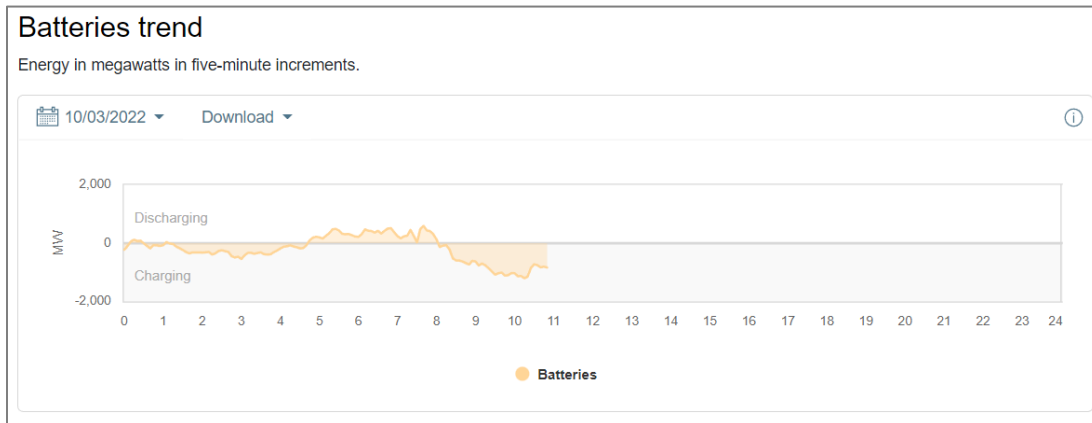


## California ISO Readiness Notes

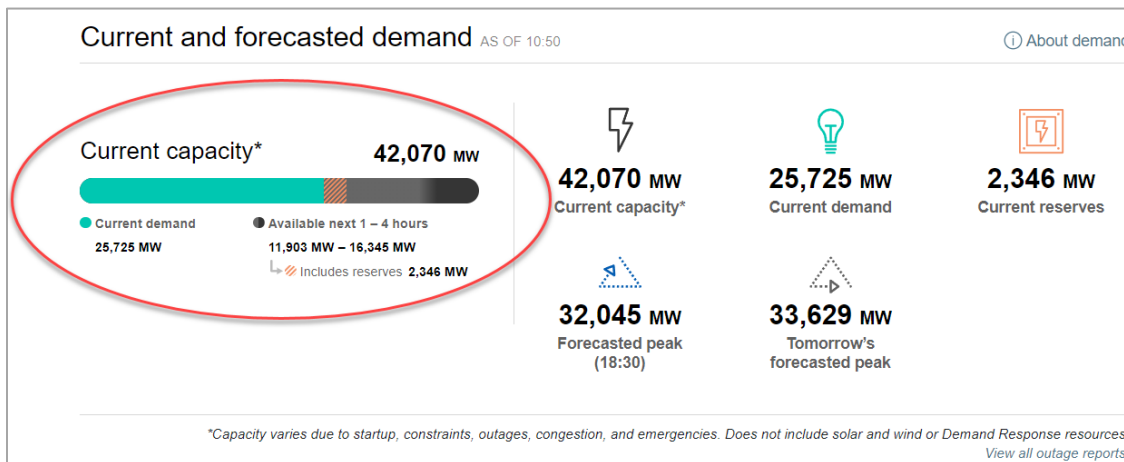
**Title:** Data Transparency Improvements 2022

The California ISO has implemented a suite of transparency related enhancements which includes new data elements to be added to existing reports, creating new reports for improved data analysis and in some cases provides increased clarity of existing information. The details about all the improvements are summarized in this document.

