

<b>Description of Meeting:</b>	<b>NTTG Planning Committee</b>
<b>Meeting Date:</b>	<b>June 10, 2015</b>
<b>Meeting Notes Prepared By:</b>	<b>Amy Wachsnicht</b>
<b>Approved for Posting:</b>	<b>August 12, 2015</b>

**1. Agenda:**

- a. Establish Quorum and Agenda Review
- b. Approve May 13, 2015 Planning Committee Meeting Notes
- c. NTTG Technical Workgroup Q5/Q6 Update
- d. Draft Final Regional Transmission Plan Report Outline
- e. Round Table/Other Business

**2. Discussions & Decisions:**

**Decision: Approve May 13, 2015 Planning Committee Meeting Notes**

- It was noted that quorum requirements had been met in Class 1 and Class 3 but not met in Class 2.
- With a motion by Craig Quist and seconded by Don Johnson, the May 13<sup>th</sup> meeting notes were unanimously approved for posting in Class 1 & Class 3.

**Discussion: NTTG Technical Workgroup Q5/Q6 Update**

- Craig Quist gave a presentation discussing what was accomplished in Quarters 3 & 4 and work done in Quarters 5 & 6.
- The Draft Regional Transmission Plan (DRTP) was completed on December 31, 2014. The Technical Workgroup (TWG) used the TEPPC PCM base case.
- In using the TEPPC case it was determined that the TWG did not consider the transmission needs and available transmission capacities. This led to the Study Plan being revised to allow for additional studies needing to be performed with updated load and resource data submitted in Quarter 5. The Revised Study Plan was approved by the Steering Committee on March 9, 2015.
- The Draft Final Regional Transmission Plan (DFRTP) will be completed by June 30, 2015.
- Updated Received in Quarter 5:
  - No changes from the Quarter 1 submittals.
    - The TWG started the additional studies in January 2015 which showed that some of the load and resources, specifically for PacifiCorp were off significantly and needed to be adjusted.
  - Almost 1000 MW of new resources were submitted at the end of Quarter 5
    - It was determined that due to the timing the TWG did not have enough time to do an in-depth study and instead would perform a high-level analysis of the summer case only. A more in-depth study will be done in the next cycle.
  - The New Resources Include:
    - 431 MW Solar in Idaho, Oregon
    - 10 MW wind (OR),
    - 10 MW hydro in ID, MT
    - 64 MW retirement of coal (Boardman)
    - 600 MW Nuclear in Butte County, Idaho
  - Boardman to Hemmingway project updates:
    - In service date changed to 2021
    - Cost of the project increased to \$1.14 billion.
  - New Transmission Service Updates were received from Idaho Power

- In parallel to the DRTP, the TWG particularly NorthWestern Energy, completed a Public Policy Consideration analysis which was completed on May 13, 2015.
  - This report will be included in the DFRTTP report.
- Updated Power flow Studies:
  - Updated the load and resources for PACE BAAs. Those results showed that the DRTP Alternative Project, the Aeolus-Anticline-Populus 500 kV line was unacceptable because of N-0 and N-1 performance violations in Wyoming.
  - The TWG evaluated a new change case with an Alternative Project consisting of:
    - A new 230 kV line from Windstar to Aeolus and reinforcements to underlying 230 kV system in Wyoming
    - A new 500 kV line from Aeolus to Anticline to Populus in southern Idaho; and
    - A new 500 kV line from Aeolus to a new substation near Mona, Utah (Clover)
  - With these changes it met the performance criteria.
- The transmission needs and capabilities analysis showed that the DRTP did not meet the transmission requirements of Idaho Power.
  - Out of the study process the DFRTTP would include the Boardman to Hemmingway project and the new Alternative Project identified.
- Once the transmission project was identified the TWG created scenario cases to be used for cost allocation and for robustness analysis:
  - Scenario A: +1000 MW of NTTG load
  - Scenario B: - 1000 MW of NTTG load
  - Scenario C: replace 800 MW of wind w/ solar
  - Scenario D: replace energy from 1000 MW of coal with wind and solar

