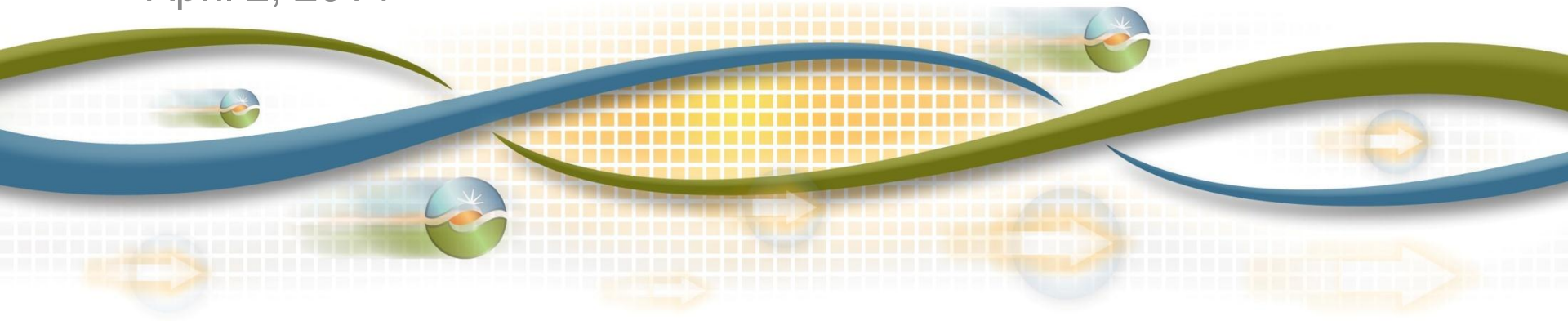


Interconnection Process Enhancements Initiative

Draft Final Proposal for Topics 4, 5, and 13

Stakeholder Meeting

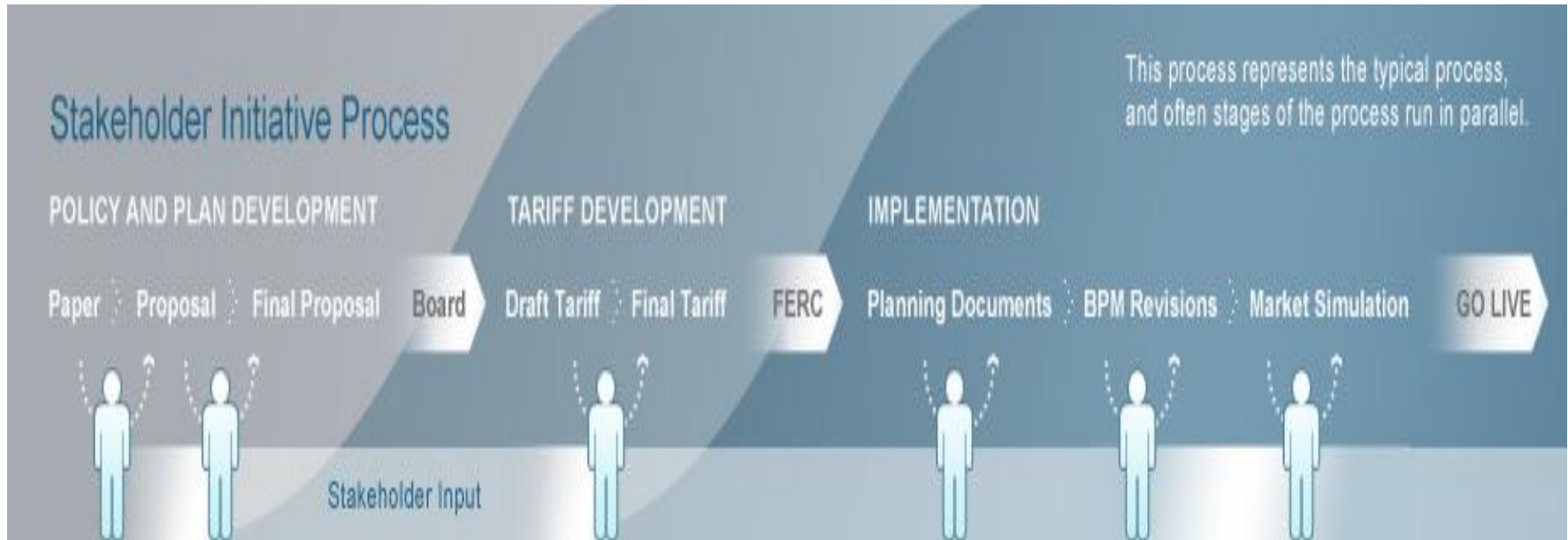
April 2, 2014



Agenda

Time	Agenda Item	Speaker
10:00-10:15	Introduction, Stakeholder Process	Kristina Osborne
10:15-10:45	Discussion of Topic 4	Sushant Barave
10:45-11:15	Discussion of Topic 5	Abhishek Singh/ Andrew Ulmer
11:15-11:45	Discussion of Topic 13	Tom Flynn
11:45-12:00	Next Steps	Kristina Osborne

