

**From:** Mark Howitt <mhowitt@storelectric.com>  
**Sent:** 07 July 2020 18:29  
**To:** .box.Earlycompetition; Oxenham1 (ESO), Michael  
**Subject:** EXT || Feedback on Early Competition consultation

Dear Mike,

I have received your consultation document, which is a good one and reflects the input from the nine consultation webinars. Thanks. I have the following additional comments to make. Slide numbering is the PDF number, not the number on the slide (the PDF number is 1 higher).

I am happy for you to put my name to all comments, publicly.

**Slide 9: Suitability**

I suggest that when you develop the Electricity Ten Year Statement (ETYS) reports, each header (and summarised at the end) lists "forecast system needs", specifying:

1. The need (e.g. congestion relief, black start, inertia)
2. The forecast date at which it becomes critical
3. The projected rate of growth of that need
4. Other factors, e.g. that there is a project not accommodated in the NOA that hopes to do X from X date at X size and will increase/decrease this requirement by X
5. References to other needs within (a) the locality, and (b) the grid region (these are probably defined by the number of substation steps) - so that a project that can support more than one need can make easy reference to that fact

As well as other feedback from ETYS, you also solicit Proposals. These would be for companies to write in along the lines of "We have this technology that can deliver xxxx in support of Need ##, and yyyy in support of need ## at a capital cost in the range of £a-b million and can then expand {details: size, rate of expansion, cost} to support ongoing needs growth".

In this way the ETYS would act as the Very Early Stage invitation, without the need for NG to make any judgements on eligibility. Each such proposal would then be explored cooperatively between NG and the proposer, through various stages of increasing commitment of resources by both sides as its viability solidifies. Assessment would have to be by dialogue so as fully to understand the proposal, which may not be immediately understood in full if there is innovation or an unusual aspect within it. Consequently it would enable you to assess alternatives before affecting the lead time of a network solution.

You could restrict this number by excluding standard network solutions (you were thinking of only opening the very early stage to non-network solutions anyway), though may allow an exception for innovative network solutions.

This may lead to splitting ETYS into two reports: overview and detailed, with the above in the detailed one. This should not involve additional work: the overview would merely be extracts from the detailed. This consideration is to keep the report manageable for those who have different uses for it.

It would also eliminate the need for a Very Early Stage competition.

**Slide 9, Lead times for solutions**

Ref. second-last paragraph: I suggest that the invited solutions exclude grid connection lead time and cost on the grounds that it's the TO seeking the solutions. But it would have to include planning, which would make pre-construction lead time 3.5-4 years for Nationally Significant Infrastructure (for outline design, planning-related surveys consultations and reports, financing), 2-2.5 years for local planning. Then there's construction and commissioning.

### **Slide 11, Commercial Model - Revenue**

Second paragraph: yes, consumers only derive value when commissioned, but the TO would normally incur costs prior to that. Why can't the solution provider receive at least some pre-commissioning payments to defray the costs that otherwise the TO would be incurring anyway? I agree, no profits - and maybe even no administrative mark-up, but payment of actual measured costs would greatly assist cash flow, especially for smaller developers.

- This would satisfy the "revenue during preliminary works" issue on slide 12.

### **Slides 11-12, Revenue Period**

If the TO were to build a network solution, it wouldn't stop amortising it if they were to reinforce elsewhere such that the first was rendered unnecessary. It is not right to commission work by a private company which you render useless a couple of years later by other work you do, then stop paying for the first. There should be a minimum contract period and (as envisaged on slide 12) potential for extension.

I note that (top of slide 12) you envisage 45-year contracts, which we can deliver; is downtime allowable for maintenance and upgrade during its life? (All plant with rotating equipment has overhauls, sometimes accompanied by upgrades, every 10-30 years.)

### **Slide 12, Revenue during Preliminary Works**

See comments on Slide 11, Revenue.

