NORTHERN TIER TRANSMISSION GROUP

Description of Meeting:	**NTTG Planning Committee**
Meeting Date:	**November 16, 2018**
Meeting Notes Prepared By:	**Amy Wachsnicht**
Approved for Posting:	**February 13, 2019**

1. **Agenda:**
   a. Establish Quorum and Agenda Review
   b. Approval of October 17, 2018 NTTG Planning Committee Meeting Notes
   c. Technical Workgroup Reliability Analysis Results
   d. NTTG Metrics Analysis and Draft Regional Transmission Plan Results
   e. Proposed Modifications to NTTG's Data Submittal Form
   f. Approval:
      i. ***RESOLVED:*** That the Planning Committee Approves the proposed revisions to NTTG's Data Submittal Form
   g. Round Table/Other Business

2. **Discussions & Decisions:**

Decision: Approval of October 17, 2018 NTTG Planning Committee Meeting Notes

- With a motion by Ian Beil and second by Bob Decker, the October 17, 2018 NTTG Planning Committee Meeting notes were **unanimously approved** for posting.

Discussion: Technical Workgroup Reliability Analysis Results

- The NTTG Technical Workgroup (TWG) has completed its technical studies and is currently working on drafting the report. The Metrics Workgroup has also completed its economic analysis.
  - At this time, the TWG is on schedule for completing the Draft Regional Transmission Plan (DRTP) by the end of Quarter 4.
- Since the last Planning Committee meeting, the TWG updated one case to meet the case objectives. The revised case, along with the original case, will be included in the draft report.
- The conclusion from the TWG is that the DRTP will be identical to the Prior Regional Transmission Plan which includes segments from Gateway West and Gateway South, Boardman to Hemmingway, the Antelope Projects as well as a couple of committed projects already under construction.

Discussion: NTTG Metrics Analysis and Draft Regional Transmission Plan Results

- John Leland thanked the members who participated in the Metrics Workgroup for their work and efficiency on getting the analysis completed.
- As per the Attachment K, NTTG follows two steps in selecting the draft and final plan. The first is the reliability analysis ensuring the selected plan meets the reliability requirements of the NTTG footprint looking 10 years out. The second is to apply the three economic metrics (Capital Costs, Losses, and Reserves) to the Non-Committed projects in each of the selected plans for analysis.
- This cycle, the TWG identified the pRTP and the Initial Regional Transmission Plan (iRTP) that is the pRTP plus the roll up of projects submitted by the Transmission Providers Quarter 1 data submittals as meeting the reliability needs in the NTTG footprint.
  - While there were over 30 change cases analyzed against the 8 flow scenarios studied, only the iRTP and pRTP preformed acceptably in all 8 flow scenarios.
- Energy Loss Metric

  - Production cost modeling (PCM) software is used to calculate the 8760 hourly losses. These were then aggregated to the Balancing Authority Area (BAA). The megawatt hour losses were then converted into dollars.
  - In comparing the loss metric results between the iRTP and the pRTP, the conclusion showed the iRTP was the more efficient plan in terms of losses.
- Reserve Metric Analysis
  - The NTTG footprint is segmented into zones. Spreadsheet analysis is used to calculate the share to each party within the zone on a pro-rata portion of a simple cycle combustion turbine which is priced at $800/kW.
  - The results indicated no reserve sharing distinction between the iRTP and pRTP which both contained the same benefit value of $750,000/year.
- Capital Related Costs Analysis
  - This metric uses several steps including WECC Calculators and a spreadsheet summary to compare the results.
  - For those submitted projects where the project sponsor includes the submitted project costs, NTTG will compare those costs to the WECC Transmission Cost Calculator and validate if the submitted costs are within +/- 20%. If the project sponsor submitted capital cost is outside the +/- 20% range, then TWG will work with the sponsor to validate the submitted cost.
  - If a project sponsor does not include the submitted project costs, NTTG will use the WECC Capital Cost Calculator to get the estimated project costs.
  - John Leland indicated when estimating a project's WECC Transmission Cost, those costs are expressed in 2018 dollars. If the project sponsor submitted costs are not in 2018 dollars (example: 2016 dollars) NTTG will inflate the costs to be consistent with 2018 dollars.
  - Once the estimated project costs are calculated, the next step is to calculate the Annual Capital Related Costs starting from the projects in-service year. To do this, NTTG uses WECC Capital Cost Calculator and escalate the project capital cost expressed in 2018$ to the in-service year $ using an escalation rate of 2.3%.
    - As in prior cycles, NTTG assumes the revenue requirement over a 40 year assumed life of the project and uses the Excel Net Present Value (NPV) function assuming an 8.5% discount rate.
  - NTTG will then de-escalate the Capital Related Cost NPV for each Non-Committed project back to 2018 dollars and sum the appropriated Non-Committed Projects to develop the NPV Capital Related Costs for the iRTP and pRTP. The iRTP and pRTP NPV Capital Related Costs are then levelized so they can be added with the other two metrics.
  - John Leland reviewed the assumptions used in the calculations.
    - There was a discussion regarding the 17.5% AFUDC Rate. It was agreed that that AFUDC rate represents an estimate for the accumulation of the annual carrying costs through the project construction period.
- Incremental Cost Comparison
  - The incremental costs of the plan is the sum of all three annual metric results.
  - Based on the reliability and economic analysis of the two plans, the pRTP was chosen as the more efficient or cost-effective draft plan.

Discussion: Proposed Modifications to NTTG's Data Submittal Form

- At the conclusion of each data submittal cycle, the NTTG TWG reviews the Data Submittal Form to see if there are any improvements that should be considered.
- During the Quarter 1 data submittals, the TWG noticed retirements were not being consistently submitted. The TWG added language to the Data Submittal Form indicating retirements should be specified.
- The TWG also added examples of non-transmission alternatives to help with clarity.

- Ron Schellberg walked through the specific tabs in the NTTG Data Submittal Form showing the updated language.

Decision: Approval

- ***RESOLVED:*** That the Planning Committee Approves the proposed revisions to NTTG's Data Submittal Form

- With a motion by Craig Quist and second by Marshall Empey, the above resolution was **unanimously approved** by the NTTG Planning Committee.

Discussion: Round Table/Other Business

- Sharon Helms reminded members the December 12th Planning Committee meeting was cancelled due to the Quarter 4 NTTG Stakeholder Meeting in Salt Lake City, UT on December 13th.

3. Assignments:

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

Next Meeting: The next Northern Tier Planning Committee Meeting is scheduled for TBD in 2019 at 1PM Pacific.

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

Attendees:

NTTG Planning Committee Member Representatives		
Membership Class 1		
Eric Bahr, NorthWestern (Proxy)	Bill Hosie, TransCanada	Bob Smith, TransCanyon
Ian Beil, Portland General	Nathan Powell, Deseret	Curt Winterfeld, Citizens Energy
Jared Ellsworth, Vice Chair, Idaho Power	Craig Quist, PacifiCorp	
Membership Class 2		
Marshall Empey, UAMPS	Rhett Hurless, Absaroka	
Membership Class 3		
James Branscomb, WY PSC	Steven Goodson, ID OEMR (Proxy)	Steven Goodson, ID PUC
Bob Decker, MT PSC		
Other NTTG Members & Guests		
Justin Bieber, UAE	Jeff Hurt, BPA	Ron Schellberg, NTTG
Daney Brauchie, WY PSC	John Leland, NTTG	Amy Wachsnicht, NTTG
Sharon Helms, NTTG		