



1800 Larimer Street
Denver, CO 80202

September 14, 2018

VIA ELECTRONIC FILING

The Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Re: *Public Service Company of Colorado*
Docket No. ER18-____-000
Ministerial Revisions to Xcel Energy Companies Joint Open Access
Transmission Tariff

Dear Secretary Bose:

Pursuant to section 205 of the Federal Power Act, 16 U.S.C. § 824d, and Section 35.13 of the Rules and Regulations of the Federal Energy Regulatory Commission (“FERC” or “Commission”), 18 C.F.R. § 35.13 (2018), Public Service Company of Colorado (“PSCo”), hereby submits revisions to the Xcel Energy Operating Companies FERC Electric Tariff, Third Revised Volume No. 1 (“Xcel Energy Tariff” or “Tariff”). The enclosed ministerial revisions correct an inconsistency between some language in Schedule 16, Flex Reserve Service (“Schedule 16”) and in Table 35 to Attachment O, Public Service Company of Colorado Formula Rate Tables (Attachment O-PSCo”) and tariff revisions previously accepted by the Commission. PSCo respectfully requests that the Commission accept the proposed ministerial corrections to Schedule 16 and Table 35 to Attachment O-PSCo effective April 16, 2016, the date the current Xcel Energy Tariff was restated in the eTariff system, so Schedule 16 and Table 35 are consistent with the PSCo rates previously accepted for filing by the Commission in Docket No. ER16-1916-000. The proposed ministerial changes have no effect on rates.

I. BACKGROUND

A. The Filing Parties

PSCo is a wholly-owned subsidiary of Xcel Energy Inc, a public utility holding company. PSCo is an integrated electric utility and, *inter alia*, generates, transmits, distributes, and sells electric energy at cost-based regulated rates to approximately 1.5 million retail customers in the State of Colorado subject to the regulatory authority of the Colorado Public Utilities Commission (“CoPUC”).

PSCo provides open access wholesale transmission services to transmission customers under Parts II or III and ancillary-only services to ancillary service customers under Part IV of

the Xcel Energy Tariff, respectively.¹ Approximately 82 percent of the transmission loads on the PSCo system are PSCo retail native loads; the remaining 18 percent are wholesale loads. PSCo also provides wholesale requirements sales service at cost-based rates to six municipal and cooperative customers under the Assured Power and Energy Requirements Tariff. PSCo operates a Balancing Authority Area (“BAA”) in the Western Interconnection region.

Xcel Energy Services Inc. (“XES”) is the centralized service company subsidiary of Xcel Energy and, as such, performs an array of administrative and general services on behalf of the Xcel Energy Operating Companies.² Among other things, XES submits filings with and appears in proceedings before the Commission on behalf of PSCo.

B. Implementation of Schedule 16 to Tariff

On May 15, 2014, as amended on May 24, 2014 (the “May 2014 Filing”), in Docket No. ER14-1969-000, PSCo filed revisions to the Tariff relating to the provision of certain ancillary services by PSCo. The May 2014 Filing proposed implementation of a new ancillary service schedule, Schedule 16 “Flex Reserve Energy Service.” On December 5, 2014, the Commission issued an order conditionally accepting PSCo’s proposed tariff revisions, and suspended them for a nominal period to become effective January 1, 2015, subject to refund.³ The Commission also established hearing and settlement judge procedures. On October 19, 2015, PSCo filed an offer of settlement and settlement agreement to resolve all issues in the proceeding. On March 3, 2016, the Commission approved the settlement.⁴

On April 15, 2016, PSCo filed an administrative filing to migrate (“rebaseline”) certain Tariff records filed under PSCo’s Tariff ID 2000 to new Tariff ID 2001 as a result of implementation of new eTariff software, to be effective April 16, 2016. The Commission accepted the baseline PSCo eTariff migration filings for Tariff ID 2001 in Docket Nos. ER16-1422-000, ER16-1422-001 and ER16-1422-002 by letter order dated August 16, 2016.⁵

On June 13, 2016, while the rebaseline Tariff changes were pending Commission action, PSCo filed revised tariff sheets in Docket No. ER16-1916-000 to, *inter alia*, modify certain

¹ The Xcel Energy Tariff was initially filed via eTariff in *Public Service Company of Colorado*, Docket No. ER10-2070-000, and accepted by the Commission on September 24, 2010. *See Pub. Svc. Co. of Colo.*, Docket No. ER10-2070, delegated letter order (Sept. 24, 2010).

