

Invitation to Tender

Attachment 2c – Demonstration Instructions and Guidance

RM6385 Energy Trading and Risk Management (ETRM) System

# **General**

# As part of your bid for RM6385 Energy Trading and Risk Management (ETRM) System, you are required to complete a live demonstration of your solution which must demonstrate the required functionality detailed in this document and in accordance with Attachment 1a - Contract Schedule 2 (Specification).

* 1. The demonstration of the system will be conducted via a webinar.
  2. Any questions in relation to demonstrations should be raised as early as possible during the clarification period. The deadline for asking questions is stated in Attachment 1 About the Contract ‘Timelines for the competition’.
  3. You are required in question 2.6 below to nominate your two (2) favoured demonstration dates/times.
  4. Following compliance checks, you will receive an invitation via the eSourcing suite confirming your demonstration date and time. At this stage you will be required to provide contact names and email addresses for your participants to enable us to provide joining details.
  5. Attendees must not exceed three people who will be directly involved in the Contract.
  6. No legal representatives will be allowed.
  7. The language that the event will be conducted in will be English.
  8. You will need to ensure that you have appropriate technical support prior to and during the presentation.
  9. The total time allowable for the session is 2 hours (120 minutes). This is broken down into the following:
* 5 minute introduction delivered by CCS
* 100 minutes for you to delivery the live demonstration tasks
* 15 minute period for CCS to ask any clarification questions about the presentation.
  1. If you fail to complete all of the tasks in the required time, you will not receive any marks for uncompleted tasks. No additional time will be permitted. CCS may choose to allow the clock to be paused in the event of circumstances outside the control of the bidder impacting the demonstration (for example, issues with the teleconference connection or CCS staff being interrupted).
  2. At certain stages within the demonstration you will be required to show the results of previous actions (for example, showing the impact on a basket position of entering a trade). At these points, CCS will check the outputs and the results of any calculations match the expected values. If the outputs do not match the expected values, you will be informed and given the chance to correct the issue.
  3. All bidders will be given the same amount of time with CCS. Late attendees to the event may result in the bidder being deemed as non-compliant and the bidder may be excluded from this competition or may have to present their demonstration within the remaining time scheduled.
  4. All bidders will be asked to perform live calculations on their system during the demonstration. There are 21 component parts that need to be demonstrated in detail in order to be awarded a maximum score. Each component part will be awarded specific marks.
  5. You must achieve a minimum weighted mark of 25 (out of 40) for the demonstration. If your weighted mark for the demonstration is below 25 your bid will be rejected and you will be excluded from further participation in the procurement.
  6. During the demonstration each evaluator will independently assess your demonstration using the response guidance and the evaluation criteria. Consensus will be reached amongst the evaluators post demonstration, during the consensus meeting, which will result in an agreed score for each component part and the final score for question 2.7. Please note no feedback will be provided on the day of the event.

# **Demonstration Preparation**

* 1. Prior to the demo, you should configure your ETRM solution for UK gas and power trading.
  2. Gas will be traded in therms, and priced in p/therm
  3. Power will be traded in MWh and priced in £/MWh.
  4. Trades will use standard UK gas and power contracts (month, quarter or season delivery periods, with baseload and peakload variations for power).
  5. All the trades, demand forecasts, price curves, etc. used in the demo will fall within the date range 1st April 2025 to 31 March 2027.
  6. Some information (for example, details of baskets to create, trades to enter) will be provided verbally during the demonstration.
  7. Some data (for example, demand profiles, price curves) will be provided as Excel files when you are invited to your demonstration slot. You are responsible for converting the provided files into a format compatible with your system.
  8. You may perform any work necessary to prepare your system for the demo (for example, you may need to configure position reports for the gas and power sections, or set up/write queries for the API data extraction section). However, please do not complete any of the marked tasks below until the demonstration as if CCS do not see the required task being completed, we may be unable to award you marks for it.
  9. The maximum score available for completing all the required tasks successfully is 100 marks.

# **Question 2.7 Demonstration Guidance**

* 1. You must provide a live demonstration of your Solution to demonstrate the functionality of the required key elements.

