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**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF SOUTH DAKOTA**

**DOCKET EL18-038**

**IN THE MATTER OF THE COMPLAINT OF ENERGY OF UTAH, LLC AND FALL RIVER SOLAR, LLC AGAINST  
BLACK HILLS POWER INC. DBA BLACK HILLS ENERGY FOR DETERMINATION OF AVOIDED COST**

**STAFF MEMORANDUM SUPPORTING  
SETTLEMENT STIPULATION**

**AUGUST 14, 2020**

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Commission Staff (“Staff”) submits this Memorandum in support of the Settlement Stipulation (“Settlement”) of August 12, 2020, between Energy of Utah, LLC and Fall River Solar, LLC (collectively, “Fall River”), Black Hills Energy (“Black Hills”), and Staff, collectively referred to herein as “the Parties,” in the above-captioned matter.

**BACKGROUND**

On September 14, 2018, Fall River filed with the Commission a Complaint Against Black Hills for Determination of Avoided Cost (“Complaint”) in accordance with the Public Utilities Regulatory Policies Act of 1978 (“PURPA”). In the Complaint, Fall River stated that it is an 80 MW solar generating facility and is a Qualifying Facility (“QF”) as defined in PURPA. The Complaint further described the attempts made by Fall River and Black Hills to negotiate a price for Black Hills’ avoided cost. Negotiations broke down on September 6, 2018, and resulted in Fall River filing the Complaint on September 14, 2018. On October 4, 2018, Black Hills filed its answer to Fall River’s Complaint.

The record before the Commission includes direct, rebuttal, and supplemental testimony. On March 22, 2019, Fall River filed the direct testimonies of Mark Klein and Ros Vrba. On May 7, 2019, Black Hills filed the direct testimonies of James McMahon, Kyle D. White, and Amanda M. Thames. On August 9, 2019, Staff filed the direct testimony of Darren Kearney. On January 30, 2020, Black Hills filed rebuttal testimonies of James McMahon, Kyle White, and Amanda M. Thames. On March 12, 2020, Fall River filed the rebuttal testimony of Mark Klein. On April 30, 2020, Staff filed the supplemental testimony of Darren Kearney.

After extensive negotiations between Fall River and Black Hills, the Parties agreed to a Settlement that resolves all matters related to Fall River’s Complaint. The Settlement was filed with the Commission on August 12, 2020.

## **OVERVIEW OF SETTLEMENT**

There are five conditions the Parties agreed to in the Settlement. First, the main condition of the Settlement is the PPA rate of **[Begin Confidential]** [REDACTED] **[End Confidential]** that was settled on by Fall River and Black Hills. Second, is a condition that the Renewable Energy Credits (“RECs”) will be transferred to Black Hills at no additional cost for the benefit of its customers. Third, the Settlement identifies basic terms that will be included in the PPA such as: 1) the PPA is for a 20-year term, 2) the Commercial Operation Date must be achieved between December 31, 2021 and December 31, 2022, 3) the Party responsible for procuring ancillary and regulation services, and 4) other commercial terms and construction milestones that are typically included in PPAs. Fourth, the Settlement identifies Fall River and Black Hills will enter into a Large Generator Interconnection Agreement (LGIA). Finally, the last condition of the Settlement identifies that the Parties still dispute certain facts, testimony, and claims and that the Settlement cannot be used as precedent in any future proceeding before the Commission.

## **STAFF’S JUSTIFICATION FOR ENTERING SETTLEMENT**

The Settlement, as summarized above, contains terms that bind Fall River and Black Hills to execute a PPA at a certain price, for a certain term, with certain conditions. The essence of the Settlement was negotiated between Fall River and Black Hills without Staff at the table. After Black Hills and Fall River presented the Settlement to Staff, Staff reviewed the terms of the Settlement as set forth herein prior to agreeing to participate in the Settlement.

### **PURPA Regulations Considered By Staff**

The first thing Staff considered is the rate Congress intended a QF be paid by the utility for its energy and capacity. When Congress enacted PURPA it established the general criteria for a utility’s avoided cost rate. That criteria is provided in 16 USC §824a-3(b), which states:

**RATES FOR PURCHASES BY ELECTRIC UTILITIES** The rules prescribed under subsection (a) shall insure that, in requiring any electric utility to offer to purchase electric energy from any qualifying cogeneration facility or qualifying small power production facility, the rates for such purchase—

(1) shall be just and reasonable to the electric consumers of the electric utility and in the public interest, and

(2) shall not discriminate against qualifying cogenerators or qualifying small power producers.

