Gemini API User Guide

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Introduction

This guide has been provided to give Gemini users an overview of the API facility available in relation to the Gemini system. If you wish to make use of this service you should also refer to the Gemini and Gemini Exit API Specification Document which contains technical details on the structure of the APIs, session management, error handling etc. There is also a schema library for you to refer to.

Gemini APIs

What is an API?

API stands for Application Programming Interface. It's a mechanism that enables one system to interact with another system. If you have large data sets that you want to retrieve then a query via an API is often quicker than using an online screen. It also enables data to be sent from a source system to then make updates in the destination system.

What API provision does Gemini have?

Gemini has a defined suite of APIs which can be used to query data and, in some cases, make updates. Each API maps to an online screen within Gemini or within Gemini Exit. The full list is given in the catalogue section of this User Guide.

How do I access the Gemini APIs?

If you wish to use the Gemini APIs there are a number of activities that will need to be completed first.

Access route

The Gemini APIs are currently accessed via your IX connection however from July 2021 they will also be available over the internet. You will need to speak to your IT department to understand which route you want to use. Once you have decided you will need to configure your connection. Technical information to support this can be found in the Gemini and Gemini Exit API Specification Document.

Security

In order for you to use the Gemini APIs you will need to request an API account. This should be done via the Security Access Request form which can be found here. You will need to liaise with your Local Security Officer (LSO) as any access request has to be submitted by them.

There are various User Roles covering APIs which depend on your type of organisation and which area you wish to access. Any user role with the prefix IGMS relates to Gemini and so covers Entry Capacity and Balancing related APIs. Any user role with the prefix EXIT relates to Gemini Exit and so covers Exit Capacity related APIs. Once any accounts have been set up you will need to include this in your configuration activities.

Source System

You will need to develop your own API Client program. This is tooling that will trigger requests and then process responses. We don't offer API Client software however the Gemini and Gemini Exit API Specification Document contains information to assist your development work.

Testing

Prior to any set up in the production system you may want to carry out some testing. We have a test environment that you can use for testing your API set up however the current Gemini change programme means we cannot guarantee availability of the environment. Information on how to book the test environment can be found here.

API Catalogue

The current catalogue consists of 43 APIs. The Gemini System Enhancements project will be adding a further 13 APIs which are scheduled to be available from 25th July 2021. Here is a list of all 56 APIs including screenshots of the corresponding online screen. The APIs you can access will depend on your organisation type.

Entry Capacity

1. All Active Bids
2. Bid Information Shipper View – Normal Pricing Strategy
3. Bid Capture (New API for 2021)
4. View Bid Information for IP Locations (New API for 2021)
5. Revised Entitlements
6. IP Entry Entitlement
7. Daily Auctions Summary Report – Bids/Shippers
8. Daily Auctions Summary Report – Max/Min Price Information
9. Daily Auctions Summary Report – Sold/Unsold
10. Daily Auctions Summary Report – WAP
11. Capacity Trade Details
12. Capacity Trade Registration

Exit Capacity

1. All Active Requests
2. Capture Request (New for 2021)
3. Auction Request Information
4. Auction Request Information for IP Locations (New for 2021)
5. Entitlement Report
6. IP Exit Entitlement
7. Max/Min Price Information – Daily Auction
8. Sold/Unsold – Daily Auction

9. Transfer Registration (New for 2021)
10. View Transfer Registration (New for 2021)

Balancing

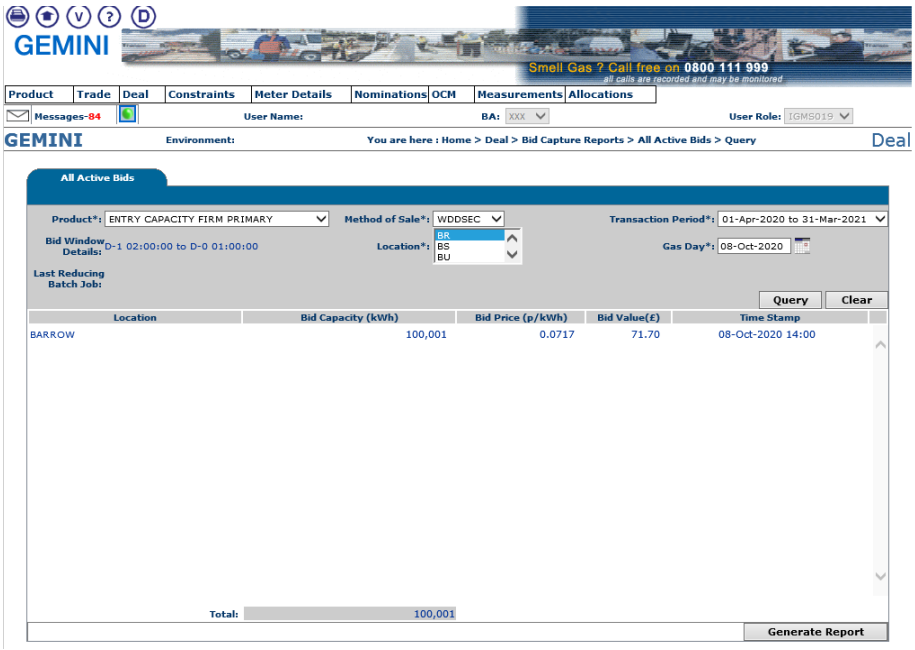
1. Add/Update Nominations
2. Update Renominations
3. Update INS Nominations
4. Add/Update IP Nomination
5. View Renominations
6. View Renomination Details
7. View INS Nominations
8. View IP Nominations
9. Maintain OCM Renominations (View)
10. Maintain Physical Renominations (Update)
11. Shipper EOD Noms (Hour Bar)
12. View Allocation Details by LDZ and Meter Type (New for 2021)
13. System Nomination Balance
14. System Status Information
15. System Status History
16. Shipper Preliminary Balance
17. Shipper Preliminary Balance across Date Range (New for 2021)
18. Shipper Imbalance (New for 2021)
19. Shipper Total Energy Forecast
20. View Shipper UIG Values
21. View Shipper Allocation UIG Share (New for 2021)
22. View Shipper Input Claims (New for 2021)
23. Update Shipper Input Claims (New for 2021)

24. View Storage Output Claims
25. Update Storage Output Claims (New for 2021)
26. Daily Cashout Tolerance Breakdown
27. Register Physical/Locational Trades
28. Register Title Swaps
29. Gas Trades Breakdown
30. Meter to Zone Relationship
31. Price Information History
32. View WCF/SF Values
33. Confirm Multilocational Trades (Update)
34. View Shipper Trade Details

Entry Capacity

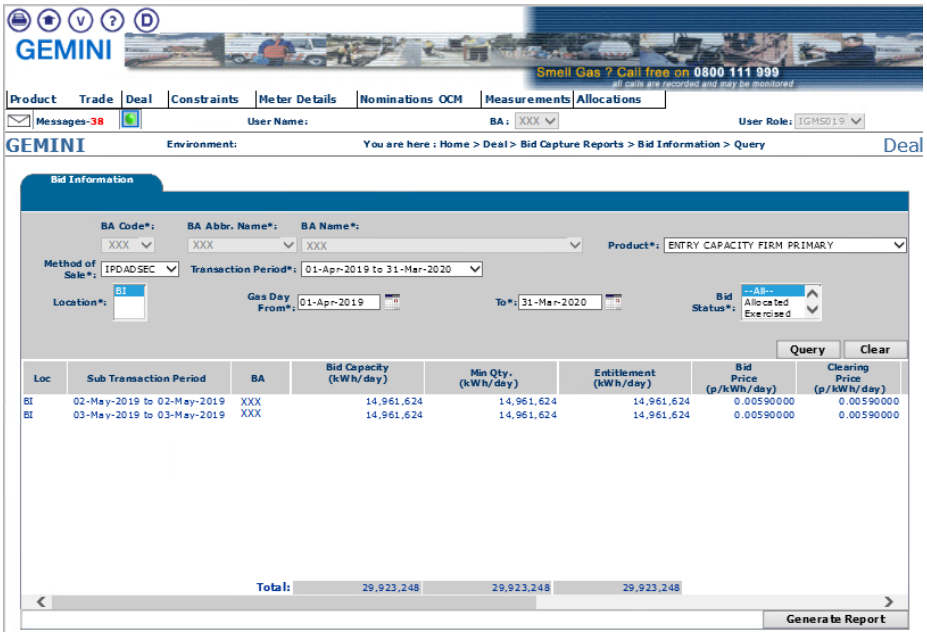
All Active Bids

This API enables you to query for all active bids for an Entry Capacity auction. In line with the online screen you can query for one, some or all locations. This is not applicable to Interconnectors.



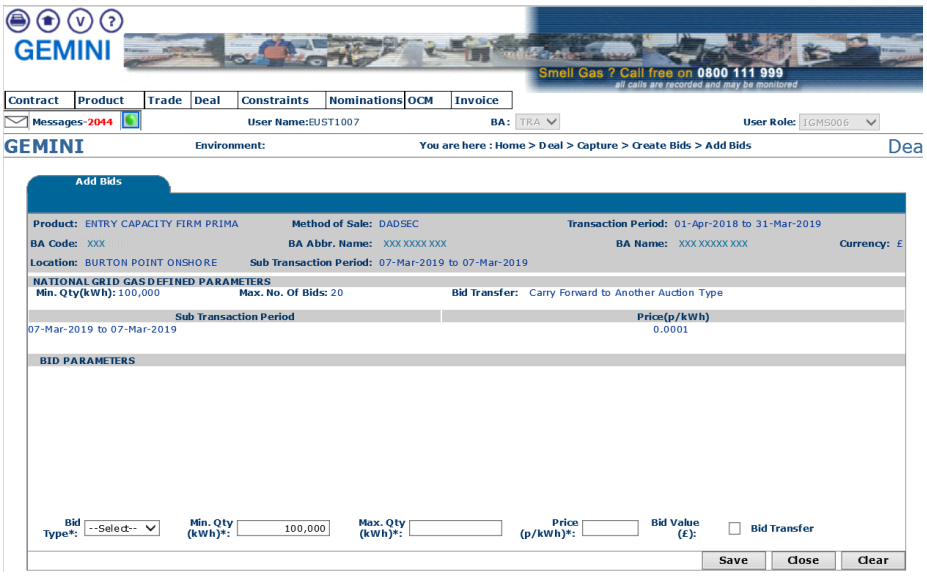
Bid Information Shipper View – Normal Pricing Strategy

This API enables you to query for Bid Information for an Entry Capacity auction. This shows various pieces of information for each bid including the status. In line with the online screen you can query for one, some or all locations. This is not applicable to Interconnectors.



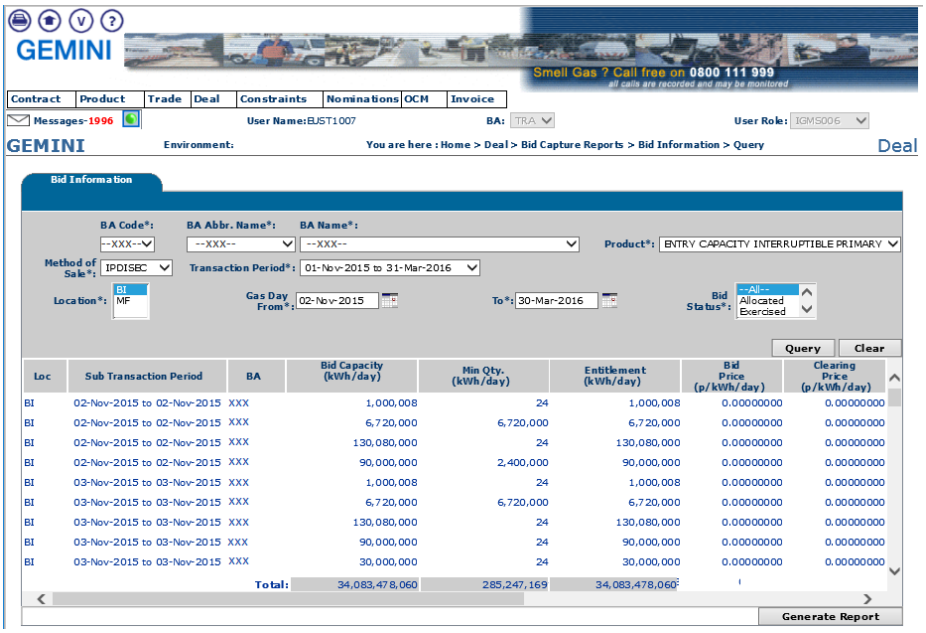
Bid Capture

This is a new API which is scheduled to be available from 25th July 2021. The API will allow you to submit Bids for an Entry Capacity auction. This is not applicable to Interconnectors.



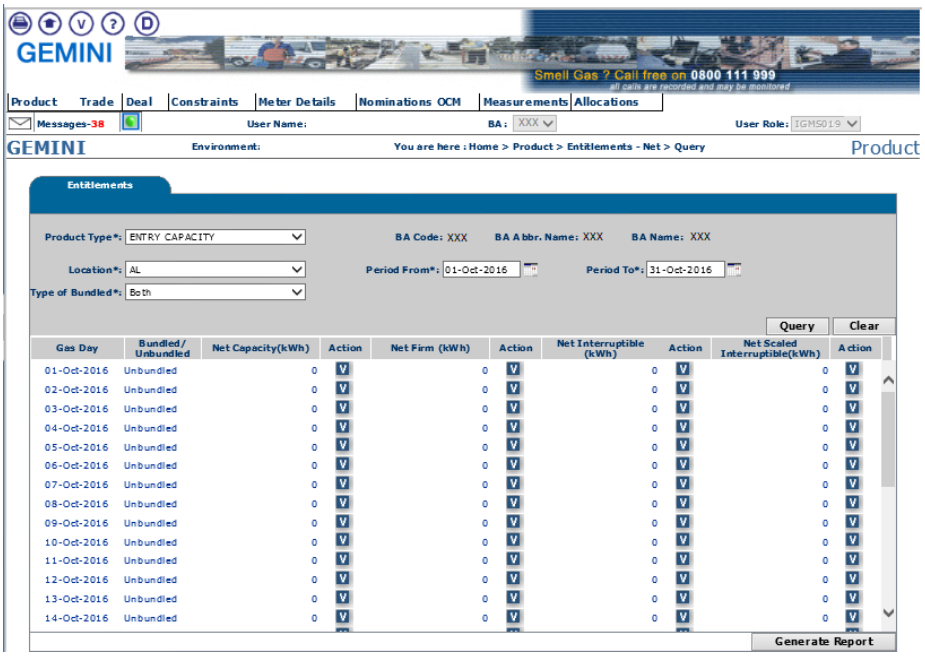
View Bid Information for IP Locations

This is a new API which is scheduled to be available from 25th July 2021. This API enables you to query for Bid Information for an Entry Capacity auction at the Interconnectors. This shows various pieces of information for each bid including the status.



