

Demand Response non-summer capacity measurement and verification

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Capacity compliance – measurement of load reductions

- Summer (June September)
 - FSL (firm service level)
 - PLC (Load * Line Loss Factor)
 - GLD (guaranteed load drop)
 - Lessor of FSL or (CBL load) * line loss factor
- Non-summer (October through May)
 - (CBL load) * line loss factor
- CBL customer baseline, which represents what load would have been if customer did not reduce load.

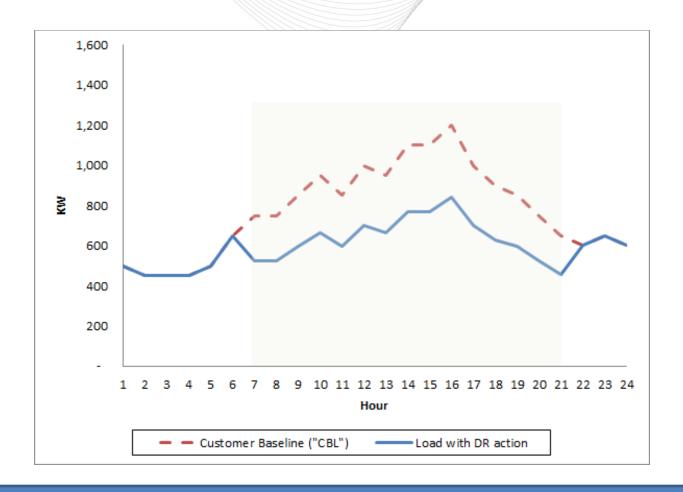
Load Reduction used to determine penalties or bonus payment



- Default capacity compliance CBL = default economic energy CBL
 - 3 daytype with Symmetric Additive Adjustment ("SAA")
 - Weekdays, Saturdays, Sunday/Holiday
 - Construct CBL (load curve) from recent history that exclude event day
 - Calibrate CBL based on difference between load on event day prior to event and load in CBL from same period
 - Alternative CBL may be used if significantly more accurate than default CBL
 - RRMSE metric used to compare accuracy



Load reduction in Winter period



Must be able to reduce load in winter from 6am through 9pm







DR

RPM Products, eRPM modelling & eLRS registrations

1 resource modelled in eRPM

with multiple commitments

Product	15/16	16/17	17/18	18/19	19/20	20/21
Limited DR	X	X	X			
Extended Summer DR	X	X	X			
Annual DR	X	X	X			
Base DR				X	X	
Capacity Performance		X	X	X	X	X

-- Customers are registered in eLRS by Product --

Product modelled as

individual eRPM resource

^{*}FRR – LDR/XDR/ADR through 18/19, 19/20 Base/CP, 20/21 CP



CP Demand Resource transition to be more consistent with other capacity resources

Requirement	(Today) Limited DR (15/16 – 17/18)	(Today) Extended Summer DR (15/16 – 17/18)	(Today) Annual DR (16/17 – 17/18)	(CP) Base Capacity DR (18/19 & 19/20 DY only)	(CP) Capacity Performance DR (16/17 DY & beyond)
Availability	Non-NERC holiday weekday, June – Sept	June – Oct & May	Any day during DY*	June - Sep	Any day during DY*
Maximum Number of Interruptions	10 interruptions	Unlimited	Unlimited	Unlimited	Unlimited
Hours of Day Required to Respond (Hours in EPT)	12:00 PM – 8:00 PM	10:00 AM – 10:00 PM	June – Oct & May: 10 AM – 10 PM Nov. – April: 6 AM- 9 PM	10:00 AM – 10:00 PM	June – Oct. & May: 10 AM – 10 PM Nov. – April: 6 AM- 9 PM
Maximum Duration of Interruption	6 Hours	10 Hours	June – Oct : 12 hours Nov – April: 15 hours	10 Hours	June – Oct : 12 hours Nov – April: 15 hours

^{*}unless on an approved maintenance outage during Oct – Apr.