PwC will allow a copy of the Agreed-Upon Procedures Report ("PwC Report"), to be made available on the basis only that the Recipient accepts and agrees to all of the terms set below.

By clicking the button below, "I accept and agree for and on behalf of myself and any party, parties or entities I represent (each a "Recipient", "the Recipient"), that:

1. The PricewaterhouseCoopers ("PwC") Agreed-Upon Procedures Report ("PwC Report", the "report") was prepared with EirGrid plc and SONI Limited's ("PwC's Client") interests in mind. It was not prepared with any Recipient's interests in mind or for any Recipient's use. The report is not a substitute for any enquiries that the Recipient should make;

2. PwC accepts no liability (including liability for negligence) to the Recipient in relation to PwC's work or the PwC Report. The report is provided to the Recipient for information purposes only. If the Recipient relies on the PwC Report, the Recipient does so entirely at the Recipient's own risk;

3. The Recipient will not bring a claim against PwC which relates to the access to the report by the Recipient;

4. Neither PwC's Report, nor information obtained from it, may be made available to anyone else without PwC's prior written consent, except where required by law or regulation;

5. The Recipient agrees to reimburse PwC for any liability (including legal costs) that PwC incurs in connection with any claim by anyone other than PwC's Client in relation to the provision of the PwC Report to the Recipient, where the claim arises from the Recipient failing to comply with the provisions and the terms set out herein;

6. PwC will be entitled to the benefit of and to enforce these terms;

7. The agreed-upon procedures were performed for the period 1 January 2023 to 31 December 2023 and thus the PwC Report is based on historical information. Any projection of such information to future periods is subject to the risk that changes may occur after the report is issued and the process document may no longer accurately portray the Interconnector NTC Calculation process and therefore any projection of such information to future periods would be inappropriate;

8. Any explanations that PwC may provide to the Recipient in relation to the PwC Report, are given on the same bases as those relating to the provision of the report itself; and

9. These terms and any dispute arising from them, whether contractual or non-contractual, are subject to Irish law and the exclusive jurisdiction of Irish courts.

By reading this report, I accept and agree to the above terms on behalf of myself and any party, parties or entities that I represent.

The Directors
Eirgrid plc
Block 2
The Oval
160 Shelbourne Road
Dublin 4 D04 FW28

The Directors
SONI Limited
12 Manse Road
Belfast
BT6 9RT
United Kingdom

20 November 2024

Dear Ladies and Gentlemen

Agreed-upon procedures report of factual findings in connection with specified elements of EirGrid plc's (the "company") and SONI Limited's (the "subsidiary") Interconnector Net Transfer Capacity ("NTC") Calculation process

Purpose of this Agreed-Upon Procedures Report

This report is produced in accordance with the terms of our agreement dated 19 November 2024. The procedures were performed solely to assist the company and the subsidiary in fulfilling their obligation to report on specified elements of the Interconnector NTC Calculation process for the period 1 January 2023 to 31 December 2023 and may not be suitable for another purpose.

Your Responsibilities

The directors of the company have provided us with the 'Interconnector Net Transfer Capacity Calculations: Process overview and agreed-upon procedures scope for the period 1 January 2023 to 31 December 2023' (the "process document") attached at *Appendix 2- Interconnector Net Transfer Capacity Calculations: Process overview and agreed-upon procedures scope for the period 1 January 2023 to 31 December 2023*, which they have used in determining the scope of the agreed-upon procedures. The company's and the subsidiary's directors remain solely responsible for that document and for such other documents and records that support its contents, and for the operation of the Interconnector NTC Calculation process. The company's and the subsidiary's directors are also responsible for identifying and ensuring that the company and the subsidiary comply with their regulatory requirements.

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You are responsible for determining that the scope of the services is sufficient for your purposes and have confirmed that the procedures described herein are appropriate for the purpose for which you have engaged us to provide the services.

Our Responsibilities

We have performed the procedures agreed with you, as listed in the columns headed "Agreed-upon Procedures to be performed in respect of the SONI Limited day-ahead Interconnector (Moyle) NTC calculations" and "Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations", on the table attached in *Appendix 1 – Agreed upon procedures in respect of specified elements of the Interconnector Net Transfer Capacity (NTC) Calculation process, for the period 1 January 2023 to 31 December 2023*. Our work was performed in accordance with the International Standard on Related Services (ISRS) 4400 (Revised) 'Agreed-Upon Procedures Engagements.'

We have complied with the ethical requirements of the Chartered Accountants Ireland Code of Ethics. For the purpose of this engagement, there are no independence requirements with which we are required to comply.

An agreed-upon procedures engagement involves performing the procedures that have been agreed with you, and reporting the findings, which are the factual results of the agreed-upon procedures performed. We make no representation regarding the appropriateness of the agreed-upon procedures.

