

Entity Level 1
Entity Level 2
Entity Level 3
Entity Level 4
Lowest level granularity

ESPI Derived (non-PII) Data Model

SMD Phase	ESPI Element Name	Electric / Gas	ESPI Element Description	PG&E Details	Data Element Additional Detail	Required Authorization	Accessible APIs
Ph 1	Usage Point (self-link)	Both	Logical point on a network at which consumption or production is either physically measured (e.g., metered) or estimated (e.g., unmetered street lights).	Root Node: Usage Point ID (SA UUID) is the obfuscated Service Agreement ID	(IOU) Unique Identifier	Any	1)../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint 2)../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) + all other APIs
Ph 1	ServiceCategory	Both	(container) Category of service provided to the customer.	Container	Commodity	Any of the following: Billing Info Usage Info	Both (Billing or Usage Info Authorization): 1)../espi/1_1/resource/Batch/Bulk/(BulkID)/(CorrelationID) --> daily subscription job 2)../espi/1_1/resource/Batch/Bulk/(BulkID) 3)../espi/1_1/resource/Batch/Subscription/(SubscriptionID) 4)../espi/1_1/resource/Batch/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) Usage Information (Authorization): 5)../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/MeterReading/(MeterReadingID)/IntervalBlock 6)../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/MeterReading/(MeterReadingID)/IntervalBlock/(IntervalBlockID) Billing Information: 7)../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary 8)../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary/(UsageSummaryID)
Ph 1	Kind	Both	Service classification	Commodity of Usage Point. Example Values: 0 = electricity, 1 = gas			
Ph 1	LocalTimeParameters	Both	Daylight savings offset info	Daylight savings offset info	Local Time Parameters (DST details)	Any of the following: Usage Info	1)../espi/1_1/resource/LocalTimeParameters 2)../espi/1_1/resource/LocalTimeParameters/(LocalTimeParametersID)
Ph 1	dstEndRule	Both	Rule to calculate end of daylight savings time in the current year.	(e.g. B40E2000)			
Ph 1	dstOffset	Both	Daylight savings time offset from local standard time.	(e.g. 3600 - 1 hour)			
Ph 1	dstStartRule	Both	Rule to calculate start of daylight savings time in the current year.	(e.g. 360E2000)			
Ph 1	tzOffset	Both	Local time zone offset from UTCtime. Does not include any daylight savings time offsets.	(e.g. -28800 = -8 hours)			
Ph 1	Reading Type	Both	Characteristics associated with all Readings included in a MeterReading.	Root node	[container] Attributes of Interval Usage Readings ESPI defined attribute of Usage Reading (largely N/A to PG&E implementation)		
Ph 1	accumulationBehaviour	Both	Code indicating how value is accumulated over time for Readings of ReadingType.	(e.g. 4 - deltaData)			
Ph 1	dataQualifier	Both	Code describing a salient attribute of Readings of ReadingType.	(e.g. 12 - normal)			
Ph 1	defaultQuality	Both	Default value to be used if no value of ReadingQuality:quality is provided. Specific format and valid values per the standard are specified in QualityOfReading.	(e.g. 17 - validated)	Default Data Quality (if not specified in IntervalReading/ReadingQuality)		
Ph 1	flowDirection	Both	Direction associated with current related Readings.	(e.g. 1: Delivered, 19: reverse, 4: net) Electric Service Agreements with on-site generation (e.g. solar) will have both channels of data (delivered and reverse), other customers will have net only.	Energy Direction		
Ph 1	intervalLength	Both	Default interval length specified in seconds for Readings of ReadingType.	(e.g. 3600, 900, 300)	Interval Length (of Usage Reading)		
Ph 1	kind	Both	Kind of service represented by the UsagePoint	(e.g. 12 - energy)	Kind of Service related to Usage Reading		1)../espi/1_1/resource/Batch/Bulk/(BulkID)/(CorrelationID) --> daily subscription job 2)../espi/1_1/resource/Batch/Bulk/(BulkID) 3)../espi/1_1/resource/Batch/Subscription/(SubscriptionID) 4)../espi/1_1/resource/Batch/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) 5)../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/MeterReading/(MeterReadingID)
Ph 1	phase	Both	Enumeration of phase identifiers. Allows designation of phases for both transmission and distribution equipment, circuits and loads. Residential and small commercial loads are often served from single-phase, or split-phase, secondary circuits. Phases 1 and 2 refer to hot wires that are 180 degrees out of phase, while N refers to the neutral wire. Through single-phase transformer connections, these secondary circuits may be served from one or two of the primary phases A, B, and C. For three-phase loads, use the A, B, C phase codes instead of s12N.	(e.g. Electric Service Agreements: 224 - Involving all phases, 769 - S1: Phase S1; Gas Service Agreement: 0 - Not Applicable)	ESPI defined attribute of Usage Reading	Any of the following: Usage Info Billing Info	ReadingType will have an uplink associating it to a specific UsagePoint's MeterReading and IntervalBlock
Ph 1	powerOfTenMultiplier	Both	The power of ten unit multipliers.	(e.g. -3) Please note UOM along with powerOfTenMultiplier when converting to desired UOM (e.g. from Wh to kWh etc.)	Power of Ten Multiplier (for interval usage values)		
Ph 1	timeAttribute	Both	Code used to specify a particular type of time interval method for Readings of ReadingType.	(e.g.0 - none)	ESPI defined attribute of Usage Reading (largely N/A to PG&E implementation)		
Ph 1	uom	Both	The units of the reading, e.g. "Wh"	(e.g. 72 - Wh, 169 - therm) Please note UOM (along with powerOfTenMultiplier) when converting to desired UOM (e.g. from Wh to kWh etc.)	Unit (kWh / Therm)		
Ph 1	measuringPeriod	Both	[extension] Time attribute inherent or fundamental to the reading value (as opposed to 'macroPeriod' that supplies an "adjective" to describe aspects of a time period with regard to the measurement). It refers to the way the value was originally measured and not to the frequency at which it is reported or presented. For example, an hourly interval of consumption data would have value 'hourly' as an attribute. However in the case of an hourly sampled voltage value, the meterReadings schema would carry the 'hourly' interval size information. It is common for meters to report demand in a form that is measured over the course of a portion of an hour, while enterprise applications however commonly assume the demand (in kW or kVA) normalized to 1 hour. The system that receives readings directly from the meter therefore must perform this transformation before publishing readings for use by the other enterprise systems. The scalar used is chosen based on the block size (not any sub-interval size).	Interval length of interval usage data. Interval granularity depends on configuration of meter. Example values: 2 = 15 min, 7 = 60 min.	Interval Length (of Usage Reading)		
Ph 1	commodity	Both	Code for commodity classification of Readings of ReadingType.	Commodity: 1 = electricity (Secondary Metered), 7 = natural Gas	(Current) Service voltage (electric only) and Commodity	Any of the following: Usage Info Billing Info	1)../espi/1_1/resource/Batch/Bulk/(BulkID)/(CorrelationID) --> daily subscription job 2)../espi/1_1/resource/Batch/Bulk/(BulkID) 3)../espi/1_1/resource/Batch/Subscription/(SubscriptionID) 4)../espi/1_1/resource/Batch/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) 5)../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/MeterReading/(MeterReadingID) ReadingType will have an uplink associating it to a specific UsagePoint's MeterReading and IntervalBlock

Ph 1	Meter Reading	Both	Set of values obtained from the meter.	Root Node		
Ph 1	Interval Block	Both	Time sequence of Readings of the same ReadingType.	Root Node		
Ph 1	interval	Both	Specifies the time period during which the contained readings were taken.	Container		
Ph 1	duration	Both	Duration of the interval, in seconds.	In seconds (86400 = 1 day)		
Ph 1	start	Both	Date and time that this interval started.	Epoch time in seconds		
Ph 1	IntervalReading	Both	Specific value measured by a meter or other asset. Each Reading is associated with a specific ReadingType.	Container		
Ph 1	value	Both	Value in units specified by ReadingType	Interval usage amount. Please note UOM along with powerOffTenMultiplier when converting to desired UOM (e.g. from Wh to kWh etc.)		
Ph 2	TOU	E	Code for the TOU type of Readings of ReadingType. Enumeration of Interval TOU identifiers. Identifies the applicable time of use period at the interval level -- only for customers (Service Agreements) on TOU rates or on rates with a TOU version available. Example Values: 1, 2, 3, 4, 5, 6, 7, 8, 9 See ProgramIDMappings for mapping to PG&E defined TOU periods: 1 = SPK (Summer Peak), 2 = SOP (Summer Off Peak), 3 = SPP (Summer Partial Peak), 4 = WPK (Winter Peak), 5 = WPP (Winter Partial Peak), 6 = WOP (Winter Off Peak), 7 = MPK (Spring Peak), 8 = MOP (Spring Off Peak), 9 = MXO (Spring Super Off Peak)	Historical (Usage) Intervals (Interval Usage) Start (default Interval) Duration (length in seconds) (Interval Usage) Volume Unit (kWh / Therm) Also includes: Electric Interval TOU Indicators (in combination w/ ProgramIDMappings)	Any of the following: Usage Info (must authorize an interval metered Service Agreement to receive)	1)../espi/1_1/resource/Batch/Bulk/BulkID/(CorrelationID) --> daily subscription job 2)../espi/1_1/resource/Batch/Bulk/BulkID 3)../espi/1_1/resource/Batch/Subscription/SubscriptionID 4)../espi/1_1/resource/Batch/Subscription/SubscriptionID/UsagePoint/UsagePointID 5)../espi/1_1/resource/Subscription/SubscriptionID/UsagePoint/UsagePointID/MeterReading/MeterReadingID/IntervalBlock 6)../espi/1_1/resource/Subscription/SubscriptionID/UsagePoint/UsagePointID/MeterReading/MeterReadingID/IntervalBlock/IntervalBlockID
Ph 1	ReadingQuality	Both	Quality of a specific reading value or interval reading value. Note that more than one Quality may be applicable to a given Reading. Typically not used unless problems or unusual conditions occur (i.e., quality for each Reading is assumed to be "Good" (valid) unless stated otherwise in associated ReadingQuality).	Container		
Ph 1	quality	Both	Quality of a specific reading value or interval reading value. Note that more than one Quality may be applicable to a given Reading. Typically not used unless problems or unusual conditions occur (i.e., quality for each Reading is assumed to be "Good" (valid) unless stated otherwise in associated ReadingQuality).	(e.g. 14: raw, 17: validated, 19: Revenue Quality)		
Ph 1	timePeriod	Both	The date time and duration of a reading. If not specified, readings for each "intervalLength" in ReadingType are present.	Container		
Ph 1	duration	Both	Duration of the interval, in seconds.	In seconds (e.g. gas: 86400 electric: 3600 / 900 / 300)		
Ph 1	start	Both	Date and time that this interval started.	Epoch time in seconds		
Ph 1	UsageSummary (replaces ElectricPowerUsageSummary)	Both	(Container) Summary of usage for a billing period	Root Node: captures billing info	(Container) Historical Billing Info	
Ph 2	tariffProfile	Both	A schedule of charges; structure associated with Tariff that allows the definition of complex tariff structures such as step and time of use. Billed tariff (rate schedule). Where applicable, tariff profile may include prefixes/suffixes indicating other rate modifiers such as Standby Rate Option for On-Site Generation (e.g. "S" prefix) and/or voltage service indicator (Primary, Secondary, Transmission) etc. Example Values: E1 (Residential Service E-1), HE1* (Interval Billed Residential Service E-1), HE1N** (Interval Billed NEM Residential Service E-1), SE1*** (Standby Mixed-use E1), E6 (Residential TOU Service E-6), H2E6N**** (Interval Billed NEM2 Residential TOU Service E-6), HE6 (Interval Billed Residential TOU service E-6), H6E6N (Interval Billed NEM Residential TOU Service E-6), SE6 (Standby Mixed Use E6), EM (EM), HEM (Interval Billed EM), EMI (Master-Meter Multifamily CARE), HEMI (Interval Billed Master-Meter Multifamily CARE), EMTOU (EM_TOU), HEMTOU (Interval Billed EM_TOU), ETODUA (E-TOU Option A), HETODUA (Interval Billed E-TOU Option A), ETODUB (E-TOU Option B), HETODUB (Interval Billed E-TOU Option B), EVA (EV-Rate A), HEVA (Interval Billed EV-Rate A), HEVAN (Interval Billed EV-Rate B NEMs version)...HE19 (Interval Billed E-19), HE19P, HE19S, HE19T, HE20 (Interval Billed E-20), HE20P, HE20S, HE20T...etc *An H prefix is just the Interval Billed version of the Rate Schedule. ** Not all NEMs customers are explicitly identified in the rate schedule code by the 'N'. This is because we have some customers for which their NEMs indicator is captured elsewhere by our billing systems. ***Standby as either indicated in the rate schedule itself (as with E6) or by the Standby schedule: http://www.pge.com/tariffs/tm2/pdf/ELEC_SCHEDULES_5.pdf ****NEM2 refers to: http://www.pge.com/tariffs/tm2/pdf/ELEC_SCHEDULES_NEM2.pdf	(Historical Billed) Service tariff (D-TOU) & (Historical Billed) Standby Rate Option if On-Site Generation Indicator	Any of the following: Billing Info Usage Info	1)../espi/1_1/resource/Batch/Bulk/BulkID/(CorrelationID) --> daily subscription job 2)../espi/1_1/resource/Batch/Bulk/BulkID 3)../espi/1_1/resource/Batch/Subscription/SubscriptionID 4)../espi/1_1/resource/Batch/Subscription/SubscriptionID/UsagePoint/UsagePointID 5)../espi/1_1/resource/Subscription/SubscriptionID/UsagePoint/UsagePointID/UsageSummary 6)../espi/1_1/resource/Subscription/SubscriptionID/UsagePoint/UsagePointID/UsageSummary/UsageSummaryID
Ph 2	billLastPeriod	Both	The amount of the bill for the referenced billingPeriod in hundred-thousandths of the currency specified in the ReadingType for this reading (e.g., 840 = USD, US dollar).	Note, as defined by ESPI this is expressed in hundred-thousands of USD; hence 7,550,000 means \$75.50 = (7,550,000 / 100,000).	Bill total charges (\$)	
Ph 2	currency	Both	The ISO 4217 code indicating the currency applicable to the bill amounts in the summary.	(i.e. 840 = USD)	Currency of bill total costs	
Ph 2	readCycle	Both	(extension) Cycle day on which the meter for this usage point will normally be read. Usually correlated with the billing cycle.	Service Cycle Indicator for the billing period. More info here: http://www.pge.com/en/myhome/saveenergymoney/smartmeter/analogmeters/schedule/index.page Examples: B, C, D, F, G, H, I, J, K, L, M, N, P, O, R, S, T, V, W, X, Y, Z	(Historical Billed) Meter Read Cycle	
Ph 2	commodity	Both	Code for commodity classification of Readings of ReadingType.	Commodity: 1 = electricity (Secondary Metered), 7 = natural Gas	(Historical Billed) Service voltage (if relevant)	
Ph 1	billingPeriod	Both	The billing period to which the included measurements apply	bill dates		
Ph 1	duration	Both	Duration of the interval, in seconds.	In seconds	Bill start date Bill end date (derived)	Any of the following: Billing Info Usage Info
Ph 1	start	Both	Date and time that this interval started.	Epoch time in seconds		1)../espi/1_1/resource/Batch/Bulk/BulkID/(CorrelationID) --> daily subscription job 2)../espi/1_1/resource/Batch/Bulk/BulkID 3)../espi/1_1/resource/Batch/Subscription/SubscriptionID 4)../espi/1_1/resource/Batch/Subscription/SubscriptionID/UsagePoint/UsagePointID 5)../espi/1_1/resource/Subscription/SubscriptionID/UsagePoint/UsagePointID/UsageSummary 6)../espi/1_1/resource/Subscription/SubscriptionID/UsagePoint/UsagePointID/UsageSummary/UsageSummaryID
Ph 1	overallConsumptionLastPeriod	Both	(extension) The amount of energy consumed in the last billing period.	Container		
Ph 1	powerOffTenMultiplier	Both	The power of ten unit multipliers.	(e.g. -3)		
Ph 1	timeStamp	Both	The date and time (if needed) of the summary measurement.	Epoch time in seconds		
Ph 1	uom	Both	The units of the reading, e.g. "Wh"	(e.g. 72 - Wh, 169 - therm)		
Ph 1	value	Both	The value of the summary measurement.	total usage for billing period		
Ph 1	readingTypeRef	Both	(extension) Reference to a full ReadingType.	readingTypeRef.DefaultQuality = Quality of overallConsumptionLastPeriod.value Example: 19: Revenue Quality	Bill total kWh (* other attributes)	Any of the following: Billing Info Usage Info
Ph 1	qualityOfReading	Both	Indication of the quality of the summary readings	Indicates the quality at the time of request of latest provided interval usage values plus corrections corresponding to the UsageSummary.billingPeriod dates. e.g. 14, 17, 19 See Attachment 2: https://www.pge.com/nots/rates/tariffs/tm2/pdf/ELEC_4378-E-A.pdf		1)../espi/1_1/resource/Batch/Bulk/BulkID/(CorrelationID) --> daily subscription job 2)../espi/1_1/resource/Batch/Bulk/BulkID 3)../espi/1_1/resource/Batch/Subscription/SubscriptionID 4)../espi/1_1/resource/Batch/Subscription/SubscriptionID/UsagePoint/UsagePointID 5)../espi/1_1/resource/Subscription/SubscriptionID/UsagePoint/UsagePointID/UsageSummary 6)../espi/1_1/resource/Subscription/SubscriptionID/UsagePoint/UsagePointID/UsageSummary/UsageSummaryID
Ph 1	statusTimeStamp	Both	Date/Time status of this UsageSummary	Epoch time in seconds		
Ph 1	commodity (of readingTypeRef)	Both	Code for commodity classification of Readings of ReadingType.	Commodity: 1 = electricity (Secondary Metered), 7 = natural Gas		

Ph 2	costAdditionalDetailLastPeriod	E	[extension] Additional charges from the for the referenced billingPeriod which in total add up to costAdditionalLastPeriod.	Container for billing details		
Ph 2	note	E		<p>As applicable, will include following billing details:</p> <ul style="list-style-type: none"> - Demand by TOU and Season: - TOU Usage by Season - Tiered Usage <p>Example Values:</p> <p><u>Demand by TOU and Season:</u> Max Summer Demand, Max Summer Peak Demand, Max Summer Off Peak Demand, Max Summer Partial Peak Demand, Max Winter Demand, Max Winter Peak Demand, Max Winter Partial Peak Demand, Max Winter Off Peak Demand</p> <p><u>TOU Usage by Season:</u> Total Summer Peak Usage, Total Summer Off Peak Usage, Total Summer Partial Peak Usage, Total Winter Peak Usage, Total Winter Partial Peak Usage, Total Winter Off Peak Usage, Total Spring On Peak Usage, Total Spring Off Peak Usage, Total Spring Super Off Peak Usage, Total Spring Usage</p> <p><u>Tiered Usage:</u> Summer Tier 1 Usage Summer Tier 2 Usage Summer Tier 3 Usage Summer Tier 4 Usage Summer Tier 5 Usage Winter Tier 1 Usage Winter Tier 2 Usage Winter Tier 3 Usage Winter Tier 4 Usage Winter Tier 5 Usage Summer Peak Tier 1 Usage Summer Peak Tier 2 Usage Summer Peak Tier 3 Usage Summer Peak Tier 4 Usage Summer Peak Tier 5 Usage Summer Off Peak Tier 1 Usage Summer Off Peak Tier 2 Usage Summer Off Peak Tier 3 Usage Summer Off Peak Tier 4 Usage Summer Off Peak Tier 5 Usage Summer Partial Peak Tier 1 Usage Summer Partial Peak Tier 2 Usage Summer Partial Peak Tier 3 Usage Summer Partial Peak Tier 4 Usage Summer Partial Peak Tier 5 Usage Winter Peak Tier 1 Usage Winter Peak Tier 2 Usage Winter Peak Tier 3 Usage Winter Peak Tier 4 Usage Winter Peak Tier 5 Usage Winter Off Peak Tier 1 Usage Winter Off Peak Tier 2 Usage Winter Off Peak Tier 3 Usage Winter Off Peak Tier 4 Usage</p>	<p>Category: (Historical) Bill tier breakdown (if any): Name (Over Baseline 1%-30%) Volume (1234.2)</p> <p>Category: (Historical) Bill TOU kwh breakdown (if any): Name (Over Baseline 1%-30%) Volume (1234.2)</p> <p>(Historical) Bill TOU kwh breakdown (if any): Name (See Comments for the complete list of TOU Breakdown fields) Volume (1234.2)</p> <p>(Historical) Bill demand breakdown (if any): Name (See Comments for the complete list of Demand Breakdown fields) Volume (1234.2)</p>	<p>1)../espi/1_1/resource/Batch/Bulk/(BulkID)/(CorrelationID) --> daily subscription job 2)../espi/1_1/resource/Batch/Bulk/(BulkID) 3)../espi/1_1/resource/Batch/Subscription/(SubscriptionID) 4)../espi/1_1/resource/Batch/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) 5)../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary 6)../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary/UsageSummaryID</p>
Ph 2	itemKind	E	[extension] Classification of a line item -- i.e. usage charge, taxes, etc...	<p>Example Values: 3 - Energy Usage Fee. A charge for electricity, natural gas, water consumption (as of Jan 2016, only supporting Energy Usage Fee bill details).</p> <p>As applicable, Energy Usage Fee will include the following bill details: (see note for possible values)</p> <ul style="list-style-type: none"> - Demand by TOU and Season - TOU Usage by Season - Tiered Usage 		
Ph 2	measurement	E	[extension] relevant measurement for line item.	Container		
Ph 2	powerOfTenMultiplier	E	The multiplier part of the unit of measure, e.g. "kilo" (k)	(e.g. -3)		
Ph 2	unit	E	The units of the reading, e.g. "Wh"	(e.g. Wh, kWh, 38 Wh)		
Ph 2	value	E	The value of the summary measurement.	(numeric value of measurement)		
Ph 2	programIDMappings	E	[extension] list of programIDMappings	Container		
Ph 2	programIDMapping	E	single program id mapping	As of Jan 2016, only supporting mapping for Time Of Use (TOU) Interval identifiers (i.e. referenced by IntervalBlock.IntervalReading.TOU)		
Ph 2	tOUorCPorConsumptionTier	E	kind of code	<p>As of Jan 2016, only supporting tou.</p> <p>Example value(s): tou</p> <p>Enumeration of Interval TOU identifiers. Identifies the applicable time of use period at the interval level -- only for customers (Service Agreements) on TOU rates or on rates with a TOU version available.</p>	<p>Mapping for enumerated Interval Time of Use Indicators as found within IntervalBlock/ IntervalReading/ TOU entries.</p>	<p>Any of the following: Usage Info (for tou values -- must authorize an interval metered SA on a TOU rate or a rate with a TOU version available)</p>
Ph 2	code	E	code numeric value	<p>ESPI enforced enumeration of TOU periods</p> <p>Example values: 1, 2, 3, 4, 5, 6, 7, 8, 9</p>		
Ph 2	name	E	name associated with code	<p>Example values: SPK, SOP, SPP, WPK, WPP, WOP</p> <p>Mapping: 1 = SPK, 2 = SOP, 3 = SPP, 4 = WPK, 5 = WPP, 6 = WOP, 7 = MPK, 8 = MOP, 9 = MXO</p>		
Ph 2	note	E	optional description of code	<p>Example Values: Summer Peak, Summer Off Peak, Summer Partial Peak, Winter Peak, Winter Partial Peak, Winter Off Peak, Spring Peak, Spring Off Peak, Spring Partial Peak, Spring Super Off Peak</p> <p>Mapping: SPK = Summer Peak, SOP = Summer Off Peak, SPP = Summer Partial Peak, WPK = Winter Peak, WPP = Winter Partial Peak, WOP = Winter Off Peak, MPK = Spring Peak, MOP = Spring Off Peak, MXO = Spring Super Off Peak</p>		