

Meeting minutes

NOA Committee meeting 14 May (redacted)

Meeting name

Date:	14/05/2019	Location:	Faraday House L1.15
Start:	02:00PM	End:	03:45PM

Participants

Present	Attend/Regrets
Duncan Burt (Chair)	Attend
Julian Leslie	Attend
Craig Dyke	Attend
Richard Smith	Attend
Marcus Stewart	Attend

Attendee	Role	Minute(s) attended
Jingchao Deng	Technical Secretary	Full
Nick Harvey	Network Development Manager, ESO	Full
Graham Stein	Network Operability Manager, ESO	Full
Hannah Kirk-Wilson	Technical Economical Assessment Manager, ESO	Full
Marc Vincent	Economical Assessment Manager, ESO	Full
James Whiteford	System Capability Manager, ESO	Full
Mark Pearce	NOA CBA technical specialist, ESO	Full
Kelvin Lambert	NOA lead, ESO	Full
Amir Alikhanzadeh	Constraint management Pathfinder lead, ESO	Minute 5
Shurooque Baloch	Stability Pathfinder lead, ESO	Minute 5
Mostafa Nick	Probabilistic Pathfinder lead, ESO	Minute 5
Emmanouil Belivanis	Commercial solutions Pathfinder lead, ESO	Minute 5

Jason Hicks	NOA CBA lead 18/19, ESO	Full
Clothilde Cantegreil	Head of RIIO Electricity Transmission, Ofgem	Full*
Faith Natukunda	Commercial solutions Pathfinder lead, ESO	Minute 5*
Kirsten McIver	Senior Design Engineer, SPT	Minutes 6-8*
David Adam	Transmission Networks Manager, SPT	Minutes 6-8*
Eric Levy	Head of Transmission, SPT	Minutes 6-8*
Bless Kuri	Network Capability & Performance Manager, SHE Transmission	Minutes 6-8*
Roddy Wilson	Transmission System Planning & Investment Manager, SHE Transmission	Minutes 6-8*
Le Fu	NOA lead, NGET	Minutes 6-9
Mark Perry	Network Development Manager, NGET	Minutes 6-9
Nicola Todd	Connection Portfolio Manager – Network Investment, NGET	Minutes 6-9
Toby Thornton	Energy Demand Manager, ESO	Minutes 6
Andy Dobbie	Electricity Market Modelling Manager, ESO	Minutes 6

*Joined by teleconference

Discussion and details

Topics to be discussed

1. Apologies and introductions

Mr Burt welcomed all attendees and introductions were made.

2. Meeting governance and process

[Redacted due to administrative nature.]

3. Minutes of the NOA Committee meeting held on 09 Jan 2019

The draft NOA Committee minutes for the meeting held on 09 January 2019 (the “Minutes”), as circulated prior to the meeting, were taken as read. Mr Burt requested the members and attendees to provide any final comments.

There were no further comments and accordingly the Minutes were **APPROVED** as an accurate record and **APPROVED** for signature by the Chair.

4. Actions arising from the NOA Committee meeting of 09 Jan 2019

[Redacted due to administrative nature.]

5. Pathfinder projects

5.1. High volts Pathfinder project

Mr Burt invited Mrs Kirk-Wilson to provide an update on Pathfinder projects and the following points were noted:

An overview of the Pathfinder projects:

- There are currently five Pathfinder projects including high volts, stability, commercial solutions, probabilistic analysis and a new constraint management project.
- Valuable learnings have been gained from conducting those projects and the forward plan target was met for 2018/19. [Redacted due to commercially sensitive nature.]

High volts:

- The high volts RFI has been sent out at the end of March 2019 for the Mersey area and will stay open until the end of May.
- A high volts webinar was held at the beginning of May 2019. Around 40 participants attended.
- A number of issues such as connection requirements are to be resolved before moving onto the tendering stage.
- A decision on whether the solutions will be tendered will be made at the end of June based on the information received.
- The Pennine area high volts RFI is being prepared and the RFI is likely to be split into zones as the Pennine area is considerably larger than the Mersey area.
- The South Wales high volts project has been cancelled as there is less need in the region when new reactors are commissioned.
- The high volts methodology is now included in the NOA methodology which was published for consultation.

Mr Burt queried whether and when the high volts solutions will be included in the main NOA. Mr Leslie remarked that the high volts analysis will be kept as a separate process alongside the main NOA. While the main NOA focuses on the wider transfer issues, the high volts process looks at regional voltage problems and will consider commercial solutions as well.

