

Description of Meeting:	NTTG Cost Allocation Committee
Meeting Date:	April 29, 2016
Meeting Notes Prepared By:	Amy Wachsnicht
Approved for Posting:	June 8, 2016

1. Agenda:

- a. Establish Quorum Requirements & Agenda Review
- b. Approval of April 22, 2016 Cost Allocation Committee Meeting Notes
- c. NTTG Cost Allocation Committee Chair and Vice Chair Elections
- d. 2016-2017 Cost Allocation Scenarios
 - i. Committee recommendation on 2016-2017 cost allocation scenarios to be included in NTTG's 2016-2017 Study Plan
- e. Round Table/Other Business

2. Discussions & Decisions:

Decision: Approval of April 22, 2016 Cost Allocation Meeting Notes

- With a motion by Ray Brush and second by Johanna Bell the April 22, 2016 Cost Allocation Committee meeting notes were approved for posting.
 - The following Member Representatives abstained from voting:
 - Ray Brush
 - Bela Vastag

Decision: NTTG Cost Allocation Committee Chair and Vice Chair Elections

- Ray Brush nominated Amy Light for the Chair of the Cost Allocation Committee. Hearing no other nominations, Amy Light was elected by acclamation.
- Marshall Empey nominated Courtney Waites for the Vice Chair of the Cost Allocation Committee. Hearing no other nominations, Courtney Waites was elected by acclamation.

Discussion: 2016-2017 Cost Allocation Scenarios

- During the April 22nd meeting John Leland walked through the allocation scenarios being proposed as well as the cost allocation process as laid out in the Attachment K.
- Amy Light reminded the committee the Attachment K language states that the Cost Allocation Committee will establish cost allocation scenarios in consultation with the Planning Committee and stakeholders. At this time the committee is at the first step of conceptualizing the allocation scenarios. Following that the Cost Allocation and Planning Committees will meet jointly in a public committee meeting open to all stakeholders to discuss the allocation scenarios as well as the 2016-2017 biennial study plan.
- Amy Light indicated there was not a vote today to adopt the allocation scenarios and opened the meeting up for discussion or proposals for the draft allocation scenarios being proposed.
- Jamie Austin indicated she submitted comments regarding the allocation scenarios and the process of selecting allocation scenarios. There is a concern with selecting the allocation scenarios in Quarter 2 before having qualified projects to apply the allocation scenarios to and suggested to repeat the process done last cycle where the allocation scenarios were selected after a project was identified.
 - Jaime Austin also indicated that the term scenarios is used to address sensitivities. When doing the analysis it is difficult to know what sensitivities to use unless there is a project to analyze. She suggested it was premature to select scenarios.
- Regarding the timing of selecting the allocation scenarios Amy Light commented that was something that is not debatable. From a planning perspective she understood the comment, but from a cost allocation perspective the Attachment K has language that states the Cost

Allocation Committee will select allocation scenarios in Quarters 1 & 2 that will be included in the draft study plan. There is not language in the Attachment K that states the Cost Allocation Committee will select allocation scenarios in Quarters 1 & 2 but only if there is a qualified project

- As for the discomfort with the process, Amy Light indicated that is something which needs to be taken up with the legal workgroup. Changing the current process is not something the committee can do since the tariff has been filed with and approved by FERC.
- Sharon Helms gave a point of clarification regarding the process in the last cycle. Sharon indicated Jaime Austin was correct in that the allocation scenarios were not selected in Quarters 1 & 2 as per the requirement of Attachment K. Last cycle was NTTG's first time through the Order 1000 process and as part of the lessons learned it was acknowledged that was an error on NTTG's part and needed to be corrected in this cycle.
- Through discussions it was noted that PacifiCorp's interpretation of the language in Attachment K differed in the sense that it can be suggested to wait until there is a qualified project to develop the allocation scenarios as done in the previous cycle.
 - Ms. Light stated that if PacifiCorp felt NTTG is choosing the wrong interpretation of Attachment K that was something their legal representative needs to take up with the legal workgroup.
- The task of the Cost Allocation Committee in this meeting is to discuss the allocation scenarios proposed and have a conversation around whether they are correct or need modification. Whether allocation scenarios should be deferred until after specific projects have been proposed is out of scope.
 - Scenarios are intended to represent potential futures of the transmission plan selected by the Planning Committee, and how robust the plan is to meet reliability needs for transmission in the alternate scenarios. The purpose is not to test the individual projects. It was suggested that tying the scenarios to a particular project could defeat the purpose of testing a wide range of potential futures which could narrow the scope of robustness testing of the distribution of benefits.
- There was also discussion regarding PacifiCorp's discomfort around the coal retirement scenario. Since EPA and the states do not have defined rules for 111-d, it was suggested that doing the analysis was premature. The other concern around the coal retirement scenario was NTTG's analysis results would not be a complete set of analysis to address the coal retirement.
 - Jamie Austin indicated in order for NTTG to do the complete analysis it would require the combination of both production cost modeling (PCM) with power flow and dynamic stability analysis. At this point the Planning Committee has not done dynamic analysis or PCM because it is not part of the approved NTTG tool set. Limiting the analysis to only running power flow cases could give misleading results.
- With respect to 111-d and the retirement of coal, there is a belief that some form of coal retirement will happen and it is felt one of the cost allocation scenarios should consider the possibility. Last cycle the coal retirement scenario was included with recognition that it could be a potential future similar to the other allocation scenarios.
 - John Leland indicated he arbitrarily suggested picking the coal retirement scenario with the 111(d) information as a bookend and the affected utilities would need to discuss and agree on the magnitude of the coal retirements. The suggestion was intended to set the stage for thinking and not to provide the answers.
 - Scenario analysis is a planning exercise to evaluate possible futures and includes the use of weighting factors to assess the robustness of the draft transmission plan that is selected Quarter 4.
- Sharon Helms asked the committee if there were other member representatives who shared the same concerns as PacifiCorp as it would be beneficial to understand if other members shared PacifiCorp's concerns or if PacifiCorp would need to take the issue off line with legal.
 - Ray Brush indicated that from NorthWestern's point of view NTTG should look at a reduction in coal resources even absent 111-d. He also indicated that Washington

