



DR Hub Update

Demand Response Subcommittee
December 9, 2019

- Training: December 11, 2019
- Production: December 19, 2019
- Summary of Release
 - Support for Summer-Period Only Load Management registrations
 - Bug fixes related to Load Management registrations
 - Minimal changes for Web Services

Field	Need Summer and Winter ICAP	Need Winter ICAP only (rare)	Need Summer ICAP only (rare)
PLC	> 0	PLC = 0	> 0
Measurement Method	Y	Defaults to FSL	Y
Summer Managed Load	>= 0	Defaults to 0 if null	>= 0
Summer ICAP	Calculates to >= 0	Calculates to 0	Calculates to >= 0
Summer Only Checkbox	Unchecked	Unchecked	Checked
WPL	Y	Y	optional
Winter Managed Load	Y	Y	N
Winter ICAP	Y	Y	N

Registration Detail

Tasks | Locations | **Registrations** | Events | Meter Data | Energy Settlements | Compliance | Dispatch Groups | Account and Users | Reports | RERRA

Cancel | Save | Submit | Copy | Search | Resource Outage | Calculate Winter Peak Load

Name * CSP ENOC Status **H**

Reg ID Program * Hold Scheduling Hold Settlement

Effective Date * Allow Modification EDC LSE

EDC BC (Large) ZONE Pr

Test Required Completed

Capacity

Peak Load Contribution (kW) <input type="text" value="3500"/>	Winter Peak Load (kW) <input type="text"/>	Resource Type <input type="text" value="Select One"/>
Measurement Method <input type="text" value="Select One"/>	Winter Managed Load (kW) <input type="text"/>	Product <input type="text" value="Capacity Performance DR"/>
Summer Managed Load (kW) <input type="text"/>	Winter Weather Adj. Factor <input type="text"/>	RPM DR Resource <input type="text" value="Select One"/>
Capacity Loss Factor <input type="text" value="1.05"/>	Winter Nominated ICAP (kW) <input type="text"/>	Lead Time <input type="text" value="Quick_30"/>
Summer Nominated ICAP (kW) <input type="text"/>		

Summer Only

Check if Winter Nominated
ICAP is not needed

- All registrations will be Capacity Performance with a single RPM Auction Commitment
 - If the CSP has Summer-Period Only commitment (was paired with a Winter resource in an RPM Auction), the Summer RPM commitment is added to the commitment for annual Capacity Performance
 - Example: CSP has 25 MW annual Capacity Performance and 2 MW Summer-Period Only commitment

RPM Resource Commitment	MW (ICAP)
June thru October	27
November thru April	25
May	27

- All registrations with same RPM Auction Resource will have all Summer Nominated ICAP and all Winter Nominated ICAP rolled up together and compared to the annual Capacity Performance RPM commitment at the RPM Auction Resource (same as last year)
- If total Summer Nominated ICAP exceeds total Winter Nominated ICAP, it's considered as excess Summer Only (can be used for replacement, etc), or is used to fulfill any Summer-Period commitment
 - Note – there is no Winter-Period DR, if Winter Nominated ICAP > Summer Nominated ICAP then it cannot be used

- **Resources Linked to Registrations Report**
 - Shows **confirmed** registrations linked to an RPM Auction Resource
 - RPM Resource Commitment on 6/1/2020 is compared to sum of Summer Nominated ICAP
 - RPM Resource Commitment on 11/1/2020 is compared to Annual Nominated ICAP (lesser of: sum of summer and sum of winter) compared to

Registration	Summer ICAP (kW)	Winter ICAP (kW)
1	16,000	15,000
2	10,000	10,000
Total	26,000	25,000

Annual CP commitment = **25**

Summer: **26000** minus 25000 = 1000 = **1 MW (long in summer)**

Annual CP: **25000** minus (lesser of 26000 and 25000) = **0 MW (met commitment for Annual CP)**

RPM Resource Commitment	MW (ICAP)	Shortfall
June thru October	26	-1.0
November thru April	25	0
May	26	-1.0

