Transmission Constraint Management Requirement Notice: Invitation to Tender Pack, Letter 2 Emily Campion Account Manager

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To All Service Providers

9 April 2018 Issue 1

Dear Service Provider

TRANSMISSION CONSTRAINT MANAGEMENT REQUIREMENT NOTICE - TCMRN/03/18

The following Transmission Constraint Management Requirement was identified by National Grid Electricity Transmission ("National Grid") to manage forecast constraint costs and volumes, arising from asset health, planned outages and forecast system conditions. National Grid therefore, sought to procure constraint management services in order to economically and efficiently manage this potential constraint.

Constraint Requirement

| Zonal Requirement: | t: South Coast | | |
|------------------------------|---|--|--|
| Potential Service Providers: | Seabank / Marchwood / Didcot | | |
| Additional Notes: | Where CCGT generation tenders in and is capable of operating in 1+1 mode it will fulfil the requirement and ideally should be tendered in this way. | | |
| Estimated volume required: | 1 Unit | | |

For a full description of the service, please refer to 'Letter 1' below.

Assessment and Results

We would like to thank those who have taken the time to participate in this tender round. No tenders were received for this requirement, resulting in no services being taken forward.

Further Information

For further information and a more detailed explanation of the procurement process for the above or similar requirements, please contact your Balancing Services Account Manager.

Yours faithfully

Emily Campion Account Manager

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To All Service Providers

21 March 18 Issue 1

Dear Service Provider

TRANSMISSION CONSTRAINT MANAGEMENT REQUIREMENT NOTICE - TCMRN/03/18

The following Transmission Constraint Management Requirement has been identified by National Grid Electricity Transmission ("National Grid") to manage forecast constraint costs and volumes, arising from asset health, planned outages and forecast system conditions. National Grid is therefore, seeking to procure constraint management services in order to economically and efficiently manage a potential constraint.

Index Price Only

Given the current uncertainty around plant running, National Grid is not looking to procure contracts for this requirement on a fixed price basis. We are inviting tenders based on an index price only as detailed below. Please note the below requirement is for a voltage only service at minimum output.

Constraint Requirement

| Zonal Requirement: | South Coast | | |
|------------------------------|---|--|--|
| Potential Service Providers: | Seabank / Marchw ood / Didcot. | | |
| Additional Notes: | Where CCGT generation tenders in and is capable of operating in 1+1 mode it will fulfil the requirement and ideally should be tendered in this way. | | |
| Estimated volume required: | 1 Unit | | |

Service providers are requested to provide prices for the following service: **Spread index linked**

| Service description: | Voltage Only |
|----------------------|---|
| Service Type: | Option price without availability component |
| Term: | From: 30 APR 2018 (23:00) To: 01 OCT 2018 (07:00) |
| Extension: | n/a |
| Period: | 23:00 – 07:00 |
| Payment Rate: | On days when National Grid enacts the option, National Grid payout to unit based on the difference betw een the day ahead spark/dark spread and pre- agreed strike price (SP) for the contracted period, as detailed in the Voltage Constraint Formula document. |



| Notice: | 10:00 w ithin day for 23:00 same night |
|-------------------|---|
| Additional notes: | We require prices for the follow ing options. Option 1 - where at the time of the instruction, PN < SEL in EFA block 6 and EFA block 3. Option 2 - where at the time of the instruction, PN >= SEL in EFA block 6 or where at the time of the instruction PN >= SEL in EFA block 3. Option 3 - where at the time of the instruction, PN >= SEL in EFA block 6 and EFA block 3. |

Please note that the above service is based on historic information and any service provider may offer an alternative if it is felt it may meet the requirement. Any new service offer, including prices, will be published as detailed below.

These requirements are National Grid's current best view based on OC2 generation availability, demand estimates, asset condition and forecast market conditions. However, if in National Grid's view the drivers change significantly then National Grid reserves the right to amend or withdraw these requirements. Where appropriate National Grid may republish the tender requirements and revise the relevant timescales accordingly.

Timescales

The timescales for this particular process are as follows:

| Business Day 1, 17:00 | Wednesday 21 st March 2018 | Requirement published |
|------------------------|---------------------------------------|---------------------------------|
| Business Day 8, 17:00 | Tuesday 3 rd April 2018 | Submission of prices & services |
| Business Day 12, 17:00 | Monday 9 [™] April 2018 | Outcome published |
| Business Day 24, 17:00 | Wednesday 25 [™] April 2018 | Contract in place |
| Business Day 27, 23:00 | Monday 30 th April 2018 | Service commencement |

Submission of Service and Price Offers

Should a service provider wish to submit service and price offers for these constraint management requirements, these should be submitted to Emily Campion <u>and</u> the email address: <u>commercial.operation@nationalgrid.com</u> in accordance with the timescales above.

This process is not governed by National Grid standard contract terms, therefore the electronic submission of such offers are acceptable providing the above timescales are complied with.

A template for submissions is provided in Excel format on the constraint management website. Please use this Tender Sheet for your offer submission.

If there are any technical limitations on your stations ability to deliver this service, please ensure these are included in the tender for consideration in the assessment.

