Greenfield RTEP Proposal Template

Proposal Template

Executive Summary (must note contain any redacted information)

- Name of proposing entity
- Proposal Window and associated violation/issue being addressed
 - Identify that type of regional/interregional analysis or process that identified the violation/issue
- Violations caused by proposal/nearby violations not addressed by your proposal
- Identify projects that span (e.g. ties between or taps) between two PJM Transmission Owner zones or between PJM and a neighboring Balancing Authority. This group includes transmission that spans two or more affiliated companies (e.g. Meted and Allegheny Power).
- Indication of intentions to construct/own/operate/maintain
- Description of the proposed solution and corresponding violation(s) it resolves.
- Description of how the project should be considered; only as a whole or if portions of the project should be considered as well. (Each individual portion/combination will be considered a separate proposal, and should be submitted this way)
- High Level overview of cost and cost commitment.

Company Evaluation

- Name and address of the entity including a primary and secondary point of contact.
- Pre-qualification submittal identification number
- Optional: Supplemental company information relevant to the specific proposal project that demonstrates one or more of the following:
 - Technical and engineering qualifications of the entity or its affiliate, partner, or parent company.
 - Qualifications/partnerships for specific technical aspects of a proposal
 - Demonstrated experience of the entity or its affiliate, partner, or parent company to develop, construct, maintain, and operate transmission facilities. Including a list or other evidence of transmission facilities previously developed regarding construction, maintenance, or operation of transmission facilities both inside and outside of the PJM Region.
 - Previous record of the entity or its affiliate, partner, or parent company to adhere to standardized construction, maintenance and operating practices.
 - Capability of the entity or its affiliate, partner, or parent company to adhere to standardized construction, maintenance and operating practices.
 - Financial statements of the entity or its affiliate, partner, or parent company. Please provide the most recent fiscal quarter, as well as the most recent three fiscal years, or the

period of existence of the entity, if shorter, or such other evidence demonstrating an entity's current and expected financial capability acceptable to the Office of the Interconnection.

- Commitment by the entity to execute the Consolidated Transmission Owners Agreement, if the entity becomes a Designated Entity.
- Evidence demonstrating the ability of the entity to address and timely remedy failure of facilities.
- Description of the experience of the entity in acquiring rights of way.

Constructability Information

- Scope of project
- Is this project being proposed as a solution to Cross-Border issues? (Stakeholder is responsible for initiating and satisfying all Regional and Interregional requirements.)
 - Is evaluation for Interregional Cost Allocation desired?
 - Has the proposal been evaluated in a coordinated interregional analysis under PJM Tariff or Agreement provisions? Please specify the analysis and applicable Tariff or Agreement provisions.
 - List the specific Regional and Interregional violations and issues from the Regional and/or Interregional analyses that identified the violations and issues addressed by the proposal.
- Detailed breakdown of all elements of proposal elements
 - General description
 - Geographic description
 - Route description including existing/new ROW, if new ROW is required details on obtaining land
 - Physical characteristics
 - Maps and supporting diagrams
 - Specific location of interconnection with incumbent TO facilities and assumptions that were made for this proposal
 - Outage Required for construction
 - Total Cost of project and total cost for each major component (e.g. new transmission line, modification work at substation A, and modification at Substation B) If the cost for certain work is assumed to be provided by others and is not included in the total cost, indicate that scope as not included and to be estimated by other(s).
 - Identification of construction responsibility of each component (e.g. Entity proposes to construct the new line from Substation A to B and upgrade work to interconnect new line at Substations A and B is assumed to be constructed by the substation owners.)

Analytical Assessment (PJM will perform all analysis used in evaluations of proposals)

Detailed analysis report on proposed solutions, including:

- o Breaker one-line diagrams to illustrate system topology and substation configuration
- Spreadsheets (e.g. Output of analysis showing solution to identified issue)
- Equipment parameters and assumptions
 - All parameters (Ratings, impedances, mileage, etc.)
 - For reactive devices, settings and outputs
 - For synchronous machines, MW and MVAR output assumptions
- All necessary PSS/E idev files or appropriate data to model upgrade
- Any other supporting documentation required by PJM that is required to perform verification review, that isn't explicitly stated in this document
- Proposal Template spreadsheet (in excel format) including which flowgates your project is addressing, general scope, detailed solution components, total cost
- In addition to all other requirements, if the project requires updates to the event file, the <u>Market Efficiency</u> Proposals should also include:
 - Description of changes/updates that were applied to the event file (if any):
 - List of events that were modified
 - Brief description of the update: change type (interface changes, changes to the monitored lines or to the contingencies)
 - Brief explanation of the update need.
 - The event file (updated on top of PJM's published event file) should contain:
 - New Ratings of interfaces or flowgates
 - Updates to the contingency section based on your proposal
 - New event definitions and removal of existing events that are no longer accurate based on your proposal
 - Expected increase/decrease for all impacted Reactive Interface ratings from proposed projects
- Additionally, PJM requests but does not require the following analysis for <u>Market Efficiency</u> Proposals:
 - Detailed Benefit/Cost evaluation showing savings from project in production costs, gross load payments, net load payments, and congestion costs for all study years
 - Calculated Benefit/Cost ratio
 - PV Analysis for projects that impact Reactive interfaces
 - PROMOD change cases to implement project
 - CETL analysis for all RPM proposed projects
- Additional benefits of your proposal

<u>Cost</u>

- All Cost estimates shall include the following
 - Total cost in current year dollars

- o Total cost in In-Service year dollars
- Yearly cash flow with escalation included
- o Detailed explanation of real and inflation components of escalation rates used
- Detailed breakdown of cost of each element (Transmission and Substation)
 - Cost of materials and equipment
 - Cost of engineering and design
 - Cost of Construction and commissioning
 - Cost of Permitting/routing/siting
 - Cost of ROW/Land Acquisition
 - Cost of Construction management
 - Company overheads or other miscellaneous costs
 - Cost of Contingency
 - Assumptions of costs to be performed by incumbent TO
- Clearly defined cost commitment
 - No "conditional upon other proposal" cost commitment
 - If proposing a cost commitment, you must provide a detailed scope pf work that is subject to the cost commitment. Cost commitment can only be provided for work which the proposing entity may be designated.
 - Terms and conditions of the cost commitment
 - Estimated Annual Transmission Revenue Requirement with Assumptions is suggested by not required
 - Changing the scope of the cost commitment is considered a change to the proposal and will not be allowed.

<u>Schedule</u>

- Detailed conceptual schedule for proposed project
- Environmental/routing/permitting

Operations/Maintenance

- Overview of plans for operations and maintenance
 - Previous experience
 - o Intentions for Control center
 - Maintenance contracts