

Appendix B

**Utah Rural Electric Association
Progress Report**
September 17, 2020



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Mr. Justin Christensen
Utah Division of Public Utilities
Box 146751
160 East 300 South
Salt Lake City, UT 84114

Re: Utah Code 54-17-604 Renewable Energy Progress Report

Mr. Christensen,

In accordance with Utah Code 54-17-604, each rural electric cooperative is required to make a progress report by January 1, 2020 to the respective association's board of directors. On behalf of Utah's electric cooperatives, and to assist the Division with compiling its January 1, 2021 report to the Legislature, the Utah Rural Electric Cooperative Association (URECA) submits this report on behalf of its members.

If you have questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeff Peterson".

Jeff Peterson
Executive Director

2020 Renewable Energy Progress Report

Background

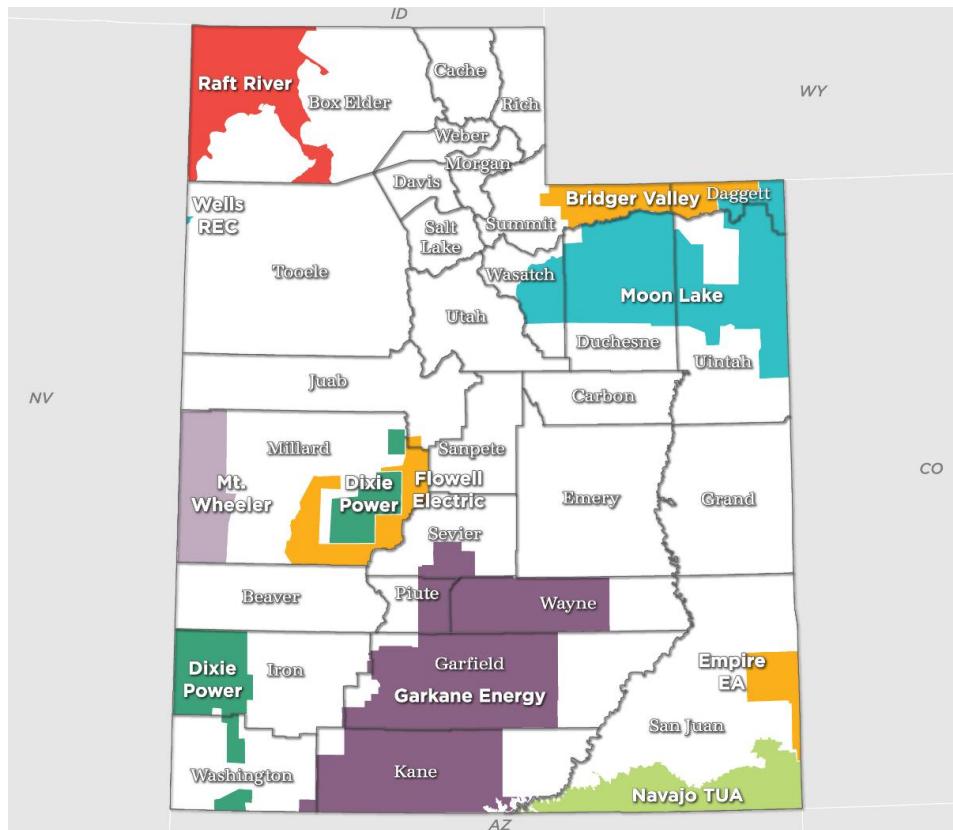
In Utah, there are nine distribution electric cooperatives that serve rural parts of the state, and one generation and transmission (G&T) cooperative. Four of these distribution co-ops, and the G&T, are headquartered in Utah. Those specific co-ops are:

- Deseret Power (G&T), South Jordan, Utah
- Dixie Power, St. George, Utah
- Flowell Electric, Flowell, Utah
- Garkane Energy, Kanab, Utah
- Moon Lake Electric, Roosevelt, Utah

The remaining five cooperatives are headquartered and principally operate in adjoining states but serve small portions of the state of Utah. These co-ops are:

- Bridger Valley Electric, Mountain View, Wyoming
- Empire Electric, Cortez, Colorado
- Mount Wheeler Power, Ely, Nevada
- Raft River Electric, Malta, Idaho
- Wells Rural Electric, Wells, Nevada

The map below illustrates the general area of cooperative service territory.



2020 Renewable Energy Progress Report

Electric cooperatives are a unique power provider. They are owned by their members, operate as not-for-profits, and have democratically elected boards of directors. As a result, cooperatives are responsive to the needs and desires of the communities they serve. Utah's electric cooperatives pride themselves on providing safe and reliable electricity at some of the lowest prices in the country.

