

Demand Response Business Process Issue Framework

1.0 Qualification

Process	Description	Affected Entity
Product/Program Definition	Defining the various DR markets, products/programs, objectives, participants, requirements, operating rules, and success criteria	ISO, Stakeholders, Participants,
Participant Qualification	Criteria and process for determining market participation	ISO, Stakeholders, Participants
Resource Qualification	Criteria and process for determining resource participation prior to enrollment in a product/program	ISO, CSP
Integration to Registration	Method for ensuring smooth process transition from qualifying steps to actual resource enrollment in product/program	ISO

2.0 Registration

Process	Description	Affected Entity
Resource Profiling	Defining the demand response characteristics of a resource to be registered	CSP
<ul style="list-style-type: none"> Unique Identifiers 	Method for identifying a given resource uniquely across multiple participants	CSP, UDC, LSE
<ul style="list-style-type: none"> Reduction Capacity/ Profile 	Sources and capacity of demand reduction resources	CSP
<ul style="list-style-type: none"> Shutdown Costs/Time 	Parameters for consideration in bidding and dispatching events	CSP
<ul style="list-style-type: none"> Shutdown Response Time 	Amount of notice necessary for shutdown operation	CSP, Participant
<ul style="list-style-type: none"> LMP and/or Retail Rate 	Determining the price(s) and formula to be used in settlement	CSP, LSE
<ul style="list-style-type: none"> Retail Contract Type 	Type of retail energy contract	CSP, LSE
<ul style="list-style-type: none"> Baseline Approach 	Method of calculating load baselines for deriving a reduction	CSP, LSE
<ul style="list-style-type: none"> Telemetry 	Method and granularity of data	CSP
<ul style="list-style-type: none"> Aggregation 	Approach to handling a resource that is an aggregate of other individual resources	CSP
Program Enrollment	Method of registering a given resource for a given program for a given length of time	CSP, LSE, UDC, ISO
Enrollment Duplicates	Method of identifying and resolving duplicate enrollment, or other prohibited combinations of enrollments	CSP, ISO
Enrollment	Method of submitting, tracking, and resolving enrollment	CSP, LSE, UDC, ISO

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Process	Description	Affected Entity
Disputes	disputes	
Enrollment Changes	Method and rules for requesting changes to a registration or resource profile	CSP, LSE, UDC, ISO
Resource Transfers	Method and rules for transferring resources from one participant (CSP or LSE) to another	CSP, LSE, UDC, ISO
Testing & Auditing	Method and rules for periodically testing and auditing the reported resource reduction capacity	CSP, ISO
Integration to Scheduling	Method for ensuring smooth process transition from registration to the actual scheduling of resources into the market	ISO

3.0 Scheduling

Process	Description	Affected Entity
System Forecasting	Incorporating demand resources into the long and short term forecasting processes	ISO
<ul style="list-style-type: none"> • Load 	Forecast of load with and without inclusion of price sensitive or emergency interruptible load	ISO, LSE, CSP
<ul style="list-style-type: none"> • Reduction Capacity 	Forecast of reduction capacity given seasonal or secular variations of load and interruptible load	ISO, CSP
<ul style="list-style-type: none"> • Transmission Constraints 	Impact of transmission constraints on the need for or use of demand resources	ISO
<ul style="list-style-type: none"> • Planned Outages 	Forecast of demand resource outages, or other outages that might require the use of reduction capacity	ISO, CSP, LSE
<ul style="list-style-type: none"> • Reliability 	Any other reliability review process that might need to incorporate demand resources	ISO
Resource Forecasting	Participants providing long and short term estimates of load and reduction capacity	CSP, LSE, Participant
Resource Scheduling/ Bidding	Actual participation in the various markets	CSP, LSE
<ul style="list-style-type: none"> • Resource Identification 	Method of identifying the resource to be scheduled, on both the load and demand sides	CSP, LSE
<ul style="list-style-type: none"> • Resource Location 	Method and granularity of identifying the network model location of the resource	CSP, LSE
<ul style="list-style-type: none"> • Resource Aggregation 	Method and approach for allowing the participant to aggregate resources together when scheduling	CSP, LSE
Resource/ Schedule Alignment	Method of correlating CSP and LSE resources schedules with each other	CSP, LSE
Integration to Operations	Method of informing grid operations of demand resource schedules, and/or allowing them to dispatch capacity	ISO
Integration to	Method of informing settlements of market awards	ISO