We have applied International Standard on Quality Management (Ireland) 1 'Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements' and, accordingly, we maintain a comprehensive system of quality management including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Procedures and Findings

We have performed the procedures agreed with you as listed in the columns headed **"**Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC Calculations" and "Agreed-upon Procedures to be performed in respect of the EirGrid plc day- ahead Interconnector (EWIC) NTC Calculations" in the table attached at *Appendix 1 – Agreed upon procedures in respect of specified elements of the Interconnector Net Transfer Capacity (NTC) Calculation process, for the period 1 January 2023 to 31 December 2023.*

Our findings and details of any exceptions are set out in the columns headed "Results of procedures performed by PwC: SONI Limited" and "Results of procedures performed by PwC: EirGrid plc" in the table attached in *Appendix 1 – Agreed upon procedures in respect of specified elements of the Interconnector Net Transfer Capacity (NTC) Calculation process, for the period 1 January 2023 to 31 December 2023.*

Our procedures, as stated in our agreement, did not constitute an audit or other assurance engagement carried out in accordance with generally accepted auditing or assurance standards, the objective of which would be the expression of assurance on the contents of the specified elements of the Interconnector NTC Calculation process. We do not express such assurance. Had we performed additional procedures or had we performed an audit or assurance engagement on the specified elements of the Interconnector NTC Calculation process other matters might have come to our attention that we would have reported to you. This report relates only to the specified elements of the Interconnector NTC Calculation process.

This report is solely for your use in connection with the purpose specified above and as set out in our agreement. No part of this report is to be copied or distributed to any other party except as permitted under the terms of our agreement. We do not accept any liability or responsibility to any third party.

Yours faithfully

PricewaterhouseCoopers
Chartered Accountants
Dublin, Ireland
20 November 2024

pwc

Appendix 1 – Agreed upon procedures in respect of specified elements of the Interconnector Net Transfer Capacity (NTC) Calculation process, for the period 1 January 2023 to 31 December 2023[1]

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
Inputs - NTC Calculation File	1. Select 5 days haphazardly from the period 01 January 2023-31 December 2023 ("**sample day**"). - For each **sample day**, obtain the **NTC Calculation file** dated as per the selected sample day (for samples dated prior to 18 February 2023, the **NTC Calculation file** is titled 'margin check 2023MMDD'; for samples dated on or after 18 February 2023, the **NTC Calculation file** is titled 'NTC Calculations TD2023MMDD-IDA1 Final'). Report where the relevant **NTC Calculation File** could not be provided for any of the sample days selected.	The agreed-upon procedures were performed. No findings to report based on the agreed-upon procedures performed for 5 out of 5 sample dates.	1. Select 5 days haphazardly from the period 01 January 2023-31 December 2023 ("**sample day**"). - For each **sample day**, obtain the **NTC Calculation file** dated as per the selected sample day (for samples dated prior to 18 February 2023, the **NTC Calculation file** is titled 'margin check 2023MMDD'; for samples dated on or after 18 February 2023, the **NTC Calculation file** is titled 'NTC Calculations TD2023MMDD-IDA1 Final'). Report where the relevant **NTC Calculation File** could not be provided for any of the sample days selected.	The agreed-upon procedures were performed. No findings to report based on the agreed-upon procedures performed for 5 out of 5 sample dates.
Inputs - Wind and Solar Forecast	Using each **sample day** selected in procedure 1, perform the following procedures: 2.1. Obtain the wind generation forecasts, for all sample dates, and solar (PV) generation forecasts, for sample dates on or after 27 October 2023, using information relating to the Weprog (Vendor 1) and Overspeed (Vendor 3) applications as it is captured in the documents	The agreed-upon procedures were performed. No findings to report based on the agreed-upon procedures performed for 4 out of 5 sample dates. For the remaining sample, the below finding was noted.	Using each **sample day** selected in procedure 1, perform the following procedures: 2.1. Obtain the wind generation forecasts, for all sample dates, and solar (PV) generation forecasts, for sample dates on or after 27 October 2023, using information relating to the Weprog (Vendor 1) and Overspeed (Vendor 3) applications as it is captured in the documents	The agreed-upon procedures were performed. No findings to report based on the agreed-upon procedures performed for 4 out of 5 sample dates. For the remaining sample, the below finding was noted.

[1] As per Appendix 2- Interconnector Net Transfer Capacity Calculations: Process overview and agreed-upon procedures scope for the period 1 January 2023 to 31 December 2023