² The other Xcel Energy Operating Companies are Northern States Power Company, a Minnesota corporation, and Northern States Power Company, a Wisconsin corporation (the “NSP Companies”), and Southwestern Public Service Company (“SPS”).

³ *Public Service Company of Colorado*, 149 FERC ¶ 61,208 (2014).

⁴ *Public Service Company of Colorado*, 154 FERC ¶ 61,164 (2016).

⁵ *Public Service Company of Colorado*, Docket No. ER16-1422-000 et al., unpublished letter order (August 16, 2016).

terms associated with the provision of Flex Reserve Service in order to ensure consistency with the tariff records approved by the Commission in Docket No. ER14-1969-000. PSCo stated that the changes were ministerial and either had no impact on rates or would lower rates to customers, and were proposed to be effective January 1, 2015, the effective date of the Flex Reserve changes filed in the May 2014 Filing.

On August 29, 2016, in Docket No. ER16-2504-000, PSCo submitted a further administrative filing to FERC to migrate to Tariff ID 2001 certain Tariff records previously filed under PSCo's Tariff ID 2000 and were pending Commission action at the time of the April 15, 2016 rebaseline filing in Docket No. ER16-1422. The pending tariff records included Tariff revisions proposed in Docket No. ER14-1929. On October 27, 2016, FERC issued a letter order accepting PSCo's August 29, 2016 Tariff revisions with an effective date of April 16, 2016, the effective date of the rebaseline eTariff changes.⁶

Since the submission of the clean-up filings in Docket Nos. ER16-1916-000 and ER16-2504-000, PSCo has identified certain additional minor discrepancies in the currently filed eTariff records from the intent of the Flex Reserve Service settlement in Docket No. ER14-1969, and is submitting the proposed changes to correct the discrepancies.

II. DESCRIPTION AND JUSTIFICATION OF PROPOSED TARIFF REVISIONS

As noted, the purpose of this filing is to correct the discrepancies in the eTariff records to ensure the language in Schedule 16 and Attachment O-PSCo are consistent with the implementation of the settlement in Docket No. ER14-1969. This clean-up filing will: (A) accurately reflect the fixed value of the Required Capacity on line 27 of Table 35 of Attachment O-PSCo as 411 MW, and (B) modify the language in Schedule 16 describing the formula for Flex Reserve Service to accurately reflect the calculation in Table 35.

A. Correction to Required Capacity in Attachment O-PSCo, Table 35

Table 35 of Attachment O-PSCo is a worksheet for deriving PSCo's estimated ancillary service rates from Schedule 16 (Flex Reserve Service). Table 35 shows the derivation of the \$/kW/Mo charges for Schedule 16. The calculation is performed annually. PSCo proposes to modify the flex reserve capacity requirement shown on line 27. In the current Table 35 eTariff record for Schedule 16, the flex reserve capacity requirement is erroneously shown as a calculated amount. The amount of Flex Reserve capacity should be shown as a fixed value of 411 MW in the formula. Modifying this value in Table 35 will display the calculation consistently with the text in Schedule 16, which states:

⁶ *Public Service Company of Colorado*, Docket No. ER16-2504-000, unpublished letter order (October 27, 2016).

A Transmission Customer's or Ancillary Service Customer's Flex Reserve Service requirement shall be the total Flex Reserve Requirement of 411 MW for the PSCo Balancing Authority multiplied by the Customer's proportional share of wind generation in the PSCo Balancing Authority Area, based on the nameplate capacity of installed wind generation in the PSCo Balancing Authority Area serving the customer's load or scheduled exports. This nameplate capacity will be the customer's Flex reserve billing determinants. As conditions change on the PSCo system, PSCo may make a single-issue Section 205 filing with the Commission to update the total Flex Reserve Requirement value.

Thus, PSCo proposes to modify Table 35 to reflect the flex reserve capacity requirement as 411 MW rather than as a calculated value, consistent with Schedule 16.

