



Berkshire Hathaway Energy

Scott Thon

President of Operations
Berkshire Hathaway Energy

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 PACIFIC CORP.

 PACIFIC POWER.

 ROCKY MOUNTAIN POWER.

 BHE TRANSMISSION.

 ALTALINK.

 BHE U.S. TRANSMISSION.

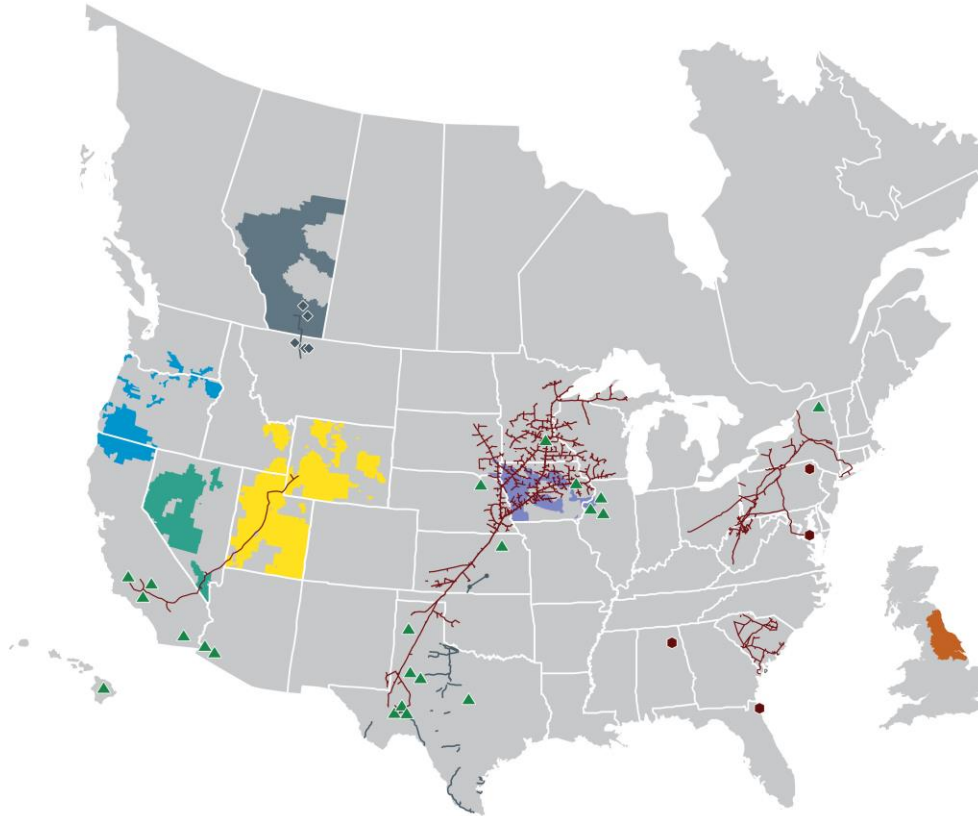
 MIDAMERICAN ENERGY COMPANY.

 NV Energy.

 NORTHERN POWERGRID.

 BHE PIPELINE GROUP.

 BHE RENEWABLES.



- 12 million customers and end-users
- Top-rated service provider within the industry



