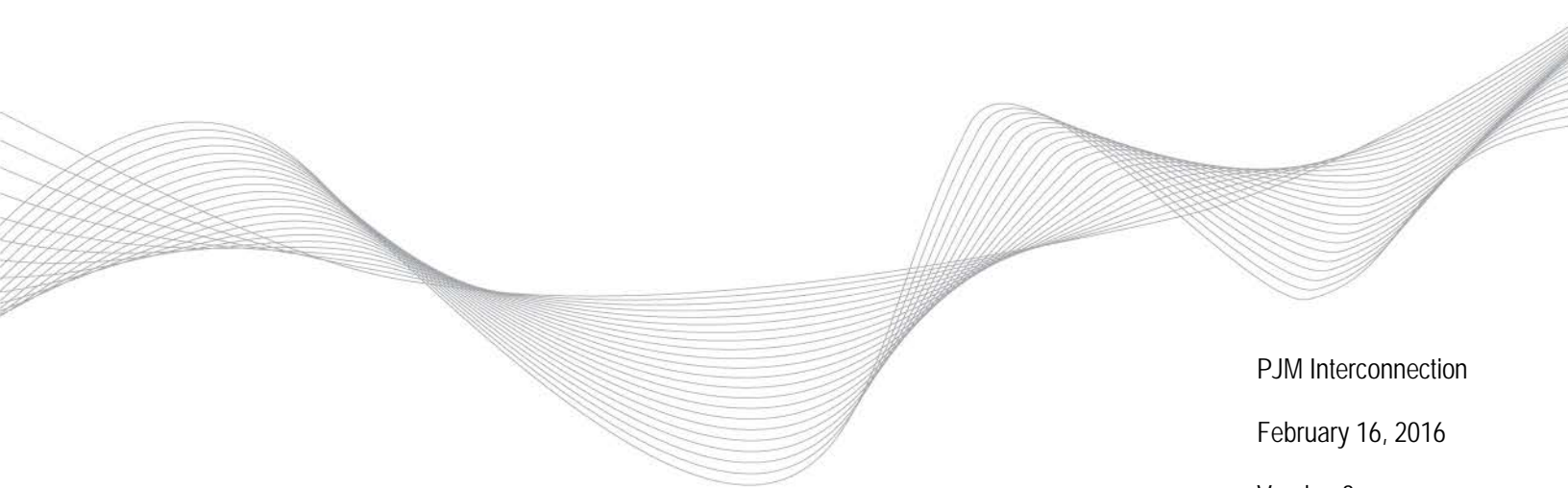




Greenfield Project Proposal Template



PJM Interconnection

February 16, 2016

Version 3

A. Executive Summary

This section shall include:

- Name of proposing entity
- Proposal Window and associated violation/issue being addressed
 - Identify the 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. (Separable portions/combinations should be submitted as separate proposals. If a proposal is submitted with multiple options, PJM will split it into multiple proposals. PJM reserves the right to select the best project, regardless of how it is packaged by proposing entities.)
- High Level overview of cost and cost commitment.
- Additional benefits of your proposal above solving the identified violation/constraints

B. Company Evaluation Information

This section is required to be completed by those proposing entities who are seeking Designated Entity status.

- Name and address of the entity including a primary and secondary point of contact.
- Pre-qualification submittal identification number
- Optional: Additional company information, not already included in the pre-qualification, 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.

C. Proposed Project Constructability Information

This section should be organized by project component as delineated by the proposing entity in their project submittal form. The proposing entity should identify those greenfield project elements for which they are requesting Designated Entity status and those which will be developed, constructed and owned by others.

- 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 proposal elements
 - General description
 - Geographic description
 - Route description including existing/new ROW, if new ROW is required details on obtaining land
 - Assessment of environmental impacts related to all facilities (i.e. environmental impact study requirements, environmental permitting, sediment, and erosion control issues)

- Right of way and land acquisition plan and approach for both public and private lands
- Permitting plan and approach
- Discussion of potential public opposition
- Physical characteristics
- Maps and supporting diagrams
- Specific location of interconnection with incumbent TO facilities and assumptions that were made for this proposal
- Generation/Transmission outages required for construction, proposed coordination with Generation/Transmission owner.
- 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). This should include a breakdown of costs including but not limited to: Labor, Materials, Risk and Contingency, environmental mitigation costs.
- 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.)

D. Analytical Assessment

Proposal Selection will be made based on PJM analysis. Please use this section to describe the details of your proposal from an analytical perspective, and outline the analysis you have performed in support of this proposal.

- Detailed analysis report on proposed solutions, including:
 - 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 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 Market Efficiency 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)
 - 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 Market Efficiency 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

E. Cost

- All cost estimates shall include the following
 - Total cost in current year dollars
 - Total cost in In-Service year dollars
 - Yearly cash flow including escalation, taxes and financing costs
 - Detailed explanation of real and inflation components of escalation rates used
- Detailed breakdown of cost of each construction 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 for work to be performed by incumbent Transmission Owner(s)
- Planned return on equity (ROE), including any incentive adders the proposing entity intends seek
- Estimated monthly AFUDC for the project, even if the Proposing Entity intends to pursue a current cash return on CWIP during the construction period
- Detailed breakdown of annual operation and maintenance (O&M) costs
- Clearly defined cost commitment
 - No “conditional upon other proposal” cost commitment
 - If proposing a cost commitment, you must provide a detailed scope of work that is subject to the cost commitment. Cost commitment can only be provided for work which the proposing entity may be designated
 - If proposing a cap on capital expenditures, provide the proposed cap on capital expenditures in present year dollars and year of occurrence dollars
 - If the Proposing Entity is proposing a cap on ROE, describe any conditions under which this ROE cap would not apply
 - Terms and conditions of the cost commitment, including any conditions under which the cost cap would not apply
 - Estimated Annual Transmission Revenue Requirement with Assumptions is suggested but not required. If provided, include the complete buildup of the annual revenue requirement including, at least: depreciation, cost of debt, return on equity, federal and state income tax, property tax, and other costs
 - Changing the scope of the cost commitment is considered a change to the proposal and will not be allowed

F. Schedule

- Detailed conceptual schedule for proposed project
 - At a minimum the schedule shall include the following major work activities:
 - Engineering and Design
 - Siting and Permitting
 - ROW and Land acquisition
 - Material procurement
 - Construction
 - Testing/Commissioning
- Environmental/routing/permitting

G. Operations/Maintenance

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

Version History

- Version 1 : Posted 6/18/2015
- Version 2: Updated Route Description sub bullets per PC final review 8/13/2015
- Version 3: Posted 2/16/2016