

**TYNAGH ENERGY
L I M I T E D**

Eoin Kennedy
Eirgrid
The Oval
160 Shelbourne Road
Ballsbridge
Dublin 4

Mark Gormley
SONI
12 Manse Road
Belfast
Co. Antrim
BT6 9RT

Ref: TEL/CJD/15/232

18th December 2015

RE: Consultation on Regulated Tariff Calculation Methodology

Dear Eoin, Mark,

TEL welcomes the opportunity to respond to this consultation.

The response is divided into two sections: Section A describes TEL's specific views on the Qualification Process for DS3 and Section B answers the questions raised in the Consultation.

Section A

The fundamental point of DS3 is to maximise the benefit for consumers of the high levels of Wind Capacity on the island, and that this requires significant and timely investment primarily from thermal generators.

We would like to raise the following points in response to this consultation:

1. Cost minimisation focus
2. Investment Certainty for enhancing CCGT's
3. Level of regulated tariffs

1. Focus on minimising cost, not on ensuring project is delivered on time within budget

The focus in this consultation appears to be very much on reducing costs in the procurement of the services, attempting to secure the required volumes at less than the budgeted €235 million. While accepting a generator would say it, it is nonetheless appropriate to point out that if the required volume of services can be provided by 2020 within the budget of €235 million the project would be a massive success. The focus should not be on reducing further the cost of these services but in doing everything possible to ensure that the services are provided.

If the RA's can provide certainty to the process and certainty to the revenues then investors will appear. However the less certainty, the greater the chance that investment will not be made and that the project will not succeed.



There are significant costs if Ireland does not deliver the DS3 project, these costs could run into the hundreds of millions in fines for failure to meet decarbonisation targets, as well as additional payments to fossil fuel generators for running when there is sufficient wind power on the system to replace them. There may also be payments to wind farms in being curtailed.

The RA's need to ensure that DS3 is a success, the cost of failure far outweighs the potential savings by further reducing the budget.

2. Investment Certainty for enhancing CCGT's

SIR is being grouped with reserve products (page 32). The rationale for this is that a service provider can provide SIR while providing these other services. The methodology being used to remunerate this group of products is to pay them the "value" of these products rather than referring to the incremental capital cost of delivering this capability. While it is true that these services can be delivered together the incremental capital costs are not related i.e. the capital cost of reducing minimum generation does not increase the capability to provide operating reserve. If a 400MW plant were to reduce its minimum generation from 250MW to 200MW it will not change its reserve requirements. The plant will still only be able to provide 20MW of POR irrespective of the change to minimum generation. This is contrary to Pöyry's conclusion (footnote 27 page 31).

The Pöyry paper recognises that the driver to reduce min gen should be remunerated through SIR and ramping products rather than reactive power (see footnote 24 page 30). When we look at the incremental capital costs considered under ramping products however the costs of reducing min gen are not considered (page 39).

The IPA report¹ on reviewing KEMA's analysis concluded that the cost of reducing minimum generation would require circa €43 million for an existing CCGT. This is by far the most expensive capital cost identified.

There is therefore no explicit recognition of the cost of enhancing a CCGT to provide a very necessary service in the tariffs. Pöyry's proposal to "value" SIR will also grossly underestimate its true value and its cost. Their proposal (footnote 31 page 36) will overstate the average inertia provided by generators on the system.

For DS3 to work, more SIR needs to be provided by existing thermal generators with a smaller MW burden i.e. CCGTs need to reduce minimum generation significantly. This is going to require considerable capital and this needs to be recognised in the tariffs.

3. Level of regulated tariffs

The tariffs must be set at a level that will see the investment required. If the tariffs are too low, the investment will not be made and the project will not be a success.

The proposals for BNE and particularly Joint BNE will not deliver required investment and will lead to failure of the project. If it has to be "cost plus" then it should be the "worst successful new entrant" so that all service providers who might be successful in the auction get an adequate return. The analogy would be that a coal plant sets the SMP for all generation this cannot work. Joint BNE is a theoretical plant that would never exist and

¹ Economic Appraisal of DS3 System Services for the Commission for Energy Regulation and The Utility Regulator – IPA 2014



therefore the cost plus model is being eroded. The BNE for SIR might be an enhanced CCGT, while RRD will be an OCGT, and FFR –might be a coal plant.