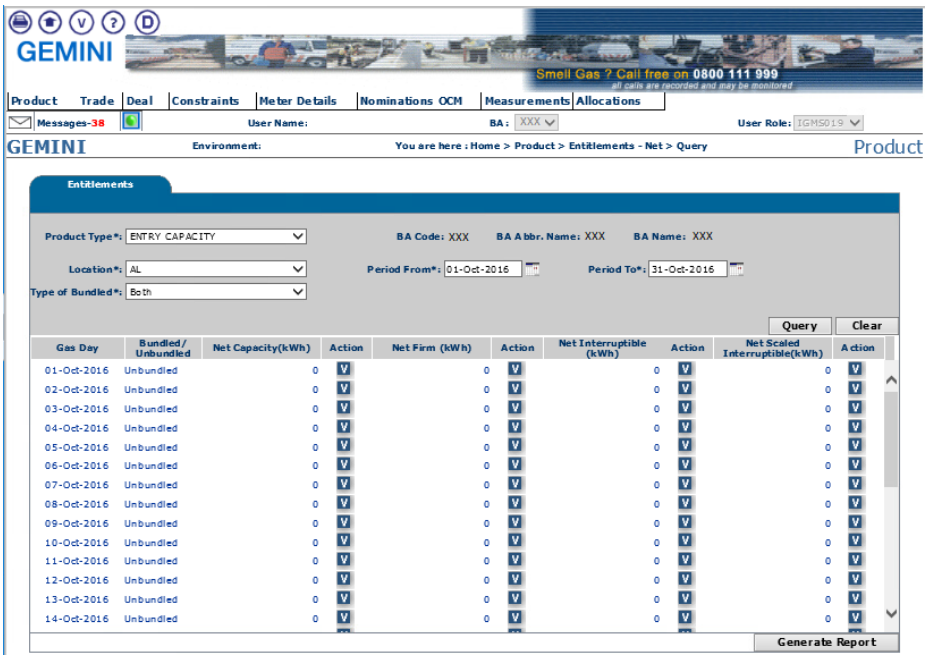
Revised Entitlements

This API enables you to query your Entry Capacity Entitlement position at one, some or all GB locations. You can query for a date range with the results shown at Gas Day level.



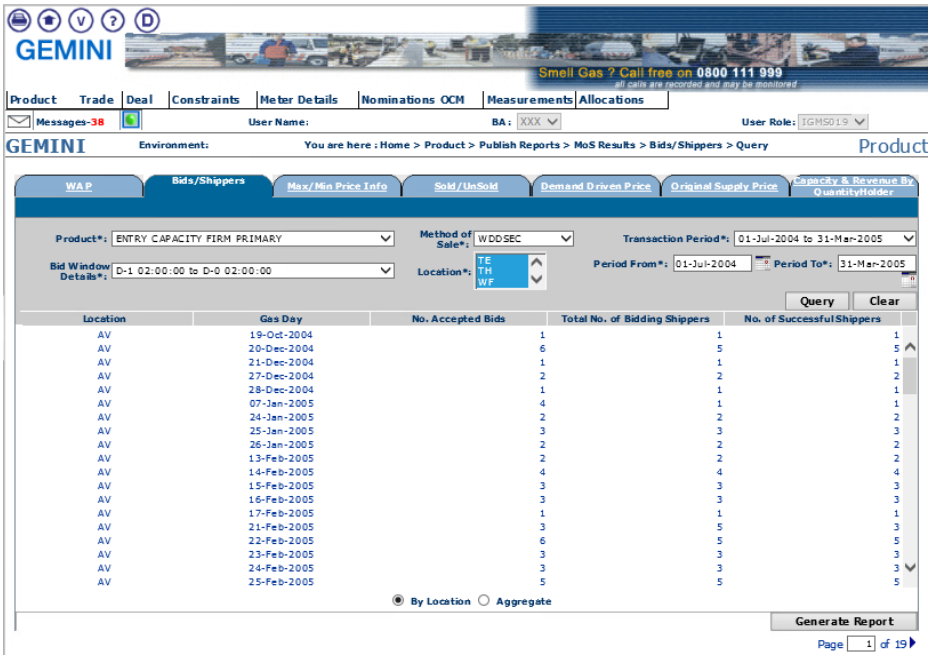
IP Entry Entitlement

This API enables you to query your Entry Capacity Entitlement position at the Interconnectors. You can query for a date range with the results being shown at Gas Day level.



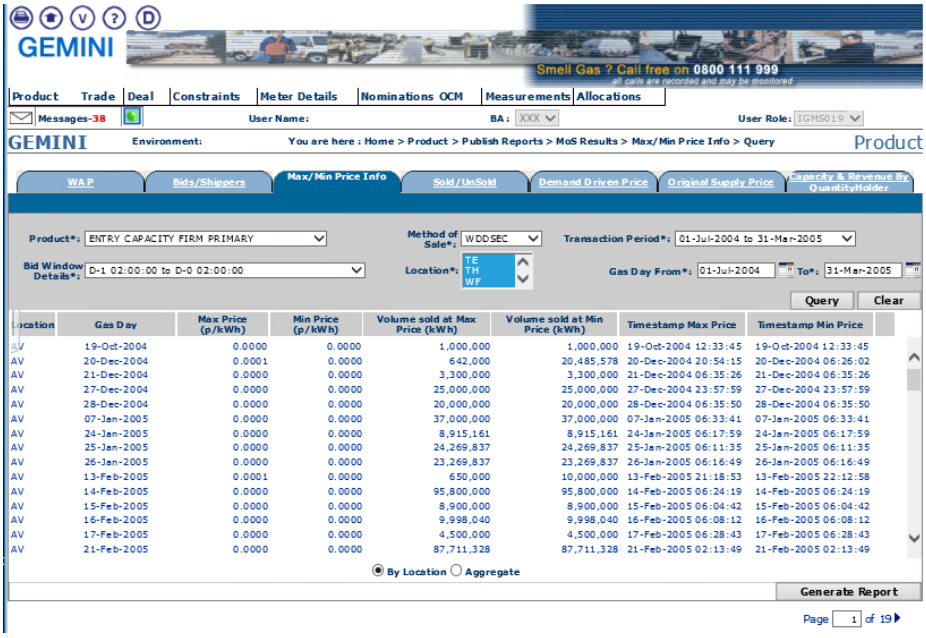
Daily Auctions Summary Report – Bids/Shippers

Following the completion of a daily Entry Capacity auction a number of reports are available in the system. This API enables you to query the Bids/Shippers report.



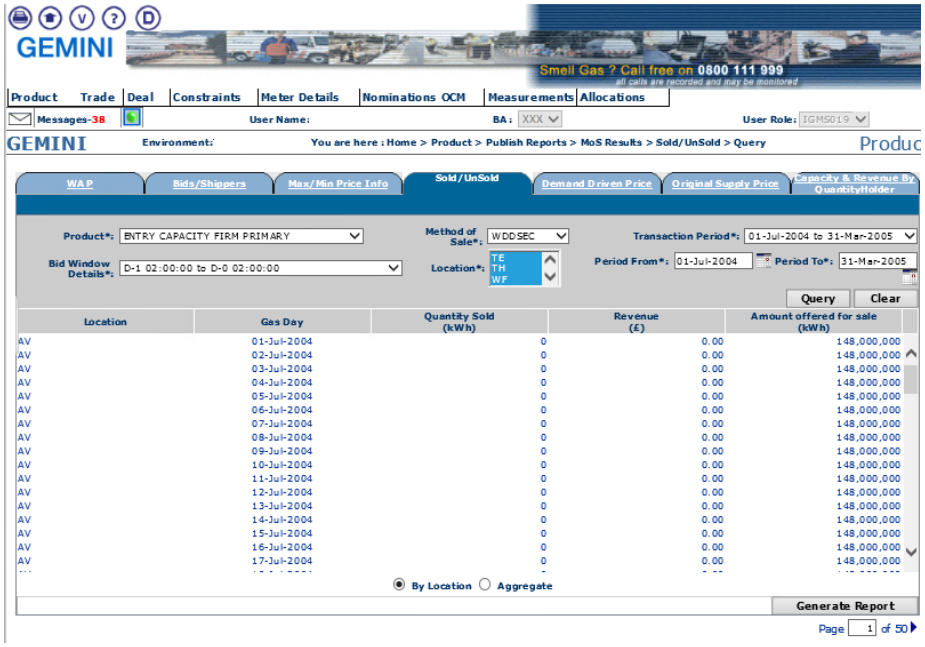
Daily Auctions Summary Report – Max/Min Price Information

Following the completion of a daily Entry Capacity auction a number of reports are available in the system. This API enables you to query the Max/Min Price Info report.



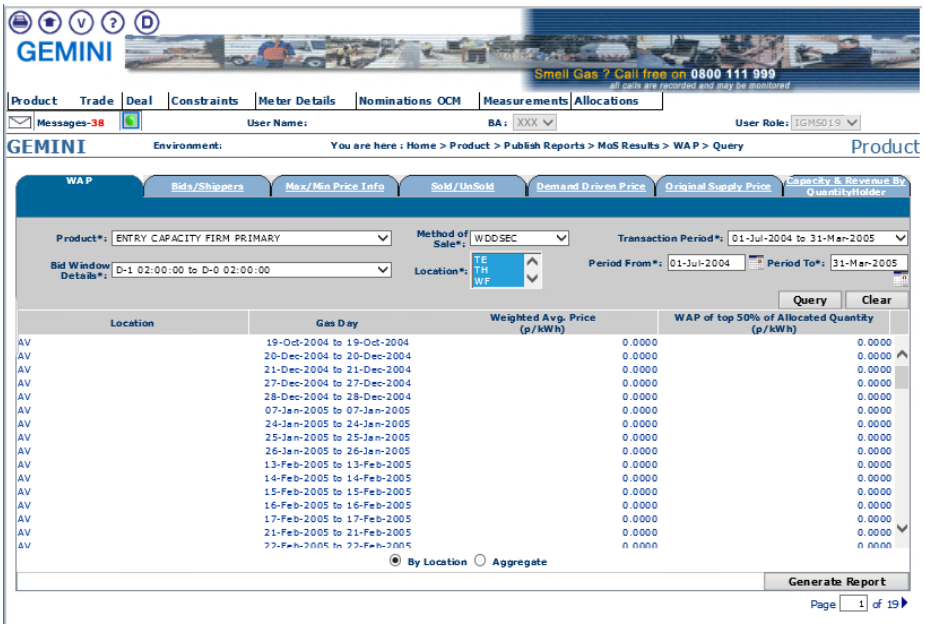
Daily Auctions Summary Report – Sold/Unsold

Following the completion of a daily Entry Capacity auction a number of reports are available in the system. This API enables you to query the Sold/Unsold report.



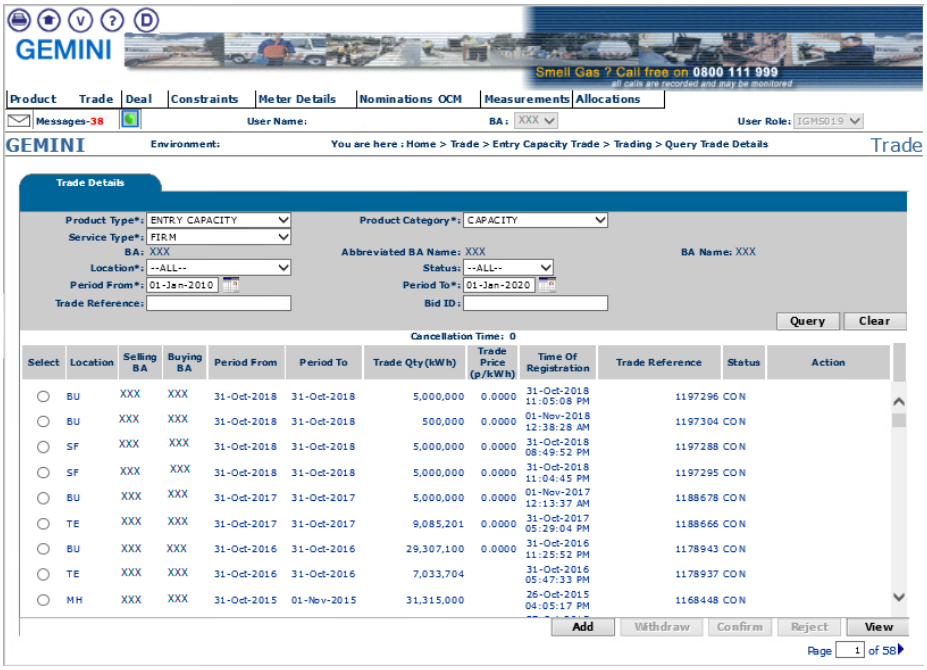
Daily Auctions Summary Report – WAP

Following the completion of a daily Entry Capacity auction a number of reports are available in the system. This API enables you to query the Weight Average Price (WAP) report.



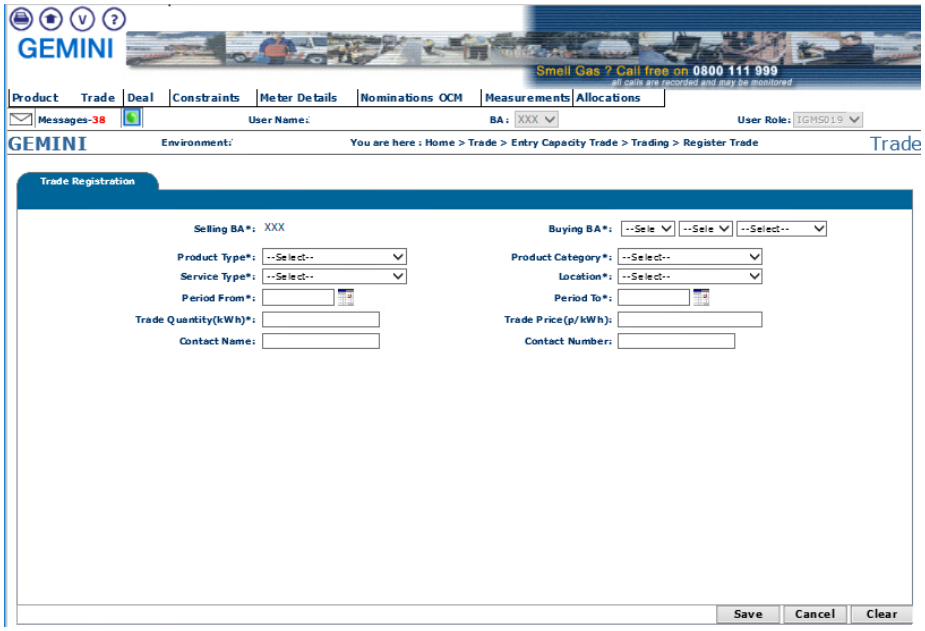
Capacity Trade Details

This API enables you to query Entry Capacity Trades that you have registered on the system.



