

Description of Meeting: NTTG Cost Allocation Committee

Meeting Date: June 14, 2016
Meeting Notes Prepared By: Approved for Posting: July 13, 2016

1. Agenda:

- a. Establish Quorum Requirements & Agenda Review
- b. 2016-2017 Cost allocation Scenarios Options Discussion
- Finalize 2016-2017 Cost Allocation Scenarios recommendation for Planning Committee review
- d. Round Table/Other Business

2. Discussions & Decisions:

Discussion: 2016-2017 Cost allocation Scenarios Options Discussion

- Amy Light informed the committee that the purpose was to walk through the Draft Cost
 Allocation Scenario Development document which included the four proposed allocation
 scenarios that have been discussed by the Cost Allocation Committee previously and come
 to an agreement on a recommendation for the cost allocation scenarios to be included in the
 study plan.
 - With regards to Scenario D, which coal is replaced by wind and solar, PacifiCorp proposed an alternative to use a different methodology for the scenario. The committee will review and discuss the two alternatives.
- NTTG received a proposal from Ocean Wave Energy Trust (OWET) to consider an ocean
 power scenario. The committee will discuss the proposal and make a decision on whether to
 incorporate the proposal in the recommended cost allocation scenarios.
- The Draft Cost Allocation Scenario Development document worked off of the document developed in the 2014-2015 planning cycle. The language in the document as well as the tables have been updated for the current 2016-2017 planning cycle.
- Table 1 includes the peak load data submittals for 2013, 2014, 2015 and the Quarter 1 2016 submittals. The table data feeds into the high and low load Scenarios A and B.
 - Bela Vastag inquired why PacifiCorp's peak load for 2015 was the same for 2014.
 - John Leland indicated a footnote was added indicating that the 2015 data was equal to 2014 due to the fact the 2015 actual data had not been received. It is expected that the actual numbers will be finalized soon and the table will be updated.
- Scenario A assumes that the 2016 load forecast in the Regional Transmission Plan is too low and adds 1,000 MW of load in the NTTG footprint. Scenario B assumes that the 2016 load forecast in the Regional Transmission Plan is too high and subtracts 1,000 MW of load in the NTTG footprint.
 - Table 2 shows the assumptions for both Scenarios A and B which is done on a prorated basis and applied to the 1,000 MW by BA. John Leland indicated that the calculation for the prorated % weight was included in the table.
 - To determine if 1,000 MW was a reasonable number, a sanity check was done. John Leland indicated he looked at the IRPs for what the high and low forecasts might (not all 2015 IPRs were final; some high/low load forecast were extrapolated from draft data provided in a graph) be and the data in Table 3 showed that 1,000 MW seemed reasonable based on the estimated values. NorthWestern did not have a high and low forecast and therefore those values were left blank.



- Scenarios C replaces 800 MW of wind with 800 MW of solar which assumes a shift in type and location of future renewable resources that are assumed in the Regional Transmission Plan.
 - Table 4 provides a sanity check which shows the incremental wind and incremental solar for 2026. The removal of wind and addition of solar are done on a prorated share between the BAs.
- Larry Nordell inquired if the 3 MW of solar showing for NorthWestern were correct. He
 indicated that from his understanding there were several 100 MW contracts at the QF1 rate
 and an additional 100 to 200 MWs more ready to file.
 - Kim McClafferty indicated NorthWestern received several applications for 3 MW projects.
- Larry Nordell asked if the numbers were appropriate for the high and low for allocation Scenarios C and D.
 - John Leland indicated that the 3 MW in Table 4 is what was submitted from NorthWestern in Quarter 1.
 - Kim McClafferty indicated she would look into the numbers to verify.
- Scenario D replaces 1,000 MW of coal with equivalent amounts of equal shares of new wind and solar.
 - The first proposed text is what was done in the previous planning cycle where 1,000 MW of coal was removed in addition to what was already assumed to be retired in 2026
 - The alternative text proposed by PacifiCorp removed the resources outlined in each members IRP submitted in Quarter 1.
- John Leland indicated he was unsure which alternative the Cost Allocation Committee would
 decide on and did the sanity check for Scenario D, showing in Table 5 based on last planning
 cycles methodology. If the Cost Allocation Committee decided to go with PacifiCorp's
 proposed alternative, the table would not show anything based on the fact that the data is
 already accounted for.
 - Table 5 assumes an 80% capacity factor for the coal retirement, 23% capacity factor for solar and 32% capacity factor for wind. The MW adjustment for wind and solar was done on a prorated bases to the BAs.
- Amy Light asked John Leland what his recommendation was for Scenario D.
 - John Leland indicated the proposed alternative text says the incremental changes over and above the Initial Regional Transmission Plan would be zero and would not be achieving a coal reduction over and above what is being planned for. The spirit of the allocation scenarios is to have alternate futures from what the Planning Committee is focused on.
- Joni Zenger indicated that in PacifiCorp's IRP, they were not replacing the coal retirement with wind and solar, but that they are using front office transactions and energy efficiency to replace the coal retirements.
- Amy Light also indicated the introductory paragraph of the discussion paper talked about the purpose of allocation scenarios and she felt the 1,000 MW was a reasonable prediction to test the cost allocation the committee would come up with.
- There was further discussion and questions from the committee members regarding the alternative text and why it was proposed.
 - There seemed to be some discomfort from PacifiCorp for the scenario used in the last cycle and it was felt that the 1,000 MW was too uncertain and premature to suggest that degree of reduction would happen in the future and they were looking for a more conservative prediction based on the IRPs.
 - The feeling from some committee members was that was not accurately reflecting the purpose of the cost allocation scenarios which is to predict a broad range of futures and test the distribution of benefits to beneficiaries.



