nationalgrid

Customer connection interface tool

User guide

NOVEMBER 2015

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We have created an interactive tool to help you access network information in a user-friendly way.

You can use our customer connection interface tool (CCIT) to find out more about transmission sites, current and future generation connections and development times, and to understand the challenges we face in developing the NETS.

A quick guide to the CCIT
The CCIT is not a complete decision making tool; instead, it complements the current application process and provides user-friendly access to information so that customers are better informed before their initial discussions with National Grid. It does not replace the current application process and should not be used in isolation to assess connections.

The CCIT presents the following data:

1. a graphical representation of capacity in the area – using the Transmission Entry Capacity (TEC) Register data (which represents contracted generation) and the latest Future Energy Scenarios data to show plausible future generation scenarios
2. information about substations in England and Wales
3. a colour-coded heat map illustrating expected connection capacity and time frames
4. data related to incremental wider works in various parts of the network.

Overview

The CCIT is an Excel-based tool with the following tabs:

1. Dashboard
2. South East
3. South West
4. East England
5. West England
6. North England
7. ETYS
8. Data Links

To gain access to the tool the user has to accept the Terms & Conditions of Use and the Legal Disclaimer. The user can then see the Dashboard.

The data that feed into the CCIT are:

1. Future Energy Scenarios[1]
2. Transmission Entry Capacity Register and Interconnector Register[2]
3. Heat Map data indicating estimated connection timeframes per capacity at Electricity Transmission substation level
4. Incremental Wider Works information from Electricity Ten Year Statement[3]
5. Local substation high level information

The data is updated at different times of the year as indicated in the tool.

[1] http://fes.nationalgrid.com/
[2] http://www2.nationalgrid.com/UK/Services/Electricity-connections/Industry-products/TEC-Register/
[3] http://www.nationalgrid.com/etys

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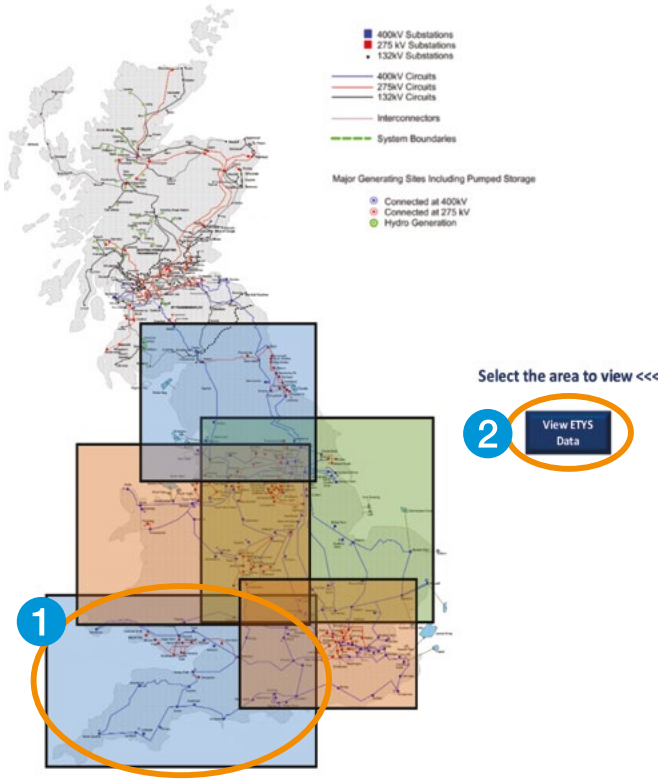
Using the CCIT

Dashboard
After the acceptance of the Terms & Conditions of Use and Legal Disclaimer you will be prompted to the **Dashboard** tab shown in Figure 1.

Within the Dashboard you can select the area you wish to learn more about by clicking on one of the **coloured areas** ❶ on the map. For example if you are interested in the South West, click on the equivalent area highlighted below and the tool will automatically direct you to the equivalent tab. You can also view the Incremental Wider Works data by clicking on the button **View ETYS Data** ❷ highlighted below.

Figure 1
CCIT Dashboard



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Regional Tabs

Once you have selected the region you wish to explore, you will be shown one of the regional tabs. These include **South East**, **South West**, **East England**, **West England**, and **North England**. Within each regional tab you can choose to navigate between the following data which will be explained in the following sections:

