From:

Drax Re-power

To: Subject: Fwd: J M - 20011847 Date: 28 March 2019 22:52:44

Attachments: rpc.pdf

----- Forwarded message -----

From: ...

Date: Thursday, 28 March 2019

Subject: J M - 20011847

To: DraxRepower@planninginspectorate.gov.uk

Dear Sir or Madam, Please find a request attached. Kind Regards

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Request for planning condition to create flexibility and adequacy in a low carbon grid environment:

During the examination the applicant suggested that the proposed development would besides generating electric power also be used to provide ancillary services even if, or especially when there is a high penetration of renewable supply. Beyond that National Grid stated that "National Grid on occasion may be required to dispatch plant otherwise "out of merit" to maintain an adequate level of system inertia. In this case plants such as Drax may be brought on ahead of, or as a replacement to renewable generation." With ever increasing capacity of renewables needed on the grid to meet emissions targets, this will become more and more frequent, increasingly costly and will directly undo some of the progress made.

Given that GHG emissions are of such great concern, and considering that it seems totally incompatible with staying within the allocated carbon budget to replace renewables with fossil generation (when we are already likely to overshoot) I wish to urge you to establish whether a planning condition can be put in place to ensure that no gas turbine is going to run 'out of merit' to replace renewables at Drax, if not necessary.

If this project would get a go ahead, it should be clear to the applicant from the onset that if additional power factor correction/ voltage control (or inertia) was needed in times of low demand, a synchronous condenser like setup on the electrical side of the project (or a separate synchronous condenser) would have to be implemented.

Formerly the applicant pointed out that "It is agreed that a synchronous condenser does provide reactive power, short circuit infeed and inertia, however, the largest clutch available is around 300 MW. This type of arrangement would therefore not be suitable for the Proposed Scheme and the proposed units associated." Clutches of this size should however still allow 600 MW worth of generation per unit to be used independently (providing ~200 MVAR of reactive power) besides a part that is permanently fixed to the turbine, a setup that might be beneficial in other ways as well.

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010091/EN010091-001023-8.5.18%20Applicant's%20Response%20to%20Deadline%205%20Submission%20by%20Julian%20May%20D6.pdf

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https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010091/EN010091-001043-Response%20from%20National%20Grid%20in%20relation%20to%20Question%20ANC%202.3%20of%20their%20DCO.pdf