Due to the areas served by co-ops, cost considerations are vital when making any decision (especially considering Utah co-ops average four members per mile of line). Because co-ops are not-for-profit and owned by their members, they do not have access to capital in the same way an investor or municipal owned utility would. If they need to finance infrastructure, buildings, O&M, new resources, etc. it all comes from their members – that is their collateral.

54-17-604 Progress Report

Utah based cooperatives are committed to purchase electricity from Deseret Generation and Transmission via an all requirements contract. These Utah based cooperatives may also be referenced as Deseret's "member(s)." Based on the statutory requirements of Utah Code 54-17-604, the following report applies to Dixie Power, Flowell Electric, Garkane Energy, and Moon Lake Electric.

1. Actual and projected amount of qualifying electricity through 2025

Load forecasts for Utah cooperatives are developed employing a detailed understanding of specific member customer load, econometric regression analysis, trending analysis and assumptions resulting from and understanding of local economics and demographics specific to each individual cooperative. Load forecasts are developed for each co-op and are then aggregated into a single Deseret member load forecast.

Existing resources available to serve member load include ownership interests in coal-fired Bonanza I and Hunter II generating units; entitlements to coal-fired Intermountain Power Project units 1 & 2; federal hydro-power allocations and additional hydro-electric generation owned by the members; a number of small PURPA purchases; and small scale solar projects.

Deseret projects having excess generation for the coming years and actively markets capacity and energy excess resources through short- and long-term sales. This is done in conjunction with meeting and maintaining access to sufficient portions of its excess resource to meet future member load growth. Deseret and its members do not foresee the need for any new or additional capacity over the current planning horizon. Consistent with 54-17-602(3)(a)(b)(c) Deseret members would not be required to substitute qualifying electricity for existing resources owned or contractually committed.

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Below is a table showing Deseret's current renewable qualifying electricity.

	Actual		Forecasted				
	MWh	MWh	MWh	MWh	MWh	MWh	MWh
Year	2019	2020	2021	2022	2023	2024	2025
Electricity	478,533	477,419	477,419	477,419	477,419	477,419	477,419

2. The source of qualifying electricity

The source of qualifying electricity is primarily hydro, but there are solar resources as well.

3. Estimate of the cost of achieving the target for an electrical corporation that is a cooperative association

Deseret member systems regularly review their cost of purchased power and renewable proposals with their locally elected boards of directors. Deseret estimates the additional qualifying electricity to meet the target by 2025 to be 60.28 MW. Even with the price of solar dropping, the cost of this acquisition is estimated to be roughly \$121 million, or a member rate increase of approximately 18%. This estimated cost would not be cost effective as outlined in 54-17-602(2)(b) for the cooperatives and would burden Deseret's members.

4. Discussion of conditions impacting the renewable energy source and qualifying electricity markets

Cost. Although the costs for renewable energy components have declined across the country, especially when factoring federal or state subsidies, Rural Electric Cooperatives are not eligible for tax credits because of their non-profit status. Even with subsidies, however, the cost of current generation resources at Deseret remain below the cost of renewables.

Reliability. Renewable energy is not capable of producing baseload power. Instead, it is an intermittent resource – meaning you can only produce when the environmental conditions exist (i.e. the sun is shining, wind is blowing). Intermittent resources are complicated to implement on a large scale because they may not provide power when it is needed. This leads to volatility in pricing, increased stress on units like Bonanza, and reliance on energy imports to meet demand. Utah cooperatives are committed to providing safe, reliable, and affordable electricity and this is best accomplished with their current resource portfolio.

Transmission. Transmission infrastructure needs major upgrades to accommodate large loads of renewable energy. Allocating costs for these projects is difficult, especially with an intermittent resource that must spread its cost across fewer megawatt-hours.

Adequate Current Resources. Utah's electric co-ops are invested heavily in other energy resources and are committed to those resources for the foreseeable future. Further, our co-ops are not in a position where they need more load. Any requirement to add investment in alternative energy resources would leave Utah cooperatives with a stranded asset, and result in a difficult financial position.

5. Recommendations for a suggested legislative or program change

The cooperatives would suggest these changes to the states Renewable Portfolio Standards program.

