

Rush Creek Task Force (CCPG)

February 22, 2017

Draft Meeting Notes

1. Introduction

- ❖ See Attendance list.
- ❖ Tom reviewed the antitrust policy of the Rush Creek Task Force (RCTF).
- ❖ Tom made some opening comments with regard to how CCPG groups achieve consensus. Generally, if no objections are received regarding decisions at meetings, then it is assumed that the task force has reached consensus. If there are objections to a decision, then it is preferable that they be raised at the meeting. Whether raised at the meeting, or at a later date, the group will do its best to capture dissenting opinions in meeting notes and other documents.
- ❖ Tom then requested that participants articulate opinions with the basis for their positions.
- ❖ Tom reminded the group that the goal of the RCTF is to focus on “reasonable” alternatives. One measure is whether an alternative is feasible from a cost or siting perspective. For example, Rush Creek to Boone or Lamar appears to be unreasonable, since the new transmission lengths are significantly greater than closer alternatives, such as Burlington.
- ❖ Tom also stated his view that alternatives that don’t integrate the entire Rush Creek Gen-Tie are not reasonable.
- ❖ Also CCPG groups such as the RCTF are not meant to be a forum to review entities’ Large Generation Interconnection Procedures (LGIP) or study reports.
- ❖ Tom discussed the intent of the meeting notes, which are to capture what happens during meetings, and are not intended to document events that occur in-between meetings. Chris Neil referred to three emails sent from December 16 to 30 stating his thoughts regarding potential alternatives. Tom indicated that those topics could be raised during a meeting and captured in the notes, and then asked if the group wanted to discuss these emails further. No further discussion occurred.

2. Review Meeting Notes From January Meeting

- ❖ Patrick showed the draft meeting notes and questioned Chris Neil’s “wire to wire” comment for his alternative suggestion. Chris clarified it was to refer to a line tap, but is no longer interested in this suggestion.
- ❖ Chris Neil tried to clarify his comments at the previous meeting regarding alternatives that connect to the transmission south of Daniels Park. Chris also indicated he would like the meeting notes reflect emails he has sent to the RCTF on December 16, December 27, and December 30, stating his thoughts of potential alternatives.
- ❖ Due to the in-meeting comments Patrick will resend the updated notes to the group after the meeting for a final review.

3. Action Item Review

- ❖ Finalize study scope: to be completed at this meeting or shortly after.
- ❖ Present preliminary results: results are not ready for presentation yet but PSCo will provide at the next meeting.
- ❖ Investigate the 800 MW largest hazard issue: aside from performing reliability analysis that will include loss of the generation on the radial line, PSCo stated that this is outside

the scope of the RCTF to, since the issue relates to how PSCo accounts for operating reserves. PSCo stated their position that this is an operational issue, and that there appears to be a misunderstanding of how this issue impacts Transmission Planning. PSCo operations has certain criteria for maintaining operating reserves based on the loss of the largest single generating unit and it is unclear how the Rush Creek Wind Project would impact these operating requirements.

- Chris Neil disagreed and believes the largest hazard issue is very important and indicated Transmission Planning needs to understand the implications of loss of the Rush Creek Gen Tie (RC I to Missile Site) with more than 800 MW of generation on the line.
- PSCo indicated they would evaluate the reliability implications of loss of the Rush Creek Gen-Tie through both power flow and transient stability analyses.
- Chris Neil stated his belief that this group should investigate operational issues and was not satisfied with PSCo's description of how planning studies take place.
- Chris stated that he brought this issue up in an email to the group on December 27, 2016. In the approximately two months since, PSCo has not responded to this issue. Chris stated that PSCo was intentionally delaying the process, which would cost ratepayers.
- PSCo disagreed with Mr. Neil's assertions, but indicated that they would try to provide him a Rocky Mountain Reserve Group (RMRG) representative contact to help him understand the issue.