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	titled 'wef_ncc_export_totals_2023mmddhhmm ("**wind generation data**")' and 'wef_ncc_export_totals_solar_2023mmddhhmm ("**solar (PV) generation data**")'. The **wind generation data** and the **solar (PV) generation data** relevant to the **sample day** is the document generated prior to 14:00 on the day prior to the **sample day**. 2.2.1. Identify the forecast wind for Vendor 1 for each 30-minute interval ("**trading period**") identified on the **NTC Calculation File** within the "Assumptions" tab for the trading day (23:00 on the date prior to the date of the **sample day** selected to 23:00 on the date of the **sample day** selected, "**trading day**"). The forecast wind for Vendor 1 for each trading period in the trading day ("**30- minute Vendor 1 Forecast wind generation**") is obtained in column D "FORECAST_MW" by applying the following filter settings to the wind generation data file: - Filter column B "JURISDICTION" for "NI" - Filter column C "HIST_TIMESTAMP" for all trading periods included in the trading day - Filter column F "VENDORID" for "1"	**Agreed-Upon Procedure 2.6. finding** For the **sample day** 16 December 2023, it was noted that the total forecast wind/PV generation values for 33 out of 48 **trading periods** for the **trading day** as noted under the heading "Wind" on the "Assumptions" tab of the **NTC calculation File** did not agree to the value calculated in procedure 2.5. when considering the acceptable positive or negative 5% margin of difference.	titled 'wef_ncc_export_totals_2023mmddhhmm ("**wind generation data**")' and 'wef_ncc_export_totals_solar_2023mmddhhmm ("**solar (PV) generation data**")'. The **wind generation data** and the **solar (PV) generation data** relevant to the **sample day** is the document generated prior to 14:00 on the day prior to the **sample day**. 2.2.1. Identify the forecast wind for Vendor 1 for each 30-minute interval ("**trading period**") identified on the NTC Calculation File within the "Assumptions" tab for the trading day (23:00 on the date prior to the date of the **sample day** selected to 23:00 on the date of the **sample day** selected, "**trading day**"). The forecast wind for Vendor 1 for each trading period in the trading day ("30- minute Vendor 1 Forecast wind generation") is obtained in column D "FORECAST_MW" by applying the following filter settings to the wind generation data file: - Filter column B "JURISDICTION" for "ROI" - Filter column C "HIST_TIMESTAMP" for all trading periods included in the trading day - Filter column F "VENDORID" for "1"	**Agreed-Upon Procedure 2.6. finding** For the **sample day** 14 March 2023, it was noted that the total forecast wind/PV generation values for 39 out of 48 **trading periods** for the **trading day** as noted under the heading "Wind" on the "Assumptions" tab of the **NTC calculation File** did not agree to the value calculated in procedure 2.5. when considering the acceptable positive or negative 5% margin of difference.

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	2.2.2. Identify the forecast wind for Vendor 3 for each **trading period** identified on the **NTC Calculation File** within the "Assumptions" tab for the **trading day**. The forecast wind for Vendor 3 for each **trading period** in the **trading day** ("**30-minute Vendor 3 Forecast wind generation**") is obtained in column D "FORECAST_MW" by applying the following filter settings to the wind generation data file: - Filter column B "JURISDICTION" for "NI" - Filter column C "HIST_TIMESTAMP" for all trading periods included in the trading day - Filter column F "VENDORID" for "3" 2.3. This procedure is only relevant to **sample days** before 27 October 2023; for **sample days** after this date refer to procedure 2.4. The average total forecast wind generation ("**average vendor total forecast wind generation**") is the average of the two vendors' wind forecasts. Recalculate the **average total forecast wind generation** for every **trading period** in the **trading day** by adding the **30-minute Vendor 1 Forecast wind generation** to the **30-minute Vendor 3 Forecast wind generation** for each **trading period** in the **trading**		2.2.2. Identify the forecast wind for Vendor 3 for each **trading period** identified on the **NTC Calculation File** within the "Assumptions" tab for the **trading day**. The forecast wind for Vendor 3 for each trading period in the trading day ("**30-minute Vendor 3 Forecast wind generation**") is obtained in column D "FORECAST_MW" by applying the following filter settings to the wind generation data file: - Filter column B "JURISDICTION" for "ROI" - Filter column C "HIST_TIMESTAMP" for all trading periods included in the trading day - Filter column F "VENDORID" for "3" 2.3. This procedure is only relevant to **sample days** before 27 October 2023; for **sample days** after this date proceed to procedure 2.4. The average total forecast wind generation ("**average vendor total forecast wind generation**") is the average of the two vendors' wind forecasts. Recalculate the **average total forecast wind generation** for every **trading period** in the **trading day** by adding the **30-minute Vendor 1 Forecast wind generation** to the **30-minute Vendor 3 Forecast wind generation** for each **trading period** in the **trading**	