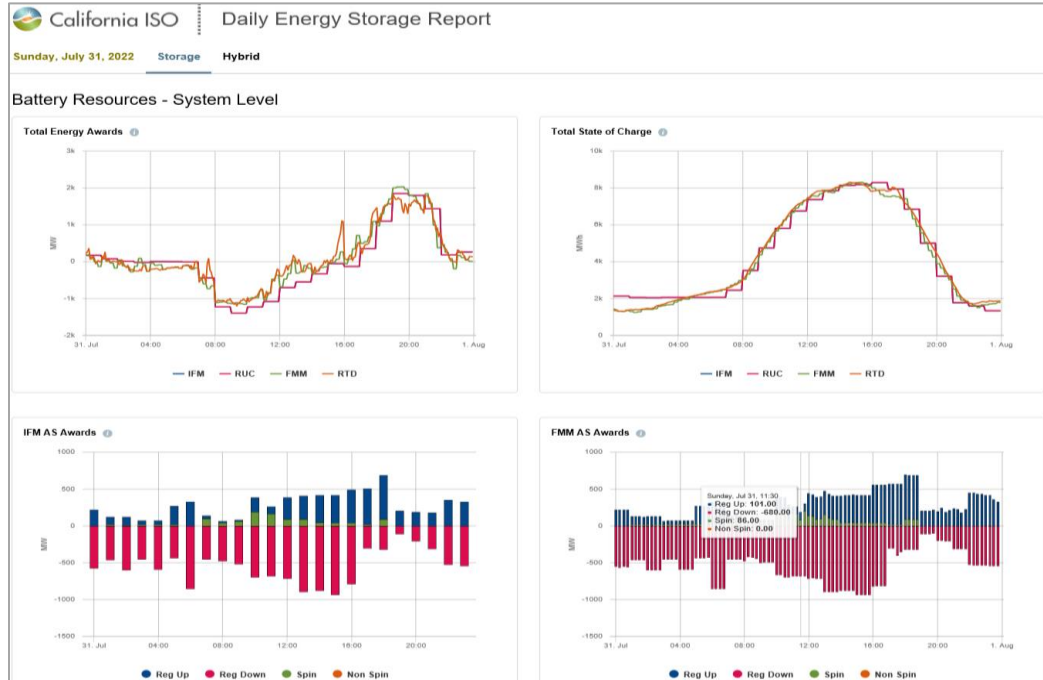
**Today's Outlook information:** The [counting methodology for battery capacity](#) has been modified to reflect units online that have reached commercial operation date, and no longer includes those in the commissioning process. This provides an accurate count of the amount of MWs that are currently on-line to serve demand and is a level of detail that was often requested by stakeholders and interested parties. This improvement was completed on March 31, 2022.



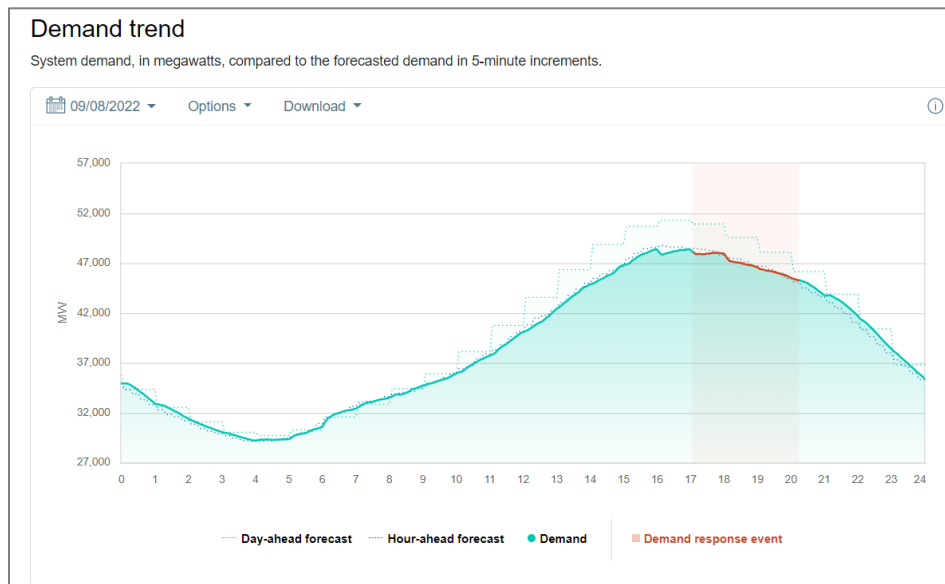
A redesign of the existing [capacity chart](#) was completed on June 15, 2022, to better define available capacity as well as provide granularity of reserves. This enhancement provides real-time data on the current demand along with the amount of capacity available on the grid to meet changes in demand. This information is updated every five minutes and can be used to inform situational awareness.



