Q. Please state your name, business address and present position.

A. My name is Ros Rocco Vrba. My business address is 1612 Bainbridge, Sandy, Utah. I am President of Energy of Utah LLC.

Qualifications

Q. Please briefly describe your education and business experience.

A. I have Masters of Science (MS) in Mechanical Engineering from 2001 and a M.B.A. from University of Phoenix from 2006. I founded Energy of Utah LLC ("EOU") in 2011. EOU's primary focuses lies in renewable energy consulting and development of clean renewable energy resources in Intermountain West. I have specific experience in the development of renewable resources, application of tariffs and transmission applicable to the testimony being given here.

Q. Have you appeared as a witness in previous regulatory proceedings?

A. Yes. I have testified on multiple occasions in Utah through various proceedings since 2012.

Purpose and Summary of Testimony

Q. What is the purpose of your testimony?

A. In my testimony I present EOU's concern on behalf of Customers and Renewable Generators with the proposed Electric Service Schedule No. 32, Service from Renewable Energy Facilities (Schedule 32), which was filed with the Commission on April 25, 2014 and subsequently amended by Direct Testimony of David L. Tylor on behalf of Rocky Mountain Power ("RMP" or "Company") on July 10, 2014 in the same docket.

Q. Please describe proposed Electric Service Schedule No. 32.

A. Schedule 32 is a retail service option which allows a Customer to receive electric service from the RMP which includes electricity generated by a Renewable Energy Facility that is owned by the Customer or is under a contractual arrangement with the Customer; as provided in Utah Code Title 54, Chapter 17, Part 8, Renewable Energy Contracts (SCH 32 Renewable Statute). The proposed Schedule 32 governs the conditions of service, pricing, and the contracting and interconnection procedures under which RMP will execute a contract or Power Purchase Agreement to supply electric service to a Customer from one or more Renewable Energy Facilities which are owned or contractually tied to that Customer. Schedule 32 is a retail service option applying to all Customers taking service under and established by Senate Bill 12 ("SB 12") of 2012.

Q. What are the services provided under Schedule 32 based on your understanding of company filing?

A. The Company indicated five general categories of service and charges under Schedule 32:

1. Renewable Power and Energy
2. Metering and Billing Services
3. Delivery Service
4. Backup Service
5. Supplementary Service

Q. Please provide your comments associated with the Renewable Power and Energy Contracts.

A. The Company filed the following statement:

> "While RMP will be a party to both the contract with the Renewable Energy Facility and the contract with the ultimate Customer, the material commercial terms of the Renewable Energy Contract will be negotiated between the Customer and the Renewable Energy Facility. Once those parties reach agreement on the material commercial terms, RMP will work with both the Customer and the Renewable Energy Facility to finalize any other contract terms necessary to facilitate the transaction"

A. We have two comments to offer:

1. Transparency and Simplicity of Renewable Energy Contract

The Company suggests that it may receive marginal portion of the provided electrical energy in case of over production from renewable energy generator under perhaps a separate Power Purchase Agreement that is yet to be produced for parties to comment. The Company simply does not administer any risk to Utah consumers, but rather serves the purpose of a "pass through" entity between Renewable Energy Facility generator and Renewable Energy Purchaser. We are assuming that the pending contract will not follow the existing complexity of Utah Schedule 38 and or Utah Schedule 37. A draft of any contract or Power Purchase Agreement required by the Company to administer Schedule 32 and SB 12 including that with the Renewable Energy Facility needs to be made available to Customers as part of this proceeding and as soon as possible.

2. Renewable Energy Contract Confidentiality

It is essential that certain commercial terms and power purchase pricing between energy generator and Customer remain confidential and that the Company does not receive a direct benefit of this information for their future rate making in Utah State or other competitive advantage of holding customers or competing with Renewable Generators. As it stands now, RMP must meter and pay the Renewable Energy Facility for energy delivered to Customer. This information needs to maintained separate from the Company's commercial unit and payments administer by a neutral third party.

