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IDAHO PUBLIC  
UTILITIES COMMISSION

**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**

**IN THE MATTER OF IDAHO POWER )  
COMPANY'S APPLICATION FOR ) CASE NO. IPC-E-20-26  
AUTHORITY TO MODIFY SCHEDULE 84'S )  
METERING REQUIREMENT AND TO ) COMMENTS OF INTERVENOR  
GRANDFATHER EXISTING CUSTOMERS ) RUSSELL SCHIERMEIER  
WITH TWO METERS )  
\_\_\_\_\_ )**

COMES NOW Russell Schiermeier, submits the following comments on Idaho Power's Application pursuant to the [Notice of Modified Procedure, Order No. 34777, issued on September 4, 2020] and pursuant to the Idaho Public Utilities Commission's Rules of Procedure.

**1. BACKGROUND**

In the winter of 2008, I had the opportunity to purchase an 800-acre farm outside the town of Bruneau, Idaho. The farm was underperforming production ground with an antiquated irrigation system with extremely poor soil health and fertility. With a limited background in agriculture, I have worked the last 12 years to focus on utilizing resources and efficiently turning the alkali ground of Owyhee County to highly efficient, highly productive farm ground. One of the most important resources has been Idaho Power. The consistency and affordability of their product is paramount to my farming operation. Since I began farming, the energy cost has ranged from \$165/acre to \$188/acre, contributing to 25-35% of the cost of production. Idaho Power's Production Staff and Field Advisors were crucial in the design and construction of an energy efficient irrigation system. It focuses on the minimization of wasted energy with variable frequency drives, proper pump and pipe sizing, utilization of Irrigation PEAK rewards program and Energy Efficiency programs. My current operation spans 3200 acres utilizes 21 pumps,

2890hp, 4 variable frequency drives and 36 radio-controlled low-pressure center irrigation pivots. The system is specifically designed to minimize use of water, minimize power consumption, and decrease labor costs.

Another important partner in the conversion to energy conservation was the Natural Resource Conservation Service. Utilizing conservation practices focused on irrigation advancements and soil health practices. The net metering is my latest advancement in pursuit of efficiency to compete on a national scale in Idaho agriculture.

In 2017 I met with the Idaho Power's Renewable Energy Specialist regarding the energy efficiency project available like the Energy Efficiency Program and PEAK Rewards. At the meeting, I learned that the Net Metering Program offered to irrigation customers with the limitation of 100-kW dual meter systems that could be aggregated monthly with a 1:1 kWh credit. Fortunately, my operation spans 23 meters over 3200 acres of continuous land and met the requirement to size the system to offset a portion of the lifting and pressurization of the irrigation system. Due to the 100-kW limitation, the system utilized 8 sites to be aggregated over the same feeder line to offset approximately 1000 of the 2890 hp. The 100-kW limitation added a few levels of complexity and specific sites were chosen to utilize unproductive or unfarmed land. After a thorough analysis of feasibility of the Net Metering Program, a system was designed with a specific criterion: Address maximum production during irrigation season, longevity of a system and minimization of impact on agricultural ground. After visiting solar systems across the United States, I concluded that the use of a dual axis system was the most economical in regard to the value of solar production, longest lifespan and minimized the footprint required to accomplish the design criteria. My system utilizes panels with a 25-year warranted production life. The solar system was designed to the specific criteria of the Net Metering Program. It focuses on the efficiency of my irrigation system and to help minimize my load on the system during the irrigation season. This is very similar the Irrigation PEAK Rewards program, supplementing demand management and reducing peak load.

One of the essential components to the economic viability of the project was the Federal Tax Credits from the U.S. Department of Energy Solar Energy Technologies Office and the Rural

Energy for America Program. These programs “help increase American energy independence by increasing the private sector supply of renewable energy and decreasing the demand of energy through energy efficiency improvements. Over time, these investments can also help lower the cost of energy for small businesses and agricultural producers.”<sup>1</sup> Like agricultural programs from the Natural Resource Conservation Service and Idaho Power’s Energy Efficiency Program, these programs are established to help promote conservation of energy and encouraging development of infrastructure to utilize technology or practices in optimizing agricultural practices. Specifically, the programs were utilized and directly funded local work to be applied in Idaho agriculture.

