**Meeting Summary**

**NorthWestern Energy Transmission Advisory Committee**

**September 16, 2015**

**9:30 AM, MDT**

**Meeting Participants**

This Transmission Advisory Committee (TRANSAC) meeting was conducted in person at NorthWestern Energy’s offices in Butte, via teleconference and the internet site GoTo Meeting.com for those not able to join in person. Those participating included:

 **Name Organization**

At NorthWestern Energy (NWE) Offices

Don Bauer NWE Electric Transmission Planning

Kathleen Bauer NWE Regional Transmission Planning

Chelsea Loomis NWE Regional Transmission Planning

Kelly Lovell NWE Regional Transmission Planning

Cathy Mathews NWE Electric Transmission Planning

Kim McClafferty NWE Regional Transmission Planning

Shea Mattix NWE Electric Transmission Planning

Jim Hadley NWE Electric Transmission Planning

Mark Zora Talen Energy

Dale Mahugh NWE Customer Care Key Accounts/Meeting Facilitator

Via Telephone & Internet

Ken Neal NaturEner

Travis Allen MATL/Enbridge

Frank Jarvenpaa WAPA

**Standards of Conduct & Anti-Trust Policy Review**

Kelly Lovell began the meeting by reviewing NWE’s Antitrust Policy, and the Standards of Conduct Policy and Safeguards. These documents are available at NWE’s OASIS web address:

 <http://www.oasis.oati.com/NWMT/NWMTdocs/01-Agenda_09-16-15-TRANSAC-Final.doc>

**Agenda**

Dale Mahugh reviewed the posted agenda with the group.

**Administration**

July 29, 2015 Meeting Summary - The participants had no changes or corrections. The July 29, 2015 meeting summary is posted at NWE’s OASIS web address:

 <https://www.oasis.oati.com/NWMT/NWMTdocs/TRANSAC_Meeting_Notes_7-29-15_Final.docx>

 Action Item List

 Kelly Lovell reported the Talen Energy request made during the July 29th meeting, was asked if NWE could provide a current list of changes made to the Generation Interconnection spreadsheet since the last version. NorthWestern reviewed the request and determined that NWE will only include items required in the Tariff and thus no changes will be made at this time. This action item is considered complete. The updated Action Item listing is available on NWE’s OASIS website:

 <http://www.oasis.oati.com/NWMT/NWMTdocs/02-Action_Items.xls>

Western Electricity Coordinating Council (WECC) Load and Resource Data Request

Cathy Mathews read her report on the WECC Load and Resource Data Request. The report can be found on NWE’s OASIS website:

 [http://www.oasis.oati.com/NWMT/NWMTdocs/03-L&R\_Update.docx](http://www.oasis.oati.com/NWMT/NWMTdocs/03-L%26R_Update.docx)

Compliance Efforts

Cathy Mathews also read her report on compliance activities. Cathy noted that the WECC Board of Directors has recommended that the name WECC be changed to **Reliability West.** This action still requires member approval. Cathy’s report along with the web addresses to access referenced discussion items, can be accessed at NEW’s OASIS web site:

 <http://www.oasis.oati.com/NWMT/NWMTdocs/04-Compliance_Update.docx>

Generation Interconnection Update

Kelly Lovell provided an update using the document posted on NWE’s OASIS web site:

 <http://www.oasis.oati.com/NWMT/NWMTdocs/05-TRANSAC-GIA_Queue_Update_9-15.docx>

*Question: Mark Zora inquired about the large amount of solar projects withdrawing this summer?*

Answer: Don Bauer responded that most were just testing the waters on locations and that many either withdrew or added new projects.

**Regional and Bulk Electric System Updates**

The draft 2014-2015 Regional Transmission Plan is out for review. Chelsea Loomis noted that work has begun on the 2016-2017 biennial cycle. TEPPC created a 2025 case that is the basis for the production cost modeling effort. Not all the generators on the system are accurately represented in the TEPPC case because they are not directly connected to the BES. NTTG has been working to cure those differences so that planning work can begin January 2016.

**FERC Order 1000**

FERC Order 1000 inter-regional coordination becomes effective in October. A white paper regarding implementation is being developed and efforts are being made to come to a consensus on how data will be shared between regions and to what extent. However, Chelsea said not everyone supports this approach. Columbia Grid has said they plan to just implement the Order as it stands. Hopefully there will be more detail to share at the December meeting.

Chelsea noted that there is a NTTG Regional Stakeholder meeting scheduled to be held in Bozeman on September 29th.