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	day and multiply each total by 0.5. Proceed to procedure 2.5. 2.4. This procedure is only relevant to **sample days** on or after 27 October 2023. 2.4.1. Identify the forecast solar (PV) for Vendor 1 for each 30-minute interval ("**trading period**") identified on the **NTC Calculation File** within the "Assumptions" tab for the **trading day** (23:00 on the date prior to the date of the **sample day** selected to 23:00 on the date of the **sample day** selected). The forecast solar (PV) for Vendor 1 for each **trading period** in the **trading day** ("**30-minute Vendor 1 Forecast solar (PV) generation**") is obtained in column D "FORECAST_MW" by applying the following filter settings to the solar (PV) generation data file: - Filter column B "JURISDICTION" for "NI" - Filter column C "HIST_TIMESTAMP" for all trading periods included in the trading day - Filter column F "VENDORID" for "1" 2.4.2. Identify the forecast solar (PV) for Vendor 3 for each 30-minute interval ("**trading period**") identified on the **NTC Calculation File** within the		**day** and multiply each total by 0.5. Proceed to procedure 2.5. 2.4. This procedure is only relevant to **sample days** on or after 27 October 2023. 2.4.1. Identify the forecast solar (PV) for Vendor 1 for each 30-minute interval ("**trading period**") identified on the **NTC Calculation File** within the "Assumptions" tab for the **trading day** (23:00 on the date prior to the date of the sample day selected to 23:00 on the date of the **sample day** selected). The forecast solar (PV) for Vendor 1 for each trading period in the trading day ("**30-minute Vendor 1 Forecast solar (PV) generation**") is obtained in column D "FORECAST_MW" by applying the following filter settings to the solar (PV) generation data file: - Filter column B "JURISDICTION" for "ROI" - Filter column C "HIST_TIMESTAMP" for all trading periods included in the trading day - Filter column F "VENDORID" for "1" 2.4.2. Identify the forecast solar (PV) for Vendor 3 for each 30-minute interval ("**trading period**") identified on the **NTC Calculation File** within the	

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	"Assumptions" tab for the **trading day** (23:00 on the date prior to the date of the **sample day** selected to 23:00 on the date of the **sample day** selected). The forecast solar (PV) for Vendor 3 for each trading period in the trading day ("**30-minute Vendor 3 Forecast solar (PV) generation**") is obtained in column D "FORECAST_MW" by applying the following filter settings to the solar (PV) generation data file: - Filter column B "JURISDICTION" for "NI" - Filter column C "HIST_TIMESTAMP" for all trading periods included in the trading day - Filter column F "VENDORID" for "3 2.4.3. For each **sample date**, recalculate the **average vendor total forecast wind/PV generation** for each **trading period** in the **sample date**, by adding the **30-minute Vendor 1 forecast Solar (PV) generation** to the **30-minute Vendor 1 forecast wind generation** for each **trading period** in the **trading day** and multiply each total by 0.5. 2.4.4. For each **sample date**, recalculate **average vendor total forecast wind/PV generation**		"Assumptions" tab for the **trading day** (23:00 on the date prior to the date of the **sample day** selected to 23:00 on the date of the **sample day** selected). The forecast solar (PV) for Vendor 3 for each trading period in the trading day ("**30-minute Vendor 3 Forecast solar (PV) generation**") is obtained in column D "FORECAST_MW" by applying the following filter settings to the solar (PV) generation data file: - Filter column B "JURISDICTION" for "ROI" - Filter column C "HIST_TIMESTAMP" for all trading periods included in the trading day - Filter column F "VENDORID" for "3" 2.4.3. For each **sample date**, recalculate the **average vendor total forecast wind/PV generation** for each **trading period** in the **sample date**, by adding the **30-minute Vendor 1 forecast Solar (PV) generation** to the **30-minute Vendor 1 forecast wind generation** for each **trading period** in the **trading day** and multiply each total by 0.5. 2.4.4. For each **sample date**, recalculate **average vendor total forecast wind/PV generation**	

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	for each **trading period** in the **sample date**, by adding the **30-minute Vendor 3 forecast Solar (PV) generation** to the **30-minute Vendor 3 forecast wind generation** for each **trading period** in the **trading day** and multiply each total by 0.5. 2.4.5. The **wind and solar forecast** is the total sum of the average wind and solar forecasts received from each vendor. For each **sample date**, recalculate the wind and solar forecast as the total of the sum of the average values from procedure 2.4.3 and 2.4.4 for each **trading period.** 2.5. For each **sample day**, for each **trading period** in the **trading day**, multiply the average **vendor total forecast wind/PV generation** in procedure 2.4.5 (if testing a **sample date** on or after 27 October 2023) or 2.3 (if testing a **sample date** before 27 October 2023) by the "scale wind" % on the "Assumptions" tab of the **NTC Calculation File**. Round the recalculated value to the nearest whole number. 2.6. Agree the total forecast wind/PV generation values for each **trading period** for the **trading day** as noted under the heading "Wind" on the "Assumptions" tab of the **NTC Calculation File**, to the		for each **trading period** in the **sample date**, by adding the **30-minute Vendor 3 forecast Solar (PV) generation** to the **30-minute Vendor 3 forecast wind generation** for each **trading period** in the **trading day** and multiply each total by 0.5. 2.4.5. The **wind and solar forecast** is the total sum of the average wind and solar forecasts received from each vendor. For each **sample date**, recalculate the wind and solar forecast as the total of the sum of the average values from procedure 2.4.3 and 2.4.4 for each **trading period.** 2.5. For each **sample day**, for each **trading period** in the **trading day**, multiply the average **vendor total forecast wind/PV generation** in procedure 2.4.5 (if testing a **sample date** on or after 27 October 2023) or 2.3 (if testing a **sample date** before 27 October 2023) by the "scale wind" % on the "Assumptions" tab of the **NTC Calculation File**. Round the recalculated value to the nearest whole number. 2.6. Agree the total forecast wind/PV generation values for each **trading period** for the **trading day** as noted under the heading "Wind" on the "Assumptions" tab of the **NTC Calculation File**, to the	