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Process	Description	Affected Entity
Settlements		

4.0 Notifications

Process	Description	Affected Entity
Forecasts	Method for collecting and/or distributing demand resource forecasts	ISO, CSP
Self-Schedules	Method and timing for collecting and/or distributing demand resource self-schedules	ISO, CSP
Day-ahead Schedules	Method and timing for distributing demand resource day-ahead market awards	ISO, CSP, LSE
Real-time Dispatch	Method and timing for distributing demand resource real-time market energy dispatches	ISO, CSP, LSE
Ancillary Services	Method and timing for distributing demand resource ancillary service instructions, especially for real-time synchronous reserve and regulation	ISO, CSP, LSE
Emergency Reserves	Method and timing for communicating emergency events and/or dispatching specific reserve capacity	ISO, CSP, LSE
Outages	Method and timing for collecting and/or distributing demand resource outage information	ISO, CSP, LSE
Event Tagging	Method for uniquely identifying demand response events	ISO
Integration to Settlement	Method for informing settlements of what events occurred during real-time operations	ISO

5.0 Metering & Telemetry

Process	Description	Affected Entity
Metering Provider	Identifying the meter data source for given registration	ISO, CSP, LSE, UDC, MDMA
Metering Validation	Verification of in-place meter	ISO, MDMA
Data Availability	Ability to provide timely meter & telemetry data for DR event	ISO, MDMA
Data Type & Granularity	Type and granularity of data being provided	ISO, MDMA
Data Accuracy	Accuracy of meter and telemetry data being provided	ISO, CSP, MDMA
Integration to Settlement	Method for communicating summarized, aggregated, and validated interval data to the settlements process	ISO

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6.0 Settlement

Process	Description	Affected Entity
Event Prioritization	Determining which events to settle for what resources and in what order	ISO
Determinant Collection	Identifying and collecting all the required bill determinants to settle a specific event for a specific resource	ISO
Baseline Calculation	Method for calculating a baseline from which a load reduction will be determined	ISO
Reduction Calculation	Method for calculating the actual load reduction	ISO
Settlement Calculation	Method for calculating the actual settlement	ISO
<ul style="list-style-type: none"> • Day Ahead 	Cash flow model for cleared DA demand bids	CSP, LSE
<ul style="list-style-type: none"> • Real-time 	Cash flow model for RT dispatched demand	CSP, LSE
<ul style="list-style-type: none"> • Ancillary Services 	Cash flow model for AS provided by demand resources	CSP, LSE
<ul style="list-style-type: none"> • Emergency 	Cash flow model for called emergency resources	CSP, LSE
Settlement Approvals	Method of submitting demand response event settlements for approval prior to actually billing/crediting	ISO, CSP, LSE, UDC
Settlement Adjustments	Method of re-calculating and submitting settlement adjustments	ISO, CSP, LSE, UDC
Settlement Disputes	Method of submitting, tracking, and resolving settlement disputes	ISO, CSP, LSE, UDC
Integration to Performance Management	Method for communicating settlement information to the performance management process	ISO

7.0 Performance Management

Process	Description	Affected Entity
Resource Performance	Measuring and reporting the activity and performance of resources	ISO, Participants
Participant Performance	Measuring and reporting the activity and performance of participants	ISO, Participants, Stakeholders
Program Performance	Measuring and reporting the activity and performance of participants	ISO, Participants, Stakeholders, Regulators
System Performance	Measuring and reporting the net effect of all demand response programs on reliability, market prices, etc	ISO, Participants, Stakeholders, Regulators