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Denver, Colorado 80201-0840

December 1, 2020

Advice No. 1844 - Electric

Public Utilities Commission  
of the State of Colorado  
1560 Broadway, Suite 250  
Denver, Colorado 80202

The accompanying tariff sheet issued by Public Service Company of Colorado ("Public Service" or "Company") is sent to you for filing in accordance with the requirements of the Public Utilities Law and the Rules of Practice and Procedure, 4 CCR 723-1-1210:

COLORADO P.U.C. NO. 8 - ELECTRIC

and the following sheet is attached:

Colorado P.U.C. No. 8 Sheet No.	Title of Sheet	Cancels Colorado P.U.C. No. 8 Sheet No.
Fourth Revised P7	Purchase Payment Amount Table	Third Revised P7

The principal proposed change is: to revise the capacity and energy payment rates applicable to Qualifying Facilities ("QFs") with a design capacity of 100 kilowatts ("kW") or less in the Company's Electric Purchase - Small Power Production and Cogeneration Facility Policy Section ("QF Tariff") of its P.U.C. No. 8 – Electric Tariff ("Electric Tariff") to become effective January 1, 2021. This proposed change is made pursuant to Colorado Public Utilities Commission ("Commission") Decision Nos. C14-1153<sup>1</sup> and C16-0005<sup>2</sup> in the last QF Methodology Proceeding No. 13AL-0958E, and the terms and conditions of the Company's Electric Tariff. In addition, Commission Rules Regulating Electric Utilities 4 CCR 723-3, Section 3900, Small Power Production and Cogenerators, require the Company to offer standard rates for purchases from QFs with a design capacity of 100 kW or less. This Advice Letter and

<sup>1</sup> Commission approval of Recommended Decision No. R14-1288-I.

<sup>2</sup> Commission approval of Recommended Decision No. R15-1177.

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the documents which are being filed with it are in substantively the same form and contain the content as last year's filing, with the exception of the change in the actual rate numbers.

In Decision Nos. C14-1153 and C16-0005, the Commission approved the derivation of the Energy Payment Rate Component based on forward-looking marginal energy cost ("MEC"), weighted by a technology specific resource, and adjusted to take into consideration integration costs by technology. The Capacity Payment Rate Component is based on the cost of the least cost capacity resource, adjusted to reflect different technology operating characteristics and the Company's capacity need.<sup>3</sup> The Company has used inputs, values and methods from the most recent Commission approved 2016 Phase I Electric Resource Plan ("2016 ERP"), (Decision No. C17-0316 in Proceeding No. 16A-0396E), in the derivation of the 2020 Energy and Capacity Payment Rate Components

The findings and directives of Decision Nos. C14-1153 and C16-0005 require the Company to provide the following with this Advice Letter filing:

- Number of customers currently taking service under the QF Tariff and a projection of customers that will take service under the tariff during the calendar year in which the rates are effective (Decision No. C16-0005, ¶24). Currently, there is one customer taking service under the Company's QF Tariff. The Company does not currently expect to add any additional customers to its QF Tariff in 2021.
- Results of a diagnostic PLEXOS® model run for the 2021 calendar year showing the base case for 2021 and a diagnostic case for 2021 for the change to the Energy Payment Rate Component of the standard rate and inputs used in the base case PLEXOS® model run (Decision No. R15-1177, ¶110 and ¶111).
- Information regarding a change from PLEXOS® to another production cost model in the event the Company replaces PLEXOS® with a different production cost model. For 2021, there was no change in the production cost model from PLEXOS® (Decision No. R15-1177, ¶122).
- Proposed Capacity and Energy Payment Rate Components for the 2021 calendar year consistent with the methods approved by Commission Decisions in Proceeding No. 13AL-0958E.

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<sup>3</sup> Technologies include PV Fixed, PV Tracking, Wind, Hydro, and Other.

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Submitted with this Advice Letter are the following Exhibits:

- Exhibit 1: Derivation of 2021 QF Capacity and Energy Payment Rate Components;
- Exhibit 2: 2021 QF Base Case PLEXOS® Model Inputs and Outputs;
- Exhibit 3: 2021 QF Diagnostic PLEXOS® Model; and
- Exhibit 4: Customer Legal Notice.

Exhibit 1 provides the derivation of the 2021 Capacity and Energy Payment rates. This Exhibit does not contain any Confidential or Highly Confidential Information.

