

Targeted Demand Response Program (TDRP)

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Demand Response In-Depth

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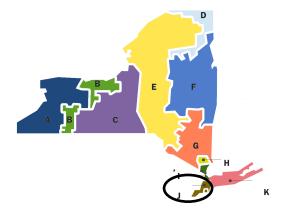
Session Objectives

- Define the purpose of the Targeted Demand Response Program (TDRP)
- Identify conditions for deploying the TDRP
- Explain similarities to NYISO's other reliability-based Demand Response programs (e.g., Event Notification, Event Response, Meter Verification, Settlement)



Targeted Demand Response Program

- One of NYISO's reliability-based demand response programs
- <u>Purpose</u>: Provide load reductions under specific conditions, in response to a Transmission Owner's request for assistance, to solve local reliability problems
- Only available in targeted areas within Load Zone J (New York City)





TDRP Deployment – Load Zone J

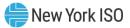
- NYISO deploys DR resources in one or more sub-load pockets in Load Zone J
- The sub-load pockets correspond to the following Transmission Owner network area substation groupings

Sub-Load Pocket Identification	Area Substation Grouping					
J1	Sherman Creek/Parkchester/E 179 th					
J2	Astoria West/Queensbridge					
J3	Vernon/Greenwood					
J4	Staten Island					
J5	Astoria East/Corona/Jamaica					
J6	W 49 th					
J7	E13 th /East River					
J8	Farragut/Rainey					
J9	Shared Subzone					



TDRP Resources

- TDRP deploys existing wholesale market EDRP resources and SCRs enrolled in Zone J
- Load reduction during a TDRP reliability event is <u>voluntary</u>
- Load reduction through interruptible loads or loads with a qualified behindthe-meter Local Generator
- In 2021, 96.5% of total NYCA EDRP MW and 35.2% of total NYCA ICAP/SCR MW participated in the TDRP



Conditions for Deploying TDRP

- A TDRP event is called (either for specific sub-load pockets or for the entire Zone J) when
 - Contingencies exist that cannot be cleared through available Generation resources, or
 - Significant service interruptions are anticipated unless Load relief measures are employed
- Contingencies could exist in
 - The Transmission and Sub-Transmission System (69kV or higher)
 - Lower Voltage Systems (33kV or below)
- Based on the contingencies, NYISO might put forth Day Ahead advisories, or In-Day Deployment notices for TDRP deployment



- Program Eligibility Requirements:
 - Resources geographically present in Zone J, currently enrolled in either the EDRP or SCR programs can participate in TDRP events; no separate eligibility requirements
- Enrollment Process:
 - No separate enrollment required
- Baselines for Performance Measurement:
 - Customer Baseline Load (CBL), as calculated for EDRP/SCR resources
 - Weekday or weekend CBL calculation similar to EDRP resources
 - In-day weather adjustment allowed
- Performance Measurements:
 - Load reduction during a TDRP event measured using metering data submitted, similar to EDRP/SCR resources



- <u>TDRP Event Notification and Customer response</u>: Event notification for a TDRP event and customer response to Event notification are similar to a NYISO event (SCR/EDRP activation)
 - Communication from NYISO contain similar information, and will clearly be marked as a TDRP Event
- The CSP or the RIP for the EDRP/SCR resource provides expected kW response (expected curtailment value) to the NYISO in response to the notification



