

**EXHIBIT NO. ___(CES-14)
DOCKET NO. UE-060266/UG-060267
2006 PSE GENERAL RATE CASE
WITNESS: CALVIN E. SHIRLEY**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY, INC.,

Respondent.

**Docket No. UE-060266
Docket No. UG-060267**

**FIFTH EXHIBIT (NONCONFIDENTIAL) TO THE
PREFILED REBUTTAL TESTIMONY OF
CALVIN E. SHIRLEY
ON BEHALF OF PUGET SOUND ENERGY, INC.**

AUGUST 23, 2006



MEMORANDUM

DATE: June 30, 2006

TO: Cost Effectiveness and aMW Savings Committee

FROM: Jeff Harris

Cc: Margie Gardner, Susan Hermenet, Karen Horkitz, Christine Jerko

SUBJECT: Why and when should NEEA discontinue counting savings?

Action Requested: For discussion at the July Committee Meeting.

Background.

Since its start in the fall of 1996, NEEA has been tracking energy savings from changes in markets for most of its market transformation projects. As a result, NEEA has been and continues to report an accumulated total of energy savings from 1997 until the present. Although originally quite small, as would be expected from market transformation efforts, the accumulated total has grown by 2005 to represent the equivalent of a power plant with the capacity of approximately 150 average megawatts.

However, some of these savings are associated with things like changes in federal standards that arguably might have occurred over the ten year period that NEEA has been in existence without our intervention. That has raised questions about how long NEEA should continue to count savings from projects.

Standard procedures used to estimate savings from market transformation projects includes an estimate of what would happen in the market without intervention by NEEA. While highly dependent on available data, this market model of “baseline” market response does represent an analytical approach to answering the question of when the savings should no longer be counted. A brief explanation of the approach is included in the Attachment

In addition, standard procedures already include adjustments for retirements of saving. These adjustments can have the effect of essentially ending tracking of a program and the associated savings claims. For example, in the 2005 annual reported savings process the Scientific Irrigation Scheduling project savings were all retired. The project has not been active since 2001 and the retirement of the savings effectively drops the project as part of the NEEA portfolio of savings.

Key Issues.

If the market model predicts that market adoption would never achieve the same market share as that implied with NEEA intervention, there is an open philosophical question as to when the Alliance should stop counting savings. There are a number of issues to be addressed around this question. The following is only a partial list of the issues but is intended as a starting point for the discussion.

1. What is the purpose for counting accumulated savings from market effects on an ongoing basis?
 - Alliance funder needs to meet new loads through additional resource acquisition
 - Alliance marketing needs
2. Who is the primary audience?
 - The Northwest Power and Conservation Council as a representative of the Four States
 - Utility regulatory agencies
 - Current and future NEEA funders?
3. Given answers to 1 & 2, who should be doing the counting?
 - Should this continue as an Alliance internal exercise OR
 - Should the NW Council pick this up as part of the regional tracking?
4. Depending on the answer to 1 & 2, what should be the triggering mechanism to signal the end of accumulation?
 - Adoption of a new Power Plan?
 - Baseline market share reaching 50%?
 - Federal Standards change? What if the Market transformation project was targeted at changing Federal Standards?
 - State or local code changes? What if the codes change as a result of market transformation activity?
 - Fixed time horizon – 5, 10, 20 years?

Recommendations (for discussion at the July Committee Meeting).

1. **Wherever possible, decisions about keeping or dropping project savings should be tied to the best available estimates of baseline market behavior.** Staff believes that the underlying baseline is the key to addressing this issue and that where possible and practical it should be used as the primary determinant for decision making about keeping or dropping project savings with the practical exception of point number 2 below.
2. **When projects have been closed for a significant period of time, unless the project is actively tracked as part of the long-term monitoring and tracking effort, the savings should be dropped regardless of measure life.** Projects that are no longer supported by NEEA and are not being tracked or reporting to NEEA are not likely to be considered successful market transformation efforts regardless of their energy savings performance during their active management by NEEA. As such, even though there may have been energy savings tracked during the

active phase of the project, if there is no long-term evidence of sustainable market change, the project should be dropped. This has already effectively been implemented on the Scientific Irrigation Scheduling project as all of the savings were retired in this year's annual reporting of savings process. Other similar projects could include the Just Enough Air and DrivePower projects that are still included in the tracking system because there were demonstration project related savings but no ongoing effort to track and no apparent sustained market change apart from utility program activity.

- 3. Where Federal Standards have changed without any direct involvement or influence from the Northwest, savings should be adjusted to reflect the new standard.** Since federal standards are rarely adjusted to the same efficiency levels as those targeted by NEEA projects, a change in federal standards is an example of partial baseline adjustment as illustrated in Figure 2 in the Attachment. Staff recommends that the remainder of the savings after resetting the baseline to the new standards level still be counted as long as the project is either active or being tracked as part of the LTM&T process.

- 4. Where NEEA projects have deliberately targeted Federal Standards or State Code Changes, Savings should be tracked and counted until the best assumptions about baseline subsume the net market effects.** In the case where NEEA has specifically targeted a change in Federal Standards as it did in Clothes Washers, NEEA should continue to take credit for those savings until the best assessment of where baseline would have been without intervention essentially matches the federal standard level.

Next Steps.

