



Overview of the CAISO Competitive Solicitation Process

NRRI – Transmission Transitions

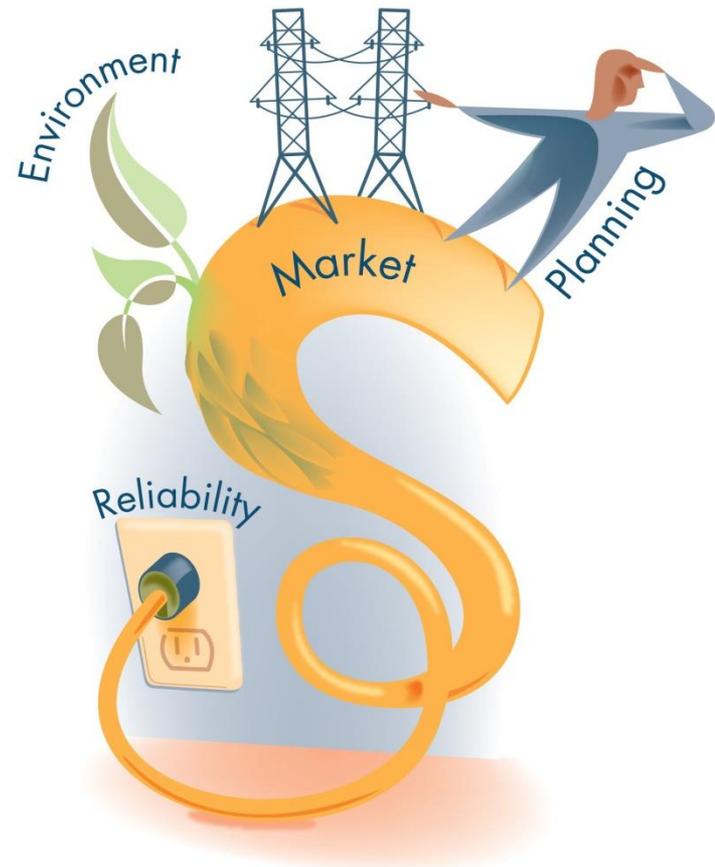
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Shaping the industry

The ISO, a nonprofit public benefit corporation, maintains the constant and reliable flow of electricity for the health, safety and welfare of consumers.

How?

- Delivering **240 million megawatt-hours** of electricity annually
- Facilitating **fair and transparent** wholesale electricity market
- Performing comprehensive **transmission planning**
- Clearing the way for **clean, green resources** to access the grid



ISO's annual transmission planning process identifies system expansion requirements for the footprint:

January 2018

April 2018

March 2019

Phase 1 – Develop detailed study plan

- State and federal policy
- CEC - Demand forecasts
- CPUC - Resource forecasts and common assumptions with procurement processes
- Other issues or concerns

Phase 2 - Sequential technical studies

- Reliability analysis
 - Renewable (policy-driven) analysis
 - Economic analysis
- Publish comprehensive transmission plan with recommended projects

Phase 3 Procurement

ISO Board approves transmission plan

Regional transmission facilities eligible for competitive solicitation

- Regional transmission facilities deemed needed under the comprehensive transmission planning process
- Approved by either:
 - the ISO Board as part of the annual comprehensive Transmission Plan, or
 - approved by ISO management if capital costs are \$50 million or less (accelerated basis).

Regional transmission facilities not eligible for competitive solicitation:

- *Facilities that involve an upgrade or improvement to, addition on, or a replacement of a part of an existing participating TO facility*
- *all projects under 200 kV*