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	value calculated in procedure 2.5. A positive or negative 5% margin of difference is acceptable when agreeing the values. Report for each sample day the number of **trading periods** in the **trading day** that exceeded this threshold.		value calculated in procedure 2.5. A positive or negative 5% margin of difference is acceptable when agreeing the values. Report for each sample day the number of **trading periods** in the **trading day** that exceeded this threshold.	
Inputs - Load Forecast	Using each **sample day** selected in procedure 1, perform the following procedures: 3.1. Obtain the total forecast demand information recorded by SONI Ltd as originating from MMS in the document titled, 'PUB_DailyLoadFcst2023MMDDHHMM ("**MMS total forecast demand**")'. The forecast demand relevant to the **sample day** is the document generated prior to 14:00 on the day prior to the **sample day** and is generated through the TSO's Market Management System (MMS). 3.2. Agree the total forecast demand, as noted under the heading "Load" on the "Assumptions" tab of the **NTC Calculation File** to the corresponding values noted in column E of the **MMS total forecast demand** obtained in procedure 3.1 for each **trading**	The agreed-upon procedures were performed. No findings to report based on the agreed-upon procedures performed for 5 out of 5 sample dates.	Using each **sample day** selected in procedure 1, perform the following procedures: 3.1. Obtain the total forecast demand information recorded by EirGrid plc as originating from MMS in the document titled, 'PUB_DailyLoadFcst2023MMDDHHMM ("**MMS total forecast demand**")'. The forecast demand relevant to the **sample day** is the document generated prior to 14:00 on the day prior to the **sample day** and is generated through the TSO's Market Management System (MMS). 3.2. Agree the total forecast demand, as noted under the heading "Load" on the "Assumptions" tab of the **NTC Calculation File** to the corresponding values noted in column D of the **MMS total forecast demand** obtained in procedure 3.1 for each **trading**	The agreed-upon procedures were performed. No findings to report based on the agreed-upon procedures performed for 4 out of 5 sample dates. For the remaining sample, the below finding was noted. **Agreed-Upon Procedure 3.2. finding** For the **sample day** 13 July 2023, it was noted that the total forecast demand for 4 out of 48 **trading periods** for the **trading day** under the heading "Load" on the "Assumptions" tab of the **NTC Calculation File** did not agree to the corresponding values noted in column D of the **MMS total load forecast demand** obtained in procedure 3.1.

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	period in the **trading day**. For the period 26 March 2023 – 29 October 2023 the time as per the **NTC Calculation File** corresponds to an entry one hour ahead of the **MMS total forecast demand** file due to daylight savings time. Report for each **sample day** the number of **trading periods** that did not correspond.		**period** in the **trading day**. For the period 26 March 2023 – 29 October 2023 the time as per the **NTC Calculation File** corresponds to an entry one hour ahead of the **MMS total forecast demand** file due to daylight savings time. Report for each **sample day** the number of **trading periods** that did not correspond.	
Inputs - Moyle/EWIC NTC	Using each sample day selected in procedure 1, perform the following procedures: 4.1. Check that the value "Moyle NTC (NI)" as stated in cell C4 in the "Assumptions" tab of the **NTC Calculation File** is equal to -410. If the cell is equal to -410, do not proceed with procedure 4.2. If this value is not equal to -410, document this fact and complete procedure 4.2. and its sub procedures to note if any outage was impacting on the Interconnector. 4.2. Obtain the document titled "Daily Margins 2023" and open tab "SONI Daily", which is generated by the TSO and records all outages scheduled over the year. In column B "Station" of the Daily Margins	The agreed-upon procedure 4.1. was performed. No findings to report based on the agreed-upon procedure performed for 5 out of 5 sample dates. Please note that due to the outcome of agreed-upon procedure 4.1., it was not required to perform agreed-upon procedure 4.2. and its sub procedures.	Using each sample day selected in procedure 1, perform the following procedures: 4.1. Check the value "EWIC NTC (IE)" as stated in cell Q4 in the "Assumptions" tab of the **NTC Calculation File** is equal to -530. If the cell is equal to -530, do not proceed with procedure 4.2. If this value is not equal to -530, document this fact and complete procedure 4.2. and its sub procedures to note if any outage was impacting on the Interconnector. 4.2. Obtain the document titled 'Daily Margins 2023' and open tab "EirGrid Daily", which is generated by the TSO and records all outages scheduled over the year. In column B "Station" of the Daily Margins	The agreed-upon procedures were performed. No findings to report based on the agreed-upon procedures performed for 4 out of 5 sample dates. Please note that due to the outcome of agreed-upon procedure 4.1., it was not required to perform agreed-upon procedure 4.2 and its sub procedures for 4 out of 5 samples. For the remaining sample, agreed-upon procedure 4.2.1.1. was performed, and the below finding was noted. **Agreed-Upon Procedure 4.2.1.1. finding** For the sample day 6 December 2023, it was noted that the **EWIC NTC (IE)** as stated in the "Assumptions" tab of the **NTC Calculation File** differed from the expected value of -530 by 4. The

