requested, files specifying the annual revenue requirements over the economic life of the proposal. Similar to the proposed cost cap mechanisms submitted to PJM, please include proposed contractual revenue requirement commitment language to be included in the Designated Entity Agreement. The Contractual revenue requirement commitment language must be identical to that submitted in the PJM Competitive Proposal Template.*

[redacted]

- *Please explain how the costs of the proposed projects may be impacted by selection of a subset of the options versus the entire proposed project:*

[redacted]

- *Please explain any additional cost control mechanisms provisions for the BPU to consider that were not included in the PJM submission forms:*

[redacted]

VI. Project Risks and Mitigation Strategy

Please provide the following items to describe the project's risk and risk mitigation strategy:

- *Discuss the project's plan for site control and the ability to achieve site control.*

[redacted]

- *Identify whether the project will require the issuance of a right-of-way, a right of use and easement, or similar authorization from the U.S. Bureau of Ocean Energy Management ("BOEM"), and the project's plan and timetable for obtaining such any required authorization.* N/A
- *Discuss the project stakeholder engagement plan's ability to minimize public opposition risk from the fishing industry, coastal and beach communities, and other stakeholder groups.*

[redacted]

- *Identify any construction techniques will be needed – benthic substrate, long HDD spans, existing cables, pipelines or other infrastructure, sandwaves/megaripples, contaminated sediment, dredging, or onshore waterbody crossings – that may result in project delays or cost overruns.* [redacted]
- *Identify known or potential time of year restrictions on construction activity, particularly related to listed species or beach restrictions.*

[redacted]

- *Identify anticipated construction-related outages and expected duration on existing PJM transmission facilities.*

[redacted]

- *Identify supply chain constraints or material procurement risks that may impact the project.*

[redacted]

- *Identify project-on-project risks related to the timing or completion of other transmission and offshore wind projects built to achieve the New Jersey public policy requirement.*

[redacted]

- *Describe and provide proposed contractual language for any project schedule guarantees, including but not limited to guaranteed in-service date(s), financial assurance mechanisms, financial commitments contingent on meeting targeted commercial online dates, and delay damage or liquidated damage payment provisions, that have been proposed.*

[redacted]

- *Identify any additional risks associated with the project that could lead to increased costs, reduced project benefits (reliability, market efficiency, and/or public policy), or delayed development and delivery of the proposed offshore wind generation.*

[redacted]

VII. Environmental Impacts and Permitting

Please provide a Environmental Protection Plan which describes all associated onshore and/or offshore environmental impacts from the planning, construction, and operation phases of the project, including, but not limited to: [redacted]

- *Physical Resources- air quality, electric and magnetic fields (EMF), geological resources, airborne sound, water quality, underwater acoustics, wetlands and waterbodies.*

  [redacted]
- *Biological Resources- avian and bat species, benthic and shellfish, coastal and terrestrial habitat, finfish and essential fish habitat, marine mammals and sea turtles, terrestrial wildlife*

  [redacted]
- *Cultural Resources- above-ground historic properties, marine archaeology, terrestrial archaeology*

  [redacted]
- *Socioeconomic Resources- visual resources, commercial and recreational fisheries, commercial shipping, environmental justice, land use and zoning, existing cables, tourism, public health & safety, workforce, economy, demographics*

  [redacted]
- *GIS Desktop Study of potential impacts to sensitive resources including tabular summaries of acreage and distance calculations*

  [redacted]
- *Width of individual cable routes or shared power corridors*

  [redacted]
- *Footprint of onshore substation including expansion needed and acreage calculations of habitat disturbance, especially related to wetlands, forested areas, or other sensitive habitats*

  [redacted]
- *Descriptions of cable installation methods with locations identified*

  [redacted]
- *General footprint and extent of Horizontal Directional Drilling (HDD) boreholes and cable landings*

  [redacted]
- *Footprint and extent of associated pre-construction and construction activities*

  [redacted]

