

Wholesale Data Requirements

Element	Short Description	Complete Description	Enterprise Architect Attribute Name	Unit Of Measure	
1	Facility ID	Identifier assigned to the Facility	A Facility is the location at which connection to the transmission or distribution system is made. This is most closely related to a CIM SDPLocation.	IRC::Facility:facilityID	Numeric
11	Facility Name	Name of the Facility		IRC::Facility:name [CIM::IdentifiedObject:name]	AlphaNum
2	Resource ID	Identifier assigned to the Resource	A Resource is a group of Response Method Aggregations that represents a dispatchable entity. A Demand Resource is a Load or aggregation of Loads capable of measurably and verifiably providing Demand Response. The corresponding CIM term is RegisteredResource. A Load is an end-use device or customer that receives power from the electric system (NERC Definition). Demand Response is a temporary change in electricity consumption by a Demand Resource in response to market or reliability conditions. For purposes of these standards, Demand Response does not include energy efficiency or permanent Load reduction.	IRC::Resource:resourceID	Numeric
21	Resource Name	Name of the Resource		IRC::Resource:name [CIM::IdentifiedObject:name]	AlphaNum
3	Response Method Aggregation ID	Identifier assigned to the Response Method Aggregation	A Response Method Aggregation is a logical entity that has a reportable interval-level consumption. For example, an RMA may be a physical entity that has its own meter, a neighborhood of homes that has a net meter, or an estimate of consumption of an aggregation of retail customers. Corresponds to the CIM Identified Object mRID.	IRC::RMAggregation:mRID [CIM::IdentifiedObject:mRID]	
31	Response Method Aggregation Name	Name of the Response Method Aggregation		IRC::RMAggregation:name [CIM::IdentifiedObject:name]	
4	GenEMSID	Alias or point Identifier assigned to the Resource		IRC::Resource:genEMSID	
41	GenBillingID	Billing Identifier assigned to the Resource		IRC::Resource:genBillingID	
5	Electric Service Identifier	Identifier assigned to the Service Delivery Location of the Resource		CIM::MeterAsset:<<irc>> electricServiceID	
991	General Resource Comments	General comments associated with the Resource		IRC::Resource:comments	AlphaNum
Location					
1	Address1	Address line 1 of the Facility		IRC::Address:address1	AlphaNum
11	Address2	Address line 2 of the Facility		IRC::Address:address2	AlphaNum
12	City	City of the Facility		IRC::Address:city	List
13	Facility State/Province	State or Province two-letter code of the Facility		IRC::Address:stateOrProvince	List
14	Facility Zip/Postal Code	Zip or Postal Code of the Facility		IRC::Address:postalCode	Numeric
15	Facility Country	Country of the Facility		IRC::Address:country	
2	GPS Coordinates	Latitude and longitude of the Facility		CIM::PositionPoint:xPosition,yPosition	
21	Weather Station	Weather Station code associated with the Facility		IRC::Facility:weatherStation	List
3	Zone ID	Identifier assigned to the Zone in which the Facility is located		IRC::Zone:mRID [CIM::IdentifiedObject:mRID]	
31	Zone (from CIM)	Name of the Zone in which the Facility is located	A Zone is a physical or electrical region. This definition is from the CIM.	IRC::Zone:name [CIM::IdentifiedObject:name]	AlphaNum
4	Electrical Node ID	Identifier assigned to the Electrical Node at which the Facility is connected		CIM::PowerSystemResource:mRID [CIM::IdentifiedObject:mRID]	Numeric
41	Electrical Node Name	Name of the Electrical Node at which the Facility is connected		CIM::PowerSystemResource:IdentifiedObject:name [CIM::IdentifiedObject:name]	
42	Electrical Node Type	Type of Electrical Node at which the Facility is attached		CIM::PSRType:name [CIM::IdentifiedObject:name]	List (meter, substation, POD, etc.)
