Rush Creek Task Force (CCPG)

January 24, 2017

Meeting Notes

1. Introduction

- See Attendance list.
- Tom / Patrick apologized for not sending out the scope and meeting minutes prior to meeting. Draft notes, scope, and alternative one-lines were distributed to the group.
- Goal of the meeting is to review scope and agree on:
 - Alternatives
 - Models
 - Sensitivities
 - Generation dispatch
- ❖ Patrick noted the CCPG Rush Creek Task Force (RCTF) website has been set up.

2. Review Draft Study Scope

Models

- Agreed to 2026 WestConnect base cases for both heavy and light load.
- ➤ Benchmark case will have no Craig 1 or Valmont generation online.
- Agreed to let the group review the models or at least the modeling assumptions prior to studies.
 - Question: Will San Luis Valley Poncha 230 kV and the Northern Greeley projects be included? Tom: yes and they are likely already included in the WestConnect base cases.

Generation

- Chris Pink noted that Tri-State has seen some congestion during light load around Burlington because the load is low.
- Generation dispatch sensitivities may be performed
- Start by dispatching new Rush Creek area generation to high cost units in the Denver Metro Area, including RMEC, Spruce, and Spindle.
- ➤ Mark Detsky: do we want to study avoided curtailments? Tom: that would involve production cost modeling studies which is outside the scope or capability of this group.
- Question: what is the timeline for Big Sandy Calhan 230 kV project? Chris Pink: 2022.

Prioritization of Alternatives

- Goal is for RCTF to agree on the preliminary alternative list
- Patrick walked through the 11 alternative one line diagrams shown in the presentation provided.
- The group, except for Chris Neil, agreed that the alternatives should focus on networking the *entire* Rush Creek Gen Tie (to Rush Creek II). Alternatives not networking the entire line are lower priority.
 - Chris objected, since he believes that it would be appropriate to integrate portions of the Rush Creek Tie.
- Chris Neil (OCC) advocated for a variation of Alt 6 (Rush Creek I to Daniels Park 345 kV line) by sending the 345 kV line from Rush Creek I to a new switching station south of Daniels Park (believing similar to PSCo's generator interconnection study

GI-2015-1) that would loop into the two Comanche-Daniels Park 345 kV lines as well as the Midway-Waterton 345 kV line.

- Chris initially thought that this could use a wire-to-wire interconnection (line tap).
- Tom and Patrick believe that this would require a new 7 element 345 kV switching station, the cost of this switching station would be much higher than terminating the new line into the already established Daniels Park substation, and would be electrically similar.
- It was also noted the alternative does not completely network the Gen Tie because Rush Creek II would still be on a radial.
- Betty Mirzayi stated that the Generation Interconnection study identified problems caused on the Colorado Springs Utilities and Black Hills system.
- The group, except for Chris Neil, agreed to model this electrically as Alternative 6B to Daniels Park substation. A sensitivity could be performed with the Midway-Waterton 345 kV line looped into Daniels Park substation.
- Chris objected because he would prefer the alternative go to a new substation.
- ➤ Rich Crawford suggested a new alternative: Rush Creek II to Limon Wind Substation, stating that you can see the Limon wind turbines from the Rush Creek II site. This was included as part of Alternative 9a.
- ➤ The group, except for Chris Neil, agreed the high priority alternatives included the following:
 - Alt 1: Rush Creek II to Burlington 345 kV Substation
 - Alt 8: Rush Creek II to Burlington 345 kV line & Rush Creek I to Big Sandy 345 kV Substation
 - Alt 9: Rush Creek II to Burlington 345 kV line & Rush Creek I to Limon Wind Gen 345 kV Substation
 - Alt 9a: Rush Creek II to Burlington 345 kV line & Rush Creek II to Limon Wind Gen 345 kV Substation

3. Next Steps

- Finalize study scope
- Present preliminary results
- Investigate the 800 MW largest hazard issue
- Send out meeting notes from December meeting for comment
- Next meeting February 22nd at 1PM

4. Attendees List

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