

2013 Annual Transmission Customer Meeting

May 29, 2013



Let's turn the answers on.

Customer Survey Results and Improvement



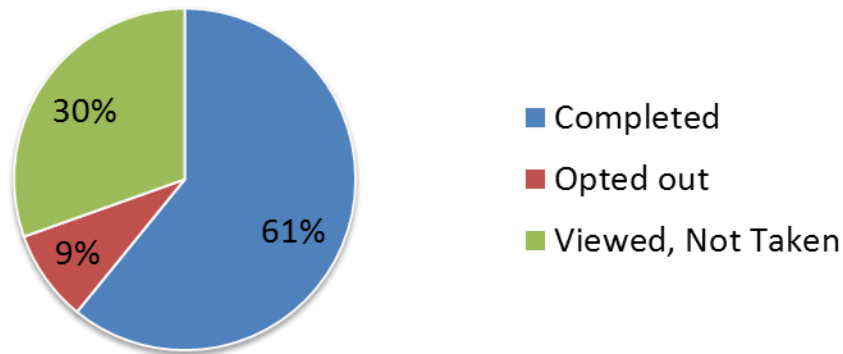
Let's turn the answers on.

Background

- Open for comment January 29, 2013 through February 28, 2013 for evaluation of prior year
 - 17 close ended questions
 - 2 ratings for each close ended questions; rated on both importance and performance
 - 2 multiple choice questions
 - 2 open ended questions
 - Multiple choice and open ended questions compare PacifiCorp Transmission to other transmission providers and request feedback on areas for improvement

Inaugural Web Based Survey

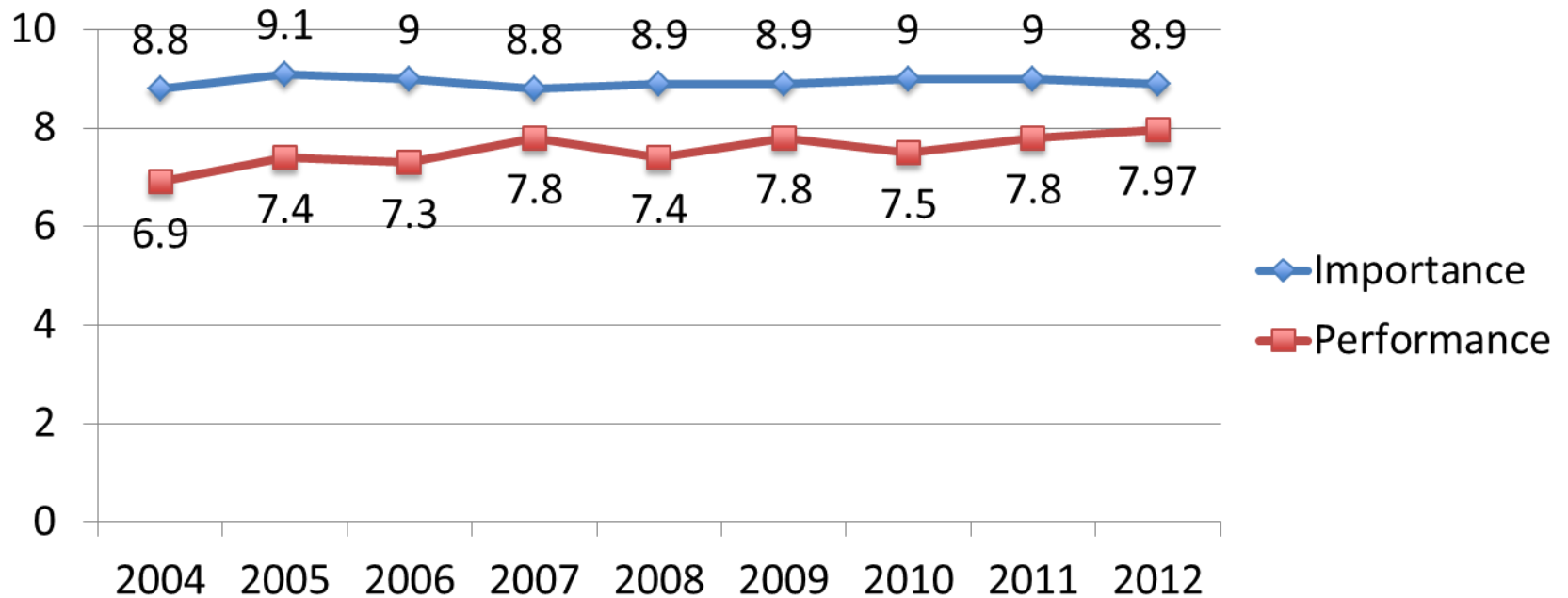
- First year of a web based survey allows for a larger audience, previous surveys were conducted via phone
- Survey link also posted to OATI/OASIS
- Survey viewed total of 69 times
 - A total of 42 respondents completed the survey for a 61% completion rate



- 11 of 42 respondents provided contact information with the balance of the surveys remaining anonymous

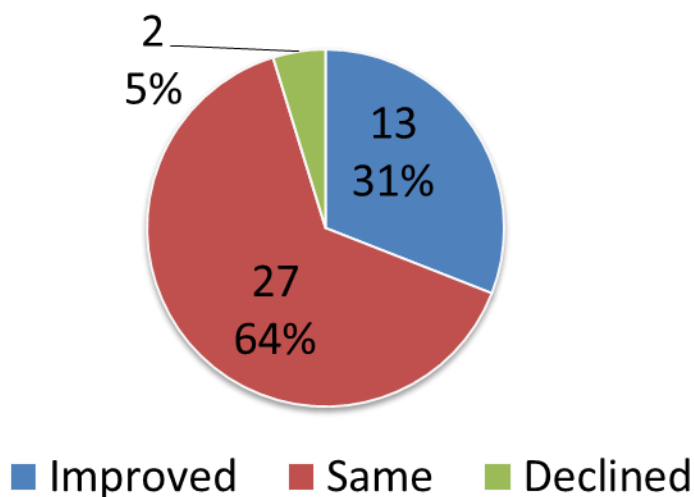
2012 Score and Historical Trends

- The weighted average score for calendar year 2012 was 7.97.



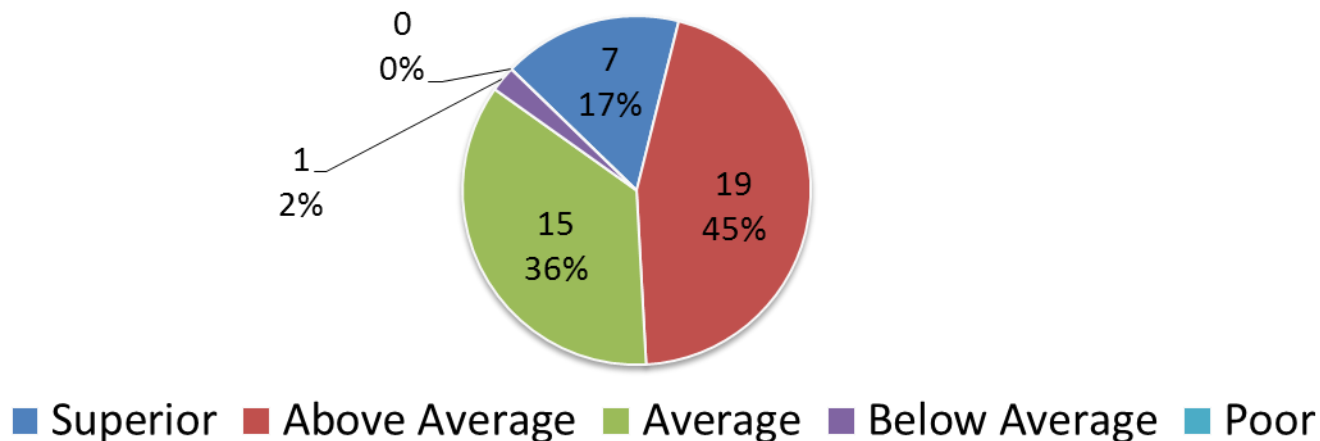
Overall Service

- During the past year, how do you believe the overall service you have received from PacifiCorp transmission has changed?



