2017 ANNUAL RENEWABLE ENERGY STANDARD COMPLIANCE REPORT

June 1, 2018
Introduction


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, the Colorado Office of Consumer Counsel, the Colorado Energy Office, the Colorado Independent Energy Association, and Western Resource Advocates. 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. No additional RECs were purchased in 2017 for compliance matters.

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 2017 and awarded the full 2 MW of capacity to the winning bidder. The Company also awarded 500 kW of CSG capacity through a separate stand-alone offer. These two new CSG’s are expected to be on-line in June 2018.

The Busch Ranch Wind Project came on-line in late 2012, and 2017 was the fifth full year of operation for the project. Black Hills owns a 50% undivided ownership in this facility, 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 late 2016, and 2017 was the first full year of operation for the project. The project was approved by Commission Decision 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 2017 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 2017, 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 2017, 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 2017, Black Hills met the requirements for non-distributed generation of the RES through the following Black Hills renewable sources:

- **Busch Ranch Wind Project** – 109,992 RECs (Attachment A.1 – “RES Compliance Summary” and Attachment A.2 – “Busch Ranch Wind”).
  - 82,396 RECs were carried forward from 2016 for 2017 compliance.
  - 27,596 RECs generated in 2017 were used for 2017 compliance.
- **Peak View Wind Project** – 232,231 RECs (Attachment A.3 – “Peak View Wind”).
  - 33,384 RECs were carried forward from 2016 for 2017 compliance.
  - 198,847 RECs generated in 2017 were used for 2017 compliance.

For the compliance year 2017, Black Hills met the requirements for renewable distributed generation (“DG”) including retail distributed generation (“Retail DG”) of the RES through the following Black Hills Commission-approved wind and solar programs:

- **Busch Ranch Wind Project** – 13,835 RECs (Attachment A.2 – “RES Compliance Summary”)
  - 13,835 RECs generated in 2017 were used for 2017 compliance.
- **On-Site Solar <10kW** – 5,177 RECs (Attachment A.4 – “Onsite Solar <10kW”)
  - 5,177 RECs were carried forward from 2014 for 2017 compliance.
- **On-Site Solar >10kW** – 18,537 RECs (Attachment A.5 – “Onsite Solar >10kW”)
  - 18,537 RECs were carried forward from 2015 and 2016 for 2017 compliance.
- **Community Solar Gardens** – 476 RECs (Attachment A.6 – “Community Solar Gardens”)
  - 262 RECs were carried forward from 2015 and 2016 for 2017 compliance.
  - 214 RECs generated in 2017 were used for 2017 compliance.

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 1,901,235 megawatt hours (“MWh”) in 2017. Therefore, Black Hills’ 2017 applicable Renewable Energy Standard pursuant to § 40-2-124(1)(e)(I)(D) was 380,247 MWh, or 20% of the 2017 MWh sales. In addition, 38,025 MWh or 2% of the total retail electricity sales were required to be renewable distributed generation and one-half of the renewable DG (19,013 MWh) are required to be retail renewable DG. Black Hills complied with Rule 3662(a)(I) by actually generating 380,247 RECs during 2017, as highlighted in Attachment A.
Pursuant to Rules 3662(a)(II) and 3662(a)(III), Black Hills reports that it acquired a total of 337,987 RECs in 2017. For wholesale distributed generation energy, the Busch Ranch Wind Project produced 91,915 MWh of wind energy in 2017. This equates to 114,894 RECs after applying the 25% Colorado in-state credit. The Company also acquired 198,847 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 290,762 MWh. The Company did not purchase any stand-alone RECs in order to meet 2017 compliance. No RECs from biomass or biodiesel were produced in 2017 and production of these RECs is not projected to occur in the future. Please see Attachment A.2 – “Busch Ranch Wind”, Attachment A.3 – “Peak View Wind”, Attachment A.8 – “REC Purchases & Sales”, Attachment A.9 – “Biomass Resources”, Attachment A.10 – “Biodiesel – Pueblo” and Attachment A.11 – “Biodiesel – Rocky Ford”, 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 2017 was 24,246 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 – “Onsite Solar <10kW”, Attachment A.5 – “Onsite 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 2017 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 2018 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 163,308 RECs were carried forward from calendar years prior to 2017. Of these, a total of 139,757 were used for 2017 Compliance. For 2017 RES Compliance, the following carried forward RECs were used to meet compliance:

