



2016 ANNUAL RENEWABLE ENERGY STANDARD COMPLIANCE REPORT

June 1, 2017



Black Hills/Colorado Electric Utility Company, LP, d/b/a Black Hills Energy
2016 Renewable Energy Standard (RES) Compliance Report

Introduction

This RES Compliance Report is being filed by Black Hills/Colorado Electric Utility Company, LP, (“Black Hills” or “Company”) pursuant to the Renewable Energy Standard (“RES”) established by C.R.S. § 40-2-124. *et seq.* (“RES statute”) and implemented by Rules 3650-3668 (“RES Rules”). This report covers the RES compliance year 2016.

The Commission approved Black Hills’ 2015-2017 RES Compliance Plan by Decision No. C15-1279 mailed December 3, 2015, consistent with the terms of a settlement agreement (“2015-2017 RES Plan Settlement”) joined by Black Hills, Staff of the Colorado Public Utilities Commission (“Staff”), the Colorado Office of Consumer Counsel (“OCC”), the Colorado Energy Office (“CEO”), the Colorado Independent Energy Association (“CIEA”), and Western Resource Advocates (“WRA”). The settlement agreement included an on-site solar program acquisition level of 1,150 kW per year for the 2015-2017 compliance period. The settlement also included Black Hills issuing a Request for Proposals (“RFP”) to purchase stand-alone Renewable Energy Credits (“RECs”) in 2015 and 2016. The RFP resulted in Black Hills purchasing 250,000 RECs for 2015 RES Compliance and an additional 150,000 RECs for 2016 Compliance.

Consistent with the 2015-2017 RES Plan Settlement, the Company issued an RFP for up to 2 MW of Community Solar Garden (“CSG”) capacity in 2016 and awarded the full 2 MW of capacity to the winning bidder. The Company also awarded 500kW of CSG capacity through a separate standard offer program. Additional on-site solar capacity that came online in 2016 was also a result of the 2015-2017 RES Plan Settlement.

The Busch Ranch Wind Project came on-line in late 2012, and 2016 was the fourth full year of operation for the project. Black Hills owns a 50% undivided ownership in this facility, and the other 50% is owned by AltaGas. Black Hills entered into a Renewable Energy Purchase Agreement to purchase the renewable energy from AltaGas. The Busch Ranch Wind Project is located in Huerfano County, Colorado.

The Peak View Wind Project came on-line in November of 2016. This project was approved by Commission Decision No. C15-1182 in Proceeding No. 15A-0502E. The Company purchased this 60 MW project from Invenergy, LLC after it was selected as the winning bid in a competitive bid solicitation in Proceeding No. 13A-0445E. Attachment B provides more information pursuant to the settlement agreement reached in Proceeding No. 15A-0502E. The Peak View Wind Project is located in Huerfano County and Las Animas County in Colorado.

This 2016 Annual RES Compliance Report contains a narrative description of how Black

Hills achieved compliance with each component of the RES rules that were in effect in compliance year 2016, citing to individual rules and supporting exhibits with details of monthly REC contributions.

Executive Summary

Pursuant to Rule 3662(b), Black Hills reports that for the compliance year 2016, the Company achieved compliance with each component of the RES. This report follows Rule 3662, “Annual RES Compliance Report,” and demonstrates that Black Hills has complied with the requirements of the RES.

For the compliance year 2016, Black Hills met the requirements for renewable distributed generation, including retail distributed generation (“Retail DG”) of the RES through Black Hills’ Commission-approved solar programs, non-solar retail renewables, and RECs from the Busch Ranch Wind Project. Black Hills met the remaining requirements of the RES through the RECs produced from the Busch Ranch Wind Project and from stand-alone RECs purchased as a result of the Company’s 2015 stand-alone REC RFP. The RFP was issued to comply with Decision No. C15-1279 which approved the 2015-2017 RES Plan Settlement.

An electronic copy of this annual compliance report has been posted on the Black Hills website pursuant to Rule 3662(d). Black Hills will also provide the Commission with an electronic copy of this report, excluding any confidential material, pursuant to Rule 3662(e).

RES Compliance Report

Pursuant to Rule 3662(a)(I), Black Hills reports that its retail electricity sales in Colorado totaled 1,923,650 megawatt hours (“MWh”) in 2016. Therefore, Black Hills’ 2016 applicable Renewable Energy Standard pursuant to § 40-2-124(1)(c)(I)(C) was 384,730 MWh, or 20% of the 2016 MWh sales. In addition, 33,664 MWh or 1.75% of the total retail electricity sales were required to be renewable distributed generation (“DG”) and one-half of the renewable DG (16,832 MWh) had to be retail renewable DG.