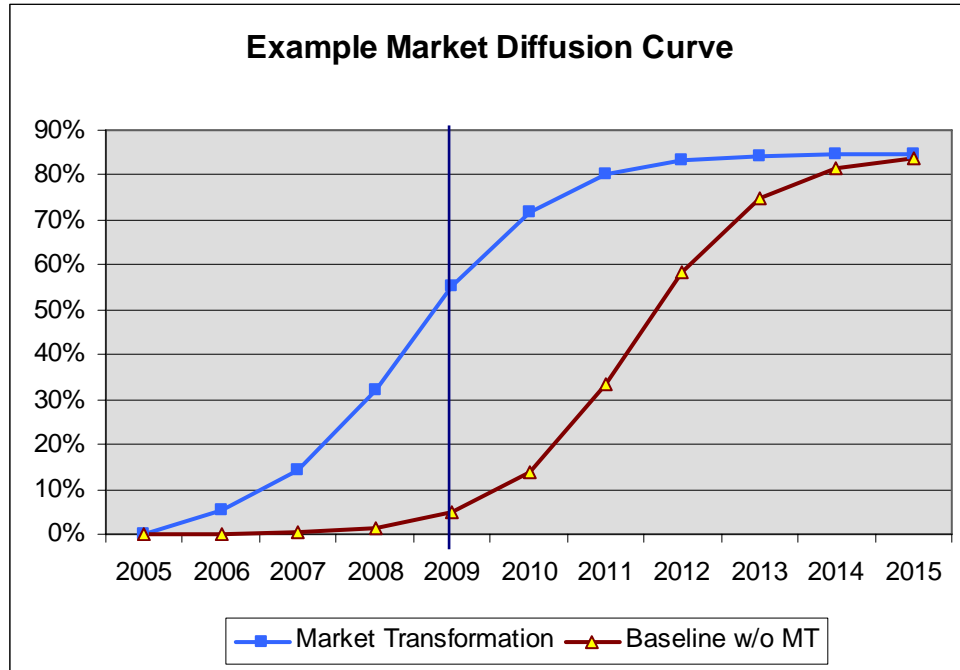
Staff recommends that the Committee discuss and come to resolution on issues 1 and 2 first. Then, depending on the outcome, the Committee may want to discuss the draft recommendations included in this memo or re-direct staff to come back to the next meeting with a revised set of recommendations.

ATTACHMENT

Diffusion Curve Modeling of Market Change and Project Retirement.

The Alliance Cost Effectiveness (ACE) model is based on a fundamental assumption that the market being transformed has an underlying response curve similar to the one exhibited in Figure 1 below.

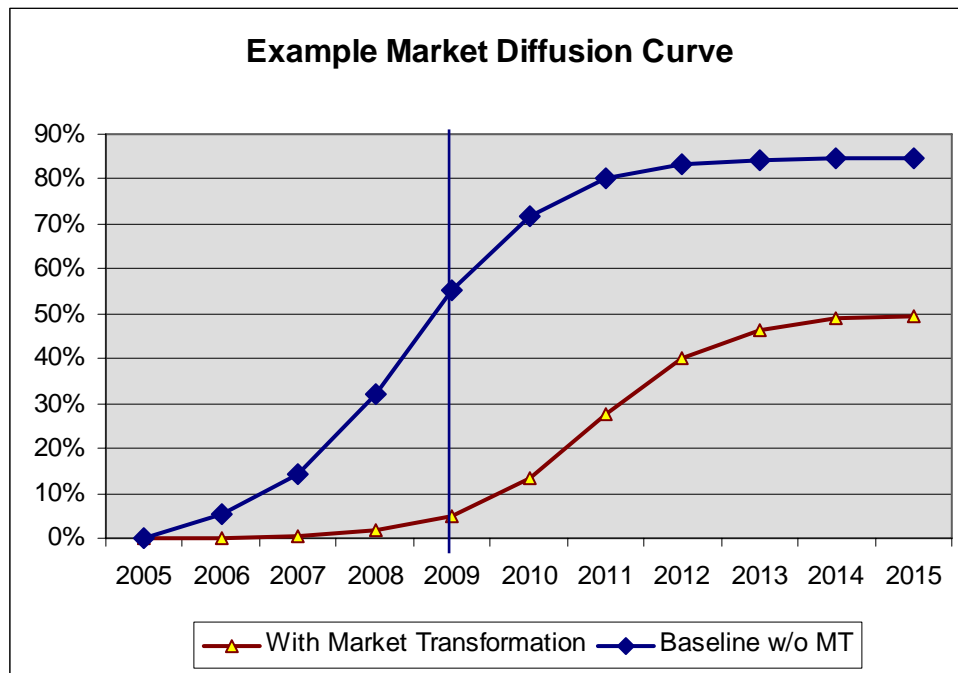
Figure 1. Market Transformation Model.



This market transformation model assumes that there will be an underlying baseline market response that at some point reaches a steady state market saturation typically at some fraction of the total market. Market transformation efforts can either accelerate the rate of market adoption or increase the end-point steady state total market share or perhaps both. If the assumed baseline steady state end-point is the same for both the baseline and the market transformation case, then the issue of when to quit counting savings will be ultimately a moot point as the baseline ramps up each year and absorbs the difference in market share until it disappears altogether.

However, in most of the ACE models, the end-point for a baseline is assumed to end in a steady-state condition with a market share something less than what is assumed with a fully successful market transformation effort. This case is illustrated in Figure 2 below.

Figure 2. Baseline with Market Share Saturation Lower than with Full Market Transformation



If the baseline market response in Figure 2 is deemed to be the best approximation of market behavior without the market transformation effort, then the question of when to stop tracking and taking credit for savings becomes a valid concern.