

Description of Meeting:	NTTG Quarter 5 Stakeholder Meeting
Meeting Date:	April 18, 2019
Meeting Notes Prepared By:	Amy Wachsnicht
Approved for Posting:	July 29, 2019

Agenda:

- Welcome, Agenda Review and Meeting Objectives
- NTTG 2018-2019 Draft Regional Transmission Plan Development Update
- Quarter 5 Technical Workgroup Update
- Neighboring Planning Region Updates
- Upcoming Opportunities for Stakeholder Input
- Stakeholder Comments/Round Table

Welcome, Agenda Review and Meeting Objectives

- Sharon Helms welcomed attendees and walked through the 2018-2019 Planning Milestones. NTTG just finished Quarter 5 which included stakeholder review and comments on the Draft Regional Transmission Plan (DRTP), data submittal updates and the opening of the Economic Study Request Window.

**NTTG 2018-2019 Draft Regional Transmission Plan Development Update – Plan Overview
(Presented by Chelsea Loomis)**

- The goal of the Regional Transmission Plan (RTP) evaluation is to select the more efficient or cost-effective set of projects that meets the needs of the NTTG footprint. Regional projects are selected through reliability analysis and benefit determination. The analysis is performed on the Initial Regional Transmission Plan (IRTP), the IRTP without uncommitted projects and evaluation of Alternative Projects.
- Quarter 1 load submittals showed an overall increase of 486 MW between 2028 and 2026. Resource submittals included large amounts of coal retirements as well as an increase in gas, wind and solar within the NTTG footprint.
 - A few of the [coal retirement dates are set to December 2028](#) (at the end of the NTTG planning horizon) and will be modeled online, however, a sensitivity case will be ran in order to capture the aspects of the coal unit being retired going into the next planning cycle.
- In Quarter 1 NTTG received a number of transmission additions as well as [four Interregional Transmission Projects](#).
- Local transmission needs driven by Public Policy Requirements (PPR), are included in NTTG's RTP. No additional needs driven by PPR were submitted by stakeholders.
- The [change case matrix](#) was developed through the Technical Workgroup (TWG) and went through several iterations. The left of the matrix lists the topology of the system whereas the right shows the stressed conditions that the TWG ran the particular topology against.
- Based on the reliability and economic considerations, the more efficient or cost effective draft plan is the [prior Regional Transmission Plan \(pRTP\)](#).
- NTTG used the entire WECC model to monitor the impacts on neighboring regions and no negative impacts to other regions were identified.
- The technical studies indicated the DRTP would support each of the ITPs, however none of the ITPs satisfied an NTTG regional need and therefore were not selected into the DRTP.
- None of the projects selected into the DRTP requested cost allocation and therefore costs were not allocated.



NTTG 2018-2019 Draft Regional Transmission Plan Development Update – Stakeholder Comments & NTTG’s Response (Presented by Chelsea Loomis)

- NTTG received one set of comments on the Draft Regional Transmission Plan (DRTP), from the [“Joint Parties”](#). The comments were reviewed, responded to and are posted on the NTTG website.
 - Chelsea Loomis walked through each of the comments, NTTG’s response and the changes in the DRTP as a result of the comments received.
 - One of the biggest changes to the DRTP was [adding a Preface to the report retaining the assumptions and caveat language](#) from the 2016-2017 Regional Transmission Plan.
- **Question:** *Bob Smith (TransCanyon)* – These responses, will they be included in the draft plan or are they just responses in the matrix?
- **Answer:** *Chelsea Loomis (NorthWestern)* – Right now, they are just responses in the draft matrix. Where we indicate in the response a change to the draft plan, we are clear in indicating that in the matrix.
 - **Answer:** *Sharon Helms (NTTG)* – One addendum to that, these responses are also publicly available on the NTTG website.
- **Question:** *Nadeen Hanhan (OR PUC)* – When were the comments submitted and how long did it take to get into the report, or considered them? I am trying to get a sense of timeline.
- **Answer:** *Chelsea Loomis (NorthWestern)* – They were submitted back in January?
 - **Answer:** *Sharon Helms (NTTG)* – The Q5 comment window was in January and in February the Technical Workgroup developed responses that were approved by the Planning Committee on February 13th.