- OSHA Recordable Incident Rate of 0.35



- 45% renewable/noncarbon generation



- 35% below national average prices at MidAmerican Energy

- 29% below national average prices at PacifiCorp

- 23% below national average prices at NV Energy

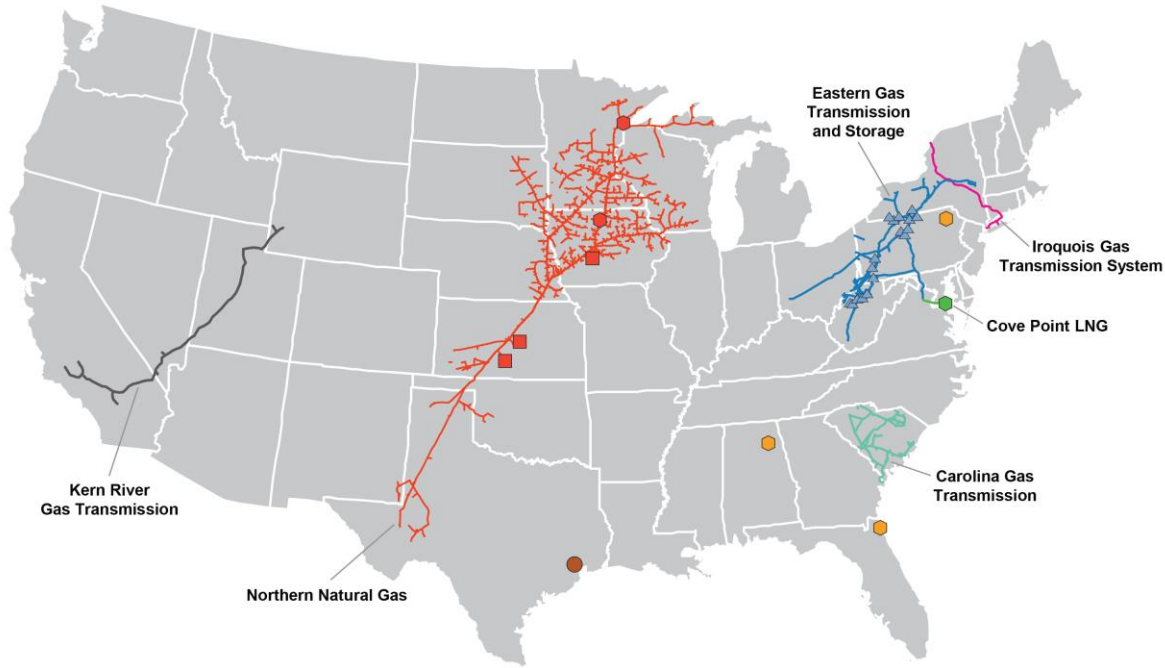


- \$132.1b in total assets
- Exceptional cyber and physical protection



- 2021 net income > \$3.9b
- Operating cash flows > \$8.7b

BHE Pipeline Group



Transportation Capacity	21.1 Bcf
Working Gas Storage Capacity	516 Bcf
Miles of Pipe	21,100 miles
Compression	2.1 million HP
Employees	2,744

Kern River Gas Transmission
— Pipeline

Northern Natural Gas

- Pipeline
- LNG Facility
- Underground Storage Facility

Cove Point LNG (25%)