### **Slide 12-13, Costs**

A standard NPV etc. interest rate should be declared in the bid document, so all base their quotes on common figures. If the cost of money is higher for some companies, that could be resolved by the TO loaning them the money (with a small mark-up) which, as per comments on Slide 11 Revenue, would NOT be an expense that the TO would otherwise not have.

Bids should be able to charge any mix of capital and revenue income. All bids can then be correlated at the common NPV rate to determine cost-effectiveness. There may be a provision wherein any capital payments totalling more than (say) 40% of total discounted costs results in NG ownership of that proportion of the asset - or maybe on a sliding scale from 20% to 40% (NG ownership rising by 2% per 1% capital) and direct proportion thereafter, which would eliminate a sharp cut-off and related perverse incentives to keep it to 39.9%.

The TRS calculation, as phrased, looks like a cost-plus contract. I thought that the TO was seeking bid-price contracts?

Allocation of risks for cost overruns should be part of the bid, but must be very simple so as to be (a) analysable and (b) comparable in the bid process. I would propose that NG pay, as standard, half the cost-overruns without mark-up, paid in whichever combination of capital and revenue charging is proposed in the bid. Time criticality should be stated, with the developer being charged half of NG's incurred costs of overruns. Time advances should not be remunerated unless of direct benefit to the grid, but any time between achieved and target operational dates could be time for the asset to trade freely on the markets.

### **Slide 14, Post-tender award**

Incentive for timely delivery: see the paragraph starting with allocation risks for cost overruns, just above.

De-commissioning: NG and the company should be able to come to an agreement to waive decommissioning costs at the end of the contract (do we dismantle the grid after 45 years' operation?), and also potential acquisition of the asset at that time by NG with or without a negotiated payment to reflect the residual life and asset value.

Because of this, beside the decommissioning costs, bidders should also estimate a residual life and value were they not to decommission.

A bid bond would make it difficult for small / new-technology bidders to participate.

## **Slide 20, Identifying network needs**

See comments above.

Omitted: planned new assets (e.g. wind/solar/tidal farms, power stations, interconnectors, storage, synchronous condensers etc.) listed by stage of development (firm plans, TYNDP approval, planning approval, finance secured, under construction), forecast completion date, and their effects on the needs statement.

Also omitted: planned demise of old assets, with similar criteria.

## **Slides 21-27, 1.2 Early vs Very Early Competition**

See comments on Slide 9: Suitability for Very Early Stage. There would be no competition at this stage: all proposals would be explored until demonstrated not to satisfy the needs. The ETYS could identify Very Early Stage challenges, while the NOA defines Early Stage competitions - but it would then only go into the NOA when the decision to tender has been made. Current NOA projects without decision-to-tender should be moved to the detailed ETYS, together with any initial evaluation and indicative solution work done on them. There would therefore be no need for "the system needs ... to be narrowed down in some form to allow a requirement to be specified" for Very Early Stage work (slide 24).

This adds a bit more concrete detail to your "current preferred option", slide 25-26, though the EOI would be the statements in the ETYS. A deadline or target date for expressions of interest (combined with a very brief statement of the technology/ies being considered, including alternatives where appropriate) could be set in the individual ETYS statement of need, if appropriate.

## **Slides 32-34, 2.1 Parties**

I trust in the TO to be able to deal with these projects with fire walls between their projects arm and their contracting arm. But such separation of responsibility should be formalised.

## **Slides 35-37, 2.2 Roles and Responsibilities**

Under my proposal (slides 9, 21-27), for Very Early Stage the counterparty would also have a parallel cooperative role in the three boxes Identify options, Identify solution, Initial solution design. The Procurement Body's role would be to provide technical commercial and operational input, to facilitate grid connection identification / design / costing, and to evaluate and validate.

## **Slides 38-41, 3.1 Revenue**

See my comments on slides 11-13.

In preparing the bids the TO should liaise with developers to identify which (if any) other revenue streams can be accessed concurrently without impeding performance of the contract. Some of this may be time-of-day, weekend or seasonally dependent. The reason is because if these projects have an expectation of supplementary revenues, they may be able to lower their margins and cut the share of amortisation borne by the grid contract, saving money for the TO (and ultimately the consumer), and encouraging greater participation by increasing profit opportunities. It would also reduce the costs of these facilities delivering those supplementary contracts.