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	(SONI) table, search for "Moyle" and in row 5 "day" search for the date of the sample day selected. Where these two cells intersect in the Daily Margins (SONI) table ("**outage cell**"), note if an outage was in place. If the cell reads "F" (forced outage) or "S" (scheduled outage) check that the value stated in cell C4 in the "Moyle NTC (NI)" on the "Assumptions" tab of the NTC Calculation File is equal to "0". If the cell reads a value, check that the value stated in cell C4 in the "Moyle NTC (NI)" on the "Assumptions" tab of the **NTC Calculation File** is equal to this value. If not, proceed to the following procedures in order to determine if the sample day occurred on the first or last day of an outage. 4.2.1. If the cell identified in step 4.2. reads "F", or "S", or a numerical value and the value stated in "Moyle NTC (NI)" on the "Assumptions" tab of the NTC Calculation File reads a different numerical value, complete the following procedures to determine if the sample was on the first or last day of an outage. 4.2.1.1. **Identifying if an outage starts or ends on the sample day** Identify the cells to both the immediate left and immediate right of the **outage cell** referenced in		(EIRGRID) table, search for "EWIC" and in row 5 "day" search for the date of the sample day selected. Where these two cells intersect in the Daily Margins (EIRGIRD) table ("**outage cell**"), note if an outage was in place. If the cell reads "F" (forced outage) or "S" (scheduled outage) check that the value stated in cell Q4 in the "EWIC NTC (IE)" on the "Assumptions" tab of the NTC Calculation File is equal to "0". If the cell reads a value, check that the value stated in cell Q4 in the "EWIC NTC (IE)" on the "Assumptions" tab of the NTC Calculation File is equal to this value. If not, proceed to the following procedures in order to determine if the sample day occurred on the first or last day of an outage. 4.2.1. If the cell identified in step 4.2. reads "F", or "S", or a numerical value and the value stated in "EWIC NTC (IE)" on the "Assumptions" tab of the NTC Calculation File reads a different numerical value, complete the following procedures to determine if the sample was on the first or last day of an outage. 4.2.1.1. **Identifying if an outage starts or ends on the sample day** Identify the cells to both the immediate left and immediate right of the **outage cell** referenced in	stated value for the sample date was -526.

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	4.2. above. If both or neither of the cells contain either an "F" or an "S", then the sample day does not fall on the first or last day of the outage. If this is the case, report the difference noted in 4.1 and do not proceed to the next procedures. 4.2.1.2. If the cell to the right of the **outage cell** contains an "F" or "S" and the cell to the left contains a numerical value, the sample day occurs on the "**outage start date"**. If the cell to the left of the **outage cell** contains a "F" or "S" and the cell to the right contains a numerical value, the sample day occurs on the last day of an outage, and the sample date is the **outage end date**. If the **sample day** occurs on the first day of an outage, proceed to procedure 4.2.1.4. and do not complete 4.2.1.3. If the **sample day** occurs on the last day of an outage, proceed to procedure 4.2.1.3. 4.2.1.3. Identifying the outage start day If in procedure 4.2.1.2., it was identified that the sample date was on the last day of an outage, the first day of the outage must be identified in order to find the correct **Moyle Outage Notice**. In the "Daily Margins 2023" document, moving left across the row from the **outage cell**, identify the last cell in the row which contains a "F" or "S". The last		4.2. above. If both or neither of the cells contain either an "F" or an "S", then the sample day does not fall on the first or last day of the outage. If this is the case, report the difference noted in 4.1 and do not proceed to the next procedures. 4.2.1.2. If the cell to the right of the **outage cell** contains an "F" or "S" and the cell to the left contains a numerical value, the sample day occurs on the "**outage start date"**. If the cell to the left of the **outage cell** contains a "F" or "S" and the cell to the right contains a numerical value, the sample day occurs on the last day of an outage, and the sample date is the **outage end date**. If the **sample day** occurs on the first day of an outage, proceed to procedure 4.2.1.4. and do not complete 4.2.1.3. If the **sample day** occurs on the last day of an outage, proceed to procedure 4.2.1.3. 4.2.1.3. I**dentifying the outage start day** If in procedure 4.2.1.2., it was identified that the **sample date** was on the last day of an outage, the first day of the outage must be identified in order to identify the correct outage in the **EDIL Outage Document**. In the "Daily Margins 2023" document, moving left across the row from the **outage cell**, identify the last cell in the row	

