

Office of the General Counsel

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January 10, 2018

Mr. James Robert Deal P.O. Box 2276 Lynnwood, WA 98036 James@JamesDeal.com

RE: Letter of January 2, 2018 Regarding Electronic Meters

Dear Mr. Deal:

We received your letter of January 2, 2018, addressed to the Commissioners of Public Utility District No. 1 of Snohomish County (the "District"), and the revision dated January 9, 2018, in which you refuse consent for installation and use of digital meters for your residence and rooftop solar system. Your letter has been forwarded to me for response.

We appreciate your choosing to install a rooftop solar system, and appreciate that you have put so much time and effort into your investigation of the GE electronic meters that the District uses for residential customers and for residential solar installations.

However, we disagree with your assertions that the GE meters are somehow protective devices intended to prevent surges, that they are defective, that they emit dangerous levels of electromagnetic radiation, that they add to your electric bill, or that the District does not have the right to install such meters.

It is, of course, your choice as to whether you want to interconnect the solar system you have just had installed. If you do wish to interconnect it, however, the District's requirements for electric service must be met, including the digital production meter, and the digital bi-directional residential meter. If not, there is no immediate need to replace your analog meter, unless or until it fails.

We have the following additional responses.

First, I am concerned that some of your comments may stem from a misunderstanding of the role of the electric utility in supplying electricity for residential or commercial use, and the role of the meter. In addition to the energy itself, the utility is responsible for the transmission and distribution system that delivers the electricity, its transformation to lower voltage, and delivery through a service drop to the meter base, which is owned by the customer.

The protective equipment installed throughout the District's electric system is all designed to protect the distribution system and substations, or in other words, only the District's equipment. The District is not responsible for the design, installation, or inspection of grounding or surge protection for a customer's premises or its equipment.

The design, installation and inspection of grounding, wiring, and surge protection for a customer's premises and equipment would be the responsibility of the customer, and his or her licensed electrician.

The District's Terms and Conditions for Service, set forth in its Schedule 82, include the following provisions:

(B) FACILITIES AND EQUIPMENT

- (i) Ownership and Control of Facilities The PUD will install, own, maintain and control all equipment and facilities for the distribution and delivery of Electric Power to the Customer, including but not limited to the metering equipment and facilities, that is located on the PUD side of the Point of Delivery (the "PUD's Facilities"), and the Customer will install, maintain and control all electrical equipment and facilities owned or controlled by the Customer on the Customer side of the Point of Delivery ("Customer's Facilities").
- (ii) Maintenance of the Customer's Facilities - The Customer shall maintain the Customer's Facilities in proper and safe working order, and in compliance with any and all applicable national, state and local electrical codes and standards. The PUD will, upon reasonable advance notice to the Customer, and subject to the Customer's safety and security rules and regulations, be entitled to inspect all or any portion of the Customer's Facilities at any time and from time to time during the Term; provided, however, that, without in any way limiting the foregoing, the Customer acknowledges and agrees that the PUD will not at any time have any obligation to inspect the Customer's Facilities (or any portion thereof). Any inspection by the PUD will be for the limited purpose of determining that the Customer's Facilities are compatible with the PUD's Facilities and will not be made to determine whether the Customer's Facilities are installed and/or being operated as required by law, specifically including any electrical, safety or building code. Inspection by the PUD will not establish or imply any duty on the part of the PUD to discover or report any code violations or the existence of hazards of any nature.

Further, the District's Terms and Conditions make clear the customer's responsibility for appropriate protective devices:

(E) SERVICE INTERRUPTIONS AND SUSPENSIONS

(i) <u>Customer Responsible for Protective Equipment</u> – The PUD will use reasonable diligence to provide uninterrupted service to the Customer. However, the Customer will be responsible for installing any and all electrical protection equipment, such as back- up generators, surge protection devices, fusing, circuit breakers, relay protection controls and single phase protection (including but not limited to suitable protective apparatus on all motor installations to protect against single phasing of three-phase motors), that may be necessary or appropriate to prevent damage from reasonably foreseeable potential electrical disturbances such as reduced voltage, loss of service, over voltage, loss of phase wire and short circuit faults.