43	PNode	Name of the Price Node associated with the Facility	The P-Node is the price location of the Facility in the transmission and/or distribution network.	CIM::PNode:name [CIM::IdentifiedObject:name]	Numeric
44	PNode ID	Identifier assigned to the Price Node associated with the Facility		CIM::PNode:mRID [CIM::IdentifiedObject:mRID]	
5	Competitive Choice Area	Flag set if the Facility is in an area with Competitive Choice		IRC::Facility:competitiveChoice	Y/N
51	Facility Multiplier	Number of identical Response Methods within the Facility	A Response Method is a measurable action taken in response to an instruction to change consumption.	IRC::Facility:facilityMultiplier	
991	Facility Location Comments	Comments associated with the Location of the Facility		IRC::Facility:locationComments	AlphaNum
Contact					
1	Contact Type (CIM)	Interest code associated with a Contact	This is a classification defining the function a particular contact serves. It supports "who to call for what needs" decisions. Valid types are: Primary, Secondary, Billing, Third Party, and Authorized Representative.	IRC::Contact:contactType	List, including authorized representative

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11	Contact Priority	Order in which this Contact should be selected	This is used when multiple contacts are defined.	IRC::Contact:contactPriority	
12	Attribute of CIM Contact Type	DUNS business number		BusinessEntities::MP:DUNS	
13	Attribute of CIM Contact Type	Flag set if the Contact is a third-party entity		IRC::Contact:thirdPartyFlag	
2	Title	Title of the Contact		IRC::Contact:title	
21	First Name	First Name of the Contact		IRC::Contact:firstName	Alpha
22	Last Name	Last Name of the Contact		IRC::Contact:lastName	Alpha
23	Contact Middle Name	Middle Name of the Contact		IRC::Contact:mName	
3	Contact Method	Method of communication with the Contact	This identifies the various types of communication options (phone, email, etc.) to be used.	IRC::ContactMethod:contactMethod	
31	Contact Address Data	Method-dependent Address of the Contact	This identifies specific information required for the contact method selected.	IRC::ContactMethod:contactAddress	
32	Contact Method Priority	Order in which a Communication Method should be selected for a Contact	A Communication Method is the medium by which an object communicates with another object for instruction, measurement, or control. The user specifies the sequence in which each medium is to be used when being contacted.	IRC::ContactMethod:contactMethodPriority	
991	Contact Comments	Comments associated with the Contact		IRC::Contact:comments	AlphaNum
Grid Connection					
1	Loss Factor Type	Type of Loss Factor		IRC::FacilityEnergyInfo:lossFactorType	List
11	Loss Factor (value)	Loss Factor	Expressed as a decimal value.	IRC::FacilityEnergyInfo:lossFactor	Numeric
12	Connect Voltage	Voltage at connection.	<<RECENTLY ADDED>>		
2	Business Segment	SIC or NAICS code of the Facility		IRC::Facility:businessSegment	
21	Batch Load Flag	Flag set if the Resource is a Batch Load		IRC::Resource:batchLoad	Boolean
3	TimeZoneName	Name of the Time Zone in which the Facility is located		IRC::Facility:timeZoneName	
991	Attribute Comments	Comments associated with the Attributes of the Resource		IRC::Resource:attributeComments	AlphaNum
Business Entity Relationships					
11	SP ID	Identifier assigned to the Service Provider	The Service Provider coordinates Resources to deliver electricity products and services to a market or distribution operator. A Demand Response Provider is a type of Service Provider that delivers Demand reductions from Demand Resources and is compensated for providing such Demand Response products as specified by the System Operator. A System Operator is a Balancing Authority, Transmission Operator, or Reliability Coordinator whose responsibility is to monitor and control an electric system in real time (based on NERC definition). The System Operator is responsible for initiating Advance Notifications, Deployment, and Release/Recall instructions. The System Operator also administers the Demand Response process, from Resource Enrollment to Performance Evaluation.	ParticipantRoles::SP:mRID [CIM::IdentifiedObject:mRID]	Numeric
