

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	PII / non-PII	ESPI Element Description	PG&E Details	Data Element	Required Registration & Authorization for access	Accessible APIs
SMD Existing	Usage Point (self-link)	Both	non-PII	Logical point on a network at which consumption or production is either physically measured (e.g., metered) or estimated (e.g., unmeasured smart lighting).	Root Node: Usage Point ID (SA UUID) is the obfuscated Service Agreement ID	IDU Unique Identifier	Any	1) ../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint 2) ../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) + all other APIs
SMD Click Thru 2.0	readCycle	Both	non-PII	[extension] Cycle day on which the meter for this usage point will normally be read. Usually correlated with the billing cycle.	Service Cycle Indicator Service Agreement is currently set up on. More info here: http://www.gge.com/en/myhome/saveenergymoney/smartmeter/analogmeters/schedule/index.page Examples: B, C, D,F, G, H, J, K, L, M, N, P, Q, R, S, T, V, W, X, Y, Z	(Current) Meter Read Cycle	Any of the following: Program Enrollment 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)
SMD Existing	ServiceCategory	Both	non-PII	(container) Category of service provided to the customer.		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): 6) ../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/MeterReading/(MeterReadingID)/IntervalBlock 7) ../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/MeterReading/(MeterReadingID)/IntervalBlock/IntervalBlockID Billing Information: 8) ../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary 9) ../espi/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary/(UsageSummaryID)
SMD Existing	Kind	Both	non-PII	Service classification	Commodity of Usage Point. Example Values: 0 = electricity, 1 = gas			
SMD Click Thru 2.0	ServiceDeliveryPoint	Both	non-PII	(container) Category of service provided to the customer.				
SMD Click Thru 2.0	tariffProfile	Both	non-PII	A schedule of charges; structure associated with Tariff that allows the definition of complex tariff structures such as step and time of use.	Currently enrolled 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). Example Values: A1, A10, A10L, A10P, A10PV, A10PX, A10PY, A10S, A10SV, A10SX, A10SY, A10T, A10TV, A10TX, A10TY, A1S, A1SF, A1F, A1L, A1K, A6, A6L, A6W, A6X, AG1A, AG1B, AG4A, AG4B, AG4C, AG4D, AG4E, AG4F, AG5A, AG5B, AG5C, AG5D, AG5E, AG5F, AG6A, AG6B, AG7A, AG7B, AG7D, AG7E, AG7F, AG7G, AG7H, AG7I, AG7J, AG7K, AG7L, AG7M, AG7N, AG7O, AG7P, AG7Q, AG7R, AG7S, AG7T, AG7U, AG7V, AG7W, AG7X, AG7Y, AG7Z, AG8A, AG8B, AG8C, AG8D, AG8E, AG8F, AG8G, AG8H, AG8I, AG8J, AG8K, AG8L, AG8M, AG8N, AG8O, AG8P, AG8Q, AG8R, AG8S, AG8T, AG8U, AG8V, AG8W, AG8X, AG8Y, AG8Z, AG9A, AG9B, AG9C, AG9D, AG9E, AG9F, AG9G, AG9H, AG9I, AG9J, AG9K, AG9L, AG9M, AG9N, AG9O, AG9P, AG9Q, AG9R, AG9S, AG9T, AG9U, AG9V, AG9W, AG9X, AG9Y, AG9Z, AG10A, AG10B, AG10C, AG10D, AG10E, AG10F, AG10G, AG10H, AG10I, AG10J, AG10K, AG10L, AG10M, AG10N, AG10O, AG10P, AG10Q, AG10R, AG10S, AG10SV, AG10SX, AG10SY, AG10T, AG10TV, AG10TX, AG10TY, AG10Z	(Current) Service tariff (D->TOU) & (Current) Standby Rate Option if On-Site Generation Indicator	Any of the following: Program Enrollment 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)
SMD EDS	tariffRiderRefs	E	non-PII	(container) List of rate options applied to the base tariff profile				
SMD EDS	riderType	E	non-PII	Rate options applied to the base tariff profile	Service Tariff Options, including: a) Medical Baseline, b) CARE, c) FERA, d) TBS (Transitional bundled customer), e) CCA-TBS (CCA Transition Bundled Customer) f) Solar Choice	Service tariff options (CARE, FERA, etc.).	Any of the following: Program Enrollment 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)
SMD EDS	enrollmentStatus	E	non-PII	Retail Customer's Tariff Rider enrollment Status	Current status of enrollment for given tariff option with possible values of: enrolled/unenrolled/enrolledPending			
SMD EDS	effectiveDate	E	non-PII	Effective date of Retail Customer's Tariff Rider enrollment status	As of date current enrollment status is effective			
SMD Existing	LocalTimeParameters	Both	non-PII	Daylight savings offset info				1) ../espi/1_1/resource/LocalTimeParameters 2) ../espi/1_1/resource/LocalTimeParameters/(LocalTimeParametersID)
SMD Existing	dstEndRule	Both	non-PII	Rule to calculate end of daylight savings time in the current year.	(e.g. 840E2000)	Local Time Parameters (DST details)	Any of the following: Billing Info Usage Info	
SMD Existing	dstOffset	Both	non-PII	Daylight savings time offset from local standard time.	(e.g. 3600 - 1 hour)			
SMD Existing	dstStartRule	Both	non-PII	Rule to calculate start of daylight savings time in the current year.	(e.g. 360E2000)			
SMD Existing	tzOffset	Both	non-PII	Local time zone offset from UTCtime. Does not include any daylight savings time offsets.	(e.g. -28800 = -8 hours)			

SMD Existing	Reading Type	Both	non-Pii	Characteristics associated with all Readings included in a MeterReading	Root node	[container] Attributes of Interval Usage Readings	
SMD Existing	accumulationBehaviour	Both	non-Pii	Code indicating how value is accumulated over time for Readings of ReadingType.	(e.g. 4 - deltaData)	ESPI defined attribute of Usage Reading (largely N/A to PG&E)	
	dataQualifier	Both	non-Pii	Code describing a salient attribute of Readings of ReadingType.	(e.g. 12 - normal)	ESPI defined attribute of Usage Reading (largely N/A to PG&E implementation)	
SMD Existing	defaultQuality	Both	non-Pii	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)	
SMD Existing	flowDirection	Both	non-Pii	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	
SMD Existing	intervalLength	Both	non-Pii	Default interval length specified in seconds for Readings of ReadingType.	(e.g. 3600, 900, 300)	Interval Length (of Usage Reading)	
SMD Existing	kind	Both	non-Pii	Kind of service represented by the UsagePoint	(e.g. 12 - energy)	Kind of Service related to Usage Reading	
	phase	Both	non-Pii	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
SMD Existing	powerOfTenMultiplier	Both	non-Pii	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)	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)
SMD Existing	timeAttribute	Both	non-Pii	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)	ReadingType will have an uplink associating it to a specific UsagePoint's MeterReading and IntervalBlock
SMD Existing	uom	Both	non-Pii	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)	
	measuringPeriod	Both	non-Pii	[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)	
SMD Existing	commodity	Both	non-Pii	Code for commodity classification of Readings of ReadingType.	Commodity and (electric) Service Voltage: 2 = electricity Primary Metered, 1 = electricity Secondary Metered, 26 = electricity Transmission Metered, 7 = natural Gas	(Current) Service voltage (electric only) and Commodity	Any of the following: Program Enrollment 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)
SMD Click Thru 2.0							ReadingType will have an uplink associating it to a specific UsagePoint's MeterReading and IntervalBlock

SMD Existing	Meter Reading	Both	non-Pii	Set of values obtained from the meter.	Root Node			
SMD Existing	Interval Block	Both	non-Pii	Time sequence of Readings of the same ReadingType.	Root Node			
SMD Existing	interval	Both	non-Pii	Specifies the time period during which the contained readings were				
SMD Existing	duration	Both	non-Pii	Duration of the interval, in seconds.	In seconds (86400 = 1 day)			
SMD Existing	start	Both	non-Pii	Date and time that this interval started.	Epoch time in seconds			
SMD Existing	IntervalReading	Both	non-Pii	Specific value measured by a meter or other asset. Each Reading is associated with a specific ReadingType.				
SMD Existing	value	Both	non-Pii	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.)			
SMD Existing	TOU	E	non-Pii	Code for the TOU type of Readings of ReadingType. 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)	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	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)../esp/1_1/resource/Batch/Bulk/BulkID/(CorrelationID) --> daily subscription job 2)../esp/1_1/resource/Batch/Bulk/BulkID 3)../esp/1_1/resource/Batch/Subscription/(SubscriptionID) 4)../esp/1_1/resource/Batch/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) 5)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/MeterReading/(MeterReadingID)/IntervalBlock 6)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/MeterReading/(MeterReadingID)/IntervalBlock/IntervalBlockID
SMD Existing	ReadingQuality	Both	non-Pii	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).				
SMD Existing	quality	Both	non-Pii	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)			
SMD Existing	timePeriod	Both	non-Pii	The date time and duration of a reading. If not specified, readings for each "intervalLength" in ReadingType are present.				
SMD Existing	duration	Both	non-Pii	Duration of the interval, in seconds.	In seconds (e.g. gas: 86400 electric: 3600 / 900 / 300)			
SMD Existing	start	Both	non-Pii	Date and time that this interval started.	Epoch time in seconds			
SMD Existing	UsageSummary	Both	non-Pii	(Container) Summary of usage for a billing period	Root Node	(Container) Historical Billing Info		
SMD Existing	tariffProfile	Both	non-Pii	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: A1, A10, A10L, A10P, A10PX, A10PY, A10S, A10SX, A10SY, A10T, A10TX, A10TY, A15, A15F, A1F, A11, A1X, A6, A6L, A6W, A6X, AG1A, AG1B, AG4A, AG4B, AG4C, AG4D, AG4E, AG4F, AG5A, AG5B, AG5C, AG5D, AG5E, AG5F, AG6A, AG6B, AG7A, AG7B, AG7D, AG7E, AGICE, AGRA, AGRB, AGRD, AGRE, AGVA, AGVB, AGVD, AGVC, E1, E1S, E1SP, E1SE, E1ST, E1SV, E19V, E19W, E19X, E1C, E1F, E1G, E1I, E1M, E1ML, E1S, F1S1, E1S8, F1S8L, E1T, E1TL, E20, E20P, E20S, E20T, E2S, E2SP, E2SS, E2ST, E2L, E2B, E3B, E36W, E36X, E37, E37P, E37S, E37T, E37W, E37X, E4A, E4B, E6, E7, E7A, E7L, E7LA, E8, E8L, E9A, E9B, EA7, EA8, E9B, E9C, E9D, EM, EM1, EML, EMT0U, ES, ESEG, ESL, ESR, ESSL, ET, ETL, EVA, EVB, HA1, HA10, HA10L, HA10P, HA10PV, HA10PX, HA10PY, HA10S, HA10SX, HA10SY, HA10T, HA10TX, HA10TY, HA10V, HA10W, HA10X, HA10Y, HA11, HA11L, HA11X, HA11Y, HA6, HA6L, HA6W, HA6X, HA6LA, HA6LB, HA6LA, HA6LB, HA6C, HA6D, HA6E, HA6F, HA6G, HA6H, HA6I, HA6J, HA6K, HA6L, HA6M, HA6N, HA6O, HA6P, HA6Q, HA6R, HA6S, HA6T, HA6U, HA6V, HA6W, HA6X, HA6Y, HA6Z	(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)../esp/1_1/resource/Batch/Bulk/BulkID/(CorrelationID) --> daily subscription job 2)../esp/1_1/resource/Batch/Bulk/BulkID 3)../esp/1_1/resource/Batch/Subscription/(SubscriptionID) 4)../esp/1_1/resource/Batch/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) 5)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary 6)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary/UsageSummaryID
SMD Existing	billLastPeriod	Both	non-Pii	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 ESP1 this is expressed in hundred-thousands of USD; hence 7,550,000 means \$75.50 x (7,550,000 / 100,000).	Bill total charges (\$)		
SMD Existing	currency	Both	non-Pii	The ISO 4217 code indicating the currency applicable to the bill amounts in the summary.	(i.e. 840 = USD)	Currency of bill total costs		
SMD Existing	readCycle	Both	non-Pii	[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, DJF, G, H, J, K, L, M, N, P, Q, R, S, T, V, W, X, Y, Z	(Historical Billed) Meter Read Cycle		
SMD Existing	commodity	Both	non-Pii	Code for commodity classification of Readings of ReadingType.	Commodity 1 = electricity Primary Metered, 11 = electricity Secondary Metered, 26 = electricity Transmission Metered, 7 = natural Gas	(Historical Billed) Service voltage (if relevant)		
SMD EDS	billingChargesSource	Both	non-Pii	Source of Billing Charge	Bill charges originating Service Provider	Name of bill charges originating Service Provider (PG&E)	Any of the following: Billing Info	1)../esp/1_1/resource/Batch/Bulk/BulkID/(CorrelationID) --> daily subscription job 2)../esp/1_1/resource/Batch/Bulk/BulkID 3)../esp/1_1/resource/Batch/Subscription/(SubscriptionID) 4)../esp/1_1/resource/Batch/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) 5)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary 6)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary/UsageSummaryID
SMD EDS	agencyName	Both	non-Pii	Name of billing source	Name of bill charges originating Service Provider (PG&E)		Any of the following: Billing Info Usage Info	1)../esp/1_1/resource/Batch/Bulk/BulkID/(CorrelationID) --> daily subscription job 2)../esp/1_1/resource/Batch/Bulk/BulkID 3)../esp/1_1/resource/Batch/Subscription/(SubscriptionID) 4)../esp/1_1/resource/Batch/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) 5)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary 6)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary/UsageSummaryID
SMD Existing	billingPeriod	Both	non-Pii	The billing period to which the included measurements apply	bill dates	Bill start date Bill end date (derived)	Any of the following: Billing Info Usage Info	1)../esp/1_1/resource/Batch/Bulk/BulkID/(CorrelationID) --> daily subscription job 2)../esp/1_1/resource/Batch/Bulk/BulkID 3)../esp/1_1/resource/Batch/Subscription/(SubscriptionID) 4)../esp/1_1/resource/Batch/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) 5)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary 6)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary/UsageSummaryID
SMD Existing	duration	Both	non-Pii	Duration of the interval, in seconds.	In seconds			
SMD Existing	start	Both	non-Pii	Date and time that this interval started.	Epoch time in seconds			

SMD Existing	overallConsumptionLastPeriod	Both	non-Pil	[extension] The amount of energy consumed in the last billing period.				1)../esp/1_1/resource/Batch/Bulk/BulkID/(CorrelationID) -> daily subscription job 2)../esp/1_1/resource/Batch/Bulk/BulkID 3)../esp/1_1/resource/Batch/Subscription/(SubscriptionID) 4)../esp/1_1/resource/Batch/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) 5)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary 6)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary(UsageSummaryID)
SMD Existing	powerOffenMultiplier	Both	non-Pil	The power of ten unit multipliers.	(E.g. -3)			
SMD Existing	timeStamp	Both	non-Pil	The date and time (if needed) of the summary measurement.	Epoch time in seconds			
SMD Existing	uom	Both	non-Pil	The units of the reading, e.g. "Wh"	(E.g. 72 - Wh, 169 - therm)			
SMD Existing	value	Both	non-Pil	The value of the summary measurement.	total usage for billing period			
SMD Existing	readingTypeRef	Both	non-Pil	[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	
SMD Existing	qualityOfReading	Both	non-Pil	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/notes/rates/tariffs/tm2/pdf/ELEC_4378-E-A.pdf			
SMD Existing	statusTimeStamp	Both	non-Pil	Date/Time status of this UsageSummary	Epoch time in seconds			
SMD Existing	costAdditionalDetailLastPeriod	E	non-Pil	[extension] Additional charges from the for the referenced billingPeriod which in total add up to costAdditionalLastPeriod.	Container for billing details			
SMD EDS	note	E	non-Pil	Comment or description of line item	Bill Line Items: As applicable, will include following billing details: - Billed TOU Usage - Billed Tiered Usage - Billed Demand Usage - Taxes - Fees Example Values: TOU Usage Peak Energy Charge Off Peak Energy Charge Part Peak Energy Charge TBCC TOU Usage (Transitional Bundled Commodity Cost) TBCC Peak TBCC Off Peak TBCC Part Peak Tiered Usage: Tier 1/2/3/4/5 Usage Peak Tier 1/2/3/4/5 Usage Off Peak Tier 1/2/3/4/5 Usage Part Peak Tier 1/2/3/4/5 Usage	Bill Line Items: As applicable, will include following billing details: - Billed TOU Usage - Billed Tiered Usage - Billed Demand Usage - Taxes - Fees		
SMD EDS	itemKind	E	non-Pil	[extension] Classification of a line item - i.e. usage charge, taxes, etc.	Enumerated classification depending on the kind of bill line item: 1: Energy Generation Fee. A charge for generation of energy. 2: Energy Delivery Fee. A charge for delivery of energy. 3: Energy Usage Fee. A charge for electricity, natural gas, water consumption. 4: Administrative Fee. A fee for administrative services. 5: Tax. A local, state, or federal energy tax. 6: Energy Generation Credit. A credit, discount or rebate for generation of energy. 7: Energy Delivery Credit. A credit, discount or rebate for delivery of energy. 8: Administrative Credit. A credit, discount or rebate for administrative services. 9: Payment. A payment for a previous billing 10: Information. An informational line item. (Informational only item that isn't necessarily used when adding up to the bill total \$ amount)	Category: (Historical) Bill tier breakdown (if any): Name (Over Baseline 1%+30%) Volume (1234.2) Category: (Historical) Bill TOU kWh breakdown (if any): Name (Peak/Off Peak/Part Peak) Volume (1234.2) (Historical) Bill demand breakdown (if any): Name Volume (1234.2)	Any of the following: Billing Info	1)../esp/1_1/resource/Batch/Bulk/BulkID/(CorrelationID) -> daily subscription job 2)../esp/1_1/resource/Batch/Bulk/BulkID 3)../esp/1_1/resource/Batch/Subscription/(SubscriptionID) 4)../esp/1_1/resource/Batch/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) 5)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary 6)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/UsageSummary(UsageSummaryID)
SMD EDS	amount	E	non-Pil	Cost of line item	Cost (of Billed Line Item Charge)			
SMD EDS	unitCost	E	non-Pil	Per Unit cost	Per Unit cost (e.g. \$/KWH) aka Rate			
SMD EDS	itemPeriod	E	non-Pil	Time period covered by the LineItem, to support pricing changes in the middle of a billing period				
SMD EDS	start	E	non-Pil	Date and time that this interval started.	Bill Line item start date			
SMD EDS	duration	E	non-Pil	Duration of the interval, in seconds.	Duration for bill line item (start + duration = end date)			
SMD EDS	measurement	E	non-Pil	[extension] relevant measurement for line item.				
SMD EDS	powerOffenMultiplier	E	non-Pil	The multiplier part of the unit of measure, e.g. "kilo" (k)	(e.g. 3)			
SMD EDS	uom	E	non-Pil	The units of the reading, e.g. "Wh"	(E.g. 72 - Wh, 38 Wh)			
SMD EDS	value	E	non-Pil	The value of the summary measurement.	(numeric value of measurement)			
SMD Existing	programIDMappings	E	non-Pil	[extension] list of programID mappings				
SMD Existing	programIDMapping	E	non-Pil	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)			
SMD Existing	TOUorCPPorConsumptionTier	E	non-Pil	kind of code	As of Jan 2016, only supporting tou. Example value(s): tou 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.	Mapping for enumerated Interval Time of Use indicators as found within IntervalBlock/IntervalReading/TOU entries.	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)	1)../esp/1_1/resource/Batch/Bulk/BulkID/(CorrelationID) -> daily subscription job 2)../esp/1_1/resource/Batch/Bulk/BulkID 3)../esp/1_1/resource/Batch/Subscription/(SubscriptionID) 4)../esp/1_1/resource/Batch/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID) 5)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/MeterReading/(MeterReadingID)/IntervalBlock 6)../esp/1_1/resource/Subscription/(SubscriptionID)/UsagePoint/(UsagePointID)/MeterReading/(MeterReadingID)/IntervalBlock/IntervalBlockID
SMD Existing	code	E	non-Pil	code numeric value	ESPI enforced enumeration of TOU periods Example values: 1, 2, 3, 4, 5, 6, 7, 8, 9 Example values: SPK, SOP, SPP, WPK, WPP, WOP Mapping: 1 = SPK, 2 = SOP, 3 = SPP, 4 = WPK, 5 = WPP, 6 = WOP, 7 = MPK, 8 = MOP, 9 = MXO			
SMD Existing	name	E	non-Pil	name associated with code				
SMD Existing	note	E	non-Pil	optional description of code	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 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			