#### **Discussion: Draft Final Regional Transmission Plan Outline**

- Gil Coulam proposed to draft the DFRTTP as a separate document from the DRTP back in December, as the study efforts were different and will include the cost allocation metrics and study efforts as presented by Craig Quist earlier.
  - The DRTP could be appended to the DFRTTP.
- Gil walked through the outline of the Table of Contents for the DFRTTP:
  - Executive summary
  - Introduction
  - Q5 data submittals
  - Q5, Q6 additional studies with updated L&R
  - Transmission needs and available capacity analysis
  - Projects selected into the DFRTTP
  - Public Policy Consideration study report
  - Cost allocation scenario base cases
  - Robustness analysis
  - Loss Analysis
  - Economic metrics from scenario cases
  - Cost allocation planning spreadsheet
  - Conclusions
- A question was asked if the conclusion would include the lessons learned.
  - It is anticipated that the lessons learned would stay in the DRTP and the DFRTTP could include what was learned in Quarter 5 and 6.
- It was noted that the Study Plan and Revised Study Plan were not included in the Table of Contents and it was asked if that would be included.
  - Gil indicated that was a good suggestion and would add them to the DFRTTP.
- The Attachment K states that the Planning and Cost Allocation Committees will identify the models utilized and provide the data and calculations to requesting stakeholders unless precluded by software licensing.

- Sharon Helms informed the committee that the reason for including the DF RTP outline in the agenda was to make sure there was support from the Planning Committee in the lay out. The intent is to have the DF RTP posted by June 25<sup>th</sup> giving stakeholders time to review prior to the June 30<sup>th</sup> Stakeholder Meeting.
- It was suggested that the focus of the DF RTP should be on the regional transmission plan and a section could be added for lessons learned as there was feedback from a stakeholder that they appreciated the lessons learned in the DRTP.
- **Question:** Fred Heutte – On the new resource additions, it unclear on how that is being handled or what the plans are on that.
  - **Answer:** Craig Quist – Some of this has not hit any of the queues of any of the transmission providers. This was submitted through the NTTG study process.
    - Once we had our DF RTP the TWG went into the models and running contingencies.
    - When the TWG started doing the revised studies in Quarter 5 we already had the Quarter 1 load and resources from PacifiCorp that could be put in, instead of the TEPPC data. The new resources didn't come in until the end of Quarter 5 and the TWG determined there was not enough time to do an in depth study, but a high level analysis with the summer case to get an indication on how the resources would affect the system.
      - Preliminary results show that for the new solar resources for Idaho, the system handles that pretty well. In the case of the new nuclear plant going from Idaho to Utah there is overloading on the local facilities in Idaho.
    - The Attachment K states that the Planning Committee will look over the data that comes in in Quarter 5 and determines if there is enough time to go through the complete analysis without delaying the process. In this case it was found that these resources would delay the production of the DF RTP and so it was determined the TWG would do a more rigorous evaluation next cycle and just a high level study this cycle
- **Question:** Fred Heutte – On the slide that talks about the changes on the East side that had new transmission upgrades, I remember the segment from East side going to Populous but I don't remember the one going to Mona and wondering how that showed up and other alternatives you may have considered
  - **Answer:** Gil Coulam - In December with the DRTP which had the TEPPC load and resources we identified an Alternative Project from Aeolus to Populous as being sufficient to get reliability results.
    - When we did the updated additional studies in Quarter 5 & 6 the TWG found that line was not adequate to avoid having overloads and performance violations in Wyoming because of the additional resource moving power to Utah loads.
    - That is why we looked at a new Alternative Project and needed more facilities, like Windstar to Aeolus. The case found there was significant amount of power going West of Aeolus, and with the loss of the 500 kV line from Aeolus to Populus there is overloading of the underlying facilities in Wyoming. Going from Wyoming to Colorado there needed to be another a leg of transmission to be able to handle that power for those outages. It was decided a larger line was need and the TWG looked at Aeolus to Mona.
    - The TWG didn't spend a lot of time going through to see if there were other additions to be made but it looked like the most least cost project that would handle the power, considering it was trying to get from Wyoming to Utah
- **Comment:** Fred Heutte – This is my ongoing concern that the TWG is closed, but I think the back and forth and consideration is important for us non transmission people to give input where appropriate. We can go to the Planning Committee and Draft Transmission Plan for