Why can't the revenue model (OFTO, PPP, RAV etc.) be part of the tender? The procurement body can assess comparative costs. Why can't they (for example) quote an up-front development cost plus ongoing indexed bidder-determined charge? Indexation should be another option rather than imposed.

## **Slides 42-45, 3.2 Revenue Period**

See my comments on slides 11-13.

I think you meant "dependable", not "dependent" (stakeholder feedback, 1st line).

I suggest you correlate revenue duration on slide 42 with that on line 2 of slide 12 and 2nd last paragraph of slide 44. On the other hand, if an asset amortises over 25 years under a 45-year contract then the final 20 years would be fully amortised. But most such assets would need a mid-life overhaul, which would mean that prices continue at similar levels.

Even when the technical asset life is long, there is likely to be an overhaul or two with down-time. This could be planned for "trough" usage periods.

Hand-over of assets after contract life should incur a purchase cost reflective of residual value.

### **Slides 46-55, 3.3 Costs**

See comments on slides 12-14. As stated, a bid bond may prevent small companies / new technologies participating.

Please also refer to my non-competition proposal for Very Early Stage proposals.

### **Slides 56-60, 4. Risk allocation**

One of the main risks of a non-network solution is the grid connection lead time and cost. Since the TO would have to pay for that anyway if they built a network solution, these should be guaranteed (or provided free of charge, with the developer agreeing the interface) to the non-network solution provider, and expedited to be available when the plant is complete. The same should be given to network solutions. This would level the playing-field.

A major lead time (and cost) issue/risk is planning. I defer to toers more experienced in this as to how it can be resolved.

### **Slides 61-62, 5.1 Pre-tender activities**

See my comments on Very Early Stage initiatives (slides etc.). A measure of collaborative work should also go into helping tenderers, e.g identifying grid access points, performance, costs, routes; examining the ramifications of different plant location / route selections. Much of this should be done bilaterally, to respect the developer's intellectual property; doing so would not be anti-competitive as the same would be offered to all.

### **Slides 63-68, 5.2 Tender process model**

ITT Stage 1 should focus on initial *proposals*, not designs. A design is much more detailed, and expensive for the developer to produce. Or maybe it should be a 3-stage process in which the initial proposals (worked up cooperatively with the TO, bilaterally) go into a qualifying stage.

There should be an invitation for Expressions of Interest that would negate the need to survey the OJEU: the ITT would be emailed out to all who expressed interest, as well as OJEU publication. (Noting that we're no longer in the EU - but will we remain in ENTSO-E? And if so, would the OJEU remain appropriate?)

Passporting should reflect not project value but technology type. If I get a £45m plant approved, why aren't I passported for a larger plant of similar type? (I say similar, because it will not be identical: each project is different, for both network and non-network solutions.) Therefore I agree with the "category specific" passporting.

Your concerns about ETYS models' sensitive information (top of slide 67) are phrased as blockers for non-licensees; as such they are spurious and will favour incumbents over new bidders. They can easily be solved by signing a simple (don't make it too complex) non-disclosure agreement that is then superseded by any licence. They can also be solved at the Very Early Stage by not showing the model, only sharing the results, in collaboration with the developer to help them optimise their proposal.

Some companies, especially new market entrants and small companies, don't have the resources or training to run ETYS models. Can this not be done cooperatively with the TO?

I support your preferred option on land information.

CBA tool: on the one hand, all using the same tool would level the playing-field. On the other, in my experience these rapidly become excessively complex as all manner of features and options are built in over the years, becoming unwieldy and impossible for newcomers to understand.

Pre-submission reviews should be offered, and undertaken interactively with the developer. Yes, it could be

seen as "free consultancy" but give rise to a much broader spectrum of proposals and more competitive bid process.

