Structure of the 2022 Electricity Ten Year Statement

Consultation

May 2022

Overview

The Electricity Ten Year Statement (ETYS), is one of the Electricity System Operator's (ESO) annual publications which we produce to help inform future decisions on Great Britain's (GB) electricity networks. The ETYS aims to encourage innovation and inform developments that ensure a secure, sustainable, and affordable energy future.

In line with our ambition to be a trusted partner, we work collaboratively with stakeholders on the ETYS – sharing ideas and seeking feedback to inform our plans for the future. We published the latest edition of ETYS in November 2021, incorporating stakeholder feedback from the 2020 document.

The Network Planning Review (NPR) has been established by the ESO to ensure that network design and investment processes in GB are fit for the future. The current phase of the project involves the identification of additional capabilities and processes required for NGESO to be able to undertake strategic network planning. We expect that this project's outcomes will prompt changes to the network planning and ETYS processes, which may impact upon the proposals made here.

We are revising the structure of our 2022 Electricity Ten Year Statement (ETYS) and would like your views on our proposal.

This consultation on the proposed structure of the 2022 ETYS sets out how we think this document should evolve to better meet your needs. We will include any feedback on ETYS 2021 already given to us.

How can you get involved?

Your views are incredibly important to help us shape the document. We hope you find this consultation useful in letting us know your area of interest and how we can continue to make improvements to the ETYS. You can participate in the survey by clicking here which will be open until **5PM on Friday, 20 May 2022**.

Thank you in advance for your feedback.

How we improved ETYS 2021

Following the publication of the ETYS 2020, we engaged with all our stakeholders through surveys and emails, on both how we can improve the document and what content is useful to our readers.

Listening to stakeholder feedback

As well as this formal ETYS consultation process, we also actively collect feedback year-round through our mini-surveys which are presented to readers on the ETYS webpages. Since the publication of ETYS 2021, we have received 98 responses to these mini-surveys from our readers. The feedback from these mini-surveys is more targeted as it usually relates to specific issues that our readers have experienced on the different ETYS web pages, often additional pieces of information that they had expected to find on that page. This allows us to identify gaps in the publication where we can make targeted changes to improve our reader's experience.

We used the feedback gathered on the 2020 publication and here were some of the improvements in the ETYS 2021:

Probabilistic Analysis

Previously included in ETYS 2020 was a section covering the methodology for the probabilistic analysis. With the level of detail that is required to properly describe this work, for ETYS 2021, we opted to separate this out from the main ETYS publication to allow the ETYS to focus on its core purpose. The year-round Thermal Probabilistic Assessment report was published in March 2022, we would encourage you to read the document here and would greatly appreciate any feedback on this report that you could provide to transmission.etys@nationalgrideso.com.

Future Boundary Capabilities

In response to consistent feedback received from last year's ETYS consultation and our mini-surveys, for ETYS 2021, we added to the ETYS boundary charts an indicative boundary transfer capability based on the 2020/21 NOA optimal path. This offers our readers a much clearer indicative view of the NETS capability over the next 10 years, when accounting for NOA options. This information was recently updated based on the 2021/22 NOA optimal path, following the publication of NOA 21/22 with support from the transmission owners.

Webpage Format

ETYS 2021 was the second web-based publication of the ETYS, we utilised all the feedback we received on ETYS 2020 to shape ETYS 2021. Our mini surveys showed that the website publication was well received and helped us to reach a wider audience. We have continued to make improvements so that our web version of ETYS 2021 is easier to use for our readers. Through last year's consultation and our mini-surveys, we received and acted on specific feedback about: making certain pieces of content easier to find, reducing the number of external hyperlinks, making the report more concise and reducing the number of webpages, and adding definitions for certain terms used in the publication.

This year, we have seen an 8% increase in the amount of traffic to the webpages and a 12% increase in the number of downloads, further building on the success of our website publication in helping the ETYS to reach a wider audience.

Our website surveys have received 98 responses since the ETYS 2021 was published at the end of November 2021, these help us to capture feedback from our readers on the changes we had made since the previous year's publication. The survey showed that this was well received, and we achieved an 87% positive feedback rating out of the 98 responses.

