DOCKET UE-220701
Direct Testimony Elena
Argunov
Exh. EACCH-20C

THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Docket UE-220701
Puget Sound Energy
Argunov, et al. v. Puget Sound Energy

COYOTE CREEK HOMEOWNERS DATA REQUEST NO. 008:

Type: Meter Configuration
Section/Table Name: Program Data
Field: Programmed Kh
BEFORE
8A: in what calculation this value is used? And what role does it play in meter reads/billing calculations

Response:

Meters are pulse counting meters. This means they digitize the energy consumption data using a circuit that toggles a switch between two contacts, creating an impulse each time. Each throw of the switch corresponds to a constant, known quantity of energy. The meter tracks both the count of these pulses for energy calculation and the rate for demand and Time of Use (TOU) billing.

Kh is a constant that is based on the number of watthours per revolution of the disc in an electromechanical meter, and given the known number of pulses required to revolve the disc, the constant P/R, and the transformer ratio of the meter (CT*PT), the actual calculation of energy in a pulse (PKe) is given as $PKe = \frac{Kh}{P/R}(CT * PT)$. Therefore, total energy is calculated by $E = PKe * pulses = \frac{Kh}{P/R}(CT * PT)(pulses)$ for some period of time. Changing Kh affects the resolution of the data collected. Setting Kh large, for instance, is used in testing because it allows for quick accumulation of data with a small amount of energy. Kh is generally chosen based on meter form.

Type: Meter Configuration
Section/Table Name: Program Data
Field: Max kW

8F: where this value is coming from and what table and how it's been calculated (please provide exact "code" or "query")?

Response:

The Max kW is derived from the kWh energy pulses that are accumulated, and can be made available for demand and /or TOU billing, if those are applicable. The actual meter code is maintained by the manufacturer.