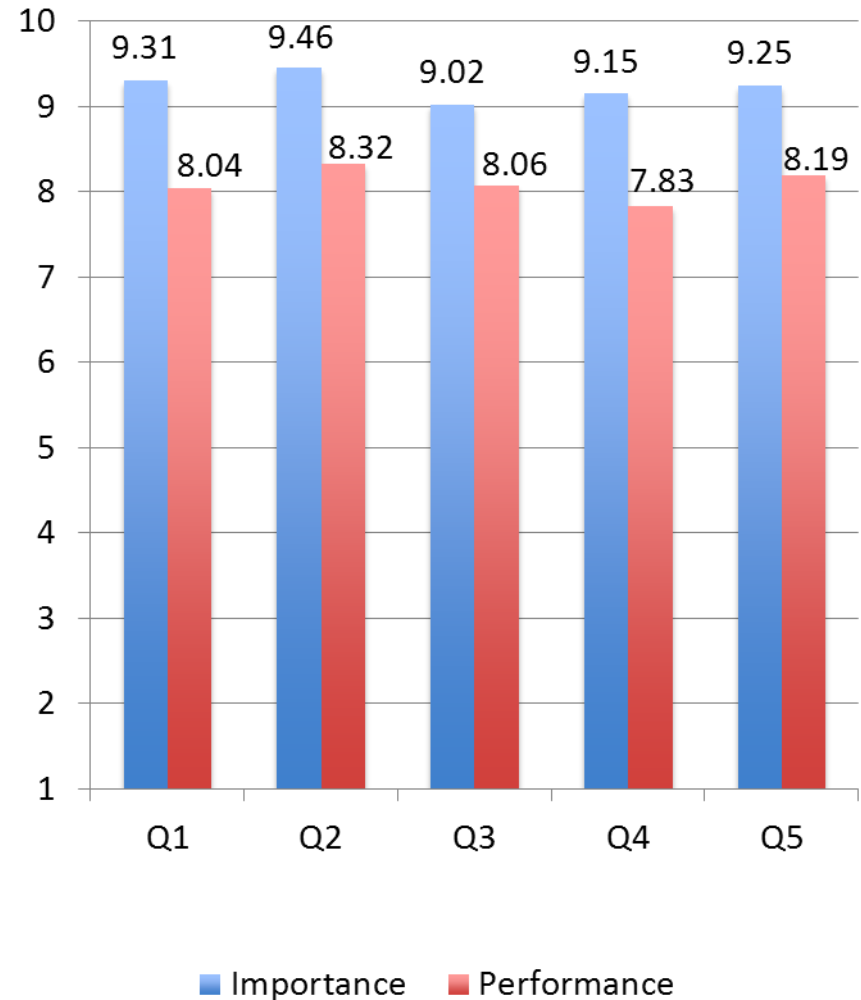
Comparison to Others

- How would you rate PacifiCorp transmission's overall customer service compared to the service provided to your company by other transmission providers?



Quality of Service

1. PacifiCorp transmission representatives know their own business and apply that knowledge to help resolve your business issues.
2. PacifiCorp transmission provides your company with the assistance it requires in scheduling its transmission service.
3. Your key PacifiCorp transmission contacts are accessible on an as-needed basis.
4. PacifiCorp transmission resolves issues within a timeframe that meets your business requirements.
5. PacifiCorp transmission provides accurate responses to your questions and requests.

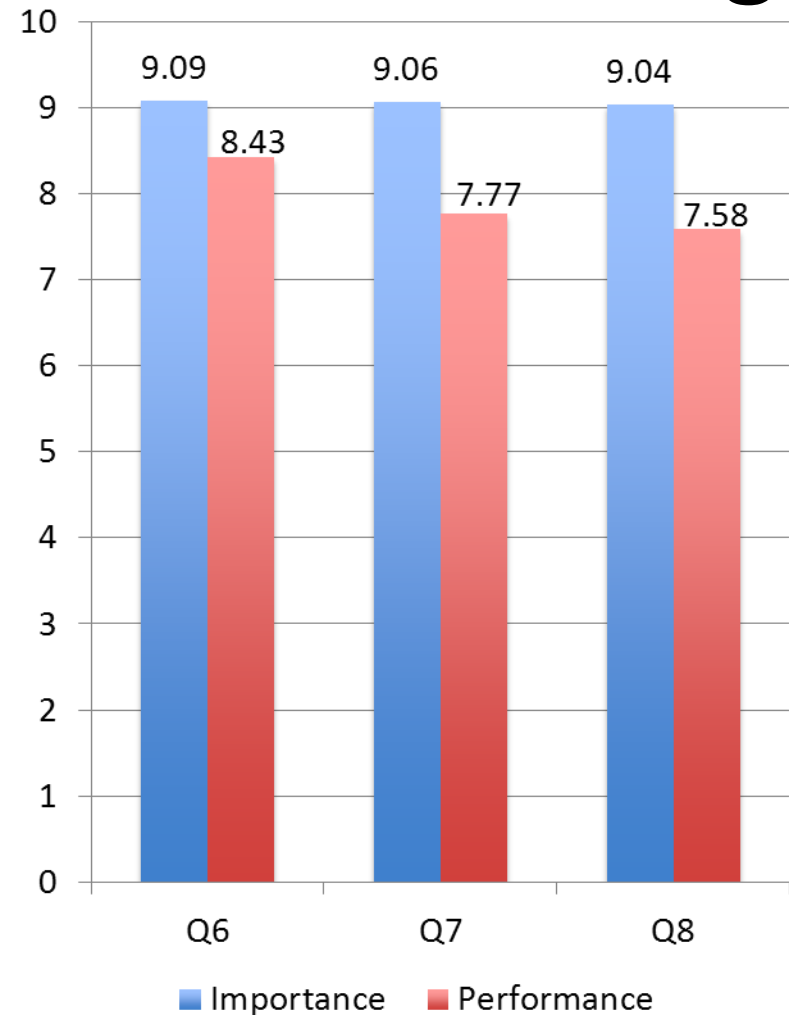


Quality of Operations & Planning

6. PacifiCorp provides adequate levels of transmission system reliability from its system to serve your business needs.

7. PacifiCorp provides timely and accurate communications regarding outages.

8. PacifiCorp considers and incorporates the input you provide on long-term outages where feasible or provides adequate explanation when input does not result in an outage plan adjustment.



Product Related Services

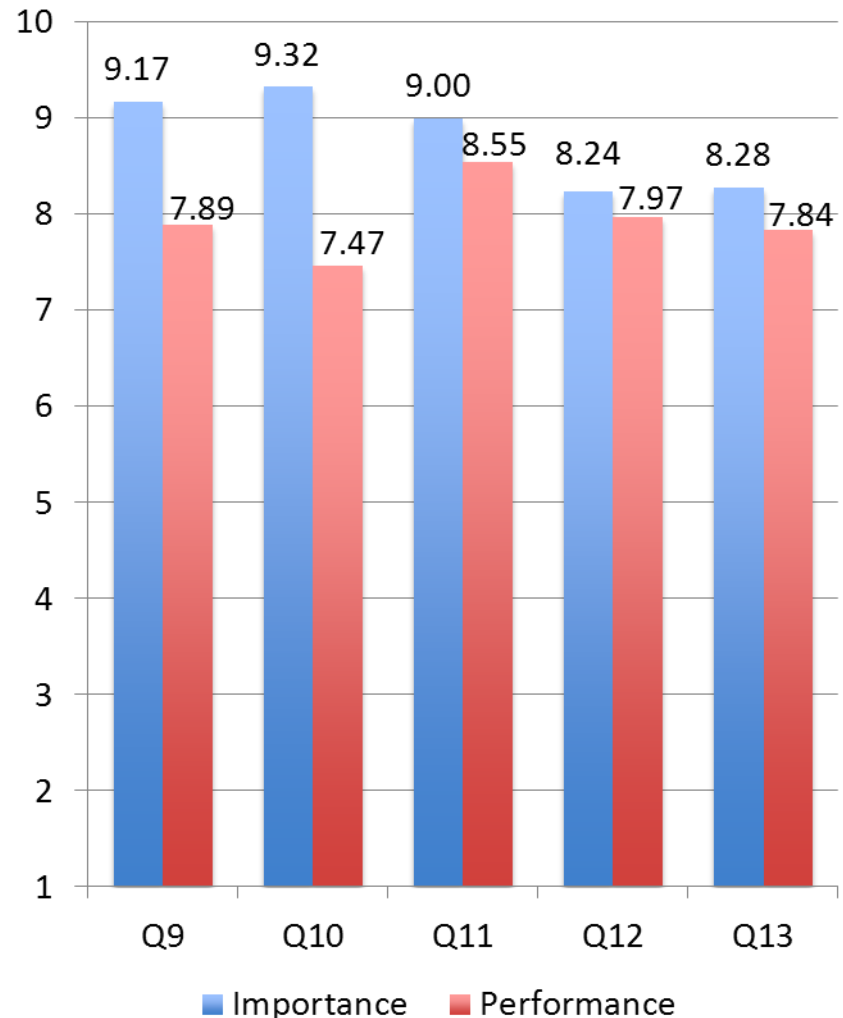
9. PacifiCorp transmission adequately communicated the status of the OASIS conversion to OATI OASIS which occurred October 5, 2012, and explained any impacts to customers.

10. PacifiCorp transmission's OATI OASIS system meets your requirements for conducting your transmission business.

11. PacifiCorp transmission effectively balances the need to meet tariff requirements while providing the flexibility to meet your service needs.

