

## Diane Holt

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**Sent:** Friday, August 10, 2018 2:51 PM  
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**Subject:** Case Comment Form: Gordon Sorensen

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Comment: Comments on CASE NO. IPC-E-17-13 (Vote Solar filed a Petition for Reconsideration of Order No. 34046) Short answer, I support the Vote Solar's petition to NOT include net metering customers in the new Schedules 6 and 8 (Order No. 34046) for R&SGS customers as net metering customers are not net exporters of power into the grid. The PUC should issue player programs explaining the names and positions of the players. I find it difficult to understand the scope of the quote "require the Company to revise the new Schedules 6 and 8 to apply only to customers who export electricity". Without a program to explain just who and who is not, an exporter of electricity in this discussion, I am forced to make assumptions in my attempt to comment on this petition. In reading the petition it appears that the Vote Solar petition seeks to exclude the net metering customers from inclusion into the new Schedules 6 and 8 (Order No. 34046) for R&SGS customers. Indeed Idaho Power's rebuttal directly names the net metering customer, "Vote Solar's recommendation would be unenforceable given that Idaho Power does not measure excess generation separately from consumption when it net meters". Assuming that is the intent of the Vote Solar Petition I agree that net metering customers should be exempt from inclusion in the Schedules 6 and 8 as net metering customers are not net exporters of power into the grid. The rules for net metering preclude a net export of power. Perhaps the wording should be changed to "are net exporters".

With regards to the statement that Idaho Power does not measure excess generation separately from consumption for a net metering customer, I am calling bullshit. I can go and view my power bill and the ancillary data to see when my solar array is generating more power than we are consuming for a given instance of time. The smart meter that was installed at the time that the system was activated, records consumption and gross excess power generation. Near the bottom of the power bill is a line item, Net Metering kWh Credit Balance showing the balance of excess power generated during the billing period. My bill for last month shows 0 for that amount.

As to "the masking of usage created by the hourly analysis of customer and Company energy exchanges", that sounds like an administration problem. Apparently it is already a sufficiently accurate count of gross excess power generation for use in managing a net metering customer. Which begs the question as to why it needs to be more accurate for the new Schedule 6 and 9 customers. One can improve the granularity (accuracy) of the data, by increasing the sampling frequency. Add more computers if necessary to handle the extra data. Change the reporting interval of the smart meters. I would wager that the smart meter could be programmed to sample more often and store the data if the transmission interval cannot be shortened.

As to "export limiting devices" there appears to be a number of grid tie inverters on the market capable of limiting the amount of power being pushed back into the grid. I did not find specifics on how the limits are managed i.e. can the customer easily modify these value or can they be controlled by Idaho Power? I am also not sure why this is necessarily important as Idaho Power could easily see when a particular grid tied system is pushing power into the grid. Suitable administrative measures could be implemented to manage and control the amount, though the net metering customer may want to install the hardware to more easily manage this number.

With regards to the net metering customer, it is unclear as to why actively limiting this value in real time is necessary. By virtue of Idaho Power's application and approval process Idaho Power has determined that the grid infrastructure is capable of supporting the net metering installation and its operational behavior.

The effects of battery storage would be to reduce or eliminate any excess power being fed into the grid. At the eliminate point, this would effectively make the customer appear as a non net metering customer who is just using less electricity. Power delivery would be one way with none of that pesky excess power running around the grid. It would however still reduce the amount of power that a net metering customer would use which would, from Idaho Power vantage, make the net metering customer guilty of not paying his fair share. This notion comes from Idaho Power's back up information as supplied in the request for authority to establish new schedules for "R&SGS" customers, Order No. 34046. From Tatum's deposition; "customers with on-site generation may pay less than their fair share for the grid-related services they require". I still do not know what a customer's "fair share" is and this certainly needs to be defined and explained before Idaho Power does any changes to the rate schedules for R&SGS customers.

I do not understand and I would certainly welcome an explanation of the meaning and repercussions of "in parallel" connections, certainly from Idaho Power's view point. If I assume this means managing consumers and generators of power, I can only imagine what is involved in that parallel connection of so many sources of generation and of consumption. In the course of matching power generation to consumption, things like the timing of starting and stopping peaking stations during the course of a day is probably the basis of a doctoral thesis. Current generations of grid tie inverters are not grid voltage regulating devices. The output of a grid tie inverter is driven by the current available from the solar panel(s), not by the voltage of the grid. Solar power is considered an intermittent power source unlike a base load, dispatch-able generation, load following, or peaking power plants. The intermittent nature of solar energy makes its management somewhat of a liability. At present the fraction of power generation by solar relative to all other generation seems pretty minuscule. It would useful to know how much it is and if it is even detectable, i.e. a complete solar eclipse over Boise and the peaking stations noted a rise in their output corresponding to the total eclipse event. Still a rapidly moving thunder storm could significantly cut the output of the solar power being fed into the grid and at some much higher fraction of the power generation side, could potentially be a destabilizing factor. Wind power has similar and greater issues, but it appears to be managed, perhaps those techniques could be applied to solar in the future, which leads me to an observation.

I would really like to see Idaho Power actually focus their intent to manage grid tie solar systems rather than seeking to exploit them by neutering them or flat eliminating them. In my scan of the internet I found 3 instances in Maine, Texas, and Nevada where power companies were aggressively and successfully trying to cripple or eliminated grid tie solar. While Idaho Power will argue that is not their intent, I find it hard to dismiss this trend by utility companies. I don't recall Idaho Power mentioning the management aspect of net metering or the pros and cons of it in their arguments and justifications. Given those justifications that were presented in the background information for the original new Schedules application, it is difficult to see actual intent to manage net metering customers but to rather to simply to exploit revenue from them.

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