ISO Stakeholder Initiative Process

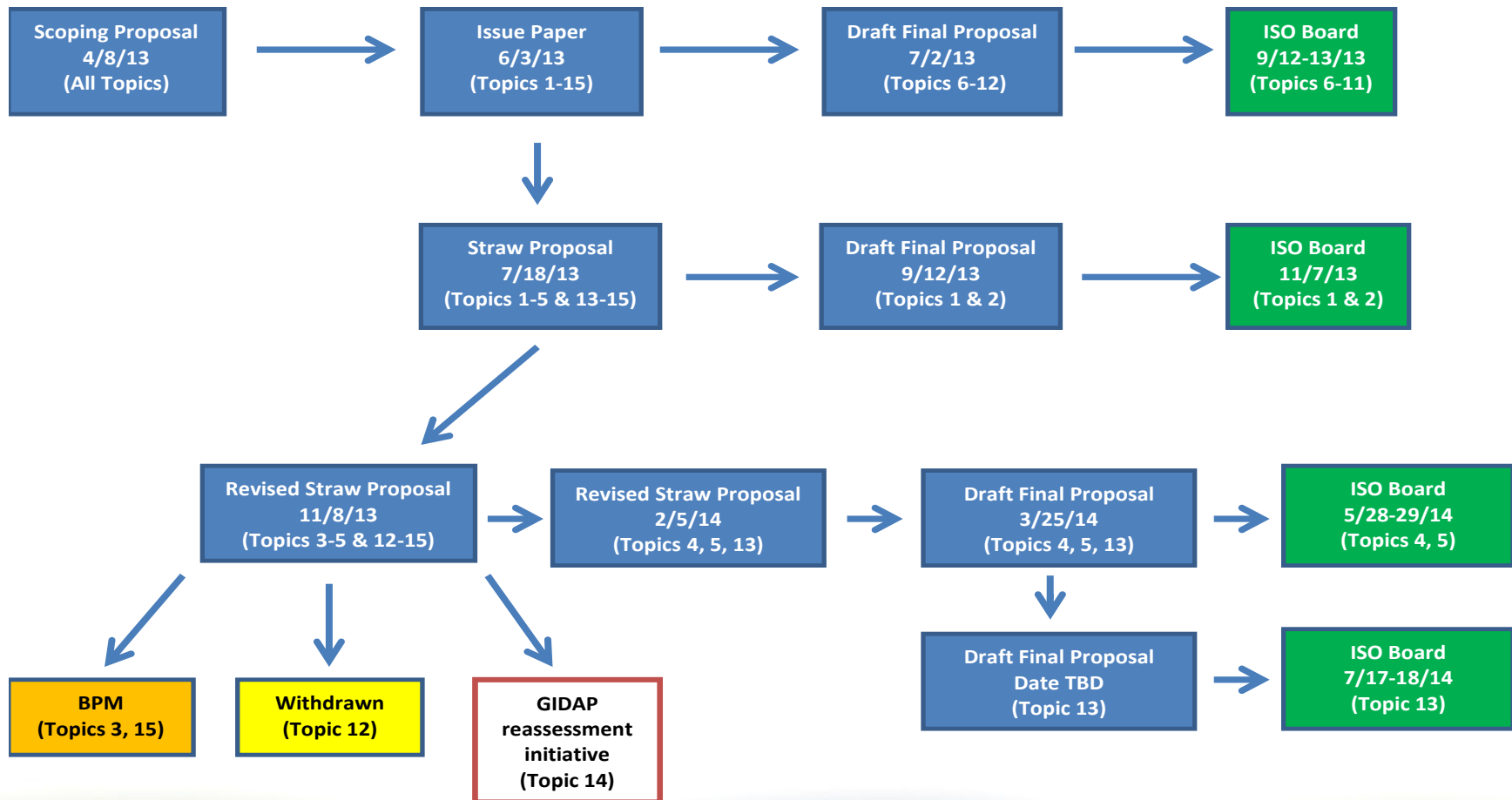


We Are Here

Stakeholder process schedule

Step	Date	Milestone
Revised straw proposal (Topics 4, 5, 13)	February 5	Posted revised straw proposal
	February 13	Stakeholder web conference
	February 28	Stakeholder comments due
Draft final proposal (Topics 4, 5, 13*) <i>* Includes 2nd revised straw proposal for Topic 13</i>	March 21	Post draft final proposal
	April 2	Stakeholder web conference
	April 16	Stakeholder comments due
Board approval (Topics 4, 5)	May 28-29	ISO Board meeting
Draft final proposal (Topic 13)	TBD	Post draft final proposal
	TBD	Stakeholder web conference
	TBD	Stakeholder comments due
Board approval (Topic 13)	July 17-18	ISO Board meeting

IPE stakeholder process overview



Topic 4 – Improve the Independent Study Process

Four areas of proposed enhancement

1. Criteria for ISP eligibility.
2. Process and timeline enhancements.
3. Tests for electrical independence.
4. Clarification on behind-the-meter (BTM) expansion and its impact on net qualifying capacity (NQC).

Criteria for ISP eligibility

Proposal is that IC must meet 5 criteria to use ISP:

1. Demonstrated ability to obtain all regulatory approvals and permits to meet COD.
2. Purchase order for generating equipment.
3. Adequate financing.
4. Point of interconnection must be an existing facility on ISO controlled grid or approved upgrade in TPP (that has completed permitting and is currently under construction).
5. No network upgrade needed to allow project to reliably enter into operation that is yet to be operational or has later completion date.

Process and timeline enhancements

1. Cluster/ISP Independence Test – Go directly into System Impact Study if no other cluster or ISP projects in study area.
2. Tests for electrical independence – Clarifies studies that will be used to assess electrical independence.
3. If FCDS or PCDS requested, then will be studied for deliverability in next cluster Phase I/II studies (next cluster that opens after the ISP FCDS request is received).