12. PacifiCorp transmission provides meaningful forums for customer input into its expansion plans.

13. PacifiCorp transmission provides transparent results of expansion plan input.



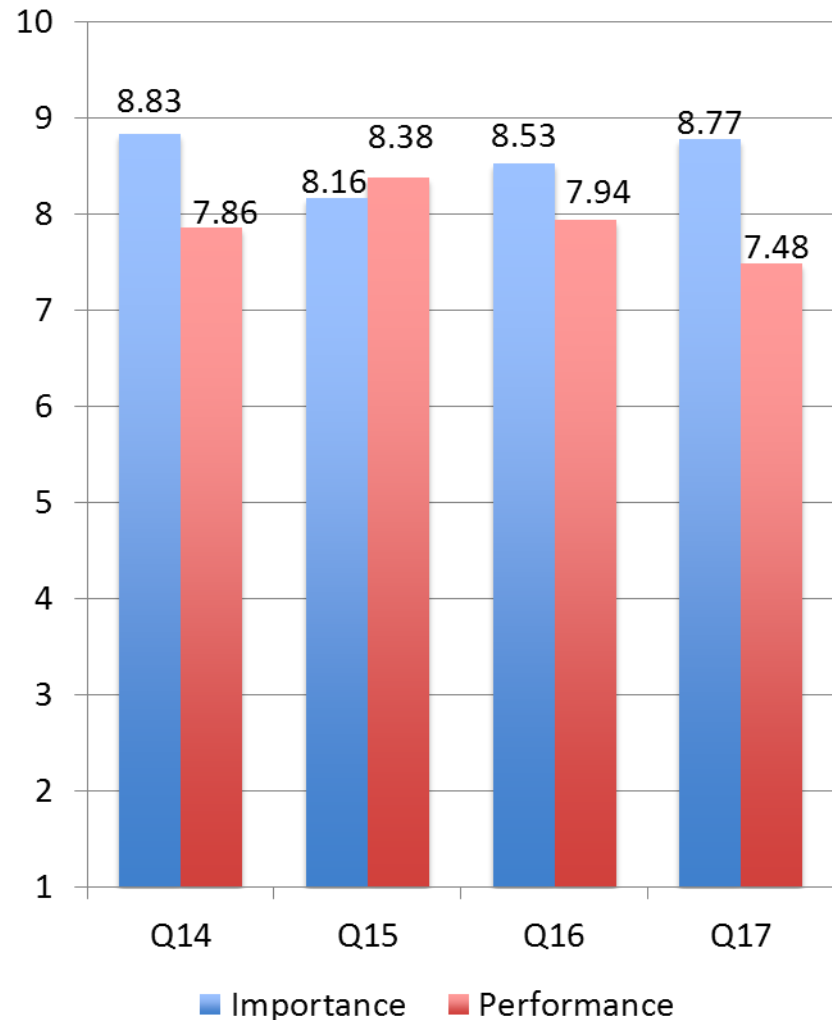
Product Related Services cont'd

14. PacifiCorp transmission understands and communicates any impacts to customers related to FERC, NAESB, NERC and WECC compliance requirements.

15. PacifiCorp transmission provides timely invoices.

16. PacifiCorp transmission provides accurate invoices.

17. Considering the service you receive, PacifiCorp transmission's rates represent good value.



Action Plan

- Transmission Staffing
 - Post on Department websites an updated organizational chart, with photos.
 - Creation of a “Who to Contact” list with an explanation of the various department email addresses and when to use them.
- OATI OASIS System Needs
 - Creation of a monthly user forum for discussion of ongoing OATI OASIS issues to be discussed during the monthly Transmission Customer Meeting.
 - Ongoing discussion of the requirements for the NITS module will continue upon completion of the NT Allocation.
- Outage Communications with customers
 - Resolve open issues between OATI-OASIS & Legacy OASIS to move to single area for postings that will be the official record.
 - Improve quality and accuracy of outage postings by improving the accuracy of path ratings for outages scheduled in COMPASS and posted to OASIS.
 - Establish a monthly forum for discussion of ongoing outage communication issues to be discussed during the monthly Transmission Customer Meeting.
 - Expansion of automatic outage notification process to larger audience with a link for customers to provide comments.
 - Creation of a training document for the outage communication process.

Action Plan cont'd

- Regulatory updates
 - Provide regulatory updates that may impact customers through the monthly Transmission Customer Meeting.
- Invoicing
 - Continue discussions with individual customers regarding their specific billing concerns.

Questions and Discussion

Rate Case and Annual Update

Rick Vail, Vice-President Transmission



Let's turn the answers on.

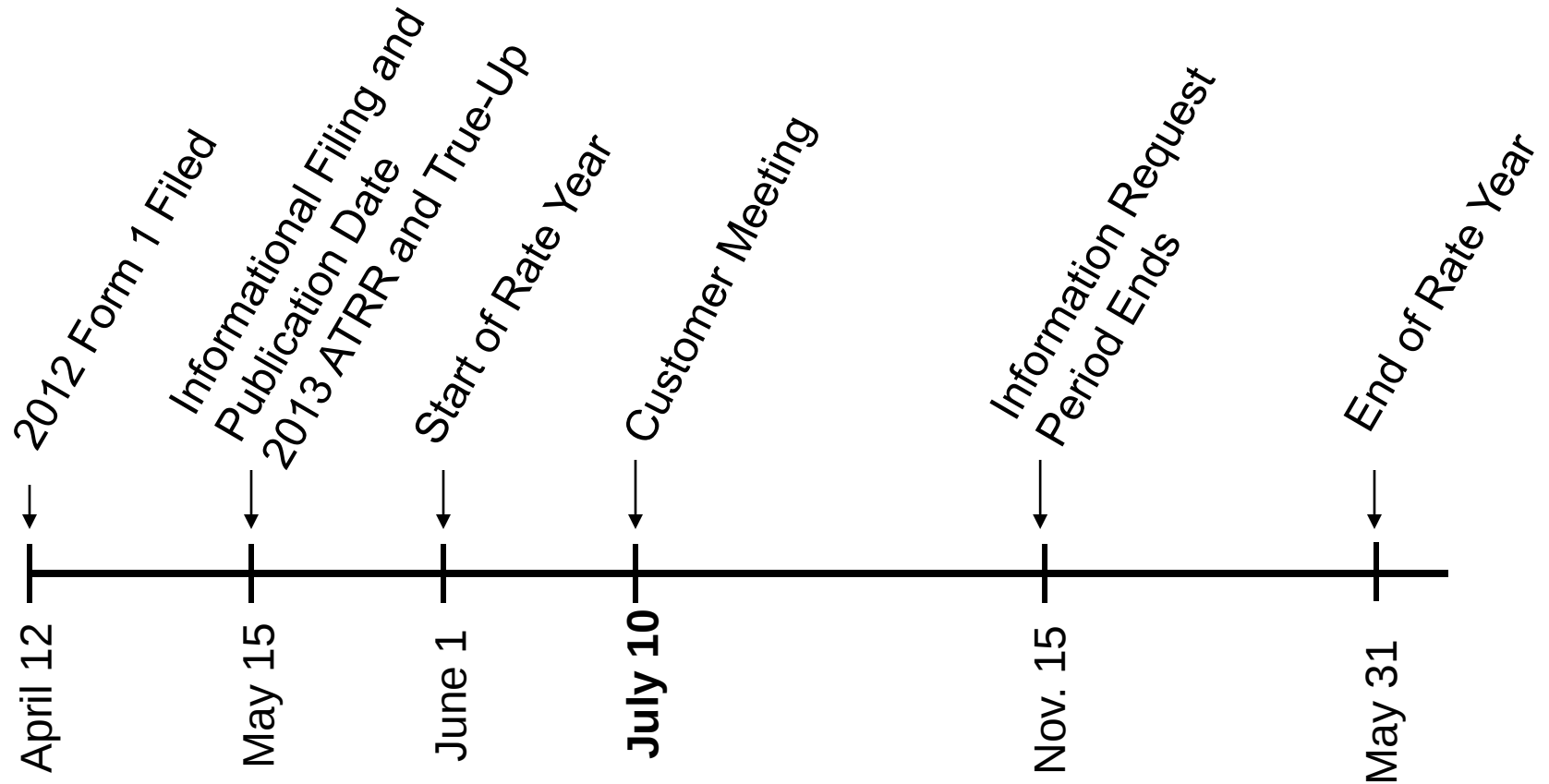
Docket No. ER11-3643-000



Customer Refund Timing

- Refunds of 2012 transmission wheeling for long-term firm point-to-point and network service customer will be calculated and distributed June 2013.
- Refunds for ancillary services will be calculated and distributed June 2013 through September 2013 (including interest).