Demand Response Information System Sullding The Energy Markets of TomorrowToday										
Main 🕶 MP 🕶	Resource - SCF	R - Performance Factors	s ▼ DR Event ▼ Mitigation	r ▼ Tables	- Notif	cation -	DSASP - BTM -			
Capability Perio	d: Summer 2021	Notification Type	e:	Message				d:	v	
Events From Date: Program: Y Zon					Zone 🖑	View Available MW Values			Display	
Expected MW for Scarci										
Notification Requir	Notification Requiring a Response Summary									
Capability Period	Notification Type	Notice Date/Time	Message Type	Program	Evencor Date/Tin		Date/Time	Zones	Response Expiration Date/Time	
Summer 2021	NYISO Event	05/12/2021 09:59	Communication Test		05/12/2	21 09:59	05/12/2021 11:00		05/12/2021 11:00	
Summer 2021	NYISO Event	06/09/2021 10:54	Communication Test		06/09/2	21 10:54	06/09/2021 12:00		06/09/2021 12:00	
Summer 2021	NYISO Event	06/10/2021 15:17	Communication Test		06/10/2	21 15:17	06/10/2021 16:00		06/10/2021 16:00	
Summer 2021	TDRP Event	06/28/2021 12:08	Day-Ahead Advisory	SCR	06/29/2	21 14:00	06/29/2021 19:00	J2	06/28/2021 13:08	
Summer 2021	TDRP Event	06/28/2021 12:08	Day-Ahead Advisory	EDRP	06/29/2	21 14:00	06/29/2021 19:00	J2	06/28/2021 13:08	
Summer 2021	TDRP Event	06/29/2021 09:42	Activation(2 Hour Notice)	SCR	06/29/2	21 14:00	06/29/2021 19:00	32	06/29/2021 10:42	
Summer 2021	TDRP Event	06/29/2021 09:43	Activation(2 Hour Notice)	EDRP	06/29/2	21 14:00	06/29/2021 19:00	J2	06/29/2021 10:43	
Summer 2021	TDRP Event	06/29/2021 09:46	Day-Ahead Advisory	SCR	06/30/2	21 13:00	06/30/2021 20:00	32	06/29/2021 10:46	
Summer 2021	TDRP Event	06/29/2021 09:46	Day-Ahead Advisory	EDRP	06/30/2	21 13:00	06/30/2021 20:00	J2	06/29/2021 10:46	
Summer 2021	TDRP Event	06/30/2021 10:26	Activation(2 Hour Notice)	SCR	06/30/2	21 13:00	06/30/2021 20:00	32	06/30/2021 11:26	
Summer 2021	TDRP Event	06/30/2021 10:26	Activation(2 Hour Notice)	EDRP	06/30/2	21 13:00	06/30/2021 20:00	32	06/30/2021 11:26	
Summer 2021	NYISO Event	07/14/2021 13:01	Communication Test		07/14/2	21 13:01	07/14/2021 14:15		07/14/2021 14:15	
Summer 2021	NYISO Event	07/30/2021 09:57	Communication Test		07/30/2	21 09:57	07/30/2021 11:00		07/30/2021 11:00	
Summer 2021	NYISO Event	08/10/2021 10:40	Day-Ahead Advisory	SCR	08/11/2	21 14:00	08/11/2021 19:00	К	08/10/2021 11:40	



Event Reporting:

- Resource response to a TDRP event must be submitted to the NYISO through DRIS before the identified deadline
- Event response is imported into DRIS following the same guidelines as an EDRP/SCR resource during a NYISO reliability event
- Data required include:
 - CBL Dates (1-10) Customer baseline calculation date (1-10)
 - CBL Include Indicator (1-10) Field to indicate if the CBL date will be included in the CBL calculation
 - CBL kW (HB0-HB23) Resource hourly CBL calculation for each Event hour
 - Metered kW (HB0-HB23) Resource hourly metered load for each Event hour
- Verification:
 - All phases of meter verification and event response verification will be handled similarly to EDRP/SCR response to a NYISO reliability event



- Settlements:
 - Settlements for a TDRP resource will be handled in accordance with the program that the resource is enrolled in
 - EDRP resources will be paid for verified load reduction during each hour of the payment eligibility period, as described earlier
 - SCR resources will be paid Energy payments for verified load reduction during each hour of the payment eligibility period, as described earlier
 - SCR resources may also be eligible for BPCG (Bid Production Cost Guarantee) payments
 - SCR resource response for TDRP events is voluntary, therefore no penalties apply
 - The cost for TDRP payments will be recovered from the Transmission District owner for Zone J

TDRP Performance Measurements and



Settlement

Demand Response Information System Event Response Details											
MP Resource SCR Performance Factors DR Event Mitigation Tables Notification DSASP BTM											
Capability Period: Summer 2021 V Zone: Event: TDRP Event - SCR - 06 V MP: All V Gen PTLD: V Aggregation: V Reporting: V Display V											
Resource Responses to Events											
MP Name	Event	Resource ID Resource	e Name	Meter Author	ity Progr	am	Aggregatio	n ID	Proxy Test	Provisional ACL	Incremental ACL
MP1	TDRP Event - SCR - 06/30/2021 01:	20001 SCF	. 15	MA 1	SCR		1001				
	TDRP Event - SCR - 06/30/2021 01:				SCR						
Event Information		ИŚ	Performan	nce Hourly Mete	er Data Enr	ollment Hourly	Meter Data	CBL Dates	Hourly Billing Data		
Type: TDRP Event	Program: SCR	Zones: J2	Resource	Hour 🔶 Net A	CL Verified A	CL CBL kW	Metered	Energy Red	Declared Value/Test V	'alue Ca	pacity Reduction kW
- Event Dates	- Performance Hours	Response Submittal Dates	20001	14 300		280	200	80	150		100
Start: 06/29/2021 14:	00 First:	Start: 07/01/2021 08:00	20001		-	300	200	100	150		100
End: 06/29/2021 19:	00 Last:	End: 09/12/2021 17:00	20001	16 30		310	200	110	150		100
Description of the second			20001	17 300 18 300		310 290	200 200	110	150		100
Payment Hours First: 06/29/2021 14: Last: 06/29/2021 18:		CBL Dates Start: 05/30/2021 End: 06/27/2021	20001	10 000	- L	230	200	90	150		100



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References

- Market Services Tariff (MST)
- Emergency Demand Response Program Manual
- Demand Response Information System (DRIS) User's Guide