B. Correction to Schedule 16

In addition, PSCo proposes to make minor corrections to the Schedule 16 eTariff in order to conform to the June 13, 2016 filing in Docket No. ER16-1916-000. In the current Schedule 16 eTariff record, the flex reserve service obligation amount is erroneously reflected as a fixed amount of 18.96%. As discussed in Schedule 16 and as shown in the calculation in Table 35, the amount of Flex Reserve Capacity is a fixed value (411 MW), but an individual customer's Flex Reserve Service Obligation will decline as the amount of renewable generation capacity in the PSCo Balancing Authority increases compared to the fixed 411 MW capacity level. The Flex Reserve Service Obligation is calculated annually using the formula in Table 35, line 29. Stating the Flex Reserve Service obligation as a fixed percentage value in Schedule 16 is inconsistent with both other provisions of Schedule 16 and the calculation in Table 35. The proposed ministerial change eliminates the erroneous fixed percentage and is consistent with how PSCo has administered Schedule 16.

III. INFORMATION RELATING TO THE EFFECT OF THE RATE CHANGE

The purpose of making the proposed tariff changes is to correct the provisions in Schedule 16 and Table 35 to Attachment O-PSCo to make them consistent with the settlement in Docket No. ER14-1969 and the tariff correction previously accepted in Docket No. ER16-1916-000. The ministerial changes ensure that Schedule 16 Flex Reserve Service rates are calculated consistent with the settlement in Docket No. ER4-1969.

IV. ADDITIONAL INFORMATION SUBMITTED IN SUPPORT OF FILING

A. Information Required by Section 35.13 of the Commission's Regulations, 18 C.F.R. § 35.13

1. Contents of Filing – Section 35.13(b)(1)

In addition to this transmittal letter, this filing includes the following:

- revised Table 35 to the Attachment O – PSCo Transmission Formula Rate Template and revised Schedule 16 to the Xcel Energy Tariff in clean eTariff format;
- revised Table 35 to Attachment O-PSCo and revised Schedule 16 in marked format.

2. Requested Effective Date – Section 35.13(b)(2) ; Request For Waiver

PSCo respectfully requests an effective date of April 16, 2016, for the eTariff records contained in this filing. As discussed above, the enclosed revisions correct inconsistencies in the eTariff records, and would have no impact on rates. In addition, the purpose of the revisions is to ensure correct implementation of the existing tariff records accepted by the Commission in other dockets. Granting a waiver under the circumstances would be consistent with Commission precedent as the rates at issue are formula rates based on actual costs.⁷

Because the revised Table 35 and Schedule 16 are part of the Tariff, the metadata for this filing reflects a proposed effective date of April 16, 2016, the earliest proposed effective date the Commission's eTariff system will accept for Tariff ID 2001 since the relevant eTariff records were established effective on April 16, 2016. PSCo clarifies, however, that PSCo has applied the corrected tariff provisions effective as of January 1, 2015, as contemplated by the settlement in Docket No. ER14-1969.⁸ PSCo respectfully requests that the Commission grant a waiver of the requirements of 18 C.F.R. § 35.13, and any other rule or regulatory provision that may be deemed necessary, in order to accept the proposed revisions to the PSCo Tariff and to grant the requested effective date.

In addition, pursuant to Rule 2003 of the Commission's Regulations, 18 C.F.R. 385.2003, all filings with the Commission are required to comply with the Commission's formatting requirements, notably the requirement of a minimum (10 point) font size. The Transmission Formula records included in the XML filing package have been converted from their native Excel spreadsheet format to RTF tables, in compliance with the Commission's eTariff regulations. The Commission letter order previously accepted the PSCo Tariff ID 2001 even though the font size for portions of the Tariff was less than 10 point. To the extent necessary, XES and PSCo again seek waiver of Rule 2003 to file the Transmission Formula Table 35 using a font smaller than the minimum font size.

⁷ See, e.g., *Public Service Electric & Gas Co.*, 124 FERC ¶ 61,303 (2008); *Am. Elec. Power Serv. Corp.*, 120 FERC ¶ 61,205 (2007).