2013 Annual Update Timeline



2013 Annual Update

- May 15, 2013 (“Publication Date”) - Informational Filing made at FERC and served on customers Docket No. ER13-3643
- Rates filed:

	Filed rate (\$/kW-year)
2012 True-up	21.656
2013 Projection	25.856

OASIS Postings

- In addition to the Informational Filing, PacifiCorp posted the following materials to OASIS:
 - PacifiCorp Formula Rate Model 2013 Projected
 - PacifiCorp Formula Rate Model 2012 True-up
 - Additional materials required pursuant to the Protocols:
 - Transmission Plant Addition Detail
 - Material Changes Summary
 - Variance Analysis of Projection and Up
 - Information Request Process Narrative

<http://www.oasis.oati.com/ppw/index.html>

See folder location: PacifiCorp OASIS Tariff/Company
Information/OATT Pricing/2013 Transmission Formula Annual Update

Annual Review Procedures

- Customer Meeting will be held July 10, 2013 via webinar and in-person in Salt Lake City, UT
- Interested parties will have 180 days after the Publication Date (i.e. May 15) to serve reasonable Information Requests to the Transmission Provider for information and work papers supporting the Annual Update.
- An interested party shall have the right to make Preliminary and/or Formal Challenges pursuant to the Protocols

Information Request Process

- Please submit information requests to the following email address:
datarequest@PacifiCorp.com
- PacifiCorp will make a good faith effort to respond within 10 business days of receipt of such requests and post both requests and responses within 1 business day of receipt / response.
- IntraLinks is the intranet workroom for Information Requests
 - PacifiCorp's IntraLinks workspace is a secure online environment
 - Documents are protected and users must have permission to view (requires log-in and password)

IntraLinks Sign-Up Process

- Parties will receive two initial emails: 1) PacifiCorp invitation to the IntraLinks exchange and, 2) temporary password and request to change your password
- Log in with the email address in which you received your invitation
 - Log in page: <https://services.intralinks.com/login/>
- Questions about documents or access to documents, contact the exchange manager.
 - Lisa Harkins, 503-813-5669 or lisa.harkins@pacificorp.com

Questions and Discussion

ORDER 1000



Let's turn the answers on.

Order 1000 Background

- Builds on existing FERC Orders 888, 889, 890
- Addresses transmission planning and cost allocation
 - Requires open transparent transmission planning
 - Requires regional and interregional planning coordination
 - Requires stakeholder input and review of transmission planning and plans
 - Requires cost allocation to beneficiaries

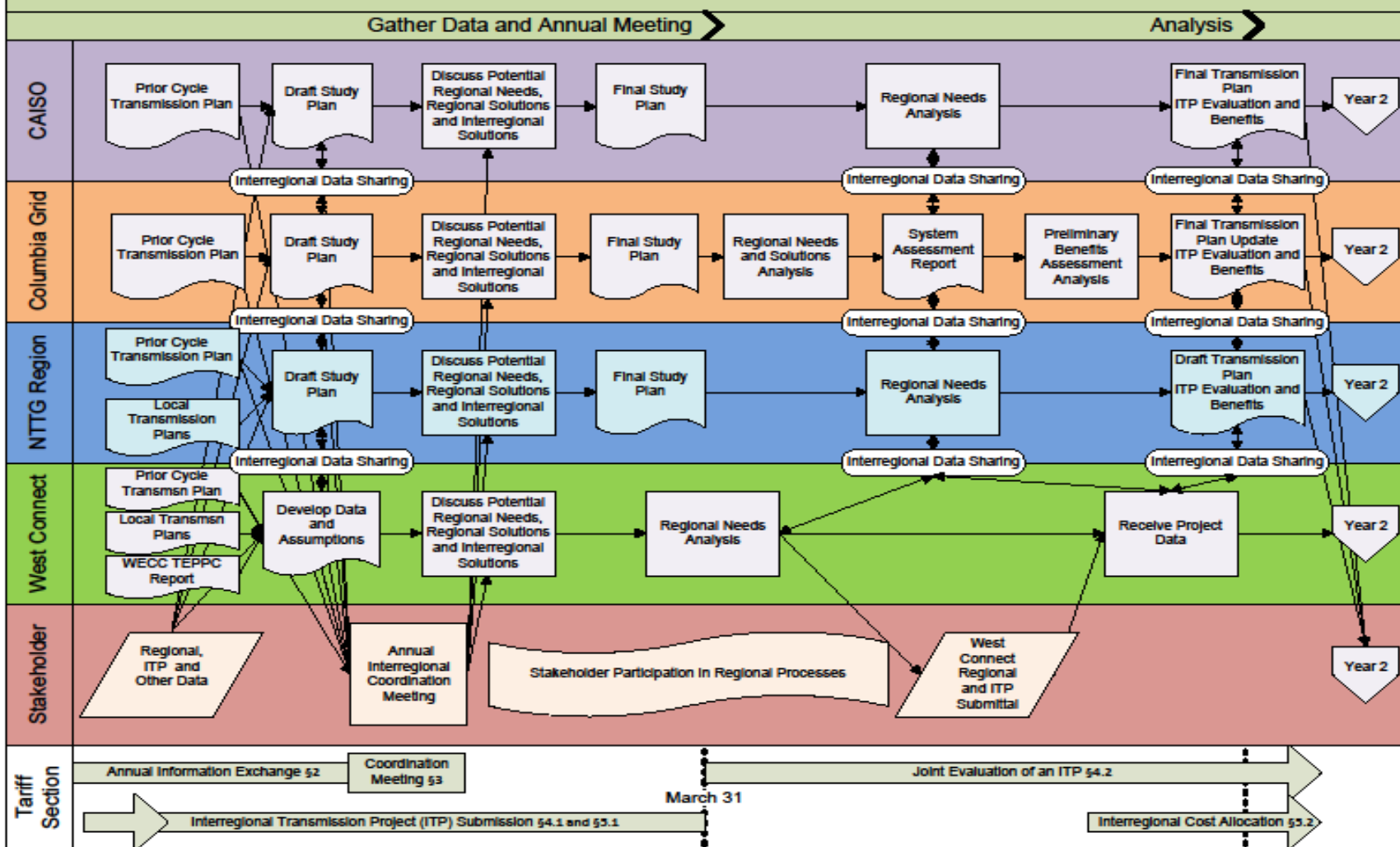
Regional Coordination

- October 11, 2012 Filing
 - NTTG filed October 10, 2012 with an effective date of October 1, 2012
 - Outlined how the Order would be met
 - Regional & Interregional planning, cost allocation, Stakeholder participation
 - FERC order issued May 17, 2013
 - Accepted - October 1, 2013 effective date, planning transparency, 10 year planning horizon, planning timeline
 - Not or Partially Accepted - information exchange, planning study prioritization, identify transmission needs from public policy, project evaluation process, enrollment process
 - Response due 120 days from Order – September 16, 2013
- http://elibrary.FERC.gov/idmws/file_list.asp?accession_num=20130517-3008

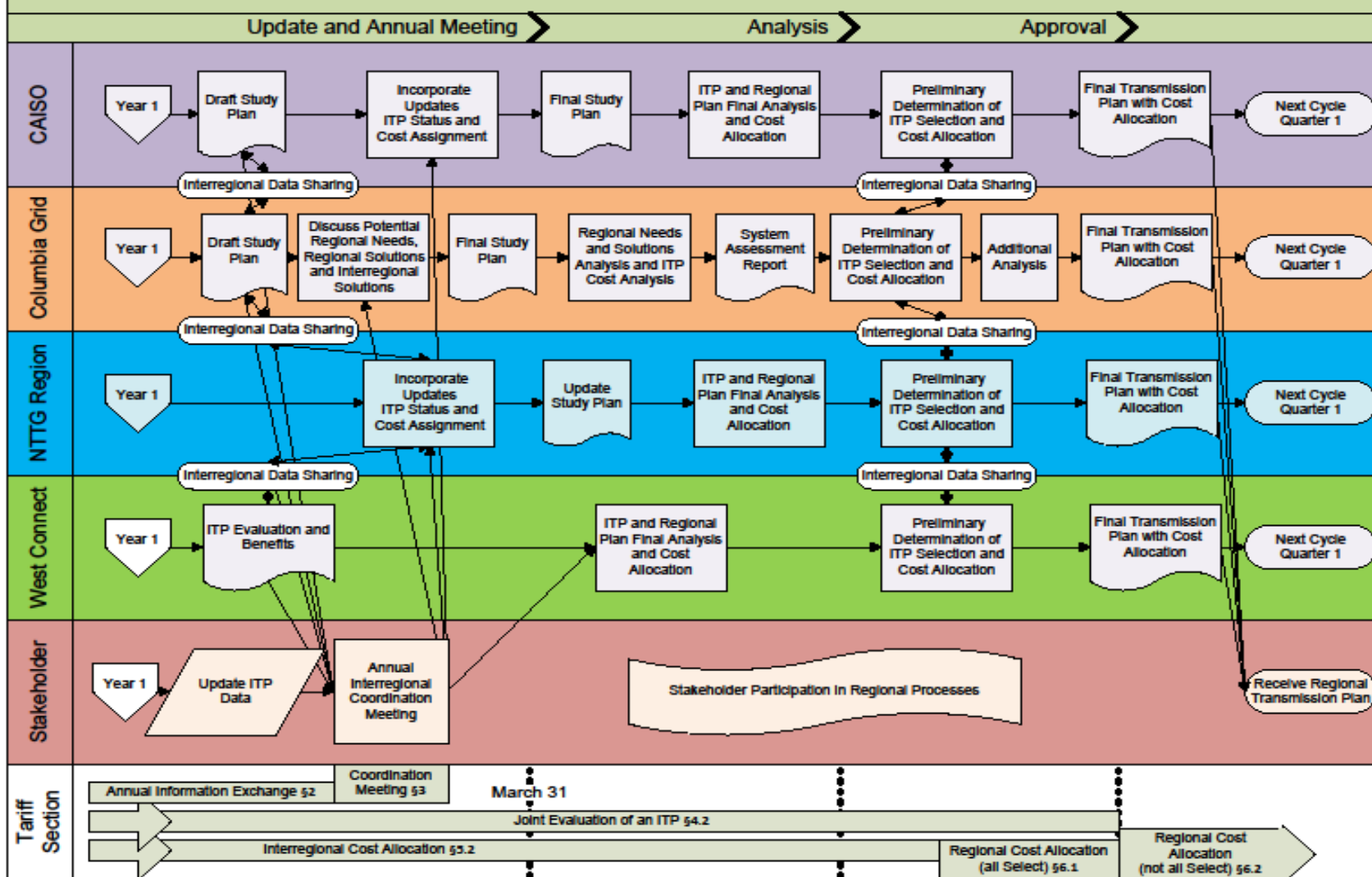
Interregional Coordination

- Filing due to FERC July 11, 2013
- NTTG filed May 10, 2013
- Joint filing letter with WestConnect and Cal ISO
- Stakeholder input
- Planning coordination