comment when it's available, but I think we are missing opportunities potentially to understand the alternatives that are proposed and offer other ideas. It makes me wonder if there are any implications on who would build such lines and from the consumer perspective, we are talking about a lot of costs to build the projects and I have concerns about that. I appreciate the explanations and it will help when the next document is published.

- **Comment:** Dave Angell – These projects are unsponsored projects and basically sets up for the next cycle for parties to come up with better solutions and sponsor those solutions.
- **Comment:** Fred Heutte – This underscores the need to strengthen the Eastern side of the system.
- **Question:** Bill Hosie – I heard some discussion about additional wind resources in Wyoming near Windstar but I don't see them in the slide of new resources.
  - **Answer:** Gil Coulam – We made that separate from the new Quarter 5 resources slide, which included only the resources submitted in Quarter 5. The wind resources were submitted by PacifiCorp in Quarter 1. We used the TEPPC case for the first 4 quarters thinking it was the best picture of what the system would look like in 2024. The TEPPC case turned out not to be the best picture because it did not include some of the wind resources and loads of PacifiCorp from the Quarter 1 submittal. This in turn did not show the right project to meet the regional needs.
- **Question:** Bill Hosie – The first set of the studies didn't include the new wind or as much wind as now, wouldn't that be on the list of what has changed to show us what has changed to cause the new conclusions?
  - **Answer:** Gil Coulam – We should have included a slide on that, and did have that at the last meeting showing the difference in load forecast. Maybe that would be a type of slide we should develop.
  - **Comment:** Dave Angell – That would be appropriate for the stakeholder meeting. As we document the DFRTP, we will have what was submitted in Quarter 1 and will have some discussions of the DRTP, what was modeled and developed, then the changes that ensued to actually get the load and resources more appropriate for our footprint.
- **Question:** Bill Hosie – Around the certainty around the nuclear plant, this has been talked about for many years. Will you have a transmission scenario when this project, should this project not go ahead and what the revised plan would be if it does go ahead?
  - **Answer:** Gil Coulam – The Regional Transmission Plan will have a base set of assumptions including the wind. I don't believe that has the Quarter 5 solar and nuclear. Those were sensitivities we are in the process of running to inform the plan for the next cycle because we anticipate those will be submitted again in Quarter 1 of the next cycle.
    - There will be some additional information to help stakeholders understand that we didn't have the time to dig into it but from an initial look. If they are submitted in the next cycle we will have to deal with that.
- **Question:** Bill Hosie – On slide 6, when you talk about transmission service updates, are those updates in transmission service requirements associated with the incremental load put in, or the original load and generation forecast?
  - **Answer:** Dave Angell – With the original load and generation forecast it was mostly tuning up. With regard to Idaho transmission service requirement, in the Quarter 5 data, we move the submission around so it was clear what the transmission need was, submitted the Boardman to Hemmingway and the transmission service requirement was imbedded in one of the tabs, but we made much clearer in this submission
    - BPA also submitted data to Idaho that were included in the submission as well.
- **Question:** Bill Hosie – Why are PacifiCorp's revised transmission service requirements not in here or not in the list?