- Pipeline
- LNG Terminal

Eastern Gas Transmission and Storage

- Pipeline
- ▲ Storage Facility

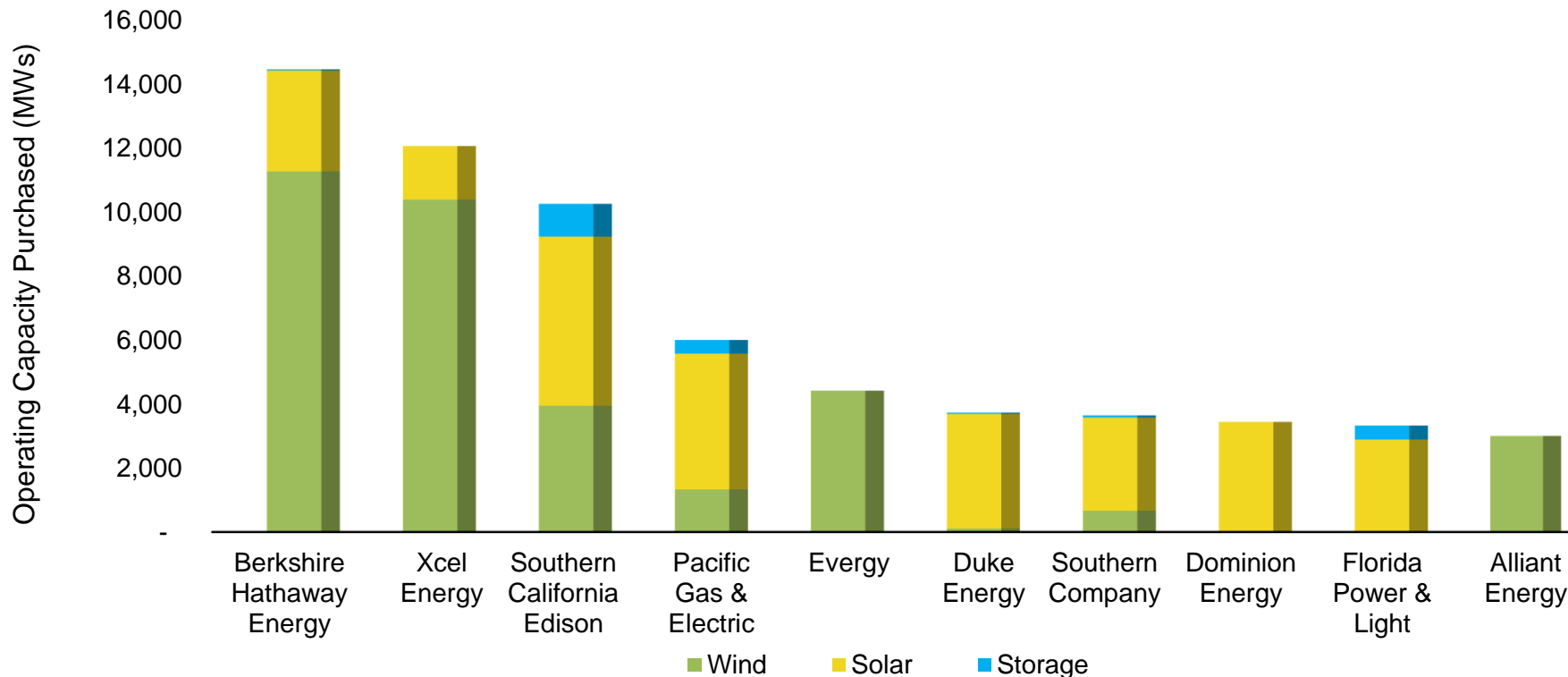
Carolina Gas Transmission

- Pipeline
- Iroquois Gas Transmission System (50%)
- Modular LNG Holdings
- BHE Compression Services

Industry Leader in Regulated Renewable Energy



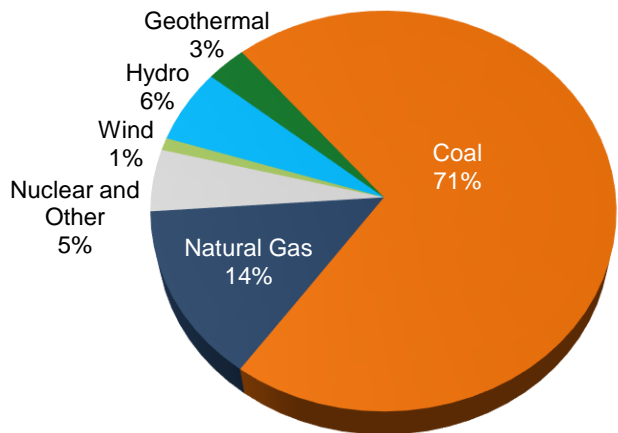
Top 20 Investor-Owned Utilities With Clean Power on the System



