



Utah's Energy Future

Presentation to the Public Utilities, Energy and Technology Interim Committee

August 23, 2017

Economic Benefits of Renewable Energy

Long-Term Ratepayer Benefits

ECONOMIC BENEFITS OF RENEWABLE ENERGY

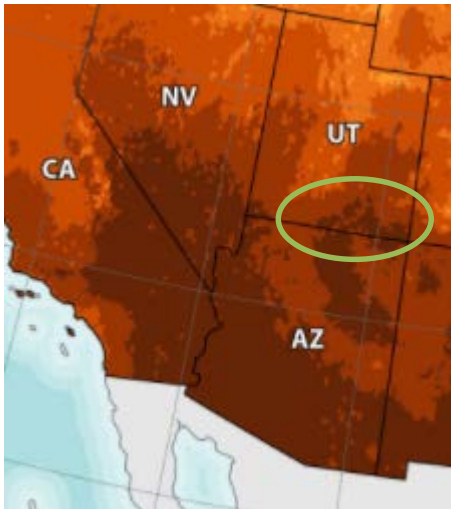
Solar and wind are now the **lowest cost source of power**

Low cost energy supports investments in manufacturing, data centers

- sPower's solar projects in UT (Kane County) price near \$0.03/kWh
- sPower's wind projects in WY price near \$0.02/kWh
- Battery storage is quickly becoming cost effective; solar + storage is already pricing at \$0.045/kWh

Rocky Mountain Power is proposing a \$3.5B investment in Idaho/Wyoming wind and transmission

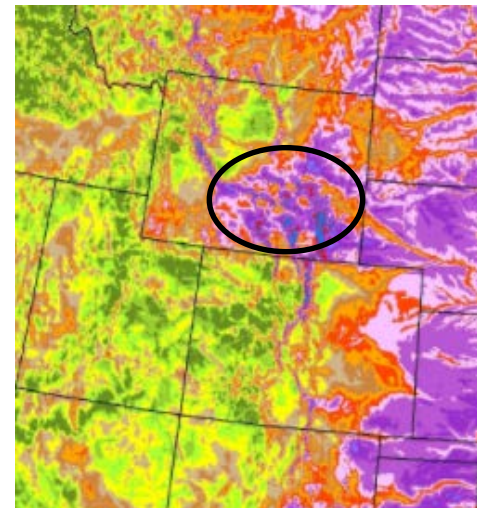
Competitive wind, solar, and storage can provide Utahns with **low cost, stable, and clean power while promoting large investment and growth in the new energy economy, benefiting all Utahns**