- If the committee were to choose the alternative text proposed, most likely there would not be a different outcome from what was in the Draft Final Regional Transmission Plan.
- After the discussion there was general consensus from the committee members with a comfort for moving forward with the 1,000 MW coal reduction scenario.
 - Amy Light asked for a vote of the Cost Allocation Committee members on the recommendation "to include the 1,000 MW scenario as written and as used in the last cycle in the committee's recommendation to the Steering Committee for inclusion in the study plan."
 - This recommendation was unanimously approved by both Class 1 & Class 2.
- OWET proposed to include a cost allocation scenario that looked at ocean power. John Leland indicated that Scenarios C & D have assumed wind. An alternative would be to include both land and offshore wind in the scenarios, if the committee decided to look at ocean power.
 - John Leland presented a WECC transmission map that showed the transmission lines on the coast. In order for an ocean power scenario to be considered, it would need to directly connect to an NTTG member.
 - At this time PacifiCorp has substations in Astoria, Clatsop, Crescent City, and Isthmus. These are all low voltage transmission lines and there is not a lot of opportunity as most are local service to serve loads.
 - NTTG would also need the capacity factors for offshore wind in its table if it is going to be modeled in a production cost model. Last year NTTG did not use production cost modeling only power flow.
 - There was discussion regarding the use of studying an ocean power scenario for cost allocation. There was a concern that a single scenario for ocean and wind would show benefits in the coastal area but would be zero benefit in the other scenarios which would lead to a rejection for a project being eligible for cost allocation.
 - The legislation requires that for any transmission planning done in Oregon, ocean power is considered adequately and consistent with FERC transmission requirements. The regulation does not require nor suggest it to be included as a scenario.
 - There are a number of ways resources come into the transmission planning process, proposed projects, data from the transmission providers plans and cost allocation scenarios is one of those ways to include a future scenario. The purpose of the Cost Allocation Committee is to work with alternatives and not do transmission planning as that is done through the Technical Workgroup.
 - It was felt that the issue was not developed enough to be included as a cost allocation scenario in the current cycle.
 - Henry Tilghman indicated that he had not heard anything from the discussion that he would disagree with and didn't have an opinion if the Cost Allocation Committee was the right committee to take on the scenario. His request which he asked during the Joint NTTG Planning and Cost Allocation Committee meeting was for NTTG to explain how it will be considering ocean energy in its process. His concern was that when the process was finished the consideration and analysis of the opportunities offered by offshore wind energy would be left unaddressed.
 - Amy Light reiterated the purpose of the Cost Allocation Committee was to select scenarios that are a reasonable prediction of the future and use those scenarios to test the distribution of benefits across the beneficiaries that result in the study plan. She also understood Henry Tilghman's request for more information on how NTTG conducts transmission planning and where the opportunities are to put forward ocean power as a potential resource to be included in the study process. As discussed during the Joint NTTG



Planning and Cost Allocation Committee meeting, this would be addressed at the upcoming NTTG Stakeholder meeting at the end of June.

- The committee further discussed the opportunities for an ocean power scenario to be studied in NTTG which would be through submitting a Public Policy request or a project in Quarter 1.
- Following the discussion the Cost Allocation Committee's **recommendation was not to include** an ocean power allocation scenario in the study plan.
- Prior to the committee taking a vote on the four proposed allocation scenarios for inclusion in the study plan, Larry Nordell asked if there was any updates on the appropriate number for solar from NorthWestern.
 - Kim McClafferty indicated that after a quick check, NorthWestern has 135 MW currently in contract.
 - It was asked if that number should be reflected for NorthWestern, and if so then it would show as a benefit for NorthWestern resulting in a higher cost assignment.
 - John Leland indicated that NorthWestern could submit the appropriate adjustments in their resource mix to NTTG in Quarter 5 and that cost allocation would not be done until Quarter 6.
 - Bela Vastag asked for clarification on the impact of the 135MW.
 - Larry Nordell indicated that the QF Rate is out of date and solar developers are coming in with very small projects that qualify for that rate. NorthWestern currently has a tariff on file that the Commission has not changed in the last filing and there currently is a new filing for relief. The 135 MW of solar in NorthWestern will show additional benefits to any transmission coming their direction.
 - John Leland indicated that as a result of the scenarios, if there are any improvements needed to accommodate a reliable system that would offset any potential benefits in terms of capital costs or losses. If there are no real capital costs in terms of transmission then it could be a benefit in losses or reserve margins.
 - Kim McClafferty indicated the contracts are coming in on distribution and not affecting transmission at this time.