Quarter 5 Technical Workgroup Update – Public Policy Consideration Study (Presented by Jared Ellsworth)

- At the beginning of each cycle, NTTG offers stakeholders the opportunity to submit a Public Policy Consideration (PPC) study request. If submitted, these PPC study requests are informational only and may inform the RTP but does not result in inclusion of additional transmission projects.
 - NTTG received one study request from the [“Joint Parties”](#) which was approved on May 9, 2018 by the NTTG Planning Committee with the study plan for analysis approved by the Steering Committee on July 10, 2018.
 - The TWG studied three stressed conditions, High Wyoming Wind, High Southern Idaho Export and High Southern Idaho Import with Jim Bridger 1 and Naughton 1 & 2 modeled as off-line. The Southern Idaho Export subsequently was dropped from the DRTP analysis and [replaced with two additional cases](#).
 - With regards to make-up power for Bridger #1, Idaho Power’s IRP indicates Coulee and market purchases in the Pacific Northwest. PacifiCorp’s IRP, however, does not specify what market purchases will make-up their portion of Bridger #1. Therefore, the TWG came up with [three bracketing scenarios of make-up power](#).
 - Between the four stressed cases and three scenarios, the TWG created [12 cases to analyze against several configurations](#). Overall, the results of the studies showed that Gateway West, Gateway South and Populus to Hemingway are needed to resolve issues in the cases.
 - The PPC Study Plan called for [reviewing several segments](#). Following the analysis, the TWG made their observations and gave reasoning why these segments are necessary in the DRTP.
- **Question:** *Nadeen Hanhan (OR PUC)* – When you say “Public Policy Consideration” can you please explain, who submitted those and how you chose those?
- **Answer:** *Jared Ellsworth (Idaho Power)* – Let’s start with what is a Public Policy Requirement study. We generally include Public Policy Requirements in our studies, and that would be

like RPS goals and things like that. Those are apart of the draft plan. However, a Public Policy Consideration is “what could happen”. What if a new RPS was passed, what would happen? Or in this case, if additional coal retirements were mandated or came early? That’s why we are looking at this.

- Here is a list of the [Joint Parties](#) who submitted the request and I think one of their goals in submitting this request is that there is a lot of coal retirements that are planned and we are building a lot of transmission out of Wyoming. They wanted to know “Well, if you’re building all of this transmission out of Wyoming and you’re assuming all of the coal is still there. What if the coal goes away? Do you still need the transmission facilities out of Wyoming?” This was the question we were hoping to answer. One of the things we are showing [here \(Slide 29\)](#) is the amount of wind being added in Wyoming is more than the actual coal being retired and if they retire more coal they are probably going to be adding more wind and that is facilitating the need for this transmission construction.

➤ **Question:** *Nadeen Hanhan (OR PUC)* – Wind behaves differently than coal. From my understanding, there are certain services coal provides, depending on the coal plan. If coal’s retiring and the initial plan was built to have coal in the consideration, how does that change with wind coming online? Is that part of what you consider?

- **Answer:** *Jared Ellsworth (Idaho Power)* – We don’t get really into the local issues there. Jamie (Austin) can talk about some of the local issues that show up in Wyoming when we start removing all this coal and adding in a variable amount of wind, but we do look at replacing the resource with wind. We look at the submittal put out by PacifiCorp and what their plans are in the regions and we look at how to transfer that power. Of course, it is variable, and we will see a lot of hours where it’s really high in Wyoming compared to coal where you wouldn’t have that amount of variability.
- **Comment:** *Jamie Austin (PacifiCorp)* – NTTG studies, has not done any stability or loss of inertia type of analysis.
- **Comment:** *Kishore Patel (PacifiCorp)* – To add to that, when talking about voltage, that is a separate process for each of the utilities to get TPL studies. When they do their TPL studies at the local level, they should see a need popping up at the local level so that with all these retirements coming in, we can fill that void.
- **Comment:** *Jared Ellsworth (Idaho Power)* – What is really nice about the way we do this, is that we did model a lot of coal retirements, all of Dave Johnson and Naughton and Valmy and then we modeled this wind as well in the PCM, so we get 8,760 hours of dispatches including the wind variability and then selected a few hours to study specifically in a power flow case to see how the transmission system performs.

Quarter 5 Technical Workgroup Update – Updated Data Submittals (Presented by Jared Ellsworth)

- Quarter 5 provides an opportunity for the transmission providers and stakeholders to submit any material changes to their Quarter 1 submittals that may impact the DRTP.
 - Updates were received from NorthWestern, Portland General, Idaho Power and MATL. PacifiCorp indicated no material changes to their Quarter 1 data.
- Quarter 5 is also another opportunity for Economic Study Requests (ESR).
 - NTTG received one ESR submitted by the “Joint Parties” to study an [alternative transmission configuration](#). This request will be considered by the Planning Committee at their next meeting.
- The Quarter 5 data submittals did not alter the DRTP and in Quarter 6, the TWG will review the production cost modeling data changes, perform robustness analysis and address the submitted ESR.