Capacity Trade Registration

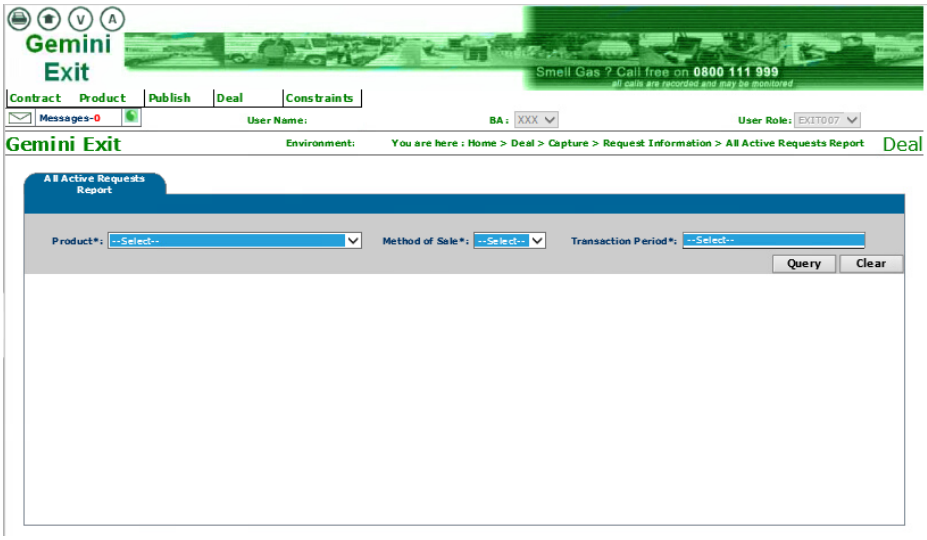
This API enables you to register an Entry Capacity Trade in the system.



Exit Capacity

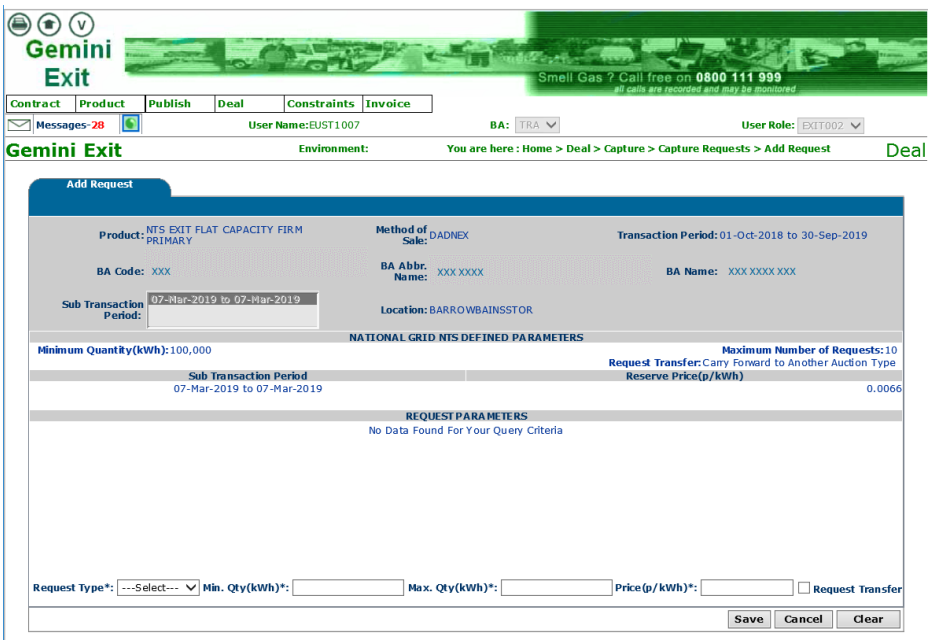
All Active Requests

This API enables you to query for all active requests for an Exit Capacity Daily auction. In line with the online screen you can query for one, some or all locations. This is not applicable to Interconnectors.



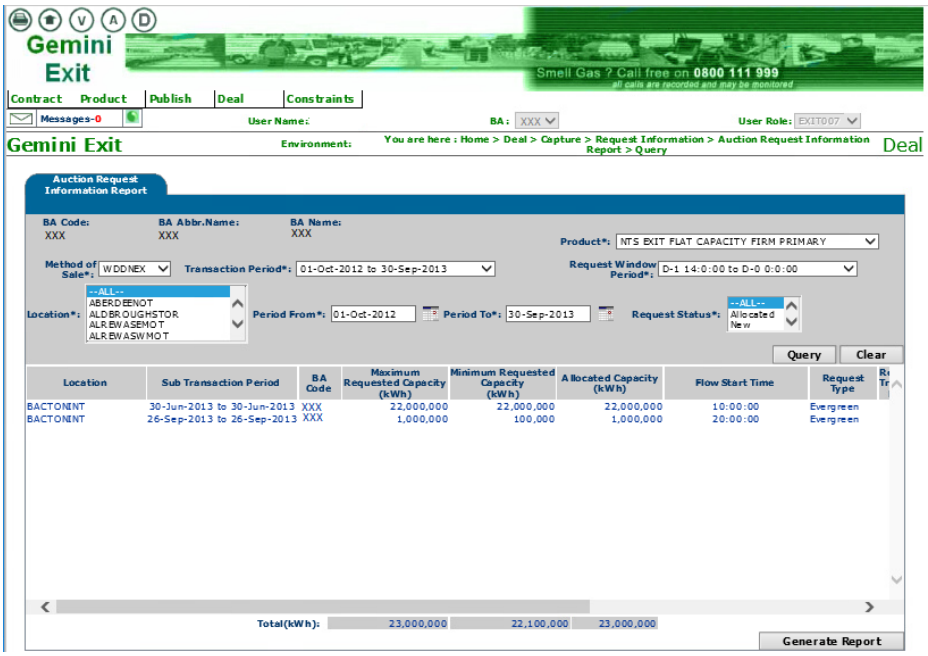
Capture Request

This is a new API which is scheduled to be available from 25th July 2021. The API will allow you to submit Requests for an Exit Capacity application/auction. This is not applicable to Interconnectors.



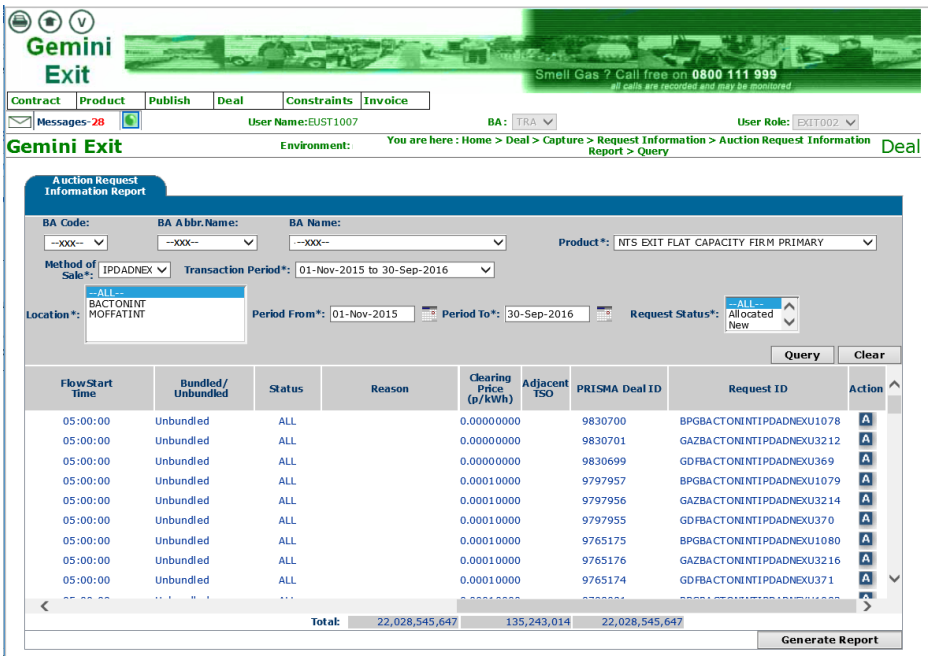
Auction Request Information

This API enables you to query for Request Information for an Exit Capacity Daily auction. This shows various pieces of information for each request including the status. In line with the online screen you can query for one, some or all locations. This is not applicable to Interconnectors.



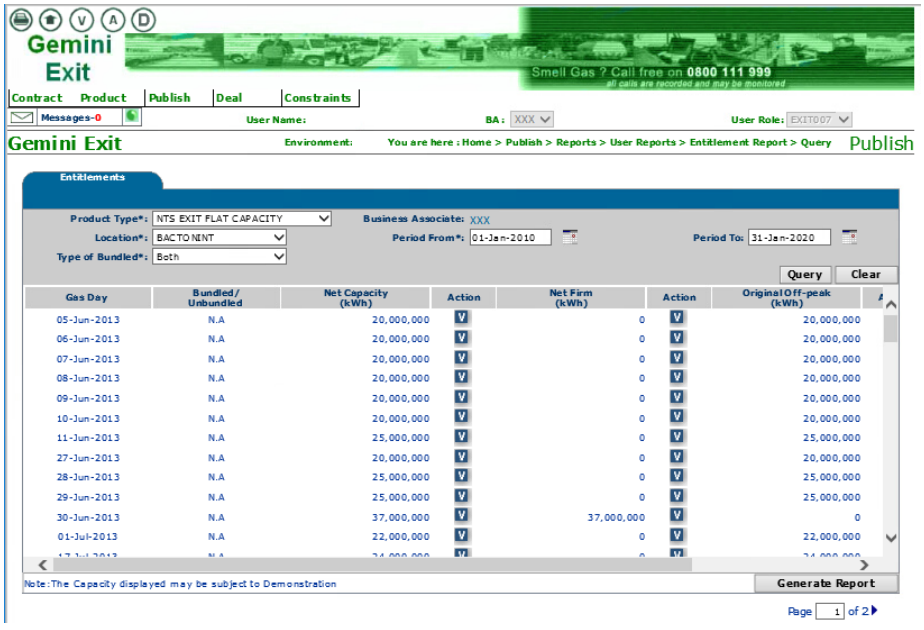
Auction Request Information for IP Locations

This is a new API which is scheduled to be available from 25th July 2021. This API enables you to query for Request Information for an Exit Capacity auction at the Interconnectors. This shows various pieces of information for each request including the status.



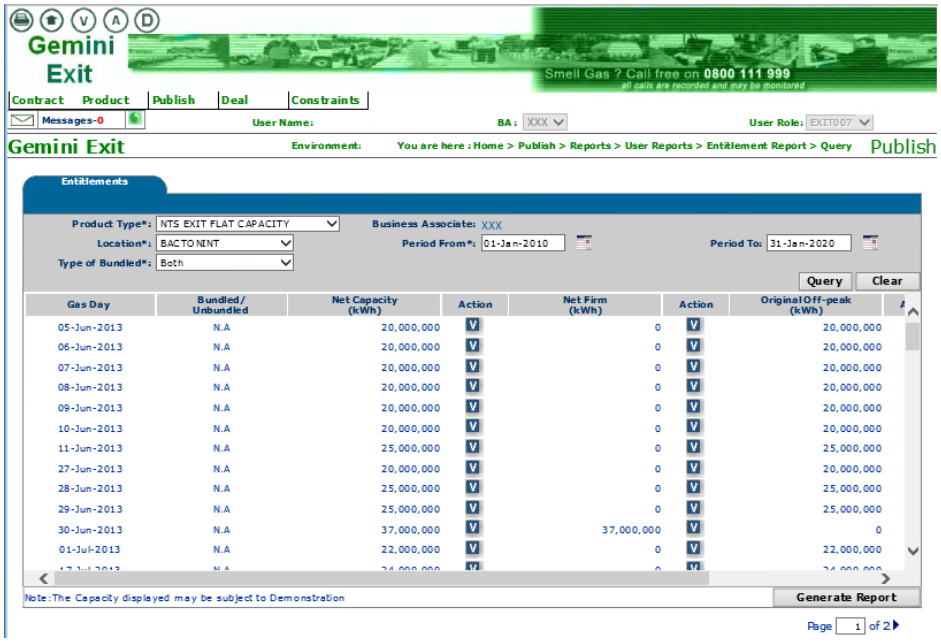
Entitlement Report

This API enables you to query your Exit Capacity Entitlement position at one, some or all GB locations. You can query for a date range with the results shown at Gas Day level.



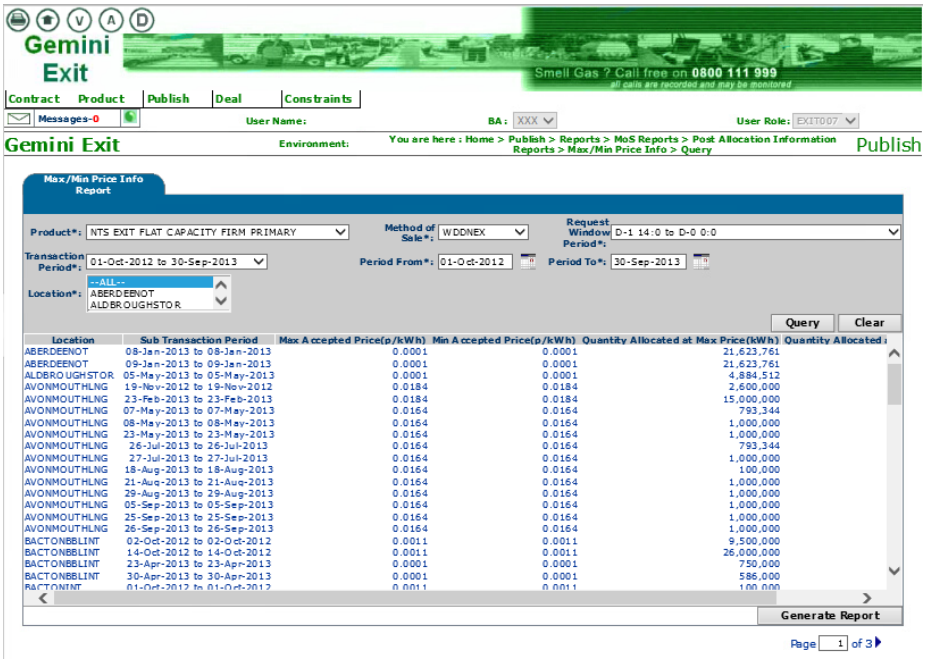
IP Exit Entitlement

This API enables you to query your Exit Capacity Entitlement position at the Interconnectors. You can query for a date range with the results shown at Gas Day level.