12	SP Name	Name of the Service Provider		ParticipantRoles::SP:name [CIM::IdentifiedObject:name]	AlphaNum
2	TDSP ID	Identifier assigned to the Transmission/Distribution Service Provider	The Transmission/Distribution Service Provider operates a local electricity transmission and/or distribution system.	ParticipantRoles::TDSP:mRID [CIM::IdentifiedObject:mRID]	
21	TDSP Name	Name of the Transmission/Distribution Service Provider		ParticipantRoles::TDSP:name [CIM::IdentifiedObject:name]	AlphaNum
22	TDSP Account No	Transmission/Distribution Service Provider's account number for the Resource		IRC::Facility:tdspAccountNumber	AlphaNumeric
3	LSE ID	Identifier assigned to the LSE	The Load-Serving Entity serves end users and sells electric energy to end users.	ParticipantRoles::LSE:mRID [CIM::IdentifiedObject:mRID]	
31	LSE Name	Name of the LSE		ParticipantRoles::LSE:name [CIM::IdentifiedObject:name]	AlphaNum
4	Retail Rate ID	Identifier assigned to the Retail Rate		IRC::RetailRate:mRID [CIM::IdentifiedObject:mRID]	
41	Retail Rate Code	Code representing the Retail Rate for the Facility		IRC::RetailRate:rateCode	
42	Retail Rate Name	Name of the Retail Rate for the Facility		IRC::RetailRate:name [CIM::IdentifiedObject:name]	AlphaNum
43	Retail Rate Description	Description of the Retail Rate	This can also be used for comments associated with the Retail Rate.	IRC::RetailRate:description [CIM::IdentifiedObject:description]	AlphaNum

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44	Retail Rate	Retail Rate Expressed as Price per kWh	IRC::RetailRate:rate	Numeric
5	Meter Installation Provider ID	Identifier assigned to the Meter Installation Provider	CIM::MeterAsset:<<irc>>installerID [CIM::Asset:<<irc>>installerID]	Numeric
51	Meter Installation Provider Name	Name of the Meter Installation Provider This is the competitive meter entity for the meter device.	CIM::MeterAsset:<<irc>>installerName [CIM::Asset:<<irc>>installerName]	AlphaNumeric
6	Meter Authority ID	Identifier assigned to the Metering Authority The Metering Authority provides electric usage data necessary to determine the performance of a Resource.	ParticipantRoles::MA:mRID [CIM::IdentifiedObject:mRID]	Numeric
61	Meter Authority Name	Name of the Metering Authority	ParticipantRoles::MA:name [CIM::IdentifiedObject:name]	AlphaNumeric
7	Scheduling Entity ID	Identifier assigned to the Scheduling Entity A Scheduling Entity submits bids and/or offers and receives Schedules and Awards.	ParticipantRoles::SE:mRID [CIM::IdentifiedObject:mRID]	
71	Scheduling Entity Name	Name of the Scheduling Entity	ParticipantRoles::SE:name [CIM::IdentifiedObject:name]	
8	Designated Dispatch Entity ID	Identifier assigned to the Designated Dispatch Entity The Designated Dispatch Entity receives and processes Demand Resource Dispatch instructions or market information and may provide response information.	ParticipantRoles::DDE:mRID [CIM::IdentifiedObject:mRID]	
81	Designated Dispatch Entity Name	Name of the Designated Dispatch Entity	ParticipantRoles::DDE:name [CIM::IdentifiedObject:name]	
991	External Entity Comments	Comments associated with the External Entity	BusinessEntities::MP:comments	AlphaNum
Device and Qualification				
1	Meter Configuration	Configuration of the Meter at the Facility The CIM defines the Meter as the physical asset that performs the metering role of the ServiceDeliveryPoint. It is used for measuring consumption and detecting events.	CIM::MeterAsset:<<irc>> meterConfiguration	List
11	Parent Meter id	Flag set if the Meter is a Master or Parent Meter	CIM::MeterAsset:<<irc>> parentMeterID	
2	Meter ID	Identifier assigned to the Meter	CIM::MeterAsset:<<irc>> meterID	
21	Meter Type	Type of Meter installed at the Facility Valid values include RTU, CT/PT, etc.	CIM::MeterAsset:<<irc>> meterType	List
22	Meter Mfr (CIM Meter Asset Attribute)	Manufacturer of the Meter	CIM::MeterAsset:<<irc>> manufacturer [CIM::Asset:<<irc>> manufacturer]	