My 800-kW net metered solar system was completed March of 2019. Later that month, Idaho Power announced 100% clean energy goal. I was then personally informed Idaho Power would be filing a case with Public Utility Commission to alter the Schedule 84 Net Metering Program and suspend Schedule 84 services. On April 5<sup>th</sup>, Case IPC-E-19-15 was filled. After researching the case and calculating the economics of hiring legal representation, I decided to intervene and to represent myself and my project due to economic constraints. The timing of the case was exceedingly difficult to adhere to during my farming season, often stopping harvest to attend the monthly meetings. The Commission Staff and Idaho Power did an excellent job of accommodating my schedule.

In the case, I learned that Idaho Powers had a few concerns that specifically effected my operation. One being the concern “[t]hrough conversation with CI&I customers, the Company understands that there are instances where installers have presented customers with payback periods of as little as five years – when inaccurate assumptions are corrected, the payback increases in some cases to over 25 years.”<sup>2</sup> Idaho Power also included a pamphlet in the September 2019 billing statements that addressed customer generation. The pamphlet addressed cost versus benefits and return on investments, calculating the Approximate Solar Payback Time

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<sup>1</sup>USDA Rural Development: Rural Energy for America Program Energy Systems & Energy Efficiency Improvement Guaranteed Loans and Grants Overview

<sup>2</sup> Idaho Power comments IPC -E-19-15 page 9

ranging from 16 to 29 years<sup>3</sup>. The second concern addressed “Gaming of Meter Aggregation.” As stated before, my system was specifically designed with Idaho Power to utilize the allowed aggregation rules to offset a portion of my annual system loads restricted by the 100-kW requirement. As a system, the project offsets less than 40% of my actual load, but Idaho Power argued in IPC -E-19-15, “the current criteria of meter aggregation incentivizes these customers to oversize their systems in order to generate Excess Net Energy to be transferred to other sites, rather than installing generation that is more aligned with the customer’s usage needs.”<sup>4</sup> In Order 34059, the Public Utility Commission addressed IPC-E-18-15 concerning the grandfathering of existing customers, and found they “make this distinction based on our finding that customers who installed on-site generation understood that rates for consumption could change, and recognized that the value of the 1:1 monthly kWh offset would change in value along with the rates for consumption”<sup>5</sup>. Following of the Order for Case IPC-E-18-15, a notice of withdrawal of application on March 17, 2020 was filed addressing the future of my project and Schedule 84 customers.

## 2. POSITION/ARGUMENT

In Case IPC-E-20-26, there are 3 concerns that directly affect my farming operation and solar net metering sites:

### 1. GRANDFATHERING EXISTING CUSTOMERS WITH TWO METERS

As stated above, my system was specially designed to the design criteria of offsetting a portion of my irrigation load on my farm, utilizing aggregation. The process was very in depth in physical and economic analysis to determine economic viability for my farming operation, using long standing federal incentives and grants. It was not until weeks after my project passed county, State of Idaho Electrical and Idaho Power inspections, did I become aware of the drastic alteration proposed to the New Metering Program. I have encourage analysis and have offered any data needed, production/cost/management wise to Idaho Power

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<sup>3</sup> Idaho Power: Idaho Irrigation News September 2019

<sup>4</sup> Idaho Power comments IPC-E-1915 page 11

<sup>5</sup> Order No. 34509 page 14

and interested parties to create and encourage assessment of the program and its potential to a power grid system that is seeing unprecedented growth in the residential sector. Idaho Power's identification of different design criteria is an appreciated acknowledgment of the difference of proposed single-meter changes as well as possible change to non 1:1 kWh monthly aggregation. My system is configured with the monthly billing program with the expectation of a 1:1 kWh credit. It was sized, designed, and constructed specifically to the constraints, and would not align with a different program, costing our farming operation financial losses for post design alterations. If a new Net Metering Program is defined and approved, one could configure to those specifications. To address the time requested of maximum of 10 years, I would be suffering a drastically different cost recovery if the approved operational system were forced to conform to a criterion it was not designed for. Moving to a single meter would not alter the systems much, however, the 1:1 kWh credit from sites specifically designed to aggregate to larger load sites (sometimes feet away) would disrupt the economic design of those specific systems. The possible implementation of a different criteria would essentially make approved sites economically unfeasible. My system was designed specifically for longevity in an agricultural setting, emphasizing quality of equipment warranted for 25 years. In comparison to the residential ruling, our kWh credit value is approximately 60% of that value plus demand charge that is 25-30% of the monthly energy cost, resulting in an equivalent payback period of 55.5 years relative to residential in IPC-E-18-15 treatment. A difference of 45.5 years does not align with the treatment of Net Metering customers depending on offsetting residential to agriculture load. As stated before, Idaho Power has emphasized in testimony and literature of a 16 to 28-year return.<sup>6</sup>

