My name is Judith Johnson. I worked for the Division of Public Utilities for 13 years, the last several as Manager of the Energy Section. I also worked as an Electric Utility stock Analyst for Lehman Brothers in the years before Lehman Brothers became a dirty word. Therefore, I have some expertise in price regulation for electric utilities.

I also admit to a bias. I was energy manager in 2000 and 2001 during the electricity price crisis when, according to Wikipedia, there was an "800% increase in wholesale prices from April 2000 to December 2000." I vividly remember both the crisis and trying to recover from it in a way that was in the public interest. That means that I, as a regulator, neither wanted the utility to go bankrupt (not so good for the economy of Utah, reliability, or for prices in the future), nor did I think it fair to charge consumers, who had no control or the purchase of power, for the amount. We worked our way through it but many of us have not forgotten that time.

Avoiding that cost during any hour of the high use time would have been of great benefit to the company, who had to absorb some of those excess power costs, and to all users who paid a significant portion of those costs as an add on to their existing rates.

Following that crisis, I became quite a scold to anyone from the company who would listen, or had to listen during negotiations, meetings etc. I would natter on about how we in Utah must do everything in our power to lessen the reliance on purchased power, to lower peak usage, conserve energy and on and on until people probably wanted to run away when I started talking.

So, when I became aware that RMP wanted to start charging a monthly fee for solar, which seems a natural in this sun washed state, and an answer to my quest for clean, renewable energy available at high use times, I became interested.

I was surprised that both the Division of Public Utilities and the Office of Consumer Services recommended the charge to retail net metering customers. I have read the testimony of those agencies as well as RMP's and have some points that I think need to be made.

The first point of my citizen's testimony is to declare out loud something that everyone that works with and for the industry knows.

Price regulation is an imprecise methodology and it is based on averages.

That doesn't make it ineffective or unfair. I'll give an example. Electricity users who live in the rural areas require longer transmission and distribution lines than do those users in densely populated areas. In addition, since I live in a PUD, the users in my neighborhood

with attached buildings use shorter distribution lines than those living in single family homes on larger lots in the urban areas. Yet there is no attempt, nor should there be, to quantify the difference in cost to my PUD home and a rural user who is miles away from the next user. Price regulation must use averages and by doing so some will cause more cost and some will cause less cost than the average. There is no attempt to set precise prices and trying to do so would cost more than is reasonable. Price regulation has successfully relied on the use of averages to set fair prices.

The Company states that if net metering grows too fast it will have to bear the cost. Again regulation is not precise. Rates are set by examining the books to see what the cost has been and is expected to be in the future on a line by line basis. When the company collects the rates, it will over collect on some cost items and under collect on others. If, on average, the company collects the amount it needs to achieve its revenue requirement, neither regulators nor the company will try to adjust the rates so that the individual cost categories are accurate. For example, legal costs may be more than predicted, or wages and salaries may be less. No attempt is made to raise rates up or down unless the overall costs and collections are significantly out of balance. If the company believes that it is collecting significantly less than the amount expected, it comes before the commission to ask for a rate increase as it has just done. If the company is earning significant more than granted, parties may request that it have the utilities rates decreased.

Again, price regulation is not precise but based on averages.

The second issue is in regards to Senate Bill 208. According to the Tribune the "state bill passed last session enables utilities to impose a charge on net metered customers to cover cost they incur to the electrical grid. But SB 208 requires the PSC to weigh those costs against the benefits net metering provides."

My reading of the RMP testimony is that the analysis it has provided, and the acceptance of such by the DPU and the OCC constitute enough evidence that the Public Service Commission can make a determination that NM customers can be charges a monthly fee.

However, I find several areas of the filed testimony that argue against setting a monthly NM charge at this time.

There are two sides to the analysis. Do the net metering customers incur a <u>significant</u> cost to the grid that is shifted to other rate payers? I emphasize the word significant because, again, price regulation is imprecise and based on averages. The other side required is an analysis of the benefits net metering provides.

Turning first to the cost side. The company, DPU, and OCS all rely on a simplistic model to determine what the so-called cost shift is from NM customers to all other customers. First it shows what portion of the transmission/distribution costs are captured by a fixed customer charge and what portion is captured from the <u>average</u>, (there's that word again), charge based on electricity used. Then it shows that, because the NM customers purchase less electricity than the average, it should pay an additional fixed charge to make up the difference.