221	Meter Installation Date	Date of Installation of the Meter	CIM::MeterAsset:installationDate [CIM::Asset:installationDate]	
222	PT Ratio	Ratio of the Potential Transformer	CIM::MeterAsset:<<irc>> ptRatio	
223	Meter Installer License	Professional License Number of the Installer of the Meter	CIM::MeterAsset:<<irc>> installerLicense [CIM::Asset:<<irc>>installerLicense]	
224	Meter Correction Factors (CIM Meter Asset Attribute)	Device-specific Factors used to adjust for atmospheric changes at the point of installation of the	CIM::MeterAsset:<<irc>> meterCorrectionFactors	
225	Meter Test Criteria	Test Criteria required to qualify the installation of the Meter	CIM::MeterAsset:<<irc>> meterTestCriteria	
226	Meter Test Frequency	Frequency of Tests of the Meter Expressed in months.	CIM::MeterAsset:<<irc>> testFrequency	
227	Device QA Plan	Quality Assurance plan for maintenance and testing of the Meter	CIM::MeterAsset:<<irc>> qaPlan [CIM::Asset:<<irc>> qaPlan]	
228	Date of Last Meter Test	Date of Last Test of the Meter	CIM::AcceptanceTest:dateValue	Date
229	Meter Qualification Date	Date of Qualification of the Meter by the Metering Authority or System Operator	CIM::MeterAsset:<<irc>> qualificationDate	Date
2291	Meter Test Results	Results of Tests of the Meter These are specific to the meter type.	CIM::MeterAsset:<<irc>> meterTestResults	Binary (eg. Word, excel, zip file)
2292	VEE Compliance	Compliance standard for Validation, Editing, and Estimation Validation, Editing, and Estimation is the process of taking raw meter data and performing validation and, as necessary, editing and estimation of corrupt or missing data, to create validated data. VEE guidelines are published in the Edison Electric Institute's Uniform Business Practices for Unbundled Electricity Metering, Volume Two, Published 12/05/00, http://www.naesb.org/REQ/req_form.asp .	CIM::MeterAsset:<<irc>> veeCompliance	
2293	Measurement Interval	Interval of time between Measurement readings This is the time between electricity meter recordings. The Measurement records the consumption or supply of an End Device. An End Device is a physical end-use device that consumes or supplies electricity.	CIM::MeterReading:valuesInterval	
2294	ANSI Compliance	ANSI standard with which the Meter complies	CIM::MeterAsset:<<irc>> ansiCompliance	
2295	Owner (CIM Meter Asset Attribute for Meter Owner)	Owner of the Meter	CIM::MeterAsset:<<irc>> owner [CIM::Asset:<<irc>> owner]	
2296	Meter Asset Comments	Comments associated with the Meter Asset	CIM::MeterAsset:comments [CIM::Asset:comments]	
23	Meter Model (CIM Meter Asset Attribute)	Model of the Meter	CIM::MeterAsset:<<irc>> model [CIM::Asset:<<irc>> model]	

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24	Meter Rating (CIM Meter Asset Attribute)	Load Rating of the Meter	CIM::MeterAsset:<<irc>> meterRating	
25	kH (CIM Meter Asset Attribute for Meter Multiplier)	Multiplier used to convert pulses into power units	CIM::MeterAsset:kH	
26	Meter Accuracy Class(CIM Meter Asset Attribute)	Accuracy Class of the Meter	CIM::MeterAsset:<<irc>> meterAccuracyClass	
27	Meter Loss Compensation(CIM Meter Asset Attribute)	Line Losses included in the Meter	CIM::MeterAsset:<<irc>> meterLossCompensation	
28	Maximum Error	Error of the Meter, including end-to-end Maximum Error	CIM::MeterAsset:<<irc>> maxError	
29	Meter Phase(CIM Meter Asset Attribute)	Specific Phase information	CIM::MeterAsset:<<irc>> meterPhase	
291	CT Ratio	Ratio of the Current Transformer	CIM::MeterAsset:<<irc>> ctRatio	
3	Generator Type	Type of Generation Device This technology characteristic of the generation device, such as combined cycle, induction, etc.	IRC::GenerationDevice:generatorType	List
31	Nameplate	Manufacturer's output rating of the Generation Device	IRC::GenerationDevice:nameplate	
32	Fuel Type (CIM Generator Asset Attribute)	Type of Fuel consumed by the Generation Device	IRC::GenerationDevice:fuelType	
33	Gen Permit Type	Type of environmental authorization required to operate the Generation Device The Environmental Authority is a regulatory authority responsible for the development, reporting, and enforcement of environmental activities.	IRC::GenerationDevice:genPermitType	