In fact the suggestion that there should be a joint BNE for SIR and all reserve services is unrealistic.

- SIR, FFR, POR, SOR, TOR1&2 RRS & RRD are all vastly different products.
 - SIR inherent inertia is plant specific and minimum generation is key
 - FFR – will depend on the technology, CCGT's will really struggle to provide any FFR. CCGT's have difficulty in providing 5% of export capacity in the POR timeframe.
 - RRS should be linked to RM1 etc.
 - RRD is related to start-up capability while the other products are all on-line.
- Opportunity costs of providing ramping margin cannot be ignored. CCGT's will be held at min gen to facilitate wind and will be providing RM. There is an opportunity cost the same as for provision of reserve products. Investment in new CCGT technology to deliver faster start-up times so that they can deliver in the RM3 and potentially RM1 timeframes while off-line have not been considered, the focus seems to have been solely on warming.

Section B

Question 1: What is your view on the high-level methodology outlined by Pöyry in its paper?

TEL does not agree with the high-level methodology. The focus seems to be on minimising costs, as opposed to ensuring that the services are provided within the budget. The focus needs to be on ensuring that each of the required volumes of each of the services is provided.

Question 2: Do you agree with Pöyry's proposed approach to managing inflation risk?

Yes.

Question 3: Do you agree that investment costs can be identified specifically for increasing Fast Post-Fault Active Power Recovery, Dynamic Reactive Response, Steady-State Reactive Power and the Ramping Margin services capability? If not, please explain your reason.

No. Because there are product interdependencies.

Question 4: Do you agree that the TSOs should develop the necessary inputs to the calculations and that the Regulatory Authorities should approve them? If not, who do you propose should develop and approve them, and why?

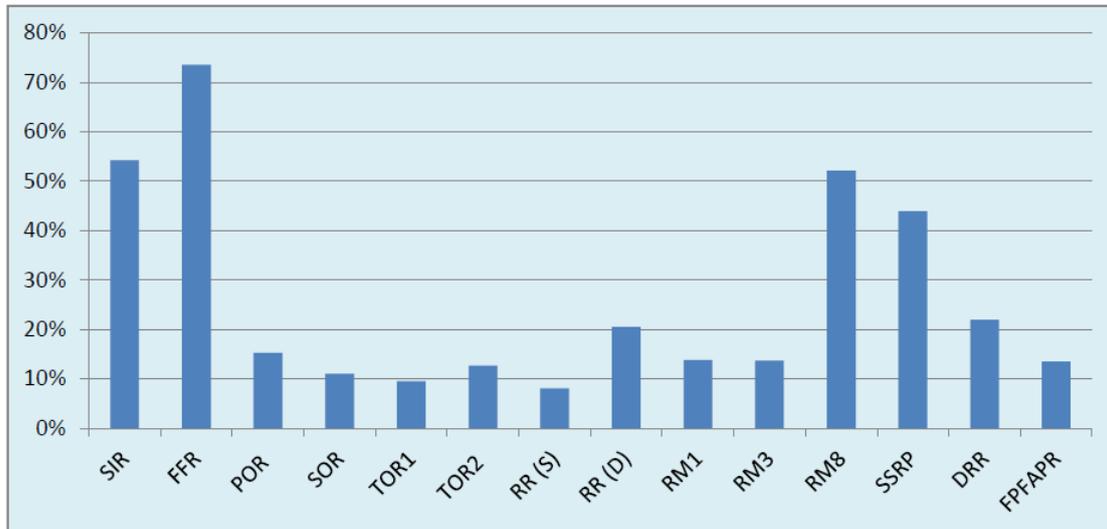
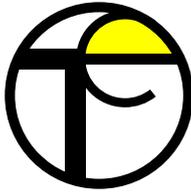
No, we would disagree with the fundamental logic that has been created for the inputs, as such agreeing to the method of calculation and approval would be inappropriate

Question 5: Do you agree that investment costs for increasing individual service capability only cannot be identified for the Synchronous Inertial Response, Fast Frequency Response and the reserve services?

