



2018–2019 Transmission Planning Process Phase 3 – Competitive Solicitation

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Transmission Planning Process Phase 3 - Overview of the Competitive Solicitation Process

- Process and schedule
- Evaluation approach
- Projects eligible for Phase 3

2013/2014 Transmission Planning Cycle

April 2018

March 2019

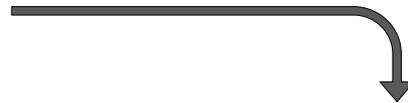


ISO Board Approval of Transmission Plan

Phase 1

Development of ISO unified planning assumptions and study plan

- Incorporates State and Federal policy requirements and directives
- Demand forecasts, energy efficiency, demand response
- Renewable and conventional generation additions and retirements
- Input from stakeholders
- Ongoing stakeholder meetings



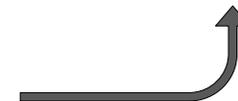
Phase 2

Technical Studies and Board Approval

- Reliability analysis
- Renewable delivery analysis
- Economic analysis
- Central California Study
- Publish comprehensive transmission plan
- ISO Board approval

Phase 3

Receive proposals to build identified reliability, policy and economic transmission projects.



TPP Phase 3 Schedule

- April 22, 2019 – Bid Window Opens
- **Option to Collaborate – 10 Business Days (BD)**
- Gates 500kV Dynamic Reactive Support Project – Bid Window Closes July 12, 2019
- Round Mountain 500kV Dynamic Reactive Support Project – Bid Window Closes August 23, 2019
- Validation – 15 BD
- Cure – 10 BD
- Final Validation – 10 BD
- Qualification – 15 BD
- Cure – 10 BD
- Final Qualification – 10 BD
- Comparative Analysis and select Approved Project Sponsor – 60 BD
- Gates 500kV Dynamic Reactive Support Project - Post approved project sponsor and associated report – January 2020
- Round Mountain 500kV Dynamic Reactive Support Project - Post approved project sponsor and associated report – February 2020

Key Steps in the Solicitation and Selection Process

- 1 Post functional specifications and conduct informational conference call
- 2 Solicit Project Sponsor applications
- 3 Receive Project Sponsor applications
- 4 Assess whether Project Sponsors meet minimum qualifications
- 5 Post list of qualified Project Sponsors
- 6 Selection of Approved Project Sponsor
- 7 Post Approved Project Sponsor and Report

Functional Specifications, Informational Conference Call and Q&A Document

- The ISO prepares and posts functional specifications for each transmission solution prior to opening the bid window.
- The ISO will host an informational conference call prior to opening the bid window to address questions on:
 - Schedules
 - Process
 - Application
 - Functional specifications
- Potential Project Sponsors can submit questions during the bid window and the ISO will post answers on the CAISO website for all interested parties to view.

Project Sponsor Application includes the following:

1. Introduction
2. General Instructions
3. Project Sponsor, Name, and Qualifications
4. Past Projects, Project Management and Cost Containment
5. Financial
6. Environment and Public Processes
7. Substation
8. Transmission Line
9. Construction
10. Operation and Maintenance
11. Miscellaneous
12. Officer Certification
13. Application Deposit Payment Instructions

Sections 4-11 above capture all of the Selection Factors identified in Tariff 24.5.4

Project Sponsor Minimum Qualification Criteria

- The Project Sponsor has assembled (or plans to assemble) a sufficient sized team with the knowledge and skill to design, construct, operate and maintain the transmission solution.
- The project sponsor has sufficient financial resources, including the ability to assume liability from major losses resulting from failure of any part of the transmission solution.
- The Project Sponsor's schedule meets the ISO's requirements, and the sponsor has the ability to meet its proposed schedule.
- The project sponsor and its team (or planned team) have the necessary technical and engineering qualifications and experience to design, construct, operate and maintain the transmission solution.
- The project sponsor agrees to sign the TCA (Transmission Control Agreement), become a PTO (Participating Transmission Owner), comply with NERC and WECC requirements and standards, and will turn the regional transmission facility over to the ISO's operational control.

Project Proposal Minimum Qualification Criteria

- Whether the proposed design of the transmission solution is consistent with needs identified in the comprehensive Transmission Plan.
- Whether the proposed design of the transmission solution satisfies Applicable Reliability Criteria and CAISO Planning Standards.
- The ISO will post the list of qualified project sponsors.

Project Sponsor Selection Among Qualified Sponsors and Proposals

- Single Project Sponsor is automatically selected
- Multiple Project Sponsors
 - The ISO, with assistance from a qualified expert consultant, will conduct a comparative analysis and select the approved project sponsor.
 - The ISO will post the identity of the approved project sponsor, along with a report summarizing the comparative analysis.

ISO will use Comparative Analysis to Determine the Approved Project Sponsor

- Selection based on a comparative analysis of the degree to which each Project Sponsor's proposal meets the qualification criteria and selection factors, as set forth in Tariff section 24.5.4
- Objective is to determine the qualified Project Sponsor which is best able to:
 - Design, finance, license, construct;
 - Maintain, and operate the transmission solution in a cost-effective, efficient, prudent, reliable, and capable manner over the lifetime of the transmission solution; while
 - Maximizing overall benefits and minimizing the risk of untimely project completion, project abandonment, future reliability issues, and operational or other relevant problems.