### **Slides 69-71, 5.3 Pre-Qualification**

The proposal for new entrants is good.

An outcome of the PQ for new entrants may be that the technology is promising but that they need reinforcing, stating aspects that need such reinforcement.

### **Slides 72-74, 5.4 ITT (Stage 1)**

I support this.

### **Slides 75-77, 5.5 ITT (Stage 2)**

There may be residual value, or a non-decommissioning alternative (e.g. build a new one re-using the site, grid connection etc.; re-fit)

There needs to be provision for comparing different cost profiles, e.g.

- The mix of initial and ongoing charges;
- Structure of charging (e.g. fixed/indexed, or cost-plus, or regulated asset)
- Risk allocation
- Residual value v decommissioning

Environmental performance should also be evaluated, and compared at suitable CO2e costs of at least ~£120/tonne, which are the "true costs" calculated by numerous parties - not at the grotesquely discounted (by glut of permits) carbon price in the Emissions Trading Scheme.

### **Slides 78-80, 5.6 Preferred Bidder**

I support the preferred position, with the caveats that bid bonds may well prove prohibitive of new entrants, small developers and/or new technologies.

### **Slides 81-88, 6.1 Preliminary Works and Solution Delivery**

Ref. top of slide 85: Payments to bidders during construction WOULD provide competitive financing arrangements, especially for smaller bidders. Also it would NOT undermine incentive strength: after all, were the TO to provide a network solution itself, it would still incur such costs all along - this last point seems to be forgotten throughout this consultation.

Otherwise, this section looks good.

### **Slides 89-90, 6.2 Commissioning**

No comment.

### **Slides 91-98, 6.3 Operation and Maintenance**

Payments must relate to set-aside capacity, and therefore be availability based because that precludes other trading. I see no case for varying this availability payment by seasonal demand pattern (slide 93 para. 6), as availability for other trading remains constant regardless of network-related demand. I represent a non-network solution.

Planned outages should be agreed bilaterally and only charged inasmuch as (a) they directly affect network performance (this gives an incentive to plan them during low-usage times, etc.) and (b) they are not provided for in the original proposal (e.g. decennial overhaul). Upgrades and modifications should be subject to separate agreement as noted above, and not count against the expected planned outages.

Unplanned outages should be charged against the availability payments, but only inasmuch as they surpass the agreed threshold, e.g. 2% of all availability time excluding planned outages (and, if the outage is only partial, scaled accordingly).

Upgrades and modifications should be contractable bilaterally, and should include relevant planned outage time. This would be a way to enable in-operation innovation, or retro-fitting innovations into existing

plant/network, and also to enable adaptation to changing grid requirements.

The yellow comments in the latter half of this document seem to assume that the solution is an OFTO; I had thought that this is not necessarily the case.

Environmental performance against bid performance should be incentivised and penalised at a suitable rate. Otherwise bidders will claim perfect-life performance rather than performance under realistic operational conditions.

### **Slides 99-101, 6.4 Decommissioning**

Note my comments above about:

1. Extending contracts if there is life left in the plant;
2. Residual value of the plant;
3. Transferring assets to the TO, which should be in respect of payments for residual value - and whether it is purchased or the contract extended should be subject to negotiation and agreement (this will determine a fair residual value as there will be a balance-point at which residual-value payment balances ongoing contract-extension payments).

There should be no pre-determined decision between extending contracts and purchasing assets at residual value.

Note that there may be scope at the end of the contract for a mod/upgrade to extend useful life, in which case there may be both a contract for the mod/upgrade and a re-setting of the contract terms and duration.

De-commissioning should not be assumed at any point. Very little on the grid has ever been decommissioned: if it had been, we wouldn't have most of the grid that exists today as it's technically life-expired. Although there must be provision for decommissioning if the asset is no longer wanted as well as being nominally life-expired, yet the asset may still have further life trading as an asset separate from the TO. As an example, we're storage; a plant may no longer be required for constraint alleviation but still have a role trading balancing, ancillary and stability services.

Kind regards,  
Mark

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