1 MW summer excess can be used for a bilateral (summer only), to sell into an auction, etc.

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Resources Linked To Registrations DR Registration Orphan Report

Resources Linked To Registrations Report - 2020/2021



- a) Negative MW means shortfall and will be assessed daily deficiency penalty.
- b) Excess means amount nominated is greater than RPM commitment.
- c) All penalties are in UCAP, Resource Names are RPM resources - go to Capacity Exchange to see specifics.
- d) Difference Summer MW equals Summer Committed MW (ICAP) minus Total Summer ICAP (MW)
- e) Difference Annual MW equals Annual Committed MW (ICAP) minus Minimum of Total Summer MW (ICAP) and Total Winter MW (ICAP).

CSP	Product	Resource Name	Zone	Resource ID	Summer Commitment MW (ICAP)	Annual Commitment MW (ICAP)	Reg ID	Customer Name	Summer ICAP (MW)	Winter ICAP (MW)
PJMTest	Capacity Performance DR	PJMTest PECO DR 2	PECO	4787715	25	25	3287736	aly test registration 1	16.0	15.0
							3287737	aly test registration 2	10.0	10.0
								Total MW	26.0	25.0
								Difference Summer MW	1.0	
								Difference Annual MW		0.0

Registration	Summer ICAP (kW)	Winter ICAP (kW)
1	17,100	15,400
2	8,500	11,200
Total	25,600	26,600

Annual CP commitment = **25**, Summer Only commitment = **2**

Summer: **27000** minus 25600 = 1400 = **1.4 MW (short)**

Annual CP: **25000** minus (lesser of 25600 and 26600) = 600 = **0.6 MW (long for winter period only, 0.6 MW used to reduce Summer short from 2 MW to 1.4MW)**

RPM Resource Commitment	MW (ICAP)	Shortfall
June thru October	27	1.4
November thru April	25	-0.6
May	27	1.4

1 MW winter excess cannot be utilized (winter-period DR does not exist)

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							3287737	aly test registration 2	8.5	11.2
								Total MW	25.6	26.6
								Difference Summer MW	-1.4	
								Difference Annual MW		0.6

- Resources Linked to Registrations Report will round to 1 decimal place to match Capacity Exchange
- When registration is marked “Completed” immediately after selecting the RPM Auction Resource, the RPM Auction Resource is no longer set to null
- When registration is marked “Completed”, the RPM Auction Resource is required

Appendix

Capacity Section Steps for Load Management Registrations

- **Annual CP registration (need Summer and Winter Nominated ICAP > 0) - no change**
 - Enter PLC, Measurement Method, Summer Managed Load
 - Verify Summer Nominated ICAP
 - Submit registration for EDC Review
 - The next 3 steps can be done before or after EDC Review
 - Upload meter data for Winter Peak Load calculation
 - Enter Winter Managed Load
 - Verify Winter Nominated ICAP
 - Mark registration “Completed” when data is all finalized

- **Summer Only CP registration (rare) – no Winter Nominated ICAP needed**
 - Enter PLC, Measurement Method, Summer Managed Load
 - Verify Summer Nominated ICAP
 - Check “Summer Only” Checkbox (new field - defaults to unchecked, Winter Managed Load, Winter Nominated ICAP gray out)
 - Submit registration for EDC Review
 - Mark registration “Completed” when data is all finalized
 - Winter Peak Load may still be calculated by uploading meter data but not necessary to mark registration “Completed”

- **Winter Only CP registration (rare) – no Summer Nominated ICAP needed**
 - Set PLC to zero: Summer Managed Load defaults to zero if blank, Measurement Method defaults to FSL if blank, Summer Nominated ICAP calculates to zero
 - Verify Summer Nominated ICAP is zero
 - Submit registration for EDC Review
 - The next 3 steps can be done before or after EDC Review
 - Upload meter data for Winter Peak Load calculation
 - Enter Winter Managed Load
 - Verify Winter Nominated ICAP
 - Mark registration “Completed” when data is all finalized