



On-Site Generation Economic DR settlements process

(Update to 6/8/2021 DRS meeting)

- Implementation of High level DR Hub changes to enhance the on-site generation economic DR settlement process
 - Generation Cost section to appear on economic registrations having locations with on-site generation starting 9/1
 - Hourly Cost/Retail rate data to appear 9/1 on settlements corresponding to RT/DA Events occurring after 8/31/2021
- Upon implementation the requirement for historical data for On-Site generation will continue but to be supplied upon request to PJM.
 - Cogeneration applications



DR Hub enhancements to simplify the settlement process

Example of Generator Cost/Retail rate sections on Settlement in DR Hub (note the 4 hourly columns on the far right):

Settlement Details

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

Cancel Save Submit

XML

Settlement Id: 579

CSP: PE LSE: AE EDC: BC

Registration ID: 10104 Registration Name: Registration 1 Event Date: 07/10/2021

Program: Economic Invoice Date: Pricing Point: APS_RESID_AGG

Zone: APS Status: Incomplete **H**

Dispatch Group:

Note that all individual cells in new columns are editable (Supply cells only editable if retail rate type 'Fixed' designated on registration)

Reduction Hour?	HE	Market	Scheduled (kW)	Dispatched (kW)	Load (kW)	CBL/Gen (kW)	Reduction (kW)	Loss Factor	Supply (\$/Kwh)	Delivery (\$/Kwh)	Fuel Cost (\$/Mwh)	Variable OM (\$/Mwh)
<input checked="" type="checkbox"/>	15	DA Energy	3000.0	0.0	0.0	0.0	0.0	1.1	0.2	0.2	300.99	400.99
<input checked="" type="checkbox"/>	16	DA Energy	3000.0	0.0	0.0	0.0	0.0	1.1	0.2	0.2	300.99	400.99
<input checked="" type="checkbox"/>	17	DA Energy	3000.0	0.0	0.0	0.0	0.0	1.1	0.2	0.2	300.99	400.99
<input checked="" type="checkbox"/>	18	DA Energy	3000.0	0.0	0.0	0.0	0.0	1.1	0.2	0.2	300.99	400.99
Total/Average			12000.0	0.0	0.0	0.0	0.0	1.10000	0.2	0.2	300.99	400.99

CBL Calculation

CBL Method: MBL(Max Base Load) Status: Pending

Summary: Valid as of:

- Download Meter Data
- + Upload Meter Data
- Calculate CBL
- Load Data Review
- CBL Detail Report



Updated PJM energy settlement methodology

- Based upon member feedback, PJM plans to determine settlement eligibility on an hourly basis.
 - If generator cost < retail rate for any hour, that settlement hour is not eligible for settlement
 - Hour will not be processed whether RT or DA energy

Date	Hour	Generator Cost	Retail Rate	Eligible
4/29/2021	11	\$60.00	\$29.24	YES
4/29/2021	12	\$60.00	\$24.18	YES
4/29/2021	19	\$60.00	\$137.49	NO
4/29/2021	20	\$60.00	\$55.49	YES
4/29/2021	21	\$60.00	\$180.77	NO
4/29/2021	22	\$60.00	\$52.47	YES

- Generator Cost = Fuel Cost + Variable Operation and Maintenance Cost (VOM)
 - Fuel Cost (include the estimated \$/MWh cost for fuel)
 - This can include gas demand charges where the demand charge is based on the monthly demand charges cost divided by the estimate run hours in the month.
 - VOM Cost (\$/MWh)
 - Variable Repair and Maintenance costs
 - Should *not* include employee salaries and benefits (not variable).