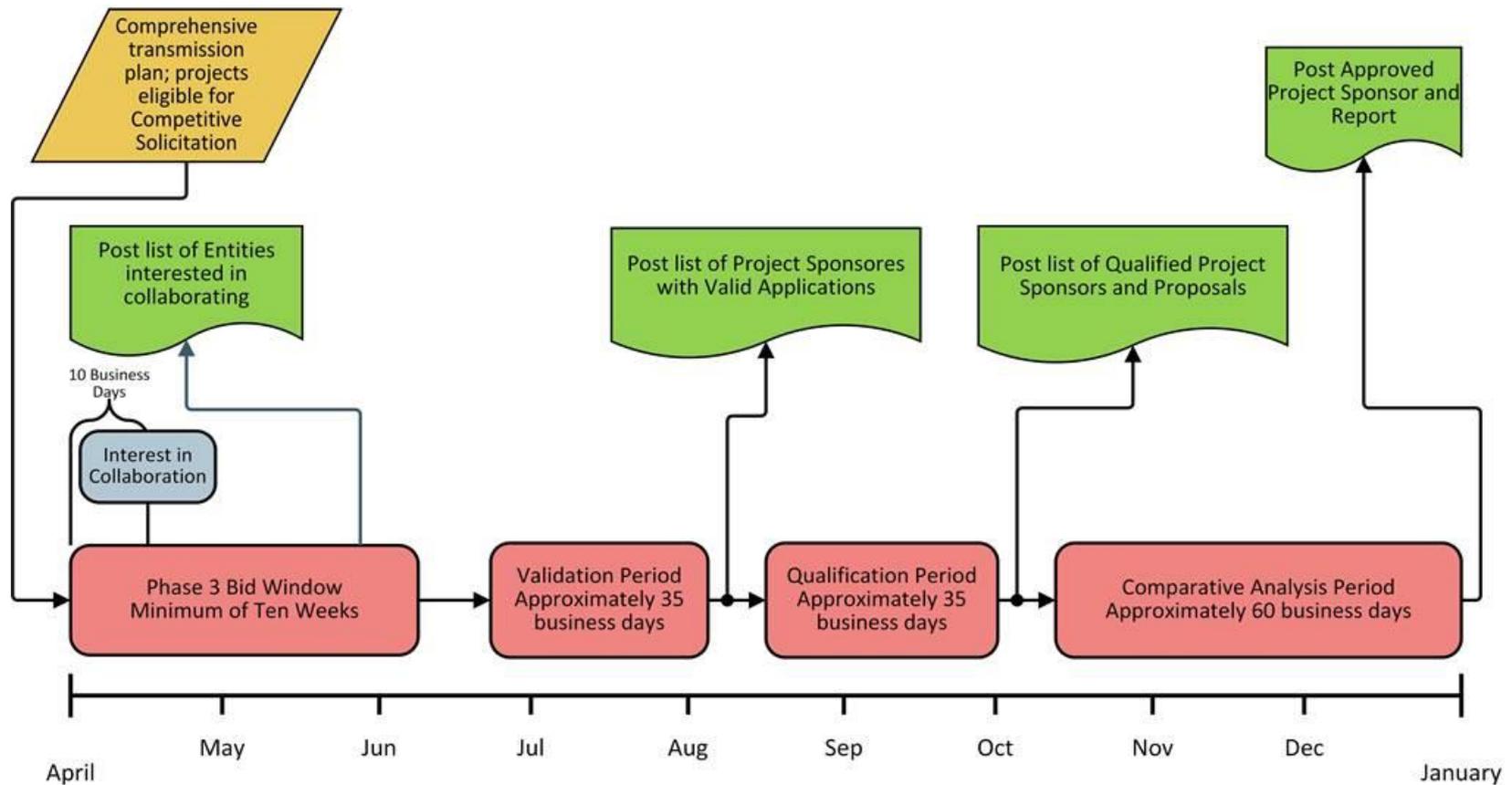
Functional Specifications, Information Conference Calls and Q&A Document

- The ISO posts functional specifications for each regional transmission facility eligible for competitive solicitation
 - Includes key selection factors
- The ISO hosts an informational conference call after opening each bid window to discuss:
 - Process
 - Schedules
 - Application form
 - Functional specifications
- Project sponsors applicants can submit questions during the open bid window. The ISO will post answers on the CAISO website for all interested parties to view.