Q. Do you have any other comments with Renewable Power and Energy Contracts?

A. Yes. I would like to offer the following regarding Capacity contributions under Schedule 32.

The Company correctly identified that potential Customers acting under Schedule 32 can and will receive an off-set for "energy" from renewable energy generator on their monthly bill. However, no "capacity" contribution off-set or power charge off-set has been identified even though the Renewable Energy Facilities provide direct benefits in form of capacity contribution into the Company's energy grid, reserve margin and backup ancillary services costs. In other past proceedings, especially in docket 12-035-100, the Company attests to capacity contribution and the Commission assigned a "fixed capacity contribution" based on generation resource. Given the nature of Schedule 32 as proposed by RMP, this capacity contribution is not realized by SB 12 potential Customers, but is rather distributed to Utah consumers and the Company in form of direct and unjust subsidy

elsewhere. The Commission should assign a "fixed capacity contribution" based on generation characteristics of each renewable resource to allow SB 12 and Schedule 32 Customers to receive and realize an off-set on their energy and portion of their capacity as well. We view this "capacity contribution" as a pivotal point of our filing and essential to SB 12 and Schedule 32 Customers. If Customers only receive savings off their electricity bills for reductions in energy charges, even without considering additional delivery charges proposed by RMP, then retail customers will not be able to pay the costs required for Renewable Generators to compete. Renewable Generators must be able to offer competitive prices including capacity contribution to off-set their capital and O&M costs. Only receiving a reduction in energy charges is insufficient. This is no different than return on investment allowed the Company. If RMP is left to have its way, there will be no economic incentives for Customers to contact for renewable generation. This is a question of equity for the Customer and fulfilling the requirements of SB 12. The off-set concept including capacity contribution is discussed in more detail under the "simplified" billing approach that I will described in more detail later. For solar and wind resources, the concept of capacity contribution is based on the spatial penetration of each technology being that the sun is always shining somewhere or the wind is always blowing somewhere and these resources cumulatively are always generating a firm capacity contribution.

Q. Please provide your comments to Metering and Billing Services

A. The Company identified a $ 450 monthly Customer charge per Renewable Energy Contract. To justify this cost, the Company pointed out manual labor hours needed

in order to segregate renewable and the Company's own electrical production on Customer's monthly bill. We view these charges as excessive and design directly to curb Customer's further interest in SB 12. The Commission should order creation of automatic billing procedure and bring the monthly costs to be closely aligned with other Utah Electric Schedules monthly costs.

Q. Do you have any other comments to Metering and Billing Services?

A. Yes. The Company further acknowledged that they will allow changes to Customer's point of energy off-take on seasonal basis. Or in other words, allowing changes in contractual commitments to align when Customers need electrical energy based on longer term forecast to better cope with Customer's needs and requirements. We ask commission to permit the same changes to energy points on daily bases that are closely aligned with the Company's HLH and LLH profiles. Renewable Generators will need this level of flexibility to secure all of its energy off-take for all hours of the day and days of the week. Some Customers under Schedule 32 may need electricity for their operations only during certain hours of the day or at night depending on their operation. An example would be office complex using energy from 7 AM to 6 PM weekdays vs. manufacturing facility running 24/7 operation. The price each would pay would also be different depending on the savings that can be realized on their energy bill. This flexibility is essential for prudent delivery of all the Renewable Energy Facility's generation and off-set of the capital and O&M costs of these facilities.

Q. Please provide your comments associated with Delivery Service.

A. The Company provided a table for transmission and distribution service charges as well as a table of energy losses to be applied against the Renewable Energy Facility's generation. Our concern is that all charges associated with energy losses must be discounted by costs already included in Customer's facility and/or power charges under approved Utah electric schedules. Some of these schedules are thought to already have portions if not all of these costs contained in facility charges and others in power charges. Examples would be Utah Electrical Schedules 6. Customers should only be charged for incremental costs and we would ask that the Company discloses these costs in further detail in order to identify costs included under existing electric schedules other than Schedule 32 for parties review and comments. Renewable Energy Facility should not subsidize system energy losses already being collected in normal tariff rates. This is especially true as Customers will already be charged these costs under its normal tariff as discussed later under simplified billing approach. If Customers are already paying for energy losses in their facility and power charges, they should not be charged twice under Schedule 32. Any energy loss factors embedded in these charges needs to be transparent and credit applied to the renewable generator.