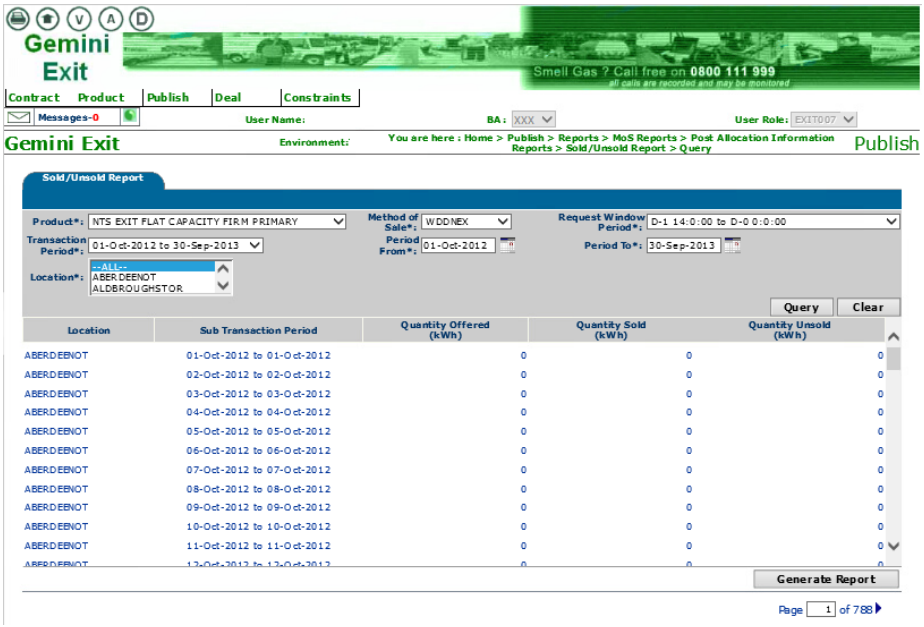
Max/Min Price Information – Daily Auction

Following the completion of a daily Exit Capacity auction a number of reports are available in the system. This API enables you to query the Max/Min Price Info report.



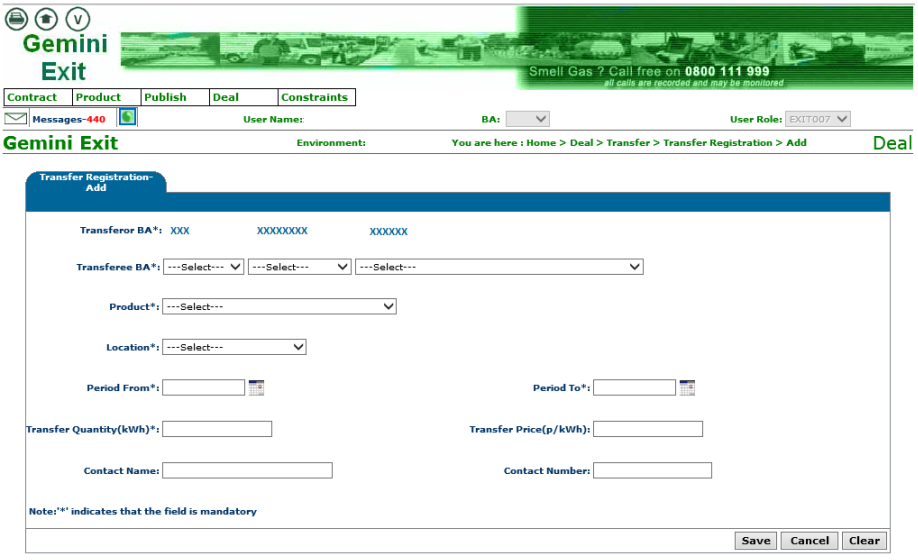
Sold/Unsold – Daily Auction

Following the completion of a daily Exit Capacity auction a number of reports are available in the system. This API enables you to query the Sold/Unsold report.



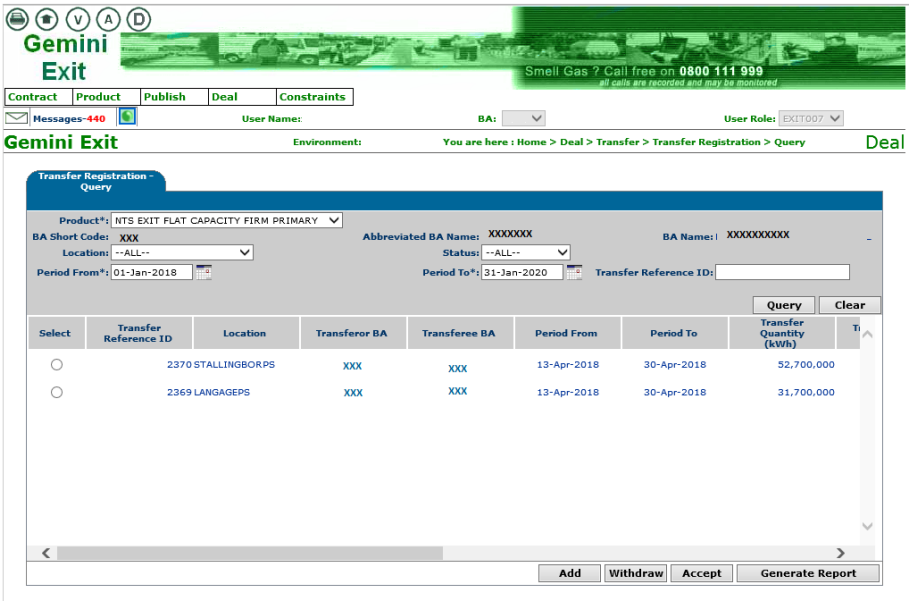
Transfer Registration

This is a new API which is scheduled to be available from 25th July 2021. This API enables you to register an Exit Capacity Transfer in the system.



View Transfer Registration

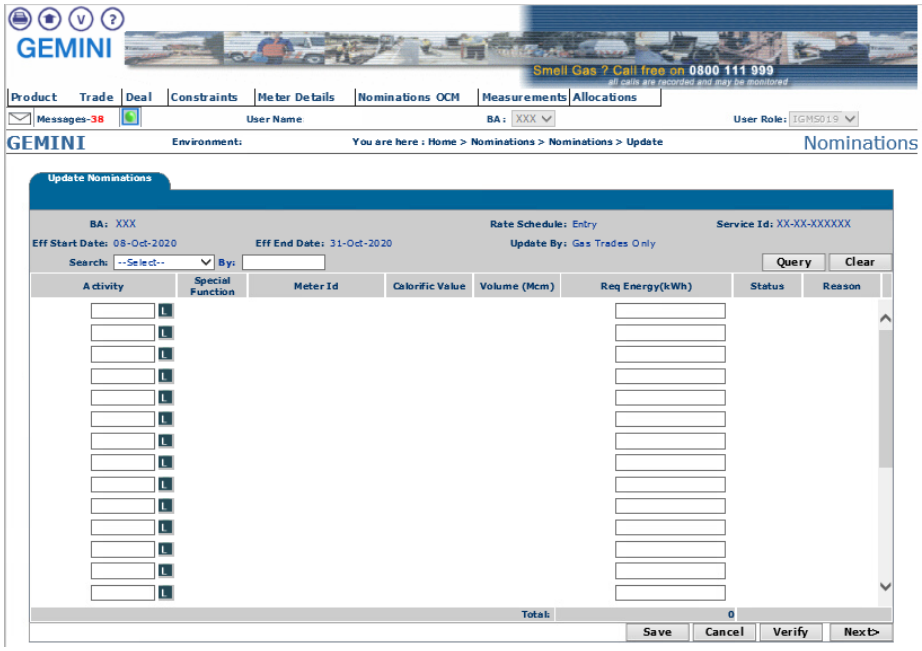
This is a new API which is scheduled to be available from 25th July 2021. This API enables you to query Exit Capacity Transfers that you have registered on the system.



Balancing

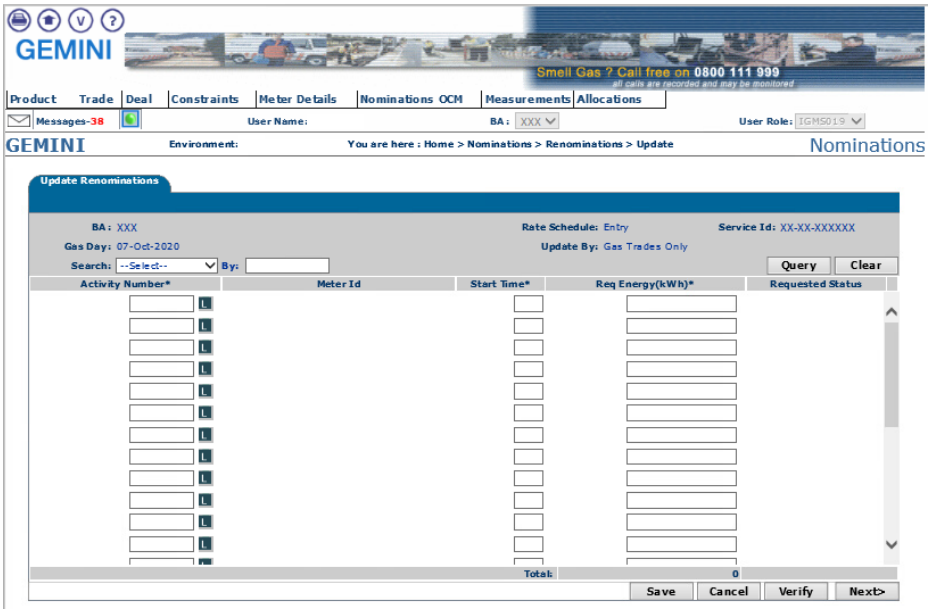
Add/Update Nominations

This API enables you to submit Nominations for Entry and Exit Meters by Gas Day. This is not applicable to Interconnectors.



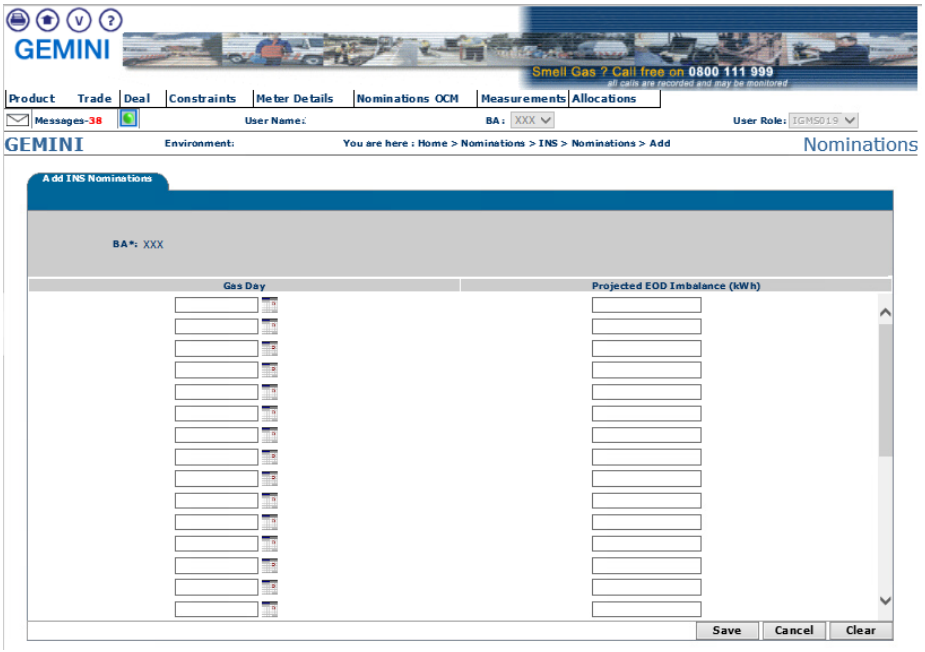
Update Renominations

This API enables you to submit Renominations for Entry and Exit Meters by Gas Day. This is not applicable to Interconnectors.



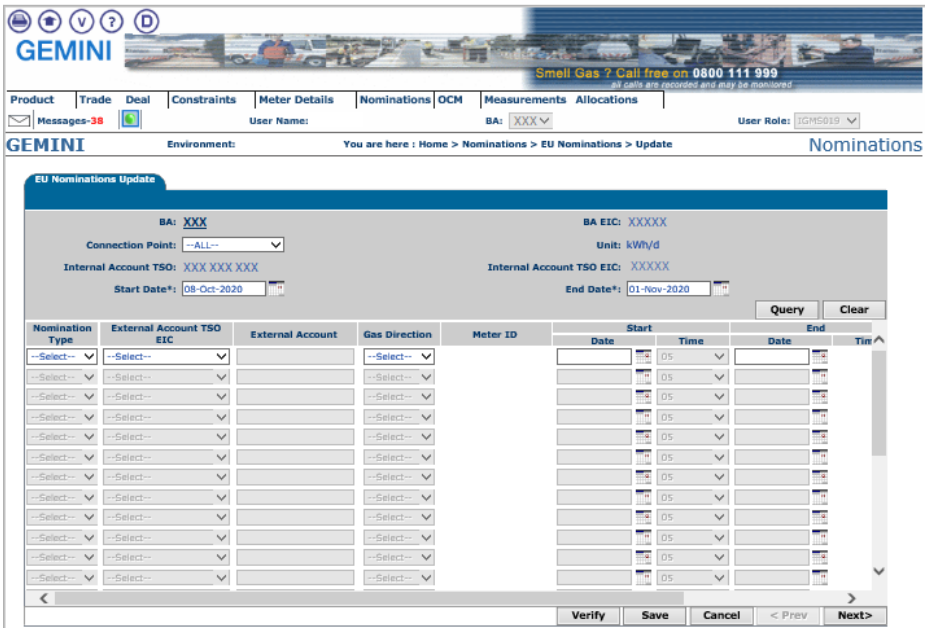
Update INS Nominations

This API enables you to submit/modify an Incentivised Nomination Scheme (INS) nomination.