- **Answer:** Dave Angell - There were no changes to that from my understanding. They did remove something in Quarter 5 that was in Quarter 1, but it was to clarify that they had no specific transmission service requirements to be studied, and the existing transmission service requirements they have today would be studied.
- **Question:** Bill Hosie – If there is a line from Anticline to Mona, wouldn't that be a new transmission service requirement for PacifiCorp?
  - **Answer:** Gil Coulam - That particular line was identified through our reliability study process which identified that need based on the load and resources, it wasn't triggered by an identified transmission service requirement.
  - **Comment:** Dave Angell - This speaks to our tradition to study reliability analysis and we had not paid attention to transmission contracts. This was the modification we made in our study process to consider that. If PacifiCorp, in future cycles identifies new transmission service requirement by their integrated resource planning, those would be input.
- **Question:** Bill Hosie – If no one has any service requirements for that, would that become a challenge for the Cost Allocation Committee?
  - **Answer:** Dave Angell – Any project that requires cost allocation, a sponsored project that the sponsor has been qualified, will receive cost allocation based on the results of the transmission plan and the cost allocation study. If it is purely a reliability project, those costs get driven to a particular place and there is a transmission service need that has been submitted may drive costs in that particular way as well.
- **Question:** Bill Hosie – Is there simple way to explain, what the formula would be to calculate the costs or should I sign into the Cost Allocation Committee meetings to understand that?
  - **Answer:** Dave Angell – The TWG is looking at identifying the beneficiaries for any of the projects where cost allocation is identified. We are developing that process because this is our first time through Order 1000. Right now, my understanding is that we are looking to allocating towards those generation resources that benefit from a particular transmission project. That is still in process and at the end of this month we will have a clearer picture and so will the stakeholders.
- The TWG will continue to work on the outline of the DF RTP report with the intent of having the report posted for stakeholders by June 25<sup>th</sup>.
  - It is proposed the comment period of the DF RTP will be July 6<sup>th</sup> through July 24<sup>th</sup>.
- Dave Angell went back to Fred Heutte's comment about being on the TWG and not being a technical planner with the abilities to run the studies. The focus of the TWG is to run the studies and the focus of the Planning Committee is to provide guidance to them. In the next cycles there will be better opportunities for providing information as well as identifying alternative projects.

#### **Discussion: Round Table/Other Business**

- The next NTTG Planning Committee meeting is scheduled for July 8<sup>th</sup>. It was noted that this conflicted with the NTTG Steering Committee meeting scheduled the same day.
  - Dave Angell suggested to cancel the July 8<sup>th</sup> Planning Committee meeting and have the next meeting as scheduled on August 12<sup>th</sup> since there will be little activity due to the June 30<sup>th</sup> Stakeholder Meeting. This would also give the committee time to receive, review and draft responses to the stakeholder comments on the DF RTP.

### **3. Assignments:**

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



4.				
----	--	--	--	--

**Next Meeting:** The next Northern Tier Planning Committee Meeting is scheduled for August 12<sup>th</sup> at 1PM Pacific.

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

**Attendees:**

**NTTG Planning Committee Member Representatives**

Membership Class 1		
Dave Angell, Chair, Idaho Power	Don Johnson, Portland General	Craig Quist, PacifiCorp
Bill Hosie, TransCanada	Kim McClafferty, NorthWestern	

**Membership Class 2**

Rhett Hurless, Absaroka Energy		
--------------------------------	--	--

**Membership Class 3**

John Chatburn, ID OER	Jerry Maio, UT PSC	David Walker, WY PSC
Bob Decker, MT PSC		

**Other NTTG Members & Guests**

Jamie Austin, PacifiCorp	John Leland, NTTG	Henry Tilgham, Tilgham Associates
Gil Coulam, NTTG	Bill Pascoe, Absaroka Energy	Amy Wachsnicht, NTTG
Sharon Helms, NTTG	Kishore Patel, PacifiCorp	Matt Wiggs, ID OER
Fred Heutte, NVEC		