*Question: Everyone is aware of the NW Power Pool, is there any kind of case or study that looks at the various NWPP power markets to show they are effective and efficient?*

Answer: Energy and balance in power markets is studied by NWPP. NTTG doesn’t deal with markets.

**Local Area Plan Update**

Local Area Plan Draft Document Available for Comment

Kathy Bauer reported that the draft 2014-2015 Local Area Plan is expected to be posted for 30-day Stakeholder comment by October 1st. Stakeholders will be notified of the exact comment period dates. The final version of the 2014-2015 Local Area Plan will be published and distributed by December 31, 2015.

Kathy noted that during the last two years a number of changes have occurred and/or been implemented (example: terminology changes and the implementation of FERC Order 1000). These changes will necessitate the review and updating of NWE’s Business Practices for the 2016-2017 Local Area Planning cycle. It is hoped that the projected revisions to the Business Practices will be outlined and ready to post for 30-day comment during the fourth quarter of 2015. Stakeholders will be notified when the red-lined versions are available.

Mitigation Studies results

Don Bauer provided a mitigation, uncertainty scenario and VAR Margin Study update. The presentation is posted on NWE’s OASIS website at:

 <http://www.oasis.oati.com/NWMT/NWMTdocs/06-LAP_Update_09-16-15.pptx>

Don noted that an update for Highest Priority Problem #14 was not included in the presentation, but he felt comment should be made regarding the scenario of the loss of two of the lines between Crooked Falls and Great Falls. This has been given considerable attention and to re-conductor the lines would be very expensive. NWE is moving forward with an alternative - the creation of an Operational Procedure to mirror what Peak RC would ask us to do, which is to back off our own generation. NWE’s agrees to forego generation if this scenario were to occur.

Uncertainty Scenarios Update

Don Bauer shared that NWE has given consideration to the various readily apparent uncertainly scenarios and have spent more time recently on the two situations that were outlined at the previous meeting; serious forest fires affecting major line corridors and the prolific growth of certain areas of our system, particularly Bozeman and Billings.

2015 has proven to be one of the worst forest fire years on record. Fires have taken their toll on NWE transmission facilities this year, but the extent could have been much worse. These events provided a good foundation to review what could occur if sequential losses of facilities in an area were to occur. The Missoula Evaro Area Results noted some overloading of transformers if one of the 161 kV lines were lost and the presentation indicated mitigation is planned for the area BPA line. It is scheduled to be re-conductored to Kalispell. The results of the fire studies indicate that load shedding or curtailment of load is possible, but none of these extreme events caused cascading outages.

*Question: Do we know what effect would be most apparent outcome when fire considerations become reality?*

Answer: The most likely result would be that customers could experience considerable voltage variations.

Accelerated growth in certain areas of the system is proving to be an interesting challenge as well. Using projected 2019 heavy Summer and Winter load conditions, the projections for the Billings and Bozeman areas were grown to forecasted 2029 levels. This has provided for interesting scenarios to be analyzed. The rapid growth of the entire Bozeman area lends to strongly considering the acceleration of the Belgrade substation construction. The Billings considerations and concerns have been discussed in detail previously and there were little added beyond the prepared information.

*Question: With the loss of Corette, has consideration been given if the Billings Generation plant (BGI) were also lost?*

Answer: We do consider loss of all system elements in our planning studies: lines, transformers, generators. Don added that we would likely need another 230kV source for Billings.

*Question: Has consideration been given for TPL-007events?*

Answer: Regarding solar flares and ground induced currents, there has been considerable discussion on this matter and guidelines have been written for what could be anticipated and possible steps to take regarding electromagnetic exposures. Most area utilities including NWE are standing by to see if WECC will conduct regional studies on this like they do for under frequency load shed.

Review VAR Margin Study

Don noted that a consultant was working on this for us, but study work was not yet complete. As a result, the findings will be included in the final version of the “the Book”.

**Action Item List Review-currently none**

**Upcoming Meetings**

Posted Public Meeting dates, and the proposed date for the remaining TRANSAC group meeting in 2015 are as follows:

* Thursday, October 8, 2015, 7:00PM- Public Meeting in Billings
* Wednesday, October 14, 2015, 7:00PM- Public Meeting in Missoula
* Wednesday, December 16, 2015, 9:30AM – (Quarter #8) Reporting and Final Document

Dale thanked everyone for their participation and asked if anyone had anything further to bring before the group. Hearing nothing, he declared the meeting adjourned.

**Disclaimer**

Committee members provide advice to NWE as individual professionals; the advice they provide does not bind the agencies or organizations they serve.