## 2. MODIFICATIONS TO METERING REQUIREMENT

A single-meter conversion does not create any issues with designs going forward. The system would allow for demand charges to be possibly offset in operation that do not operate during sundown periods. In irrigation, the demand charge is metered monthly and is preserved with single or dual-meter configurations. The movement of 1:1 kWh credit to an export rate would drastically change my current design and alter the economics dramatically.

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<sup>6</sup> Idaho Power comments IPC -E-19-15 page 9

Due to the larger pump loads associated with agriculture, the 100-kW restriction causes aggregation to become very important and could be mitigated by allowing pump locations to be sized for their specific load rather than arbitrary 100-kW requirement. On my project alone, that would have focused the design and eliminated the need for 3 designed aggregation sites. Due to the uncertainty of energy credit value, without a complete Net Metering program, an accurate economic analysis is exceedingly difficult to achieve and hence, will be difficult for irrigators to use. With sunseting Federal Investment Tax Credits and competitive REAP dollars, these opportunities for farmers to invest in infrastructure in our state could be squandered.

### 3. UNDERTAKE A SOLAR COST AND BENEFITS STUDY

Through the development of my farm, I have worked on practices and equipment to optimize value on my operation. The solar aspect has been another step in the ongoing advancement. As one of the larger self-generation sites in the Schedule 84 sector, I hope to create data that can be used by farmer and Idaho Power to find a system that benefits both parties. Until 2018, there was limited data on solar sites in agriculture, I think the advancement of solar technology can be utilized to benefit the Idaho farmer while helping Idaho's large influx of residential growth. In the cases I was involved with, a cost and benefit study would have allowed for real advancement in policy. Often, anecdotal examples were used in public comments or publication that referenced skewed data on payback or cost to non-solar irrigators. A concrete study would allow for accurate analysis of systems.

### 3. Conclusion

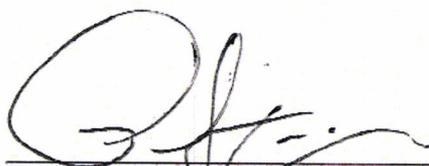
Idaho Power's request to address the grandfathering of existing customers is the correct way to approach changing the 18-year-old Net Metering program. Testimony on October 13<sup>th</sup>, 2020 indicated farmers have the same concerns I do. We are looking to control cost of irrigation and invest in solar under the current design criteria. Just like the residential customers were addressed in IPC -E-18-15, the irrigation customers were under the same understanding and could have been addressed under the IPC-E-19-15 case. The arbitrary 10-year period does not

align return on investment analysis or equipment design life. Alignment with the IPC-E-18-15 ruling should be used.

Agriculture in Idaho has changed since I began in 2008. The opportunity to build a farm during the changing period has allowed me to adapt to a new farming system focused on efficiency of production with a transition to conservation goals. Working with Idaho Power has been an honor and one of my operation's biggest assets. Nationally, Idaho has an agricultural advantage over most of the country with its reliable power and water infrastructure. Being able to utilize unused ground to harvest the sun's energy at the pump site is a big opportunity for farmers. The Net Metering program is a unique opportunity to recover investment in our land and continue the most efficient irrigation system possible.

Unfortunately, there has not be an agricultural group that has represented my interest, or other farmers interested in a solar component to farming. This void in the agricultural community required me to learn how to protect my investment and voice. The Public Utility Commission Staff has been an outstanding resource and I feel like their interaction has been balanced to protect interests. The intervenor process has shown to be a process that has allowed my concerns to be heard and addressed. Moving forward, I would hope experience from the farm field is used to optimize a program that benefits the power grid and the economy. I am interested in the advancement of conservation and sustainable farming and look forward to a strong Idaho agricultural industry.

Respectfully submitted this 27 day of October 2020.



Russell Schiermeier  
Farmer/Owner Schiermeier Farms

## CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day October 27, 2020, served the foregoing IPC-E-20-26 upon all parties of record in this proceeding by email to:

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