Neighboring Planning Region Updates

- ColumbiaGrid – Larry Furmasu
 - ColumbiaGrid finished it’s 2017 – 2018 planning cycle. The Board approved the 2019 Biennial Transmission Expansion Plan (BTEP) which is posted on their website. The

- contents of the 2019 BTEP covers the study work and activities under regional and interregional coordination.
 - The study plan for the 2019-2020 cycle is being finalized. While, the base cases used for the system assessment studies have been completed the contingencies list is still being worked on. The goal is to complete the system assessment in August.
 - The next planning meeting will be held on May 9th at the ColumbiaGrid offices.
 - CAISO – Gary DeShazo
 - The 2018-2019 plan was approved by the Board in March and the CASIO is now initiating the 2019-2020 planning process. The study plan was reviewed by stakeholders in March, subsequently finalized and posted on the CAISO website.
 - CAISO is continuing to look at renewable studies outside of California, such as importing high amounts of wind from New Mexico and Wyoming. One model is looking at placing a resource at the ISO boundary to see what kind of transmission is required within California to make it deliverable to its aggregate of flow.
 - Several large voltage devices were determined to be needed for voltage support on the Pacific AC Intertie and approved by the Board. Given the fact these are 3rd Party Solicitation projects, the CAISO will be initiating Phase 3 process over the next 15 months.
- **Question:** *Nadeen Hanhan (OR PUC)* – Can you remind me how California defines renewables? Does it exclude hydro?
- **Answer:** *Gary DeShazo (CAISO)* – I think it's a yes and no. For our 20% and 33% and I think up to 50% it does exclude hydro. The 20% and 33% energy requirements from RPS are required to be deliverable. Which means there needs to be transmission in place to be able to deliver it to aggerate of load. To get to 50%, the definition was modified to not necessarily require deliverability, so you could have “energy only” deliverables that could use existing transmission capacity, provided it was available. What I understand is to go above the 50% pushing to 65% and 80% would include hydro and other types of resources we have that has not been considered as apart of the overall calculation. The other thing I would mention is that we've always used the percentile thing, such as 50% of the energy to the aggerate load must be from renewables. California is starting to look at the greenhouse gas impact. We've had for some time, I think it came out in Bill 350, a requirement to return to 42 metric tons, which we had in 1992 and we have a target date to get there. Now the PUC has been providing procurement to meet that greenhouse target. To get to 42 metric tons may not necessarily equate to 50% or some other number, its something that could be in between. You may see some things come out of California and our studies looking at that 42 metric ton target, and the percentage of that is around 67% to 70%, but if you include all of our hydro, one of our PTO's is actually 100%, but we are way up in the 80% range if you include the hydro.
- WestConnect – Charlie Reinhold –
 - At the last Planning Management Committee (PMC) meeting, members reviewed and accepted the Planning Subcommittee's (PSC) recommendations on two scenarios; 10% Load scenario and high export from the CAISO to the WestConnect area. The next step is to complete the report by the June PMC meeting
 - WestConnect is looking to accelerate the planning report and approve biennial planning cycle by the end of Quarter 3, which would allow Quarter 4 overlaps with creating the study plan for the next planning cycle.
 - WestConnect did not find any regional needs, so there is no further evaluation of projects in the current planning cycle.



Upcoming Opportunities for Stakeholder Input (Presented by Sharon Helms)

- NTTG's next stakeholder meeting will be held on June 21st in Boise, ID with a stakeholder comment window opening in Quarter 7 on the DRTP.

Hearing no other comments, the meeting was adjourned.

Attendees List:

First	Last	Company	In-Person	Webinar
Rhett	Hurless	Absaroka Energy		x
Tracy	Rolstad	Avista		x
Zach	Beus	BPA		x
Daniel	Hauge	BPA		x
Gary	DeShazo	California ISO		x
Larry	Furumasu	ColumbiaGrid		x
Richard	Maguire	Electrical Consultants		x
Kathleen	Fraser	Energy Strategies		x
Jared	Ellsworth	Idaho Power	x	
Courtney	Waites	Idaho Power		x
Curtis	Westhoff	Idaho Power		x
Travis	Allen	MATL		x
Younglae	Kim	MATL		x
Bill	Hosie	New American Transmission Co.		x
Sharon	Helms	Northern Tier Transmission Group	x	
John	Leland	Northern Tier Transmission Group		x
Ron	Schellberg	Northern Tier Transmission Group	x	
Amy	Wachsnicht	Northern Tier Transmission Group	x	
Chelsea	Loomis	NorthWestern Energy		x
Nadine	Hanhan	OR Public Utilities Commission	x	
Jamie	Austin	PacifiCorp	x	
Kishore	Patel	PacifiCorp	x	
Craig	Quist	PacifiCorp		x
Shaun	Foster	Portland General	x	
Bob	Smith	TransCanyon	x	
Justin	Bieber	UAE		x
Marshall	Empey	UAMPS		x
Heidi	Pacini	WestConnect		x
Charlie	Reinhold	WestConnect		x
Belinda	Kolb	WY OFC Consumer Advocates		x
Daney	Brauchie	WY Public Service Commission		x
Marci	Norby	WY Public Service Commission		x