BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Approval of Changes to Renewable Avoided Cost Methodology for Qualifying Facilities Projects Larger than Three Megawatts	**DOCKET NO. 12-035-100**

Direct Testimony of Rocco Vrba

For Energy of Utah LLC

March 28, 2013

Q. Please state your name, title and business affiliation.

A. My name is Rocco Vrba. I am the Principal Partner at Energy of Utah LLC, a local renewable energy development company.

Q. Qualifications.

A. I have an MS in Mechanical Engineering and an MBA from the University of Phoenix. I have worked for PacifiCorp Energy as a Project Manager on the development and construction of a number of wind assets in PacifiCorp's portfolio. In addition, I have worked for Wind Capital Group as Director of Construction, overseeing a large wind energy portfolio from development through construction. At the present time, I represent Energy of Utah LLC and its interests in the development of renewable energy assets in the State of Utah.

Q. **What is your association with this docket?**

A. Energy of Utah's Long Ridge Wind development is directly affected by the outcome of this docket. We are also interested in the presence of a level playing field for wind energy in Utah over future years.

Q. What is the purpose of your testimony?

A. I am responding to the Rocky Mountain Power (Company) position pertaining to proposed methodology for renewable energy in Utah under Schedule 38.

Q. Please provide your response to the Company's stated position.

A. The Company's testimony asserts that the application of the Market Proxy method to Utah wind development projects in the Schedule 38 queue will result in excessive costs to ratepayers and instead drives us towards the use of "GRID". Under the new scenario, the Company proposes to calculate capacity values for wind energy based on high-probability availability during the 100 highest load hours of given year.

This methodology would effectively result in 4% capacity value for wind energy, despite the fact the Utah wind development capacity factors ranges between 32%-40%, depending on specific site conditions. This newly-proposed methodology also discounts a number of critical issues, including: cost of fuel hedging, environmental regulation risk, generation diversification risk, and transmission costs.

Q. Please explain the economic impact of the Company's proposed methodology.

A. This method, if approved, would effectively curb all wind energy development in our state, as the pricing would not provide for a reasonable on investment. As a consequence, the methodology would deprive our state and local communities of much-needed short and long term economic benefits, as illustrated by a recent Utah State University Study. [1]

[1] David J. Ratliff, Captain United States Air Force, Cathy L. Hartman, Ph.D. Edwin R. Stafford, Ph.D.

Q. Please explain your views on additional considerations associated with the Company's proposed QF methodology for wind development.

A. I would like to offer the following factors for the Commission's consideration:

- Generation portfolio concentration risk
- Wind integration and reliability
- Environmental impacts
- Fuel hedging costs
- Infrastructure improvements and power balancing costs

Q. Please explain your view on generation portfolio concentration risk.

The Company's generation portfolio primarily consists of coal and gas fired generation, and as such, is heavily dependent on outside factors that may play a major role in future energy costs. The majority of these "cost driving" factors are not in the Company's control. Despite their best forecasting efforts, the Company cannot effectively predict very long term energy costs. For example, future Federal emission guidelines, the long-term prospects for natural gas "fracking", natural disasters (e.g. the tsunami in Japan and its impact on global energy policy) and very long-term supply and demand trends all present unpredictable risks to ratepayers. Renewable energy offers an effective risk-mitigation strategy for these factors, protecting Utah consumers from market volatility and from longer-term price risk.

Q. Please explain your view on wind integration and reliability.

A. Large amounts of wind energy are already being reliably and cost-effectively integrated with the grid in the U.S. and around the world. In 2010, the Texas grid obtained 7.8% of its electricity from wind energy. Roughly 20% of the electricity produced in Iowa now comes from

wind energy. Similarly, European countries like Germany, Spain, Portugal, Denmark, and Ireland now obtain more than 10% of their electricity from wind[2].

Our neighboring state Colorado and its utility Excel Energy benefits from wind via its 4000 + MW of electricity, comprising over 10% of their total generation portfolio. Excel Energy engaged with the National Center for Atmospheric Research and its high-resolution wind energy forecasting system, which combines real-time, wind turbine-level operating data with weather prediction models and sophisticated algorithms to forecast wind energy 72 hours in advance. The forecasts help system operators to make better decisions about powering down coal- and natural gas-fueled generating plants when sufficient winds are predicted. Excel estimates that improved forecasting has saved their customers about $14 million so far in fuel and system efficiencies.[3]

Successful wind integration has already been demonstrated around the globe.