<https://www.nrel.gov/gis/solar.html>

Southern Utah one of best solar areas in country

Wyoming one of best wind areas in country



<https://www.nrel.gov/gis/wind.html>

Economic Benefits to Rural Communities

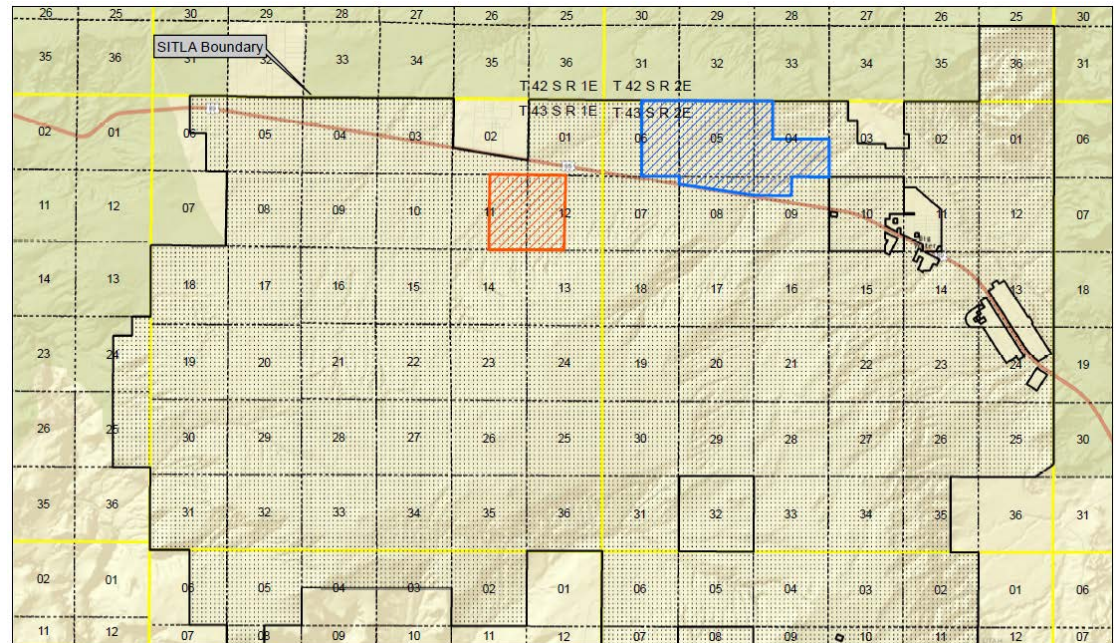
ECONOMIC BENEFITS OF RENEWABLE ENERGY

Renewable energy gives significant economic boosts to rural communities

- Construction and O&M Jobs
- Significant tax base increase without added services
- Lease revenue

Best use of land

- sPower's solar projects in Kane County total 95MW and represent \$130M in CapEx
- These projects will occupy roughly 1000 acres, or 2% of available SITLA land in the area
- Current SITLA lease income from ranching 1,000 acres: \$600/yr or \$21,000 over 35 years
- SITLA lease income under Glen Canyon Solar lease: Starts at \$125k/yr then escalating; Totals \$16M over 35 years



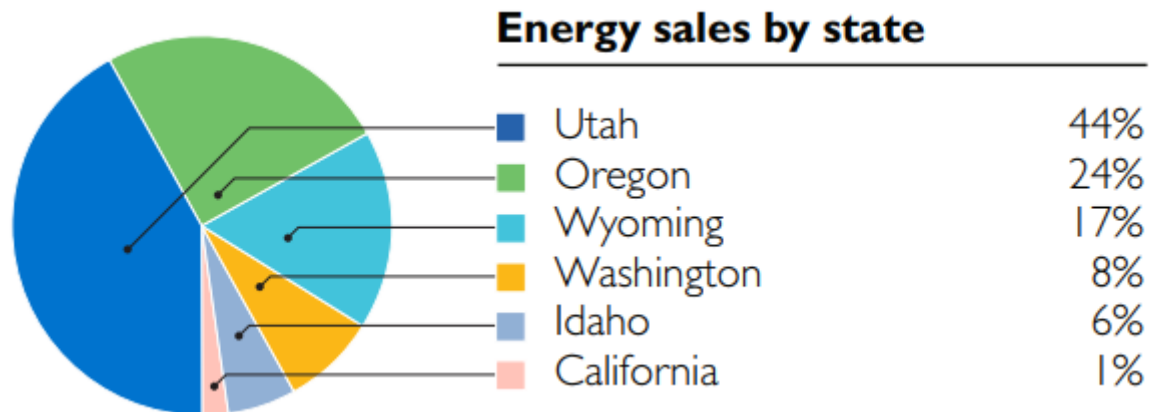
Economic Benefits to Rural Communities

ECONOMIC BENEFITS OF RENEWABLE ENERGY

RMP also recognizes these economics benefits:

- “These investments will provide significant long-term benefits to our customers and bring substantial economic benefits to rural communities where the facilities will be located.”¹

RMP’s current plan benefits Wyoming on the back of Utah ratepayers



“This ambitious plan – a nearly \$3 billion investment in Wyoming – diversifies Wyoming's economy, expands markets, presents workforce training opportunities, adds jobs and strengthens the tax base in local communities,” **said Wyoming Governor Matt Mead. "I look forward to working closely with Rocky Mountain Power. I see great potential for Wyoming workers and rate payers as this plan is implemented."**²

¹ Rocky Mountain Power Advances \$3.5 Billion Wind and Transmission Investment; June 29, 2017: <https://www.rockymountainpower.net/about/nr/nr2017/energy-vision-2020-wind-power.html>

² Rocky Mountain Power Plans to Power the Future with More Wind, Solar and Transmission Lines, April 4, 2017: <https://www.rockymountainpower.net/about/nr/nr2017/irp-wind-solar-transmission.html>

Energy Sales by State Chart: https://www.rockymountainpower.net/content/dam/pacificcorp/doc/CCCom_Update/2017/January_2017/RMP-FactSheet.pdf