passed legislation laws for Puget Sound Energy to put aside money to close down Colstrip 1 & 2. In northern Oregon there is a push to reduce coal and Portland General is converting Boardman to a natural gas plant as part of the effort. There also appears to be pressure from environmental groups to move towards renewables. A future with less coal is a real possibility, one in which NTTG should look at.

- Bela Vastag commented that in PacifiCorp's 2015 IRP there were scenarios that resulted in early retirements of coal plants.
- Amy Light indicated that if NTTG were to put out a draft study plan that ignored coal reduction as a potential future it could get push back. Amy Light also indicated there should be discussions about refining the scenario, however leaving out a scenario that looks at the reduction of coal seems incorrect.
- Jamie Austin reiterated concerns with NTTG's limited tools and resources to do the coal reduction analysis. Unless there is some type of process that is consistent with the IRP's about what would be retired next and then run analysis to come up with how much should be retired and where through PCM. Once identified, NTTG would then need to run the dynamic stability analysis, inertia and frequency response which is a big task and NTTG is not set up to do that. Jamie Austin recognized NTTG has been trailblazers and putting the tools in place to do that, however it has not been completed and is concerned of having enough resources in place to have a complete analysis.
- The Cost Allocation Committee's task is to establish scenarios that set a range of future load levels. Once that is done, it is turned over to the Planning Committee with the expertise of the Technical Workgroup transmission planners to provide the expertise to determine how much is taken off where and replaced with certain wind and solar. One of the issues from last cycle was there was so much renewable coming in, it was hard to find good places to consider where to install it, which is a discussion planning would need to have with cost allocation.

Discussion: Walk Through of the Cost Allocation Study Plan

- After discussion it was suggested that John Leland walk through the Cost Allocation Study Plan which will be imbedded within the 2016-2017 NTTG Study Plan and includes the proposed allocation scenarios.
- The introduction sets the stage for the cost allocation portion of the study plan. The Allocation scenarios are designed to examine those parameters that will likely affect the transmission plan and not the projects themselves. The analysis will determine the benefits of the Regional Transmission Plan and the four allocation scenarios and costs will be allocated if the benefits outweigh the costs of the project.
 - Clarification was asked if the allocation scenarios were to determine the benefits and beneficiaries.
 - John Leland indicated it was and explained the workbook developed last cycle had taken the difference between the Initial Regional Transmission Plan benefits and the Draft Regional Transmission Plan benefits. NTTG would also compute the difference from the Initial Regional Transmission Plan and the four allocation scenarios that will result in a total of five sets of differences.
 - Sharon Helms suggested the language to be changed to include that additional explanation.
- The Pre-Qualification for Cost Allocation is a new section which was not included in last cycle's study plan. John Leland explained that he felt it gave more background for the cost allocation process.
- The Allocation Scenarios Change Cases section is to explain that, for example, in Quarter 4 the Planning Committee will come up with the Draft Regional Transmission Plan benefits and beneficiaries. Assuming there are no changes resulting from the Quarter 5 data submissions Quarter 4 analysis would be the basis to test the robustness of the plan. In that instance, the

NTTG Technical Work Group would not go back to the original roll up plan (i.e., the Initial Regional Transmission Plan) but use the Quarter 4 computed the differences from whatever uncommitted projects that are selected in the Draft Regional Transmission Plan for the allocation scenarios.

