Commercial Operations Key Strategic Initiative IPR 2 Webinar

 Market access, inventory management and products and services are the focus areas under commercial operations. There are many other facets to commercial operations but BPA needed to narrow focus in order to develop a portfolio of initiatives.

Market access

- The focus is on maintaining access to market for generating resources and facilitating access to markets by using the transmission system.
- BPA wants to continue taking a leadership role in emerging markets and governance perspective.
- o Power perspective:
 - BPA interested in rules that allow BPA to still have physical access to our preference loads in other balancing area authorities, like PacifiCorp East (such as in the case of SE Idaho loads).
- Transmission perspective:
 - BPA is looking at how process, business practices and products fit into the changing landscape. BPA reviewing if the current options meet load growth as well as the need for new or different products and enabling access to customers.

· Products and services

- BPA reviewing the suite of products and services currently offered to see if we have the right mix for what our customers need.
- Power and transmission will be working together to look at how the hydro system can help support congestion management for transmission and how transmission would compensate power for this service.
- Transmission is looking at load service and market access needs to define what the product need is. There is a need to differentiate and make clear what attributes each product has as well as look at opportunities for new products and services.
- On the power side, hydro has a lot of flexibility but there are also some constraints on the system. Plans include developing flexible capacity products. Also the low, almost no, carbon nature of the system may be leveraged for a special set of products.

Inventory management

- Transmission is developing better tools to more accurately identify system availability and to support products now and in the long-term for system optimization.
- o Power needs to refine our inventory methods to measure flexibility in the intra-hour.

• Questions:

- Who is on the commercial operations steering committee and what organizations are represented?
 - The committee includes Michelle Manary (vice president of Transmission Services' marketing and sales), Michelle Cathcart (vice president of Transmission Services' system operations), Suzanne Cooper (vice president of Power Services' bulk marketing), Jeff DiGenova (transmission technology services director), Jeff Cook (vice president of Transmission Services' planning and asset management), Larry Buttress (senior vice president of business transformation office) and Kieran Connolly (vice president of Power Services' generation asset management).
- What is the approval process from the COSC? How does it relate to budgeting?
 - The approved projects on slide 10 have gone through the COSC already. There are robust business cases for each of the projects. At this point they are primarily technology

This information was made publicly available on Dec. 23, 2016, and contains information not sourced directly from BPA financial statements.

projects and are nearly in the execute phase. Two projects – Marketing & Settlements and Generation Outage Tracking systems – dollars shown are not the full project costs. These projects each have capital components that are funded through the IT budget. The expense dollars shown were COSC approved to pay additional IT costs so these projects could go forward in FY17.

- For staffing, the amount has been approved already based on needs that were justified and approved by the COSC.
- The approval process includes:
 - Creating a team to develop the business case to aid teams to actually help create the project. The team spends about 20 to 40 hours with the business line on a pre-proposal.
 - The COSC goes through a prioritization process to determine which preproposals should move forward which ensures the pre-proposal is ready to go. A sub-prioritization team decides what moves onto the proposal phase.
 - In the proposal phase, the team is looking at the cost/benefit analysis and actually outlining the steps of the project. There is also a solutions analysis completed to review how much is a business related action compared to process, if IT is needed and what technology may be needed.
- There are a number of projects currently in the pre-proposal phase that have not moved onto the proposed phase. There are more than \$3.5 million worth of projects that would advance Commercial Operations, but they need to go into prioritization and proposal phase for formal approval.
- Commercial Operations is in a transition phase right now and is trying to identify projects they know will be needed regardless of direction for FY 2018-19 coming out of the vendor engagement.
- What is out of scope for the evaluation in commercial operations? For example, are biological requirements out of scope?
 - The Biological Opinion includes a significant amount of requirements to operate the hydropower system along with other non-power related requirements on the system. When commercial operations will look at surplus products, these requirements will already be factored in.
 - System requirements is more in scope.
 - On the transmission side, BPA is still defining areas to look at. Out of scope for the commercial operations work is the day-to-day operations. The agency is looking for projects that achieve the long-term vision of commercial operations.
- Does public power have a place to comment on the planning of commercial operations projects and if so what is the forum?
 - Per slide 11, in January, BPA will meet with a subset of customers to discuss potential approaches and alternatives. There will be more to come through the IPR 2 process but what that will look like has not been established yet.
 - There is a need to figure out what the level of customer interest is.
- How does project work identified in this effort compared to the Northwest Power Pool MC (SCED)?
 - BPA is leveraging a lot of work that was learned during the MC initiative. The agency looked back at the cost/benefit analysis completed during the MC initiative and used information that was still relevant. The MC initiative was tailored to the Northwest so this time it will be a little different as the area has expanded. The information that we did not

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have available from that effort helped to start our gap analysis of information we need to gather.

- There were a number of foundational improvements to our existing functionality that were identified to be built before BPA could join a SCED. There are a number of projects in the proposal phase of the commercial operations initiative that are part of the foundational improvements previously identified.
 - One example of base or core functionality that was identified and implemented in the previous NWPP effort was a flow forecasting tool for the region. This will be used as move into the commercial operations initiative.
- This is BPA's effort to bring tech to twenty-first century, correct? Is this an effort to centralize this process into one focused effort and break down silos around BPA? What is different now compared to before (assuming BPA was always planning to advance into the new century)?
 - The key distinction is five organizations are coming together to build a road map over the next year to reflect the trade-offs and synergies for projects and address what the appropriate sequencing of projects is across the different functions to modernize business functions and technologies. It is creating a one-BPA approach.
- Will any benefits from commercial operations projects be shown in future versions of the reference case?
 - Yes. Any quantifiable benefits would be captured in future versions of the reference case.