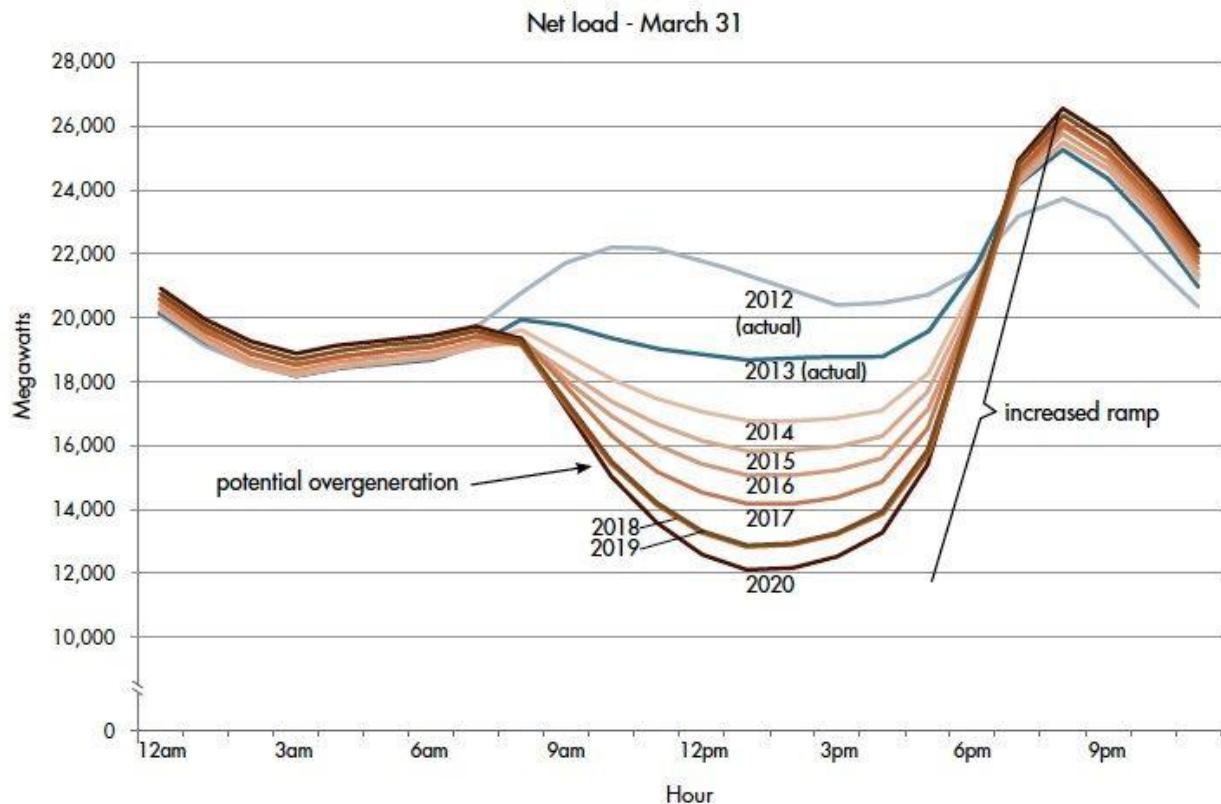
a. No mandates for renewable energy

The state's goal to reach 20% renewable energy by 2025 will be achieved naturally by market forces and increased efficiencies. As technology improves, that percentage will likely increase – especially considering the current trend of closing traditional power generation and replacing it with an intermittent renewable resource.

The danger in forcing this transition is highlighted by the recent power crisis in California. As illustrated in the graphic below, renewable resources (primarily solar power) do a great job producing power during daytime hours. However, solar power does not produce at peak demand times. This cycle of over generation followed by a steep ramp to meet demand is known as the Duck Curve.

As high temperatures hit California in August 2020, solar generation stopped producing as demand soared. California called on any available resource (including what it could import) to meet this increase in demand, but due to years of reducing base load capacity, there was not enough power to meet the states need. Their solution was rolling blackouts. The power crisis California experienced will be a more regular occurrence as renewables flood the grid in response to policies that mandate higher percentages of their use.

Utah legislators should be very cautious when considering similar mandates for renewable energy if they want to avoid these scenarios.



Out-of-State co-ops Exempt from Progress Report

In 2018, the Utah Legislature amended Utah Code section 54 by adding 54-2-202. This section exempts from Commission jurisdiction out-of-state electric cooperatives that meet the following criteria:

1. The electric co-op is a distribution electrical cooperative that is headquartered and principally operates in a state adjoining Utah that;
 - a. Has not previously been headquartered or maintained its principal place of business in Utah;
 - b. Serves fewer than 25,000 total customers;
 - c. Provides less than 20% of the out-of-state distribution electrical cooperative's total power sales in Utah; and
 - d. Provides and maintain on file with the commission written documentation certifying that the out-of-state distribution electrical cooperative is subject to the applicable laws, rules, and regulations of the state where the out-of-state distribution electrical cooperative's principal place of business is located.

2020 Renewable Energy Progress Report

Based on this criterion, the following co-ops are not required to file a Renewable Energy Progress Report in accordance with 54-17-604:

- Bridger Valley Electric, Mountain View, Wyoming
- Empire Electric, Cortez, Colorado
- Mount Wheeler Power, Ely, Nevada
- Raft River Electric, Malta, Idaho
- Wells Rural Electric, Wells, Nevada