4. If fail tests for electrical independence, then can be part of next cluster or withdraw.
5. If FCDS or PCDS requested, then “Option A” project.
6. If project consists of asynchronous generators, then 0.95 (lead/lag) power factor required at point of interconnection.
7. Execute EO GIA following of SIS and facilities studies.

Tests for electrical independence

Changes proposed to the following tests for electrical independence:

- Flow Impact Test
 - Use Phase I results and only test RNUs
- Short Circuit Test
 - Remove 100 amp threshold and test for 5% of available or 80% of nameplate

Additional tests proposed:

- Transient Stability Test
- Reactive Support Test

Clarification on BTM expansion and its impact on the NQC

Modifications/clarifications proposed in the following areas:

- Size of the expansion
- Removed requirement for a separate expansion breaker, however
 - Automatic tripping scheme required
 - Separate resource ID and separate metering required
 - Limited exception for same technology
 - FCDS will change to PCDS without separate metering

Clarification on BTM expansion and its impact on the NQC (continued)

Modifications/clarifications proposed in the following areas:

- Deliverability status of BTM expansion and its impact on NQC
 - Not eligible for FCDS through annual full capacity deliverability process.
 - Cannot be counted towards an increase in the NQC of the original project

Topic 5 – Improve the Fast Track Process

Draft final proposal

- Processing fee eliminated; study deposit increased from \$1,000 to \$25,000 (see section 5.1, 3rd paragraph)
- Section 5.2 – Timeline changes from 15 BD to 30 CD
- Section 5.3.2 (FT passing screen) will be modified to include the requirement for a facilities study
 - With this change, section 5.3.4 can be removed

Draft final proposal (continued)

- Section 5.4.1 (a sub-section under customer options meeting) is proposed to be eliminated. This is a new proposal element.
- Section 5.5.1 (supplemental review) – Proposed to include a system impact study and a facilities study.
- See Table 4, pages 39-46, of the March 25 draft final proposal for details.