Q. Please provide your comments associated with Backup Service.

A. SB 12 and Schedule 32 contain an upper generation limit of 300 MW. We believe that this limit was established with sufficient "generation reserve margin" of RMP during the 2012 SB 12 proceedings. It is our understanding that due to this fact, any and all contracted generation under Schedule 32 shall have no backup charges as proposed by the Company. In our view, all new generation under Schedule 32

up to its upper generation limit reduces RMP's need for generation "spinning reserves" and planning future reserves as well. The proposed backup charges represent double charges to potential Schedule 32 Customers. The Customer will already be charged these costs under its normal tariff as discussed later under simplified billing approach. If Customers are already paying facility and power charges, they should not be charged twice under Schedule 32.

Q. Please provide your comments associated with Supplementary Service

A. The Company's indicated that for any energy or power delivered by the Company to meet demand not satisfied by the Renewable Energy Facility, the Customer will be charged at normal tariff rate including facility and power charges based on the maximum 15-minute on-peak period of energy use net of renewable generation during the monthly billing cycle. Additionally, Schedule 32 charges will apply based on the renewable contract capacity for facility and backup facility charges and based on daily maximum 15-minute on-peak renewable energy delivered. This represents a serious fatal flaw in the approach of applying charges proposed by RMP under Schedule 32. Except for base load generation that is always on line during on-peak hours, the Customer will be charge twice for the same services as the renewable generation level during the month will be a low number and likely zero resulting in maximum charges for Supplemental Power and Energy Charges as though no renewable generation had been delivered plus charges under Schedule 32 when renewable generation is delivered. Even if the maximum power charges under proposed Schedule 32 were limited to the Supplemental Service Power Charges, RMP is proposing Schedule 32 facility and backup facility charges

substantially greater than tariff facility charges. The concept proposed by RMP will simply not work specially for intermittent generators. For these reasons, EOU is proposing a "simplified" billing approach described below.

Q. Are there any other proposals leading to simplified Schedule 32 that you would like to share?

A. Yes, we would like to offer an alternate "simplified" billing approach. The problem as I see it is that the proposed Schedule 32 charges by RMP have been developed thinking strictly from the generator's or utility's point of view to deliver the power and not taking into account the real life Customer who is already getting service from RMP and paying for many of the same services as being proposed as charges outlined in RMP's proposal. Except for the case where the Customer would take all its power from a Renewable Generator or the case where the Renewable Generator is a base load energy source, the proposed rate structure by RMP is overly complex and in addition inequitable and discriminatory since it duplicates charges.

More precisely, the typical Customer will be contracting for renewable power to supplement its power and energy needs and will continue to purchase a major portion of its power and energy under its existing tariff. In addition, the renewable generating source will likely be an intermittent generator or at least a generator that cannot deliver in every 15-minute on-peak period and in these circumstance the Customer has an almost certain probability to receive zero renewable generation for at least one 15-minute on-peak period each month thereby maximizing the Customer's facility and power charges as though it received no renewable

generation whatsoever. Under these circumstances, the Customer will have paid for all RMP facility and power charged services, including those to deliver renewable energy, regardless if it received renewable generation or not. In all cases that can be envisioned, there would be no need to pay for additional delivery facility charges, generation backup facility charges and backup power charges as proposed by RMP. In these circumstances, it would be inequitable and highly discriminatory to have any additional charges imposed during periods of receiving renewable energy.

My position is that RMP rate structure, in addition to being too complex, is completely unnecessary for Utah based Customer. Instead of inventing a new rate structure with charges when renewable energy is delivered to Customer, the Customer should be given credits or off-sets against its normal tariff for amounts of renewable power generated and energy received.