Interregional Coordination Process Representative Schedule (Year 1)



Interregional Coordination Process Representative Schedule (Year 2)



Next Steps

- Production Cost Modeling
- FERC Ruling resolution
- FERC ruling on May 10, 2013 filing
- 2014 – 2015 Planning

Questions and Discussion

FERC ORDER 764

Integration of Variable Resources



Let's turn the answers on.

History

- Notice of Inquiry - 2010
- Notice of Proposed Rulemaking – 2011
- Final Rule issued June 22, 2012
- Effective Date: 60 days after publication in the Federal Register – September 11, 2013
- 60 days extension – **November 11, 2013**

764 VER Defined

- Variable Energy Resource:
 - Renewable
 - Cannot be stored by the facility owner or operator
 - Has variability that is beyond the control of the facility owner or operator
 - Wind, solar, thermal, photovoltaic, and hydrokinetic generating facilities

Intent

- Amend the pro forma Open Access Tariff to:
 - Remove unduly discriminatory practices
 - Ensure just and reasonable rates for Commission – jurisdictional services
- Allow more efficient utilization of transmission and generation resources to benefit all customers

Order

- Three parts to the original Order:
 - 1) Offer intra-hour transmission scheduling
 - 2) Require VER interconnection customers to provide meteorological and forced outage data to the public utility transmission provider for the purpose of power production forecasting
 - 3) Include the proposed Schedule 10 governing generator regulation service (*declined*)

Proposed Benefits

- More accurate transmission schedules based on forecasted energy output
- Mitigate VER's exposure to imbalance charges
- Rely less on reserves
- Better understanding of expected energy flows

15-Minute Scheduling

- Amends the OATT to provide all transmission customers the option of using more frequent transmission scheduling intervals within each operating hour
- Includes new and adjustments to existing schedules

HOWEVER

No requirement to use

15-Minute Scheduling

- Does not require (*but does not preclude*) intra-hour calculation of ATC or sale of transmission service
- Retains existing 20-minute prior notification period for submission of a transmission schedule
- Allows TP's to recover any costs incurred to implement pursuant to Schedule 1 of the OATT

Considerations

- Acknowledged other WECC efforts (ADI, 30 minute intra hour schedules, I-TAP, DSS)
- Recognized a combination might be equivalent or superior to the Final Rule
 - *Could be presented in the compliance filing*
- Full benefit will not be realized if non-jurisdictional entities do not **choose** to adopt this practice
- Application of curtailment priorities and ATC calculation rules become more complicated

How do we proceed?

- **WECC Joint Guidance Committee**

- 15 Minute Scheduling Task Force:**

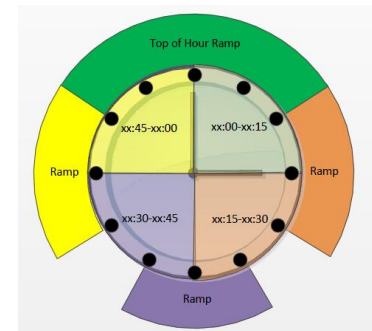
- Mission: Assess the reliability and commercial impacts of 15-minute scheduling in WECC
 - Membership: ~70 participants
 - Timeline: Report findings by March 31, 2013
 - *“WECC 15-Minute Scheduling Suggested Best Practices Document”*

WECC Best Practices

- Fixed start times for scheduling intervals
 - 15-minute scheduling intervals fixed at xx:15, xx:30, and xx:45
 - Schedules will be allowed in 15-minute, 30-minute, 45-minute and 1-hour blocks
- Pre-schedule changes
 - None anticipated, but nothing prevents a 15-minute preschedule Request for Interchange

WECC Best Practices

- Ramp Rates
 - Continuing with established default ramps for next hour (20 minutes)
 - 10-minute straddle ramp for 15-minute scheduling intervals
- Timing
 - Must be submitted 20 minutes prior to the scheduling interval start time



WECC Best Practices

- Curtailments
 - Firm schedules preempt non-firm
 - Non-firm preempts non-firm of lower priority
 - Curtailments will occur prior to the top of the hour for all scheduled intervals in the hour, and curtailments/reloads will occur within the hour
- NSI Accounting
 - No change; future review may be required

WECC TF Guidelines

- Coordination of Net Scheduled Interchange (NSI) checkouts
 - Subgroup established
 - WIT updates in place
- Transmission Pre-emption, Transmission Curtailments and Reloads
 - Subgroup established
 - Identify complications and possible solutions

WECC TF Guidelines

- Interaction with Market Structures and Seams Issues with the CAISO
 - Identify potential issues with 15-minute scheduling the WECC and CAISO
- Review current WECC, NERC and NAESB documentation

PacifiCorp Plans

- Additional personnel
- Tool enhancements
- Procedure updates

Questions and Discussion

Energy Imbalance Market (EIM)



Let's turn the answers on.

EIM Description and Footprint



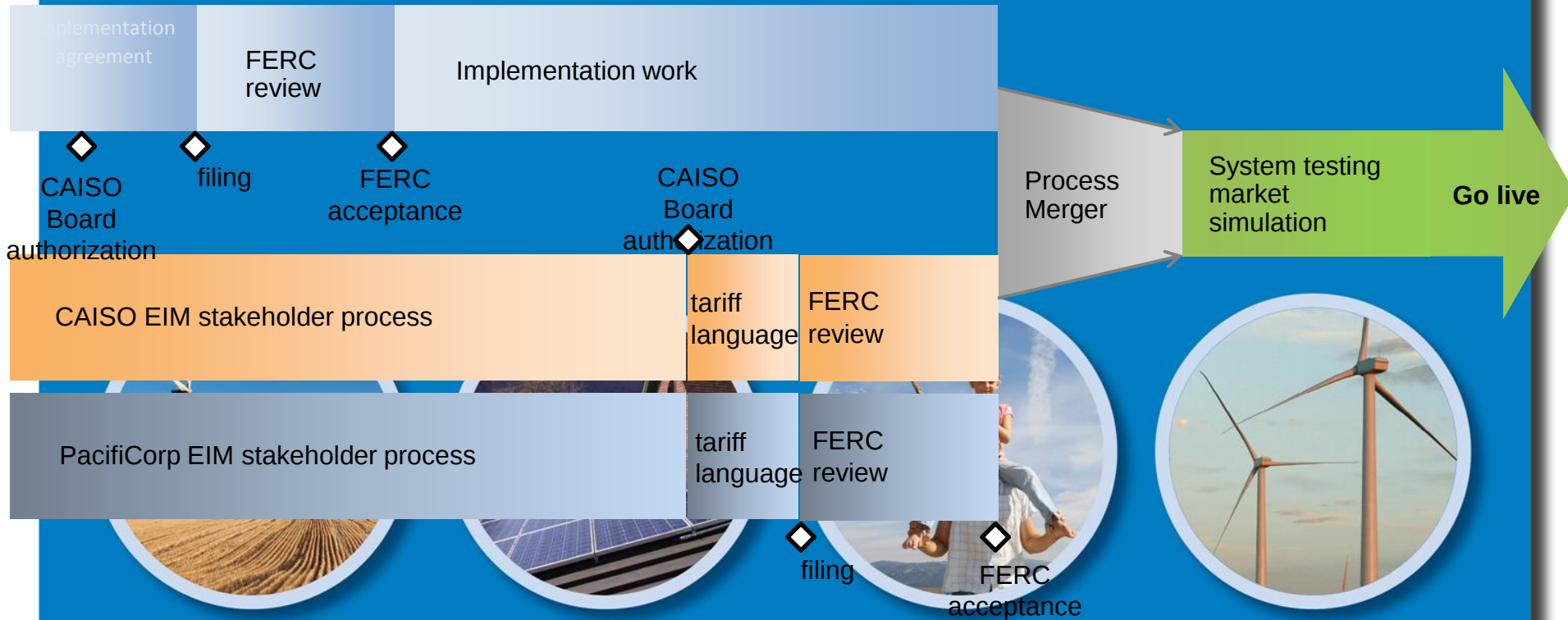
Benefits

- Provides an opportunity to generator-owners within PacifiCorp's Balancing Authority Area to participate in the EIM
- Potentially reduces reserve requirements
- Leverages existing CAISO market to lower start-up costs
- Captures the benefits of geographical diversity of load and resources and enhanced reliability through improved situational awareness
- Provides easy entry/exit for EIM participation

EIM Processes and Timeline

2013

2014



Let's turn the answers on.

