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SEM Committee

Att.: Robert O`Rourke

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Datum: 14-08-14

Re: Response to SEM Committee Consultation SEM-14-059 „DS3 System Services Procurement Design“

Dear Mr. O`Rourke,

Please find our response to SEM Committee Consultation SEM-14-059 „DS3 System Services Procurement Design“ below.

Mit freundlichen Grüßen / Kind regards / Saludos / Sinceramente / 懇切地

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1. Summary

It is requested that respondents provide a summary of their position and any general comments on the system services review and the economic analysis

We as a manufacturer of battery storage systems are concerned that the preferred procurement design option of „Competitive Multiple Bid Auctions“ does not offer a viable route to market for battery storage systems. With increasing levels of renewable penetration energy storage will become an important building block of future energy systems to provide system stability, but the procurement design for system services must offer enough security to make these projects bankable. Calculable revenue streams over a sufficient contract length are the only way to offer innovative technologies a route to market. A regulated tariff (option 1) with a sufficient contract length (minimum 10 years) is required.

A recently published report by Deutsche Energie-Agentur called „dena-Studie Systemdienstleistungen 2030“ (<http://www.dena.de/projekte/energiesysteme/dena-studie-systemdienstleistungen-2030.html>) investigates different scenarios for system services in Germany until the year 2030. A comparison of different technologies for frequency regulation concludes that battery storage is the most cost-competitive technology (chapter 2.4). In July 2013 the report „Does Ireland need more storage“ was published by a EU-funded work group called „stoRE“ (www.store-project.eu). This report clearly indicates that there is a need for additional storage capacity by 2020 (70GWh at 1.8GW power rating) to fully integrate all the wind energy output under a 40% RES-E scenario. Even though this document focusses on bulk storage, mainly PHES (Pumped Hydro Energy Storage), we believe that distributed MW-scale battery storage systems can play a significant role, especially when considering price decline of li-ion batteries and at the same time the enormous siting and planning constraints for PHES or CAES (Compressed Air Energy Storage) projects.

The follow-up report „Energy Storage Action List – Promoting Energy Storage in Ireland“ identifies a number of barriers for implementing energy storage and proposes possible solutions:

Chapter 2:

The Concern: The uncertainties surrounding energy storage regulation do not provide any motivation for future investments.... no incentives are given to energy storage in recognition of its important contribution to enable higher penetration of variable RES production in the grid.

Action: Need for different entry route into market for new technologies (difficult for new technologies to enter market under same route as conventional technologies)

By whom: SEMC/CER/TSO

We are aware that the DS3 System Services Procurement Design is only a small building block when talking about new entry routes for storage technologies, nevertheless it is an important one and to decide on the right procurement option is crucial.

2. Demand and Supply Side analysis

Respondents are asked to provide views on the approach to the demand and supply analysis, the results and the interpretation of those results

We agree with the approach to the demand analysis and the subsequent results.

We do not agree with the approach to the supply analysis and the subsequent results. Chapter 3 (page 10) states:“ *The most notable result of the supply analysis is the level of uncertainty*

surrounding the costs of provision and the technologies that will provide the services. Therefore the SEM Committee considers that the procurement mechanism should be as technology neutral as reasonable...". We think that the economic analysis of the supply side (CAPEX and OPEX of different technologies) should have been given far greater attention to detail to minimise the above mentioned uncertainties (e.g. in the IPA report the figures for battery storage systems are based on one single document and are in parts highly inaccurate). A technology neutral procurement mechanism without a clear vision for the future energy system can lead to fatal results (e.g. system services provided by fully depreciated gas turbines in low demand periods leading to grid congestion for renewable generators).

3. Procurement Designs

Do you agree with the criteria and analysis used by the SEM Committee to evaluate the options?

We do agree with the criteria used by the SEM Committee.

We do not agree with the analysis, see below (4.b)

4. Procurement Options

a. Do you agree with the design of the procurement options? Are there any different design elements or procurement options that the SEM committee should consider?

We agree with the design of the procurement options.

b. Do you agree with the SEM Committee`s analysis of the procurement options?

We do not agree with the SEM Committee`s analysis of the procurement options.

We do not agree with the analysis of investment criteria shown in chapter 8.3.

The highest certainty for investors is expected with procurement Option 3 (Regulated Competiton), 4 (Competitive Split Auction) and 5 (Competitive Multiple Bid Auction). In contrast Option 1 (Regulated Tariff) is supposed to offer low certainty for investors on the grounds that the contract length is only 5 years. It is our view that Options 3, 4 and 5 do not offer sufficient certainty for investors, simply because the auction results are not known at the point in time when investment decisions have to be made. Clearly the answer is a Regulated Tariff (Option 1) with sufficient contract length.

c. Which option do you prefer?

We prefer Option 1 (Regulated Tariff).

5. Option 5: Multiple Bid Auctions

a. Do you agree with the SEM Committee`s proposal to adopt this option and only to fall back on Option 1 (Regulated Tariff) where the auction fails to deliver the required volume of services?

No (see 4.b.). Installation of new technologies like battery storage systems require a leadtime of 2-3 years. With a Regulated Tariff (Option 1) investment decisions can be made as soon as the tariffs are calculated and published. Waiting for the results of a Multiple Bid Auction (Option 5) will delay investment decisions significantly. If the Auction fails and subsequently the Regulated Tariff will be introduced there will be further delays.

b. Are there any specific issues the SEM Committee should consider regarding the auction design?

No comment.

c. Do you agree that market power mitigation measures are required?

Yes.

d. Are the SEM Committee`s proposals regarding market power sufficient? Should alternative or additional measures be considered?

With the introduction of a Regulated Tariff (Option 1) market power is not a critical issue.

e. Are there any specific requirements that the SEM Committee should include in the bidding rules?

No comment.

6. Payment basis for the services

Do you agree with the proposed payment basis for each service/option?

Yes.

7. Interaction with I-SEM

a. Do you agree with the SEM Committee`s views on the interaction with the energy market?

No comment.

b. Do you have any views on the potential interactions and the appropriate measures to address these interactions?

No.

8. Other issues

Are there any other issues not raised in this paper the SEM Committee should consider?

No.