⁸ PSCo resettled Schedule 16 charges with affected Tariff customers in December 2016 for 2015 and 2016, with interest consistent with the tariff revisions filed in Docket No. ER16-1916-000.

3. The Names and Addresses of Persons to Whom a Copy of the Rate Change Has Been Posted – Section 35.13(b)(3)

An electronic notice of this filing will be served on the Colorado Public Utilities Commission and all affected PSCo transmission service customers taking service under the Tariff. A courtesy copy will be served on the Director, Division of Electric Power Regulation (West). In addition, a copy of this filing will be available at the offices of PSCo at 1800 Larimer Street, Denver, Colorado.

4. Brief Description of Rate Change – Section 35.13(b)(4)

See Sections II and III above.

5. Statement of Reasons for Rate Change – Section 35.13(b)(5)

See Sections II and III above.

6. Requisite Agreement for Rate Change – Section 35.13(b)(6)

See Section III above. The changes are being made to correct inconsistencies in the eTariff language and would not impact rates.

7. Statement Showing Expenses or Costs Included in cost-of-Service Statements – Section 35.13(b)(7)

None of the costs related to this filing have been alleged in any administrative or judicial proceeding to be illegal, duplicative, or unnecessary costs that are demonstrably the product of discriminatory practices.

B. Communications

Correspondence and communications with respect to this filing should be sent to, and XES requests the Secretary include on the official service list, the following:⁹

⁹ To the extent necessary, XES respectfully requests waiver of Rule 203(b)(3) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.203(b), to permit all of the persons listed to be placed on the official service list for this proceeding.

Honorable Kimberly D. Bose
September 14, 2018
Page 7

James P. Johnson
Assistant General Counsel
Xcel Energy Services Inc.
414 Nicollet Mall – 401-08
Minneapolis, MN 55401
Telephone: (612) 215-4592
Email: James.P.Johnson@xcelenergy.com

Diane Watkins
Manager, Federal Regulatory Affairs
Xcel Energy Services Inc.
1800 Larimer St, Suite 1200
Denver, CO 80202
Telephone: (303) 571-6428
Email: Diane.Watkins@xcelenergy.com

Mark C. Moeller
Manager, Transmission Business Relations
Xcel Energy Services Inc.
414 Nicollet Mall – 6th Floor
Minneapolis, MN 55401
Telephone: (612) 330-4592
Email: Mark.C.Moeller@xcelenergy.com

V. CONCLUSION

For the reasons stated above, the PSCo respectfully requests that the Commission accept the revised e-Tariff records, to be effective April 16, 2016.

Respectfully submitted,

/s/ Diane Watkins

Diane Watkins
Manager, Federal Regulatory Affairs
Xcel Energy Services Inc.
1800 Larimer St, Suite 1200
Denver, CO 80202
Telephone: (303) 571-6428
Email: Diane.Watkins@xcelenergy.com

Cc: Colorado Public Utilities Commission
Director, Division of Tariffs and Market Development (West)
PSCo Tariff Customers

CERTIFICATE OF SERVICE

I hereby certify that I have this day electronically served a notice of the enclosed filing on the state commission with jurisdiction over PSCo and on affected transmission service customers.

Dated at Minneapolis, Minnesota this 14th day of September, 2018.

s/ Elizabeth A. Walkup

Elizabeth A. Walkup

Xcel Energy/Responsible by Nature

Transmission Business Analyst

414 Nicollet Mall – 6th Floor

Minneapolis, MN 55401

(612) 330-6780

elizabeth.a.walkup@xcelenergy.com

Xcel Energy Operating Companies
FERC FPA Electric Tariff
Third Revised Volume No. 1

Proposed Effective Date: 4/16/2016

Att O-PSCo Formula Rate,
Table 35, Schedule 16
Version 0.1.0
Page 1 of 2
Approved Effective Date:

Public Service Company of Colorado
Transmission Formula Rate Template
Ancillary Services, Schedule No. 16
Flex Reserves

