

CORE ELECTRIC COOPERATIVE
2023 RENEWABLE ENERGY STANDARD COMPLIANCE REPORT
May 28, 2024

INTRODUCTION

CORE Electric Cooperative (CORE) submits this annual report in recognition of Colorado's renewable energy standard (RES), C.R.S. § 40-2-124(5.5), and Colorado Public Utilities Commission (Commission) Rule 3662.

CORE is a cooperative electric association that serves more than 177,000 meters within a service territory covering approximately 5,000 square miles in parts of eleven counties in Colorado. C.R.S. § 40-2-124(1)(c)(V.5) requires a cooperative electric association that provides electricity at retail to its consumers and serves 100,000 or more meters to generate or cause to be generated at least 20% of the energy it provides to its customers from eligible energy resources in the years 2020 and thereafter.

C.R.S. § 40-2-124(1)(g)(II) provides that each wholesale energy provider shall offer to its wholesale customers that are cooperative electric associations the opportunity to purchase their load ratio share of the wholesale energy provider's electricity from eligible energy resources. In 2023, CORE acquired renewable energy credits (RECs) associated with wholesale power purchases from Public Service Company of Colorado (PSCo), the Western Area Power Administration (WAPA), Victory Solar, LLC, Pioneer Solar, LLC, Hunter Solar, LLC, and various small distributed generation resources interconnected to CORE's distribution facilities.

COMPLIANCE STATEMENT

Pursuant to the requirements of Commission Rule 3662, applicable as provided in Commission Rule 3650(b), the details of CORE's compliance are set forth as follows:

1. Commission Rule 3662(a)(I) – Total Megawatt Hours Sold by CORE to Colorado Retail Customers and Eligible Energy Required for Compliance

CORE sold 2,537,868 megawatt hours (MWh) of electrical energy to its Colorado retail consumers in 2023. Pursuant to C.R.S. § 40-2-124(1)(c)(V.5), CORE's compliance obligation is equal to 20% of its retail sales for compliance year 2023 or 507,574 MWh of eligible energy. CORE must generate 1% of total retail sales from distributed generation, per C.R.S. § 40-2-124(1)(c)(X), or 25,379 MWh, of which half, or 12,690 MWh, must be from retail renewable distributed generation, per C.R.S. § 40-2-124(1)(c)(II)(A).

2. Commission Rule 3662(a)(II) – Total Amount and Source of Eligible Energy and Renewable Energy Credits (RECs) Acquired for Compliance

CORE acquired a total of 442,455 RECs in connection with wholesale power purchased from PSCo in 2023 for resale to CORE's consumers. Pursuant to the wholesale power purchase agreement between PSCo and CORE, PSCo transferred RECs equal to CORE's load ratio share times the energy from designated eligible energy resources (defined as PSCo energy obtained from

solar, wind, geothermal, biogas, new hydroelectricity of ten megawatts or less, pre-2005 hydroelectricity of thirty megawatts or less, and recycled energy). CORE acquired the following vintage 2023 RECs from PSCo:

Resource Type	RES Component	Early EER Quantity	EER Quantity
Wind	Non-DG	364,352	4,529
Wind	Wholesale DG	3,612	0
Solar	Non-DG	3,688	0
Solar	Wholesale DG	0	62,953
Hydroelectric	Wholesale DG	2,723	0
Biogas	Wholesale DG	598	0
Total PSCo RECs		374,973	67,482

In 2010, CORE entered into a memorandum of understanding with WAPA regarding RECs for hydroelectricity generated by the Loveland Area Projects (LAP), which include a number of hydroelectric generators that do not meet the requirements of the Colorado Renewable Energy Standard. Only the share of RECs associated with Colorado-eligible resources are included in this report. Pursuant to the memorandum of understanding, WAPA transferred the following 2023 vintage RECs to CORE:

Resource Type	RES Component	Early EER Quantity	EER Quantity
Hydroelectric	Wholesale DG	40,025	0

In 2011, CORE entered into a memorandum of understanding with WAPA regarding RECs for hydroelectricity generated by the Salt Lake City Integrated Projects (SLC-IP), which include a number of hydroelectric generators that do not meet the requirements of the Colorado Renewable Energy Standard. Only the share of RECs associated with Colorado-eligible resources are included in this report. As of the date of this report, the transfer of 2023 RECs associated with SLC-IP purchases has not occurred. CORE will include the quantity of 2023 vintage RECs eligible for the RES in the 2024 compliance year report to be filed in 2025.