- *Projected vessel traffic and/or vehicles needed for project surveys, construction, operation, and project closeout including emissions estimates from vessel and/or vehicle activity*

[redacted]

- *Any needed exclusion zones around project infrastructure including offshore platforms*

[redacted]

- *Plan to address the identified impacts described above, including innovative measures to avoid, minimize or mitigate impacts.*

[redacted]

Please provide a description of the anticipated environmental benefit of a particular transmission proposal in comparison to radial lines:

[redacted]

Please provide a Fisheries Protection Plan that must include the following information:

[redacted]

Please provide a description of how the Applicant will identify (or has identified) environmental and fisheries stakeholders, and how the Applicant proposes to communicate with those stakeholders during preconstruction activities through project closeout, as well as a plan for transparent reporting of how stakeholders' concerns were addressed.

[redacted]

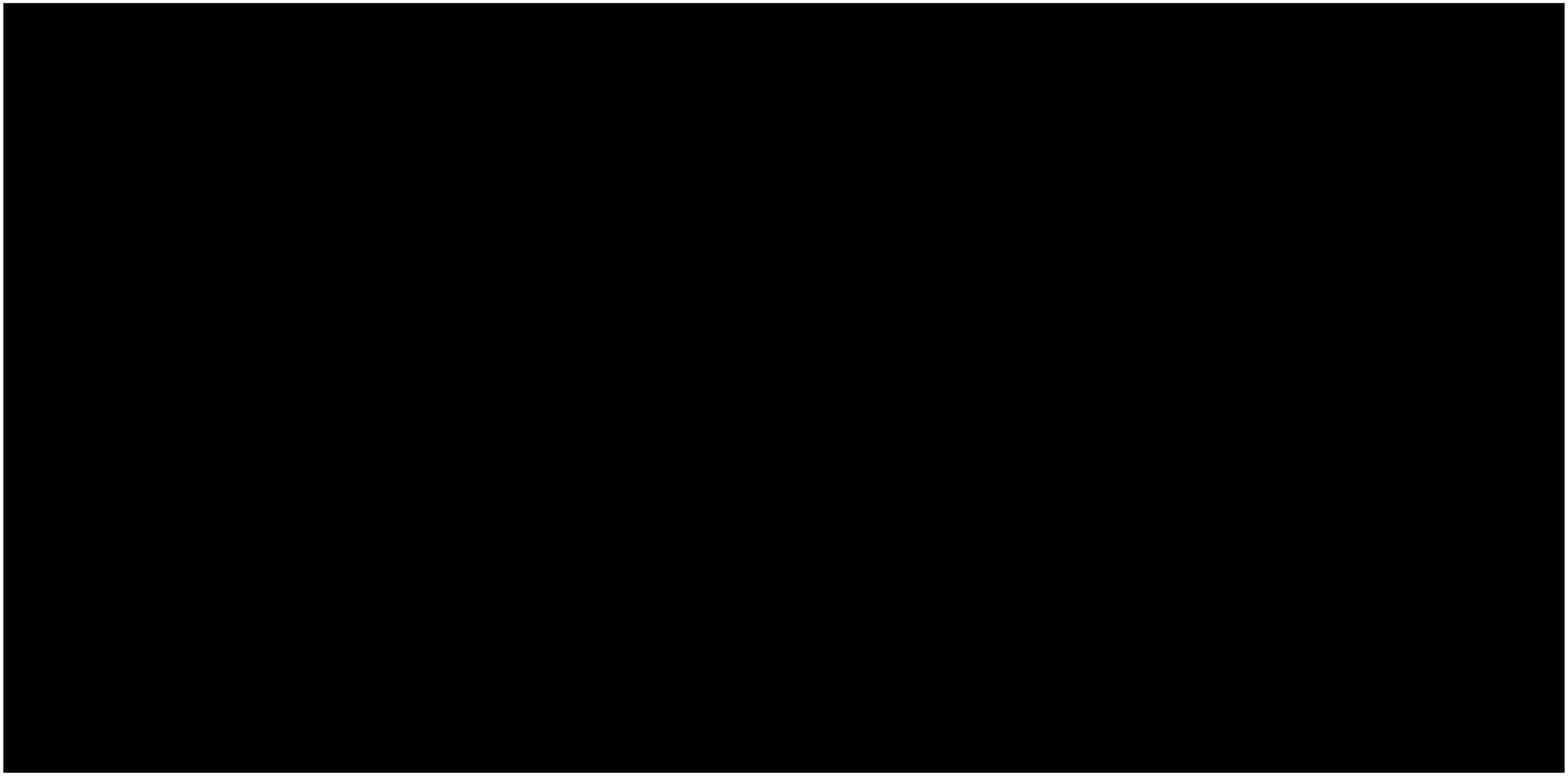
Please provide an analysis showing that project infrastructure will not impact overburdened communities in a disproportionate fashion.

