**Memorandum**

August 7, 2012

To: Juliana Williams, Regulatory Analyst, WUTC

From: Christine Jerko, Sr. Economist, Market Planning, NEEA

cc: Susan Hermenet, Director, Market Planning, NEEA

 Christina Steinhoff, Lead Analyst, Market Planning, NEEA

Subject: Discussion on Multiple Reporting Options

This is a response to your request to further your understanding of multiple baselines, along with differing methodologies regarding savings reporting to WUTC utilities. The memo begins by providing high level definitions of the baselines incorporated into NEEA savings reports. Next, the memo outlines the various methods for allocating savings to NEEA funders. Lastly, the memo demonstrates how reporting becomes multiplicative in nature by combining the baseline and funder allocation options.

**Types of Baselines**

‘Baseline’ in this memo refers to the starting point from which incremental savings rates for each initiative are derived. Since NEEA’s inception, NEEA has calculated a baseline specific to its own protocol and calculation. At some point, some funders started to request baseline calculations used in the Council’s Power Plan. Now, funders driven by I-937 or other conservation targets, request a variety of baselines: NEEA’s, 5th Power Plan, 6th Power Plan, or custom baseline based on specific territory characteristics. Some funders request a mix of baseline calculations. Below is a table providing a high level description of the various baselines calculated and reported by NEEA.

|  |  |  |
| --- | --- | --- |
| Type of Baseline | Description | Application [Number of Users] |
| NEEA Baseline | This is NEEA’s traditional baseline calculation. NEEA typically tried to calculate a baseline using one year of data prior to program implementation. Baseline is described as the average energy consumption of alternative products available for sale in the market. The theory is that the savings created from the energy efficiency initiative implementation is incremental to what would have alternatively been purchased. | NEEA calculates this baseline to be consistent with the reporting methodology it has been using for the past 15 years. [2 Users] |
| 6th Power Plan | The Council tries to use the amount of energy used by the entire market, but in lieu of the entire market, they may assume that a particular product type would be fully in place at the time of measurement as a proxy for the state of the entire market at Plan inception. The 6th Power Plan tries to measure the total change in energy consumption in a particular market due to the new initiatives. So, the 6th Power Plan baseline would measure the state of the market just prior to 2010. | NEEA takes this calculation directly from the Council and incorporates it into savings calculations. Some funders use this baseline for their I-937 targets. [2 Users]However, all but one of the custom savings reports mentioned below also incorporate the 6th Power Plan baseline for some of the initiatives. |
| 5th Power Plan | The same as above except the 5th Power Plan measured the state of the market just prior to 2006. | Again, this baseline value is taken from the Council.Some funders use this baseline for their I-937 targets.[7 users] |
| Custom | Some funders have calculated baselines which are specific to their service territories. Different parts of the PNW have differing baselines due to adoption rates that are significantly different from the regional average or different climate zones. Funders sometimes engage in their own market research to determine which baseline is most representative of their service territory. | If funders ask, NEEA will incorporate their specific baselines into the savings calculation. Most times, funders do not have a custom baseline for all of the initiatives. As a result, savings reports become a combination of Custom and 6th Power Plan.[5 users] |

**Ways to Report Individuals Funder’s Savings**

In addition to multiple baselines, NEEA also allocates regional savings by various methods, depending upon the needs and requests of our funders.

So, by each initiative, funders may choose to either 1) use NEEA’s funder share, or 2) use a methodology more specific to their territory.

1. **NEEA funder share**

NEEA collects data and calculates savings at the Total Regional Level. Then, the regional savings are allocated to the funders. Savings allocation to a funder is based on the percentage of their funder share to NEEA. The funder share percentages primarily correspond to the funders’ residential load. Below is the NEEA funder allocation for Avista, PacifiCorp, and Puget Sound Energy.

|  |  |
| --- | --- |
| Funder | NEEA Funder Share as of July 2012 |
| Avista Corporation, Inc. | 5.62% |
| PacifiCorp\_WA | 3.04% |
| Puget Sound Energy | 13.93% |

1. **Territory Specific**

There are multiple ways in which territory-specific savings calculations may be made. NEEA calculates service territory allocations based on the data granularity. NEEA strives to collect the most granular data, but service territory data is not always available. Below is a table listing the granularity levels from most specific to least specific, for data collected by NEEA.

|  |  |  |
| --- | --- | --- |
| Types of Data to Service Territory Allocation | Description | Example |
| Service Territory Level | NEEA collects data from the contractor that specifically lists the service territory in which the initiative product or activity is being used or engaged in. | Residential Homes data is collected at the Service Territory Level. |
| Zip Code Level | Some NEEA data is collected at the zip code level. This is sales data at the retail level. This does not mean that the savings from the initiative product are realized in that zip code. Therefore, NEEA employs further assumptions regarding consumer zones and savings allocations based on customer count. | Lighting sales data |
| State Level | Sometimes NEEA only receives state level data. Again, savings based on this data is parsed based on customer count within the state. | Appliance data |

In addition to NEEA derived service territory savings allocation, funders sometimes arrive at their own calculation, as described in the table below.

|  |  |  |
| --- | --- | --- |
| Funder Derived Service Territory Allocation | Description | Example |
| Funder - Custom | This calculation is not based on NEEA data, and in fact, is completely independent of NEEA data. This calculation results if/when a funder has better data regarding widgets sales in their service territory. This may result due to a funder’s knowledge of a specific local program in which they are going to engage. This occurrence is rare, but has happened. | Ductless Heat Pumps |

Much greater detail about the data sources and means with which they may be allocated are provided in the three attachments that have been presented at previous Cost-Effectiveness Advisory Committee Meetings:

1. ServiceTerritoryMemo\_20101123.doc [ a description of the zip-code data savings allocation methodology]
2. Memo\_ServiceTerritoryData\_20110418.doc [high level summary of data types]
3. CE-Committee\_UpdateOnServiceTerritoryAllocation\_20110425.ppt [a descriptive presentation on service territory reporting and examples based on preliminary data]

Please, feel free to call me, or the author, Christina Steinhoff, with any questions you may have about these attachments.

**Reporting Options**

As mentioned in the introduction, baseline types and funder-allocation types may be mixed and matched. The matrix below illustrates some of the options that have been requested of NEEA. In example 1, this funder may have a mix of baselines (column 4) while only using NEEA funder share (row1) to allocate initiative savings. While in example 2, another funder may choose 6th Power Plan only baseline (column 2), while using a mix of savings allocation methods (row 3).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Savings Rates based on BaselineMethod of allocating initiative savings | 5th Power Plan only | 6th Power Plan only | NEEA only | Custom + 6th Power Plan/or NEEA baseline\* |
| NEEA Funder Share |  |  |  | Example 1 |
| Service Territory Allocation based on NEEA data collection |  |  |  |  |
| Custom Service Territory from Funder + NEEA Funder Share or other Service Territory Allocation |  | Example 2 |  |  |

As a result, NEEA produces many different types of savings reports to our funders. Again, this information can be very confusing, so please don’t hesitate to call or email with questions.