

Appendix H

Comments from the Office of Consumer Council & Responses from Public Service

Questions for First Rule 3627 Report Stakeholder Meeting on Friday, August 14, 2015

A. Questions from CCPG Meetings and Related Presentations

1. From the CCPG meetings presentation and discussion: How is transmission in the San Luis Valley (SLV) being addressed in the Rule 3627 Report?

Response:

Rule 3627 requires utilities to identify projects that are 100 kilovolt (“kV”) or greater. Every 10-Year Transmission Plan provides information for each of the projects that make up the Public Service Company of Colorado (“PSCo”) transmission plan. The information includes a project description, the purpose of the project, the estimated cost, and the status of development. Projects that are not fully defined may be classified as “conceptual”. Projects classified as “planned” generally also include an implementation schedule. The Company is still finalizing the Rule 3627 Report to be filed in February 2016 and therefore cannot address all the questions that have been included in this document at this time.

Notwithstanding, Transmission planning is ongoing for the San Luis Valley (“SLV”) through working groups of the Colorado Coordinated Planning Group (“CCPG”). It is expected that the upcoming 10-Year Transmission Plan to be filed in February 2016 will address PSCo’s involvement in SLV transmission plans per Rule 3627.

2. From the CCPG meetings presentation and discussion: How are the low voltage issues in lower SLV being addressed in the Rule 3627 report?

Response:

See Response to Question No. 1.

3. Will the changes to the timing of the components of South Weld Expansion Plan be identified in the Rule 3627 Report? How is the timing of the components being impacted by lower prices for oil and gas? Will the Rule 3627 Report show that PSCo is joining the South Weld project?

Response:

See Response to Question No. 1. In addition, the Southwest Weld Expansion Project (“SWEPP”) is a Tri-State project that PSCo is considering participating in. Questions regarding the timing of the project should be referred to Tri-State. It is expected that the upcoming 10-Year Transmission Plan to be filed in February 2016 will address PSCo’s involvement in any Northeast Colorado transmission plans.

4. What Greeley and East Weld County improvements will be discussed in the Rule 3627 Report? Does the oil and gas load justify the need for these projects at this time? Are oil and gas developers paying for all or most of the costs of these projects? It does not appear possible to justify a Weld-Rosedale line upgrade based on loads in eastern Weld County.

Response:

See Response to Question No. 1. In addition, it is expected that the upcoming 10-Year Transmission Plan to be filed in February 2016 will address PSCo’s involvement in any Northeast Colorado transmission plans.

5. Given the claims of increased load in the Weld County area as exhibited by both Tri-State’s South Weld Project and by PSCo’s East Weld needs, will the Pawnee-Ft. Lupton 230 kV to 345 kV upgrade be discussed in the Rule 3627 Report? If not, why not.

Response:

The need for a Pawnee – Ft. Lupton upgrade has not been identified by PSCo or the Colorado Coordinated Planning Group (“CCPG”), Northeast Colorado Subcommittee (“NECO”) Work Group. In Proceeding No. 14A-0287E, the Office of Consumer Counsel (“OCC”) proposed the project as an alternative to the PSCo proposed Pawnee – Daniels Park Project. PSCo was granted, by the Colorado Public Utilities Commission (“CPUC”), a Certificate of Public Convenience and Necessity (“CPCN”) for the Pawnee – Daniels Park project and therefore, is not considering alternatives to that project.

6. Will Ault-Rosedale, Ault-Kersey West or other TOT7 projects be included in the Rule 3627 Report? Given the expiration of PSCo’s purchase power contracts that have been bringing up to 300 MW to 450 MW of power across TOT7 to PSCo, as shown in the table below, what is the justification for PSCo’s participation in a TOT7 project?

Response:

See Response to Question No. 1. In addition, Transmission planning is ongoing for the northeast Colorado area through the NECO Subcommittee of CCPG. It is expected that the upcoming 10-Year Transmission Plan to be filed in February 2016 will address PSCo’s involvement in any northeast Colorado transmission plans. PSCo has customer loads in northeast Colorado and is a joint owner in the TOT 7 transfer path. Therefore, participation in any studies of the northeast Colorado area is fully justified.