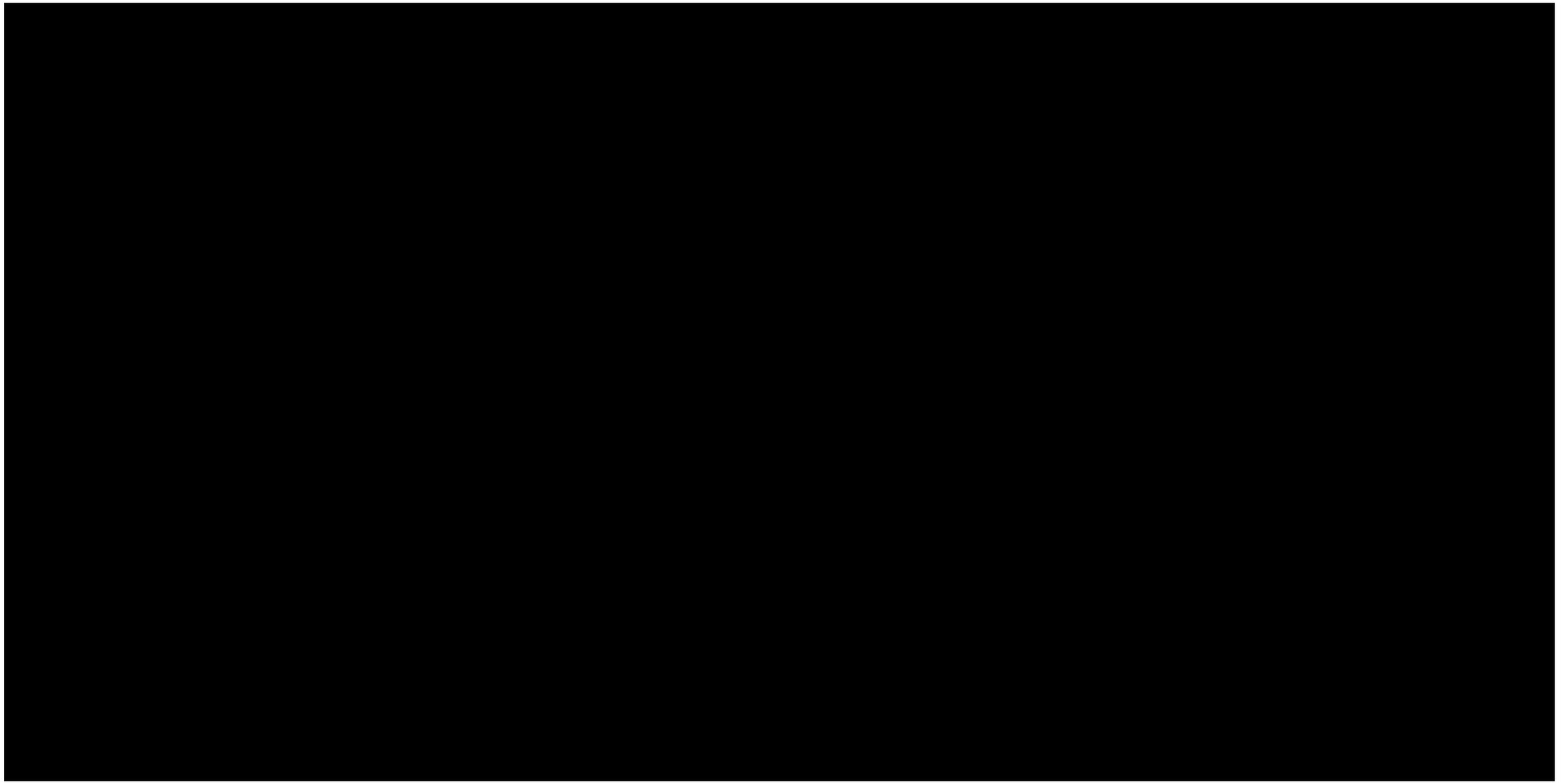
[redacted]