The ISO has posted a new [Daily Energy Storage Report](#) to provide market participants with selected metrics on the performance of storage and hybrid resources, including bid-in capacity, awards, state of charge, and procurement of ancillary services for both day-ahead and real-time markets, to bring improved visibility to how storage and hybrid resources are being dispatched in the ISO markets.

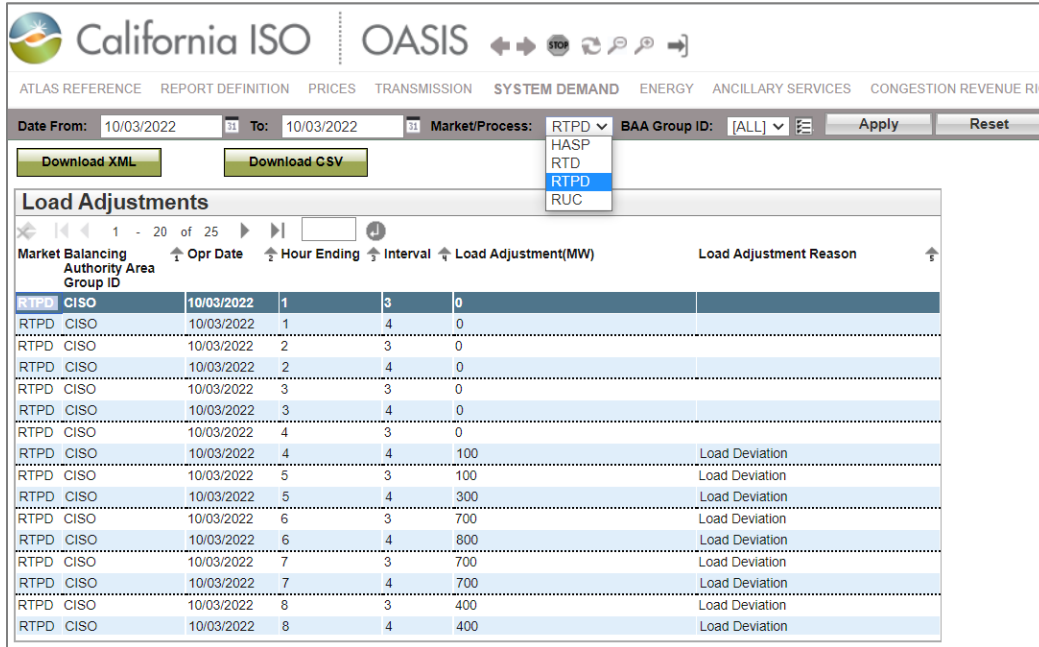


The ISO added a highlighted line on the [demand trend](#) that visually indicates when a Demand Response event has occurred and the subsequent divergence from the load forecast. This enhancement brings visibility to a demand response event and the overall impact of load reduction.



**OASIS data:** Publication of RUC/HASP/RTPD/RTD adjustments (load forecast adjustments/load bias) and publication of curtailment (schedule reduction) data (wheels, exports, load). These enhancements provide real-time operational data that is beneficial to market participants since these adjustments determine the final forecast used in market runs, which impacts price formation, generation dispatch schedules, and import/export schedules. This was completed on June 8, 2022.