Table OCC-1 Expiring Public Service Contracts Related to TOT 7		
(Megawatts)	Current	Expires
Purchases that Expire, 2011 ERP, p. 2-58		
Basin 1	100	2015
Basin 2	75	2015
Tri-State 2	100	2016
Tri-State 3	25	2015
Subtotal	300	
PacifiCorp	150	2022
Total	450	
Remaining Owned West-Slope Capacity - 2011 ERP Page 2-70		
Hayden 1	139	
Hayden 2	98	
Craig 1	42	
Craig 2	42	
A little hydro and CT		
Total without hydro/CT	321	
Old Total	771	
New Total after Contract Expirations	321	Without PacifiCorp
New Total after Contract Expirations	471	With PacifiCorp

B. Questions Related to the Energy Imbalance Market

7. Will joining the Cal-ISO/PacifiCorp Energy Imbalance Market (EIM) be decided before the 3627 transmission report is issued? If so, what will be the impact of the EIM on transmission plans?

Response:

No. PSCo does not anticipate any decision with respect to Energy Imbalance Market (“EIM”) participation prior to the deadline for filing the Rule 3627 Report.

8. Will the 3627 Report discuss adding transmission lines to Wyoming, with the EIM with PacifiCorp being part of the reason for this?

Response:

No. PSCo does not anticipate the tie line to Wyoming would be required in order to participate in the EIM. Potentially, the amount of market integration and associated potential benefits would be higher with increased transfer capability, but no work has been done to estimate if the benefits would exceed the costs.

9. Will the Rule 3627 Report show additional transmission lines or upgrades of existing lines to Four Corners because of the Cal-ISO EIM or because the closure of generating units at Four Corners and San Juan provides a greater opportunity for transactions (sales-purchases) with California and Southwest utilities? What can be done to increase the transmission capacity to the four corners area?

Response:

No decisions have been made regarding joining the CAISO/PacifiCorp EIM. As a result, it is uncertain what the transmission implications might be under such a condition.

The EIM is an energy-only market and does not provide firm transmission capability. Any transmission developments in response to portfolio changes at Four Corners and San Juan would be administered through the traditional open-access process including requests for new service and associated transmission upgrade studies.

C. Questions Related to the Clean Power Plan and Other Federal Actions

10. Will the April, 2016 Rule 3627 Report show the transmission impact of the EPA's Clean Power Plan? If not, where will the transmission impact of the Clean Power Plan be reported?

Response:

PSCo is still evaluating the Environmental Protection Agency ("EPA") final rule and how it might impact the state of Colorado. The Rule 3627 Report may include the impacts of the EPA's Clean Power Plan. However, it is uncertain at this time what those impacts may be.

11. Will PSCo be modifying and re-submitting the joint dispatch proposal to FERC? What, if any, is the impact of the joint dispatch proposal on transmission planning?

Response:

Yes – PSCo anticipates filing a revised joint dispatch proposal to the Federal Energy Regulatory Commission ("FERC") in the Fall of 2015. We do not anticipate any impacts to transmission planning efforts associated with the joint dispatch proposal.

12. Please explain what non-transmission alternatives ("NTAs") are being discussed in the Rule 3627 report. Which transmission lines are being delayed or eliminated by NTAs? If no transmission lines are being delayed or eliminated by NTAs, are NTAs being seriously evaluated as alternatives to transmission lines? What NTAs are being considered to eliminate or delay the need for the Pawnee-Daniels Park transmission line?

Response:

At this time, it is uncertain what, if any NTAs will be discussed in the report. Rule 3627 does not require or mention NTAs. No NTAs are being considered to eliminate or delay the Pawnee – Daniels Park transmission line. In Proceeding No. 14A-0287E, the CPUC granted a CPCN for that project.

D. Questions Related to System Peak Demand, Local Area Peak Demand and the Need for Additional Transmission Lines

13. The system peak demand forecast provides the overall basis for the need for transmission and needs to be included in the Rule 3627 Report.

Response:

It is PSCo's understanding of this question that OCC is asking that system peak demand forecasts be included in the Rule 3627 filing to be made in February 2016. With this understanding, PSCo states as follows:

PSCo disagrees. Rule 3627 requires that the 10-year plan be compliant with all applicable reliability criteria over a range of forecasts. It does not require that PSCo provide the forecasts.