A meter is not a protective device. Although, as you point out, analog meters have contained devices sometimes called surge protectors, they are not true surge protectors, they are devices whose purpose is to divert current from a power surge to avoid damaging the meter itself. The electronic meters fufill a similar function with varistors, as you noted, and they, like analog meters, are only surge resistant.

It also is important to note that the District does not, and could not, guarantee uninterrupted power supply, or prevent curtailments, or fluctuations or disturbances of electric energy outside its reasonable control. Again, the District's Terms and Conditions of Service provide:

(E) SERVICE INTERRUPTIONS AND SUSPENSIONS

(ii) Notwithstanding any other provision of the Customer Service Documents, neither the PUD nor any electric utility or federal power marketing agency with which the PUD is interconnected will be in breach of or default under the Customer Service Documents, or have any responsibility or liability whatsoever to the Customer or any other person under the Customer Service Documents or otherwise, for or in connection with any service interruption, suspension, curtailment or fluctuation or disturbance of electric energy originating outside and passing through the electrical system of the PUD, whatever the cause, or any service interruption, suspension, curtailment or fluctuation or disturbance of electric energy originating inside the electrical system of the PUD caused by or resulting from any cause other than the gross negligence or willful misconduct of the PUD....

The District regularly replaces meters that are beyond their useful life, and has generally begun to replace the analog meters in its service area with digital meters because analog meters are no longer standard technology for electric utilities. It will continue to do so.

In Mr. Gregory's prior correspondence to you, the District indicated that it has purchased electronic meters that meet the ANSI standards, and that they are more accurate than analog meters. The District also regularly tests its meters for compliance with the National Institute of Standards and Technology standards.

In response to the public records request appended to your letter, we have included references to the manufacturer, vendor, marketing and technical materials related to the meters, together with a District white paper that collects the information and scientific studies related to electromagnetic radiation associated with advanced meters. These materials are being assembled and will be provided separately. In our view, these materials largely contradict the conclusions you have drawn from doing your research.

Finally, in response to a couple of your other points, I would note that the National Electric Code explicitly does not cover and exempts "Installations under the exclusive control of an electric utility where such installation . . . Consist of service drops or service laterals, and associated metering." NEC Handbook Article 90, Section 90.2, Scope (2014). Any electricity used by the meter in its operation registers on the line, or utility, side of the meter, not the customer, or load, side of the meter, and thus is not included in the customer's bill.

With regard to your comments about the easement, we find no basis for your argument that the use of digital meters would exceed the scope of an easement granted to the District by the developer of the plat within which your property is located. As you indicate, this is a broadly worded easement that clearly authorizes the utility to use equipment for the purpose of serving the subdivision and other property with electric service. This primary purpose would include a meter. There is nothing in the easement that would limit its scope to an analog meter, and we find no persuasive evidence that the digital meter presents any greater burden on the easement.

The District is fully within its rights as a utility to select the appropriate metering equipment for its operations. I note that you argue that the District may not threaten to cut off service if you refuse to allow a digital meter because the District has a duty to provide service. But while the District has a duty to serve customers within an area in which it holds itself out as the exclusive service provider, that duty is not unlimited.

Even where there is a duty to serve, that duty can be limited by reasonable conditions. A utility can attach conditions to its willingness to serve. Yakima County (West Valley) Fire Protection Dist. No. 12 v. Yakima, 122 Wn.2d 371, 382-83 (1993) (hereinafter Yakima Fire Protection District); Yakima County Fire Protection Dist., Brookens v. Yakima, 15 Wn. App. 464, 466, rev. denied, 87 Wn.2d 1011 (1976).

The courts also have held that a utility who holds itself out as the sole provider of services can deny hook-ups or connection for utility-related reasons. Yakima Fire Protection District, 122 Wn.2d at 381-82 (citing Barbaccia v. County of Santa Clara, 451 F. Supp. 260, 264 n.2 (N.D. Cal. 1978)); Nolte v. City of Olympia, 96 Wn. App. 944 (1999). It is this ability to impose reasonable conditions that enables a utility to require compliance with its design standards, customer service regulations, and extension policies.