- 82,396 RECs from Busch Ranch Wind Project production in 2016 (Attachment A.2 – Busch Ranch Wind”).
- 33,384 RECS from Peak View Wind Project production in 2016 (Attachment A.3 – Peak View Wind”).
- 5,177 RECs from Solar <10kW (DG) production in 2014 (Attachment A.4 – “Onsite Solar <10kW”).
- 18,537 RECs from Solar >10kW (Retail DG) production in 2015 and 2016 (Attachment A.5 – Onsite Solar >10kW”)
- 39 RECs from CSG (Retail DG) production in 2015 (Attachment A.6 – “Community Solar Gardens”).
- 224 RECs from CSG (Retail DG) production in 2016 (Attachment A.6 – “Community Solar Gardens”).
Pursuant to Rule 3662(a)(VIII), Black Hills reports that, under Rule 3654(h)(III), 97,496 RECs that were acquired in 2017 will be carried forward from the 2017 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 2017 RES:

- Wind (DG) RECs = 13,835. Please see Attachment A.2 – “Busch Ranch Wind” for monthly contribution detail.
- On-Site Solar (Retail DG) RECs = 214. See Attachment A.6 – “Community Solar Gardens” for 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. Additionally, Black Hills did not purchase any RECs for 2017 Compliance.

Pursuant to Rule 3662(a)(XIII), on June 23, 2017, Black Hills issued two Request for Proposals (“RFP”) – the EER RFP and the Request for Proposal for Renewable Energy Credits in Conjunction with Eligible Energy Resource Bid. Through the EER RFP, Black Hills sought to acquire up to 60 MW of eligible energy resources necessary for compliance with the RES as identified in Black Hills’ 2016 ERP and the 2018-2021 RES Compliance Plan. On February 9, 2018, Black Hills recommended the most cost-effective and lowest risk bid from a selection of very competitive bids. Black Hills has not received a final written decision from the Commission regarding the proposed 60 MW Purchase Power Agreement (wind resource) with Black Hills Electric Generation, LLC.

Pursuant to Rule 3662(a)(XIV), Black Hills reports that it spent a total of $4,568,154 RESA funds in 2017 to acquire Eligible Energy and its associated RECs during the compliance year.

<table>
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<tr>
<th>2017 Retail Rate Impact</th>
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<tr>
<td>2017 RESA Revenue (2% Renewable Energy Standard Adjustment)</td>
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<tr>
<td>Costs of RECs Acquired in 2017</td>
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<tr>
<td>Funds Applied to Negative RESA Balance</td>
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<td>Retail Rate Impact</td>
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In Proceeding No. 17AL-0477E, Phase II rate design, the Commission ordered the cost of production meters to be recovered through RESA and not base rates. The 2017 RESA costs do not include the cost of production meters, however the Company in 2018 will begin to charge the RESA for the cost of production meters.
Pursuant to Rule 3662(a)(XV), Black Hills reports that during 2017, 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, 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 for 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 2017 total RESA revenue was $4,918,431 and its total cost of 2017 compliance was $4,568,154, and therefore, no funds were advanced during the 2017 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 2018 was $.02496 per kWh. The $.02496 per kWh represents the average hourly incremental cost of electricity currently on file with the Commission per Proceeding No. 17AL-0805E that became effective January 1, 2018 and was calculated based on October 1, 2016 – September 30, 2017 data. The average hourly incremental cost of electricity on file with the Commission during the compliance year (effective January 1, 2017) was $.02312 per kWh per Proceeding No. 16AL-0916E.

Also pursuant to Rule 3662(a)(XVIII), there was no unsubscribed CSG capacity at the end of 2017. CSG subscriptions for residential customers produced 191 MWh during 2017, and these customers received approximately $21,844 in bill credits. CSG subscriptions for small commercial customers produced 11 MWh during 2017, and these customers received approximately $1,412.41 in bill credits.

Pursuant to Rule 3662(b), Black Hills reports that it achieved compliance with each component of the RES in 2017. Please see Attachment A.1 – “RES Compliance Summary”.

**Conclusion**

Black Hills achieved compliance with Colorado’s RES for the 2017 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 and Peak View Wind Project. Black Hills also received REC contributions from Community Solar Garden production as well as a carry forward of RECs from the Busch Ranch and Peak View Wind projects, On-Site Solar program production, and Community Solar Garden production in program years 2014, 2015, and 2016.