Posting Approved Project Sponsors and Report on Approved Project Sponsor Selection

- The ISO will post a list of the approved project sponsor for each regional transmission solution.
- The ISO will post a detailed report regarding the selection of the approved project sponsor.

Key Selection Factors (Section 24.5.1)

- “existing qualification criteria and selection factors, in addition to any binding cost containment commitments, which the CAISO believes are key for purposes of selecting an Approved Project Sponsor for the particular transmission solution” (Section 24.5.1)
- Key selection factors for the transmission solutions eligible for competitive solicitation can be found at:
<http://www.aiso.com/Documents/KeySelectionFactors-2018-2019TransmissionPlanningProcess.pdf>

To determine the key criteria for each transmission solution subject to competitive solicitation, the ISO will consider:

- (1) the nature, scope and urgency of the need for the transmission solution;
- (2) expected severity of siting or permitting challenges;
- (3) the size of the transmission solution, potential financial risk associated with the transmission solution, expected capital cost magnitude, cost overrun likelihood and the ability of the Project Sponsor to contain costs;
- (4) the degree of permitting, rights-of-way, construction, operation and maintenance difficulty;
- (5) risks associated with the construction, operation and maintenance of the transmission solution;
- (6) technical and engineering design difficulty or whether specific expertise in design or construction is required;
- (7) special circumstances or difficulty associated with topography, terrain or configuration;
- (8) specific facility technologies or materials associated with the transmission solution;
- (9) binding cost containment measures, including cost caps;
- (10) abandonment risk; and
- (11) whether the overall cost of the transmission solution impacts the ISO's prior determination of, and inclusion in, the comprehensive Transmission Plan of the more efficient or cost effective solution during Phase 2 of the transmission planning process.

Characteristics of transmission facilities being competitively procured:

- Cost containment capabilities, commitments, and ability to manage schedules.
- Dynamic Reactive Support devices – reliability driven projects, broad range of technical options and varying degrees of more unique power system equipment, new equipment to be interconnected to existing substations.
- Additional emphasis on broad capabilities of team, accessing existing rights of way, and specific technical capabilities.

Transmission Solutions for Competitive Solicitation

- Gates 500kV Dynamic Reactive Support
 - Cost Estimate: \$210 to \$250 million
 - Capability: +/- 800 Mvar
 - Reliability driven
 - Mitigates future voltage violations due to future generation retirements
 - Latest in Service Date: June 2024
- Key Qualification and Selection Factors
 - 24.5.4 (b) - the Project Sponsor's existing rights of way and substations that would contribute to the transmission solution in question.
 - 24.5.4 (d) - the proposed schedule for development and completion of the transmission solution and demonstrated ability to meet that schedule of the Project Sponsor and its team

Transmission Elements for Competitive Solicitation

- Key Qualification and Selection Factors (continued)
 - 24.5.4 (j) - demonstrated cost containment capability of the Project Sponsor and its team, specifically, binding cost control measures the Project Sponsor agrees to accept, including any binding agreement by the Project Sponsor and its team to accept a cost cap that would preclude costs for the transmission solution above the cap from being recovered through the CAISO's Transmission Access Charge, and, if none of the competing Project Sponsors proposes a binding cost cap, the authority of the selected siting authority to impose binding cost caps or cost containment measures on the Project Sponsor, and its history of imposing such measures.

Transmission Solutions for Competitive Solicitation

- Round Mountain 500kV Dynamic Reactive Support
 - Cost Estimate: TBD
 - Capability: +/- 500Mvar
 - Reliability driven
 - Mitigates voltage violations following certain contingencies
 - Latest in Service Date: June 2024
- Key Qualification and Selection Factors
 - 24.5.4 (b)
 - 24.5.4 (d)
 - 24.5.4 (j)

Officer Certification

- Officer certifies that s/he has full authority to represent the project sponsor or affiliate of the project sponsor.
- Officer certifies that the information contained in the application is true, accurate and that there are no material omissions.

Deposit Fee

- Project sponsor must submit a deposit of \$75,000 with its application.
- Project sponsor will be responsible for the actual costs that the ISO incurs in qualifying and selecting an approved project sponsor through the competitive solicitation process, including the cost of the retained expert consultant.
- Costs not to exceed \$150,000 per application
- Payment instructions are included in the project sponsor application.

Summary and Next Steps

- Project Sponsor application is posted to the Transmission Planning webpage at:
<http://www.caiso.com/planning/Pages/TransmissionPlanning/Default.aspx>
- Project Functional Specifications are posted to the 2018-2019 Transmission Planning Process webpage at:
<http://www.caiso.com/planning/Pages/TransmissionPlanning/2018-2019TransmissionPlanningProcess.aspx>
- Submit completed applications (also questions about the application) to this email address:
transmissioncompetitivesolicitation@caiso.com
- Questions and associated answers tables will be posted to the transmission planning web page.
- Complete applications (including deposit fee and officer certification signature) are due on or before July 12, 2019 (Gates) or Aug 23, 2019 (Round Mountain).