

データ項目名	説明	一般向けDR Residential	大口向けDR Wholesale	OpenADR1.0通信仕様との対応	SEP2.0との対応
共通データ項目: All DR Events					
DR Program Name	An identifier of the program for which a DR event was issued.	DR Program Name	Program Name	EventState.program Name	DR event name
Service Provider ID	An identifier for the Service Provider issuing the DR event.	Service Provider ID	(System Operator)	EventState.drasName	
Event ID	An identifier for the DR event that was created when the DR event was first issued.	Event ID	Event ID	EventState.event Identifier	DR event ID
Event Modification Number	A modification number for the DR event. This is used to indicate if the DR Event has been modified by the Utility. Each time it is modified, this number is incremented.	Event Modification Number	n/a	EventState.event ModNumber	
Location Identifier	An identifier used to indicate what this dispatch is applicable to. A value of "null" indicates that the price is in effect for all areas.	Location			
Location-type	A value used to interpret the value contained in the Location. Examples of Location-type include: Postal Address Zone GPS Coordinates Grid Location / USNG Electrical Node Zip-code Weather Station Zone ID Zone (from CIM) Electrical Node ID (could be the same as Service Delivery Location) Electrical Node Name Electrical Node Type PNode PNode ID, Competitive Choice Area Or Resource Identifier Or Asset Identifier	Location-type	Address1 Address2 City Facility State/Province Facility Zip/Postal Code Facility Country GPS Coordinates Weather Station Zone ID Zone (from CIM) Electrical Node ID Electrical Node Name Electrical Node Type PNode PNode ID, Competitive Choice Area		
Test Event Flag	This attribute signifies whether this is a test event or not. Test events may be issued by the Utility/ISO like other DR Events.	Test Event Flag	Deployment Type=test or Audit	EventState.testEvent	
Simple Signal Levels	Used as an alternate and simplified representation of the DR signal, whether it be price based or a dispatch. Takes on a small number of finite levels such as NORMAL, MODERATE, and HIGH, SPECIAL		n/a	EventState.simple DRModeData. OperationModeValue EventState.simple DRModeData. OperationModeSchedule	
Criticality Level	This field defines the level of criticality of this event. The action taken by load control devices for an event can be solely based on this value, or combination with other Load Control Event fields supported by this device. For example, additional fields such as Average Load Adjustment Percentage, Duty Cycle, Cooling Temperature Offset, Heating Temperature Offset, Cooling Temperature Set Point or Heating Temperature Set Point can be used in combination with the Criticality level. Criticality Level Level Description Participation 0 Reserved 1 Green Voluntary 2 1 Voluntary 3 2 Voluntary 4 3 Voluntary 5 4 Voluntary 6 5 Voluntary 7 Emergency Mandatory 8 Planned Outage Mandatory 9 Service Disconnect Mandatory 0x0A to 0x0F Utility Defined Utility Defined				Criticality Level
All Price Plus Information Dispatches					
DR Dispatch Type (for Price Plus)	Identifies the type of the DR Price Plus Dispatch. PRICE_ABSOLUTE – Price number PRICE_RELATIVE – Change in price relative from base tariff. PRICE_MULTIPLE – Multiple of current price	Instruction Type	n/a Retail only for now	EventState.drEvent Data.eventInfoInstances.eventInfoTypeID EventState.DrEventData.eventInfoInstances.eventInfoName	
All Price Plus Information Intervals					
Currency	Identifier used to interpret the price element. MUST follow ISO 4217 standard.	Currency			
Price	Expressed in decimal notation with a precision up to 6 decimal places. Prices MAY be either positive or negative. Single or multiple valued price (e.g., for energy,	Price		EventState.DrEventData.eventInfoInstances.eventInfoValues.value	