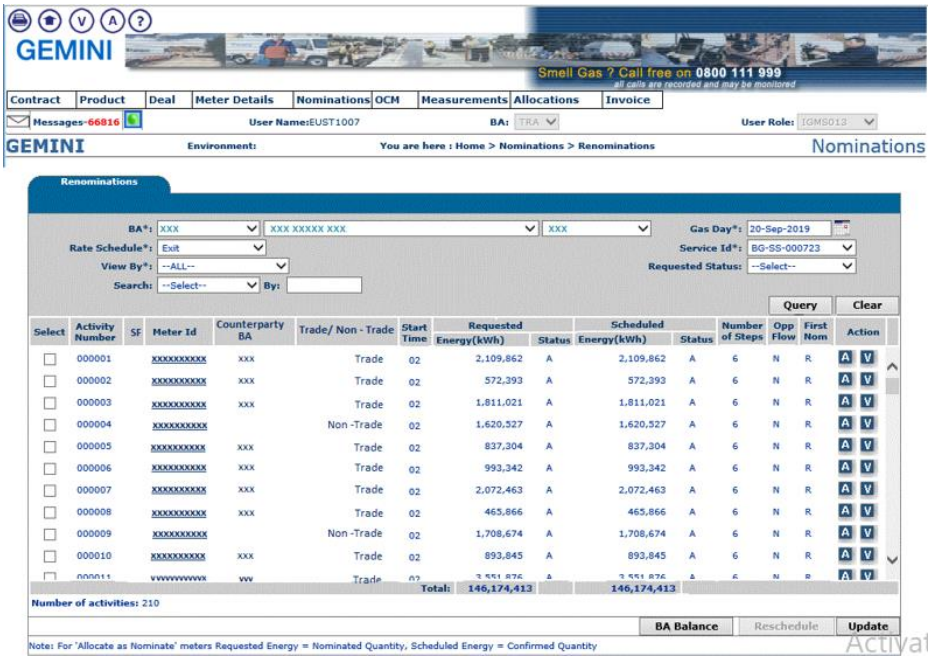
Add/Update IP Nomination

This API enables you to submit/modify Nominations for Interconnectors which will then flow through to the Nomination Matching process.



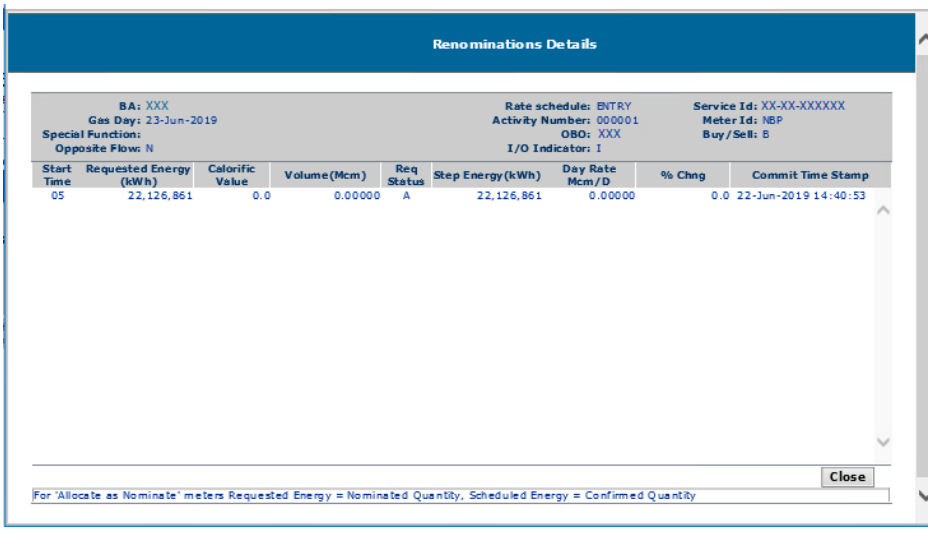
View Renominations

This API enables you to query your Renominations at Entry and Exit meters. This is not applicable to Interconnectors.



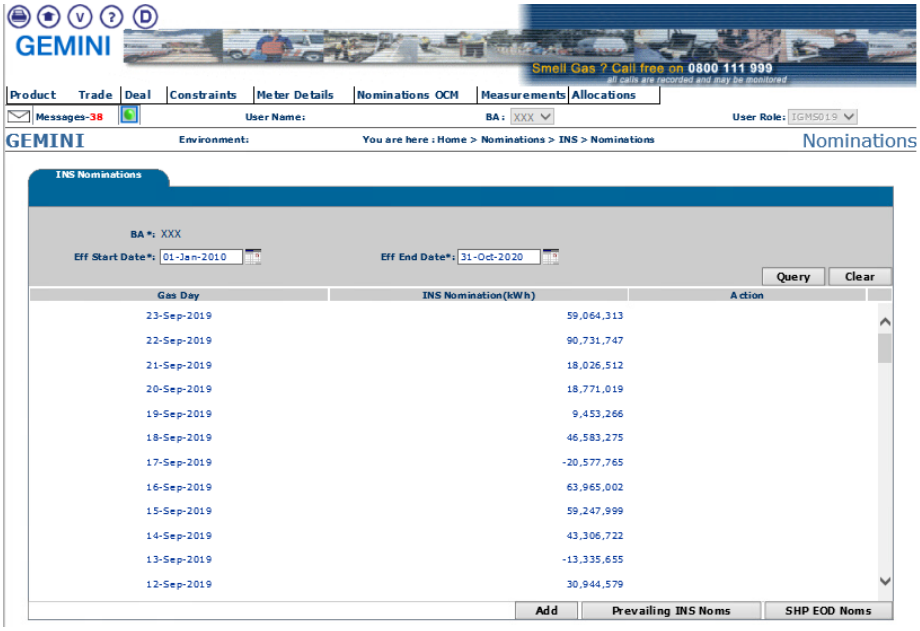
View Renomination Details

This API enables you to query the step details of your Renominations at Entry and Exit meters. This is not applicable to Interconnectors.



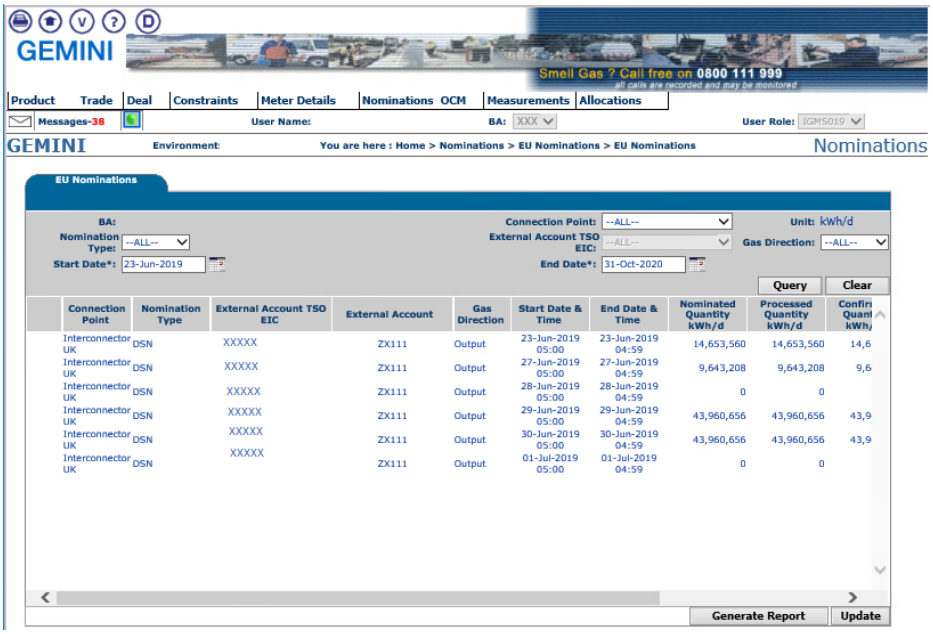
View INS Nominations

This API enables you to view any Incentivised Nomination Scheme (INS) nomination that you have submitted.



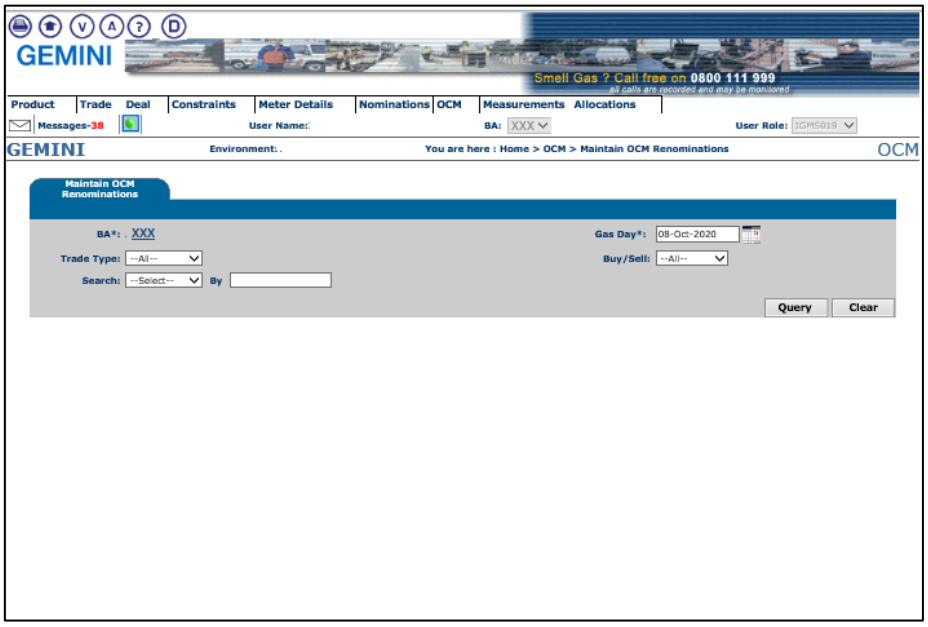
View IP Nominations

This API enables you to view any Nominations/Renominations that you have submitted for Interconnectors.



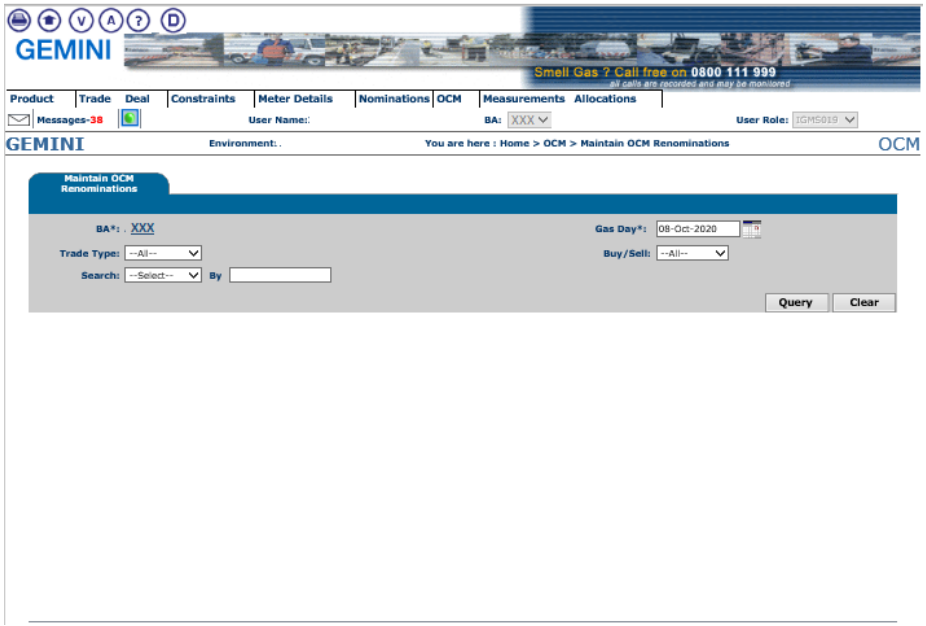
Maintain OCM Renominations (View)

This API enables you to query any unconfirmed Physical and/or Locational Trades that you have in the system.



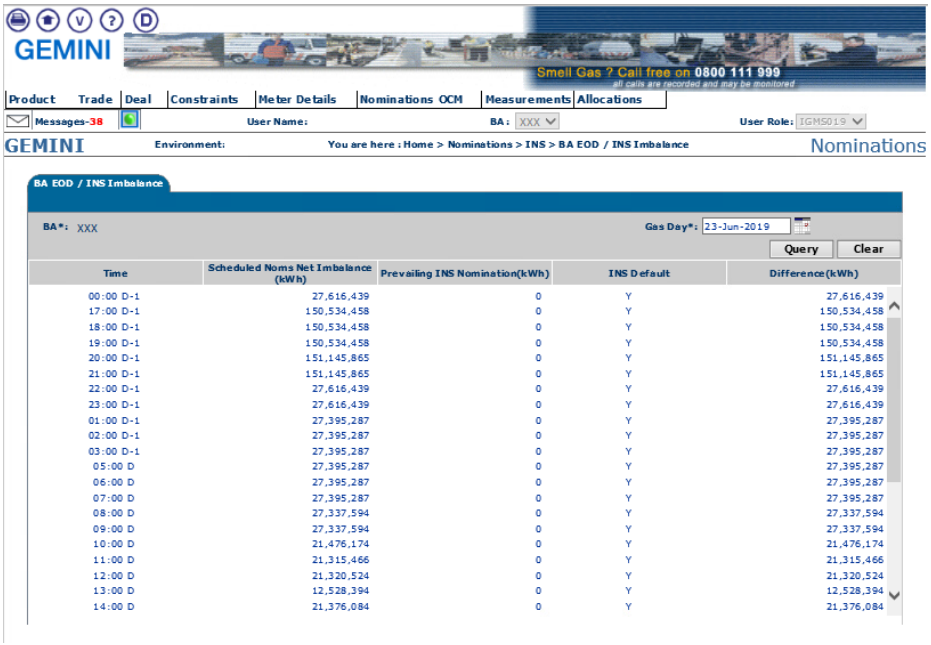
Maintain Physical Renominations (Update)

This API enables you to confirm OCM Physical Trades.



