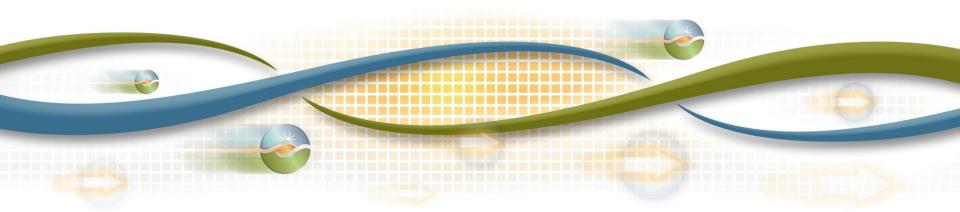


# Regional Integration Bi-Weekly Update

January 19, 2016

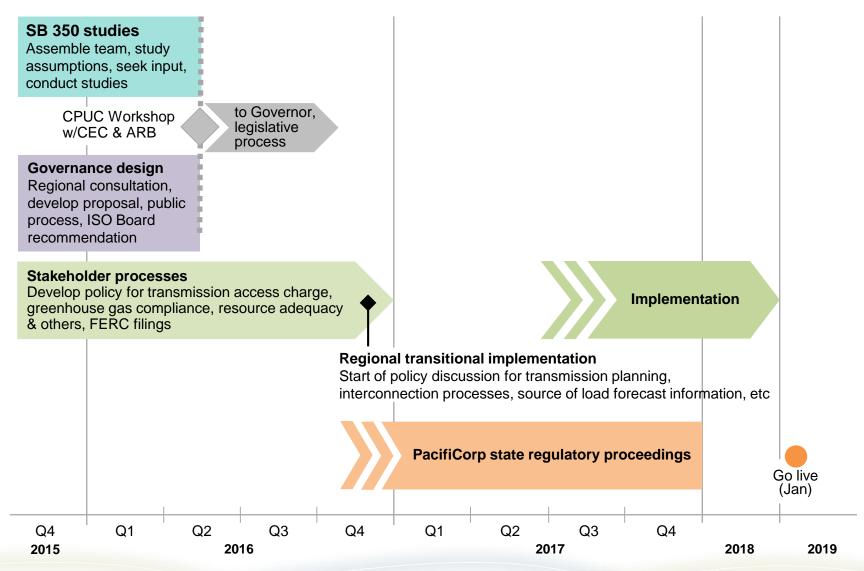


# Agenda

Time	Topic	Presenter
2:00 - 2:10	Timeline for regional activities	Stacey Crowley
2:10 - 2:15	Stakeholder process overview	Kristina Osborne
2:15 – 2:20	Stakeholder initiatives update	Kristina Osborne
2:20 - 2:25	SB350 activities update	Stacey Crowley
2:25 – 2:30	Online Resources & Questions	Kristina Osborne

# Current timeline for regional integration activities

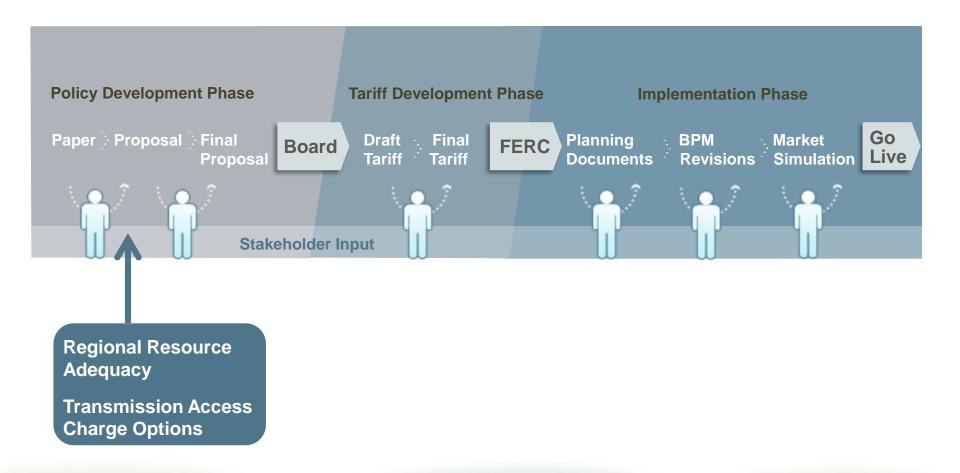
Note: Timeline designed to allow PacifiCorp to seek state regulatory approvals before the end of 2017





# ISO Stakeholder Engagement Process

This diagram represents the typical process, often phases will run in parallel.



# Current Stakeholder Initiatives - Regional

# **Transmission Access Charge Options**

This initiative considers whether the existing revenue recovery mechanisms would be appropriate should a transmission owner with a load service territory join the ISO as a participating transmission owner. This initiative began with an issue paper in late October 2015.