Locking in Long-Term Benefits

ECONOMIC BENEFITS OF RENEWABLE ENERGY

- RMP wants to use its southern UT transmission to import cheap solar power from CA rather than build solar in UT
- The CA duck curve is a short-term market dislocation and not a long-term energy strategy
- Battery storage can cost effectively harness nighttime WY wind and deliver when needed, while firming and shaping solar from southern UT
- Long-term fixed contracts with IPPs can provide low cost and stable power to ratepayers with the IPPs bearing the risk
- Due to timing of the PTC and ITC, there is an immediate opportunity to lock in low cost wind and solar to benefit Utahns for generations, while also providing substantial economic benefits to rural Utah

Rocky Mountain Power Schedule 34 and 38 Tariffs

RMP Schedule 38

ROCKY MOUNTAIN POWER SCHEDULE 34 AND 38 TARIFFS

RMP Schedule 38 is Utah's implementation of a federal law – PURPA

- Schedule 38 allows for new renewable generators at ***no additional cost to ratepayers***
- 1,000 MW (~\$1.5B investment) of solar built in Beaver and Iron Counties in 2015 and 2016.
 - ***Significant benefits to local communities through land lease and tax payments***
- More projects could still be built, ***but RMP is blocking developers***
 - Reducing PPA terms
 - Preventing transmission access
 - Refusal to coordinate transmission studies
 - Refusal to operate transmission grid cost effectively
 - Refusal to tender draft PPAs

RMP Schedule 34

ROCKY MOUNTAIN POWER SCHEDULE 34 AND 38 TARIFFS

RMP Schedule 34 came out of STEP legislation passed in 2016

- Meant to provide large customers with choice to buy directly from renewable IPPs
- Schedule 34 construct does not actually provide customers with ability to take advantage of low cost and long term contracts since RMP is still acting as the middle man

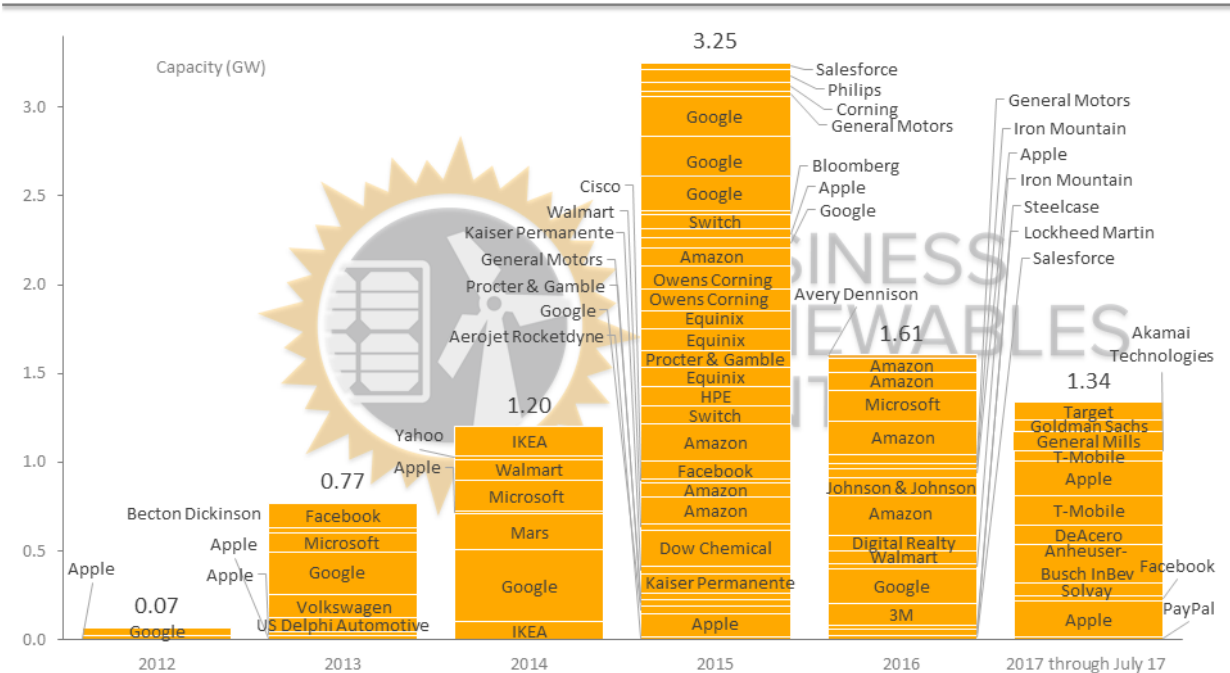
- Customers pay their standard RMP rate plus a premium for renewable energy

- In reality, the cost of wholesale renewable energy is much lower than the customer's standard power rate from RMP

- Enormous demand from corporate America for contracts with renewable energy suppliers, and companies are locating in states where they have access



Corporate Renewable Deals 2012 – 2017



Publicly announced contracted capacity of corporate Power Purchase Agreements, Green Power Purchases, Green Tariffs, and Outright Project Ownership in the US and Mexico, 2012-2017. Excludes on-site generation (e.g., rooftop solar PV) and deals with operating plants. Last updated: July 14, 2017.