1. TEC/FES
2. Substation Data
3. ETYS Data (Incremental Wider Works)
4. Return to Dashboard

TEC/FES Data Mode

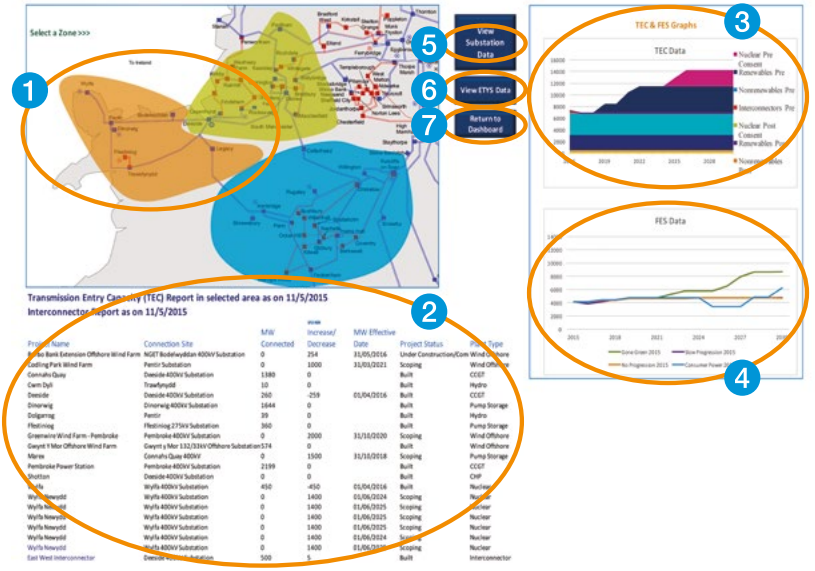
In the following example (see Figure 2) the user has selected West England. By clicking on one of the zones on the map, the equivalent TEC and FES data is populated along with the publication date of the data used.

The user has selected the **orange zone** ❶ in North Wales by clicking on the highlighted area. The relevant TEC and FES generation data is then populated for the selected zone:

- a list of TEC and Interconnector Register data ❷
- graphical presentation of TEC and Interconnector Register split into types of generation and project status (built, pre-consents or post-consents) ❸
- graphical presentation of the cumulative generation FES data ❹.

The user can then choose to navigate to the **Substation Data** ❺ or the **ETYS Data** ❻ of the selected region (see next section 'Substation Data Mode'). There is also an option to navigate back to the **Dashboard** ❼.

Figure 2
TEC/FES Regional Tab: West England example



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Substation Data Mode
After clicking on **View Substation Data** button the user is taken to a similar arrangement as per 'TEC/FES Data Mode' shown in Figure 2.

The data provided here is in the form of a heat map and local substation high level information as seen in Figure 3.

Connection Timeframes Heat Map
The user has the option to select between three options (smaller or equal '<=' 300MW, 1000MW, larger or equal to '>=' 1800MW) from a **drop down list** ❽. Choose the level of connecting generation capacity in MW you would like to see the indicative connection timeframes for per transmission substation. Each substation on the map ❾ will then colour code itself accordingly to the estimated connection timeframes expected at that site.

NOTE: The connection time frames heat map is determined on known information on each area and the most realistic time for the completion of enabling works for the substation and capacity in question. Network reinforcement requirements may vary and will depend heavily on individual requirements of each connection. More contemporaneous data may exist at the time of use of the CCIT.

Local Substation Information
By clicking on one of the **active substations (color-coded)** ❿ you can obtain local high level information for the selected substation. The CCIT provides:

- a Google Maps link to the selected substation ⓫. When you click on the link Google Maps will open in the user's browser indicating the substations location
- information on whether the substation is Air Insulated or Gas Insulated ⓬, and a high level description of how that could potentially affect connection timeframes ⓭
- information on whether the substation is an Indoor or Outdoor ⓬ substation and a high level description of how that could potentially affect connection timeframes ⓭
- information on the substation's layout ⓬ and a high level description of how that could potentially affect connection timeframes. ⓭

You can then choose to navigate to the **TEC/FES Data** ⓮ or the **ETYS Data** ⓯ for the selected region. There is also an option to navigate back to the **Dashboard** ⓰.