# Next steps:

- February 8 The ISO will publish a straw proposal
- February 26 Stakeholder meeting on straw proposal (Folsom)
- March 10 Stakeholder comments due on straw proposal

# Current Stakeholder Initiatives - Regional

# Regional Resource Adequacy

This initiative evaluates whether the existing resource adequacy tariff provisions are appropriate for use in a regional ISO balancing authority area that encompasses multiple states. This initiative began with an issue paper in early December 2015.

# Next steps:

- February 17 The ISO will publish a straw proposal
- February 25 Stakeholder meeting on straw proposal (Folsom)
- March 11 Stakeholder comments due on straw proposal

# Upcoming Stakeholder Initiatives (tentative dates)

# **Greenhouse Gas Compliance**

This initiative will review potential changes to the existing EIM approach for tracking GHG compliance obligations needed to support an expanded ISO balancing authority area that encompasses states outside of California

- February 29 The ISO will publish an issue paper/ straw proposal
- March 7 Stakeholder call to review issue paper/straw proposal

Metering Rules Update – Starts February 2016

Full Network Model Enhancements – Starts July 2016



# SB350 update on upcoming activities

# **Study Work:**

- Market notice on Feb 8 announced workshop to discuss approach, assumptions, methodology of SB350 studies
  - Meeting at California ISO in Folsom; webinar will also be available
- Stakeholder meeting to discuss preliminary results will be held in late April

### **Governance:**

- Process for governance modifications underway that will allow for stakeholder input
- Joint webinar with PacifiCorp on February 10 to discuss differences between EIM and regional governance

### Online Resources

### Regional Integration Resources on the ISO Website: www.caiso.com

Regional Energy Market webpage http://www.caiso.com/informed/Pages/RegionalEnergyMarket/BenefitsofaRegionalEnergyMarket.aspx

Stakeholder Processes webpage http://www.caiso.com/informed/Pages/StakeholderProcesses/Default.aspx

ISO Public Calendar http://www.caiso.com/Pages/Calendar.aspx?IsDlg=true

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NV Energy Enters The Western Energy Imbalance Market

Portland General Electric Formalizes Agreement to Join EIM

Federal Regulators Clear Way for NV Energy Entry into the Western Energy Imbalance Market

California ISO Board Approves Energy Imbalance Market Enhancements

NV Energy Entry into the Energy Imbalance Market Delayed

Western Energy Imbalance Market Q3 Benefits Total \$12m

Home > Stay Informed > Regional Energy Market > Benefits of a Regional Energy Market

### Benefits of a regional energy market

A regional energy market would better use resources, especially renewables, to reduce greenhouse gas emissions and costs. Enabling the ISO's sophisticated market and grid optimization systems to pick the lowest cost energy to serve demand and give preference to renewable resources across a wide geographic region also means grid planners can build a cleaner, more resilient energy generation and delivery network that will create tangible economic benefits.

#### PacifiCorp benefits study (October 13, 2015)

🔼 Western Grid Integration Could Produce Significant Cost Savings, Environmental Benefits 10/14/2015 14:59

📆 FAQ - Benefits Study of PacifiCorp and ISO Integration

📆 Study: Benefits of PacifiCorp and ISO Integration

📆 Study: Technical Appendix - Benefits of PacifiCorp and ISO Integration

Mhat They're Saying - PacifiCorp Integration Study

Web conference Oct 16, 2015

🔼 Agenda and Presentation - PacifiCorp Integration Benefits Study Oct 16, 2015

PacifiCorp Integration Benefits Study Posted, Call 10/16/15

Stakeholder comments - PacifiCorp and ISO integration benefits study

🙀 Comments and Responses Matrix - PacifiCorp and ISO Integration Benefits Study 12/03/2015 18:53

BAMx Questions - PacifiCorp and ISO Integration Benefits Study 12/03/2015 16:53

📆 CDWR Questions - PacifiCorp and ISO Integration Benefits Study 12/03/2015 16:53

CPUC Questions - PacifiCorp and ISO Integration Benefits Study

12/03/2015 16:53 TURN Comments - PacifiCorp and ISO Integration Benefits Study 12/03/2015 18:53

Audio recording of the ISO - PacifiCorp benefits study web conference



#### Featured documents

SB-350 Clean Energy and Pollution Reduction Act of 2015 Establishes a 50-percent renewable portfolio standard (RPS) and starts the process of allowing the ISO to become a regional grid.

# Stakeholder Processes Webpage: Go to Stay Informed /

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#### Related links

Miscellaneous stakeholder meetings

### Stakeholder engagement opportunities

Stakeholder input is essential to ISO planning processes and for the success of new initiatives from policy development to implementation. We are committed to providing ample opportunity for stakeholder input into our market design, implementation and infrastructure planning activities. The stakeholder process will shape the market design and policies through a series of proposals, meetings and stakeholder comments.