Publication of Information

National Grid shall publish and / or announce details of the information submitted for the provision of constraint management from any service provider, and the service provider is required to consent to the disclosure by National Grid of any such information. To this end, National Grid cannot accept an offer from any potential service provider unless they consent to the disclosure of such information.

Further Information

For further information and a more detailed explanation of the procurement process for the above or similar requirements, please contact your Balancing Services Account Manager.

Yours faithfully

Emily Campion Account Manager

APPENDIX 1 - GAS

Contract Fee

The Contract Fee for each Service Period shall be determined as follows:-

| Contract Fee (CF) = $(Max (0, SP - CSS_{d})) * SEL * H_{d}$ | | | | | |
|--|---|--|---|---|--|
| Where: | | | | | |
| CF | = | the Contract Fee for the relevant Service Period. | | | |
| SP | = | the Strike Price, being [] £/MWh | | | |
| CSS_{d} | = | for Service Periods expiring in calendar day d, the day ahead Clean Spark Spread | | | |
| | Clean | ean Spark Spread | | GBPP – Gas Cost – Carbon Cost | |
| | | Where: | | | |
| | | Gas Cost | = | (Day Ahead NBP/ Gas Conversion Factor * 10)/ Gas Efficiency Constant | |
| | | Carbon Cost | = | (Dec 2018EUA + CPS) * Gas Carbon Intensity | |
| | And w | and where: | | | |
| | GBPP Day Ahead NBP Dec 2018EUA CPS Gas Carbon Intensity | | = | a mean average across each Settlement Period throughout the Service Period of the clearing prices for those Settlement Periods published by APX following the day ahead auction on calendar day d-1, quoted as £/MWh | |
| | | | = | the Day Ahead Gas Index as published by Argus on calendar day d-1 (or, where this is not a Working Day , on the immediately preceding Working Day) or, where the Working Day immediately preceding calendar day d is a Friday, the Argus Weekend Gas Index published on that day, quoted as pence/therm | |
| | | | = | the European Union Allowance price (expressed in €/tonne) for December of the relevant year published by the Intercontinental Exchange as the 'Settle Price' within the end of day report for contract C-EUA and dated the Day in which the Settlement Period falls or, if no report is published for that Day, the report published most recently prior to that Day, converted to £/tonne at the Euro to Sterling daily spot exchange rate for that Day published by the Bank of England. | |
| | | | = | UK carbon price support being £18.00/tonne from 1 st April 2017 | |
| | | | = | 0.41 | |

Gas Efficiency Constant= 0.49



Gas Conversion Factor = 29.3071

- SEL = the Contracted SEL
- H_d = the number of hours comprised in the relevant **Service Period** excluding periods of deemed unavailability pursuant to Sub-Clause 3.3.3 and any **Settlement Periods** in respect of which the **Generator** fails to comply with any of its obligations hereunder as referred to in Sub-Clause 3.5.2.

Euro GBP conversion = daily spot rate as published by the Bank of England.

APPENDIX 1 - COAL

Contract Fee

The Contract Fee for each Service Period shall be determined as follows:-

| Contract Fee (CF) = $(Max (0, SP - CDS_d)) * CO * H_d$ | | | (0, SP – CDS _{d)})) * CO * H _d | |
|---|---------------------------|---|---|---|
| Where: | | | | |
| CF | = | the Contract Fee for the relevant Service Period. | | |
| SP | = | the Strike Price, being [] £/MWh | | |
| CDS_{d} | = | for Service Periods expiring in calendar day d, the day ahead Clean Dark Spread | | |
| | Clean | Dark Spread = GBPP – Coal Cost – Carbon Cost | | |
| | | Where: | | |
| | | Coal Cost | = | (Front Month API2/ Coal Conversion Factor) / Coal Efficiency Constant |
| | | Carbon Cost | = | (Dec 2017EUA + CPS) * Coal Carbon Intensity |
| | And w | here: | | |
| | Front Month API2 = | | = | a mean average across each Settlement Period throughout the Service Period of the clearing prices for those Settlement Periods published by APX following the day ahead auction on calendar day d-1, quoted as £/MWh |
| | | | = | the coal All Published Index number 2 closing price for the following calendar month as published by Bloomberg on calendar day d-1 (or, where this not a Working Day, on the immediately preceding Working Day), converted to £/ton |
| | | | = | the European Union Allowance price (expressed in €/tonne) for December of the relevant year published by the Intercontinental Exchange as the 'Settle Price' within the end of day report for contract C-EUA and dated the Day in which the Settlement Period falls or, if no report is published for that Day, the report published most recently prior to that Day, converted to £/tonne at the Euro to Sterling daily spot exchange rate for that Day published by the Bank of England. |
| | CPS | | = | UK carbon price support being £18.00/tonne from 1 st April 2017 |
| | Coal C | arbon Intensity | = | 0.94 |
| | Coal Efficiency Constant= | | ant= | 0.36 |
| | Coal Conversion Factor = | | or = | 6.97 |

CO = the Contracted Output

H_d = the number of hours comprised in the relevant **Service Period** excluding periods of deemed unavailability pursuant to Sub-Clause 3.3.3 and any **Settlement Periods** in respect of which the **Generator** fails to comply with any of its obligations hereunder as referred to in Sub-Clause 3.5.2.

Euro GBP conversion = daily spot rate as published by the Bank of England.