No. To increase SIR would require a reduction in minimum generation. This reduction in minimum generation will not provide any other reserve service (though it may provide some increase in ramping margin).

Therefore the cost of this reduced minimum generation will need to be paid for from SIR revenue. The following chart from the decision paper ²illustrates the estimated shortfall in each of the services. The 54% shortage in SIR is noteworthy.

² DS3 System Services Procurement Design and Emerging Thinking Decision Paper SEM-14-108



In the analysis of SIR on page 28 of the Procurement consultation³ the SEMC notes that this service will largely be provided by existing conventional units. Therefore the cost of providing for this significant shortage of SIR will need to be provided by enhancements to existing conventional units. The units that reduce their minimum generation will not benefit from any other revenue stream (i.e. Energy or Capacity Revenue), in fact due to their lower minimum generation they may lose Energy Revenue during off peak times.

The cost for this can be quantified. SIR will be a fundamental service at times of high wind. Without this service it is highly unlikely that the system will be able to move to 75% SNSP. If the cost of this investment is not likely to be covered by the regulated tariff then investment will not take place.

Question 6: Do you agree with Pöyry's proposal by which the tariffs for these services will be informed by the marginal cost of provision of each service?

No. The regulated tariff must be seen as an enticement for investment. The greatest opportunity that the project will succeed is if the entire budget of €235 million is attributed through a simple calculation of required volumes by prices.

Question 7: Do you agree with the proposal to use the same portfolio scenarios (and the same study years) for the volume calculation and regulated tariff calculation processes?

Yes.

Question 8: Do you agree with the TSOs' view that it may be necessary to adjust tariff levels post-calculation to manage the scale of payments?

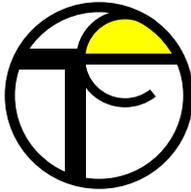
If there was oversubscription of all the services then it is possible that tariff levels should be adjusted. However with the notional cost-plus methodology proposed it seems unlikely there will be sufficient investment, so this will not be a problem. The cost to provide the service should be an absolute minimum for the tariff.

Question 9: What are your views on the options proposed by Pöyry for managing expenditure?

Without a significant change in the proposed methodology we cannot see sufficient investment in the System Services to warrant these options being required.

Question 10: Do you agree with Pöyry's view that payments for Dynamic Reactive Response and Fast Post-Fault Active Power Recovery should be targeted? Do you agree that they should

³ DS3 System Services Procurement Design SEM Committee Consultation



be targeted at times of greatest need? What are your views on targeting payments to specific types of technologies?

The Decision states: *“The SEM Committee remains committed to the implementation of a procurement mechanism that is technology neutral. “*

We would be disappointed if that principle was broken, even just the possibility being raised creates more uncertainty and doubt for investors. Equally the strong push for targeted payments for times of high wind, will affect investor clarity. If it's a low wind year, investors may do very badly from plant that have been built specifically to provide services.

Question 11: What is your view on the proposed approach to determination of the Steady State Reactive Power tariff?

We do not agree. The Pöyry paper states that in the event that greater volumes of SSRP are required while the Decision suggests (see the chart in the previous page) that there will be a requirement for a 40% increase by 2020. The whole basis for the tariff for this service is that it is unlikely that there will be a change in requirement.

Question 12: What is your view on the proposed approach to determination of the tariffs for Ramping Margin services? Do you agree with the suggestion to use the cost of the required equipment for keeping a CCGT 'warm' to inform the tariff level?

No. The RA's and their consultants should also look at other options which could allow CCGT's to provide RM1 or RM3

Question 13: What is your view on the proposed inclusion of commodity price indexation?

We are in favour of commodity price indexation, but this should solely be included in such a way as to increase investor certainty.

Yours sincerely,

Cormac Daly
Risk and Regulatory Manager