- Click icon for RSS Feeds Subscription Page
- Stakeholder calendar
- Stakeholder Initiative Milestones 12/

Release planning

Completed stakeholder processes

#### Current initiatives

Bidding rules enhancements

Commitment costs

- · Commitment cost enhancements phase 3
- Competitive solicitation process enhancements

Contingency modeling enhancements

Demand response

- Demand response net benefits test
- Energy storage and distributed energy resources
- Expanding metering and telemetry options
- Flexible ramping product
- Flexible resource adequacy criteria and must offer obligations

Frequency response

Full network model expansion

Local market power mitigation enhancements 2015

Reactive power requirements and financial compensation

Reliability services

Renewable resources integration

· Market and product review phase 2

Revised settlement statement and dispute timeline for T+35M

Tariff clarifications filing process

Two tier allocation real-time bid cost recovery

### **Energy Imbalance Market initiatives**

Energy Imbalance Market year 1 enhancements

Energy Imbalance Market governance development

#### Regional integration initiatives

PacifiCorp participation study

Regional resource adequacy

Transmission access charge options

#### Recurring stakeholder processes

2015-2016 Transmission planning process

2014-2015 Transmission planning process

2013-2014 Transmission planning process

Budget and grid management charge

Flexible capacity needs technical study process

Generator interconnection procedures

Interconnection process enhancements 2015

Interregional transmission planning

Local capacity requirements process

Stakeholder initiatives catalog process

Participating transmission owner per unit costs

#### Initiatives in implementation phase

Bid cost recovery and variable energy resource settlements

Capacity procurement mechanism replacement

Commitment cost enhancements phase 2

Contingency reserve cost allocation

Energy storage interconnection

FERC order no 764 market changes

Flexible capacity procurement

#### Generator interconnection procedures

- Deliverability allocation procedures reassessment
- Interconnection process enhancements

Load granularity refinements

Merced Irrigation District transition

Natural gas pipeline penalty recovery

Pay for performance regulation

Payment default allocation

Peak reliability coordinator funding

Pricing enhancements

Reliability must-run pump load

# Regional integration market notices

Stakeholders participating in today's call or in recent regional initiative activities will be enrolled to automatically receive ISO market notices for regional integration activities.

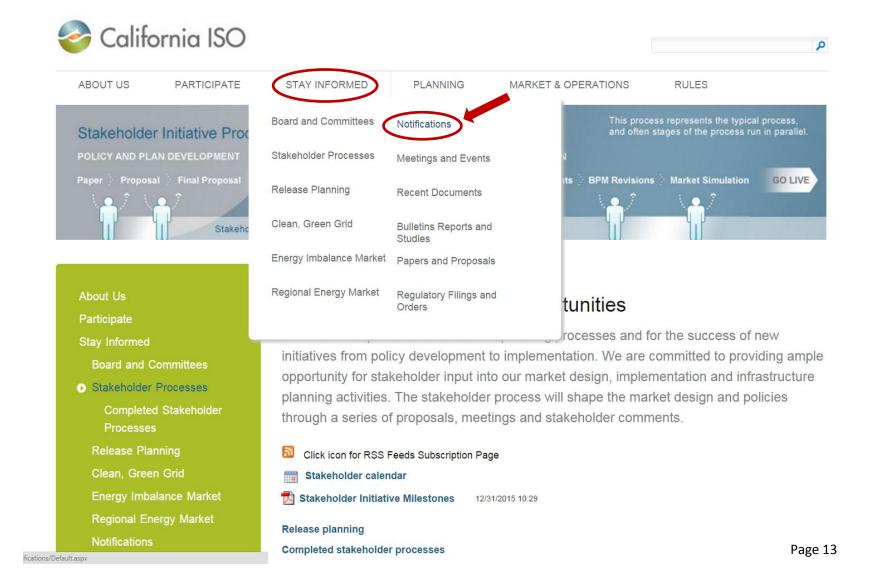
If you prefer not to receive market notices from the ISO, please follow the steps in the following slides to unsubscribe.

You can also subscribe and unsubscribe using the mobile app, ISO Today.



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We send out important notifications regarding ISO operations and markets, alerts and emergencies, and upcoming events. Sign up for the notification lists you prefer or install our app on your mobile device.

### Alerts, warnings, and emergency notices and Flex Alerts

Alerts, warnings and emergency notices are issued when operating reserves or transmission capacity limitations threaten our ability to safely and reliably operate the grid. Flex Alerts are part of an educational and emergency alert program that informs consumers about how and when to conserve electricity during heat waves and other challenging grid conditions.

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### Market notices

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or go to the market notice webpage.

### **Energy Matters newsletter**

Energy Matters is a quarterly newsletter to keep you informed of developments in energy that will impact your community and your business. Many changes are coming to California's energy landscape as the electricity grid of yesterday becomes the energy network of tomorrow.

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### System operating messages

The ISO control room issues messages that describe current operational conditions on the grid and in the market.

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## Contacts

Please send questions to:

RegionalIntegration@caiso.com

Join us for the next regional integration update on February 2, 2016. See calendar on ISO's website for web conference details