[Supply Point Quantities] API Technical Specification

Overview

The Formula Year AQ is used to calculate the billing rates that will be applied in the coming financial year and by the Shipper/Suppliers to quote customers. The purpose of this API is to enable Shippers to view the proposed Formula Year (Billing) AQ value prior to the notification sent to the current Shipper in late March.

API Parameters

Input Parameters

There are 3 different filters that could be applied to the API call, where at least 1 is mandatory. These are MPRN, ADDRESS_ID or POSTCODE, the latter could be combined with additional address details as specified below:

#	Name	Type	Length	Description
1	mprn	string	50	Meter Point Reference Number
2	address_id	string	30	Internal ID that links MPRN to address data (internal use only)
3	postcode	string	10	Post Code
3.1	house_no	string	10	House Number
3.2	sub_building_name	string	40	Sub Building Name
3.3	street	string	40	Street
3.4	town	string	40	Town
3.5	county	string	3	County
3.6	country	string	3	Country
3.7	dependent_street	string	40	Dependent Street
3.8	dependent_local	string	40	Dependent Local

Output Parameters

The following Output parameters are included within the API:

#	Field Name	Type	Length	Description
1	amr_indicator	string	3	AMR In indicator
2	country	string	3	Country
3	county	string	3	County
4	csep_id	string	10	CSEP ID
5	current_aq_roll_value	Decimal	16,7	Current AQ Roll Value
6	current_formula_year_aq_value	Decimal	16,7	Current Formula Year AQ Value

7	current_formula_year_soq_value	Decimal	16,7	Current Formula Year SOQ Value
8	current_soq_roll_value	Decimal	16,7	Current SOQ Roll Value
9	dependent_local	string	40	Dependent locality
10	dependent_street	string	40	Dependent Street
11	distribution_network_operator	string	40	Distribution Network Operator
12	exit_zone	string	10	Exit Zone
13	house_no	string	10	House Number
14	local_distribution_zone	string	10	Local Distribution Zone
15	market_sector_code	string	10	Market Sector Code
16	mprn	string	50	Meter Point Reference Number (MRPN) (UC_POD_EXT)
17	perspective_formula_year_aq_value	Decimal	16,7	Perspective Formula Year AQ Value
18	perspective_formula_year_effective_date	Date		Perspective Formula Year Effective Date
19	perspective_formula_year_soq_value	Decimal	16,7	Perspective Formula Year SOQ Value
20	postcode	string	10	Post Code
21	street	string	40	Street
22	sub_building_name	string	40	Sub Building Name
23	town	string	40	Town
24	installation_number	string	40	Installation Number

Error Codes and Descriptions

The following table contains the implemented error codes

HTTP Code	Error Code	Fault String
400	-	-
500	steps.regexprotection.ThreatDetected	Regular expression threat is detected in the API request, please check the data entered.
401	steps.oauth.v2.FailedToResolveAPIKey	Application Key sent in API request is either empty or invalid.
500	policies.custom.config.1	Application creation process has not completed due to technical issues, please contact or raise a fault with the system administrator.
500	policies.custom.config.2	Application creation process has not completed due to technical issues, please contact or raise a fault with the system administrator.
500	policies.custom.config.3	Application creation process has not completed due to technical issues, please contact or raise a fault with the system administrator.
500	policies.ratelimit.SpikeArrestViolation	Number of API requests for [product] has exceeded the allowed spike limit of [__] per [minute].

500	policies.ratelimit.QuotaViolation	Number of API requests for [product] has exceeded the allowed quota limit of [__] per month.
400	e001	Request cannot be empty, please submit at least one unique identifier.
200	e002	Requested address has twin stream meter device. You are not authorised to view this data.
200	e003	Requested address has shared supply meter device. You are not authorised to view this data.
200	e004	Requested address has twin stream and shared supply meter device. You are not authorised to view this data.
200	e005	Requested address has extinct meter device. You are not authorised to view this data.
200	e006	Requested address has non domestic meter device. You are not authorised to view this data.
200	e007	Requested meter reference number is not found.
200	e008	Requested meter reference number has more than one matching records; data can only be provided for unique match.
200	e009	Submitted address details has multiple records; data is only provided for unique number.
500	e010	Unexpected error occurred while processing request
200	e011	Requested address has no matching record. This may be because, there is no gas meter at this property (or) full postcode with a space is not entered (or) the entered details are incorrect.

Sample Request / Response

Requests

The following are the API requests:

#	Request	Request description
1	/v1/Shipper.svc?mprn=XXXXXXXXXX	MPRN query option
2	/v1/Shipper.svc?postcode=AB24+3PU	Address details query option

Responses

For any positive response for the requests above, there will always be only **one** record returned:

#	Response	Response description

1,2	<pre>{
	    "mprn": {
	        "amr_indicator": "",
	        "country": "GB",
	        "county": "",
	        "csep_id": "",
	        "current_aq_roll_value": 0.0013527,
	        "current_formula_year_aq_value": 0.0013527,
	        "current_formula_year_soq_value": 0.0000109,
	        "current_soq_roll_value": 0.0000109,
	        "dependent_local": "",
	        "dependent_street": "",
	        "distribution_network_operator": "Scotland Gas Networks Plc.",
	        "exit_zone": "SC1",
	        "house_no": "10",
	        "local_distribution_zone": "SC",
	        "market_sector_code": "D",
	        "mprn": "XXXXXXXXXX",
	        "perspective_formula_year_aq_value": 0.0013527,
	        "perspective_formula_year_effective_date": "2016-10-01T00:00:00.000Z",
	        "perspective_formula_year_soq_value": 0.000011,
	        "postcode": "AB24 3PU",
	        "street": "ELMBANK TERRACE",
	        "sub_building_name": "",
	        "town": "ABERDEEN",
	        "installation_number": "XXXXXXX"
	    }
	}</pre>
		Positive responses

Common Elements

Header Information [Request]

#	Header type	Header Options	Header Optionality
1	APIKey		Required