CAISO/PacifiCorp Stakeholder

Item	Date
CAISO Post Straw Proposal	April 4, 2013
CAISO Stakeholder Meeting (Folsom)	April 11, 2013
PacifiCorp Stakeholder Webinar	April 16, 2013
CAISO Stakeholder Comments Due	April 19, 2013
PacifiCorp Stakeholder Webinar	May 28, 2013
CAISO Post Revised Straw Proposal	May 30, 2013
CAISO Stakeholder Meeting (Folsom)	June 6, 2013
CAISO Stakeholder Comments Due	June 14, 2013
PacifiCorp Stakeholder Comments Due	June 21, 2013
CAISO Post 2 nd Revised Straw Proposal	July 2, 2013
CAISO Stakeholder Meeting (Phoenix)	July 9, 2013
PacifiCorp Stakeholder Webinar	July 16, 2013
CAISO Stakeholder Comments Due	July 19, 2013
PacifiCorp Stakeholder Comments Due	July 26, 2013
CAISO Post Draft Final Proposal	August 13, 2013
CAISO Stakeholder Meeting (Portland)	August 20, 2013
CAISO Stakeholder Comments Due	August 27, 2013
CAISO Post Draft Tariff Language	September 16, 2013
CAISO Stakeholder Comments Due	September 23, 2013
CAISO Stakeholder Meeting (Folsom)	September 30, 2013
CAISO Board Decision	November 8, 2013

Next Steps

- PacifiCorp stakeholder process:
 - <http://www.oasis.oati.com/ppw/index.html> (“EIM” folder and news announcements)
 - *Comments to PacifiCorp: June 21, 2013*
 - *Next PacifiCorp EIM session: July 16, 2013*
 - Contact: Sarah Edmonds: sarah.edmonds@pacificorp.com (503-813-6840) with questions, comments or feedback
- CAISO stakeholder process:
 - <http://www.caiso.com/informed/Pages/StakeholderProcesses/EnergyImbalanceMarket.aspx>
 - *CAISO Post Revised Straw Proposal: May 30, 2013*
 - *CAISO Stakeholder Meeting (Folsom): June 6, 2013*

Questions and Discussion

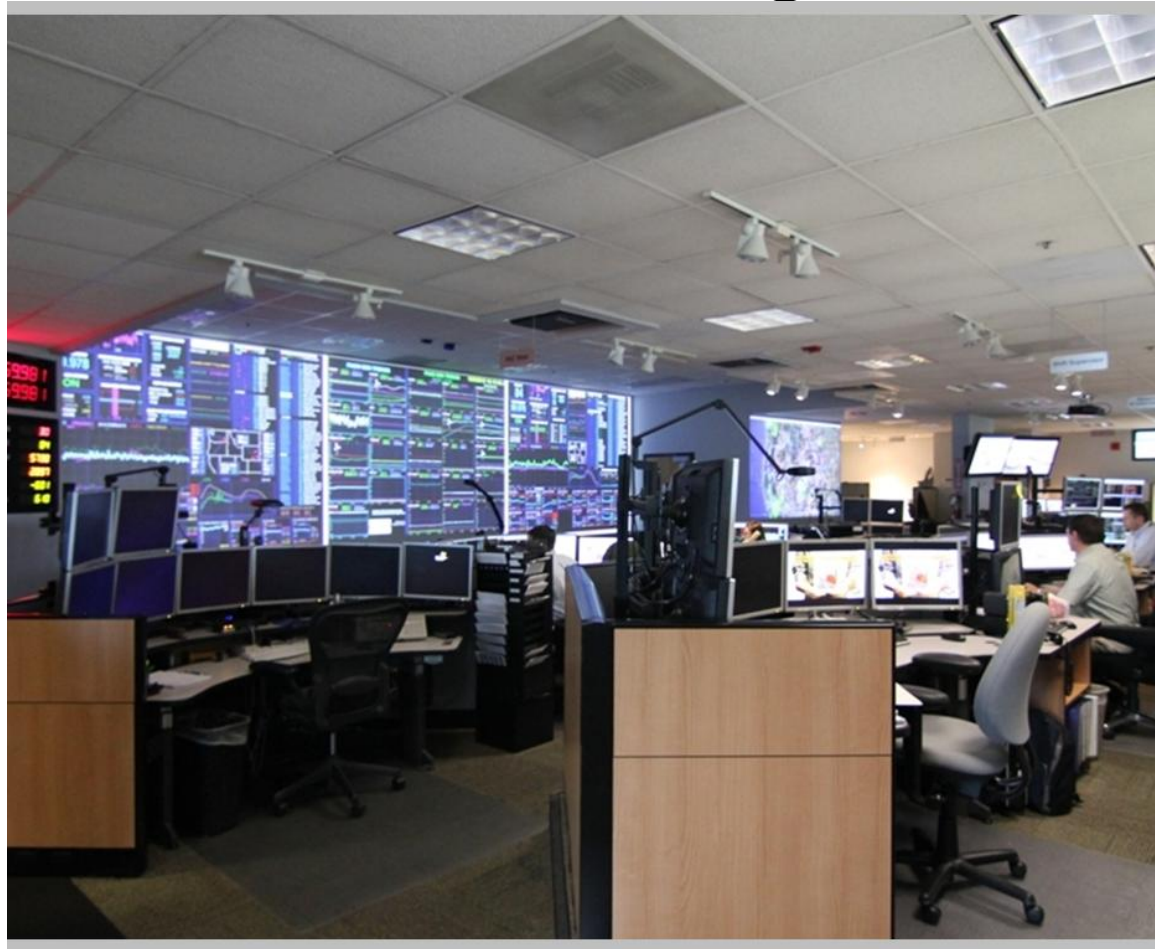
Outage Coordination



Let's turn the answers on.

Transmission Grid Operations

Portland Oregon



Outage Coordination Staff

- Dean Pace – Grid Operations Manager

– (503)251-5180



- Bob Clewell – Grid Operations Supervisor

– (503)251-5155



- Kelly Myers – Associate Area/Transmission Planner

– (503)251-5206



Outage Scheduling phone – (503)251-5157

Outage Coordination office hours 0600 to 1500 PT
Monday thru Friday

PacifiCorp Outage Coordination Goals

- Safety of personnel and equipment
- Reliability of the Bulk Electric System
- Compliance of NERC and WECC reliability Standards
- Meeting our customers needs
- Coordinate outages efficiently and economically while focusing on system reliability

Outage Scheduling Time Frames

- 45 days before the Start of the Outage Month for lines and equipment designated by the Northwest Power Pool planned outage coordination process.
- 10 working days for lines and equipment 150kv to 500kv.
- 5 working days for lines and equipment 34.5kv to 150kv.
- 3 working days for distribution facilities.

PacifiCorp Lines and Equipment designated by the NWPP

- Alvey-Dixonville 500kv line
- Captain Jack-Malin #2 500kv line
- Dixonville-Meridian #1 500kv line
- Captain Jack-Klamath CoGen #1 500kv line
- Meridian-Klamath CoGen 500kv line
- Hemingway-Summer Lake 500kv line
- Hemingway-Midpoint 500kv line
- Summer Lake-Malin 500kv line
- Malin 500/230kv transformer

PacifiCorp Lines and Equipment designated by the NWPP

- Alvey Dixonville 230kv line
- Chiloquin-Klamath Falls 230kv line
- Dixonville –Grants Pass 230kv line
- Grants Pass-Meridian 230kv line
- J.C. Boyle-Klamath Falls 230kv line
- LaPine-Chiloquin 230kv line
- Lone Pine-Copco 230kv line
- Malin-Klamath Falls 230kv line
- Meridian-Lone Pine #1 and #2 230kv lines

PacifiCorp Lines and Equipment designated by the NWPP

- Midway-Union Gap 230kv line
- Pilot Butte-LaPine 230kv line
- Ponderosa-Pilot Butte 230kv line
- Union Gap-Pomona 230kv line
- Walla Walla-Hurricane 230kv line
- Walla Walla-North Lewiston 230kv line
- Walla Walla-Wanapum 230kv line
- Wanapum- Pomona 230kv line

Balancing Everyone's Needs

- O & M maintenance schedules
- Capital Projects
- Mandated WECC maintenance and testing
- Neighboring Entities outages
- Generation outages and impacts
- NERC and WECC Reliability Standards
 - TOP-002, TOP-003, TOP-004, TPL-002
- Maintain System Reliability

NERC Standard TOP-003

Planned Outage Coordination

- **R1-** Generator Operators and Transmission Operators shall provide planned outage information.
 - **R1.1-** Each Generator Operator shall provide outage information daily to its Transmission Operator for scheduled generator outages planned for the next day (any foreseen outage of a generator greater than 50 MW). The Transmission Operator shall establish the outage reporting requirements.
 - **R1.2-** Each Transmission Operator shall provide outage information daily to affected Balancing Authorities and Transmission Operators for scheduled generator and bulk transmission outages planned for the next day (any foreseen outage of a transmission line or transformer greater than 100 kV or generator greater than 50 MW) that may collectively cause or contribute to an SOL or IROL violation or a regional operating area limitation.
 - **R1.3-** Such information shall be available by 1200 Central Standard Time for the Eastern Interconnection and 1200 Pacific Standard Time for the Western Interconnection.