Going forwards, we will be continuing to use our website surveys on the ETYS webpage to engage with our readers across the year and will look at tailoring the website surveys to support the formal ETYS consultation process and drive more responses.

Structure of the 2022 ETYS

The ETYS communicates the system needs by publishing the current boundary capabilities, future requirements, and power flows on each part of the national electricity transmission system for the next 10 years. With this focus in mind, we are proposing the structure of the 2022 ETYS as follows:

Introduction

This section provides an overview of the background to the document, defines the purpose of the ETYS, and how the ETYS fits into the suite of Future of Energy documents.

ETYS and the Network Planning Process

This section describes the information and data we use in our analysis. We build our analysis on the GB Future Energy Scenarios (FES) data. Using this data and the NETS Security and Quality of Supply Standard (SQSS) criteria, we produce credible generation and demand backgrounds against which to assess the capability of the NETS.

Electricity Transmission Network Requirements

Based on the FES and NETS SQSS, this section describes the current winter peak capability of the NETS, and what we think the projected future requirements on the system will be for the next decade and beyond. The system requirements from this chapter will be used by the NOA process to develop and recommend network development options.

We also recognise that the most challenging system needs might no longer be just at winter peak, but that other periods such as at low demand in the summer may also give rise to demanding network conditions. We will continue to review how year-round thermal and voltage requirements could be integrated into the ETYS. Our ongoing development of new processes and analysis tools will be key in enabling us to widen our capabilities in this area. To this end we will include some examples of ways that we can clearly and effectively communicate year-round thermal system needs within in ETYS 2022 for our readers to provide feedback on, as well as providing an update on our progress in this area. This will help us evolve how we communicate system needs in ETYS to help provide a better understanding of system needs to foster wider participation in the ETYS/NOA process.

We will continue to include the future boundary capability, based on the NOA optimal path, on our boundary requirement charts for all boundaries studied in the NOA, as was done in ETYS 2021.

We are continuing to bring more interactive content this year by working on an interactive map of the transmission system and we expect to have this ready for inclusion in ETYS 2022. This will allow users to pan around the transmission network in a more interactive manner, enhancing the graphics published in the appendices.

The Way Forward

This section provides an overview of what our annual stakeholder engagement and activity program will be, after publishing ETYS 2022. It will also provide information of the timeline to publish NOA 2022/23.

Appendices

Here we publish the data in line with our license requirement and use the criteria below to decide what information we should provide as appendices of the ETYS:

- we can share the information permitted in our role as System Operator,
- the information is not already available from other System Operator or network owners/operators' publications, and
- information that you have told us that is useful and valuable to you.

With the above criteria in mind, we will continue to include the following appendices in ETYS 2022:

- System schematics and geographic diagrams
- System technical data
- Fault level data

One of the appendices we have previously published: 'Appendix H: Further information on inputs and methodologies' is not expected to be published for ETYS 2022 as their content will be rolled into the main ETYS publication, in the chapter 'ETYS and the Network Planning Process'.

Survey

Your feedback is at the heart of improvements made to ETYS every year. This year we are asking the questions below in our survey:

Question 1: Does the proposed structure of the ETYS meet your needs, and do you think that it covers all of the areas that you would expect to find in the ETYS?

Question 2: Are there any topics relating to the national electricity transmission system (NETS) capability requirements that you would like us to further explore?

Question 3: The ETYS is moving towards providing information on year-round thermal requirements on the NETS, will this be useful for you? What kind of information or data would be most useful to you?

Question 4: The ETYS voltage screening report provides indication of regions which are experiencing issues related to high voltages. Was this report useful to you? How could we improve how we communicate voltage requirements?

Question 5: In ETYS 2021, we added an indicative future boundary transfer capability based on the NOA optimal path to the boundary charts. Was this clear and easy to understand? How can we improve how we communicate future boundary capabilities and requirements?

Question 6: We are currently reviewing whether the ETYS could signal needs considering whole system across the transmission/distribution interface. What type of information would be useful to you?

Question 7: What are your views on the proposed ETYS appendices? Do they meet your needs, and do you think they cover all the areas that should be in the ETYS?