14. What impact does Boulder leaving the PSCo system have on the need for transmission?

Response:

Public Service understands this question to refer to Proceeding No. 15A-0589E, in where the City of Boulder has applied to the CPUC to transfer certain assets from PSCo which are necessary for the operation of a municipal electrical utility. The question assumes that the CPUC will grant such application. With this understanding, PSCo states as follows:

Because the City of Boulder would continue to interconnect with the PSCo system, there is no expected impact on the need for transmission.

15. Please provide year-to-date summer peak demand for 2015 Does 2015 continue a trend of declining or low peak demand since 2012? Was 2012 peak demand an aberration – significantly higher than the years around it (after adjusting for discontinued wholesale demand)? How does the low peak demand of the last three years, and Boulder leaving the system, change PSCo demand forecast? How does low peak demand in the last three years, and Boulder leaving the system, change the need generating capacity and the need for transmission?

Response:

See Response to Question No. 13. This information is outside the scope of Rule 3627.

16. Is PSCo basing its transmission needs on the demand forecast that was most recently approved by the Commission in the Proceeding No. 14A-1057EG, the 2015-2016 DSM Plan? If not, please identify where the Commission approved the demand forecast that is being used to justify the transmission in the Rule 3627 Report.

Response:

PSCo uses the most recent demand forecasts for transmission planning. Forecasts are generally updated twice a year. The Commission does not approve forecasts used for transmission planning. Rule 3627 requires that PSCo demonstrate compliance with reliability criteria over a range of system demands.

17. Does the load in the West Slope oil and gas development area still support the need for the construction of the second Rifle-Parachute 230 kV line?

Response:

Yes. In Proceeding No. 13A-0032E, the CPUC approved the CPCN for the Rifle – Parachute Project that was approved based on current reliability needs. It is scheduled to be completed in 2016.

18. The Pawnee-Daniels Park 345 kV transmission line was approved assuming that Boulder would remain on the PSCo system. With Boulder having formerly notified PSCo that they are leaving, please explain when PSCo will be re-evaluating the need for the Pawnee-Daniels Park transmission line without Boulder.

Response:

Public Service understands this question to refer to Proceeding No. 15A-0589E, in where the City of Boulder has applied to the CPUC to transfer certain assets from PSCo which are necessary for the operation of a municipal electrical utility. The question assumes that the CPUC will grant such application. With this understanding, PSCo states as follows:

In Proceeding No. 13A-0032E the CPUC approved the CPCN for Pawnee – Daniels Park Project. It is scheduled to be completed in 2022. See the Response to Question No. 14.

E. Questions Related to Renewable Power and its Transmission

19. What transmission lines are included in the Rule 3627 Report in order to increase the amount of wind that can be accepted on the PSCo system (besides Pawnee-Daniels Park)?

Response:

As explained in Response to Question No. 1, Rule 3627 requires utilities to identify projects 100 kV or greater. Every 10-Year Transmission Plan provides information for each of the projects that make up the PSCo transmission plan. The information includes a project description, the purpose of the project, the estimated cost, and the status of development. Projects that are not fully defined may be classified as “conceptual”. Projects classified as “planned” generally also include an implementation schedule.

If a project has the potential to accommodate additional generation resources, it will be discussed in the Rule 3627 Report.

20. What transmission lines are included in the Rule 3627 Report in order to increase the amount of solar that can be accepted on the PSCo system?

Response:

See Response to Question No. 19.

21. How much additional wind capacity can be accommodated on the PSCo system? Please provide the basis for the answer.

Response:

This information is outside the scope of Rule 3627.

22. How much capacity does PSCo have on the transmission lines from Craig-Hayden to the east slope of Colorado?

Response:

This information is outside the scope of Rule 3627.

23. The Hermosa wind project showed that the Craig-Hayden lines can be upgraded by 300 MW for modest cost by changing the transformers at each end. If PSCo or its independent power supplier paid for the transformer upgrade, would PSCo gain the rights to this 300 MW of additional transmission capacity? Please

explain. Will this upgrade be listed in the Rule 3627 Report as a possible project so that developers are aware of it and can propose wind or natural gas generation projects to utilize this additional transmission capacity?