Table 35
Schedule 16

Line No		Plant/Type	Contribution Ratio (1)	Installed Cost (\$/kW) (2)	Operation and Maintenance (\$/kW) (3)	Fixed charge (\$/kW) (d) x Prod FCR without O&M (4) or if PP (d) x 1.0	Cost of providing reactive supply services (\$/kW) (5)	Weighted Annual Cost (\$/kW) ((f)+(e)-(g)) x (c)
		col. (a)	col. (b)	col. (c)	col. (e)	col. (f)	col. (g)	col. (h)
1	Arapahoe		1.2%	0.00	0.00	0.00	0.00	0.00
2	Cherokee		2.8%	0.00	0.00	0.00	0.00	0.00
3	Comanche		3.0%	0.00	0.00	0.00	0.00	0.00
4	Craig		0.0%	0.00	0.00	0.00	0.00	0.00
5	Hayden		0.6%	0.00	0.00	0.00	0.00	0.00
6	Pawnee		1.4%	0.00	0.00	0.00	0.00	0.00
7	Valmont 5		1.0%	0.00	0.00	0.00	0.00	0.00
8	Zuni		0.0%	0.00	0.00	0.00	0.00	0.00
9	Alamosa		0.9%	0.00	0.00	0.00	0.00	0.00
10	Fort Lupton		2.5%	0.00	0.00	0.00	0.00	0.00
11	Fruita		0.7%	0.00	0.00	0.00	0.00	0.00
12	Valmont 6		1.2%	0.00	0.00	0.00	0.00	0.00
13	Fort St. Vrain 1-4		7.3%	0.00	0.00	0.00	0.00	0.00
14	Fort St. Vrain 5-6		13.3%	0.00	0.00	0.00	0.00	0.00
15	Blue Spruce		11.2%	0.00	0.00	0.00	0.00	0.00
16	Rocky Mountain		8.1%	0.00	0.00	0.00	0.00	0.00
17	Cabin Creek		6.2%	0.00	0.00	0.00	0.00	0.00
18	Brush Cogeneration Partners (Brush 1&3) PP		4.0%	0.00	0.00	0.00	0.00	0.00
19	Brush Cogeneration Partners (Brush 4) PP		6.5%	0.00	0.00	0.00	0.00	0.00
20	Colorado Energy Management LLC (Manch) PP		12.2%	0.00	0.00	0.00	0.00	0.00
21	Plains End LLC PP		5.2%	0.00	0.00	0.00	0.00	0.00
22	Spindle Hill PP		10.8%	0.00	0.00	0.00	0.00	0.00
23								
24			100.00%				Total Reg/LF cost (\$/kW)	0.00
25							losses	0.00%
26							Annual Cost (\$/MW)	0.00
27	Required Capacity (MW) (1)	411						
28	Wind Nameplate							
29	Reserve obligation (Line 27 / Line 28)	0%						
30	Rate (\$/kW/Yr)	\$0.00						
31	Monthly (\$/kW/Mo)	\$0.000						
32	Weekly (\$/kW/Wk)	\$0.000						
33	Daily On Peak (\$/MW/Day)	\$0.000						
34	Daily Off Peak (\$/MW/Day)	\$0.000						
35	Hourly On Peak (\$/MW/hr)	\$0.000						
36	Hourly Off Peak (\$/MW/hr)	\$0.000						
37	Network Integrated Delivery(\$/kW/Mo)	\$0.000						
38	Ancillary Service Delivery(\$/kW/Mo)	\$0.000						

Note:

(1) Fixed value that cannot change without a Section 205 or 206 filing.

(2) WP_Installed Cost, Column (g).

(3) WP_O&M Cost, Column (i).

Xcel Energy Operating Companies
FERC FPA Electric Tariff
Third Revised Volume No. 1

Proposed Effective Date: 4/16/2016

Att O-PSCo Formula Rate,
Table 35, Schedule 16
Version 0.1.0
Page 2 of 2
Approved Effective Date:

(4) WP_FCR Line 21 minus Line 1.

(5) Column (c) times WP_Reactive Cost, Column (f). For Purchased Power, used the same Reactive Power Cost as the Plants.

Proposed Effective Date: 4/16/2016

Approved Effective Date:

SCHEDULE 16

Flex Reserve Service

Flex Reserve Service is needed to maintain generation and load balance in the event of a reduction of online wind generation of 100 MW or more in 30 minutes due to reductions in wind speed. Any Transmission Customer or Ancillary Service Customer using wind generation to serve load in the PSCo Balancing Authority Area or exporting the output of wind generation out of the PSCo Balancing Authority Area must purchase or self-supply Flex Reserve Service.

