

**Transmission Constraint Management Requirement Notice :  
Invitation to Tender Pack, Letter 2**

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Account Manager

To All Service Providers

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Issue 1

Dear Service Provider

**TRANSMISSION CONSTRAINT MANAGEMENT REQUIREMENT NOTICE - [TCMRN/02/15]**

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**

<b>Zonal Requirement:</b>	South East
<b>Potential Service Providers:</b>	Coryton, Grain and Medway
<b>Additional Notes:</b>	More than one price structure or service may be offered The default mechanism will continue to be used for the payment of MVarh The standard payment methodology will be used for the response energy payment Under the combined voltage and frequency response service response holding payments will not be due in addition to the contract fee
<b>Estimated volume required:</b>	One unit for the entire month of May & one unit for a specific 10 day period in May <sup>1</sup>

Service Providers were invited to provide prices for a number of services, for a full description of the services, 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. Tenders were received on behalf of Grain, Coryton and Medway. These offers are summarised in Appendix One to this letter. Following economic assessment of the tendered offers we would like to take forward services with Coryton power station and Grain power station – as highlighted in Appendix One.

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<sup>1</sup> The estimate volume required is indicative and does not provide any guarantee that this volume will be procured via constraint contracts.



**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

Laura Brock  
Account Manager

## Appendix One

BMU ID	GRAI-7	GRAI-7	T_COSO-1	T_COSO-1	T_COSO-1	T_COSO-1	T_COSO-1	T_COSO-1	T_COSO-1	T_COSO-1
Service	2a	2b	1a	1b	2a	2b	1a	1b	2a	2b
Availability Fee (£/sp)	1097	1068	0	0	1064.81	1083.33	0	0	972.22	983.33
Strike Price (£/MWh)	N/A	N/A	12.5	12.5	N/A	N/A	10.4	10.4	N/A	N/A
MW Level (PLP)	355	355	220	220	220	220	260	260	260	260
MW Level (SEL)	230	230	220	220	220	220	260	260	220	220
MVAr Range Lead:Lag	187:220	187:220	200:475	200:475	200:475	200:475	200:465	200:465	200:465	200:465
Primary Response @0.2 Hz	30	30	10	10	10	10	10	10	10	10
Primary Response @0.5 Hz	60	60	20	20	20	20	20	20	20	20
Primary Response @0.8 Hz	60	60	25	25	25	25	25	25	25	25
Secondary Response @0.2 Hz	32	32	30	30	30	30	30	30	30	30
Secondary Response @0.5 Hz	60	60	70	70	70	70	70	70	70	70
High Response @0.2 Hz	32	32	0	0	0	0	9	9	9	9
High Response @0.5 Hz	65	65	0	0	0	0	20	20	20	20

BMU ID	MEDP-1	MEDP-1	MEDP-1	MEDP-1	MEDP-1	MEDP-1
Service	2a	2a	2b	2b	2b	2b
Availability Fee (£/sp)	1273	989	1335	1063	1985	1537
Strike Price (£/MWh)	N/A	N/A	N/A	N/A	N/A	N/A
MW Level (PLP)	205	298	205	298	410	595
MW Level (SEL)	170	170	170	170	340	340
MVA <sub>r</sub> Range Lead:Lag	CT1: 256:320; CT2: 256:190	CT1: 265:288; CT2: 265:132	CT1: 256:320; CT2: 256:190	CT1: 265:288; CT2: 265:132	394:325	407:212
Primary Response @0.2 Hz	15	15	15	15	30	30
Primary Response @0.5 Hz	38	38	38	38	76	76
Primary Response @0.8 Hz	38	38	38	38	76	76
Secondary Response @0.2 Hz	24	24	24	24	48	48
Secondary Response @0.5 Hz	53	53	53	53	105	105
High Response @0.2 Hz	16	16	16	16	31	31
High Response @0.5 Hz	40	40	40	40	79	79

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25 March 2015

Issue 1

Dear Service Provider

**TRANSMISSION CONSTRAINT MANAGEMENT REQUIREMENT NOTICE - [TCMRN/02/15]**

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.