Q. Please comment on environmental impacts.

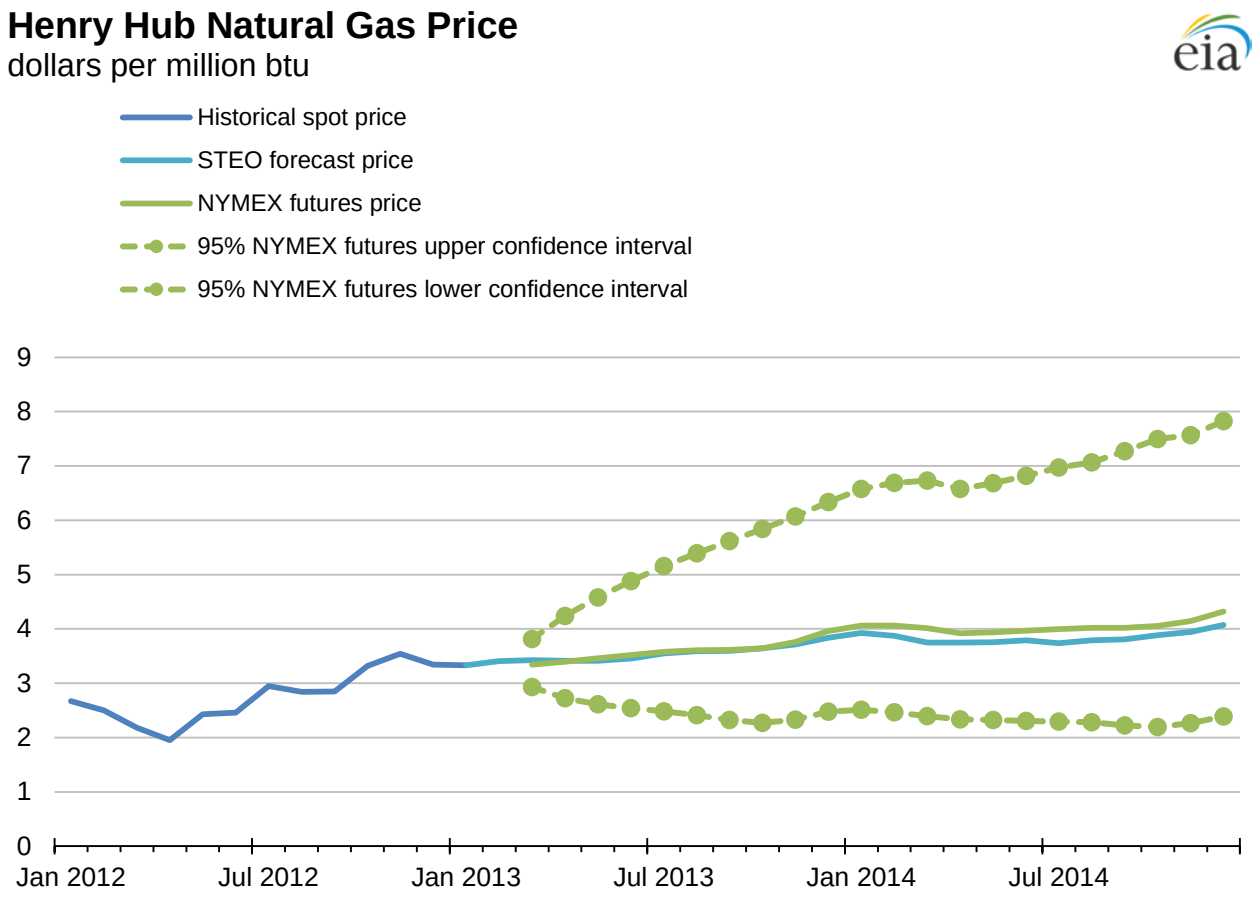
A. Wind energy is an industry leader in producing clean and renewable energy with little environmental impact. In comparison, fossil fuel generation, such as coal and gas, produces nitrogen oxides, carbon dioxide, sulfur dioxide, mercury and other pollutants. It also consumes large amounts of water.[4] These genuine externalities are born by Utah ratepayers and should be considered in avoided cost decisions.

Q. Please explain your view on fuel hedging costs, as they relate to QF's in particular.

A. Wind energy under Utah QF guidelines offers 20 years of fixed-contract price protection, including both fixed and variable costs, to Utah ratepayers. Wind energy offers substantial protection from fossil fuel market volatility that may not be predictable. The costs for short-term

[2] http://www.awea.org/learnabout/utility/Wind-Integration-and-Reliability.cfm
[3] http://www.xcelenergy.com/Environment/Renewable_Energy/Wind/Wind_Power_on_Our_System
[4] http://www.epa.gov/cleanenergy/energy-and-you/affect/coal.html

variability are born by ratepayers in the form of hedging costs. The risk of price changes beyond the horizon of hedging strategies lies on future ratepayers. The following chart[5] illustrates a potential range of natural gas pricing, as indicated by financial markets:



Note: Confidence interval derived from options market information for the 5 trading days ending February 7, 2013. Intervals not calculated for months with sparse trading in near-the-money options

Source: Short-Term Energy Outlook, February 2013

Q. Infrastructure improvements and power balancing

A. Viable wind energy is located in close proximity to Utah load centers. PacifiCorp's power lines have ample capacity for this new generation. Many areas in which new wind

[5] http://www.eia.gov/forecasts/steo/report/natgas.cfm

generation can be created outside of the state are located far from load centers, with significant associated transmission costs. Local wind generation would avoid part of these costs by utilizing existing transmission capacity utilization. New Utah wind projects would also offer local portfolio diversification.

Very large generation projects may require hundreds of million dollars in new transmission construction and overall network up grades, passing costs on to ratepayers, while existing transmission lines are not fully utilized. Smaller QF projects tend to avoid this additional cost by connecting to under-utilized transmission.

Q. Utah and renewable energy facts

A. In March of 2008, Utah adopted a voluntary Renewable Portfolio Standard with a 20% renewable generation goal by 2025. As of 2012, Utah's in-state renewable generation comprises 1% of demand. PacifiCorp continues to plan for wind energy from Wyoming, depriving Utah and its communities of much-needed short and long-term revenues. Utah consumers expect to pay for transmission system upgrades for wind projects that are hundreds of miles away. According to a resource assessment developed by the National Renewable Energy Laboratory, [6] Utah's potential wind resource is equivalent to 132% of the state's current demand.

Q. Does that conclude your testimony?

A. Yes.

[6] http://www.windpoweringamerica.gov/wind_resource_maps.asp?stateab=ut

Submitted Respectfully,

Rocco Vrba MBA

For Energy of Utah LLC