NERC Standard TOP-003

Planned Outage Coordination

- **R2-** Each Transmission Operator, Balancing Authority, and Generator Operator shall plan and coordinate scheduled outages of system voltage regulating equipment, such as automatic voltage regulators on generators, supplementary excitation control, synchronous condensers, shunt and series capacitors, reactors, etc., among affected Balancing Authorities and Transmission Operators as required.
- **R3** - Each Transmission Operator, Balancing Authority, and Generator Operator shall plan and coordinate scheduled outages of telemetering and control equipment and associated communication channels between the affected areas.
- **R4-** Each Reliability Coordinator shall resolve any scheduling of potential reliability conflicts.

PacifiCorp Grid Operations Outage Reporting Requirements

- Generator outages greater than 50MW.
- Bulk Electric System equipment outages 100KV and above
- Equipment that may collectively cause or contribute to an SOL/IROL violation.
- System voltage regulating equipment.
- Communication channels, telemetering, relays and control equipment.
- Changes in generation, transmission, load or operating conditions that could require changes in the protective systems or remedial action schemes.

Unplanned or Forced outages

- Unplanned or forced outages of lines and equipment will be posted to OASIS as soon as possible during normal business hours.
- Unplanned or forced outages of lines and equipment after normal business hours will be posted to OASIS as a Security Event.
- PacifiCorp outage coordination personnel will replace the security event posting with an outage posting as soon as practical if the outage extends into normal business hours.

Future Enhancements

- Complete the transition to OATI OASIS
 - We are working with OATI to resolve the issues with the differences in outage postings between the legacy OASIS and OATI OASIS.
- Post proposed outages for customer comment
 - We will be adding a folder in the outage folder labeled “Proposed”. These outages will be posted for review by our customers and available for comment or input into outage availability.

Future Enhancements

New folder will be added here labeled "Proposed outages"

The screenshot shows the OATI OASIS website in a Windows Internet Explorer browser. The address bar displays <https://www.oasis.oati.com/ppw/index.html>. The browser's Favorites bar includes links to COMPASS, OATI OASIS, PPW Prod - User Login, Policy & Procedure Mana..., NERC Reliability Standards, WECC RC, WECC, and COS. The website header features the OATI OASIS logo and navigation links: Registration | About | HOME. A yellow banner reads "OATI webOASISSM Production Node" with a "Production Node Login" button. The main content area displays the PacifiCorp logo and "PacifiCorp Transmission Contacts" with contact information for Brian McClelland (OASIS), Pre-Schedule Desk, Real Time Desk, Outage Coordination, and Dean Pace (Manager of Outage Coordination). Below this is the "PacifiCorp News" section with several news items dated 05/13/13, 05/09/13, 05/01/13, 04/30/13, and 04/29/13. A sidebar on the left titled "Documents" lists various folders and files, including "PPW Outages" and "WebSTrans Outages". A callout box points to the "PPW Outages" folder, indicating a new folder labeled "Proposed outages" will be added.

Registration | About | HOME

OATI webOASISSM Production Node

Production Node Login

PACIFICORP
A MIDAMERICAN ENERGY HOLDINGS COMPANY

PacifiCorp Transmission Contacts
Brian McClelland (OASIS): (503)813-5342
Pre-Schedule Desk: (503)262-4920 or [Email Pre-Schedule](#) Real Time Desk: (503)251-5210
Outage Coordination: (503)251-5157 or [Email Outage Coordination](#)
Dean Pace (Manager of Outage Coordination): 503-251-5180

PacifiCorp News

05/13/13: 2013 Annual Transmission Customer Meeting PacifiCorp transmission will host its annual customer meeting May 29, 2013, from 8:30 to 11:30 PDT/9:30 to 12:30 MDT. The annual customer meeting will be provided as a webinar. Additional information and meeting agenda can be found under Meeting Notices.

05/09/13: PacifiCorp EIM Announcement: PacifiCorp has posted a EIM Stakeholder Process Schedule Document to OASIS, which can be located in the EIM folder. This document outlines key dates and deadlines for the PacifiCorp and CAISO EIM stakeholder process. Among these dates, please be reminded that PacifiCorp will be hosting additional EIM webinars on the following dates/times:
1. May 28, 2013, from 1:30pm-3:30pm (pacific); and
2. July 16, 2013, from 1:30pm-3:30pm (pacific)
Webinar information, including presentation materials, will be posted closer to the applicable webinar dates.

05/01/13: New BP #63: Transmission Customer Provision of Reactive Supply and Voltage Control from Generation or Other Sources Service. On May 1, 2013, new BP #63, version 0.0, became effective.

04/30/13: PacifiCorp Merchant Visit 5/1/2013 Mark Smith and John Apperson will at the Grid Operations Control Center on May 1, 2013 from 10am to 11am for a meeting in a conference room and will not have access to the control room.

04/30/13: Scheduling Outage On Thursday May 2nd, the PacifiCorp Control Area Scheduling environment will be moved from PacifiCorp infrastructure to our vendors data center at MCG in Minneapolis. There will be an 20 minute outage starting at 01:40 AM(PDT) and ending at 02:00 AM (PDT).

04/29/13: New Option for Service across the PacifiCorp California-Oregon Intertie ("PacifiCorp COI Segment"): PacifiCorp is offering transmission service across the California-Oregon Intertie between Malin 500kV and Round Mountain 230kV. The document "TOR option CRRs", which can be found in the CAISO Scheduling folder under Scheduling/Tagging Instructions, outlines the two options that are available to customers wishing to purchase this transmission service. The first option is to purchase physical scheduling rights across the transmission path. The second option is to purchase financial rights across the transmission path.

04/29/13: PacifiCorp Energy Imbalance Markets Webinars: PacifiCorp will be hosting additional EIM webinars on the following dates/times:

Documents

- [NAESB Home Page](#)
- Standards of Conduct
- Performance Metrics
- Business Practices
- ATC Information
- OASIS Notices
- Outages
 - PPW Outages
 - WebSTrans Outages
- PacifiCorp OASIS
 - Tariff/Company Information
 - Real Time Data
 - Generation Interconnection and TSR Queues
 - Operational Information
 - Energy Gateway
 - Attachment K Information
 - NTTG Information
 - Integrated Resource Planning Information
 - Transmission Planning
 - Transmission System Information
 - Meetings Notices
 - Network
 - Outage Planning Process
 - General Information
 - Scheduling/Tagging Instructions
 - Customer Service-Transmission Forms
 - Legacy OASIS System-Outages-Current Sys of Record
 - OASIS Access Policy
 - EIM

Future Enhancements

- From the customer comments a line of communication can be established and PacifiCorp can address the customers concerns. If the outage can be rescheduled to meet the customers' needs, that will be done and if the outage can't be rescheduled to meet the customers' needs, we can explain to the customer why.

Future Enhancements

- Once the new folder is added to the OATI OASIS site PacifiCorp will be posting proposed outages for comment. Comments need to be sent to Dean Pace at dean.pace@pacificorp.com.
- The amount of time an outage will be posted for comment will be limited depending on how far in advance the outage will take place. For example an outage scheduled for a month in advance may be posted for comment for 1 to 2 weeks. An outage scheduled for 6 months in advance may be posted for comment for 6 weeks.

Future Enhancements

- Outages posted in the “PPW Outages” folder are scheduled outages. These are firm outages that will take place on the dates and times posted.
- Outages posted in the new “Proposed Outage” folder are not scheduled outages. The dates and times of the outages are subject to change or cancelation based on customer comments or project modifications.

Questions and Discussion

Transmission Projects Update

Energy Gateway

Rick Vail, Vice-President Transmission



Let's turn the answers on.