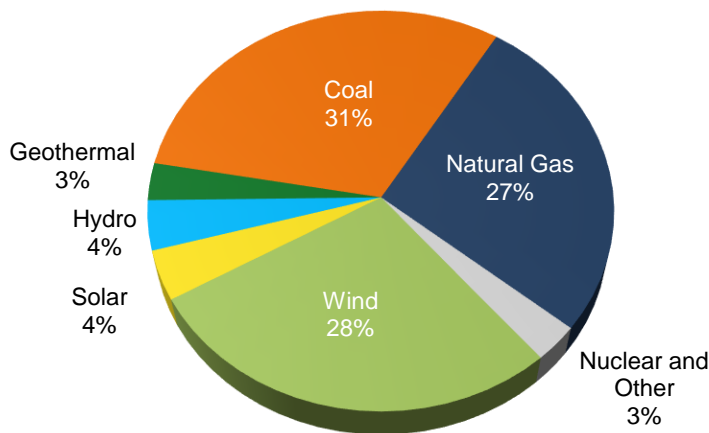
Transforming Our Generation Portfolio



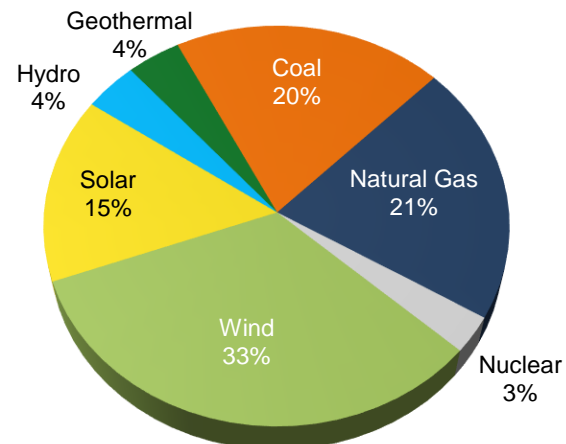
2005 Power Generation
Owned and Purchased⁽¹⁾



LTM 9/30/2022 Power Generation
Owned and Purchased⁽¹⁾



2030 Power Generation
Owned and Purchased



⁽¹⁾ Excludes generation associated with renewable energy credits which were not retained

Inflation Reduction Act Supports Low-Cost and Reliable Developments for Customers



- The Inflation Reduction Act (IRA) keeps costs low for our customers
- Affordability
 - The IRA provides clear line of sight on investment tax credits (ITC) and production tax credits (PTC) for new renewable resources required to achieve net-zero goals
 - PTC/ITC optionality for solar projects supports utility ownership and improves value proposition for our customers
 - New ITC with normalization opt-out for energy storage technologies improves economic viability
- Reliability
 - New and extended tax credits for carbon capture utilization and sequestration, clean hydrogen production and nuclear generation provide additional opportunities for base load generating assets that align with Berkshire Hathaway Energy's net-zero goals and provide grid stability