FERC Orders 792; 792-A

- Directs revisions to FERC's *pro forma* small generator interconnection agreement and procedures
- Compliance filing due by August 3, 2014
- Allows variations under independent entity standard, regional variations and variations that are consistent with to superior to the Final rule
- ISO believes that some existing tariff provisions already comply with or are superior to Order 792 reforms
- Some issues overlap with IPE Topic 5

Order 792 – Pre-application report process

- Requires pre-application report process
- ISO proposes to incorporate a pre-application report process into appendix DD of the ISO tariff
- ISO proposes to specify that the pre-application report will only apply to resources no larger than 20 MW
- Pre-application report process may reflect variations from Order 792 *pro forma* language

Order 792 – Fast track eligibility

- FERC adopted fast track eligibility thresholds that
 1. Modifies eligibility for inverter-based machines
 2. Limits eligibility for lines below 5 kV
 3. Makes eligible projects interconnecting above 69 kV
- Maintains 2 MW eligibility threshold for synchronous and induction machines
- ISO is not proposing any changes to its current fast track eligibility thresholds because they are more inclusive
- ISO believes that its existing thresholds are consistent with or superior to those adopted in Order 792

Order 792 – Customer options meeting and supplemental review process

- If an interconnection customer fails a fast track screen, Order 792 requires three supplemental screens to assess if fast track is still possible
- ISO proposes to modify the fee and timeframes associated with initial review under fast track process, modify some initial screens, and add new initial screens
- ISO may propose tariff language that varies from Order 792 requirements as part of the supplemental review

Order 792 – Customer options meeting and supplemental review process (continued)

- If an interconnection customer passes the supplemental screens or the review identifies facilities needed to pass the supplemental screens, then
 - ISO believes further assessment will be needed by PTO to identify interconnection facilities
 - This assessment will ensure the interconnection customer only pays for facilities needed to complete the interconnection in a safe and reliable manner

Order 792 – Opportunity to submit comments on any required upgrades in the facilities study

- Allows interconnection customers to provide written comments on any required upgrades in the facilities study
- ISO not proposing any changes as the tariff already provides such an opportunity
- ISO also plans to extend this right for an IC to submit written comments in response to a feasibility study performed as part of the independent study process

Order 792 – Account for the interconnection of storage devices under small generator interconnection procedures

- Defines electric storage devices as generating facilities that can take advantage of generator interconnection procedures
- Also directs that the capacity should be measured based on interconnection request, which may be less than maximum capacity a device is capable of injecting into grid
- ISO plans to incorporate this Order 792 language into its tariff

Order 792 – Require interconnection customers wishing to interconnect using network resource interconnection service to do so under LGIP

- ISO has consolidated its small and large generator interconnection procedures in tariff appendix DD
- Also section 2.4.2 of appendix DD allows an interconnection customer to connect and be eligible to deliver using available capacity of the grid
- ISO is not proposing any changes to this language
- ISO believes its existing tariff is consistent or superior to the directive adopted in Order 792

Topic 13 – Clarify timing of transmission cost reimbursement

Background

Focus has been to develop a proposal that balances these considerations:

- Alignment with policies/requirements of the Order 2003 series of orders that repayment for transmission assets begin once those assets are utilized to deliver the output of the IC's generating facility
- Elimination of the differential treatment of phased and non-phased projects
- Broad stakeholder support
- Apply new rules on a going forward basis

Second revised straw proposal

- Reimbursement for required network upgrades (NUs) already in service will commence upon the generating facility (or phase that requires those upgrades) achieving commercial operation.
- Reimbursement for required NUs placed in service subsequent to the generating facility or phase achieving commercial operation will commence at the beginning of each calendar year for those required NUs placed in service during the prior calendar year.
- Apply these new rules on a going forward basis to both phased and non-phased projects

Next steps

Date	Milestone
April 16	Stakeholder comments due on March 25 Draft Final Proposal

- Please use the comments template provided
- Submit to GIP@CAISO.COM no later than 5pm on Wednesday, April 16