Shipper EOD Noms (Hour Bar)

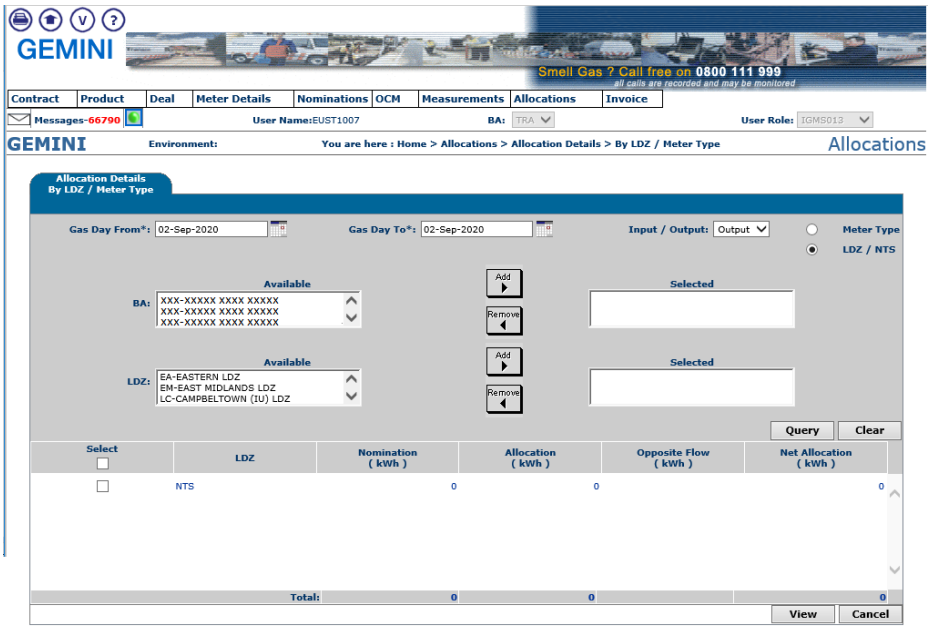
This API enables you to query your end of day Nominations split by hour bar.



Time	Scheduled Noms Net Imbalance (kWh)	Prevailing INS Nomination(kWh)	INS Default	Difference(kWh)
00:00 D-1	27,616,439	0	Y	27,616,439
17:00 D-1	150,534,458	0	Y	150,534,458
18:00 D-1	150,534,458	0	Y	150,534,458
19:00 D-1	150,534,458	0	Y	150,534,458
20:00 D-1	151,145,865	0	Y	151,145,865
21:00 D-1	151,145,865	0	Y	151,145,865
22:00 D-1	27,616,439	0	Y	27,616,439
23:00 D-1	27,616,439	0	Y	27,616,439
01:00 D-1	27,395,287	0	Y	27,395,287
02:00 D-1	27,395,287	0	Y	27,395,287
03:00 D-1	27,395,287	0	Y	27,395,287
05:00 D	27,395,287	0	Y	27,395,287
06:00 D	27,395,287	0	Y	27,395,287
07:00 D	27,395,287	0	Y	27,395,287
08:00 D	27,337,594	0	Y	27,337,594
09:00 D	27,337,594	0	Y	27,337,594
10:00 D	21,476,174	0	Y	21,476,174
11:00 D	21,315,466	0	Y	21,315,466
12:00 D	21,320,524	0	Y	21,320,524
13:00 D	12,528,394	0	Y	12,528,394
14:00 D	21,376,084	0	Y	21,376,084

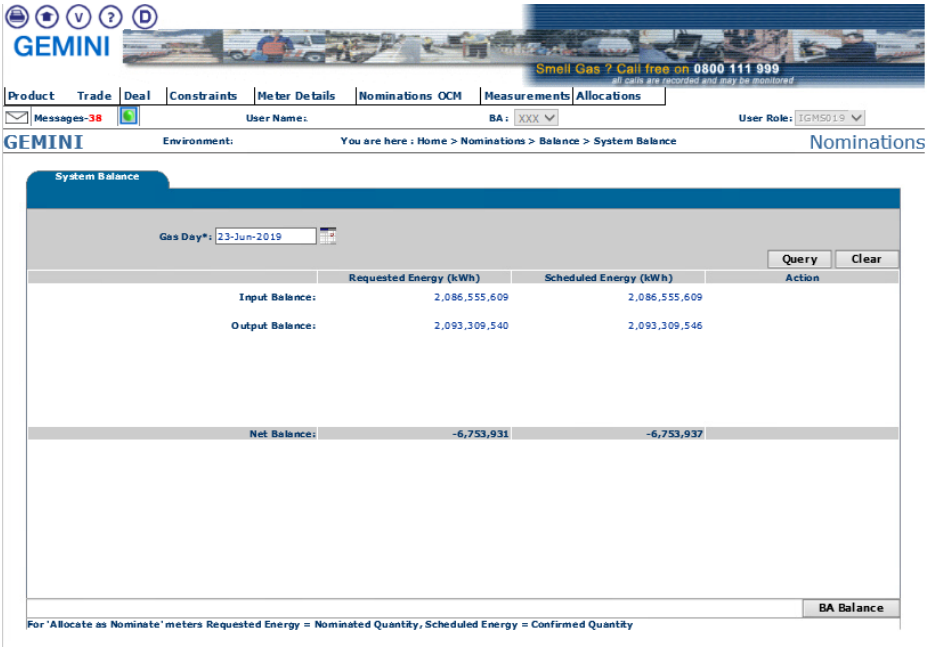
View Allocation Details by LDZ and Meter Type

This is a new API which is scheduled to be available from 25th July 2021. This API enables you to query Allocation data by LDZ and Meter Type.



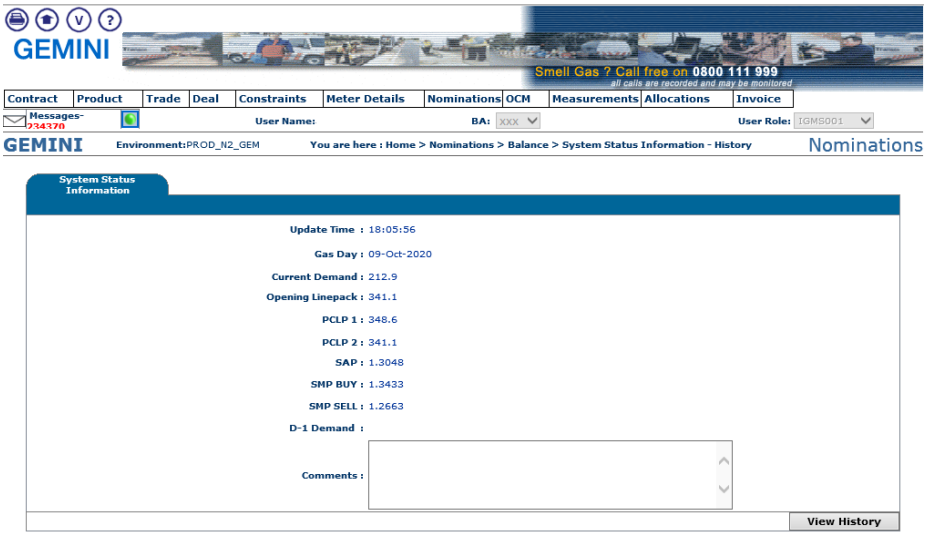
System Nomination Balance

This API enables you to query the System Balance for a Gas Day.



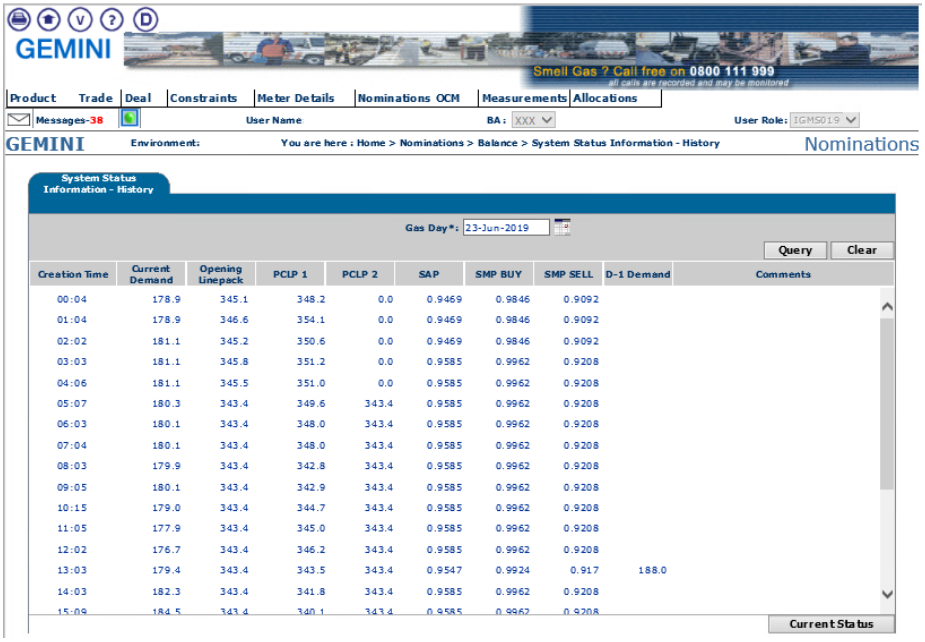
System Status Information

This API enables you to query system level data.



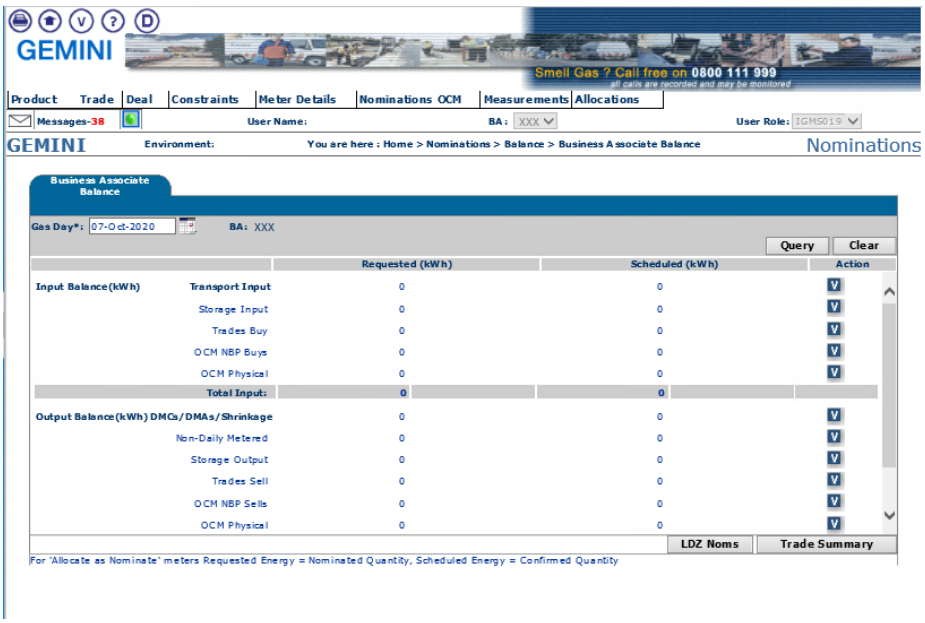
System Status History

This API enables you to query system level data and the history of that data.



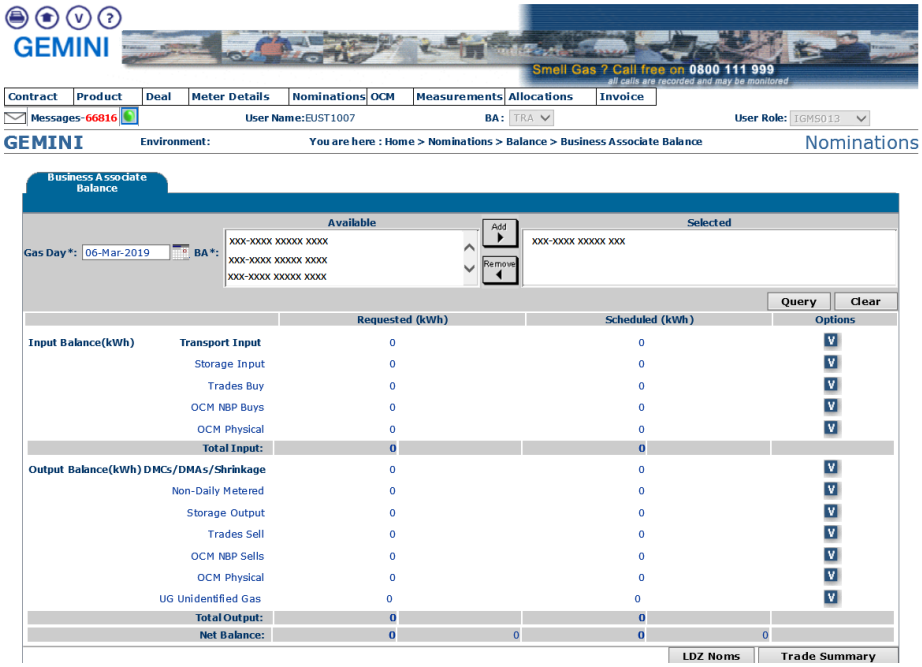
Shipper Preliminary Balance

This API enables you to query your Balance position for a Gas Day.



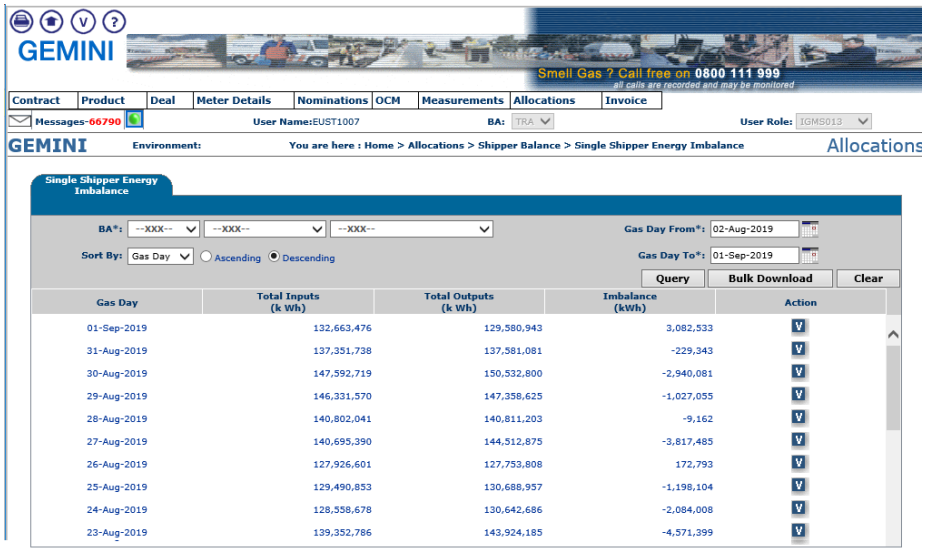
Shipper Preliminary Balance across Date Range

This is a new API which is scheduled to be available from 25th July 2021. This API enables you to query your Balance position for a Gas Day or range of Gas Days.