Navigation path: OASIS > System Demand > Load Adjustments



California ISO OASIS

ATLAS REFERENCE REPORT DEFINITION PRICES TRANSMISSION SYSTEM DEMAND ENERGY ANCILLARY SERVICES CONGESTION REVENUE RIG

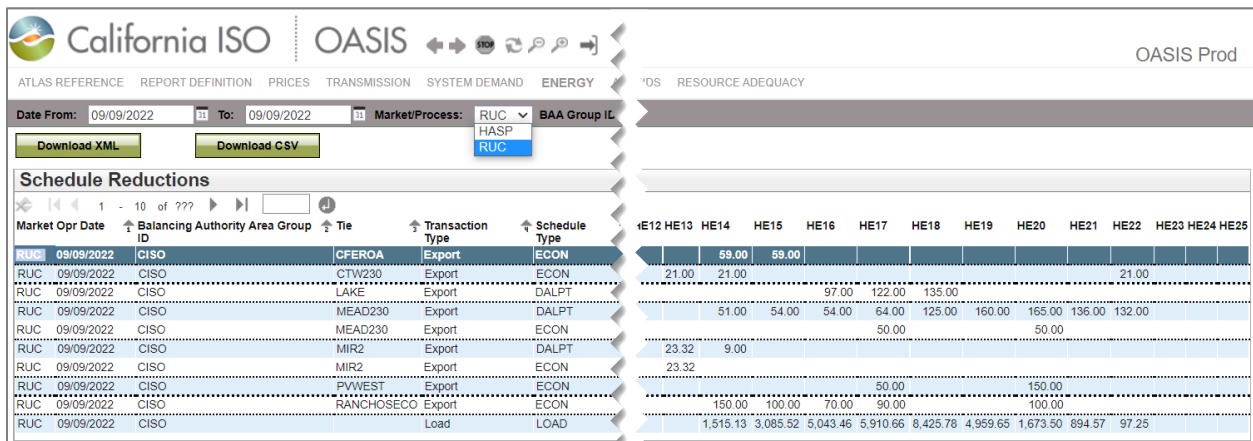
Date From: 10/03/2022 To: 10/03/2022 Market/Process: RTPD BAA Group ID: [ALL] Apply Reset

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### Load Adjustments

Market Balancing Authority Area Group ID	Opr Date	Hour Ending	Interval	Load Adjustment(MW)	Load Adjustment Reason
RTPD CISO	10/03/2022	1	3	0	
RTPD CISO	10/03/2022	1	4	0	
RTPD CISO	10/03/2022	2	3	0	
RTPD CISO	10/03/2022	2	4	0	
RTPD CISO	10/03/2022	3	3	0	
RTPD CISO	10/03/2022	3	4	0	
RTPD CISO	10/03/2022	4	3	0	
RTPD CISO	10/03/2022	4	4	100	Load Deviation
RTPD CISO	10/03/2022	5	3	100	Load Deviation
RTPD CISO	10/03/2022	5	4	300	Load Deviation
RTPD CISO	10/03/2022	6	3	700	Load Deviation
RTPD CISO	10/03/2022	6	4	800	Load Deviation
RTPD CISO	10/03/2022	7	3	700	Load Deviation
RTPD CISO	10/03/2022	7	4	700	Load Deviation
RTPD CISO	10/03/2022	8	3	400	Load Deviation
RTPD CISO	10/03/2022	8	4	400	Load Deviation

Navigation path: OASIS > Energy > Schedule > Schedule Reductions



California ISO OASIS

ATLAS REFERENCE REPORT DEFINITION PRICES TRANSMISSION SYSTEM DEMAND ENERGY OASIS Prod

Date From: 09/09/2022 To: 09/09/2022 Market/Process: RUC BAA Group ID: [ALL] Apply Reset

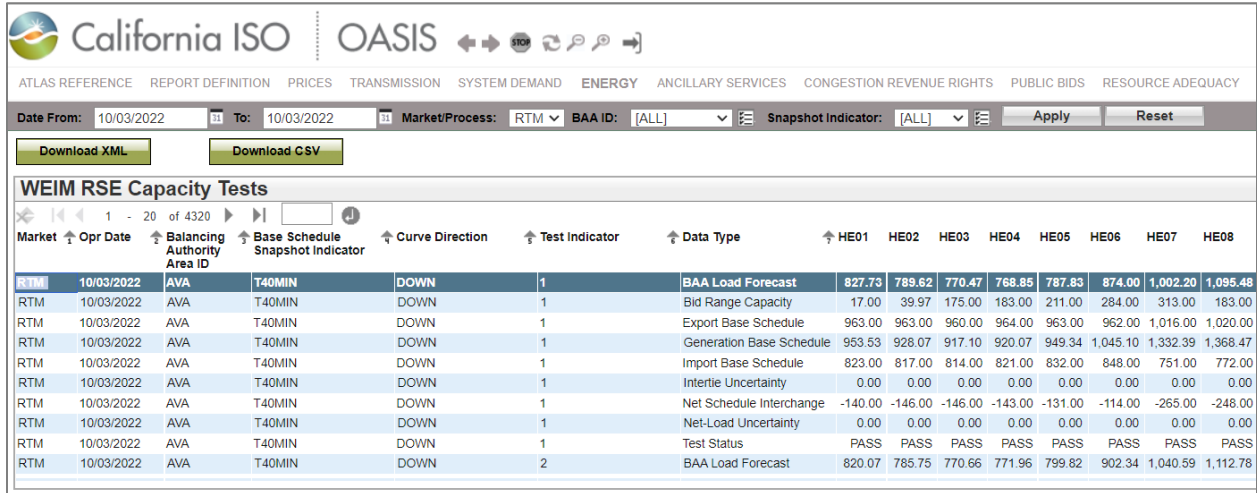
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### Schedule Reductions

