

Recommendations for Changes to CBL Formulation

Adopted at PRL WG Meeting on November 2, 2001

Overview

- Utilize the same basic **Average Day CBL** formula currently in place, with two modifications:
 - Require that 10 valid days be identified from which the five highest days are selected and used to create average hourly CBL values. In the existing version, a 30-day reach-back provision means that the number of days could be reduced to one, or none.
 - Refine the calculation of low-day exclusions from the 10 valid days so that event hours are used to determine whether a day is excluded for low usage.
- Offer participants an alternative **Adjusted CBL** formula to capture some of the effects of weather on participant's load.
 - Use the Average Day CBL method to develop initial event values
 - Average Day hourly CBL values for the event are adjusted up or down according to an Adjustment Factor. This factor is defined as the ratio of average usage in the two hours prior to the two hour notice preceding the event to the average usage in the same hours in the five days that comprise the CBL basis in the calculation of the average day CBL value for the event.
 - The Adjustment factor can be no smaller than .80 and no larger than 1.20.
- Participants select either the Average Day CBL or the Adjusted CBL. This will apply to the participant until such time as the participant applies for a change. Such applications are accepted only in advance of each capability period

Note: For DADRP events involving non-consecutive hours, an alternative (to that for EDRP) definition of the event period is proposed, and a revised version of the weather adjustment factor is suggested. These changes are required to counteract the potentially perverse results that could arise if the CBL were to be recalculated anew for each scheduled hour.

CBL Formulation

I. The Average Day CBL

A. Weekday CBLs

Step 1. Establish the CBL Window. Establish a set of days that will serve as representative of participant's typical usage.

- A.1.a The **CBL Window** is comprised of the 10 most recent days, beginning with the 2 days prior to the event day for which the CBL is being calculated, excluding the following day-types:
 - A.1.a.1 Holidays, as specified by the NYISO
 - A.1.a.2 Event days which are defined as days on which:
 - A.1.a.2.a NYISO declared an EDRP event for which the participant was eligible for payment for a curtailment, or
 - A.1.a.2.b Days on which the participant's DADRP curtailment bid was accepted in the DAM, regardless of whether or not the participant actually curtailed.
- A.1.b To define the days that comprise the CBL Window:
 - A.1.b.1 Begin with the 10-day period defined by the weekday that is two days prior to the event through the weekday that is eleven days prior to the event day. This creates a 10-day window.
 - A.1.b.2 Eliminate any holidays, and replace them with days beginning with the 12th weekday day prior to the event day continuing until a non-holiday is encountered. This results in a 10-day window.
 - A.1.b.3 Eliminate any event days, replacing them with subsequent prior days, picking up with the first day not yet included in the window after completing the holiday replacement requirement.
- A.1.c Final **Weekday CBL Window** must contain 10 weekdays days.

Step 2. Establish the CBL Basis. Identify the five days from the 10-day CBL Window to be used to develop CBL values for each hour of the event.

- A.2.a For each of the 10 days in the CBL Window, create the *average daily event period usage* for that day, which is defined as the simple average of the participant's actual usage over the hours in the day that define the event for which the CBL is being developed.
- A.2.b Create the *average event period usage level* for the 10 days in the CBL Window, which is defined as the simple average of the 10 average daily event period usage values.

- A.2.c Eliminate low usage days. For any day in the 10-day window for which the day's average daily event period usage is less than 25% of the average event period usage level, eliminate that day, and return to (Step A.1.a) and add a day to restore the 10-day window and check the elimination criteria and proceed to create a new 10-day CBL window.
- A.2.d Order the 10 days in the CBL Window according to their average daily event period usage level, and eliminate the five days with the lowest average daily event period usage.
- A.2.e The remaining five days constitute the **CBL Basis**.

Step 3. Calculate Average Day CBL values for the event.

- A.3.a For each hour of the event, the CBL is the average of the usage in that hour in the five days that comprise the CBL basis.

B. Average Day CBL formula for weekends

Step 1. Establish the CBL Window

- B.1.a The CBL Window is comprised of the most recent three like (Saturday or Sunday) weekend days. There are no exclusions for Holidays or event days.

Step 2. Establish the CBL Basis.

- B.2.a Calculate the average daily event period usage value for each of the three days in the CBL Window.
- B.2.b Order the three days according to their average daily event period usage level.
- B.2.c Eliminate the day with the lowest average value
- B.2.d The Weekend CBL Basis contains 2 days.

Step 3. Calculate Weekend Average Day CBL values for the event.

- B.3.a For each hour of the event, the CBL value is average of usage in that hour in the two days that comprise the CBL basis.

II. Elective Weather-Sensitive CBL formulation

Step 1. Calculate the Average Day CBL values for each hour of the event period described in (I) above.

Step 2. Calculate the Event Final Adjustment Factor. This factor is applied to each of the individual hourly values of the Average Day CBL.

A. Calculate the Adjustment Basis Average CBL

- 2.A.1 Establish the **adjustment period**, the two-hour period beginning with the start of the hour that is four hours prior to the commencement of the event through the end of the hour three hours prior to the event.

- 2.A.2 Calculate the Adjustment Basis Average CBL.
 - 2.A.2.a Apply the Average Day CBL formula as described in I. Average Day CBL (page 2), to the adjustment period hours as though it were an event period two hours in duration, but using the five days selected for use in the Average CBL Basis.
 - 2.A.2.b Calculate the average of the two usage values derived in 2.A.2.a, which is the Adjustment Basis Average CBL.

B. Calculate the Adjustment Basis Average Usage

- 2.B.1 The adjustment basis average usage is the simple average of the participant's usage over the two-hour adjustment period on the event day.

C. Calculate the gross adjustment factor

- 2.C.1 The gross adjustment factor is equal to the ratio of the Adjustment Basis CBL and the Adjustment Basis Average Usage

D. Determine the Final adjustment factor.

The final adjustment factor is as follows:

- 2.D.1 If the gross adjustment factor is greater than 1.00, then the final adjustment factor is the smaller of the gross adjustment factor or 1.20
- 2.D.2 If the gross adjustment factor is less than 1.00, the final adjustment factors are the greater of the gross adjustment factor or .80.
- 2.D.3 If the gross adjustment factor is equal to 1.00, the final adjustment factor is equal to the gross adjustment factor.

Step 3. Calculate the Adjusted CBL values.

- A. The Event Adjusted CBL value for each hour of an event is the product of the Final Adjustment Factor and the Average CBL value for that hour.

III. Additional CBL Provisions

A. Selecting a CBL method

- A.1 The participant selects the CBL formula when it registers, or is registered by its LSE or CSP, with the NYISO for program participation. The choice of CBL becomes effective when the NYISO accepts the registration.
- A.2 At the initial registration to the PRL program, participants may elect either the Average Day CBL or the Adjusted CBL formula.
- A.3 At the time that the new Adjustable CBL formulation becomes effective, registered participants in the PRL program may apply to change to the

adjusted formula CBL method beginning thirty (30) days after such notification or to become effective May 1, 2002.

- A.4 Participants may switch CBL methods by making application to the NYISO. For such a change applicable to the summer capability period (May 1 – October 31), the application must be submitted to NYISO by April 1. For a change applicable to the winter capability period (November 1 – April 30), the application must be submitted to NYISO by October 1. The change in the CBL formula becomes effective when the NYISO accepts the application.