34	Manufacturer (CIM Generator Asset Attribute for Generator)	Manufacturer of the Generation Device	IRC::GenerationDevice:manufacturer [CIM::Asset:manufacturer]	
35	Manufactured Date (CIM Generator Asset Attribute)	Date of Manufacturer of the Generation Device	IRC::GenerationDevice:genManufacturedDate	
36	Installation Date (CIM Generator Asset Attribute)	Date of Installation of the Generation Device	IRC::GenerationDevice:installationDate [CIM::Asset:installationDate]	
37	Generator In-Service Date	Date the Generation Device became operational	CIM::MeterAsset:<<irc>> operationalDate [CIM::Asset:<<irc>> operationalDate]	
38	Normal Load Rating	Average load picked up by the Generation Device during the applicable performance hours	IRC::GenerationDevice:<<irc>> normalLoadRating	
39	Generation Name	Name of the Generation Device	CIM::GenerationDevice:name [CIM::IdentifiedObject:name]	
41	Interconnection Agreement Type	Type of Interconnection Agreement between the Generation Device or Facility and the TDSP	IRC::GenerationDevice:<<irc>> interconnectionAgreementType	
42	Interconnection Limits	Limits associated with the Interconnection of the Generation Device or Facility	IRC::GenerationDevice:<<irc>> interconnectionLimits	
43	Capable of Synchronizing to Grid	Flag set if the Facility is capable of Synchronizing to the Grid	IRC::GenerationDevice:<<irc>> gridSyncCapable	
44	Normal Breaker Status	Status of the Breaker for the Facility under Normal operating conditions Normal Operations is the time following Release/Recall during which a System Operator or Service Provider may require a Demand Resource to have returned its Load consumption to normal levels and to be available again for Deployment.	IRC::GenerationDevice:<<irc>> normalBreakerStatus	
45	Breaker Status During Event	Status of the Breaker for the Facility during an Emergency Event	IRC::GenerationDevice:<<irc>> breakerStatusDuringEvent	
46	Wholesale Delivery Point Status	Flag set if the Facility is metered at the Wholesale level	IRC::GenerationDevice:wholeDeliveryPointStatus	
47	Private Use Network	Flag set if the Resource is an Electric Network connected to the transmission grid This is used for load that is typically netted with internal generation.	IRC::Resource:privateUseNetwork	
51	UFR Settings	Setting of the Under-Frequency Relay Expressed in Hz.	IRC::Resource:ufrSettings	
52	Load Resource Control Device	Type of Control Device at a Facility or deployed by a Response Method	IRC::GenerationDevice:loadResourceControlDevice	
61	Auxiliary Power Load	MW required to service the storage unit. <<<RECENTLY ADDED>>		
62	Available Cycles	Expected number of storage unit charge and discharge cycles remaining on the storage unit. <<<RECENTLY ADDED>>		
991	Generation Device Comments	Comments associated with the Generation Device	IRC::GenerationDevice:deviceComments	AlphaNum
Market/Program Enrollment				
1	Program ID	Identifier assigned to the Program	IRC::DemandResponseProgram:mRID [CIM::IdentifiedObject:mRID]	
11	Program Name	Name of the Program	CIM::DemandResponseProgram:name [CIM::IdentifiedObject:name]	List

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21	Effective Enrollment Date	Effective Start Date for the Enrollment	Market Enrollment is the collection of enrollment or tariff data for a Demand Resource to provide a specific market product or service.	IRC::Enrollment:effectiveDate	Date
22	Program Enrollment Status	Status of the Program Enrollment for the Facility or Resource		IRC::Enrollment:programEnrollmentStatus	List
23	Resource Type	Type of Resource	Valid types are: load reduction, generation, combination.	IRC::Resource:resourceType	
24	Resource Qualification Test Date	Date the Resource demonstrated its ability to deliver a product or service		IRC::Resource:qualificationTestDate	
25	Enrollment End Date	Date of Termination of Enrollment		IRC::Enrollment:endDate	Date
26	Requalification Test Date	Date the Resource will retest its ability to deliver a product or service		IRC::Resource:requalificationTestDate	