Market Opr Date	Balancing Authority Area Group	Tie	Transaction Type	Schedule Type	HE12	HE13	HE14	HE15	HE16	HE17	HE18	HE19	HE20	HE21	HE22	HE23	HE24	HE25
RUC 09/09/2022	CISO	CFEROA	Export	ECON			59.00	59.00										
RUC 09/09/2022	CISO	CTW230	Export	ECON	21.00	21.00												21.00
RUC 09/09/2022	CISO	LAKE	Export	DALPT					97.00	122.00	135.00							
RUC 09/09/2022	CISO	MEAD230	Export	DALPT			51.00	54.00	54.00	64.00	125.00	160.00	165.00	136.00	132.00			
RUC 09/09/2022	CISO	MEAD230	Export	ECON						50.00			50.00					
RUC 09/09/2022	CISO	MIR2	Export	DALPT	23.32	9.00												
RUC 09/09/2022	CISO	MIR2	Export	ECON	23.32													
RUC 09/09/2022	CISO	PVWEST	Export	ECON						50.00								150.00
RUC 09/09/2022	CISO	RANCHOSECO	Export	ECON			150.00	100.00	70.00	90.00				100.00				
RUC 09/09/2022	CISO		Load	LOAD			1,515.13	3,085.52	5,043.46	5,910.66	8,425.78	4,959.65	1,673.60	894.57	97.25			

**Additional WEIM Data Transparency and Reporting:** The ISO increased the amount of information provided from balancing tests by adding data from the resource sufficiency evaluation (RSE) capacity tests and the flexible ramping tests. These enhancements improve market efficiency by providing information at a more granular level so that WEIM market participants are able to identify factors that may contribute to passing/failing a balancing test. This enhancement was completed on June 15, 2022.

Navigation path: OASIS > Energy > Energy Imbalance Market > WEIM RSE Capacity Tests



California ISO OASIS

ATLAS REFERENCE REPORT DEFINITION PRICES TRANSMISSION SYSTEM DEMAND ENERGY ANCILLARY SERVICES CONGESTION REVENUE RIGHTS PUBLIC BIDS RESOURCE ADEQUACY

Date From: 10/03/2022 To: 10/03/2022 Market/Process: RTM BAA ID: [ALL] Snapshot Indicator: [ALL] Apply Reset

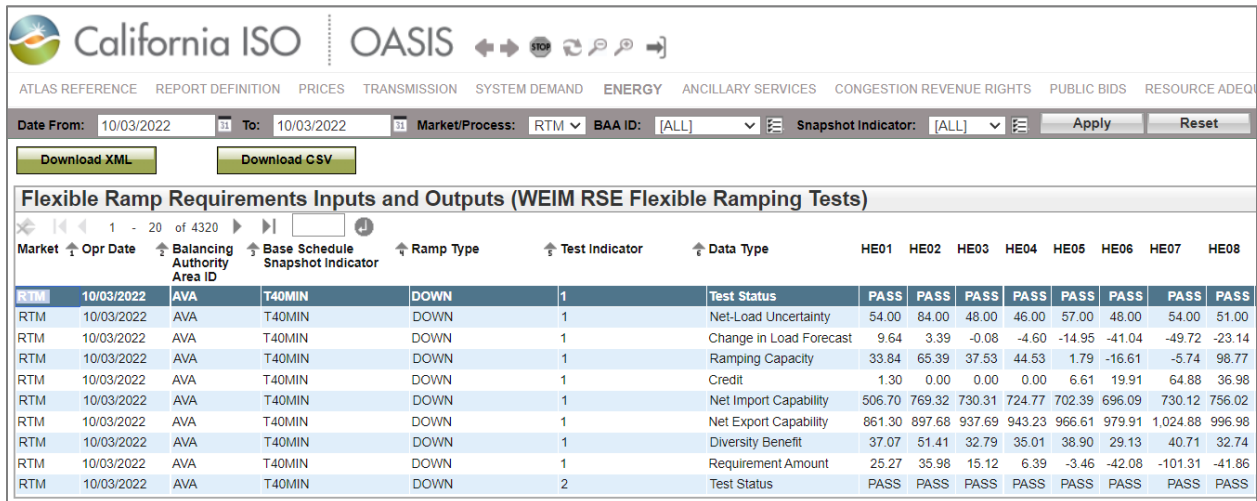
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### WEIM RSE Capacity Tests

