Is it Going to be There?
Risks of Behavioral Savings in Supply-Side Planning

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Energy Efficiency in the Northwest

- Energy efficiency is the first choice, lowest cost resource
  - EE is the only resource being invested in by BPA

- Northwest facing substantial increases in savings goals, based on the Northwest Power and Conservation Council’s 6th Power Plan
  - 1200 aMW target between 2010 and 2014
  - Nearly double 5th plan target
Embassy contractor has record of troubles

Afghanistan | Drunken parties bring attention to ArmorGroup, but U.S. officials knew of wider problems

By GINGER THOMPSON and MARK LANDLER
NEW YORK TIMES NEWS SERVICE
WASHINGTON—When a security guard at the U.S. Embassy in Kabul was lacking...
Behavior-based savings in 6th Power Plan

- Targets include savings through changes in behavior, process, and business practices
- BPA and Northwest utilities have behavioral programs in the industrial, agricultural and residential sectors to assist in achieving the regional savings target
  - 40% of Industrial potential is from non-equipment based savings (O&M, energy management)
While part of the regional target, these savings look and act different from traditional savings.
Traditional vs. Behavioral Programs

- **Traditional EE programs**
  - One-time transaction with end user
  - Single incentive
  - Cost effectiveness calculated with assigned measure life

- **Behavioral programs**
  - Multi-year effort of resources and communication
  - Multiple incentive payments
  - Unknown measure life
Traditional EE measure

- Savings are booked and assumed to last for duration of measure life
Behavioral Program

- Measure life is unknown and savings could revert at any time
How EE savings are currently used in BPA Resource Planning

- BPA has historically been a capacity rich, energy constrained system
  - Greater focus on energy efficiency than load curtailment/demand response
- Incremental annual EE savings are shaped to 8760 hour load shape and reported to Resource Planners
- EE savings then subtracted from energy needs
Most of the time it gets us the resources we need
Risks and Uncertainty of Incorporating Behavioral Savings – Reliability & Persistence

- As Energy Efficiency becomes an increasingly larger portion of utility resource portfolios, savings will need to be valid and reliable.
- The unknown measure life and ability for savings to revert is a risk to the power system when used as a resource.
- Possibility of losing confidence in EE as a dependable resource if savings do not show up.
Reporting Risks of Incorporating Behavioral Savings

- Need to ensure that savings which need to be paid for each year are not double counted.
Which Camp Are You In?

**Adventurists**
- Go for it!
- Measurement of tech based EE is not perfect either

**Cheerleaders**
- Good for customer engagement and program uptake, forget about “counting” savings

**Separationists**
- Separate traditional EE from behavioral when reporting annual savings

**Safety First**
- Continue market research on behavioral programs to gain better understanding of measure life
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