What, I ask myself, about a user I know who lives in the mountains who doesn't own an air conditioner because it is so much cooler than in the valley. They, and most of their neighbor's, use is much lower than the average user in the SL valley. What about those who live in the valley and can't afford air conditioners? Isn't their useage lower than the average? Shouldn't they also be charged part of a fixed charge for their less than average volumetric use? Think of the cost shifts from a small home with no air conditioning and few electronics to a huge mansion with several heavy duty air conditioners and a swimming pool to heat!

It is just such analytic problems that reiterate the idea that price regulation is imprecise and based on averages so trying to determine accurate "cost shifts" is an, imprecise, and useless task.

RMP also asserts that there may be "increased wear and tear on equipment caused by the intermittent nature of customer generation" thus increasing costs. But according to Dan Gimble's Direct Testimony, it provides no evidence for such a claim. Mr. Gimble made a data request to document what costs were incurred and received this answer from the company. "The Company does not have a repository where system upgrades and the corresponding costs for each individual net metering project are collected." (Response to OCS DR 15.14)

Turning now to the benefits side of the analysis.

As far as an adequate analysis for the benefits, I can't see where it has ever been attempted by the Company, the DPU or the OCS.

RMP witness G. Duval testifies, in his rebuttal testimony, that there is enough evidence to say that the PSC has fulfilled SB208 requirement. I am paraphrasing but this is my understanding of his testimony.

The cost/benefit analysis requirement if met since MN customers are compensated for power they produce at retail prices that range from 8.8 to 14.4 cents per kWh. In Docket No. 14-035-T04 the benefit from freed-up power is about 3 cents per kWh. I question

whether a valuation in an avoided cost docket is adequate to show the value of power provided by NM customers.

However, in looking through the electric dockets I saw that RMP made an application for the following in Docket No. 14-035-85.

"Rocky Mountain Power - Application for Approval of the Power Purchase Agreement between PacifiCorp and Enterprise Solar ..."

Much of the application and exhibits are redacted. However, the information about what RMP is willing to pay for the 80 mW capacity from the provider is available in Exhibit 5.1. All of the contract prices are redacted but would be available under a confidentiality agreement so that parties could see the market value RMP is willing to pay. The exhibit shows the price to be paid on a month to month basis for on-peak hours and off-peak hours. I would assume that the power provided from this solar business would match the hours that NM production occurs since both rely on the Utah sun for its energy. It seems to me this would be a much more valuable resource for benefit analysis than what RMP has put forth in its testimony.

The OCS did ask some pertinent questions of RMP on this issue. According Dan Gimble's Direct testimony on page 23 – lines 598 to 613,

In OCS DR 30.2, the Office requested detailed data on the energy and capacity (if applicable) avoided by residential NM output on an annual total dollar and \$/kWh basis. In particular, we were seeking to better understand the types of energy and capacity resources (market purchases, peaking resources, etc.) avoided by NM production over different time periods. However, the Company was unable to provide any analysis of benefits stating:

"The Company does not measure the output of the customer-owned distribution generation facilities." (Response to OCS 30.2)

The Office found this response somewhat perplexing because the Company surely has the capability to at least estimate the aggregate output profile of residential NM and determining the resources that NM production would offset over different time periods.

Additionally, Mr. Gimble states in his Rebuttal Testimony on page 4,

The Company's inability to timely furnish any information or analysis relating to NM "benefits" continues to be a major deficiency in this proceeding.

The only parties that have tried to quantify the benefits of NM are those who oppose the charge. The company, DPU, and OCS have all testified that the analyses are not adequate for one reason or another. The OCS does acknowledge that there are certainly some benefits but since they so far have not seen a quantification of those benefits, it recommends no benefit offset to the charge. It goes so far as to say that the benefits "probably" do not offset all the shifted cost without citing any evidence that it does not. The OCS recommends not waiting for an analysis to reduce uncertainty for those who consider installing solar systems and to minimize any cost shifting that may occur in the future.

I contend that amount of missing analysis argues that a docket should be opened to analyze both the cost and benefits to satisfy the requirements in SB208 before any NM customer charge is considered. It is not possible with the analysis provided in the current docket to establish whether there should be a NM customer charge let alone the exact amount that charge should be.

Waiting until adequate analysis is available as required under SB208 will cause much less uncertainty than if a charge is established now and must be rolled back, redistributed etc. if the analysis shows that a NM customer charge is not warranted.