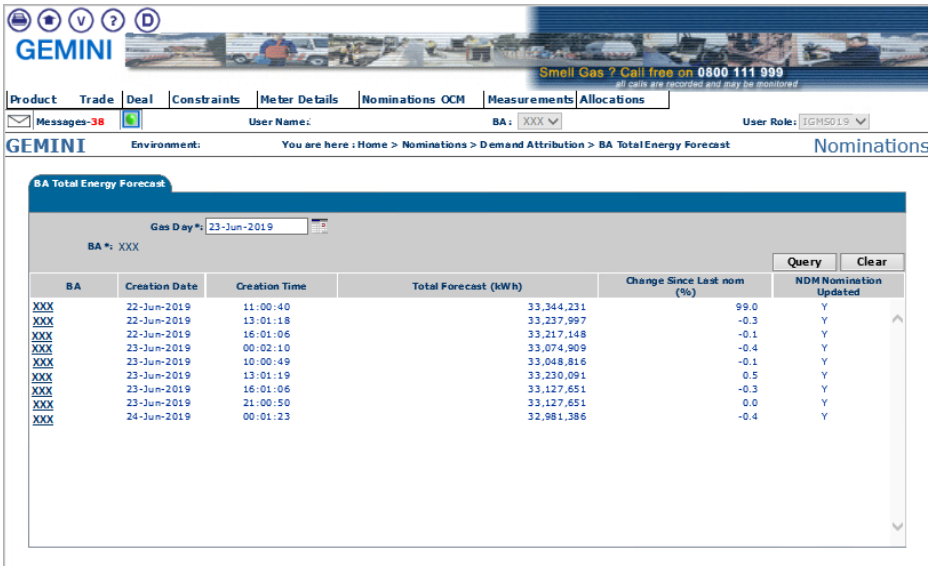
Shipper Imbalance

This is a new API which is scheduled to be available from 25th July 2021. This API enables you to query your Imbalance position for a Gas Day or range of days.



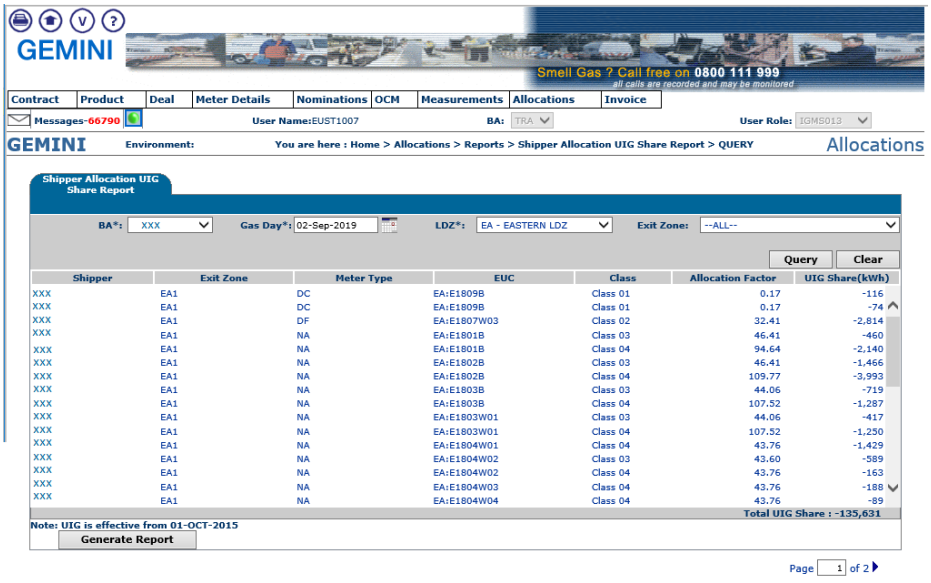
Shipper Total Energy Forecast

This API enables you to query your Total NDMA forecast for a Gas Day.



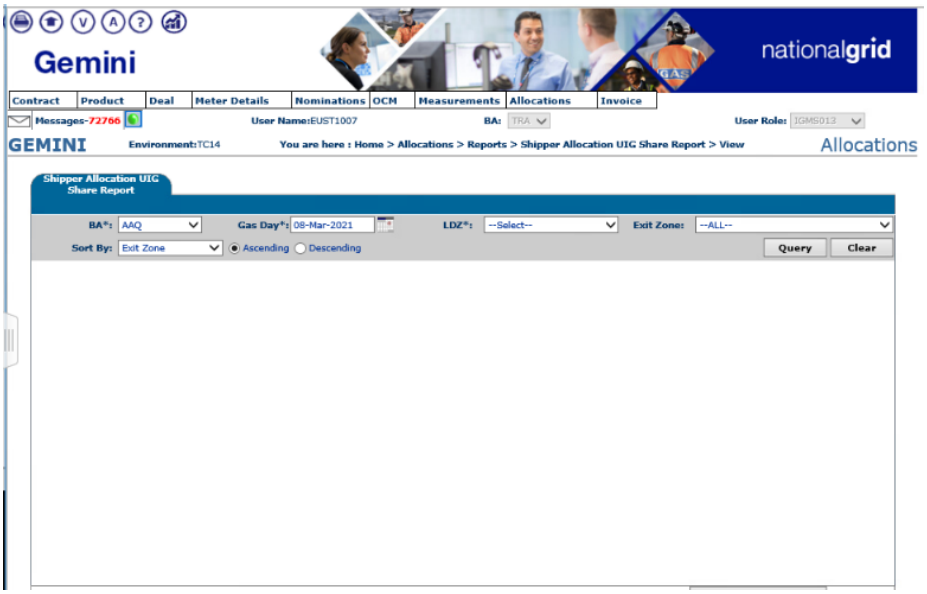
View Shipper Allocation UIG Share

This is a new API which is scheduled to be available from 25th July 2021. This API enables you to query UIG share by LDZ and Exit Zone.



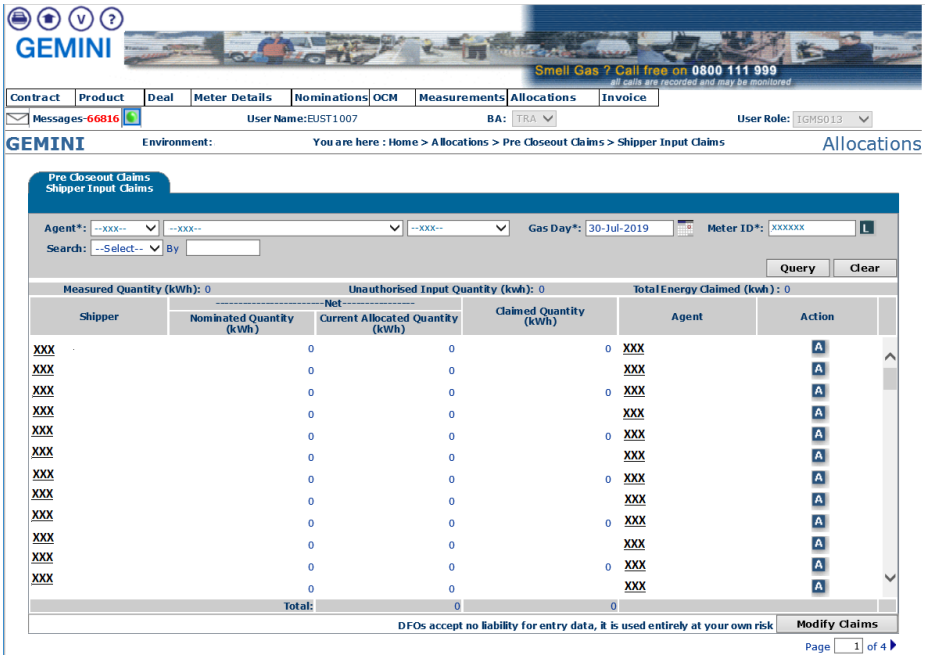
View Shipper UIG Values

This API enables you to query your UIG share at LDZ level for a Gas Day.



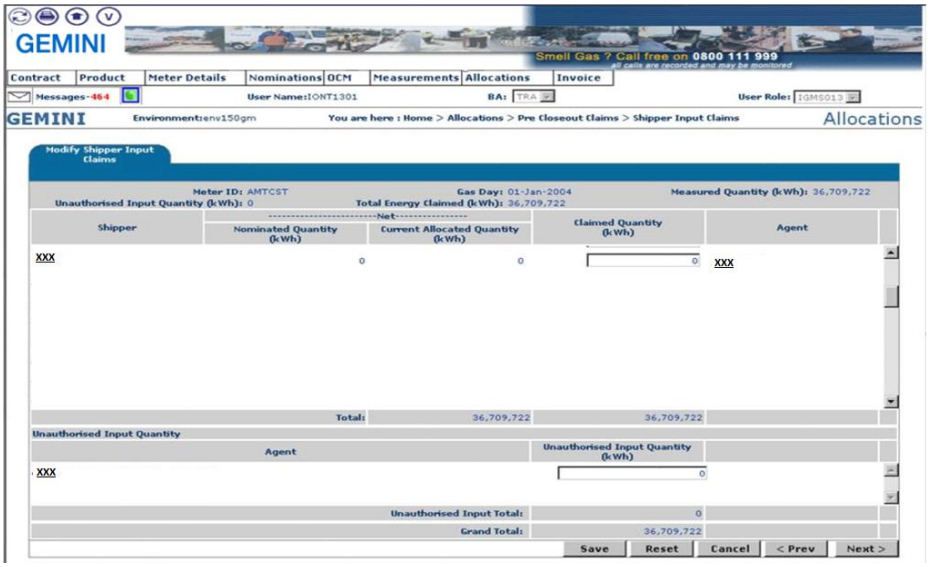
View Shipper Input Claims

This is a new API which is scheduled to be available from 25th July 2021. This API enables you to query any Input Claims for a Gas Day.



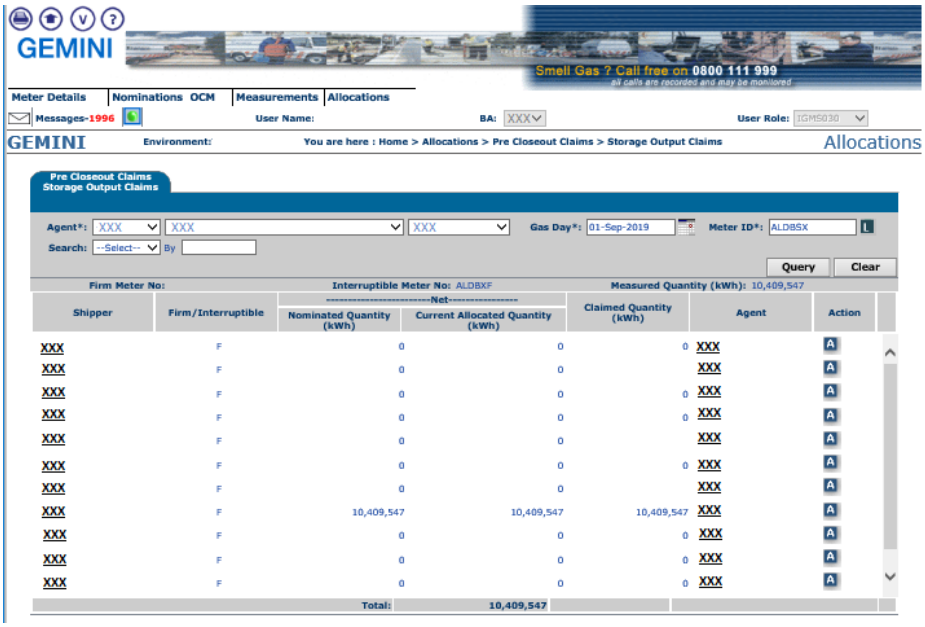
Update Shipper Input Claims

This is a new API which is scheduled to be available from 25th July 2021. This API enables you to modify the Claimed Quantity for a Gas Day.



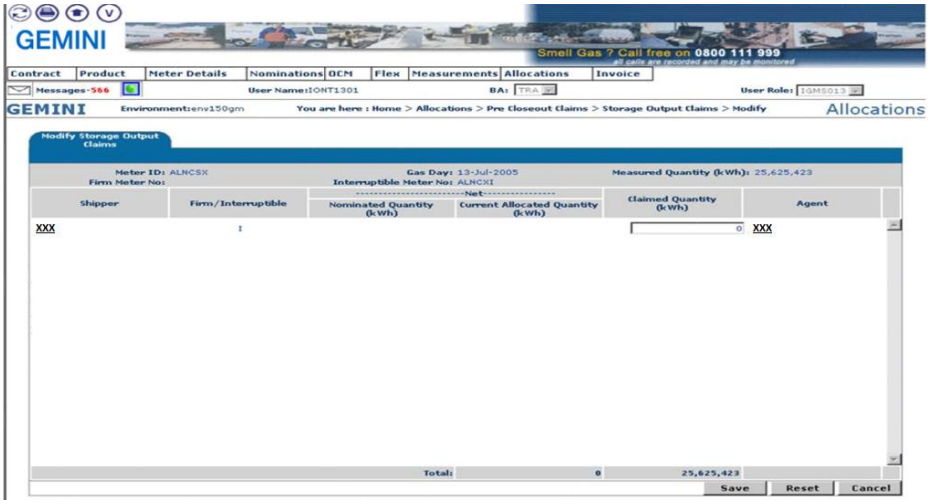
View Storage Output Claims

This API enables you to query any Storage Output Claims for a Gas Day.



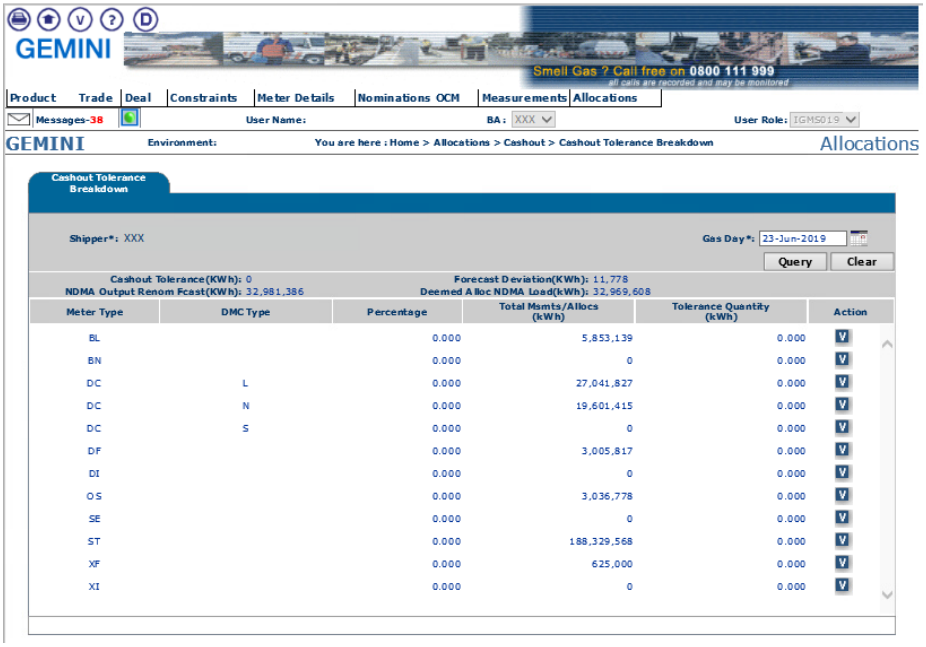
Update Storage Output Claims

This is a new API which is scheduled to be available from 25th July 2021. This API enables you to modify the Storage Output Claimed Quantity for a Gas Day.