- Sharon Helms suggested the current language did not adequately explain the process and recommended additional modifications to the language.
- The Allocation Scenarios section describes the scenarios being proposed. John Leland indicated the numbers highlighted in yellow were what was used in last cycle, and there could be an adjustment to them should the committee decide to do so. John Leland also indicated that he had tried to expand in the description of how NTTG would do the scenarios and did not include specific actual years leaving it open for future development through the Cost Allocation Committee.
- Load Allocation Scenarios A & B were adding and subtracting 1,000 MW of load in the NTTG footprint.
 - Larry Nordell inquired about having an unbalanced system due to adding and subtracting load.
 - John Leland indicated last cycle NTTG was able to utilize the existing generation in the power flow studies to rebalance resource generation to load. If NTTG is able to use the round trip process back to PCM, it is possible NTTG could have more information to use from the generation dispatch. If not, then NTTG would need to rely on the expertise of the Technical Workgroup to re-dispatch.
- Scenarios C & D were resource location/type allocation scenarios.
 - Scenario C is a solar replacement for wind. 800 MW was selected based on what was projected in last cycles wind and then cut in half. John Leland walked through an example of what was done in the last cycle and would be updated with 2026 data. The scenario was a MW for MW replacement and had ignored the energy value that might be different between wind and solar production.
 - Scenario D involves removing 1,000 MW of coal and replacing it with an equivalent amount of energy in equal shares of 500 average MW (e.g., energy) each of wind and solar in the appropriate geographic locations. The reduction was based on a pro-rata share.
 - The 1,000 MW was based on the agreement of the Cost Allocation Committee last cycle. John Leland inquired if the committee wanted to leave it the same.
- Jamie Austin asked for clarification regarding Scenario D and what the criteria was for selecting the plants for coal reduction.
 - John Leland explained last cycle the committee did not make a determination of what units to remove. They (CAC) identified the MW amount of available coal in the various transmission providers systems to reduce. With that information, the committee reduced the total coal down by 1,000 MW on a pro-rata basis. If there is a better way for doing that, the committee is open to suggestions.
- Jamie Austin indicated there needed to be some criteria for allocating the reduction and concerns with the value of proceeding with the analysis based on a pro-rata basis. There should be logic such as plant age, heat rate, and efficiency of the plant it omits.
 - John Leland indicated that the guidance would come from the expertise of the Technical Workgroup to suggest the units and how they should be allocated based on the Cost Allocation Committee's suggestion. Without information from the technical side the committee did what they could to provide recognition of what potential MW reduction could happen in the future. While there may be a better way, it does not mean the results are invalid only driven by the assumptions. If the committee can make better assumptions there could possibly be a better understanding.

- Jamie Austin re-iterated concerns with establishing broad assumptions without more definition from 111-d, the value of the scenario and indicated that PacifiCorp would not collaborate on the analysis because it does not concur that it represents a likely future.
- With regards to PacifiCorp's concern with the process, Amy Light indicated the pathway forward for discussing changes to the process is on the legal side. In reference to PacifiCorp's concern on the specific scenario, the path forward would be to suggest an alternate scenario and have discussions in this meeting as well as the upcoming Joint NTTG Planning and Cost Allocation Committee meeting.
- Jamie Austin proposed to postpone the coal retirement scenario until there is more definition around 111-d or NTTG has a project selected.
 - Amy Light explained eliminating the particular coal reduction scenario is something the Cost Allocation Committee could vote on in this meeting, however deferring the section of scenarios until there is a project is a process related concern and needed to be taken up with the legal workgroup as that is not what is stated in the Attachment K.
- Amy Light asked for a motion that the Cost Allocation Committee eliminate any coal reduction scenario from any further discussion as an allocation scenario. A motion by Ray Brush to approve keeping the coal reduction scenarios in the Cost Allocation Study Plan was seconded by Johanna Bell.
 - The vote of the individual Member Representatives is provided below:
 - Class 1 Member Representatives
 - Amy Light, Portland General – Yay
 - Jamie Austin, PacifiCorp – Nay
 - Marshall Empey, UAMPS – Yay
 - Nathan Powell, Deseret – Yay
 - Ray Brush, NorthWestern – Yay
 - Courtney Waites – Yay
 - Class 2 Member Representatives
 - Johanna Bell, Idaho PUC – Yay
 - Bob Decker, Montana PSC – Yay
 - Chris Leger, Wyoming OFC CA – Yay
 - Marci Norby, Wyoming PSC – Yay
 - Larry Nordell, Montana CC – Yay
 - Bela Vastag, Utah OFC SC – Yay
 - Shauna Benvegnu-Springer, Utah Div. PU – No longer on the call.
 - With the majority of the committee in favor of the motion, the coal reduction scenarios will be included in the study plan for discussion at the Joint NTTG Planning and Cost Allocation Committee meeting.
- Within the Power Flow Analysis section of the study plan, John Leland indicated he added language that suggested the Planning Committee do more than an N-0 study on the allocation scenarios and include a limited N-1. He also suggested if the studies identify a change any future uncommitted projects the Planning Committee should look at that and see if the future transmission line is needed given the assumptions of the allocation scenarios. If it is determined not needed based on the allocation scenario assumptions, he suggested that the uncommitted project be deferred beyond the 10-year planning horizon.
 - The reasoning behind the suggestion is in the last cycle the same capital costs from uncommitted projects in the plan were applied to all four allocation scenarios as well as the Initial Regional Transmission Plan and, as such, there were no changes in the transmission topology or capital costs. Deferring the project could provide more variance.
 - The feeling of the committee was to leave the language and highlight for further discussion at the Joint NTTG Planning and Cost Allocation Committee meeting.