3	Lead Time	Time between the advanced notification and deployment	Notification is the transmittal of a Schedule or Award. Deployment is the time at which a Resource begins its response to an instruction from the System Operator or Service Provider.	IRC::Enrollment:leadTime	
31	Day Ahead Flag	Flag set if the Resource will be participating in the Day-Ahead market		IRC::ResourceEnergyInfo:dayAheadFlag	
32	Real Time Flag	Flag set if the Resource will be participating in the Real-Time market		IRC::ResourceEnergyInfo:realTimeFlag	
33	Self-Schedule Flag	Flag set if the Resource is Self-Deploying	Self-Deployment is the Deployment via established Communication Methods of one or more Resources initiated by the Service Provider or the Resource.	IRC::ResourceEnergyInfo:selfScheduleFlag	
4	Response Method Type	Type of Response Method	Expressed as a reduction type code	IRC::ResponseMethod:methodType	List
41	Response Method ID	Identifier assigned to the Response Method		IRC::ResponseMethod:mRID [CIM::IdentifiedObject:mRID]	
42	Response Method Name	Name of the Response Method		IRC::ResponseMethod:name [CIM::IdentifiedObject:name]	
43	Response Method Value	Value of the Response Method	The Demand Response Value is the quantity of modified electrical consumption by a Demand Resource, expressed as MW.	IRC::ResponseMethod:value	Numeric
44	Verified Capability	Audited Capability	Auditing is the validation of performance, conducted by the System Operator, of certain Response Aggregation Methods AFTER the Enrollment process.	IRC::Enrollment:verifiedCapability	
45	Verified Capability Factor	Ratio of the Verified Capability to the qualified capability	Qualification is the validation of performance, conducted by the System Operator, of certain Response Aggregation Methods DURING the Enrollment process.	IRC::Enrollment:verifiedCapabilityFactor	
5	Performance Evaluation Method Type Code	Code representing the Type of Measurement		IRC::Enrollment:performanceEvaluationMethodType	List
51	Performance Evaluation Method	Method used to Evaluate the Performance of a Resource	Based on NAESB M&V terms.	IRC::Enrollment:performanceEvaluationMethod	List
991	Market Enrollment Comments	Comments associated with the Enrollment		IRC::Enrollment:marketEnrollmentComments	AlphaNum
Offer Parameters					
1	Limit Value	Limit	Expressed in MW or hours. Multiple Limit Types are applicable.	IRC::OfferParameters:limitValue	MW or hours
11	Limit Type	Type of Limit	The limit may be associated with the operating capabilities or bidding parameters of a resource. These may be limits associated with time (e.g., day, seasonal, annual, notice), range of values (e.g., minimum interruption time or maximum restoration time), or frequency (e.g., maximum deployments, maximum energy).	IRC::OfferParameters:limitType	pick list
2	Physical Min Gen	Minimum Operating Level of a Resource		IRC::OfferParameters:physicalMinGen	MW
21	Min Gen MW	Minimum MW available for dispatch	When required as part of an enrollment request, this value acts as a default.	IRC::OfferParameters:minGenMW	Numeric
22	MinGenCost	The cost per hour for each MinGenMW value.	<<<RECENTLY ADDED>>>		
23	Ramp Rate Type	Type of Ramp Rate	Valid types are: Normal, Emergency, Regulation.	IRC::RampRate:rampRateType	List
24	Ramp Rate Segment	Energy of Segment of the Ramp Rate	The end value of the Ramp Rate step, monotonically increasing or decreasing (as indicated by the Ramp Rate Direction), expressed in MW (NOTE: When required as part of an enrollment request, this value becomes the default)	IRC::RampRateSegment:segment	List
25	Ramp Rate Direction	Direction of the selected Ramp Rate Type and Ramp Rate Segment	Valid directions are: Upward, Downward, Both.	IRC::RampRate:direction	List
26	Ramp Rate Value	Ramp Rate associated with the selected Ramp Rate Type for the selected Ramp Rate Segment and	The NERC definition of Ramp Rate is the rate, expressed in megawatts per minute, by which a generator changes its output. For a Demand Resource, the Ramp Rate is the rate, expressed in megawatts per minute, by which a Demand Resource changes its Load.	IRC::RampRateSegment:value	MW per min