Application Deposits

- Project sponsors must submit a deposit of \$75,000 with its application
- Project sponsors are responsible for the actual costs that the ISO incurs in validating, qualifying and selecting an approved project sponsor, including the cost of retained expert consultants
- Costs not to exceed \$150,000 per project sponsor

Competitive solicitation schedule



Notes:

1. The figure above is for illustrative purposes only
2. The Phase 3 Bid Window opens the month following Board approval
3. Dates may be adjusted or staggered based on number and complexity of projects

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ISO uses a holistic evaluation approach to selecting an approved project sponsor and proposal

- No pre-set weights for evaluation criteria - doing so would limit the flexibility to evaluate the large variety of regional transmission facilities that may be built.
- A comparative analysis evaluation better reflects the importance of individual selection factors that can vary according to the type of regional transmission facility.
- Project sponsor's cost estimates are not used as a primary determinant because it limits the ability to:
 - evaluate considerations pertaining to reliability; and
 - consider the project sponsor's capability to engineer, permit, build, operate, and maintain the regional transmission facility.

Approved Project Sponsor Agreement (APSA)

- Once the project sponsor is selected
 - Agreement tendered ~ 30 calendar days
 - Execute Agreement – 120 calendar days
- Agreement includes:
 - Obligation to build the project
 - Structured reporting requirements & communications
 - Milestone requirements
 - Define project specifics on an element basis
 - Specification review and approval
 - Study process for interconnection requests
 - Obligation to become a PTO, if applicable

The ISO's competitive solicitation process has been very active:

- Selections made among competing offers:
 - Imperial Valley area collector station
 - Gregg-Gates 230 kV transmission line
 - Sycamore - Penasquitos 230 kV transmission line
 - Suncrest dynamic reactive support
 - Estrella, Spring, and Wheeler Ridge substations
 - Delaney-Colorado River 500 kV transmission line
 - Harry Allen – Eldorado 500 kV transmission line

Continuous stakeholder initiatives to review and improve the competitive solicitation process

- Revised Transmission Planning Process (2010)
- Compliance with FERC Order No. 1000 (2012)
- Ongoing lessons learned and competitive transmission improvements initiatives (2013-2015)

Additional Background

Project sponsor application contents:

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

Application validation and project sponsor collaboration

- During the bid application window
 - if more than two project sponsors have submitted complete applications, allow an opportunity for these sponsors to collaborate
- Following the close of the bid application window, the ISO will:
 - review the proposal applications for completeness and allow a cure period if any applications are incomplete
 - post to the website a list of those project sponsors whose applications are deemed complete

Project sponsor minimum qualification criteria

- Project Sponsor has sufficient depth regarding knowledge and skill
- Project Sponsor has sufficient financial resources.
- Project Sponsor's schedule meets the ISO's requirements, and the sponsor has the ability to meet its proposed schedule.
- Project Sponsor and its team (or planned team) have the necessary technical and engineering qualifications and experience.
- Project Sponsor agrees to meet all the obligations of a participating transmission owner.
- Whether the proposed design of the regional transmission facility is consistent with needs identified in the comprehensive Transmission Plan.
- Whether the proposed design of the regional transmission facility satisfies applicable reliability criteria and CAISO planning standards.

Use of Consultants

The ISO currently engages two industry consulting firms

One firm primarily supports the analysis of:

- Financial strength and cost evaluation
- Design, construction, and schedule
- Permitting and environmental
- Operations & maintenance

The second firm supports economic and financial analysis, particularly cost of service analysis

Selection factors

- a) current and expected capabilities of the project sponsor and its team to finance, license, and construct the regional transmission facility for the life of the project;
- b) existing rights-of-way and substations that would contribute to the facility in question;
- c) experience in acquiring rights-of-way;
- d) proposed schedule and demonstrated ability to meet that schedule;
- e) financial resources;
- f) technical and engineering qualifications and experience;
- g) previous record regarding construction and maintenance of transmission facilities;
- h) demonstrated capability to adhere to standardized construction, maintenance and operating practices;
- i) demonstrated ability to assume liability for major losses resulting from failure of facilities;
- j) demonstrated cost containment capability, specifically, binding cost control measures (such as accepting a cost cap);
- k) any other strengths and advantages the project sponsor may have to build and own the specific regional transmission facility