



## **Questions and Answers: Clallam County PUD Radio Read Meters**

### **Does the PUD have Smart Meters?**

The standard PUD meter is a radio meter, not a smart meter. By definition, a smart meter is a meter that provides real-time two-way communication between the customer's meter and the utility over a wireless network. The standard radio meter is not a smart meter because it is only capable of one-way communication. It can provide the customer's consumption data to the District but it cannot receive any signals wirelessly from the District. The District does have meters capable of two-way communication, but these are only utilized in special circumstances and currently account for less than 100 total meters.

### **What are Radio Read meters?**

The radio read meter is a solid-state meter that measures consumption and utilizes a low-power radio signal to communicate with hand-held receivers used by meter readers in the nearby area. This saves time, improves reliability, increases accuracy and ensures data security.

### **Why is the PUD using Radio Read meters?**

The District's existing electromechanical (analog) metering system is reaching the end of its useful life. Electromechanical meters and their replacement parts are quickly becoming more difficult and costly to maintain. For this reason, beginning in October 2012 the District's policy is to upgrade from electromechanical to digital meters with one-way radio read capability. The technology being used has been around for more than 20 years, and more than 80 million radio read meters have been installed throughout the U.S. and Canada. The District is upgrading to a similar one-way, radio read meter for water meters, as well.

Radio read meters increase privacy and convenience for customers as they eliminate the need for a meter reader to enter the property each month to read the meter. Human errors are reduced, ensuring that customers receive an accurate bill. Because they reduce costs and identify potential theft, they also help keep rates as low as possible.

### **What type of signals are used to transmit information?**

Consumption and tamper data is transmitted through periodic radio frequency ("RF") signals that are received by meter readers when they are within range. The RF transmissions occur on the 900 Mhz spectrum, which are the same FCC-approved frequencies that have been used for many years in many common household devices.

When transmitting, the exposure to RF is dramatically lower than exposure limits set by the Federal Communications Commission (FCC) and in fact are far below the levels emitted by cell phones, wireless internet routers, baby monitors and microwave ovens. The transmission duration is also extremely brief, less than a quarter of a second. Signals fall off quickly with distance from the meter. Indoors the radio signals are 10 percent or less of those present outdoors because the meter socket and building materials act as natural barriers.

### **How do the radio signals on District meters compare with cell phones?**

According to the environmental consulting firm Gradient, exposure from one year of cell phone use for 15 minutes per day would equal or exceed 375 years of that from an RF meter.

<http://smartgridcc.org/faqs/it-would-take-375-years-of-direct-contact-with-a-smart-meter-to-equal-the-same-amount-of-radio-frequency-exposure-from-a-daily-15-minute-cell-phone-call>

More information regarding Radio Frequency may be found at the links below.

<https://www.itron.com/na/resourcesAndSupport/Pages/RF-Resource-Center-Sources.aspx>

[www.itron.com/na/resourcesAndSupport/Pages/RF-Resource-Center.aspx](http://www.itron.com/na/resourcesAndSupport/Pages/RF-Resource-Center.aspx)

<http://www.fcc.gov/encyclopedia/radio-frequency-safety>

<http://www.edf.org/SmartMeterResponse>