Pursuant to Rules 3662(a)(II) and 3662(a)(III), Black Hills reports that it acquired a total of 326,621 RECs in 2016. For wholesale distributed generation energy, the Busch Ranch Wind Project produced 97,343 MWh of wind energy in 2016. This equates to 121,679 RECs after applying the 25% Colorado in-state credit. The Company also acquired 33,384 RECs from the Peak View Wind Project. These RECs are considered non-distributed generation. The total amount of QRU-owned eligible energy production equals the sum of Busch Ranch and Peak View Production, or 130,727 MWh. The Company also purchased 150,000 stand-alone RECs for 2016 Compliance as a result of a competitive RFP. These RECs are not considered DG. No RECS from biomass or biodiesel were produced in 2016 and production of these RECs is not projected to occur in the future. Please see Attachment A.2, “Wind Resources – PSCo PPA and Busch Ranch,” Attachment A.8, “Misc. REC Purchases and Sales,” Attachment A.9 “Biomass Resources,” Attachment A.10 “Biodiesel Resources Pueblo Station,” and Attachment

A.11 “Biodiesel Resources Rocky Ford Station,” which are attached to this report and incorporated herein.

Also pursuant to Rules 3662(a)(II) and 3662(a)(III), the total of the Retail DG RECs acquired in 2016 was 21,558 RECs from participants in Black Hills’ Standard Rebate Offer program, Performance Based Incentive programs, Community Solar Garden program, and by a Non-Solar Retail DG resource. Please see Attachment A.4, “Customer Sited Solar <10 kW,” Attachment A.5 “Customer Sited Solar >10kW,” Attachment A.6 “Community Solar Gardens,” and Attachment A.7 “Non-Solar Retail DG.”

Pursuant to Rule 3662(a)(IV), Black Hills reports that no Eligible Energy and RECs were borrowed forward, pursuant to Rule 3654 from previous compliance years, and thus no Eligible Energy and RECs were made up during the 2016 compliance year. See Attachment A.1, “RES Compliance Summary.”

Pursuant to Rule 3662(a)(V), Black Hills reports that no Eligible Energy and RECs will be borrowed forward from future compliance years, pursuant to Rule 3654. See Attachment A.1, “RES Compliance Summary.”

Pursuant to Rule 3662(a)(VI), Black Hills reports that no Eligible Energy and RECs will be carried back from 2017 Eligible Energy and RECs produced prior to July 1, under Rule 3654(h)(I). See Attachment A.1, “RES Compliance Summary.”

Pursuant to Rule 3662(a)(VII), Black Hills reports that, under Rule 3654(h)(III), a total of 221,418 RECs were carried forward from calendar years prior to 2016. Of these, a total of 195,447 were used for 2016 Compliance. For 2016 RES Compliance, the following carried forward RECs were used to meet compliance: 16,832 RECs from Busch Ranch production in 2014, 6,083 RECs from Non-solar Retail DG production in 2013-2014, 462 RECS from Solar <10 kW production in 2014, and 10,287 RECs from Solar >10 kW production in 2014 to meet the DG requirements. The Company also used 161,783 RECs from Busch Ranch production in 2014-2015 to help meet the remaining RES requirement. See Attachment A.1, “RES Compliance Summary.”

Pursuant to Rule 3662(a)(VIII), Black Hills reports that, under Rule 3654(h)(III), 137,338 RECs that were acquired in 2016 will be carried forward from the 2016 compliance year for future REC requirements. See Attachment A.1, “RES Compliance Summary.”

Pursuant to Rule 3662(a)(IX), Black Hills reports that the following renewable energy resources were counted toward compliance with the 2016 RES:

- Wind (Non-DG) RECs = 201,066. See Attachments A.2, “Wind Resources – PSCo PPA and Busch Ranch” and A.3, “Wind Resources – Peak View” for monthly contribution detail.
- Wind (DG) RECs = 16,832. Please see Attachment A.2, “Wind Resources PSCo PPA and Busch Ranch” for monthly contribution detail.