Exhibit 2 provides the 2021 Base Case PLEXOS® Model inputs and outputs used to derive the 2021 MEC, which is the first step in deriving the Energy Payment Rate Component. Pages 11 through 16 of Exhibit 2 contain Confidential Information. Pages 17 through 184 of Exhibit 2 contain Highly Confidential Information.<sup>4</sup>

Exhibit 3 identifies the marginal generating unit when increased load is added to the 2021 PLEXOS® Model Base Case. All information in Exhibit 3 is Highly Confidential Information.

Exhibit 4 is the Customer Legal Notice. The notice will be published in the Legal Classified Section of the *Denver Post* and a copy delivered by the United States Mail to all qualifying facilities interconnected to the Company's electric system. This Exhibit does not contain any Confidential or Highly Confidential Information.

The 2021 proposed Purchase Payment Rates and a comparison to currently effective Purchase Payment Rates applicable to QFs with a design capacity of 100kW or less is as follows:

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<sup>4</sup> Please see the Company's Motion for Extraordinary Protection filed contemporaneously with Advice No. 1844-Electric in this Proceeding for the designation of Highly Confidential Information. This Motion is substantively the same one which was filed and approved by the Commission in Decision No. C19-1017.



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<b>2021 Rate Components \$/MWh</b>	<b>PV Fixed</b>	<b>PV Tracking</b>	<b>Wind</b>	<b>Hydro</b>	<b>Other</b>
Capacity Payment Rate	\$15.16	\$ 12.01	\$ 1.72	\$ 9.03	\$ 6.79
Energy Payment Rate	\$17.04	\$ 17.29	\$10.84	\$14.84	\$14.74
<b>Total 2021 QF Payment Rate</b>	<b>\$32.20</b>	<b>\$ 29.30</b>	<b>\$12.56</b>	<b>\$23.87</b>	<b>\$21.53</b>

<b>2020 Rate Components \$/MWh</b>	<b>PV Fixed</b>	<b>PV Tracking</b>	<b>Wind</b>	<b>Hydro</b>	<b>Other</b>
Capacity Payment Rate	\$13.17	\$10.43	\$ 1.48	\$ 7.84	\$ 5.89
Energy Payment Rate	\$20.58	\$ 20.42	\$14.28	\$18.01	\$18.00
<b>Total 2020 QF Payment Rate</b>	<b>\$33.75</b>	<b>\$ 30.85</b>	<b>\$15.76</b>	<b>\$25.85</b>	<b>\$23.89</b>
<b>Change from 2020-2021 (\$)</b>	<b>\$-1.55</b>	<b>\$-1.55</b>	<b>\$-3.20</b>	<b>\$-1.98</b>	<b>\$-2.36</b>
<b>Change from 2020-2021 (%)</b>	<b>-4.6%</b>	<b>-5.0%</b>	<b>-20.3%</b>	<b>-7.7%</b>	<b>-9.9%</b>

The 2021 updated rate components result in a decrease to the total payment rate for all QF categories as compared to 2020. The updated Capacity Payment Rate Component is an increase while the Energy Payment Rate Component is a decrease, resulting in an overall decrease in the total payment rate for these technologies. The decrease in the Energy Payment Rate Component is primarily driven by an increase in the amount of wind generation the Company has added to its system as compared to 2020 which offsets other generation resources, resulting in overall lower system costs which results in lower marginal costs. The increase to the Capacity Payment Rate Component is primarily driven by one less year of the surplus capacity credit being applied to the value of capacity for years 2021-2030 (see steps 6 and 7 of Exhibit 1).

There is an estimated decrease to the Company's annual electric energy expense as a result of this rate change of approximately \$415<sup>5</sup>.

It is requested that the changed tariff sheet accompanying this Advice Letter become effective on January 1, 2021.

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<sup>5</sup> The Capacity Payment Rate Component is fixed at 2019 levels for the one customer selling power to the Company under this tariff, therefore, the expense is a reduction because the Energy Payment Rate Component for 2021 is a decrease as compared to 2020.

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Copies of this Advice Letter, the Company's QF Tariff, Exhibit 1 - Derivation of 2021 QF Capacity and Energy Payment Rate Components, and Exhibit 4 – Customer Legal Notice will be provided electronically to all parties who participated in Proceeding No. 13AL-0958E, Public Service's most recent proceeding addressing QFs with a design capacity of 100kW or less.<sup>6</sup>

Please send copies of all notices, pleadings, correspondence, and other documents regarding this filing to:

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Manager

MAM:sdw

Enclosures

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<sup>6</sup> Parties in Proceeding No. 13AL-0958E who will be served are: Commission Staff, OCC, and Vote Solar.