

Whole Sale Metering Committee Report

June 27th, 2013 Operating Board Meeting



Introduction...



The Hook...



The Hook...

VIRGO:

“Don’t reveal all your secrets at once!”



Metering Committee Members

- Large Category - **Terry Smith**, Mercer Island
- Medium Category - **Denny Clouse**, Shoreline WD
- Small Category - **Steve Leniszewski**, Duvall
- Independent OB Member - **Ron Little**
- SPU - **Terri Gregg**
- SPU – **Eugene Mantchev**



Our Goals

1. **Fairness**
 - Each of us pay their fair share of regional costs
2. **Consistency and Predictability**
 - Avoid billing adjustments
 - Establish routine, well understood processes
3. **Cost Management**



Our Recommendations

1. Monthly Oversight
2. Annual Review
3. Meter Maintenance and Replacement

Monthly Oversight

- Requires a second meter downstream of SPU's billing meter
- Requires readings from both meters to be taken on the same day
- Compare water delivered as registered on the billing meter and on the customer's meter - on a monthly basis



Monthly Oversight (2)

- SPU Meter Reading notifies customers of meter reading dates a few days in advance (by email?)
- Customers read the totalizers of their meters on the same day
- Customers email the monthly volumes as calculated by their meters to SPU Audit



Monthly Oversight (3)

Challenges:

- Customer does not have a meter
- Additional work
- A new process that may take a while to put in place and get it to work consistently
 - Different operators tend to read meters differently

Worthwhile goal – get on a path of continual improvement

Annual Review

- To occur if/when:
 - i. There was a KNOWN meter malfunction during the year that has not been resolved
 - ii. The Customer's DSL level for the year is below 4%
 - iii. The year's DSL is much lower than prior years' tend for that customer
- Note: If (i) happened, (ii) would be in effect, too

Annual Review (2)

- Review to be based on the DSL methodology
- Whenever possible, use utility specific DSL trends
 - Use the previous year's DSL
 - Use next year's DSL (although this leads to substantial delay in resolving the issue)
- As a last resort – use a “Min DSL” number consistent with the longer term track record of that customer, age of its system, retail metering practices, etc.

Annual Review – The Process

- This process runs in the first quarter of a given year, and covers the prior year
- Customer determines its DSL percentage for the prior year, and shares the information with SPU.
- SPU reviews customer's DSL percentage while considering:
 - its trend over the years
 - known or suspected malfunctions of SPU's billing meters during the year
- SPU notifies customers with large DSL drop and/or with DSL under 4% percent; discussions initiated to determine if a billing adjustment could be in order. Customer would be expected to provide documentation supportive of low DSL level, and/or sudden DSL drop

Annual Review – The Process (2)

- Concurrently, SPU tests all meters of customers under review, and shares meter test results; results would be pertinent to a decision to adjust bill or not
- The DSL assumptions used in calculating a billing adjustment would be clearly documented, and verified against future “clean” values of DSL.
- I.e., if next year’s DSL value is reliable and different from the value assumed when calculating the billing adjustment, a recalculation may be performed and a final adjustment processed.

Meter Maintenance and Replacement Strategies

- Upon adopting the Asset Management framework, SPU essentially terminated its pro-active whole sale meter replacement program
- Contributing factor: 2002 contracts provide for the customer to bear cost of meter upgrades; SPU is sensitive to spending its customer's \$\$\$
- SPU's maintenance strategy for whole sale meters at this time amounts more or less to a “**run to failure**”
- When a whole sale meter fails, a large amount of \$\$\$ goes under dispute
- **And that changes the relationship dramatically...**

Krohne Mag Meters

- Installed in 2002-2004, so over 10 y.o. at present
- Most at SPU's cost, retain Krohne to refurbish the meters, upgrade them to submersible
- As part of annual O&M, retain Krohne to perform annual confidence testing and re-certification.
- If practical and available at reasonable cost, consider contracting out to Krohne any meter repairs in-between annual certification events.
- If problems persist, replace the Krohne mags much like they replaced a generation of sonic meters

Protectus and Compound meters

- Relatively trouble free
- Continue annual testing
- Test the Top 10 twice a year
- High consumption meters require more frequent replacement of the measuring element (UME); consider replacing these meters as it may be cheaper in the longer run
- A gradual phase-out strategy: do not replace UMEs, replace entire meter when the existing UME wears out

Rockwell/Sensus Turbines

- Relatively trouble free, but one made a BIG mess when it failed!
- Cannot be tested on site, need to swap UMEs to test
- UMEs are made of leaded brass
- New no-lead brass rule will render the meters **untestable**
- Last tested at the end of 2012; no work planned in 2013 at present
- Replace in 2014-2015, starting with the highest consumption meters



Other Issues

- Sample Stands – account for the water
- SPU is requested to consider allowing whole sale customers to perform the replacement of the SPU meters serving them
- SPU to consider providing fee based meter testing service for its whole customers

Discussion and Questions

