

# Review CBL Proposed Changes

DRS

August 30, 2011

All new and existing registrations that can receive an energy payment must be certified to use a CBL method. The CBL certification process applies to the following registrations:

1. Economic
2. Emergency DR Full (Starting in the 2012/2013 Delivery Year)
3. Emergency Energy Only
  - Because of FERC ORDER 745, full LMP compensation is accomplished with Economic registrations. Emergency Energy Only registrations may no longer be needed.

- If economic and emergency registration then use economic CBL
- If only emergency registration then:
  - Same as economic registration process (details provided later in presentation)

The CBL empirical analysis recommended the PJM Three Day type with the Symmetric additive adjustment as the standard CBL. The CBL analysis also recommended that variable load customers uses a different CBL.

The CBL Certification process will identify variable load customers. All customers must use a CBL with an error (RRMSE) no greater than 20%.

- If a customers CBL error is greater than 20% then the customer is considered to be a variable load customer and another CBL must be used.
- If an alternate CBL with an error less than 20% cannot be found then the customer may participate with a CBL calculated by the Maximum Base Line method.



## Proposed CBL Certification Process (General)

CBL Certification is performed prior to submitting the registration. The CSP creates the new registration and submits 60 non-event days of hourly interval meter data. The excluded event days are defined as days where there was economic participation or a called Load Management event.

The eLRS calculates the Relative Root Mean Squared (RRMSE) for two CBL methods:

1. Standard Economic CBL with SAA
2. 7 Day Types CBL with SAA

If the RRMSE is less than 20%, then the CBL method with the lowest RRMSE is selected by eLRS as the CBL method by default. In this scenario, the CSP may select either the Standard CBL with SAA or the 7 Day Types CBL with SAA as the CBL.

If the RRMSE is greater than 20% for both of the CBL methods, then the Maximum Baseline Load (MBL) method is selected by eLRS as the CBL method. The MBL method is calculated by averaging the daily minimum loads using hours ending 12 through hours ending 20.

The CSP submits the registration with the selected CBL method. Alternate CBLs may be requested using the normal Alternate CBL process.

1. Administrative Burden
  - Collecting 60 non-event days of hourly load data for Economic and Full Emergency DR Registrations
2. Participation before CBL is Certified
  - Potential for non-participation before CBL is decided
3. Implementation Timing
  - CSP needs sufficient time to implement CBL certification procedure

## Sixty days of non-event data is required to calculate the RRMSE for CBL methods.

- The EDCs may not have the most recent Interval meter data available for CSPs (i.e. Interval meter data only available through last month)
  - ❖ **Potential Solution** – Use the most recent 60 non-event days. The most current meter day provided by CSP must be within 60 days of current day.
- If an end use customer was previously with another CSP and there were prior events within the previous 60 days, then the CSP needs to submit 60 days of meter data starting the day after the last event from the previous CSP. This could delay the customer participation until 60 contiguous days of non-event data is obtained.
  - ❖ **Potential Solution 1** – Allow eLRS to share **event and meter** data between CSPs for CBL Certification process. The eLRS would indicate the amount of additional meter data needed to calculate daily CBLs over the previous 60 non-event days.
  - ❖ **Potential Solution 2** – Allow CSP to submit enough contiguous meter data which represents 60 non-event days of hourly interval meter data and designate days as event days which will be excluded from the CBL process.

- ❖ If either the Standard CBL with SAA or the 7 Day Types CBL with SAA is not selected as the CBL then the Maximum Baseline Load (MBL) method is selected as the CBL.
- ❖ If 60 days of non-event load data is not submitted during the CBL Certification Process then the MBL method is selected as the CBL.
- ❖ Alternate CBLs may be requested during the CBL Certification Process.
  - The customer may participate during the Alternate CBL process. Economic and/or Emergency Energy settlements should not be submitted until a CBL is determined.



## Alternative CBL nomination process

- Alternative CBLs are nominated only during the registration processes (changes require new registration)
  - Backup Generation meter data to represent load reduction is considered Alternative CBL
- Entity that proposes an alternative CBL must provide analytical support that method is more accurate and reasonable to administer
- 30 days to decide on CBL after it is proposed
- If no agreement, PJM will decide on the CBL within 20 days

- ❖ CSP needs sufficient time to implement CBL certification procedure.
  - Obtain 60 days of non-event load data.
  - Determine Transition date to certify CBL for existing Economic registrations.
  
- ❖ All existing registrations will need to be terminated and re-registered using the CBL Certification process. All existing Economic registrations without CBL Certification will need to be terminated by a future transition date. The CSP can change the registration termination dates to any future date less than or equal to the transition date.

- PJM needs better understanding of type of DR activity to help with CBL determination process
- Need a more robust Load Reduction Method table

Site
Profile
Contacts
Registration
Data History

**Registration Defaults**

Energy Loss Factor	<input type="text" value="1.05308"/>	
Capacity Loss Factor	<input type="text" value="1.05308"/>	
Retail Rate	<input type="text" value="5.22"/>	cents/kW
Peak Load Contribution	<input type="text" value="1724.8"/>	kW
Load Reduction	<input type="text" value="350.0"/>	kW

**Other**

Backup Generation Fuel Type	<input type="text" value="None"/>
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Load Reduction Method	kW Reduction (per site)
HVAC	<input type="text" value="0.0"/>
Backup Gen	<input type="text" value="0.0"/>
Lighting	<input type="text" value="0.0"/>
Refrigeration	<input type="text" value="0.0"/>
Manufacturing	<input type="text" value="0.0"/>
Water heating	<input type="text" value="0.0"/>
<b>Other</b>	<input type="text" value="350.0"/>
<b>Total Per Site</b>	<b>350.0</b>
# of Sites Multiplier	<input type="text" value="1.0"/>
<b>Total Load Reduction</b>	<b>350.0</b>