Therefore, a "simplified" billing approach is recommended. Under this approach, Customer pays "all" normal charges under existing tariff as though no renewable power or energy is being delivered and receives credits or off-sets (i) for the amounts of renewable energy delivered based on the applicable energy charge (ii) for the amounts of renewable capacity purchased based on a percentage of the applicable power charge for the contracted Renewable Generator's capacity contribution to the overall grid, reserve margin and backup ancillary services costs. Except for a small additional administrative charge, there are no additional incremental charges to consider since none have been identified by RMP. Earlier in my testimony I discussed the need to include credit for the capacity contribution

of renewable generation. A step by step description of the recommended "simplified" billing approach is attached hereto as Exhibit A

Q. Are there other comments you would like to make regarding the RMP proposed Schedule 32?

A. Yes, an additional serious concern is RMP's contention that a separate contact must be applied to each individual meter. There exist multiple instances where a single Customer at single location has multiple meters and all such meters should be aggregated under Schedule 32. This is particularly important due to the restriction place upon a Customer that it cannot accept more renewable energy in any hour than is consumed. Not to be able to aggregate meters at a single location is inequitable and discriminatory and results in high administrative burden passed onto the Commission for approval of all Renewable Energy Contract. In addition this is a blatant attempt by the Company to force more of the renewable generation to be stranded or purchased by the Company at below market rates and likewise increase the amount of billing and Customer charges and fees that can be realized. This is simply a question of equity and reason to not allow RMP to skirt the intent of SB 12. We view this restriction design directly to curb Customer's interest in Schedule 32. The Commission should order RMP to aggregate all meters at a Customer's location.

EXHIBIT A

SB 12

Delivery of Renewable Energy

Schedule 32 Docket

Simplified Billing Approach

This approach is based on the expected circumstance that customer will continue to use and consume power and energy needs from RMP and will contract for renewable generation to supplement a portion of its energy and power demands when such renewable generation is available.

Summary

Customer pays normal utility bill including "all" customer, facility, power and energy charges including any and all additional fees, charges and discounts under applicable tariff as though "no" renewable energy has been delivered and receives credit or off-set for:

(i) the net kWh of generation from contracted renewable generator (adjusted for transmission losses not included or accounted in the tariff facility and power charges) calculated for such off-set at the applicable tariff energy charge rate based on time of delivery and subject to limits of customer usage, plus

(ii) the kW of capacity contribution to utility grid, reserve margin and backup ancillary services costs as a percentage of the contracted renewable kW calculated for such off-set at the applicable tariff power charge rate

Utility charges an additional administrative fee to cover incremental costs for billing.

Customer is billed for the net kWh of renewable generation received (subject to limits of customer's usage) at the rate agreed between customer and renewable generator and contained in the renewable generator PPA.

Utility pays renewable generator the net kWh of renewable generation received by customer (subject to limits of customer usage) at the rate agreed and contained in the renewable generator PPA.

Utility pays renewable generator for the net kWh of renewable generation not credited to customer due to the limits of customer usage at the then market rate for such kWh subject to time of delivery.

Step One

For each calendar month and each 15-minute interval, utility measures average kW of power use of customer plus kW of generation of renewable generator and converts each to hourly kWh.

For the applicable customer, utility prorates the hourly kWh of total production of renewable generator by the customer's contracted kW capacity to the renewable generators total installed capacity to determine customer contracted delivery of hourly kWh of renewable generation.

The customer's contracted hourly kWh of renewable generation is reduced by applicable transmission loss factors not included or accounted in the applicable tariff facility and power charges (the "Delivered Renewable Generation" or "DRG").

Utility compares each hour of customer usage to the DRG and reduces the DRG to the hourly customer usage if the hourly customer usage is less that the DRG (the "Net DRG").

Step Two

Utility calculates normal utility bill including all customer, facility, power and energy charges

including any and all additional fees, charges and discounts under applicable tariff.

Step Three

Customer receives credit or off-set for kWh of Net DRG calculated at the applicable tariff energy charge rate based on time of delivery.

Step Four

Customer receives credit or off-set for kW of capacity contribution to utility grid as a percentage of the contracted renewable kW calculated at the applicable tariff power charge rate

For intermittent generators such as wind and solar that contribute to the grid and utility capacity due to their penetration levels and combined contribution, such values have been established as set forth in PSC Decision 12-035-100 at a applicable capacity attribute or value of 20.5% of rated capacity for wind and 84% or rated capacity for solar renewable generators.