Response:

PSCo Transmission Planning is unfamiliar with the Hermosa Wind Project. Therefore, it is not expected that it will be listed by PSCo in the Rule 3627 Report. It may be listed by another entity.

24. Does Tri-State's addition of the Burlington-Lamar line change PSCo's capacity on the Boone-Lamar line and generation injection capability in the Lamar area?

Response:

This information is outside the scope of Rule 3627. Notwithstanding, the Burlington – Lamar line does not change PSCo's capacity on the Boone – Lamar line.

25. Can the Boone-Lamar 230 kV transmission line accommodate approximately 210 MW of new wind now that PSCo's contract with SPS has expired? Or can the Boone-Lamar line share this 200 MW of capacity between wind and peaking capacity on the east side of the DC tie?

Response:

This information is outside the scope of Rule 3627. Notwithstanding, it is uncertain if the Boone – Lamar 230 kV transmission line could accommodate 210 MW under the two conditions specified in the question above.

26. What is the plan for the 162 MW Colorado Green wind project whose contract expires in 2018? Will there be a PSCo RFP that Colorado Green can respond to in order to generate without a break in the contract? Is there a chance that Colorado Green will go to Tri-State because PSCo does not have a timely RFP? Or will Colorado Green be able to bid a higher price because the PTC expired and Colorado Green doesn't have to bid against low-cost projects? Or will there be a total of approximately 372 MW of injection capacity on PSCo's Boone-Lamar line after 2018 because the Colorado Green project did not renew its contract?

Response:

This information is outside the scope of Rule 3627.

27. Wind that benefits from the Production Tax Credit (PTC) appears to cost less than coal-fired generation at Craig (using Colowyo coal), Cherokee and Valmont. Please explain why PSCo has not issued a request for proposal (RFP) to contract for more wind capacity before the PTC expires. Please explain why PSCo believes that it is prudent to wait until after the PTC expires to issue an RFP for wind.

Response:

This information is outside the scope of Rule 3627.

28. Wind power that benefits from the Production Tax Credit (PTC) appears to cost less than coal-fired generation at Craig using Colowyo coal.

- a. Please explain what steps PSCo and the other Craig owners are taking to replace Colowyo coal-fired generation with less expensive wind power.
- b. Tri-State, the operator of the Craig plant, has recently contracted for wind from the Carousel and Twin Buttes II wind farm. Did PSCo receive an allocation of these wind contracts to replace Craig generation? Is Tri-State performing its fiduciary duty to the joint owners of Craig by contracting for wind for itself and not for the Craig joint owners?
- c. The Anschtz Corporation subsidiary Power Company of Wyoming (PCW) has proposed 2,000 MW to 3,000 MW of wind in southern Wyoming. The initial focus of PCW's sales efforts was directed at California, but recent reports state that PCW wants to branch out to other customers. PCW states that its wind blows more during the daytime than other wind sources (what capacity credit would be applicable to PCW wind rather than the 12.5% capacity credit for most wind sources). PCW's transmission map shows that a transmission line to or near to Craig is one of the alternatives being considered. Tri-State lists the Craig plant at approximately 1,300 MW of capacity. If the coal units are reduced to half capacity in order to accommodate wind, that means that approximately 650 MW of wind could be taken. If PSCo paid for the transformer upgrade discussed above, it could obtain an additional 300 MW of wind capacity resulting in as much as 900 MW of wind power. Please explain what discussions PSCo has had with PCW.
- d. If PSCo has not discussed a wind purchase with PCW, please explain why not (especially given that their headquarter buildings are located only a few blocks apart). Please explain what new transmission lines and what transmission line upgrades will be considered for the Rule 3627 Report because of PCW or other Wyoming wind purchases.

Response:

- a-c.) This information is outside the scope of Rule 3627.
- d.) Please see Response to Question No. 1.

F. Long-Term Options and Generation Injection Capability

29. Will any action be proposed in the Rule 3627 Report on the projects listed below? If so, what is the basis for moving them from long-term options to more active consideration?

- Parachute - Cameo 230 kV Transmission Line
- Lamar - Front Range 345 kV Transmission Line Project
- Lamar - Vilas 230/345 kV Transmission Line Project

Response:

See Response to Question No. 1.