The District has broad authority to determine how to provide electric service. RCW 54.16.040 provides:

A district may . . . construct, condemn and purchase, purchase, acquire, add to, maintain, conduct, and operate works, plants, transmission and distribution lines and facilities for generating electric current, . . . within or without its limits, for the purpose of furnishing . . . electric current for all uses, with full and exclusive authority to sell and regulate and control the use, distribution, rates, service, charges, and price thereof, free from the jurisdiction and control of the utilities and transportation commission, in all things.

Again, while the District has an obligation to serve its customers, it also retains the right to serve under reasonable conditions. Among those conditions are the right to select the appropriate and best equipment, including meters, and to standardize its equipment.

The District maintains Customer Service Regulations and an Electrical Service Requirements Manual, available on the District's website. Compliance with both of these sets of requirements is a condition for continuing to receive electric service from the PUD.

At Section 1.2, the Customer Service Regulations provide:

(a) Acceptance of service by a customer, with or without a written application, creates a contract obligating the customer to pay current rates, **comply with service requirements and regulations**, and that is conditioned upon the District's verification of the customer's identity. (emphasis added).

Among the conditions of receiving service, the District requires District furnished meters, meter retaining rings, current transformers and associated metering equipment. Further, the meter must be sealed and not tampered with or broken without District authorization. Electrical Service Requirements Manual, Section 5(A). In addition, the customer is required to furnish a location for metering that is acceptable to the District, and to provide District representatives with "safe, clear access and entry to customer premises for service related work. The District's facilities must remain unobstructed and accessible at all reasonable times so the District may: Install, inspect, maintain or remove equipment or wiring; [and] Read, connect, disconnect or inspect metering devices." Customer Service Regulations, Section 2.3.

I note that you executed a Net Metering Agreement with the District as part of the requirements for interconnecting your solar installation. That agreement similarly states that you must comply with all applicable provisions of the District's Electrical Service Requirements and Customer Service Regulations.

It also explicitly provides for the installation of an electronic bi-directional meter:

III. NET METERING

A. Metering Equipment: The PUD shall install and maintain an electronic kilowatt-hour meter capable of registering the bi-directional flow of electricity at the Point of Interconnection at a level of accuracy that meets all applicable standards, regulations and statutes.... (Emphasis added.)

As indicated above, it is your choice whether you wish to interconnect the solar system at your residence. But please note that the Net Metering Agreement provides that:

C. Initial Operation: Customer shall submit equipment specifications and detailed plans, including one- line diagrams, for the installation of the Generator and associated interconnection, safety, and control equipment and wiring to the PUD for its review and advance written approval prior to their actual installation. Customer shall not commence operation of its Generator until the PUD has inspected and, where appropriate, tested the Generator and all associated equipment and wiring and has provided its written approval to commence parallel operations and Customer has, in addition, obtained all necessary inspections and regulatory approvals as specified in Subsection E of this Section II. (Emphasis added.)

If you install your own meter, or a jumper to connect the solar system, or remove a District meter at your place of residence, please be advised that the District must view any attempt by the customer to remove the meter or jump the solar system as tampering. If the District is required to repair or replace a meter due to tampering, we bill for those damages. If the District discovers an unauthorized connection of a solar system, it will disconnect it at the customer's expense as a safety hazard. The District's published Customer Service Regulations provide that should loss or damage occur to District property, the responsible party may be charged for repair or replacement cost, administrative time and expense and estimated unmetered energy.

Ultimately, if service cannot be provided consistent with the District's requirements, we can disconnect the service.

Conclusion

Again, if you choose not to interconnect your solar system, the District will have no immediate need to replace your current analog meter, unless or until it fails or the District implements an advanced metering program. If, however, you wish to proceed with the Net Metering Agreement you executed, the District will require installation of the two digital non-communicating meters.

Please let us know whether you wish to proceed. You may contact John Gregory at jrgregory@snopud.com, or (425) 783-8391.

I hope the foregoing has been helpful.

Sincerely,

Anne L. Spangler General Counsel

cc: Commissioners

Craig Collar, CEO/General Manager
Mike Kriedler, Insurance Commissioner
John Hearley, ACM Distribution & Engineering Co

John Haarlow, AGM Distribution & Engineering Services.