- Purchased Stand-alone (Non-DG) RECs = 150,000. See Attachment A.8, “Misc. REC Purchases and Sales” for contribution detail.
- On-Site Solar (Retail DG) = 10,749. See Attachment A.3, “Customer Sited Solar <10kW,” Attachment A.4, “Customer Sited Solar > 10 kW,” and Attachment A.5, “Community Solar Gardens” for contribution detail.
- Non-Solar Retail DG (Retail Distributed Generation) = 6,083. See Attachment A.6, “Customer Sited Non-Solar Retail DG” for contribution detail.

Pursuant to Rule 3662(a)(X), Black Hills reports that in 2016 it acquired 17,956 RECs through the Standard Rebate Offer and Performance Based Incentive programs. Please see Attachment A.4, “Customer Sited Solar <10kW” and Attachment A.5 “Customer Sited Solar >10kW” for monthly contribution detail.

Pursuant to Rule 3662(a)(XI), Black Hills reports that it did not retire any RECs during the compliance year pursuant to a voluntary green pricing program.

Pursuant to Rule 3662(a)(XII), Black Hills reports that it did not sell RECs during the compliance year. Black Hills did purchase 150,000 RECs for 2016 Compliance at a cost of \$76,500.

Pursuant to Rule 3662(a)(XIII), Decision No. C15-1182, issued on October 21, 2015, approved the settlement agreement reached in Proceeding No. 15A-0502E. This decision approved the Application of the Company for a CPCN to purchase and own a 60 MW wind project known as the Peak View Wind Project. This project came online in November of 2016 and more information regarding the project can be found on Attachment B.

Pursuant to Rule 3662(a)(XIV), Black Hills reports that it spent a total of \$2,685,717 RESA funds in 2016 to acquire Eligible Energy and its associated RECs during the compliance year. This amount also includes the stand-alone REC purchase that the Company made in 2016.

2016 Retail Rate Impact	
2016 RESA Revenue (2% Renewable Energy Standard Adjustment)	\$5,174,952
Costs of RECs Acquired in 2016	\$2,685,717
Funds Applied to Negative RESA Balance	\$2,489,235
Retail Rate Impact	2%

Pursuant to Rule 3662(a)(XV), Black Hills reports that during 2016, a 2% surcharge was collected from customers to fund the acquisition of Eligible Energy. The funds collected through this adjustment clause were used to pay for Commission approved REC payments, Performance Based Incentive payments, administration costs, interest

expenses, incremental costs of renewable resources, a stand-alone REC purchase, and the remaining balance was applied to the existing negative RESA balance.

Pursuant to Rule 3662(a)(XVI), Black Hills does not have any plans of new Eligible Energy Resources coming online prior to the end of the following compliance year that have not been proposed to be locked down pursuant to an investor owned QRU's compliance plan filing.

Pursuant to Rule 3662(a)(XVII), Black Hills reports that its 2016 total RESA revenue was \$5,174,952 and its total cost of 2016 compliance was \$2,685,717 and therefore, no funds were advanced during the 2016 compliance year to augment the amounts collected from retail customers through the RESA.

Pursuant to Rule 3662(a)(XVIII), the average hourly incremental cost of electricity during the compliance year and paid to net metering customers in January of 2017 was \$.02312 per kWh. The \$.02312 per kWh represents the average hourly incremental cost of electricity currently on file with the Commission per Proceeding No. 16AL-0916E that became effective January 1, 2017 and was calculated based on 2016 data. The average hourly incremental cost of electricity on file with the Commission during the compliance year (effective January 1, 2016) was \$.02947 per kWh per Proceeding No. 15AL-0937E.

Also pursuant to Rule 3662(a)(XVIII), approximately 14 kW of CSG capacity was unsubscribed at the end of 2016. CSG subscriptions for residential customers produced 110 MWh during 2016, and these customers received approximately \$12,153 in bill credits. CSG subscriptions for small commercial customers produced 12 MWh during 2016, and these customers received approximately \$1,509 in bill credits.

Pursuant to Rule 3662(b), Black Hills reports that it achieved compliance with each component of the RES in 2016. Please see Attachment A.1, "RES Compliance Summary."

Conclusion

Black Hills achieved compliance with Colorado's RES for the 2016 compliance year in accordance with the Commission Rules using RECs produced from a combination of wind and solar resources. The majority of the requirement was met through wind RECs produced from the Busch Ranch Wind Project. Black Hills also received REC contributions from the Peak View Wind Project, a stand-alone REC purchase, the Vestas customer-sited wind turbine (Non-Solar Retail DG), a Community Solar Garden, and other Solar DG resources that were secured from the Black Hills on-site solar standard rebate offer and Performance Based Incentive programs.