MidAmerican's Wind PRIME Project

No Rate Increase to Customers




 **\$3.9**
billion investment

 **2,042**
megawatts wind



 **50**
megawatts solar

 Continued
exploration of
other **clean energy**
technologies



 **100%**

Delivering renewable energy equal to
100% of our Iowa customers' annual
usage

Iowa Interties - Critical to No Rate Increase



Western Electric Transmission Investment to Enable Low-Cost Renewable Energy



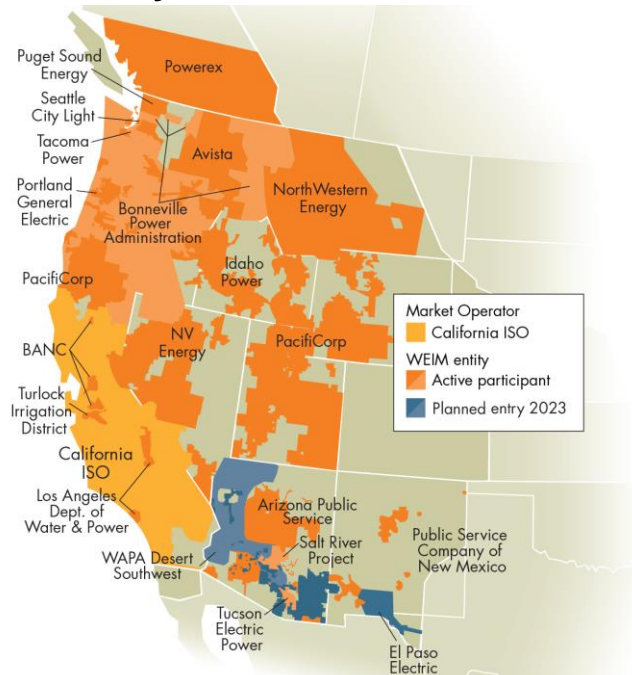
- Berkshire Hathaway Energy plans to invest more than \$18b (of which \$5.8b has been invested as of September 30, 2022) developing a more interconnected electric transmission grid, thereby providing a conduit for increased renewable energy to be delivered
- PacifiCorp plans to invest more than \$11b on major transmission projects – primarily located in Wyoming, Utah, Idaho and Oregon, of which \$3.6b has been invested as of September 30, 2022
- NV Energy’s Greenlink Nevada projects include a 350-mile, 525-kV transmission line (Greenlink West) and a 235-mile, 525-kV transmission line (Greenlink North), with a combined expected cost of approximately \$2.5b
- PacifiCorp, NV Energy and BHE Transmission plan to invest \$6.2b in other electric transmission projects, of which \$2.2b has been invested as of September 30, 2022

Energy Imbalance Market

Benefits Customers and the Environment



The Energy Imbalance Market is an innovative market that allows utilities across the West to access the lowest-cost energy available in near real-time, making it easy for zero-fuel-cost renewable energy to go where it is needed and reduce carbon emissions. Through September 2022, cumulative benefits totaled approximately \$2.9b



Combined Benefits: November 2014 – September 2022

Balancing Area Authority	Year Joined	Total (\$ millions)
CAISO	2014	\$601.2
PacifiCorp	2014	\$537.5
NV Energy	2015	\$236.6
Arizona Public Service	2016	\$302.0
Puget Sound Energy	2016	\$91.9
Portland General Electric	2017	\$176.0
Idaho Power	2018	\$160.8
Powerex	2018	\$35.9
BANC/SMUD	2019	\$374.0
Salt River Project	2020	\$130.0
Seattle City Light	2020	\$30.7
LADWP	2021	\$92.6
Northwestern Energy	2021	\$30.4
Public Service Co of New Mexico	2021	\$35.6
Turlock Irrigation District	2021	\$13.6
Avista Utilities	2022	\$14.4
Bonneville Power Administration	2022	\$13.4
Tacoma Power	2022	\$5.5
Tucson Electric Power	2022	\$29.7
Total		\$2,912.0

Map boundaries are approximate and for illustrative purposes only.

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Low-Cost Competitive Electric Rates



Company	Weighted Average Retail Rate (\$/kWh)	
U.S. National Average⁽¹⁾	\$0.1159	
Pacific Power	\$0.0893	23% lower than the U.S. National Average
Rocky Mountain Power	\$0.0791	32% lower than the U.S. National Average
MidAmerican Energy	\$0.0749	35% lower than the U.S. National Average
Nevada Power	\$0.0977	16% lower than the U.S. National Average
Sierra Pacific	\$0.0803	31% lower than the U.S. National Average

Highest Average Rates (\$/kWh) by State⁽¹⁾: Hawaii – \$0.3035; Massachusetts – \$0.2224; Rhode Island – \$0.2017; New York - \$0.1919; Connecticut – \$0.1896

