Constraint Management Service

A guide to the services procured by National Grid to manage constraints on the Transmission System

Version 1.0
National Grid is an international electricity and gas company responsible for operating the electricity and gas transmission systems across Great Britain.

What is a constraint?

As National Grid is the System Operator for the whole of Great Britain, it needs to balance the generation and demand over the whole network. Sources of generation and the points of demand are not always located in the same place. This can lead to bottlenecks on the system as there can be limited capacity to transmit the electricity across the different locations. Where the energy is restricted in its ability to flow between two points this is known as a constraint and National Grid needs to take action to both circumvent and reduce these constraints.
**Constraint Types**

There are two types of transmission constraint:

**Export**: the generation in the area is not offset by the localised demand and the flow out of the area is limited by the capacity of the circuits.

**Import**: the energy demand cannot be met by the localised generation and the flow into that area is limited by the capacity of the circuits.

**What is the service?**

To help National Grid manage constraints, potential service providers will be requested to limit or profile their generation or demand during a specific period.

**How is the service procured?**

Requirements will be identified on an ad hoc basis for constraint management services within a particular area. This may be due to work being required to reinforce the transmission system as a result of facilitating generator connections, or general maintenance of circuits.

Where competition is limited, providers will be approached directly to negotiate a bilateral contract. Where multiple generators may be able to offer assistance, a tender will be run to procure the most efficient plant to manage the constraint.

As each constraint depends on a number of factors, including the nature of the flows on the network, the duration of the requirement, the local level of generation output, and the local level of system demand, the technical details of each requirement will be unique.

**Payment**

Customers who are interested in participating in this service are requested in the tender to submit prices at which they are willing to manage their output. Such prices are normally based on an availability fee and an utilisation fee.

The requirements and invitation to tender documents can be found on our website (link on next page).
Contact:
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Information:
For more information on Balancing Services please visit