Decision: Finalize 2016-2017 Cost Allocation Scenarios recommendation for Planning Committee review

- Amy Light asked for a vote of the committee by class to approve the Cost Allocation Committee recommendation of the four proposed scenarios for inclusion in the study plan as written in the discussion paper.
- Scenario A
 - Add 1,000 MW of NTTG load MW in the NTTG footprint for a high load scenario.
 Allocate the 1,000 MW to each Balancing Authority (BA) based on historical BA actual peak demand and projected 2026 Common Case BA peak demand.
 - This recommendation was unanimously approved by both Class 1 & Class 2.
- Scenario B
 - Subtract 1,000 MW of NTTG load in the NTTG footprint for a low load scenario.
 Allocate the 1,000 MW to each BA based on historical BA actual peak demand and projected 2026 Common Case BA peak demand.
 - This recommendation was unanimously approved by both Class 1 & Class 2.
- Scenario C
 - Remove 800 MW of new wind capacity from the 2026 generation resource data and replace with 800 MW of new solar capacity. The geographic location and accompanying quantity of the 2026 new wind capacity removed will be based on each TP's forecast share of NTTG's total new wind additions from 2016 to 2026. The



location and quantity of solar capacity added will be based on each BA's share of new solar resourced added between 2016 and 2026.

This recommendation was unanimously approved by both Class 1 & Class 2.

Scenario D

- Remove 1,000 MW of coal and presume units that are not retired in the 2026 can be reduced pro rata and replaced with equivalent amount of energy in equal shares of wind and solar in the appropriate geographic locations.
 - With an abstention from Joni Zenger, this recommendation was approved by both Class 1 & Class 2.
- Following the vote Clay MacArthur indicated Scenario D is assuming demand is inelastic, and was unsure how to decrease 1,000 MW of any resource and replace it with 1,000 MW of another resource and not increase the prices substantially. The scenario is assuming the loads will come in one for one or remain one for one which is an aggressive assumption.
 - John Leland agreed that it might be, but since NTTG does not do resource planning, there is not a coefficient of elasticity that could be applied. The committee is trying to test the transmission and could be over or under estimating.
 - Ron Schellberg also agreed, but from a study perspective there is a concern too
 many changes would be made to interoperate the results. He suggested it could be
 tied in with a load reduction scenario in order to parse out the affects.
 - Through further discussion it was indicated that NTTG would need to talk to the integrated resource planners to understand the elasticity and could be a change for the next cycle to not only change the location of resources but do another step by showing that the change would have an effect on elasticity and if a 10% load reduction is assumed it is either the customer left or is now solar.
 - Clay MacArthur indicated he felt that would be a scenario that is more likely, where the customer would flee in place and utilize another source of generation. He suggested that be considered in the next cycle.
- Amy Wachsnicht asked Clay MacArthur, that for this planning cycle he was in favor of Scenario D as proposed.
 - Clay MacArthur confirmed he was.
- Following the meeting John Leland will update the discussion paper based on the recommendations of the committee and work with Ron Schellberg to get the paper inserted into the study plan.

3. Assignments:

Item #	Assignment	Owner	Target Date	Status
1.				
2.				
3.				
4.				

Next Meeting: The next Northern Tier Cost Allocation Committee Meeting is scheduled for TBD

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Attendees:

NTTG Cost Allocation Committee Member Representatives						
Membership Class 1						
Amy Light, Portland General	Kim McClafferty, NorthWestern	Courtney Waites, Idaho Power				
Clay MacArthur, Deseret						

Membership Class 2					
Johanna Bell, Idaho PUC	Marci Norby, WY PSC	Bela Vastag, UT OFC CS			
Bob Decker, MT PSC	Larry Nordell, MT CC	Joni Zenger, UT Div. PU (Proxy)			
Belinda Kolb, WY OFC CA (Proxy)					

Other NTTG Members & Guests					
John Leland, NTTG	Henry Tilghman, OWET	Amy Wachsnicht, NTTG			
Ron Schellberg, NTTG					