4. Discuss Study Scope

- ❖ Patrick reviewed the draft study scope document. The goal of the meeting is to take additional comments and present another final draft scope shortly after the meeting.
- ❖ Chris Neil asked if "light load" is spring or fall. Patrick: light spring with approximately 50% peak load.
- ❖ Tom clarified that studies will assume 100% output of Rush Creek, and then ramp up generation until a limit is reached.
- ❖ Generation Dispatch
 - TSGT commented to adjust the generation for Burlington and Lincoln areas to match the assumptions PSCo is using for their generation (wind and conventional units)
- ❖ Transmission Topology
 - TSGT requested to remove the Big Sandy-Calhan 230 kV project from the study because it is now considered conceptual. Patrick will make sure the project is removed from the base cases. They also indicated that there was no need to consider the project for any sensitivity studies.
- ❖ Alternatives. PSCo indicated it would like to review the alternatives once again so that the scope could be finalized.
 - Mark Detsky thought the group already agreed that we would only look at one alternative that integrated only part of the Gen-Tie. Chris Neil disagreed and thought more reasonable alternatives could include those partially integrating.
 - Paul Caldera indicated the language in the Settlement Agreement was somewhat vague and Tom agreed, but felt it was the spirit of the agreement to integrate the entire line.
 -) All participants, except for Chris Neil, agreed that the alternatives partially integrating the Gen-Tie should be limited to one (Rush Creek I to Big Sandy)

- The group unanimously agreed to remove alternatives associated with Boone and Lamar.
- Chris Neil believes alternatives that go to the Front Range are reasonable and stated he still wants an alternative connected the Gen-Tie to a new substation south of Daniels Park that would interconnect all three 345 kV lines in the corridor. Tom asked if anyone else was interested in this alternative and received no indication of interest.
 - Ultimately the group agreed to accommodate two 345 kV alternatives associated with Daniels Park substation
 - © 1 – Rush Creek I to Daniels Park, and Rush Creek I to Rush Creek II
 - © 2 – Rush Creek I to Daniels Park, and Rush Creek II to Burlington.
 - © If performance indicates a need, there may be sensitivity studies of tying the Midway-Waterton 345 kV line into Daniels Park.
- Paul Caldera asked if the CCPG RCTF report can contain dissenting opinions such as the OCC's. PSCo agreed to accommodate this in notes and in the final report. Any documents that result from this group will be "CCPG" documents. Decisions will be captured in the notes and reports and the group will strive to take note of any dissention opinions.
- Lisa Hickey requested a detailed note is documented for all the alternatives that were removed from consideration.
- Chris Pink and Western stated the Last Chance transmission was a bottleneck and that additional transmission that terminated there would just cause more problems.
 - The group agreed to remove those alternatives.
- Discussion of process for dealing with "limitations," for example the rating of the Big Sandy-Burlington line (the limit of 274 MVA could go to 445 MVA with relatively minor upgrades).
 - PSCo indicated that the plan was to deal with apparent performance limitations that result from studies in a similar manner to what was done for the San Luis Valley Subcommittee studies.
 - Apparent limitations will be discussed, and participants will have an opportunity to present potential mitigation measures for those limitations. If the group agrees to pursue those measures, then the costs of those will be captured, and additional studies will be performed to determine the next limitation. This may be repeated until the task force agrees on a "hard" limitation.
- ❖ Chris Pink raised the issue regarding "benefits" of alternatives. Benefits can be a subjective term and Chris asked if the task force had coalesced around a definition. Chris indicated SPP has a process for capturing benefits and will send to PSCo. Tom agreed to draft language to address this.
 - Mark Detsky stated he believes the benefits will be brought up after the studies are completed.
 - Tom indicated that the prime measure of benefit will be the amount of generation the alternative could accommodate. The task force will continue to entertain discussion around potential benefits for affected parties and attempt to capture the benefits in the report.

5. Stakeholder Comments

- ❖ Chris Neil states his objection to the prioritization of alternatives, and his objection that some alternatives he suggested were not being included in the study scope.

6. Next Steps

- ❖ Send out meeting notes from January for final review
- ❖ Finalize study scope
- ❖ Chris Pink to send document showing SPP benefits if they are public documents
- ❖ PSCo to provide RMRG contact to Chris Neil
- ❖ Review preliminary results
- ❖ Draft benefits language
- ❖ Next meeting March 29 at 1PM

7. Attendees List

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