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	demand, etc.)				
Unit-of-Measure	Indicates the unit of measure for which the price pertains. MUST be compliant with the International System of Units as defined by NIST SP 330, ref: http://physics.nist.gov/Pubs/SP330/sp330.pdf Examples of NIST compliant units of measure include: kWh MWh	Unit-of-Measure	type of attribute	EventState.DrEventData.eventInfoInstances.eventInfoTypeID	
Duration	The amount of time for which this price is valid, commencing at the Effective-Date-Time specified. A value of zero means price is valid until next price broadcast override. Specified in decimal notation where integers represent minutes and decimals represent fractions of minutes.	Duration	Uses Start and End Times		
Effective-Date-Time	The date and time which the price is in effect. In ISO 8601 standard format. The date and time interval which the price is in effect.	Effective-Date-Time	Start Time	EventState.drEventData.startTime/endTime/notificationTime EventState.DrEventData.eventInfoInstances.eventInfoValues.timeOffset	
Product Type	Identifies the type of product to which this price pertains. Contains an enumeration of various products that may be offered. Extensibility MUST be supported in order to accommodate multiple jurisdictions and markets. Product types include the following: energy, regulation, Spinning reserve.	Product-Identifier	Program ID & Program Name		
All DR Objective Dispatches					
DR Dispatch Type (for Objectives)	Identifies the type of DR Objectives: • LOAD_LEVEL • LOAD_AMOUNT • LOAD_PERCENTAGE	Dispatch Instructions	Deployment MegaWatts	EventState.DrEventData.eventInfoInstances.eventInfoTypeID EventState.DrEventData.eventInfoInstances.eventInfoName	
All DR Objective Intervals					
Interval Start Time	Start time of the dispatch interval.	Event Schedule	Event Day Event Start Time Event End Time	EventState.drEventData.startTime EventState.drEventData.eventInfoInstances.eventInfoValues.timeOffset	
Interval Duration	Period of time the Control Command is in effect.		Use Start/End		
All DR Load Level Objective Intervals DR Dispatch Type = "LOAD_LEVEL"					
Load Level Value	Value of the load level to be achieved based on a set of enumerated values. (i.e. moderate, high, etc)	Dispatch Instructions	n/a	EventState.drEventData.eventInfoInstances.eventInfoValues.value	
All Load Amount Level Objective Intervals DR Dispatch Type = "LOAD_AMOUNT"					
Load Amount Value	Fixed amount of load to shed in kW.	Dispatch Instructions	Energy Schedule or Ancillary Service Product Schedule	EventState.drEventData.eventInfoInstances.eventInfoValues.value	
All Load Percentage Objective Intervals DR Dispatch Type = "LOAD_PERCENTAGE"					
Load Percent Value	Percentage of load to increment or shed.	Dispatch Instructions	Deployment MegWatts as percentage.	EventState.drEventData.eventInfoInstances.eventInfoValues.value	Average Load Adjustment Percentage (expressed as signed integer, e.g -10 is 10% reduction from average load)
All Direct Load Control Dispatches Direct Load Control is a Dispatch type that requests an Asset to be in a specific load control state (e.g., to turn it on or off).					
DR Dispatch Type	Identifies the objective type as Direct Load Control.	DR Dispatch Type	n/a		
DR Asset ID	An identifier of the DR Asset for which the control is intended.	DR Asset ID	n/a	EventState.drAssetClientID	HAN Device ID
Status Check	A signal to require the DR resource status to be sent back.	Status Check	n/a		SEP 2.0 Req[DRLC-3] No specific data requirement
All Direct Load Control Intervals					
Direct Load Control Type	The type of DR Direct Load Control Command: e.g. Set Point Open/Close Heating Temperature -offset/setpoint Cooling Temperature -offset/setpoint	DR Control Command			Heating Temperature (offset/setpoint), Cooling

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	Load adjustment offset				Temperature (offset/Setpoint), Load adjustment offset
Direct Load Control Value	Value associated with the Direct Load Control Type.	DR Control Command			
Interval Start Time	Start time of the dispatch interval.	Event Schedule		EventState.drEventData.startTime/endTime/notification Time EventState.drEventData.eventInfoInstances.eventInfoValues.timeOffset	DR event start date/time
Interval Duration	Period of time the Control Command is in effect.				DR event duration
Duty cycle	Duty Cycle (optional): Defines the maximum On state duty cycle as a percentage of time. Example, if the value is 80, the device would be in an “on state” for 80% of the time for the duration of the event. Range of the value is 0 to 100. A value of 0xFF indicates the field is not used.				Duty cycle
Event control	Event Control options for randomized start or end times: 1= Randomize Start time, 0=Randomized Start not Applied 1= Randomize End time, 0=Randomized End not Applied				Event control
Device Class	Enumeration representing the Device Class to apply the current Load Control Event. 0 HVAC compressor or furnace 1 Strip Heaters/Baseboard Heaters 2 Water Heater 3 Pool Pump/Spa/Jacuzzi 4 Smart Appliances 5 Irrigation Pump 6 Managed Commercial & Industrial (C&I) loads 7 Simple misc. (Residential On/Off) loads 8 Exterior Lighting 9 Interior Lighting 10 Electric Vehicle 11 Generation Systems 12 to 15 Reserved				Device Class

出典: OpenADR 1.0 System Requirements Specification

<http://osgug.ucauiug.org/sgsystems/OpenADR/Shared%20Documents/SRS/OpenSG%20OpenADR%201.0%20SRS%20v1.0.pdf>

※ 「OpenADR1.0通信仕様との対応」欄は、DRRCとAkuacomで作成された「OPEN AUTOMATED DEMAND RESPONSE COMMUNICATIONS SPECIFICATION (Version 1.0)」で定義されたものとの対応を示す

<http://openadr.lbl.gov/pdf/cec-500-2009-063.pdf>