Flex Reserve Service may be provided by the following resources: (i) generating units that are on-line but unloaded, (ii) generating units off-line but capable of starting in 30 minutes, or (iii) interruptible load or other non-generation resources capable of providing this service.

Determination of Flex Reserve Requirement.

A Transmission Customer's or Ancillary Service Customer's Flex Reserve Service requirement shall be the total Flex Reserve Requirement of 411 MW for the PSCo Balancing Authority multiplied by the customer's proportional share of wind generation in the PSCo Balancing Authority Area, based on the nameplate capacity of installed wind generation in the PSCo Balancing Authority Area serving the customer's load or scheduled exports. This nameplate capacity will be the customer's Flex reserve billing determinants. As conditions change on the PSCo system, PSCo may make a single-issue Section 205 filing with the Commission to update the total Flex Reserve Requirement value.

The Transmission Customer or Ancillary Service Customer shall purchase Flex Reserve Service in the following amounts:

- 1) For Point-To-Point Transmission Service: the Reserve Obligation percentage identified on Table 35, line 29 of the Attachment O-PSCo formula rate
- 2) For Network Integration Transmission Service: the Reserve Obligation percentage identified on Table 35, line 29 of the Attachment O-PSCo formula rate
- 3) For Balancing Authority Area Ancillary Services: the Reserve Obligation percentage identified on Table 35, line 29 of the Attachment O-PSCo formula rate

The charges for Flex Reserve Service are to be based on the rates set forth below, as found in Attachment O – PSCo of this Tariff.

- 4) Monthly Point-To-Point Delivery: the amount identified on Table 2, line 78 of the PSCo formula rate /kW-month
- 5) Weekly Point-To-Point Delivery: the amount identified on Table 2, line 79 of the PSCo formula rate /kW-week
- 6) Daily Point-To-Point Delivery: the amount identified on Table 2, line 80 of the PSCo formula rate /kW-day
- 7) Daily Point-To-Point Delivery: the amount identified on Table 2, line 81 of the PSCo formula rate /kW-day

Proposed Effective Date: 4/16/2016

Approved Effective Date:

- | | |
|--|--|
| 8) Hourly Point-To-Point Delivery:
the PSCo formula rate /MWh | the amount identified on Table 2, line 82 of |
| 9) Hourly Point-To-Point Delivery:
the PSCo formula rate /MWh | the amount identified on Table 2, line 83 of |
| 10) Network Integration Delivery:
the PSCo formula rate /kW-month | the amount identified on Table 2, line 84 of |
| 11) Ancillary Services Delivery:
the PSCo formula rate /kW-month | the amount identified on Table 2, line 85 of |

The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section (6) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the rate specified in section (5) above times the highest amount in kilowatts of Reserved Capacity in any hour during such week.

Notwithstanding the foregoing, an Ancillary Service Customer whose load is served by no more than 10 MW nameplate capacity of wind generation all of which is interconnected to the distribution system behind the meter, shall not pay the charge set forth above but shall instead pay an administrative charge equal to \$0.58/kW-month.

The customer must either purchase this service from the Transmission Provider or BA Operator or make alternative comparable arrangements to satisfy its Flex Reserve Service obligation.

The nameplate capacity of the customer's wind generation used for billing purposes for the calendar year shall be the nameplate capacity of wind generation serving the customer's load or scheduled exports as of January 1 of that calendar year: nameplate capacity figures shall only be updated for billing purposes on January 1 of the applicable year. To facilitate proper billing, the customer shall provide a written certification setting forth each customer's wind generating resources and nameplate capacity of each listed resource. This written certification shall be provided on or before December 1 of each year for the following calendar year.

