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September 10, 2013

Susan M. Hudson, Clerk
Vermont Public Service Board
112 State Street
Montpelier, VT 05620-2701

Re: EEU- 2013-01 Demand Resource Plan Proceeding - Department of Public Service Comments on Modeling Scenarios and Model Input Assumptions

Dear Mrs. Hudson:

The Department offers the following comments and additional information as a follow-up to the August 27, 2013 PSB workshop on modeling scenarios, model input assumptions and QPI frameworks.

1. DPS's 3.5% Savings Scenario - The Department offers some additional information related to its August 15, 2013 recommendation that a "3.5% Savings Scenario" be modeled for this proceeding. During the workshop the Board asked the Department whether it expected there to be a material difference between it's recommended 3.5% Savings Scenario and the results of anticipated from a planned update to the *Maximum Achievable* potential study.

   After additional research and consultation with GDS Associates, the Department's contractor for the potential study, we are of the opinion that based on the results of the 2011 potential study it is unlikely that there would be a material difference between the modeling results of a 3.5% Savings Scenario and the updated maximum achievable potential. Values derived from the Department's 2011 potential study, illustrate that *annual incremental savings as a percent of sales* range between 1.8% and 3.0% of sales of each year over the duration of the forecast period. Table 1 below depicts the results of the analysis, which are based on the three and twenty year forecast used in the last DRP.

Table 1 – Incremental Annual Savings as a % of Sales for VEIC and BED

2012	2.9%
2013	3.0%
2014	2.9%
2015	2.7%
2016	2.6%
2017	2.4%
2018	2.4%
2019	2.7%
2020	2.0%
2021	1.7%
2022	1.8%
2023	1.8%
2024	2.2%
2025	2.1%
2026	2.5%
2027	3.0%
2028	3.0%
2029	3.0%
2030	3.0%
2031	2.8%

As the Department anticipates that its updated maximum achievable potential study results will be a comparable substitute for the 3.5% Savings Scenario, we withdraw our recommendation to model that scenario. The Department will strive to file results of its potential study on the same timeline that EEU scenario modeling results are due to be filed. This date is currently December 6, 2013 as indicated in EEU-2013-01 order entered August 1, 2013 establishing the overall timeline and phases for the DRP proceeding.

Instead of the 3.5% scenario, the Department recommends that the Board order the 3% scenario Savings by 2019 – which is Scenario # 1 from VEIC's August 15, 2013 filing. The Department's modeling recommendation for scenarios 1 and 2 remains the same. The three scenarios will effectively represent anticipated low, medium and high savings. In addition, the Department expects its maximum achievable potential study will provide an extreme upper bound point of reference which may provide additional context from which to make budget recommendations.

2. <u>Sector Split Assumption</u> – The Department, jointly with VEIC, offers a revised recommendation for the residential and commercial sector split for EVT. For modeling and program design purposes the concept of "sector split" refers to the percentage of

resource acquisition dollars allocated to the residential and commercial sectors based on each sector's relative Energy Efficiency Charge (EEC) contributions. The revised recommendation is intended to 1) ramp up the residential sector split used for modeling to achieve sector equity within the 20-year forecast period and 2) afford modelers an appropriate balance of stipulated and flexible sector split values for individual years and blocks of years for the three and 20-year modeling timeframe.

As indicated in Table 2 below, sector split values for years 2015, 2016 and 2017 are stipulated and are as proposed in the original recommendation filed on August 15, 2013. Remaining years in the forecast period are essentially divided into five-year blocks with stipulated average minimum values. Note that for approximately the past three years in EVT territory the residential sector has contributed 48% of the EEC and the commercial sector 52%.

Table 2 – Revised Recommended Sector Split Schedule

	VEIC	
Res/Com	Res	Com
2012	32%	68%
2013	31%	69%
2014	33%	67%
2015	34%	66%
2016	36%	64%
2017	37%	63%
2018	a	b
2019	a	b
2020	a	b
2021	a	b
2022	a	b
2023	c	d
2024	c	d
2025	c	d
2026	c	d
2027	c	d
2028	e	f
2029	e	f
2030	e	f
2031	e	f
2032	e	f
2033	g	h
2034	g	h

a = average 5 year period of 40% b = average 5 year period of 60%
c = average 5 year period of 43 % d = average 5 year period of 57%
e = average 5 year period of 46 % f = average 5 year period of 54%
g = average 2 year period of 48 % h = average 2 year period of 52%

Further, the Department notes this assumption may need to be revisited if the Department's potential study indicates that at some point in the 20-year forecast timeframe the amount of reasonably achievable potential begins to taper off or run out in the residential sector. The Department understands that ramping up to greater equity in the residential sector may lead to more costly energy savings in the residential sector and for this reason the sector split assumption may need to be revisited in order to maximize overall value for ratepayers. Finally, it is recommended that the sector split be framed as a modeling assumption which ultimately flows through the modeling results as sector-specific dollar amounts allocated to resource acquisition activities. For program implementation purposes the Department and the EEUs recognize the "70% residential equity constraint" principal recognized by the Board orders issued in the first DRP; EEU-2010-06[1] and recommend the continuation of this concept in the current DRP process. It is important to note, sector splits used for modeling resource acquisition spending in the residential sector will likely be higher than actual program spending the due to the application of the 70% residential equity constraint provision.

3. Self-Managed Energy Efficiency Program (SMEEP) and Customer Credit Program (CCP) Participant Load Assumption – As stated in its August 15, 2013 filing the Department recommends that the load for the SMEEP and CCP participants be addressed and documented appropriately in the VELCO/Itron forecast prior to modeling scenarios. Because some scenarios are based on budgetary values established in the first DRP, and those values included CCP participant EEC contributions, it may be necessary remove the CCP participant's annual budget set-aside in order to establish an accurate adjusted total resource acquisition budget available for energy efficiency services in EVT's territory. As the SMEEP participant does not make an EEC contribution a similar adjustment is not required. The Department has performed an analysis to provide an approximate value for the CCP participant annual budget set-aside, to be used as an input in the modeling process. The estimate is subject to future refinement once actual 2015-2017 budgets are established. Based on anticipated CCP participant annual EEC contributions (less 10% as stipulated by the CCP program design) the annual CCP set-aside is assumed to be constant at approximately $970,000 per year.

4. Stretch Code Assumption - The Department's joint filing of assumptions on August 15, 2013 recommended residential and commercial "stretch codes" be considered as a model input assumption. However, a numerical value was not recommended for future stretch codes. The Department, VEIC and BED recommend assuming stretch codes will be

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[1] Sector split and equity constraint concepts are referenced in EEU-2010-06 orders dated 8/01/2011 and subsequently in the Board's QPI orders for VEIC on 12/27/2011 at page 8 and BED on 1/24/2013 at page 5.

adopted through the State rule making process and 5% energy savings will be achieved above and beyond the statewide energy code. Therefore the overall energy savings potential will be reduced.

5. Table of Assumptions and Associated Values – The Department, VEIC and BED are in the process of assembling additional supporting information related to the documentation of modeling assumptions. The Department and the EEUs estimates this additional information will be filed no later than September 30, 2013 and will include a narrative description of the assumptions as well as a summary table documenting the numerical values for various modeling assumption. The Department, VEIC and BED believe this resource may be useful in current and future DRP modeling efforts and serve as a comprehensive reference for interested stakeholders.

For the Department of Public Service

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cc: EEU 2013-01 E-Service List