3	Offer Type	Type of Offer	Valid types are Flexible (resource follows basepoint signals) or Fixed (resource requests DA commitment and RT schedules of 15 minutes or greater)	IRC::OfferParameters:offerType	List
31	Offer Segment MW	Energy of Segment of the Offer	The end value of the offer step, monotonically increasing, expressed in MW (NOTE: When required as part of an enrollment request, this value becomes the default)	IRC::OfferSegment:segmentMW	Numeric
32	Offer Segment Price	Price of Segment of the Offer	NOTE: When required as part of an enrollment request, this value becomes the default.	IRC::OfferSegment:price	Numeric

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33	Offer Segment Hour	Hour of Segment of the Offer <small>NOTE: When required as part of an enrollment request, this value becomes the default.</small>	IRC::OfferSegment:hour	Numeric
34	Startup Cost	Cost of starting a response activity <small>NOTE: When required as part of an enrollment request, this value becomes the default.</small>	IRC::OfferParameters:startupCost	Numeric
35	Strike Price	Threshold Price <small>Expressed as a decimal value of price/MW.</small>	IRC::ResourceEnergyInfo:strikePrice	Numeric
36	Offer Expiration Date	Date of Expiration of the Offer <small>This applies to DAM only.</small>	IRC::Offer:expirationDate	
37	Startup Cost Type	The type of Start Up Cost included in the offer. Options may include: Select cold, intermediate, hot or <small><<<RECENTLY ADDED>>></small>		
4	Market Clearing Day	Market Clearing Day of the Offer	IRC::Offer:marketClearingDay	Alphanumeric
41	Schedule Name	Name or tag of the Offer	IRC::Schedule:name [CIM::IdentifiedObject.name]	Alphanumeric
42	Schedule Description	Description of the Offer	IRC::Schedule:description [CIM::IdentifiedObject.description]	Alphanumeric
43	Schedule Status	Status of the Offer	IRC::Schedule:status	Alphanumeric
5	Portfolio Name	Name of an aggregation of Resources for market participation	IRC::Resource:portfolioName	Alphanumeric
61	ChargeRate	The rate (MW/Min) to charge to current applied to a storage device in MW/Min to restore a storage <small><<<RECENTLY ADDED>>></small>		
63	DischargeRate	The rate (MW/Min) to charge to deplete a storage device of its full energy capacity. The rate at which <small><<<RECENTLY ADDED>>></small>		
63	JerkTimeDown	The time in seconds it takes to move from a charge state to a discharge state <small><<<RECENTLY ADDED>>></small>		
64	JerkTimeUp	The time in seconds it takes to move from a discharge state to a charge state <small><<<RECENTLY ADDED>>></small>		
71	Operational Contraint Type	Types of runtime offer parameters. Options may include: Select Minimum Runtime, Maximum <small><<<RECENTLY ADDED>>></small>		
72	Operational Contraint Interval	Typically daily, hourly, weekly <small><<<RECENTLY ADDED>>></small>		
73	Operational Contraint Value	<small><<<RECENTLY ADDED>>></small>		
Energy Market				
0	Schedule ID	Unique identifier assigned to each dispatch schedule. <small><<<RECENTLY ADDED>>></small>		
1	Energy Schedule - Start Time	Start Time of the Energy Schedule <small>A Schedule is an energy profile for a Resource for a future time period, by scheduling time interval (typically hourly).</small>	*IRC::Schedule:startTime	MW
11	Energy Schedule - End Time	End Time of the Energy Schedule <small>A Schedule is an energy profile for a Resource for a future time period, by scheduling time interval (typically hourly).</small>	*IRC::Schedule:endTime	MW
12	Energy Schedule - Interval Start Time	Start Time of the Energy Interval within the Energy Schedule and the Energy Value of the Time Interval <small>*The start time of a specific energy schedule interval</small>	*IRC::TimeInterval:startTime [EnergySchedule]	MW
13	Energy Schedule - Interval Value	The Energy Value of the Time Interval within the Energy Schedule <small>*The value associated with a specific energy schedule interval</small>	*IRC::TimeInterval:value [Energy Schedule]	MW