RECs associated with purchases under the SLC-IP contract were not transferred to CORE prior to the date of the 2022 compliance year report filed in 2023. The following 2022 vintage RECs transferred in July 2023 are as follows:

Resource Type	RES Component	Early EER Quantity	EER Quantity
Hydroelectric	Wholesale DG	894	0

In 2015, CORE entered into a power purchase agreement with Victory Solar, LLC to purchase energy and associated RECs from a 12.8 MW photovoltaic

facility located in Adams County, CO. CORE acquired the following vintage 2023 RECs from Victory Solar, LLC:

Resource Type	RES Component	Early EER Quantity	EER Quantity
Solar	Wholesale DG	0	27,254

In 2018, CORE entered into a power purchase agreement with Pioneer Solar, LLC to purchase solar photovoltaic energy and associated RECS from an 80 MW facility located in Adams County, CO. CORE acquired the following vintage 2023 RECs from Pioneer Solar, LLC:

Resource Type	RES Component	Early EER Quantity	EER Quantity
Solar	Non-DG	0	181,332

In 2019, CORE entered into a power purchase agreement with Onyx Development Group to purchase solar photovoltaic energy and associated RECs from a 370 kW facility located on our headquarters property in Sedalia, CO. CORE acquired the following eligible MWh from Onyx in 2023:

Resource Type	RES Component	Early EER Quantity	EER Quantity
Solar	Wholesale DG	0	475

In 2020, CORE entered into a power purchase agreement with Hunter Solar, LLC to purchase 45 MW of the solar photovoltaic energy and associated RECs from a 75 MW facility located in Arapahoe County, CO. CORE acquired the following MWh from Hunter Solar, LLC in 2023.

Resource Type	RES Component	Early EER Quantity	EER Quantity
Solar	Non-DG	0	7,081

In 2023, CORE acquired 325,145 RECs through REC-only transactions with third parties through WREGIS:

Resource Type	RES Component	Early EER Quantity	EER Quantity
Hydroelectric	Wholesale DG	137,741	0
Recycled Energy	Wholesale DG	0	48,770
Solar	Non-DG	0	138,637
Total acquired RECs		137,741	187,404

CORE interconnects consumer-controlled on-site renewable energy generation facilities as net-metered generation pursuant to C.R.S. § 40-9.5-118 or as qualifying facilities pursuant to the Public Utility Regulatory Policies Act of 1978

(“PURPA”). In 2023, the following energy was generated by eligible energy resources that are located on the consumers’ side of the meter and interconnected with CORE’s system:

Resource Type	RES Component	MWh Quantity
Solar	Retail DG	71,085
Wind	Retail DG	109
Total Retail MWh		71,194

3. Commission Rule 3662(a)(IV) – Eligible Energy Borrowed Forward in Previous Compliance Years

CORE has not borrowed forward any eligible energy or RECs in previous compliance years.

4. Commission Rule 3662(a)(V) – Eligible Energy Borrowed Forward from Future Compliance Years

CORE has not borrowed forward any eligible energy or RECs from future compliance years.

5. Commission Rule 3662(a)(VI) – Eligible Energy Carried Back from the Year Following the Compliance Year

CORE is not carrying back eligible energy or RECs from the year following the compliance year.

6. Commission Rule 3662(a)(VII) – Eligible Energy Carried Forward from Prior Calendar Years to Apply in the Current Compliance Year

CORE carried forward 1,792,257 RECs from prior years for the following components of the RES at the end of 2023:

Vintage	Non-DG	Wholesale DG	Retail DG
2018 ¹	0	229,908	19,403
2019	0	291,462	28,204
2020	116,729	437,142	31,210
2021	199,998	221,359	42,311
2022	59,668	62,285	52,578
Total	376,395	1,242,156	174,209

¹ Review of the 2022 Compliance Report response to Commission Rule 3662(a)(VIII) identified an error in the 2018 and 2019 Retail DG RECs carried forward for future years. The quantities identified in response to Commission Rule 3662(a)(VII) above correct that error.

7. Commission Rule 3662(a)(VIII) - Eligible Energy Proposed to be Carried Forward to Future Years

CORE will carry forward the following RECs to future years:

Vintage	Non-DG	Wholesale DG	Retail DG
2019	0	248,375	0
2020	116,729	409,687	0
2021	199,998	66,778	0
2022	167,729	137,496	0
2023	535,695	77,395	0
Total	1,020,151	939,731	0

CORE had available 1,959,882 RECs to carry forward to future years after retiring RECs associated with retail sales and accounting for wholesale purchases and sales in 2023. CORE has retired RECs using a first-in-first-out method for compliance year 2023. CORE will retire RECs for the same year in which a REC is generated as part of its greenhouse gas reduction demonstration to meet its Clean Energy Plan target for future years.

8. Commission Rule 3662(a)(IX) – Eligible Energy Counted Toward Compliance

To achieve compliance for calendar year 2023, CORE retired 454,407 RECs, which can be counted as 507,575 MWh for compliance purposes using applicable multipliers.

The Retail Distributed Generation requirement of 0.5% of retail sales was 12,690 MWh. CORE retired 12,690 MWh associated with energy supplied by consumers operating retail Distributed Generation in 2023.

Vintage	Resource Type	Retail DG MWh
2023	Solar	12,690

The remaining Distributed Generation requirement of 1% of retail sales, less retirements to comply with the Retail Distributed Generation requirement, was 12,689 MWh. CORE retired 12,689 MWhs associated with energy supplied by consumers operating retail Distributed Generation in 2023.