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	cell in a row that contains a "F" or "S" with a cell to its left with a numerical value is the first day of the outage. Note the date contained in this cell in row 5 ("**outage start date**"). 4.2.1.4. **Identifying the outage start or end time** Obtain the document titled 'Moyle-Pole 1/Pole 2/Bipole-FPO/STP-DDMMYYY ("**Moyle Outage Notice**")', which is prepared by the unit's operator, approved by SONI Ltd and expected to go on outage. The relevant document is dated the same day as the "**outage start date**" previously identified in procedures 4.2.1.2. or 4.2.1.3. Under the table Heading 1 in the Moyle Outage Notice, note the date the outage is "Valid From". Agree this date to the **outage start date** previously identified in procedures 4.2.1.2 or 4.2.1.3. If there is a difference, do not complete the remaining procedures and report the difference between -410 and cell C4 in the "Assumptions" tab of the NTC Calculation File as the Daily Margin Sheet has not accurately reflected the outage. If this date is the same, proceed to 4.2.1.5. 4.2.1.5. If the **sample date** is the same as the outage start date (as		which contains a "F" or "S". The last cell in a row that contains a "F" or "S" with a cell to its left with a numerical value is the first day of the outage. Note the date contained in this cell in row 5 ("**outage start date**"). 4.2.1.4. **Identifying the outage start or end time** Obtain the document titled 'EWIC EDIL Declaration DDMMYYYY ("**EDIL Outage Document**")', which contains outages recorded by EirGrid plc as originating from Electronic Dispatch Instruction Logger. The relevant document is dated the same day as the **sample day**. Apply the following filters: -Filter column A "Unit" for "IGB" -Filter column B "Decl Type" for "MWOF" Under the column G "Eff Time Local", in the filtered EDIL Outage Document, note the date. Agree this date to the **outage start date** previously identified in procedures 4.2.1.2. or 4.2.1.3. If there is a difference, do not complete the remaining procedures and report the difference between -530 and cell Q4 in the "Assumptions" tab of the NTC Calculation File as the Daily Margin Sheet has not accurately reflected the outage. If this date is the same, proceed to 4.2.1.5. 4.2.1.5. If the **sample date** is the same as the outage start date (as	

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	identified in procedure 4.2.1.2.), complete the following procedure: - Identify the time listed in the **Moyle Outage Notice** under the "Valid From" heading. If this time is within the "Trading Day" of the sample day, the outage began on the sample day. Proceed to procedure 4.2.1.7. If this time is not within the **trading day** of the sample day, report the difference between -410 and cell C4 in the "Assumptions" tab of the **NTC Calculation File**. If the **sample date** is different from the **outage start date** (as identified in procedure 4.2.1.3.) do not complete this procedure and complete procedure 4.2.1.6. 4.2.1.6. Identify the time listed in the **Moyle Outage Notice** under the "Valid To" heading. If this time is within the **trading day**, the outage ended on the sample day. Proceed to procedure 4.2.1.7. If this time is not within the **trading day** of the sample day, report the difference between -410 and cell C4 in the "Assumptions" tab of the **NTC Calculation File**. 4.2.1.7. **Identifying the declared outage value** Under the table Heading 1 in the **Moyle Outage Notice**, identify the value under the "Revised AVAIL		identified in procedure 4.2.1.2.), complete the following procedure: - Identify the time listed in the **EWIC Outage Document** under the column G "Eff Time Local" heading. If this time is within the "Trading Day" of the sample day, the outage began on the sample day. Proceed to procedure 4.2.1.7. If this time is not within the **trading day** of the sample day, report the difference between -530 and cell Q4 in the "Assumptions" tab of the **NTC Calculation File**. If the **sample date** is different from the **outage start date** (as identified in procedure 4.2.1.3.) do not complete this procedure and complete procedure 4.2.1.6. 4.2.1.6. Identify the time listed in the "EWIC Outage Document" under the column G "Eff Time Local" heading. If this time is within the **trading day**, the outage ended on the sample day. Proceed to procedure 4.2.1.7. If this time is not within the **trading day** of the sample day, report the difference between -530 and cell Q4 in the "Assumptions" tab of the **NTC Calculation File**. 4.2.1.7. **Identifying the declared outage value** Under the column D "Value Gen" in the **EWIC Outage Document**, identify the value listed. This value	