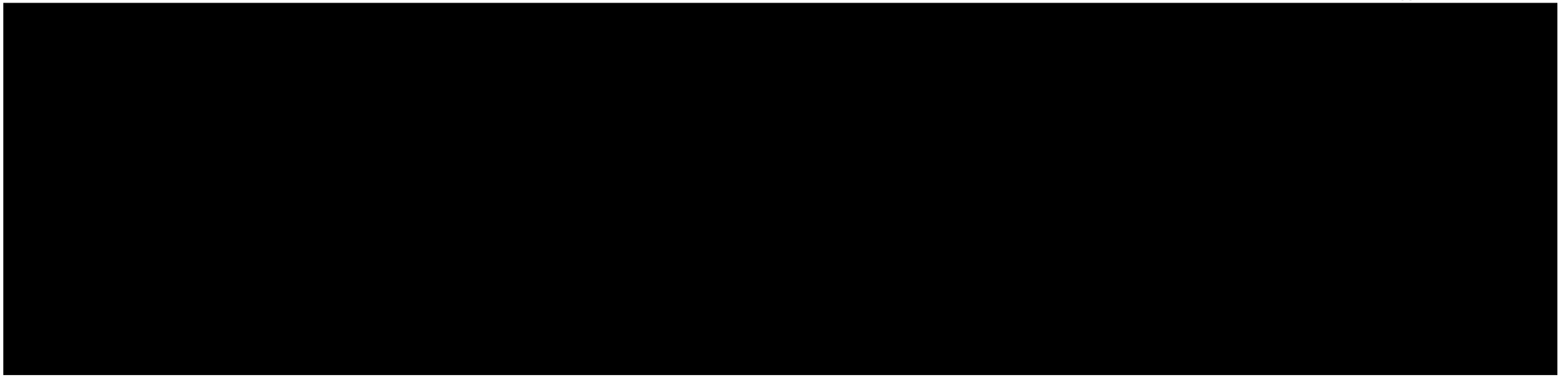
Please provide a description of the applicant's permitting plan that includes the following:

- *Identify all local, State and/or Federal permits and/or approvals required to build and operate the Project and the strategy and expected time to obtain such permits and/or approvals;*

[redacted]







- *Provide documentation of consultation with USACE beach replenishment projects and sand borrow areas, if applicable;*

[redacted]

- *Identify all applicable Federal and State statutes and regulations and municipal code requirements, with the names of the Federal, State, and local agencies to contact for compliance;*

[redacted]

- *Submit a land use compatibility / consistency matrix to identify local zoning laws and the consistency of applicant's activities in each local jurisdiction;*

[redacted]

- *Identify each appropriate State or Federal agency the Applicant has contacted for land acquisition issues and provide a summary of the required arrangements;*

[redacted]

- *Include copies of all submitted permit applications and any issued approvals and permits; and*

[redacted]

- *Include copies of all filings made to any other regulatory or governmental administrative agency including, but not limited to, any compliance filings or any inquiries by these agencies.*

[redacted]