5.2. Probabilistic approach/tool Pathfinder project

Mr Burt invited Dr Nick to provide an update on probabilistic Pathfinder project and the following points were noted:

- The case study results of NOA 2018/19 were published at the end of March 2019. The study focused on one boundary in the South.
- For NOA 2019/20, the probabilistic approach will be applied to all RIIO boundaries for Year 1 study and two boundaries will be selected for further studies to Year 10.
- The year-round probabilistic analysis is aimed to provide a comparison to the conventional approach and the results will be used to challenge the background assumptions and see how it can benefit the process.

5.3. Commercial solutions Pathfinder project

Mr Burt invited Mr Belivanis to provide an update on commercial solutions Pathfinder project and the following points were noted:

- The commercial solutions development is divided into two regions—the north (B6) and the south coast.

The north region:

- A commercial solution is being prepared for RFI. It is aimed to be published at the end of June.
 - There are restrictions to the requirements of the commercial solutions in the north region. [Redacted due to commercially sensitive nature.] The Phoenix project and stability Pathfinder project are also likely to have an influence on the requirements.
 - Information received from the RFI will be used in NOA 2019/20 to replace the assumptions made last year.
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- Tendering of solutions will take place in the first quarter of 2020/21 based on market feedback and the NOA recommendation.

The south region:

- Further investigation shows the requirement identified has been covered by several existing services including interconnector OTS and future ANM schemes from UKPN RDP.
- The need for a commercial solution in the south should be revisited.

Mr Burt remarked that the north commercial solution development is complicated and he suggested having a deep dive session offline to seek solutions to overcome the difficulties.

5.4. Constraint management Pathfinder project

Mr Burt invited Dr Alikhanzadeh to provide an update on constraint management Pathfinder project and the following points were noted:

- The project is aimed to procure longer term solutions to manage constraints, such as battery storage.
- A webinar was held in May with 70+ participants. The webinar has received very positive feedback from a range of stakeholders.
- The project requires input from different ESO functions including Commercial, Future Markets and Operations.
- The plan is to launch an RFI in Q2/3 this year and tender solutions in 2021 based on further studies and stakeholder feedback.

5.5. Stability Pathfinder project

Mr Burt invited Ms Baloch to provide an update on stability Pathfinder project and the following points were noted:

- The stability Pathfinder project focuses on a number of operability issues arising from the declining number and capacity of synchronous generation such as short circuit levels, voltage, frequency and inertia. A NOA-type approach is to be conducted for assessing benefits.
- Technical RFIs to be sent out in June and July. Based on the information received from the market, a timeline for next steps will be devised.
- Due to the complexity of the scope, feasibility studies on options are needed before going out for tendering.
- The tendering process will be similar to that of the black-start service. The key is to ensure a timely process.

[Redacted due to commercially sensitive nature.]

Mr Burt remarked the good progress on the Pathfinder projects and offered a detailed briefing with Ofgem should it require. Ms Cantegreil agreed with the approach the ESO has been taking for developing those non-network schemes and noted that there were various interested parties keen to participate in the development. Ms Cantegreil looked forward to further conversations on Pathfinder projects.

Mr Burt remarked that the NOA clearly showed that commercial solutions have the potential to provide consumer benefit. But they won't supplement the regulatory increments to the TOs' RIIO boundaries. Regulatory increments of those options should be reconsidered and captured outside the NOA process.

6. FES 2019 update

Mr Burt invited Mr Thornton and Mr Dobbie to provide an update on FES 2019 and the following points were noted:

Demand

- The FES 2019 framework is same as that of FES 2018. There are four scenarios driven by two axes, speed of decarbonisation and decentralisation. Two of the scenarios will meet the decarbonisation target and two won't. Net zero pathway to be explored in FES 2019.
- The peak underlying demand is lower than FES 2018 and the reduction is more pronounced than that of the transmission demand. Annual underlying demand is slightly lower than FES 2018.
- The assumptions on EV charging have changed based on the outcome of an NIA project. There are also more hybrid heat pumps. As a result, the range of peak demand is lower but more diversified.
- In the long term, the annual demand will fall for the next 10 years and rise again onwards due to EV charging. The annual demand patterns are similar to those of FES 2018.