⁽¹⁾ Source: Edison Electric Institute (Winter 2022) Total Retail

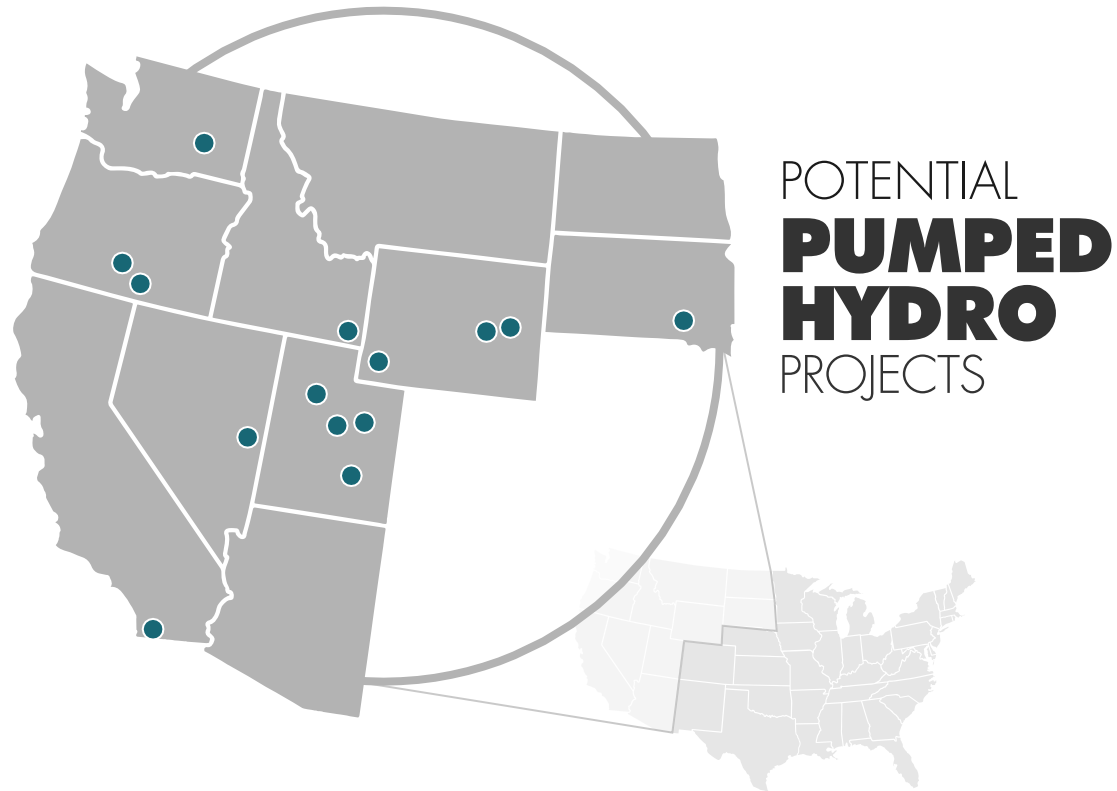
Energy Storage



- NV Energy has brought forward 14 projects that total 3,200 MWs of solar generation with more than 1,500 MWs of integrated battery storage systems
 - Three of these projects are currently serving customers
- In July 2021, NV Energy commissioned the 10-MW Chukar Battery Energy Storage System, its first grid-tied battery storage system
- NV Energy is developing a 220-MW grid-tied battery energy storage system on the site of the former coal-fueled Reid Gardner Generating Station
- Pumped storage is under development across Berkshire Hathaway Energy's electricity businesses



Pumped Hydro Energy Storage



Lithium and Geothermal Expansion



- BHE Renewables plans to produce lithium using direct lithium extraction from geothermal brine that is processed within the company's 10 geothermal plants in the Salton Sea Known Geothermal Resource Area in the Imperial Valley



- BHE Renewables estimates up to 90,000 metric tons of lithium carbonate can be extracted from its existing geothermal facilities each year, representing 14.1% of the worldwide supply in 2022

Advancing Nuclear Technologies



- TerraPower and GE Hitachi Nuclear Energy developed the Natrium™ technology, which features a cost-competitive 344-MW sodium fast reactor combined with a molten salt energy storage system (current nuclear fleet is light water)
- The overall site will be on 44 acres, with the nuclear island sitting on 16 acres
- Technology in the system can boost output to 500 MWs for more than five hours when needed, equivalent to the energy required to power approximately 400,000 homes



The Natrium demonstration plant is in Kemmerer, Wyoming, near PacifiCorp's Naughton power plant



 **BERKSHIRE HATHAWAY**
ENERGY®