2	Base Point	Per-interval energy dispatch instruction <small>A Dispatch is a real-time instruction to a Resource to move to a Base Point at a specific time (Resource-Specific Deployment) or a set of real-time instructions to multiple Resources (Bulk Deployment). A Resource-Specific Deployment is the deployment, via established Communication Methods initiated by the System Operator, of one or more discrete and/or unique Resources designated to provide a selected service.</small>	IRC::DispatchInstruction:basePoint	MW
21	Breaker Status	Status of the Breaker for the Resource	IRC::DispatchInstruction:breakerStatus	Boolean
22	Output MW	Real Power Output of the Generation Device <small>Expressed in MW</small>	IRC::DispatchInstruction:genOutputMW	
23	Output MVAR	Reactive Power Output of the Generation Device <small>Expressed in Mvar</small>	IRC::DispatchInstruction:genOutputMVAR	MVAR
24	DR Bus Load MW	Instantaneous Bus Load of a Demand Resource providing Ancillary Services <small>Demand is the rate at which electric energy is being used by the customer (NERC Definition). Expressed in MW. This element only applies to DR</small>	IRC::DispatchInstruction:drBusLoadMW	MW
25	Available Energy	Current charge state in MWh. Current energy level of the storage device (MWh). <small><<<RECENTLY ADDED>>></small>		
26	DRR Load Forecast	DR provides load forecast data 5-minute; used in clearing and ; used for performance when a <small><<<RECENTLY ADDED>>></small>		
Ancillary Service Market				
1	Ancillary Service Product Type	Type of Ancillary Service product(s) the Resource is enrolling to provide	IRC::ASInfo:asProductType	Pick List

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11	Have Engineering Diagram	Flag set if One-Line Diagrams have been submitted	IRC::ASInfo:haveEngDiagram	Boolean
2	Ancillary Service Product Qualification Type	Type of Qualification Valid types include initial, requalification, etc.	IRC::ASInfo:asProductQualificationType	list
21	Synchronization Test Date	Target Date of Test of Synchronization to the grid	IRC::ASInfo:syncTestDate	Date
22	Ancillary Service Product Type Qualification Date	Date of Qualification of the Resource	IRC::ASInfo:asProductTypeQualificationDate	Date
23	Ancillary Service Product Type Qualified	Type of Ancillary Service Product(s) for which the Resource has Qualified	IRC::ASInfo:asProductTypeQualified	
24	Requalification Requirement	Flag set if Requalification is Required	IRC::ASInfo:requalificationRequirement	boolean
31	Reserve Pickup Flag	Flag set if this is a Reserve Pickup schedule Reserve Service is a type of Demand Response service in which Demand Resources are obligated to be available to provide Demand reduction Energy Service upon deployment by the System Operator, based on reserve capacity requirements that are established to meet applicable reliability standards. Reserve Services are defined by short-term response rates (Ramp Period) and synchronization with the electricity grid (i.e., spinning and non-spinning reserves). The Ramp Period is the period of time from Deployment to Response Deadline, representing the window of time over which a Resource is	IRC::ASInfo:reservePickup	Boolean
32	Regulation Base Point	Per-interval Regulation dispatch instruction Regulation Service is a type of Demand Response service in which a Demand Resource corrects for short-term changes in electricity use that might affect the stability of the power system, matching generation and load to maintain a desired frequency. Demand Resources providing Regulation Service are subject to dispatch continuously during a commitment period. Provision of Regulation Service does not correlate to Demand Response deployment terms of the Event timelines, deadlines and durations.	IRC::ASInfo:regulationBasePoint	MW
33	Base Load MW	Level of Load at time of dispatch	IRC::ASInfo:baseLoadMW	MW
Capacity Market				
1	Capacity Type	Type of Capacity Capacity Service is a type of Demand Response service in which Demand Resources are obligated over a defined period of time to be available to deliver upon deployment by the System Operator or Service Provider.	IRC::CapacityInfo:capacityType	List
11	Capacity Type description	Description of the Type of Capacity	IRC::CapacityInfo:capacityTypeDescription	