
DS3 System Services Consultation – Volume Calculation Methodology and Portfolio Scenarios

This questionnaire has been prepared to facilitate responses to the consultation. Respondents are not restricted to this template and can provide supplementary material if desired.

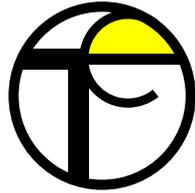
Please send responses in electronic format to DS3@eirgrid.com or DS3@soni.ltd.uk

Respondent Name	<i>Cormac Daly</i>
Contact telephone number	<i>01 8578711</i>
Respondent Company	<i>Tynagh Energy Ltd</i>

Note: It is the TSOs' intention to publish all responses. If your response is confidential, please indicate this by marking the following box with an "x". Please note that, in any event, all responses will be shared with the Regulatory Authorities.

Response confidential

The closing date for responses is Wednesday, 25th November 2015.



**TYNAGH ENERGY
LIMITED**

Question	Response
Determination of Capability Volume Requirements	
<p>Do you agree with our proposed approach to determining the Capability Volume Requirements for the System Services?</p> <p>If not, please specify what alternative method you believe to be more appropriate.</p>	<p>TEL has some reservations with regard to the methodology for determining the Capability Volume Requirement. These are:</p> <ol style="list-style-type: none">01 The TSO's have not clearly defined the problem that they are attempting to solve i.e. what are the constraints that are being applied to the PLEXOS model which will result in a deviation in dispatch? Without clear definition it is difficult for market participant to understand the results;02 The PLEXOS model has been validated for the SEM but has not yet been updated for the I-SEM. This could result in dispatch which is very different from what eventuates;03 It seems imprudent to suggest (section 2.1) that due to the absence of certainty regarding wind rollout post 2020 that the rollout will be set to zero. The latest Generation Capacity Statement suggests that there will be more than 300MW coming on line from 2020 to 2022. A more conservative approach may be to take 150MW – 200MW.04 The volumes of services that are available for delivery at any point in time and how they translate into Capability Volumes is highly dependent on the assumption made as to what services each portfolio of plant can deliver.05 In section 2.4 and 2.5 the locational constraints refer to summing the reactive power generated over the course of a year. TEL would recommend using a future grid, with all known changes in terms of industry and plant included. <p>If the volume of services required to be available at any point in dispatch is a function of the level of wind on the system (and is not dependent on the portfolio of plant) then the approach presented by the TSO would be acceptable. If however the</p>

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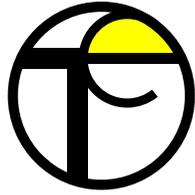
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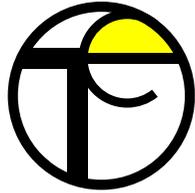
portfolio of plant available to deliver the services impacts the volume of services required then it is not clear how this hypothetical approach will lead to a meaningful result.

Plant Portfolio Scenarios

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Do you agree with the 2017/18 and 2019/20 plant portfolio scenarios and underlying assumptions presented as the starting point for carrying out the analysis of System Services Capability Volume Requirements?

If not, please specify what alternative scenarios you believe to be more appropriate, and why.

TEL would have some concerns with the assumption contained within the Enhanced Capability Scenario. These concerns are:

- 01 This scenarios assumes that the six enhanced CCGTs will achieve an average minimum generation level of 130 MW. To achieve this level of turndown will increase the level of incomplete combustion for these plant and thereby increase CO emissions. The most recent BREF document will limit CO emission to between 5 and 100 mg/Nm³ and states that the BAT for CO minimisation is complete combustion. This may limit the ability of plant to achieve this assumed turn down;
- 02 Achieving a significant improvement in minimum generation will required a sizable capital investment. KEMA estimated that this would cost tens of millions of Euro to retrofit a new combustion systems. Any plant making this type of capital investment would seek to maximise the level of services it could deliver. It would therefore be illogical for a plant to not achieve a cold start in less than three hours. As such it would seem prudent to assume that enhanced CCGTs would deliver RM3 capability.
- 03 The estimate for FFR at 50% of POR is extremely high. TEL would believe that 10% would be the limit.

The calculation of Capability Volume Requirement will be highly influenced by the portfolio of plant chosen. TEL would therefore urge the TSOs to ensure that the proposed portfolios can deliver the capability that has been assumed.