

TDRP Clarification II

- **Update to Form 1567**

TDRP form 1567 has been updated to include baseline adjustment options. In order to more accurately reflect the true load a participant is reducing, the IESO has proposed a 'default baseline adjustment' methodology. This methodology is proposed in an attempt to assist participants in capturing weather induced variations and fluctuations in the baseline that would not be captured by the baseline method detailed in the TDRP manual. Of course, participants are not required to perform a baseline adjustment. This option is being offered to TDRP participants to accurately compensate them for their achieved load reduction. Participants are free to submit their settlement requests using the unadjusted baseline.

You will see on form 1567 three additional boxes in the top left corner of the document. These boxes should be used to indicate the baseline adjustment methodology used when calculating the demand response so that your calculations can be accurately replicated. Any mark in the appropriate box is adequate.

- **Letter to LDC's**

The previous TDRP communication of March 5, 2005 included an attachment TDRP_LetterToLDC.pdf. All TDRP participants will be required to sign and submit a letter to their relevant Local Distribution Company (LDC) empowering them to disclose the required data to the IESO or its representatives. An example of this letter is attached to this communication and is entitled TDRPLetterToLDC.pdf. This information will allow the verification and audit processes to use the same data to verify each Market Participant's submissions.

If you have not done so already, please complete the letter and submit it to your appropriate contact with your LDC with a copy being sent to the IESO Help Centre. You may fax a copy of the completed letter to 905.403.6921. Alternatively you may email it to customer.relations@ieso.ca.

- **Data Submissions**

Any required data can be submitted to the IESO in an excel readable format to the IESO Help Centre at customer.relations@ieso.ca.

- **Calculating the baseline:**

Participants have requested that the IESO clarify the procedure used to calculate the baseline to ensure each participant is using the same methodology. This clarification will ensure that each Market Participant is choosing the appropriate 11 hours and will allow the verification and audit processes to use the same calculation to verify each Market Participant's submissions.

1. To calculate the unadjusted baseline, begin by selecting information from the 11 previous days of the event hour in question.
2. From the above list of 11 previous days, drop all TDRP event hours from the 11 data points, and select enough additional hours from previous days to make a revised set of 11 hours.

An event hour is any hour in which the 3 hour ahead predispatch price is greater than \$120 /MWh.

3. From the revised list of 11 previous days of the same hour, drop the minimum to make a list of 10 hours. This list is the high 10 of previous 11 hours, excluding any TDRP event hours.
4. Average the 10 remaining hours to arrive at the unadjusted baseline.

Example 1:

- a. Assuming HE 20 and 21 are demand response hours.
- b. Choose the previous 11 days of the hour in question (i.e. the same hour on the previous 11 days).
- c. Screen these 11 hours and drop the event hours from the list. (Days 3 & 5 for HE 20 and Day 2 for HE 21).
 There is no need to remove entire days from the baseline calculation as the result of an event hour within that day. For example, there is no need to remove Day 2 from the baseline calculation of HE 20 as a result of the event hour in HE 21.
- d. Replace the event hours dropped by new data from the previous days at the same hour.
- e. Now you have 11 relevant hours. Drop the lowest value. (Day 11 for HE 20 and Day 6 for HE 21)
- f. Average the remaining 10 hours to get the baseline value for that hour on the demand response day.

Example 1

HE 20	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Baseline
Load (kWh)	350	310	345	320	330	370	300	350	320	320	295	315	320	327.5
3 Hour Ahead Pre-Dispatch Price (\$)	110	50	170	90	125	72	68	95	74	69	118	85	100	n/a
HE 21	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Baseline
Load (kWh)	360	210	350	310	330	300	340	345	330	315	330	320	n/a	333
3 Hour Ahead Pre-Dispatch Price (\$)	110	250	72	89	64	85	115	95	64	103	97	90	n/a	n/a

- Adjusting the baseline

There has been some confusion with how to treat event hours when calculating the baseline adjustment. The baseline adjustment should be calculated as the average of the **two most recent non-response hours**, even if these hours are non-consecutive. A non-response hour is an hour in which a TDRP response did not occur, even if the hour in question was a TDRP event hour. A TDRP event hour is an hour when the 3 hour ahead predispatch price is greater than \$120 MWh. The baseline adjustment amount can be thought of as:

$$\text{Baseline adjustment amount} = [\text{Average of two preceding hours} - \text{Unadjusted Baseline}]$$

Example 2

HE	3 Hour Ahead Pre-Dispatch Price (\$)	Actual Consumption (kW)	Unadjusted Baseline (kW)	Average of two preceding hours (kW)	Difference between Average and Unadjusted Baseline	Adjusted Base Line (kW)	Load Reduction (kW)	Expected Payment \$
12	70	380	n/a	$(380+400)/2 = 390$	n/a	n/a	n/a	n/a
n/a	75	400	n/a		n/a	n/a	n/a	n/a
14	140	120	370		*20	390	270	37.80
15	130	120	360		n/a	380	260	33.80
16	125	120	350		n/a	370	250	31.25
17	100	340	n/a		n/a	n/a	n/a	n/a
18	125	370	n/a	$(370+400)/2 = 385$	n/a	n/a	n/a	n/a
19	130	400	n/a		n/a	n/a	n/a	n/a
20	140	100	360		*25	385	285	39.90
21	140	100	350			375	275	38.50
22	150	100	340			365	265	39.75

- **Adjusting the baseline when the adjustment would be negative:**

When the default baseline adjustment calculation results in a negative adjustment value, the adjustment should be ignored and the unadjusted baseline should be used for settlement. To place this into formulaic terms when the $[\text{Average of two preceding hours} - \text{Unadjusted Baseline}] < 0$, the adjustment should not be performed. An example of this follows

Example 3

HE	3 Hour Ahead Pre-Dispatch Price (\$)	Actual Consumption (kW)	Unadjusted Baseline (kW)	Average of two preceding hours (kW)	Difference between Average and Unadjusted Baseline	Adjusted Base Line (kW)	Load Reduction (kW)	Expected Payment \$
12	70	380	n/a	$(380+400)/2 = 390$	n/a	n/a	n/a	n/a
13	75	400	n/a		n/a	n/a	n/a	n/a
14	140	120	370		20	390	270	37.80
15	130	120	360		n/a	380	260	33.80
16	125	120	350		n/a	370	250	31.25
17	100	340	n/a		n/a	n/a	n/a	n/a
18	125	345	n/a	$(345+355)/2 = 350$	n/a	n/a	n/a	n/a
19	130	355	n/a		n/a	n/a	n/a	n/a
20	140	100	360		-10	360	260	36.40
21	140	100	350			350	250	35.00
22	150	100	340			340	240	36.00