No such rule prescribed under subsection (a) shall provide for a rate which exceeds the incremental cost to the electric utility of alternative electric energy.

In its implementing regulation, the Federal Energy Regulatory Commission (“FERC”) copied Congress’ general criteria for the rate to be paid to a QF and then expanded on certain factors that could affect the rate. This regulation was codified in 18 CFR §292.304. Both Congress and FERC clearly state that the rate a QF is entitled to for selling its energy and capacity to a utility is capped at the utility’s avoided

cost. However, FERC also clarified that if the rate is negotiated between a utility and a QF then the criteria set forth in 18 CFR §292.304 does not apply and, thus, the rate may be determined outside the strict confines of PURPA and be considered just and reasonable. This clarification by FERC is found in 18 CFR §292.301, which states:

**§ 292.301 Scope.**

**(a) *Applicability.*** This subpart applies to the regulation of sales and purchases between qualifying facilities and electric utilities.

**(b) *Negotiated rates or terms.*** Nothing in this subpart:

**(1)** Limits the authority of any electric utility or any qualifying facility to agree to a rate for any purchase, or terms or conditions relating to any purchase, which differ from the rate or terms or conditions which would otherwise be required by this subpart; or

**(2)** Affects the validity of any contract entered into between a qualifying facility and an electric utility for any purchase.

Even though FERC states that a negotiated rate between a QF and utility is not capped by regulation at the utility's avoided cost, Staff reviewed the Settlement PPA rate to determine if it aligned with the avoided cost criteria established by FERC in 18 CFR §292.304 and Black Hills' avoided cost as Staff finds that cost to be.

### **Analysis of the Settlement PPA Rate**

The idea of determining a utility's avoided cost and then capping the rate paid to a QF at the avoided cost appears simple and objective; however, in practice the determination of the utility's avoided cost can be difficult and subjective. This is especially true if the QF elected to be paid based on a forecast of the utility's avoided cost, which is what Fall River elected to do in this case. In order to accommodate Fall River's request for a rate, Black Hills ran modeling to calculate its avoided cost based on several assumptions imbedded in the model. The use of modeling creates subjectivity and provides an opportunity for experts to disagree as to what the proper assumptions are. This, in turn, creates a range for Black Hills' avoided cost that a reasonable mind could find Black Hills' avoided cost falls within. Prior to signing on to the Settlement, Staff ensured that the Settlement PPA rate was within a range of reasonableness and was a rate that the Commission may have administratively determined to be Black Hills' avoided cost had an evidentiary hearing been conducted.

Party positions on Black Hills' avoided cost are provided in direct, rebuttal, and supplemental testimony, with an initial range of \$28.30/MWh to \$48.76/MWh. The low end of the range comes from Black Hills' witness Amanda Thames' rebuttal testimony that accounts for escalated Ventyx forecasts. The high end of the range comes from Fall River's witness Mark Klein's direct testimony. Within this range lies an avoided cost that the Commission may have administratively determined if the case went to hearing.

Staff then narrowed down the initial range of avoided costs to what Staff considers to be a reasonable range based on the principles established in Mr. Kearney's direct and supplemental testimony. Staff's range is from a low of \$28.30/MWh to a high of \$34.30/MWh. The low end of the range represents Mr. Kearney's supplemental testimony position and the high end of the range represents Mr. Kearney's direct testimony position. The main difference between the two positions is that in supplemental testimony Mr. Kearney recommended the avoided cost modelling include a 12-MW Silver Sage PPA and 20 MWs of SD Sun 1, which would cause a material decrease in Black Hills' avoided cost from Mr. Kearney's direct testimony position. Staff stresses that the avoided costs represented at the high end and low end are estimates since model runs of Staff's positions, as presented in Mr. Kearney's direct and supplemental testimony, are not in the record.