Vintage	Resource Type	Retail DG MWh
2023	Solar	12,689

The remaining RES requirement of 20% of retail sales, less retirements to comply with the Distributed Generation requirements, was 482,195 MWh. CORE achieved compliance by retiring 428,950 RECs which can be counted as 482,195 MWh for compliance purposes.

Vintage	Resource Type	Category	Quantity	Multiplier	RPS Quantity
2018	Hydroelectric	Early EER	34,265	1.25	42,831
2018	Solar	Retail	19,403	1	19,403
2019	Hydroelectric	Early EER	37,466	1.25	46,833
2019	Solar	Early EER	5,621	3	16,863
2019	Solar	Retail	28,204	1	28,204
2019	Wind	Retail	116	1	116
2020	Biomass	Early EER	309	1.25	386
2020	Hydroelectric	Early EER	27,404	1.25	34,255
2020	Solar	Early EER	41	3	123
2020	Solar	EER	525	1	525
2020	Solar	Retail	31,094	1	31,094
2020	Wind	Retail	116	1	116
2021	Biogas	Early EER	692	1.25	865
2021	Solar	EER	27,345	1	27,345
2021	Solar	Retail	42,195	1	42,195
2021	Hydroelectric	Early EER	36,636	1.25	45,795
2021	Wind	Retail	116	1	116
2022	Biogas	Early EER	22	1.25	28
2022	Hydroelectric	Early EER	30,891	1.25	38,614
2022	Solar	EER	540	1	540
2022	Solar	Retail	52,462	1	52,462
2022	Wind	Retail	116	1	116
2023	Solar	EER	53,262	1	53,262
2023	Wind	Retail	109	1	109
Total			428,950		482,195

9. Commission Rule 3662(a)(X) – Renewable Energy or RECs Acquired Pursuant to the Standard Rebate Offer Program

The standard rebate offer program codified in C.R.S. § 40-2-124(1)(e) and implemented by Commission Rule 3658 is not applicable to CORE.

10. Commission Rule 3662(a)(XIII) – Investment in Eligible Energy Resources

In 2015, CORE entered into a power purchase agreement with Victory Solar, LLC, to purchase solar photovoltaic energy from a 12.8 MW generation facility located north of the Town of Bennett in Adams County, Colorado. The facility began commercial operation on December 6, 2016.

In 2018, CORE entered into a power purchase agreement with Pioneer Solar, LLC, to purchase the energy and RECs from an 80 MW generation facility located near the Town of Bennett in Adams County, Colorado. The facility has self-certified as a Qualifying Facility with the Federal Energy Regulatory Commission and began commercial operations on June 9, 2021.

In 2019, CORE entered into a power purchase agreement with Hunter Solar, LLC, to purchase the energy and RECs from 45 MW of a 75 MW generation facility located near the Town of Bennett in Arapahoe County, Colorado. The facility has self-certified as a Qualifying Facility with the Federal Energy Regulatory Commission and began commercial operations on December 29, 2023.

In 2019, CORE entered into a power purchase agreement with Onyx Development Group LLC, to purchase the energy and RECs from a 370 kW solar generation facility located at CORE's headquarters facility near Sedalia, Colorado. The facility began commercial operation in May 2020.

11. Commission Rule 3662(a)(XV) – Retail Rate Impact Calculation

The retail rate impact of incorporating renewable energy into CORE's system was derived by comparing CORE's current purchased power and generation costs with the costs of purchased power that would have been incurred absent eligible energy resources. Based on information currently available, CORE calculated the purchase power, transmission, and backup power rates less the increased coal cycling, system operations, and gas storage costs incurred by PSCo to incorporate eligible energy resources; the increased transmission investment required by PSCo to incorporate eligible energy resources; and a portion of the opportunity costs incurred by PSCo due to the purchase of energy from eligible energy resources in lieu of other possible resources. The amounts of energy that CORE purchased from PSCo and WAPA were then adjusted to reflect the portion of WAPA hydro that was generated from eligible energy resources. Using the calculated rates and adjusted energy purchases, CORE determined what its purchase power costs would have been without renewable sources and the difference between the actual purchased power costs and the adjusted purchase power costs was calculated. The difference is the increased purchased power cost of complying with the RES.

CORE's increased coal cost due to "ramping" down Comanche 3 in order to incorporate PSCo wind and CORE's solar resources was added, and revenue collected from CORE's REC sales was subtracted to determine the total cost of complying with the RES. The total cost was then divided by energy sales revenue to determine the retail rate impact.

CORE's administrative costs and a portion of PSCo's lost opportunity costs are not included in the calculation.

12. Commission Rule 3662(b) – Compliance Statement

CORE demonstrated compliance with the RES for 2023 by retiring 53,668 vintage 2018 RECs, 71,407 vintage 2019 RECs, 59,489 vintage 2020 RECs, 106,984 vintage 2021 RECs, 84,031 vintage 2022 RECs and 78,750 vintage 2023 RECs.

Submitted this 28th day of May, 2024.



Christopher Hildred
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CORE Electric Cooperative