- In the Benefits and Beneficiary Analysis section the proposal is to use the same metrics as the Planning Committee (Capital Costs, Losses and Reserves).
 - Within the section is a reference to Appendix J Cost Allocation Workbook so that anyone who was not familiar with what NTTG did in the last cycle could look to that and get more information.
 - John Leland asked the committee if a hot link to the workbook should be added for quick reference. At this time the request will be forwarded to the Joint NTTG Planning and Cost Allocation Committee meeting for further discussion.
- John Leland indicated he would make the suggested edits discussed during this meeting and send out an updated study plan to the committee for further review and edits.
 - Edits are requested to be to John Leland by the end of the day Monday, May 2nd.

Discussion: Round Table/Other Business

- The currently scheduled May 11th Planning Committee meeting has been expanded to a Joint NTTG Planning and Cost Allocation Committee meeting.
 - The purpose of the meeting is to have in depth discussion and walk through of the study plan with stakeholders.
- On May 13th the study plan will be sent out for stakeholder review and comments. Comments are submitted to info@nttg.biz. Any comments received will be put into NTTG's comment form and assigned to the relevant committees (Planning or Cost Allocation). The committees will then respond to the stakeholder comments and make any necessary changes to the study plan.
- The next NTTG stakeholder meeting is scheduled for June 28th where NTTG will walk through the study plan prior to submitting it to the NTTG Steering Committee for their approval at their July 15th meeting.
 - Prior to the Steering Committee approving the study plan, the Planning and Cost Allocation Committees will meet to approve for recommendation to send the study plan to the Steering Committee for approval.
- On behalf of the Cost Allocation Committee members Sharon Helms thanked Amy Light and Courtney Waites for accepting the nominations for Chair and Vice Chair.
- Sharon Helms indicated that a possible approval item on the agenda for the Joint NTTG Planning and Cost Allocation Committee meeting was the adoption of the Interregional NTTG Order 1000 Guidelines.
 - The guidelines were reviewed at the December Steering Committee meeting where NTTG was seeking approval from the Steering Committee to direct the Cost Allocation and Planning Committee to be responsible for implementation.
 - During the discussion it was determined there needed to be further review of the procedures. The transmission providers did a comprehensive review of the document and it now has been approved.
 - The guidelines will be distributed to the Planning and Cost Allocation Committee members for review prior to seeking to adopt the procedures.
- Bela Vastag inquired about what happens to the unsponsored project identified in the last plan.
 - John Leland indicated it is automatically a part of the Initial Regional Transmission Plan and is in the process of being reviewed along with what was submitted in Quarter 1. Since the unsponsored project is uncommitted it could be replaced until it is committed.
- Sharon Helms inquired if the study plan denotes what projects are uncommitted and up for reconsideration.
 - John Leland indicated the study plan includes a table of all projects that are uncommitted as well as a separate table for projects submitted in Quarter 1 that serve local loads.



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.

- Dial: **(626) 425-3121**
- Access Code: **432-608-245**

Attendees:

NTTG Cost Allocation Committee Member Representatives

Membership Class 1		
Jamie Austin, PacifiCorp	Marshall Empey, UAMPS	Nathan Powell (Proxy), Deseret
Ray Brush (Proxy), NorthWestern	Amy Light, Portland General	Courtney Waites, Idaho Power

Membership Class 2		
Johanna Bell, Idaho PUC	Chris Leger, WY OFC CA (Proxy)	Bela Vastag, UT OFC CS
Shauna Benevegnu-Springer, UT Div. PU (Proxy)	Marci Norby, WY PSC	
Bob Decker, MT PSC	Larry Nordell, MT CC	

Other NTTG Members & Guests

Sharon Helms, NTTG	Ron Schellberg, NTTG	Amy Wachsnicht, NTTG
John Leland, NTTG	Jamie Stamatson, MT CC	