30. PSCo's direct testimony in Proceeding 14A-0287E showed that generation injection capability is an important consideration in transmission planning. Further, this is useful information for independent power producers looking for locations for their projects. OCC's updated injection capability is provided in the table on the next page. The ones highlighted in grey represent changes from previous filings. Some of the injection capabilities, particularly the west slope ones, were limited to a maximum of 50 MW because that was the size of the Solar Connect RFP. The OCC would appreciate it if PSCo would provide the full injection capability at these sites. The possible 300 MW of injection capability due the increase in transmission capacity using the Craig-Hayden to the east slope line, that was discussed above, has not been included pending the answer to our question. The possible additional 200 MW of injection capability at Lamar that is discussed above has also not been included in the injection capability list shown below. This list is based on three sources: PSCo statements, bids in the 2013 ERP Phase II and existing contract capacities. If PSCo disagrees with any of these injection capability estimates, please provide the basis for the difference.

Response:

This information is outside the scope of Rule 3627.

Table OCC-2 Summary of Public Service Injection Capability			
Changes in grey from Table CN-6 in OCC Answer Testimony in Proceeding 14A-0287E			
Megawatts			
Table OCC-2a Compare Injection Capabilities in Recent PSCo Applications			
14A-0287E Pawnee-Daniels Park CPCN and 14A-0301E Solar Connect RFP			
Location	Interconnection Voltage (kV)	Pawnee-Daniels Park CPCN	14A-0301E Solar Connect RFP *
Boone	115	0	0-50
Comanche	230	0	0-50
Jackson Fuller	230	0	Not listed
Ft. St. Vrain	230	250	380 **
Missile Site	230/345	0	0-50
Pawnee	230/345	0-50	0-50
Lamar	230/345	0	Not listed
Ault	230	0	Not listed
San Luis Valley area	115/230	50	0-50
Poncha	230	Not listed	0-50
Hartsel	230	34	50
Cameo***	230	Not listed	190-380
Collbran***	138	Not listed	50
Hayden***	230	Not listed	50
Rifle***	230	Not listed	50
Uintah***	230	Not listed	50
Total		334-384	720-1,210
* The Solar Connect RFP is for 50 MW of capacity, so 50 MW is the maximum listed. The RFP states that more than 50 MW may be available at some injection points.			
** 14A-0301E lists FSV as 50 MW, but 380 MW was provided in response to Discovery Request OCC1-6d in 14A-0287E at a cost of \$4.5 million.			
*** Cameo updated based on Discovery OCC 6-9 in Proceeding 14AL-0660E Combined west slope total could be less than the sum. 290 MW to 480 MW is used.			
Table OCC-2b Capacity from 2013 Solicitation			
Bid G006 SWGen Valmont CTs			80
Bid G010 Invenergy Spindle 7FA			157
Bid G002 Genova Deer Trail			233
Total Capacity from 2013 Solicitation			470
Highly Confidential bid data made public in Decision C14-1090. Released 11/10/2014.			
Table OCC-2c Existing Site (Brownfield) Expansions			
2011 ERP, Proceeding 11A-869E, Vol 1, page 1-46 Assume one or two 190 MW CTs are added at each site.			
		Low	High
Cherokee (1x1 CC based on OCC 6-9)		285	285
Ft. St. Vrain			Included above
Rocky Mountain Energy Center (CC, per 6-9)		285	285
Blue Spruce Energy Center		190	380
Pawnee (CTs can be added per OCC 6-9. Is transmission required or share wind capacity?)			
Ft. Lupton (one or two CTs per OCC 6-9, net)		150	300
Total		910	1,250
Table OCC-2d Capacity Available at Sites of Retired Units			
Valmont			184
Arapahoe from 08A-145E Arapahoe CC CPCN			514 -569
Table OCC-2e Existing IPP Contracts that Expire by 2024 and Could be Renewed			
L&R Statement provided in response to CEC1-9.A1 in Proceeding 14A-0287E			
Contract	Year Expiration		Capacity
PacifiCorp	2022		150
Manchief	2021		258
SW Arapahoe CC	2023		121
Total			529
Table OCC-2g Cabin Creek Expansion			
CPCN filing in Proceeding No. 15A-0304E			
Cabin Creek Expansion			36.6
Total Capacity			3,364-4,249