Supply

- The scenarios are able to meet security of supply standards and decarbonisation targets without the significant deployment of large nuclear stations. A whole system approach is essential in meeting decarbonisation targets.
- Nuclear projections have been revised down following termination/suspension of projects at Wylfa Newydd, Oldbury C and Moorside.
- There could be up to 30GW of offshore wind by 2030 because of the sector deal and some other factors. The assumptions for the 2020s are based on the latest market intelligence (i.e. projects in CfD auctions). Offshore wind capacity, in general, is greater than FES 2018.
- Opportunity for unbated CCGTs in the 2050 compliant scenarios is limited.
- Despite uncertainty over Brexit, interconnector capacity grows in all scenarios due to greater certainty from cap and floor awards and a strong pipeline of projects. Overall levels of interconnection are similar to that of FES 2018.
- There is significant growth in storage, including larger-scale longer-duration storage will be essential to support decarbonisation of the power system.

Dr Smith queried whether onshore replanting has been considered in scenario building. Mr Dobbie confirmed that like for like onshore replanting has been considered in most scenarios, whereas in Two Degrees, an increment up to 10% has been considered for replanting.

7. East coast SWW

Mr Burt invited Dr Pearce to provide an update on east coast SWW and the following points were noted:

- The SWW CBA clearly indicated the needs for the Scottish onshore upgrades and two Anglo-Scottish links.
- The earlier the links can be delivered, the greater consumer benefits they can provide.
- The currently preferred combination is the links from Peterhead to Hawthorn Pit and Torness to Cottam with the Scottish onshore upgrades. The combination of Anglo-Scottish links is different from what NOA 2018/19 recommended due to the different study background.

Mr Burt invited the TOs to provide an update on east coast SWW Needs Case and project delivery plans and the following points were noted:

- The Scottish onshore upgrades are to be disaggregated from the Anglo-Scottish links in Needs Case submission and will be looked into in this iteration.
- Anglo-Scottish links are to be submitted in a later phase according to the milestones provided in TOs' briefing paper.
- [Redacted due to commercially sensitive nature.]

Mr Burt remarked that the regrets between the top 1 and 2 combinations from the CBA are close, therefore, the deterministic factor should be the delivery risks between those projects. Mr Perry agreed that the TOs need to overlay their thoughts on what options can mitigate delivery risks. Ms Todd added that the final projects going forward won't affect the seabed survey as they should be already covered in the survey.

8. NOA methodology

Mr Burt invited Mr Lambert to provide an update on the NOA methodology and the following points were noted:

- The methodology was published for consultation on 9 May 2019 and will be opened for 6 weeks.
- The key highlights include:
 - Inclusion of the high volts methodology
 - Changes to reflect the legal separation
 - Changes based on C27 statutory consultation
- There is an ongoing debate between the ESO and TOs around C27 changes

Dr Fu queried when is the correct submission deadline for the NOA methodology. Mrs Kirk-Wilson responded that the regulatory deadline is the end of July.

Ms Todd raised a question on behalf of the SWW working group whether the SWW studies can be combined with the NOA to reduce duplication of work and inconsistent results. Mr Burt reiterated that the purpose of the NOA is to identify/confirm the need for large projects, while the SWW is to finalise the decision on which option(s) to proceed.

Action 12.1 – The TOs' SWW working group to capture concerns around the current SWW/NOA processes and see how improvements can be made.

9. South coast SWW

Mr Burt invited Dr Whiteford to provide an update on south coast SWW and the following points were noted:

- The ESO and the NGET were working together to understand the problem in the southern area.
- A problem statement has scoped out the areas and network conditions that will be looked into.
- Currently, study models are to be agreed for moving forward.
- The ESO studies will run in parallel with the TO's. The TO's study is to be completed by the end of July and the ESO studies by the end of August.
- There is a risk that the SWW CBA being delayed as the NOA CBA will take priority from Oct to Dec.
- The ESO will consider a number of existing schemes and projects in the study background as well as developing non-network solutions where needed.

Mr Perry queried whether the CBA can be completed before the NOA commences to avoid delays as it covers a long period of time from August to December according to the timeline. Mr Hicks said the south coast study backgrounds are much more complicated with different types of studies and combinations of interconnector conditions. Technical study results of different sensitivities are expected to be fed into the CBA and assessed in a number of phases. Mr Burt suggested developing proxies of solutions in different tiers to reduce the number of solutions/sensitivities to be studied.

Action 12.2 – NGET to provide 2 to 3 south coast options to be assessed in the NOA and a range of options for the SWW.

10. The next meeting date

The next NOA Committee meeting is to be held on 8 Oct 2019.

11. AOB

None

12. Feedback

Dr Smith pointed out that some Pathfinder projects are closely related to the future market designs and the Future Markets teams should be included in those discussions. Mr Burt agreed that communication is needed with the Future Markets teams but that they are not required at the NOA Committee.