Topics Covered

- Energy Gateway Overview
- Recent Milestones
- What's next?
- Integrated Resource Plan / System Benefits Tool

Energy Gateway Transmission Expansion Plan

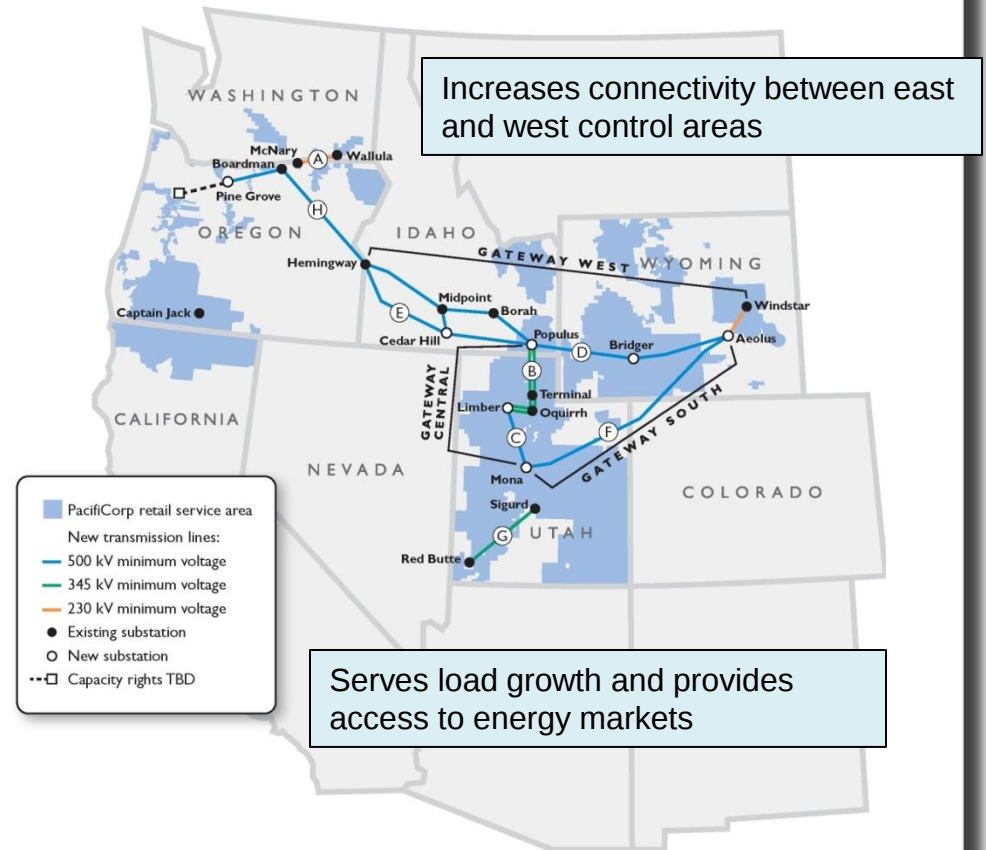
- Approximately 2,000 new line miles
- Multi-year, multi-billion dollar investment
- Objectives
 - Secure capacity for the long-term benefit of customers
 - Load service needs first, regional needs second
 - Support multiple resource scenarios
 - Secure regulatory and community support
 - Improve reliability
 - Implement rather than perpetually plan



This map is for general reference only and reflects current plans.
It may not reflect the final routes, construction sequence or exact line configuration.

Planning Energy Gateway

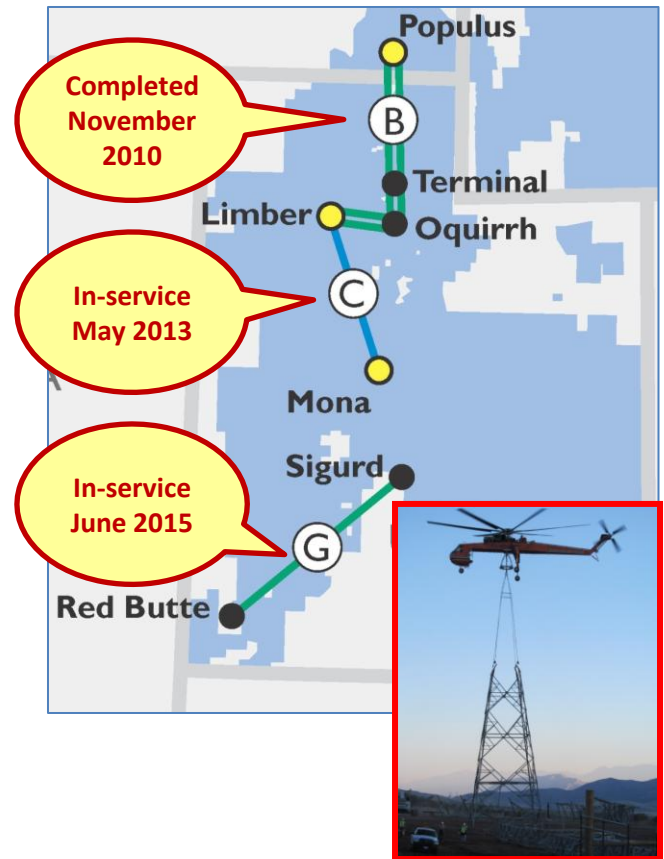
- Origins in multiple local and regional transmission planning efforts
- Announced in May 2007
- Designed to ensure a reliable, adequate system capable of meeting current and future customer needs
- “Hub and spoke” design supports multiple future resource scenarios by connecting resource-rich areas and major load centers
- Projects continue to be vetted in multiple public forums at the local, regional and interconnection-wide levels



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Energy Gateway Transmission Expansion Plan

- Multi-year, multi-segment, multi-billion dollar investment plan
 - Designed to provide up to 3,000 MW of new transmission capacity (1,500 MW on both Gateway West [D/E] and Gateway South [F]) to serve PacifiCorp customers' long-term needs
 - Populus – Terminal (B) completed in November 2010
 - **Mona – Oquirrh (C) completed in May 2013**
 - **Sigurd – Red Butte (G) construction began April 2013**
 - Progress continues on longer-term segments, including Gateway West and Gateway South



Mona – Oquirrh

Construction - 500 kV





Rugged Terrain – 345 kV



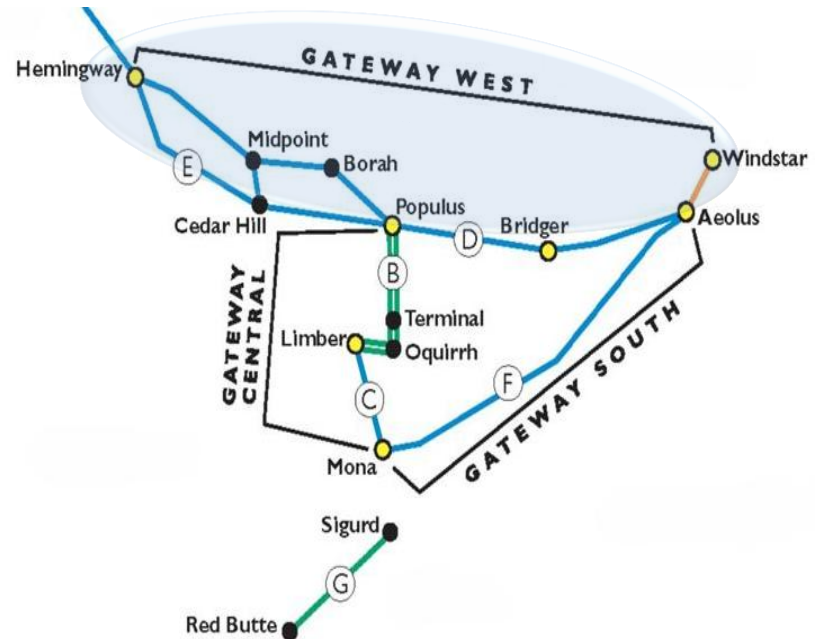
Sigurd to Red Butte

- Groundbreaking – May 8, 2013



Gateway West

- Gateway West
 - Jointly proposed by PacifiCorp and Idaho Power
 - Approximately 1,000 miles; 230 kV and 500 kV
 - Crosses Wyoming and Idaho
 - One of seven Rapid Response Transmission Team projects
 - **Final EIS issued April 26, 2013**
 - In May, series of BLM hosted meetings to gather public comment on the EIS
 - Anticipate Record of Decision: September 27, 2013
 - Estimated in-service dates:
 - Windstar-Populus – 2019-2021
 - Populus-Hemingway – 2020-2023



Gateway South

- Gateway South
 - Approximately 400 miles;
500 kV
 - Runs from Wyoming to Utah
 - Permitting underway
 - EIS process 2008-2015
 - Draft EIS anticipated Fall 2013
 - Some shared corridors with TransWest Express project
 - Estimated in-service date: 2020-2022



Integrated Resource Plan

- Integrated Resource Plan
 - Filed in the states April 30, 2013 (CA supplement filed by May 31, 2013)
 - Acknowledgment Sigurd-Red Butte and continued permitting for Gateway West and Gateway South
 - Link to 2013 IRP Volume 1:
http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Integrated_Resource_Plan/2013IRP/Pacificorp-2013IRP_Vol1-Main_4-30-13.pdf
 - Transmission Action Items

System Benefits Tool

- SBT is designed to measure transmission benefits incremental to those identified via IRP modeling
- Transmission metrics:
 - Operational cost savings (economic driven – NPC)
 - Segment loss savings (energy and capacity)
 - System reliability benefits
 - Customer and regulatory benefits
 - Avoided capital cost
 - Improved generation dispatch (reliability driven)
 - Wheeling revenue opportunity
- SBT provides ability to analyze entire segment or sub-segments
- More information can be found on the IRP webpage for PacifiCorp:
<http://www.pacificorp.com/es/irp.html>

Questions and Discussion