

**THE INTERMOUNTAIN RURAL ELECTRIC ASSOCIATION
2020 RENEWABLE ENERGY STANDARD COMPLIANCE REPORT**

May 27, 2021

INTRODUCTION

The Intermountain Rural Electric Association (IREA) 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.

IREA is a cooperative electric association that serves more than 165,000 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 customers 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 a wholesale customer can purchase eligible energy resources from its wholesale provider and receive the appropriate credit toward the RES as well as any associated renewable energy credits (RECs). In 2020, IREA purchased its load ratio share of eligible energy resources from Public Service Company of Colorado (PSCo). IREA also received RECs associated with its purchase of hydroelectricity through the Western Area Power Administration (WAPA). Additionally, IREA purchases all of the energy and associated RECs generated by Victory Solar, LLC from its 12.831 MW photovoltaic generation facility located north of the Town of Bennett in Adams County, Colorado.

COMPLIANCE STATEMENT

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

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

IREA sold 2,508,999 megawatt hours (MWh) of electrical energy to its Colorado retail customers in 2020. Pursuant to C.R.S. § 40-2-124(1)(c)(V.5), IREA's compliance obligation is equal to 20% of its retail sales for compliance year 2020 or 501,800 MWh of eligible energy.

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

In 2020, IREA acquired a total of 826,837 RECs in connection with wholesale power purchased from PSCo for resale to IREA's customers. Pursuant to the wholesale power purchase agreement between PSCo and IREA, PSCo transferred to IREA RECs equal to IREA'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). IREA acquired the following vintage 2020 RECs from PSCo:

Resource Type	RES Component	Early EER Quantity	EER Quantity
Wind	Non-DG	762,227	0
Wind	Wholesale DG	4,554	0
Solar	Non-DG	0	37,302
Solar	Wholesale DG	13,882	0
Hydroelectric	Wholesale DG	7,397	0
Biogas	Wholesale DG	1,475	0
Total PSCo RECs		789,535	37,302

In 2010, IREA entered into a memorandum of understanding with WAPA regarding RECs for hydroelectricity generated by the Loveland Area Projects (LAP). Pursuant to this memorandum of understanding, WAPA transferred the following Colorado-eligible 2020 vintage RECs to IREA:

Resource Type	RES Component	Early EER Quantity	EER Quantity
Hydroelectric	Wholesale DG	44,338	0

In 2011, IREA entered into a memorandum of understanding with WAPA regarding RECs for hydroelectricity generated by the Salt Lake City Integrated Projects (SLC-IP). As of the date of this report, the transfer of 2020 RECs associated with SLC-IP purchases has not occurred. IREA will include the quantity of 2020 vintage RECs eligible for the RES in the 2020 compliance year report to be filed in 2021.

2019 vintage RECs associated with purchases under the SLC-IP contract were not transferred to IREA prior to the date of the 2019 compliance year report filed in 2020. The 2019 vintage RECs transferred in July 2020 are as follows:

Resource Type	RES Component	Early EER Quantity	EER Quantity
Hydroelectric	Wholesale DG	1,498	0

In 2015, IREA entered into a power purchase agreement with Victory Solar, LLC to purchase solar photovoltaic energy and associated RECs. IREA acquired the following vintage 2020 RECs from Victory Solar, LLC:

Resource Type	RES Component	Early EER Quantity	EER Quantity
Solar	Wholesale DG	0	29,982

In 2019, IREA entered into a power purchase agreement with Onyx Development Group to purchase solar photovoltaic energy and associated RECs. IREA acquired the following eligible MWh from Onyx in 2020:

Resource Type	RES Component	Early EER Quantity	EER Quantity
Solar	Wholesale DG	0	322

In 2020, IREA acquired 713,911 RECs through transactions with third parties through WREGIS:

Resource Type	RES Component	Early EER Quantity	EER Quantity
Hydroelectric	Wholesale DG	139,448	1,817
Biomass	Non-DG	0	236,397
Biogas	Wholesale DG	108,000	0
Recycled Energy	Wholesale DG	0	48,943
Solar	Wholesale DG	50,921	0
Solar	Non-DG	0	27,000
Wind	Wholesale DG	66,622	0
Wind	Non-DG	26,490	0
Total acquired RECs		636,151	77,760

IREA interconnects customer on-site renewable energy generation facilities as net-metered customers pursuant to C.R.S. § 40-9.5-118 or qualifying facilities pursuant to the Public Utility Regulatory Policies Act of 1978 (“PURPA”). In 2020, the following energy was generated by eligible energy resources that are located on the customers’ side of the meter and interconnected with IREA’s system:

Resource Type	RES Component	MWh Quantity
Solar	Retail DG	31,094
Wind	Retail DG	116
Total Retail MWh		31,210

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

IREA 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

IREA 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

IREA 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

IREA carried forward 1,669,425 RECs from prior years for the following components of the RES:

Vintage	Non-DG	Wholesale DG	Retail DG
2015	0	53,695	6,935
2016	115,281	103,019	13,258
2017	87,398	251,898	17,125
2018	165,075	310,240	20,144
2019	178,490	318,663	28,204
Total	549,244	1,037,515	85,666

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

IREA will carry forward the following RECs to future years:

Vintage	Non-DG	Wholesale DG	Retail DG
2016	0	0	7,648
2017	87,398	143,186	17,125
2018	165,075	310,240	20,144
2019	178,490	318,663	28,204
2020	293,144	173,295	31,210
Total	724,107	945,384	104,331

IREA has available 1,773,822 RECs to carry forward to future years after retiring RECs associated with retail sales and accounting for wholesale purchases and sales. IREA intends to retire RECs using a first-in-first-out method in future years while reserving the discretion to sell RECs in the marketplace.

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

To achieve compliance for calendar year 2020, IREA retired 393,253 RECs, which can be counted as 501,801 MWh for compliance purposes using applicable multipliers.

The Retail Distributed Generation requirement of 0.5% of retail sales was 12,545 MWh for 2020. IREA retired 12,545 MWh supplied by IREA’s retail customers who self-generated electricity from eligible resources in 2015 and 2016.

Vintage	Resource Type	Retail DG MWh
2015	Solar	6,791
2015	Wind	144
2016	Solar	5,466
2016	Wind	144
Total		12,545

The Wholesale Distributed Generation requirement of 1% of retail sales, less retirements to comply with the Retail Distributed Generation requirement, was 12,545 MWh. IREA retired 4,182 2015 vintage solar RECs using which can be counted as 12,546 MWh for compliance purposes using a 3x multiplier.

Vintage	Resource Type	Early EER	Quantity	Multiplier	RPS Quantity
2015	Solar	Yes	4,182	3	12,546
Total			4,182		12,546

The remaining RES requirement of 20% of retail sales, less retirements to comply with the Distributed Generation requirements, was 476,709 MWh. IREA achieved compliance by retiring 386,097 RECs which can be counted as 476,710 MWh for compliance purposes.

Vintage	Resource Type	Early EER	Quantity	Multiplier	RPS Quantity
2015	Biogas	Yes	639	1.25	799
2015	Hydroelectric	Yes	42,291	1.25	52,864
2015	Solar	Yes	1,198	3	3,594
2016	Wind	Yes	5,385	1.25	6,731
2016	Biogas	Yes	7,015	1.25	8,769
2016	Biomass	Yes	110,000	1.25	137,500
2016	Hydroelectric	Yes	57,096	1.25	71,370
2016	Recycled Energy	No	36,150	1	36,150
2016	Wind	No	373	1	373
2016	Wind	Yes	7,666	1.25	9,583
2017	Biogas	Yes	8,669	1.25	10,836
2017	Biomass	Yes	55,324	1.25	69,155
2017	Hydroelectric	Yes	53,394	1.25	66,742
2017	Solar	Yes	642	3	1,926
2017	Wind	Yes	255	1.25	319
Total			390,279		476,710

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 IREA.

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

In 2015, IREA 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 Adam’s County, Colorado. The facility began commercial operation on December 6, 2016.

In 2018, IREA 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 is began producing test energy in December 2020 and is expected to achieve commercial operations in May 2021.

In 2019, IREA 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 to be 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 is expected to begin commercial operations in 2022.

In 2019, IREA 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 IREA’s headquarters facility near Sedalia, Colorado. The facility began commercial operation in May 2020.

In 2020, IREA entered into a power purchase agreement with Kiowa Solar, LLC, to purchase the energy and RECs from a 55 MW generation facility to be 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 is expected to begin commercial operations in 2023.

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

The retail rate impact of incorporating renewable energy into IREA’s system was derived by comparing IREA’s current purchased power costs with the costs of purchased power that would have been incurred absent eligible energy resources. Based on information currently available, IREA 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 IREA 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, IREA 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.

IREA's increased coal cost due to "ramping" down Comanche 3 in order to incorporate PSCo wind resources was added, and revenue collected from IREA'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.

IREA'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

IREA demonstrated compliance with the RES for 2020 by retiring 60,631 vintage 2015 RECs, 223,910 vintage 2016 RECs, and 108,712 vintage 2017 RECs.

Submitted this 27th day of May, 2021.



Pam Feuerstein, Chief Operating Officer
Intermountain Rural Electric Association