[Begin Confidential] [REDACTED]

[REDACTED] [End Confidential] Considering this, Staff evaluated the positions in Mr. Kearney's testimony for the impact they had on Black Hills' avoided cost. Two positions had the largest impacts. First, using CONE to calculate avoided capacity cost resulted in a material increase to Black Hills' avoided cost. Second, including 20 MWs of SD Sun 1 in the model resulted in a material decrease to Black Hills' avoided cost.

Regarding the first position, Staff remains convinced that valuing a utility's capacity need at CONE is the proper method for determining a utility's avoided capacity cost absent a planned resource or a bona-fide capacity contract, particularly for long-term contracts. As such, Staff's review of the Settlement PPA rate only considered an avoided cost that used CONE for calculating capacity value.

Regarding the second position, Staff's rationale for including 20 MWs of SD Sun 1 in the model was based on Staff's position of the Legally Enforceable Obligation (LEO) date. In supplemental testimony, Mr. Kearney opined that at the time the LEO was established Black Hills planned to construct 20 MWs of SD Sun 1 and, therefore, it should be included in the model. For settlement purposes, Staff determined that a reasonable mind could find the 20 MWs of SD Sun 1 was somewhat speculative at the time of the LEO and that generating resource should not be included in the model. The change of this one assumption would result in driving Black Hills' avoided cost estimate from the low end to the high end of Staff's range.

[Begin Confidential] [REDACTED]

[REDACTED] [End Confidential] Finally, it should be noted that the planned commercial operation date ("COD") for Fall River has been pushed back a year (or two) as a result of the avoided cost dispute. If modeled, the updated COD would result in higher avoided costs than what is reflected in this memorandum.

## **Renewable Energy Credits (RECs)**

Staff's position on RECs in testimony was that the ownership of RECs would stay with Fall River unless Black Hills wanted to compensate Fall River for the value of the RECs. As such, Staff's avoided cost range presented above did not account for the value of RECs. One term of the Settlement identifies that ownership of RECs generated by the Fall River solar project will transfer to Black Hills at no additional cost. Accounting for this transfer of ownership in Staff's avoided cost range would increase the range by approximately \$0.87/MWh.<sup>1</sup> Staff's range, as adjusted with the value of RECs, would be \$29.17 MWh to \$35.17/MWh.

## **Ancillary Services**

The Settlement identifies that the PPA will set forth the party responsible for obtaining ancillary services, including generator imbalance and regulation services. It is Staff's understanding that Black Hills will be responsible for procuring those services and, therefore, Staff considered what impact that cost would have on Black Hills's avoided cost. Mr. Kearney opined in his supplemental testimony that if Black Hills was responsible for procuring ancillary services, then the avoided cost should be decreased to account for this additional cost for Black Hills' customers. Based on Western Area Power Administrations' ("WAPA's") regulation and frequency response charges from 2018, Staff estimates that accounting for ancillary services would decrease Staff's avoided cost range by \$0.36/MWh.<sup>2</sup> Staff's range, as adjusted with the value of RECs and the cost of ancillary services, would be \$28.81/MWh to \$34.81/MWh.

## **RECOMMENDATION**

After reviewing the avoided costs set forth in testimony submitted by the Parties, Staff concluded that the Settlement PPA rate could be considered a reasonable approximation of Black Hills' avoided cost. Therefore, Staff did not object to the terms of the Settlement reached between Fall River and Black Hills and signed on to the Settlement in order to memorialize such. Staff recommends the Commission grant the Joint Motion for Approval of a Settlement Stipulation and adopt the Settlement Stipulation without modification.

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<sup>1</sup> Prices of RECs vary depending upon market prices. Staff referenced a National Renewable Energy Laboratory report titled "Status and Trends in the U.S. Voluntary Green Power Market (2017 Data)." The report identified the price of a voluntary, unbundled REC was \$0.70/MWh in August 2018, which Staff escalated at 2.0% for a 20-year period and levelized. NREL's report can be found at: <https://www.nrel.gov/docs/fy19osti/72204.pdf>.

<sup>2</sup> Staff used WAPA's 2018 rate of \$0.292/MWh and adjusted for inflation of 2.0% per year over 20 years and then levelized. WAPA's rates are provided in Exhibit\_DDK-11.