Xcel Energy Operating Companies
FERC FPA Electric Tariff
Third Revised Volume No. 1

Att O-PSCo Formula Rate,
Table 35, Schedule 16

Version ~~0-0-0~~ 0.1.0

Proposed Effective Date: ~~4/16/2016~~ 4/16/2016

Page 1 of 2

Public Service Company of Colorado
Transmission Formula Rate Template
Ancillary Services, Schedule No. 16
Flex Reserves

Table 35
Schedule 16

Line No	Plant/Type		Contribution Ratio (1)	Installed Cost (\$/kW) (2)	Operation and Maintenance (\$/kW) (3)	Fixed charge (\$/kW) (d) x Prod FCR without O&M (4) or if PP (d) x 1.0	Cost of providing reactive supply services (\$/kW) (5)	Weighted Annual Cost (\$/kW) ((f)+(e)-(g)) x (c)
	col. (a)	col. (b)	col. (c)	col. (d)	col. (e)	col. (f)	col. (g)	col. (h)
1	Arapahoe		1.2%	0.00	0.00	0.00	0.00	0.00
2	Cherokee		2.8%	0.00	0.00	0.00	0.00	0.00
3	Comanche		3.0%	0.00	0.00	0.00	0.00	0.00
4	Craig		0.0%	0.00	0.00	0.00	0.00	0.00
5	Hayden		0.6%	0.00	0.00	0.00	0.00	0.00
6	Pawnee		1.4%	0.00	0.00	0.00	0.00	0.00
7	Valmont 5		1.0%	0.00	0.00	0.00	0.00	0.00
8	Zuni		0.0%	0.00	0.00	0.00	0.00	0.00
9	Alamosa		0.9%	0.00	0.00	0.00	0.00	0.00
10	Fort Lupton		2.5%	0.00	0.00	0.00	0.00	0.00
11	Fruita		0.7%	0.00	0.00	0.00	0.00	0.00
12	Valmont 6		1.2%	0.00	0.00	0.00	0.00	0.00
13	Fort St. Vrain 1-4		7.3%	0.00	0.00	0.00	0.00	0.00
14	Fort St. Vrain 5-6		13.3%	0.00	0.00	0.00	0.00	0.00
15	Blue Spruce		11.2%	0.00	0.00	0.00	0.00	0.00
16	Rocky Mountain		8.1%	0.00	0.00	0.00	0.00	0.00
17	Cabin Creek		6.2%	0.00	0.00	0.00	0.00	0.00
18	Brush Cogeneration Partners (Brush 1&3) PP		4.0%	0.00	0.00	0.00	0.00	0.00
19	Brush Cogeneration Partners (Brush 4) PP		6.5%	0.00	0.00	0.00	0.00	0.00
20	Colorado Energy Management LLC (Manch) PP		12.2%	0.00	0.00	0.00	0.00	0.00
21	Plains End LLC PP		5.2%	0.00	0.00	0.00	0.00	0.00
22	Spindle Hill PP		10.8%	0.00	0.00	0.00	0.00	0.00
23								
24			100.00%				Total Reg/LF cost (\$/kW)	0.00
25							losses	0.00%
26							Annual Cost (\$/MW)	0.00
27	Required Capacity (MW) (12)	9411						
28	Wind Nameplate							
29	Reserve obligation (Line 27 / Line 28)	0%						
30	Rate (\$/kW/Yr)	\$0.00						
31	Monthly (\$/kW/Mo)	\$0.000						
32	Weekly (\$/kW/Wk)	\$0.000						
33	Daily On Peak (\$/MW/Day)	\$0.000						
34	Daily Off Peak (\$/MW/Day)	\$0.000						
35	Hourly On Peak (\$/MW/hr)	\$0.000						
36	Hourly Off Peak (\$/MW/hr)	\$0.000						
37	Network Integrated Delivery(\$/kW/Mo)	\$0.000						
38	Ancillary Service Delivery(\$/kW/Mo)	\$0.000						

Note:

(1) Fixed value that cannot change without a Section 205 or 206 filing.

(2) WP_Installed Cost, Column (g).

(3) WP_O&M Cost, Column (i).

(4) WP_FCR Line 21 minus Line 1.

(5) Column (c) times WP_Reactive Cost, Column (f). For Purchased Power, used the same Reactive Power Cost as the Plants.