**Constraint Requirement**

<b>Zonal Requirement:</b>	South East
<b>Potential Service Providers:</b>	Coryton, Grain and Medway
<b>Additional Notes:</b>	More than one price structure or service may be offered The default mechanism will continue to be used for the payment of MVarh The standard payment methodology will be used for the response energy payment Under the combined voltage and frequency response service response holding payments will not be due in addition to the contract fee
<b>Estimated volume required:</b>	One unit for entire month of May & one unit for specific 10 day period in May <sup>2</sup>

Service providers are requested to provide prices for the following services:

**Service 1a – Spread Index Linked – Month of May**

<b>Service description:</b>	Voltage & Frequency Response
<b>Service Type:</b>	Firm (Generation at part-load point) <sup>3</sup>
<b>Term:</b>	From: 23:00 1 May 2015 To: 23:00 31 May 2015
<b>Extension:</b>	Potential to extend up to 14 June 2015. Extension will be notified on a weekly basis 3 days ahead.
<b>Period:</b>	Whole of Term
<b>Payment Rate:</b>	Availability Fee( £/SP) Contract Fee based on tendered strike price based on formula in Appendix 1

<sup>2</sup> The estimate volume required is indicative and does not provide any guarantee that this volume will be procured via constraint contracts.

<sup>3</sup> Full reactive capability is required equivalent to SEL position

## Service 1b – Spread Index Linked – 10 day period in May

<b>Service description:</b>	Voltage & Frequency Response
<b>Service Type:</b>	Firm (Generation at part-load point)
<b>Term:</b>	From: 23:00 7 May 2015 To: 23:00 17 May 2015
<b>Extension:</b>	Potential to extend up to 31 May 2015. Extension will be notified on a weekly basis 3 days ahead.
<b>Period:</b>	Whole of term
<b>Payment Rate:</b>	Availability Fee( £/SP) Contract Fee based on tendered strike price based on formula in Appendix 1

## Service 2a – Fixed Price – Month of May

<b>Service description:</b>	Voltage & Frequency Response
<b>Service Type:</b>	Firm (Generation at part-load point)
<b>Term:</b>	From: 23:00 1 May 2015 To: 23:00 31 May 2015
<b>Extension:</b>	Potential to extend up to 14 June 2015. Extension will be notified on a weekly basis 3 days ahead.
<b>Period:</b>	Whole of Term
<b>Pricing:</b>	Availability Fee (£/SP)

## Service 2b – Fixed Price – 10 day period in May

<b>Service description:</b>	Voltage & Frequency Response
<b>Service Type:</b>	Firm (Generation at part-load point)
<b>Term:</b>	From: 23:00 7 May 2015 To: 23:00 17 May 2015
<b>Extension:</b>	Potential to extend up to 31 May 2015. Extension will be notified on a weekly basis 3 days ahead.
<b>Period:</b>	Whole of Term
<b>Pricing:</b>	Availability Fee (£/SP)

Please note that the above services are 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, 14:00	Wednesday 25 March 2015	Requirement published
Business Day 6, 17:00	Wednesday 1 April 2015	Submission of prices & services
Business Day 17, 17:00	Monday 20 April 2015	Outcome published
Business Day 25, 17:00	Thursday 30 April 2015	Contract in place

## 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 your Balancing Services Account Manager **and** the email address: [commercial.operation@nationalgrid.com](mailto:commercial.operation@nationalgrid.com) 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

Laura Brock  
Account Manager

## APPENDIX 1

### Contract Fee

The sum of all **Contract Fees** and **Availability Fees** cannot exceed a cap of the following over the relevant **Service Term**:

- (i) £2,100,000 – Service 1a
- (ii) £700,000 – Service 1b

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

$$\text{Contract Fee (CF)} = (\text{Max } (0, \text{SP} - \text{CSS}_d)) * \text{SEL} * H_d$$

Where:

CF = the **Contract Fee** for the relevant **Service Period**.

SP = the Strike Price, being [ ] £/MWh

$\text{CSS}_d$  = for **Service Periods** expiring in calendar day d, the day ahead **Clean Spark Spread**

$$\text{Clean Spark Spread} = \text{GBPP} - \text{Gas Cost} - \text{Carbon Cost}$$

Where:

$$\text{Gas Cost} = (\text{Day Ahead NBP} / \text{Gas Conversion Factor} * 10) / \text{Gas Efficiency Constant}$$

$$\text{Carbon Cost} = (\text{Dec 2015EUA} + \text{CPS}) * \text{Gas Carbon Intensity}$$

And where:

GBPP = UK Power Price Base published by APX following the day ahead auction on calendar day d-1, quoted as £/MWh

Day Ahead NBP = the Day Ahead Gas Index as published by Heren 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 Heren Weekend Gas Index published on that day, quoted as pence/therm

Dec 2015EUA = the December 2015 European Union Allowance price published by Bloomberg on calendar day d-1, converted to £/tonne.

CPS = UK carbon price support being £9.55/tonne until 31<sup>st</sup> March 2015 and £18.08/tonne from 1<sup>st</sup> April 2015

Gas Carbon Intensity = 0.41

Gas Efficiency Constant = 0.49





Gas Conversion Factor = 29.3071

SEL = the **Contracted SEL**

H<sub>d</sub> = 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.