**Gas (30 marks total)**

* Create 2 new gas baskets (the details will be provided verbally)

*2 marks (1 per basket)*

* Load a monthly demand profile for each of the new gas baskets using the data provided, and show that the correct demand profile is now present in the system

*2 marks (1 per basket)*

* Create 2 gas trades for each of the new gas baskets (details of the trades will be provided verbally)

*4 marks (1 per trade)*

* Show that the trades have been entered successfully and that the details below are correctly recorded:
  + Delivery contract
  + Delivery period
  + Trade volume (in therms/day)
  + Total trade volume (in therms)
  + Trade price (in p/therm)
  + Total value (in £)
  + Trader

*10 marks (2.5 per trade if all details are correct)*

* Load a daily-granularity gas price curve using the data provided

*2 marks*

* Show a monthly position report for each of the gas baskets, including the following data
  + Therms required
  + Therms purchased
  + Therms open
  + Cost done
  + Cost open
  + Total cost
  + Price done
  + Price open
  + Weighted average price

*10 marks (5 per basket if all fields are correct)*

* *The position report does not have to be a core part of the system. It could be, for example, an external dashboard linked to the system data (in PowerBI, for example).*
* *An example will be provided to demonstrate the data the position report should include when you book your demo.*

**Power (32 marks total)**

* Create 2 new power baskets (the details will be provided verbally)

*2 marks (1 per basket)*

* Load a monthly baseload demand profile for each of the new power baskets using the data provided, and show that the correct demand profile is now present in the system.

*2 marks (1 per basket)*

* Load a monthly peakload demand profile for each of the new power baskets using the data provided, and show that the correct demand profile is now present in the system.

*2 marks (1 per basket)*

* Create 2 power trades for each of the new gas baskets (details of the trades will be provided verbally)

*4 marks (1 per trade)*

* Show that the trades have been entered successfully and that the details below are correctly recorded:
  + Delivery contract
  + Delivery period
  + Trade volume (in MW)
  + Total trade volume (in MWh)
  + Trade price (in £/MWh)
  + Total value (in £)
  + Trader

*10 marks (2.5 per trade if all details are correct)*

* Load a half hourly-granularity power price curve using the data provided

*2 marks*

* Show a monthly baseload position for each of the power baskets, including the following data:
  + MWh required
  + MWh purchased
  + MWh open
  + Cost done
  + Cost open
  + Total cost
  + Price done
  + Price open
  + Weighted average price

*5 marks (2.5 per basket if all fields are correct)*

* Show a monthly peakload position for each of the power baskets, including the following data:
  + MWh required
  + MWh purchased
  + MWh open
  + Cost done
  + Cost open
  + Total cost
  + Price done
  + Price open
  + Weighted average price

*5 marks (2.5 per basket if all fields are correct)*

* *The position report does not have to be a core part of the system. It could be, for example, an external dashboard linked to the system data (in PowerBI, for example).*
* *An example will be provided to demonstrate the data the position report should include when you book your demo.*

**API data extraction (30 marks total)**

***NOTE:*** *CCS uses Cabinet Office laptops which have strict security controls and prohibit the installation of additional software. As such, you* ***must*** *only make use of Excel's built-in functionality to set up the data transfer. You* ***must not*** *make use of any third-party software or plugins as these are not permitted.*

* Using Microsoft Excel, connect to a refreshable query that returns gas position data from the ETRM

The query should correctly return the following data points, in tabular form:

* + Basket name
  + Month
  + Therms required
  + Therms purchased
  + Therms open
  + Cost done
  + Cost open
  + Total cost
  + Price done
  + Price open
  + Weighted average price

*10 marks (if all position data is correct)*

* Using Microsoft Excel, connect to a refreshable query that returns power position data from the ETRM

The query should correctly return the following data points, in tabular form:

* + Basket name
  + Month
  + Baseload/peakload
  + MWh required
  + MWh purchased
  + MWh open
  + Cost done
  + Cost open
  + Total cost
  + Price done
  + Price open
  + Weighted average price

*10 marks (if all position data is correct)*

* Using Microsoft Excel, connect to a refreshable query that returns all gas and power trade data from the ETRM

The query should correctly return the following data points, in tabular form:

* + Trade ID
  + Delivery contract
  + Delivery period
  + Trade volume
  + Total trade volume
  + Trade value
  + Total value
  + Trader

*10 marks (if all position data is correct)*

*An example of the data to be included in each query will be provided when you book your demo.*

**Trade attributes (4 marks total)**

* Using one of the gas trades entered earlier, demonstrate how this trade could be designated as a ‘gas actualisation trade’ (see specification section 3.4) for inclusion or exclusion in different reports.

*2 marks*

* Using one of the power trades entered earlier, demonstrate how the progress of the trade through the CCS verification process (see specification section 3.6) could be recorded, including how trades at a particular stage in the process could be quickly found.

*2 marks*

**Other (4 marks total)**

* Show that all the activities completed during the demo have been recorded in an audit log.

*2 marks*

* Demonstrate how user permissions can be restricted based on role.

*2 marks*