SCHEDULE 16

Flex Reserve Service

Flex Reserve Service is needed to maintain generation and load balance in the event of a reduction of online wind generation of 100 MW or more in 30 minutes due to reductions in wind speed. Any Transmission Customer or Ancillary Service Customer using wind generation to serve load in the PSCo Balancing Authority Area or exporting the output of wind generation out of the PSCo Balancing Authority Area must purchase or self-supply Flex Reserve Service.

Flex Reserve Service may be provided by the following resources: (i) generating units that are on-line but unloaded, (ii) generating units off-line but capable of starting in 30 minutes, or (iii) interruptible load or other non-generation resources capable of providing this service.

Determination of Flex Reserve Requirement.

A Transmission Customer's or Ancillary Service Customer's Flex Reserve Service requirement shall be the total Flex Reserve Requirement of 411 MW for the PSCo Balancing Authority multiplied by the customer's proportional share of wind generation in the PSCo Balancing Authority Area, based on the nameplate capacity of installed wind generation in the PSCo Balancing Authority Area serving the customer's load or scheduled exports. This nameplate capacity will be the customer's Flex reserve billing determinants. As conditions change on the PSCo system, PSCo may make a single-issue Section 205 filing with the Commission to update the total Flex Reserve Requirement value.

The Transmission Customer or Ancillary Service Customer shall purchase Flex Reserve Service in the following amounts:

- 1) For Point-To-Point Transmission Service: ~~18.96% of the Reserve Obligation percentage identified on Table 35, line 29 of the Attachment O-PSCo formula rate of Reserved Capacity~~
- 2) For Network Integration Transmission Service: ~~the Reserve Obligation percentage identified on Table 35, line 29 of the Attachment O-PSCo formula rate 18.96% of Wind VER nameplate capacity~~
- 3) For Balancing Authority Area Ancillary Services: ~~the Reserve Obligation percentage identified on Table 35, line 29 of the Attachment O-PSCo formula rate 18.96% of Wind VER nameplate capacity~~

The charges for Flex Reserve Service are to be based on the rates set forth below, as found in Attachment O – PSCo of this Tariff.

- 4) Monthly Point-To-Point Delivery: the amount identified on Table 2, line 78 of the PSCo formula rate /kW-month
- 5) Weekly Point-To-Point Delivery: the amount identified on Table 2, line 79 of the PSCo formula rate /kW-week
- 6) Daily Point-To-Point Delivery: the amount identified on Table 2, line 80 of

the PSCo formula rate /kW-day	
7) Daily Point-To-Point Delivery: the PSCo formula rate /kW-day	the amount identified on Table 2, line 81 of
8) Hourly Point-To-Point Delivery: the PSCo formula rate /MWh	the amount identified on Table 2, line 82 of
9) Hourly Point-To-Point Delivery: the PSCo formula rate /MWh	the amount identified on Table 2, line 83 of
10) Network Integration Delivery: the PSCo formula rate /kW-month	the amount identified on Table 2, line 84 of
11) Ancillary Services Delivery: the PSCo formula rate /kW-month	the amount identified on Table 2, line 85 of

The total demand charge in any day, pursuant to a reservation for Hourly delivery, shall not exceed the rate specified in section (6) above times the highest amount in kilowatts of Reserved Capacity in any hour during such day. In addition, the total demand charge in any week, pursuant to a reservation for Hourly or Daily delivery, shall not exceed the rate specified in section (5) above times the highest amount in kilowatts of Reserved Capacity in any hour during such week.

Notwithstanding the foregoing, an Ancillary Service Customer whose load is served by no more than 10 MW nameplate capacity of wind generation all of which is interconnected to the distribution system behind the meter, shall not pay the charge set forth above but shall instead pay an administrative charge equal to \$0.58/kW-month.

The customer must either purchase this service from the Transmission Provider or BA Operator or make alternative comparable arrangements to satisfy its Flex Reserve Service obligation.

The nameplate capacity of the customer's wind generation used for billing purposes for the calendar year shall be the nameplate capacity of wind generation serving the customer's load or scheduled exports as of January 1 of that calendar year: nameplate capacity figures shall only be updated for billing purposes on January 1 of the applicable year. To facilitate proper billing, the customer shall provide a written certification setting forth each customer's wind generating resources and nameplate capacity of each listed resource. This written certification shall be provided on or before December 1 of each year for the following calendar year.