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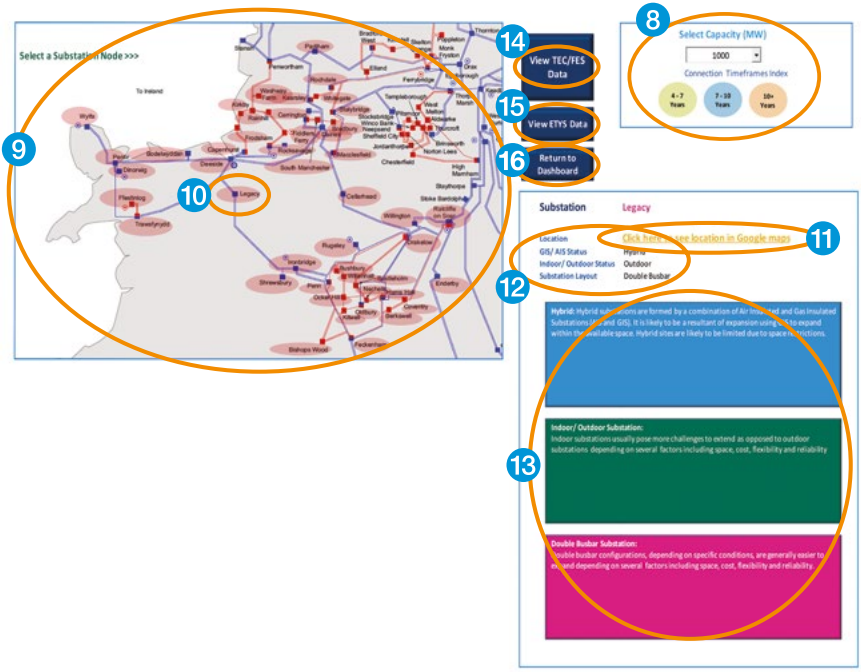
Figure 3
Substation Data - Regional Tab: West England example



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ETYS Data: Incremental Wider Works Information

You can also access the latest Incremental Wider Works information (grouped per region) using the CCIT. The results presented are based on Electricity Ten Year Statement (ETYS), or Network Options Assessment (NOA) in the future. The policy outlines the annual process of evaluating Incremental Wider Works and the recommended reinforcements.

You can navigate to the **ETYS Data** page by clicking on the **View ETYS Data** button as described in the previous sections. You will then navigate to the tab shown in Figure 4.

If the user has navigated from one of the Regional Tabs (e.g. **South West**) the ETYS Tab will automatically populate the relevant ETYS data (in this case '**West England & Wales**').

You can also navigate across the different regions by selecting the desired region from the **drop down list** ❶. A summary table of the investment strategies ❷ per transmission solution is then presented followed by all relevant boundary graphs ❸ of the required transfer across those boundaries as per the National Electricity Transmission System Security and Quality of Supply Standards (NETS SQSS). These graphs indicate the required transfer across different Future Energy Scenarios and the current capability, when a transmission solution is suggested according to NDP and what capability it will provide across the boundary. All relevant boundaries are shown in the map pictured in the active tab.

NOTE: A boundary splits the system into two parts, crossing critical circuit paths that carry power between the areas where power flow limitations may occur. The user has the option to navigate back to the Dashboard by clicking on the equivalent button ❹.

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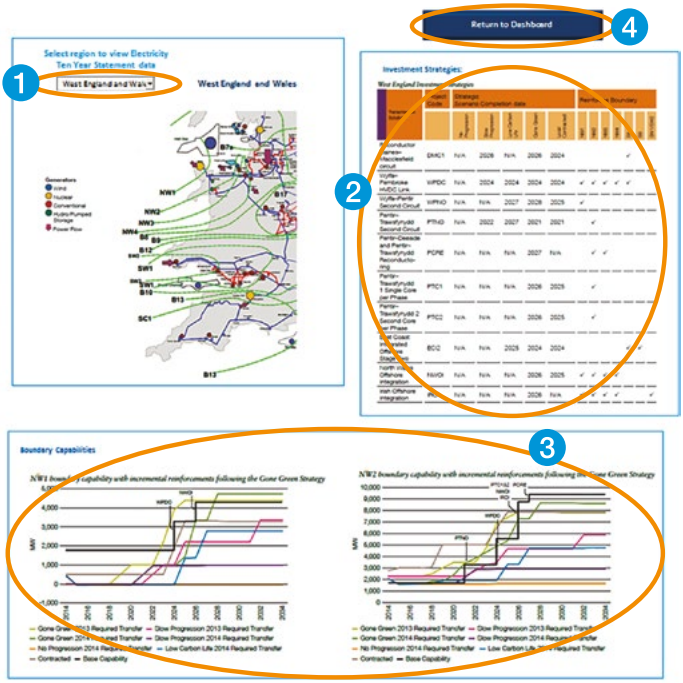
Figure 4
ETYS Data: Incremental Wider Works



NOTE: Since Connect and Manage was introduced in February 2011, we have been offering connection dates to our generation customers based on the time taken to complete a project's 'enabling works' – in other words, ahead of the completion of any wider transmission system reinforcements that are required under the NETS SQSS. The transmission requirements we present in the ETYS refers to the wider transmission system reinforcements only.

For more information on Connect and Manage visit:
http://www2.nationalgrid.com/UK/Services/Electricity-connections/Industry-products/connect-and-manage/

Information and Contacts
You can find the latest version of the CCIT on the ETYS website
http://www.nationalgrid.com/etys

We would greatly value any feedback you provide us. If you would like to contact us to discuss any feedback or issues related to the tool, you can send us an email at **transmission.etys@nationalgrid.com** and we will be in touch.