1 - 20 of 4320

Market	Opr Date	Balancing Authority Area ID	Base Schedule Snapshot Indicator	Curve Direction	Test Indicator	Data Type	HE01	HE02	HE03	HE04	HE05	HE06	HE07	HE08
RTM	10/03/2022	AVA	T40MIN	DOWN	1	BAA Load Forecast	827.73	789.62	770.47	768.85	787.83	874.00	1,002.20	1,095.48
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Bid Range Capacity	17.00	39.97	175.00	183.00	211.00	284.00	313.00	183.00
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Export Base Schedule	963.00	963.00	960.00	964.00	963.00	962.00	1,016.00	1,020.00
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Generation Base Schedule	953.53	928.07	917.10	920.07	949.34	1,045.10	1,332.39	1,368.47
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Import Base Schedule	823.00	817.00	814.00	821.00	832.00	848.00	751.00	772.00
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Intertie Uncertainty	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Net Schedule Interchange	-140.00	-146.00	-146.00	-143.00	-131.00	-114.00	-265.00	-248.00
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Net-Load Uncertainty	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Test Status	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
RTM	10/03/2022	AVA	T40MIN	DOWN	2	BAA Load Forecast	820.07	785.75	770.66	771.96	799.82	902.34	1,040.59	1,112.78

Navigation path: OASIS > Energy > Flexible Ramping > Flexible Ramp Requirements Inputs and Outputs



California ISO OASIS

ATLAS REFERENCE REPORT DEFINITION PRICES TRANSMISSION SYSTEM DEMAND ENERGY ANCILLARY SERVICES CONGESTION REVENUE RIGHTS PUBLIC BIDS RESOURCE ADEQUACY

Date From: 10/03/2022 To: 10/03/2022 Market/Process: RTM BAA ID: [ALL] Snapshot Indicator: [ALL] Apply Reset

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### Flexible Ramp Requirements Inputs and Outputs (WEIM RSE Flexible Ramping Tests)

1 - 20 of 4320

Market	Opr Date	Balancing Authority Area ID	Base Schedule Snapshot Indicator	Ramp Type	Test Indicator	Data Type	HE01	HE02	HE03	HE04	HE05	HE06	HE07	HE08
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Test Status	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Net-Load Uncertainty	54.00	84.00	48.00	46.00	57.00	48.00	54.00	51.00
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Change in Load Forecast	9.64	3.39	-0.08	-4.60	-14.95	-41.04	-49.72	-23.14
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Ramping Capacity	33.84	65.39	37.53	44.53	1.79	-16.61	-5.74	98.77
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Credit	1.30	0.00	0.00	0.00	6.61	19.91	64.88	36.98
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Net Import Capability	506.70	769.32	730.31	724.77	702.39	696.09	730.12	756.02
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Net Export Capability	861.30	897.68	937.69	943.23	966.61	979.91	1,024.88	996.98
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Diversity Benefit	37.07	51.41	32.79	35.01	38.90	29.13	40.71	32.74
RTM	10/03/2022	AVA	T40MIN	DOWN	1	Requirement Amount	25.27	35.98	15.12	6.39	-3.46	-42.08	-101.31	-41.86
RTM	10/03/2022	AVA	T40MIN	DOWN	2	Test Status	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS

