Data Standards Body

Technical Working Group

Decision Proposal 111 – Generic Tariff Data Payloads

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Context

This proposal describes the payloads for energy pricing arrangements as described in sections 9 and 10 of the energy sector designation instrument.   The designation instrument specifically describes these sections as being applicable to arrangements that are generally offered and specifically tailored to an individual. This proposal, however, is limited to general offers with tailored arrangements to be handled in a separate proposal.

This proposal has incorporated feedback obtained in response to the following consultation activities:

- **Decision Proposal 103 – Electricity End Points**
  This consultation proposed a series of URIs for the whole energy sector. Feedback provided in response to this consultation can be found at:
  https://github.com/ConsumerDataStandardsAustralia/standards/issues/103
- **First Energy API Workshop**
  This workshop was conducted online and the NMI Standing Data fields were discussed specifically. The outcomes of the workshop can be found at:
  https://github.com/ConsumerDataStandardsAustralia/standards/wiki/Consumer-Data-Right-%7C-Energy-API-Workshop-%7C-Online---Outcomes

It should be noted that, until the rules being developed by the ACCC are finalised, any decision made in response to this consultation is only indicative. The Data Standards Body is required to recommend standards only in accordance with the rules and the designation instrument.

As stipulated in the designation instrument the data covered by this proposal is expected to be provided by the Australian Energy Regulator and the Victorian Government as the specified data holders. In practice, this means that the data will be provided from the existing data stores held in the Energy Made Easy (EME) and Victorian Energy Compare (VEC) systems. This means that the existing data structures defined for EME and VEC is the domain of data that can be included for sharing.

Decision To Be Made

Define the preliminary end point URIs and payloads for Generic Tariff data.

Identified Options

When consulting on payloads each field potentially has multiple options. For this reason, this proposal only presents a single option for consultation with the expectation that all parts of the proposal are subject to change in response to community feedback.

This section therefore includes a series of descriptions of the underlying assumptions and rationale that have led to the specific proposal included in the recommendation section.

Existing Data Domain

The basis for the creation of this proposal is the documentation provided by EME for the data standard they currently hold with modification after review by the technical staff managing VEC.

Alignment To CDR Standards

The field naming conventions and structures proposed do not align with the existing, internal data structures as they have been modified to align with existing CDR standards. This includes aligning to CDR field naming and end point naming conventions. These standards are referenced below:

- **CDR Payload Structure:**
  https://consumerdatastandardsaustralia.github.io/standards/#payload-conventions
  These standards describe the overall payload structure for all CDR APIs.
  This includes a description of the use of the generic "data" object and standard error payload. This also includes a section on field naming conventions that outline how individual fields are named in the CDR standards.
  This section also includes a definition of the use of mandatory vs optional statements in CDR payloads.
- **CDR Common Field Types:**
  https://consumerdatastandardsaustralia.github.io/standards/#common-field-types
  These standards describe common field types referred to in payload definitions.

Cross Sector Alignment

The proposed payloads are also been aligned with the model for presenting product data established in the banking sector. Specifically, it has been previously assumed that product data would not be presented from a single API set aligned to the designated organisation but that each entity that the customer has a relationship with (i.e. master brand) would present APIs independently.

For energy this means that the arrangement end points are presented according to retailer brand rather than according to the data held by EME and VEC respectively.

This approach ensures that the defined end points are adaptable in the event of a change to the data holder designation in the future. It also means that the data presented can be more easily aligned with the tailored arrangement data that is designated to be provided by energy retailers as the data holder.

Current Recommendation

The recommended URIs and Payloads for generic tariff data is presented in the following sections.

Available Plans End Points Summary

A summary of the publicly available plans end points:
- GET   /energy/plans
- GET   /energy/plans/{planId}

Plan List Data

High Level Information

Title	Obtain a list of energy plans that are currently offered to the market
HTTP Method	GET
URI	/energy/plans
Security Scope	Public (no authentication required)
Pagination	Supported
Path Parameters	None
Query Parameters	**type** Used to filter results on the type field. Any one of the valid values for this field can be supplied. If absent defaults to include all products **fuel-type** Used to filter results on the fuelType field. Any one of the valid values for this field can be supplied. If absent defaults to include all products **available** Used to filter results on the available field. Any one of the valid values for this field can be supplied. If absent defaults to include all products **brand** Used to filter results on the brand field. If absent defaults to include all products **effective** If true then only include products that are effective right now and exclude products that may be available at a future time. If false only include products effective in the future. If absent defaults to include all products **updated-since** Only include products that have been update after the specified date and time. Format for this field follows the format for the DateTimeString common type. If absent defaults to include all products **page** Page of results to request (standard pagination) **page-size** Page size to request. Default is 25 (standard pagination)

Request Payload
Not applicable

Response Payloads

Field	Type	Mandatory	Description
data	Object	Mandatory	
{			
plans			
[{			
planId	ASCIIString	Mandatory	The ID of the specific plan
effectiveFrom	DateTimeString	Optional	The date and time from which this plan is effective (ie. is available for origination). Used to enable the articulation of products to the regime before they are available for customers to originate
effectiveTo	DateTimeString	Optional	The date and time at which this plan will be retired and will no longer be offered. Used to enable the managed deprecation of plans
lastUpdated	DateTimeString	Mandatory	The last date and time that the information for this plan was changed (or the creation date for the plan if it has never been altered)
name	String	Mandatory	The display name of the plan
description	String	Optional	A description of the plan
type	Enum	Mandatory	The type of the plan. Must be one of: • STANDING • MARKET • REGULATED
fuelType	Enum	Mandatory	The fuel types covered by the plan. Must be one of: • ELECTRICITY • GAS • DUAL
availability	Enum	Optional	The availability of the plan. If absent then the value GENERAL is assumed. Must be one of: • RESTRICTED • GENERAL
brand	ASCIIString	Mandatory	The ID of the brand under which this plan is offered
brandName	String	Mandatory	The display name of the brand under which this plan is offered
thirdPartyAgentId	String	Optional	The ID of the Third Party through which this plan may be originated

Field	Type	Mandatory	Description
thirdPartyAgentName	String	Optional	The display name of the Third Party through which this plan may be originated
applicationUri	URIString	Optional	A link to an application web page where this plan can be applied for
additionalInformation	Object	Optional	Object that contains links to additional information on specific topics
{			
overviewUri	URIString	Optional	A link to a general overview of the plan
termsUri	URIString	Optional	A link to terms and conditions for the plan
eligibilityUri	URIString	Optional	A link to detail on eligibility criteria for the plan
pricingUri	URIString	Optional	A link to detail on pricing for the plan
bundleUri	URIString	Optional	A link to detail on bundles that this plan can be a part of
}			
}]			
}			
links	Object	Mandatory	
{			
self	URIString	Mandatory	Fully qualified link to this API call
first	URI	Conditional	URI to the first page of this set. Mandatory if this response is not the first page
prev	URI	Conditional	URI to the previous page of this set. Mandatory if this response is not the first page
next	URI	Conditional	URI to the next page of this set. Mandatory if this response is not the last page
last	URI	Conditional	URI to the last page of this set. Mandatory if this response is not the last page
}			
meta	Object	Mandatory	
{			
totalRecords	PositiveInteger	Mandatory	The total number of records in the full set
totalPages	PositiveInteger	Mandatory	The total number of pages in the full set

Field	Type	Mandatory	Description
}			

Plan Detailed Data

High Level Information

Title	Obtain detailed information on a single energy plan offered openly to the market
HTTP Method	GET
URI	/energy/plans/{planId}
Security Scope	Public (no authentication required)
Pagination	Not supported
Specific Errors	Not supported – 400 and 422 not expected to be returned
Path Parameters	**planId** ID of the specific plan requested
Query Parameters	None

Request Payload

Not applicable

Response Payloads

HTTP Response Code: 200 OK

Field	Type	Mandatory	Description
data	Object	Mandatory	
{			
planId	ASCIIString	Mandatory	The ID of the specific plan
effectiveFrom	DateTimeString	Optional	The date and time from which this plan is effective (ie. is available for origination). Used to enable the articulation of products to the regime before they are available for customers to originate
effectiveTo	DateTimeString	Optional	The date and time at which this plan will be retired and will no longer be offered. Used to enable the managed deprecation of plans
lastUpdated	DateTimeString	Mandatory	The last date and time that the information for this plan was changed (or the creation date for the plan if it has never been altered)
name	String	Mandatory	The display name of the plan
description	String	Optional	A description of the plan

Field	Type	Mandatory	Description
type	Enum	Mandatory	The type of the plan. Must be one of: • STANDING • MARKET • REGULATED
fuelType	Enum	Mandatory	The fuel types covered by the plan. Must be one of: • ELECTRICITY • GAS • DUAL
availability	Enum	Optional	The availability of the plan. If absent then the value GENERAL is assumed. Must be one of: • RESTRICTED • GENERAL
brand	ASCIIString	Mandatory	The ID of the brand under which this plan is offered
brandName	String	Mandatory	The display name of the brand under which this plan is offered
thirdPartyAgentId	String	Optional	The ID of the Third Party through which this plan may be originated
thirdPartyAgentName	String	Optional	The display name of the Third Party through which this plan may be originated
applicationUri	URIString	Optional	A link to an application web page where this plan can be applied for
additionalInformation	Object	Optional	Object that contains links to additional information on specific topics
{			
overviewUri	URIString	Optional	A link to a general overview of the plan
termsUri	URIString	Optional	A link to terms and conditions for the plan
eligibilityUri	URIString	Optional	A link to detail on eligibility criteria for the plan
pricingUri	URIString	Optional	A link to detail on pricing for the plan
bundleUri	URIString	Optional	A link to detail on bundles that this plan can be a part of
}			
customerType	Enum	Optional	The type of customer that the plan is offered to. If absent then the plan is available to all customers. Must be one of: • RESIDENTIAL • BUSINESS

Field	Type	Mandatory	Description
geography	Object	Optional	Describes the geographical area that the plan is available for. If absent then it is assumed the plan is not geographically limited
{			
excludedPostcodes	Array of Strings	Optional	Array of valid Australian post codes that are specifically excluded from the plan
includedPostcodes	Array of Strings	Optional	Array of valid Australian post codes that are included from the plan. If absent defaults to all non-excluded post codes
supplyAreas	Array of Objects	Optional	Array of supply areas for which this plan is available
[{			
supplyAreaId	ASCIIString	Mandatory	ID of the supply area
name	String	Mandatory	Display name of the supply area
distributor	String	Optional	The name of the distributor for the supply area
state	Enum	Optional	The Australian state that the plan is applicable to. Valid values are defined by Australia Post PAF code file State Type Abbreviation. For example: NSW, QLD, VIC, NT, WA, SA, TAS, ACT, AAT
}]			
}			
meteringCharges	Array of Objects	Optional	Charges for metering included in the plan
[{			
name	String	Mandatory	Display name of the charge
description	String	Optional	Description of the charge
minimumValue	AmountString	Mandatory	Minimum value of the charge if the charge is a range or the absolute value of the charge if no range is specified
maximumValue	AmountString	Optional	The upper limit of the charge if the charge could occur in a range
period	ExternalRef	Optional	The charges that occur on a schedule indicates the frequency. Formatted according to ISO 8601 Durations (excludes recurrence syntax)
}]			

Field	Type	Mandatory	Description
gasContract	Object Note that the structure of this object is identical to: *electricityContract*	Conditional	The details of the terms for the supply of electricity under this plan. Is mandatory if fuelType is set to GAS or DUAL
electricityContract	Object	Conditional	The details of the terms for the supply of electricity under this plan. Is mandatory if fuelType is set to ELECTRICITY or DUAL
{			
additionalFeeInformation	String	Optional	Free text field containing additional information of the fees for this contract
pricingModel	Enum	Mandatory	The pricing model for the contract. Must be one of: • SINGLE_RATE • SINGLE_RATE_CONT_LOAD • TIME_OF_USE • TIME_OF_USE_CONT_LOAD • FLEXIBLE • FLEXIBLE_CONT_LOAD • QUOTA Contracts for gas must use SINGLE_RATE
termType	Enum	Optional	The term for the contract. If absent assumes no specified term. Must be one of: • 1_YEAR • 2_YEAR • 3_YEAR • 4_YEAR • 5_YEAR • ONGOING • OTHER
timeZone	Enum	Conditional	Required if pricingModel is set to TIME_OF_USE. Defines the time zone to use for calculation of the time of use thresholds. Must be one of: • LOCAL • AEST
benefitPeriod	String	Conditional	Description of the benefit period. Should only be present if termType has the value ONGOING
terms	String	Optional	Free text description of the terms for the contract
isFixed	Boolean	Mandatory	Flag indicating whether prices are fixed or variable
variation	String	Conditional	Free text description of price variation policy and conditions for the contract. Mandatory if isFixed is true

Field	Type	Mandatory	Description
onExpiryDescription	String	Optional	Free text field that describes what will occur on or prior to expiry of the fixed contract term or benefit period
meterTypes	Array Of Strings		An array of the meter types that this contract is available for
coolingOffDays	PositiveInteger	Conditional	Number of days in the cooling off period for the contract. Mandatory for plans with type of MARKET
billFrequency	Array Of ExternalRef	Mandatory	An array of the available billing schedules for this contract. Formatted according to ISO 8601 Durations (excludes recurrence syntax)
controlledLoad	Object	Conditional	Required if pricing model is SINGLE_RATE_CONT_LOAD or TIME_OF_USE_CONT_LOAD
{			
name	String	Mandatory	A display name for the controlled load tier
description	String	Optional	A description of the controlled load tier
dailyCharge	AmountString	Mandatory	The daily supply charge (exclusive of GST) for this controlled load tier
period	ExternalRef	Mandatory	The period for which the controlled load rate applies. Formatted according to ISO 8601 Durations (excludes recurrence syntax)
rates	Array Of Objects	Mandatory	Array of controlled load rates in order of usage volume
[{			
unitPrice	AmountString	Mandatory	Unit price of usage per kWh (exclusive of GST)
volume	Number	Optional	Volume in kWh that this rate applies to. Only applicable for 'stepped' rates where different rates apply for different volumes of usage in a period
}]			
}			
paymentOption	Arrau Of Enums	Mandatory	Payment options for this contract. Each item must be one of: • PAPER_BILL • CREDIT_CARD • DIRECT_DEBIT • BPAY
incentives	Array Of Objects	Optional	Optional list of incentives available for the contract
[{			

Field	Type	Mandatory	Description
name	String	Mandatory	The display name of the incentive
description	String	Mandatory	The description of the incentive
}]			
discount	Array Of Objects	Optional	Optional list of discounts available for the contract
[{			
name	String	Mandatory	The display name of the discount
description	String	Optional	The description of the discount
type	Enum	Mandatory	The type of the discount. Must be one of: - CONDITIONAL - GUARANTEED
category	Enum	Conditional	The type of the discount. Mandatory if the discount type is CONDITIONAL. Must be one of: - PAY_ON_TIME - DIRECT_DEBIT
methodUType	Enum	Mandatory	The method of calculation of the discount. Must be one of: - percentOfBill - percentOfUse - fixedAmount - percentOverThreshold
percentOfBill	Object	Conditional	Required if methodUType is percentOfBill
{			
rate	RateString	Mandatory	The rate of the discount applied to the bill amount
}			
percentOfUse	Object	Conditional	Required if methodUType is percentOfUse
{			
rate	RateString	Mandatory	The rate of the discount applied to the usageamount
}			
fixedAmount	Object	Conditional	Required if methodUType is fixedAmount
{			
amount	AmountString	Mandatory	The amount of the discount
}			

Field	Type	Mandatory	Description
percentOverThreshold	Object	Conditional	Required if methodUType is percentOverThreshold
{			
rate	RateString	Mandatory	The rate of the discount over the usage amount
usageAmount	AmountString	Mandatory	The usage amount threshold above which the discount applies
}			
}]			
greenPowerCharges	Array Of Objects	Optional	Optional list of charges applicable to green power
[{			
name	String	Mandatory	The display name of the charge
description	String	Optional	The description of the charge
type	Enum	Mandatory	The type of charge. Must be one of: • FIXED_PER_DAY • FIXED_PER_WEEK • FIXED_PER_MONTH • FIXED_PER_UNIT • PERCENT_OF_USE • PERCENT_OF_BILL
tiers	Array Of Object	Mandatory	Array of charge tiers based on the percentage of green power used for the period implied by the type. Array is in order of increasing percentage of green power
{			
percentGreen	RateString	Mandatory	The upper percentage of green power used applicable for this tier
rate	RateString	Conditional	The rate of the charge if the type implies the application of a rate
amount	AmountString	Conditional	The amount of the charge if the type implies the application of a fixed amount
}			
}]			
eligibility	Array Of Objects	Optional	Eligibility restrictions or requirements
[{			

Field	Type	Mandatory	Description
type	Enum	Mandatory	The type of the eligibility restriction. Must be one of: • EXISTING_CUST • EXISTING_POOL • EXISTING_SOLAR • EXISTING_BATTERY • EXISTING_SMART_METER • EXISTING_BASIC_METER • SENIOR_CARD • SMALL_BUSINESS • NO_SOLAR_FIT • NEW_CUSTOMER • ONLINE_ONLY • REQ_EQUIP_SUPPLIER • THIRD_PARTY_ONLY • SPORT_CLUB_MEMBER • ORG_MEMBER • SPECIFIC_LOCATION • MINIMUM_USAGE • LOYALTY_MEMBER • GROUP_BUY_MEMBER • OTHER
information	String	Mandatory	Information of the eligibility restriction specific to the type of the restriction
description	String	Optional	A description of the eligibility restriction
}]			
fee	Array Of Objects	Optional	An array of fees applicable to the plan
[{			
type	Enum	Mandatory	The type of the fee. Must be one of: • EXIT • ESTABLISHMENT • LATE_PAYMENT • DISCONNECTION • DISCONNECT_MOVE_OUT • DISCONNECT_NON_PAY • RECONNECTION • CONNECTION • PAYMENT_PROCESSING • CC_PROCESSING • CHEQUE_DISHONOUR • DD_DISHONOUR • MEMBERSHIP • CONTRIBUTION • PAPER_BILL • OTHER

Field	Type	Mandatory	Description
term	Enum	Mandatory	The term of the fee. Must be one of: • FIXED • 1_YEAR • 2_YEAR • 3_YEAR • 4_YEAR • 5_YEAR • PERCENT_OF_BILL • ANNUAL • MONTHLY • BIANNUAL
amount	AmountString	Conditional	The fee amount. Required if term is not PERCENT_OF_BILL
rate	RateString	Conditional	The fee rate. Required if term is PERCENT_OF_BILL
description	String	Optional	A description of the fee
}]			
solarFeedInTariff	Array Of Objects	Optional	Array of feed in tariffs for solar power
[{			
type	Enum	Mandatory	The type of the tariff. Must be one of: • GOVERNMENT • RETAILER
amount	AmountString	Conditional	The tariff amount per kWh
description	String	Optional	A description of the tariff
}]			
tariffPeriod	Array Of Objects	Mandatory	Array of tariff periods
[{			
name	String	Mandatory	The name of the tariff period
startDate	String	Conditional	The start date of the tariff period in a calendar year. Required if there is more than one period. Formatted in mm-dd format
endDate	String	Conditional	The end date of the tariff period in a calendar year. Required if there is more than one period. Formatted in mm-dd format
dailySupplyCharges	AmountString	Mandatory	The amount of access charge for the tariff period, in cents per day exclusive of GST.

Field	Type	Mandatory	Description
rateBlockUType	Enum	Mandatory	Specifies the type of rate applicable to this tariff period. Must be one of: • singleRate • timeOfUseRates
singleRate	Object	Conditional	Object representing a single rate. Required if rateBlockUType is singleRate
{			
name	String	Mandatory	Display name of the rate
description	String	Optional	Description of the rate
generalUnitPrice	AmountString	Conditional	The block rate (unit price) for any usage above the included fixed usage, in cents per kWh inclusive of GST. Only required if pricingModel field is 'QUOTA'
period	ExternalRef	Optional	Usage period for which the block rate applies. Formatted according to ISO 8601 Durations (excludes recurrence syntax)
rates	Array Of Objects	Mandatory	Array of controlled load rates in order of usage volume
[{			
unitPrice	AmountString	Mandatory	Unit price of usage per kWh (exclusive of GST)
volume	Number	Optional	Volume in kWh that this rate applies to. Only applicable for 'stepped' rates where different rates apply for different volumes of usage in a period
}]			
}			
timeOfUseRates	Array Of Objects	Conditional	Array of objects representing time of use rates. Required if rateBlockUType is timeOfUseRates
[{			
name	String	Mandatory	Display name of the rate
description	String	Optional	Description of the rate
type	Enum	Mandatory	The type of usage that the rate applies to. Must be one of: • PEAK • OFF_PEAK • SHOULDER • SHOULDER1 • SHOULDER2
rates	Array Of Objects	Mandatory	Array of controlled load rates in order of usage volume

Field	Type	Mandatory	Description
[{			
unitPrice	AmountString	Mandatory	Unit price of usage per kWh (exclusive of GST)
volume	Number	Optional	Volume in kWh that this rate applies to. Only applicable for 'stepped' rates where different rates apply for different volumes of usage in a period
}]			
timeOfUse	Array Of Objects	Mandatory	Array of times of use
[{			
days	Array Of Enum	Mandatory	The days that the rate applies to. Must be one of: - SUNDAY - MONDAY - TUESDAY - WEDNESDAY - THURSDAY - FRIDAY - SATURDAY - BUSINESS_DAYS
startTime	String	Mandatory	Start of the period in HHMM format using 24 hour clock format
endTime	String	Mandatory	End of the period in HHMM format using 24 hour clock format
}]			
}			
demandCharges	Array Of Objects	Optional	Array of demand charges
[{			
name	String	Mandatory	Display name of the charge
description	String	Optional	Description of the charge
amount	AmountString	Conditional	The charge amount per kWh exclusive of GST
startTime	String	Mandatory	Start of the period in HHMM format using 24 hour clock format
endTime	String	Mandatory	End of the period in HHMM format using 24 hour clock format
}]			
}]			
}			

Field	Type	Mandatory	Description
}			
links	Object	Mandatory	
{			
self	URIString	Mandatory	Fully qualified link to this API call
}			
meta	Object	Optional	
{			
}			