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For more information, please visit <http://www.businessrenewables.org/> or contact BRC@RMI.org

Customer Choice

Creating a Competitive Power Market

CUSTOMER CHOICE

Competition is good for ratepayers; customer choice programs taking hold in NV, CA, TX, OR, CO, etc.

Nevada

- Companies paying massive exit fees to leave NV Energy
- Ballot Approved Energy Choice Initiative in Nov 2016
 - “Nevada voters supported a State policy that ‘electricity markets be open and competitive so that all electricity customers are afforded meaningful choice among different providers, and that economic and regulatory burdens be minimized in order to promote competition and choices in the electric energy market.’”¹

Oregon

- SB 978 passed in July 2017, with a similar purpose:
 - “Requires Public Utility Commission to establish public process for purpose of investigating how industry trends, technologies and policy drivers in electricity sector might impact existing regulatory system and incentives currently employed by commission. If warranted, the commission may consider changes to the existing regulatory system and incentives.”²

Google filing seeks energy alternatives to Warren Buffett's Nevada utility

WINNING BIG: ECONOMIC DEVELOPMENT FUELS NORTHERN NEVADA GROWTH

After going through the toughest recession in its history, Northern Nevada has seen its fair share of economic development victories in the years that followed. Here's a list of some of the major economic development wins that the region has seen.

MGM Resorts to Leave Nevada Power, pay \$86.9M exit fee



¹Governor Sandoval Announces Committee on Energy Choice Membership; April 3, 2017: <http://gov.nv.gov/News-and-Media/Press/2017/Governor-Sandoval-Announces-Committee-on-Energy-Choice-Membership/>

² <https://olis.leg.state.or.us/liz/2017R1/Downloads/MeasureDocument/SB978>

Google filing seeks energy alternatives to Warren Buffett's Nevada Utility; April 25, 2017: <http://www.rgj.com/story/money/business/2017/04/25/google-puc-filing-independence-warren-buffett-nevada-utility-nv-energy/100906536/>

MGM Resorts to leave Nevada Power, pay \$86.9M; May 19, 2016: <https://www.reviewjournal.com/business/energy/mgm-resorts-to-leave-nevada-power-pay-86-9m-exit-fee/>

Creating a Competitive Power Market

CUSTOMER CHOICE

Utah

- RMP states “Utahns across all customer classes want more choice” and customers are “demanding cleaner energy”¹
- RMP Proposal in front of Utah PSC: \$3.5 Billion of investment in Wyoming and Idaho
 - \$2.8 Billion for wind projects and \$700 Million for new transmission¹
- A \$3.5 B plan paid for by Utahns should be thoroughly reviewed
 - RMP recently told UT and WY utility commissions that long term renewable commitments are not in ratepayer’s best interests
 - RMP is now proposing exactly that, but with their own rate-based projects
 - RMP could just buy under Schedule 38 **at no cost to ratepayers**
 - RMP should be evaluating resources across their territory, not just WY wind
- Utah Energy Resource Procurement Act (2005) requires RMP to issue an RFP
 - Draft RFP issued for Wyoming wind, but it blocks bidders without interconnection studies
 - PAC interconnection studies delayed for months over already generous tariff timeline
 - RFP designed for IPPs to be uncompetitive



¹Utilities of the Future; Gary Hoogeveen, SVP RMP. May 18, 2017
https://docs.wixstatic.com/ugd/855490_60f8aa8feba949adb2dc54bb09794c28.pdf

Creating a Competitive Power Market

CUSTOMER CHOICE

Legislative Agenda

1. **Create an Energy Task Force to assess and implement customer choice**
2. **Involve legislature in oversight of regulatory processes to fix Schedule 38 and 34 and introduce new legislation if necessary**
3. **Stop evaluation of RMP Wyoming wind investment until Task Force is complete**
 1. Any utility-owned generation should be evaluated against all possible IPPs
 2. RFP needs to be conducted on a fair and equal basis
 3. Evaluated based on total economic benefit to ratepayers
4. **Energy Task Force to assess ability of battery storage and electric vehicles to improve grid resiliency and air quality**





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THANK YOU