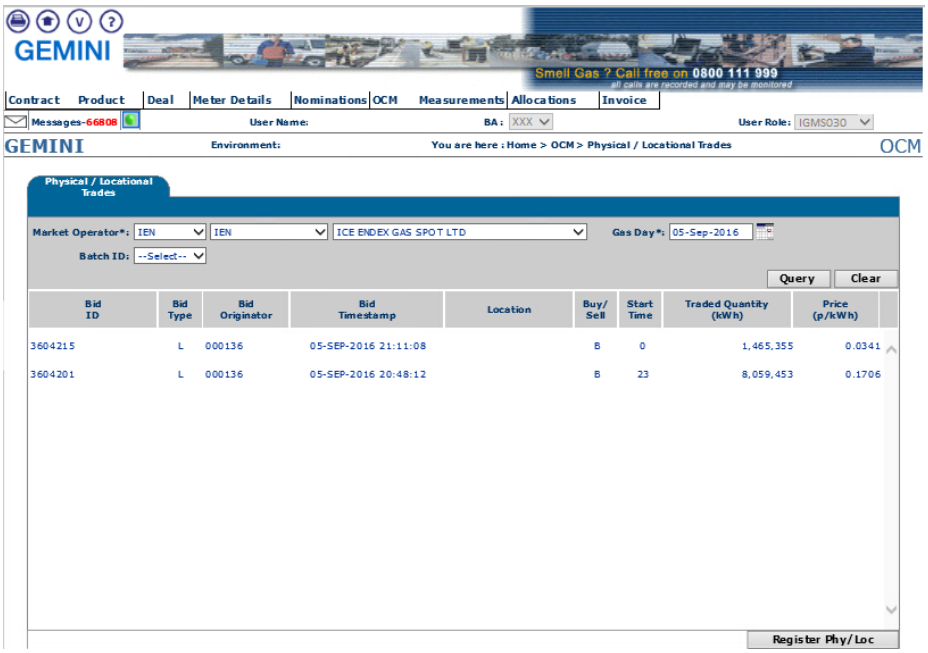
Daily Cashout Tolerance Breakdown

This API enables you to query the Cashout Tolerance Breakdown for a Gas Day.



Register Physical/Locational Trades

This API enables you to register Physical and Locational Trades.

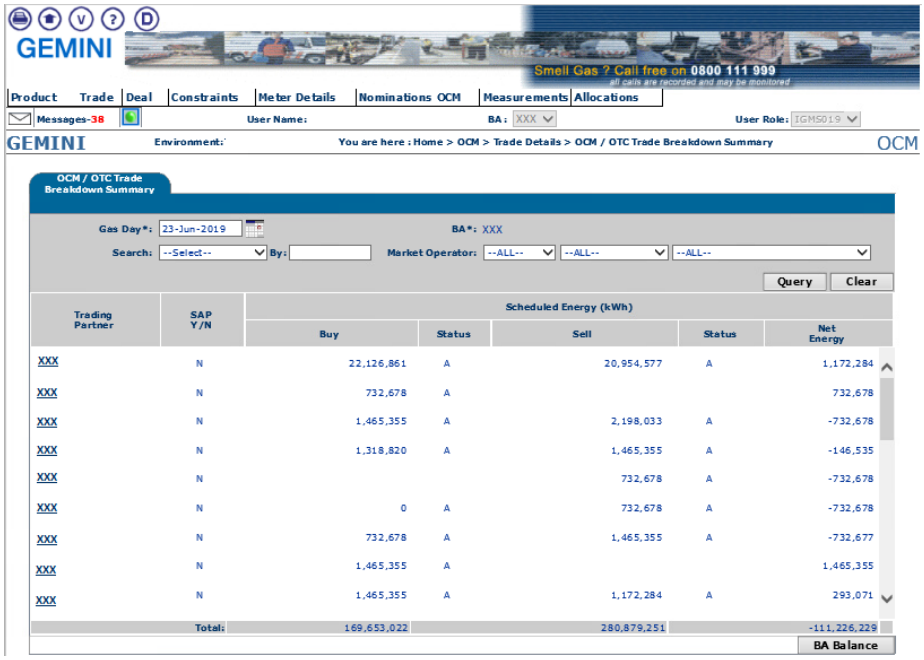


Register Title Swaps

This API enables you to register Title Swaps.

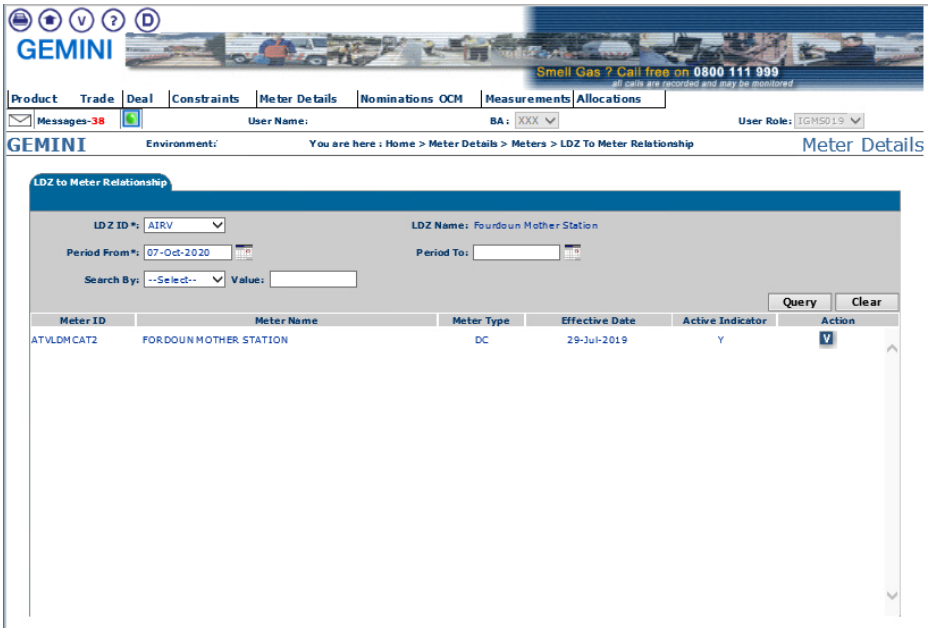
Gas Trades Breakdown

This API enables you to query the various trades you have in the system.



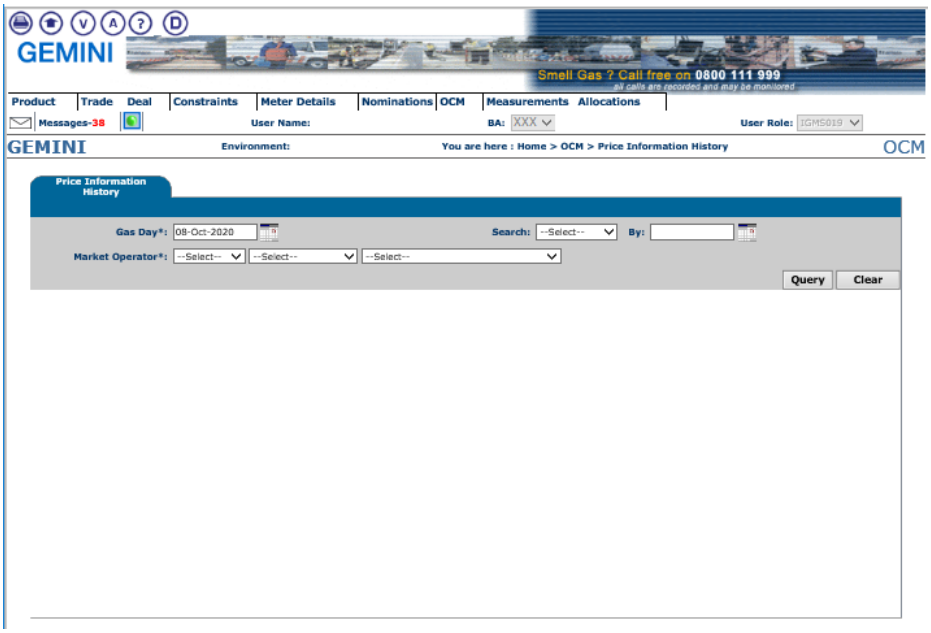
Meter to Zone Relationship

This API enables you to query the mapping between a Meter and an LDZ.



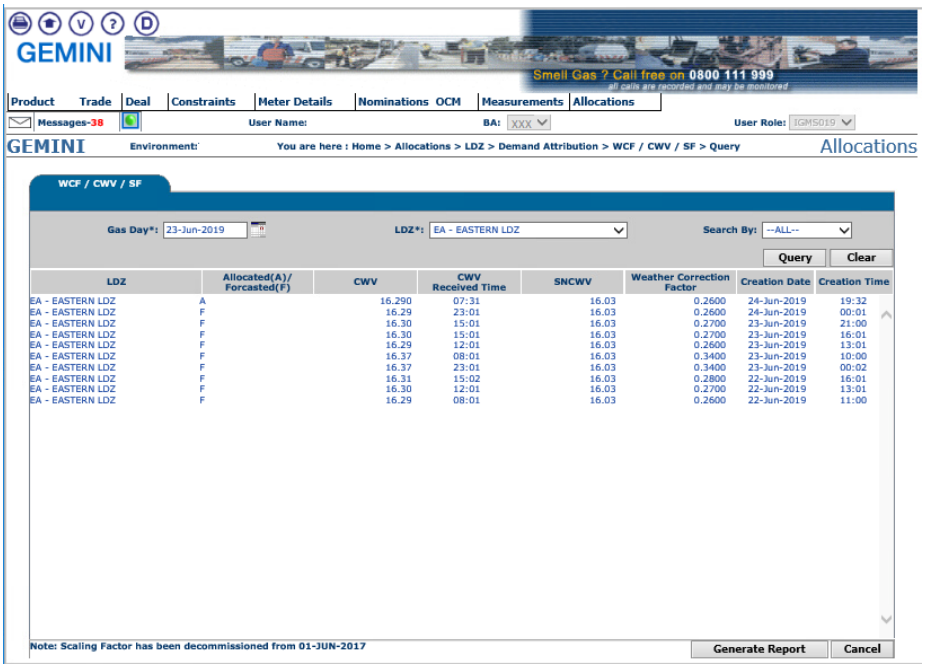
Price Information History

This API enables you to query Price Information for a Gas Day.



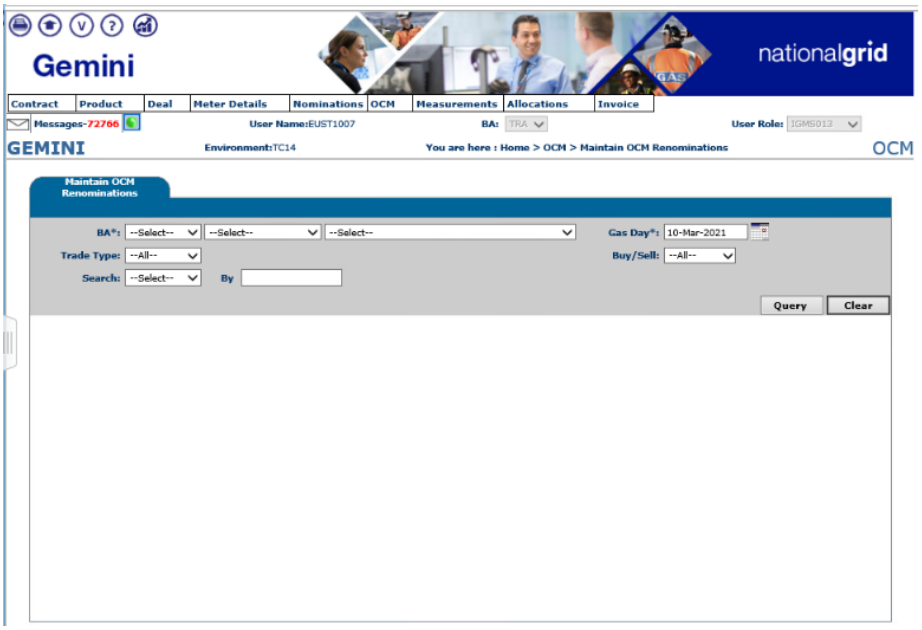
View WCF/SF Values

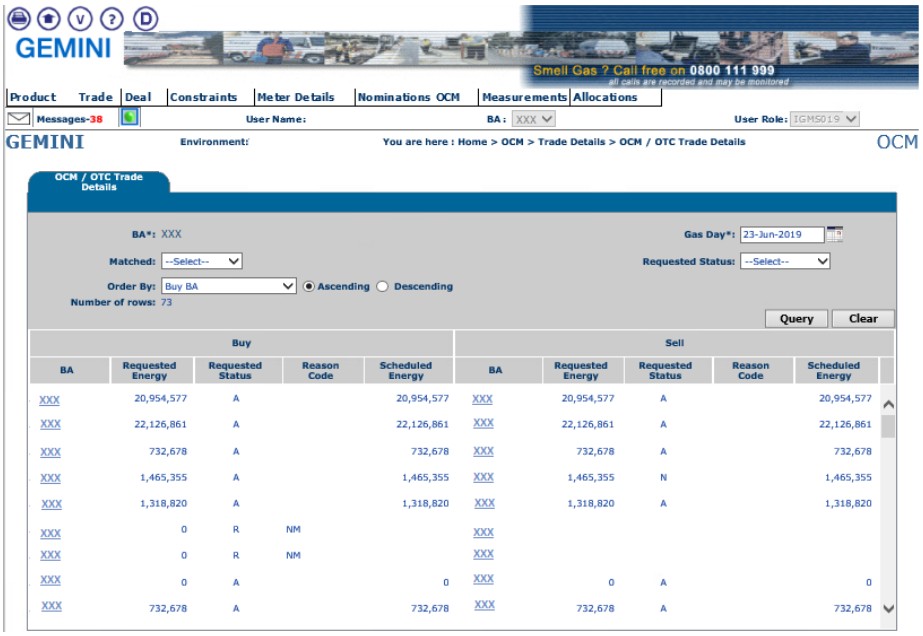
This API enables you to query the Weather Correction Factor (WCF) and Scaling Factor for an LDZ.



Confirm Multilocational Trades (Update)

This API enables you to confirm OCM Trades for multiple locations.



View Shipper Trade Details

This API enables you to query gas trade details for a Gas Day.