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	MW" (**Outage Value**). This value is the MW value declared by the Moyle Interconnector while it was on outage. 4.2.1.8. Comparing the declared outage value against the NTC Calculation File In the **NTC Calculation File**, check the Outage Value obtained in procedure 4.2.1.7. against the value "Moyle NTC (NI)" as stated in cell C4 on the "Assumptions" tab of the **NTC Calculation File**. Report for each **sample day** the difference between the value "Moyle NTC (NI)" as stated in cell C4 on the "Assumptions" tab of the **NTC Calculation File** and -410.		is the MW value declared by the EWIC Interconnector while it was on outage. 4.2.1.8. Comparing the declared outage value against the NTC Calculation File In the **NTC Calculation File**, check the Outage Value obtained in procedure 4.2.1.7. against the value "EWIC NTC (ROI)" as stated in cell Q4 on the "Assumptions" tab of the **NTC Calculation File**. Report for each **sample day** the difference between the value "EWIC NTC (ROI)" as stated in cell Q4 on the "Assumptions" tab of the **NTC Calculation File** and -530.	
Inputs - EDIL Avail	Using each **sample day** selected in procedure 1, perform the following procedures: 5.1. Obtain the generator availability information recorded by SONI Ltd as originating from Electronic Dispatch Instruction Logger ("EDIL") in the document 'EDILAvailDF-2023 mmdd' ("**EDIL availability document**"). 5.2. Obtain the jurisdictional listing contained within the document titled "List of Gen Units" populated by the Transmission System Operator ("**TSO**"). Assign the appropriate jurisdiction, "ROI" or	The agreed-upon procedures 5.1. – 5.4. were performed. No findings to report based on the agreed-upon procedures performed for 4 out of 5 samples. Please note that due to the outcome of agreed-upon procedures 5.1. – 5.4., it was not required to perform agreed-upon procedures 5.5. – 5.6. for 4 out of 5 samples. For the remaining sample, agreed-upon procedures 5.5. and 5.6. were performed and the below finding was noted.	Using each sample day selected in procedure 1, perform the following procedures: 5.1. Obtain the generator availability information recorded by EirGrid plc as originating from Electronic Dispatch Instruction Logger ("EDIL") in the document 'EDILAvailDF-2023 mmdd' ("**EDIL availability document**"). 5.2. Obtain the jurisdictional listing contained within the document titled "List of Gen Units" populated by the Transmission System Operator ("**TSO**"). Assign the appropriate jurisdiction, "ROI" or	The agreed-upon procedures 5.1. – 5.4. were performed. No findings to report based on agreed-upon procedures 5.1. – 5.4. performed for 5 out of 5 samples. Please note that due to the outcome of agreed-upon procedures 5.1. – 5.4., it was not required to perform agreed-upon procedures 5.5. – 5.6.

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	"NI", to each generator in column I in the **EDIL availability document** based on the designations included in the jurisdictional listing to compile an adjusted document ("**adjusted EDIL availability document**"). 5.3. Using the **adjusted EDIL availability document** as per procedure 5.2, identify the Largest Single Infeed ("**LSI**"). The **LSI** will equal the unit with the largest value in column F "ValueExp" after applying the following filter settings within the **adjusted EDIL availability document**: - Filter column I "Jurisdiction" for "NI" - In column H "Decl Cat Type" filter for "DECL" - In Column D "Fuel" filter out "Wind" "SOL" and "IC" - In column A "Unit" filter for the following fuel types in column D "fuel" where more than one row is included for the same unit: • For any unit that has a fuel type "COAL" in column D "Fuel", remove all other fuel types for that unit • For any unit that does not have a fuel type "COAL" in column D "Fuel", remove the fuel type "DIST" - Sort Column F "ValueExp" from largest to smallest.	**Agreed-Upon Procedure 5.6. finding** For the sample day 16 December 2023, it was noted that the **LSI** identified in agreed-upon procedure 5.3. and the value per the **NI LSI** on the "Assumptions" tab of the **NTC calculation file** exceeded the 5% margin of difference.	"NI", to each generator in column I in the **EDIL availability document** based on the designations included in the jurisdictional listing to compile an adjusted document ("**adjusted EDIL availability document**"). 5.3. Using the **adjusted EDIL availability document** as per procedure 5.2, identify the Largest Single Infeed ("**LSI**"). The **LSI** will equal the unit with the largest value in column F "ValueExp" after applying the following filter settings within the **adjusted EDIL availability document**: - Filter column I "Jurisdiction" for "ROI" - In column H "Decl Cat Type" filter for "DECL" - In Column D "Fuel" filter out "Wind" "SOL" and "IC" - In column A "Unit" filter for the following fuel types in column D "fuel" where more than one row is included for the same unit: • For any unit that has a fuel type "COAL" in column D "Fuel", remove all other fuel types for that unit unless the unit is MP2 in which case all duplicate entries other than "Oil" in column D should be removed. • For any unit that does not have a fuel type "COAL" in column D "Fuel", remove the fuel type "DIST" - Sort Column F "ValueExp" from largest to smallest.	

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	5.4. Agree the **LSI** value as noted in cell C5 "NI LSI" on the "Assumptions" tab of the **NTC Calculation File** to the value identified in procedure 5.3. A positive or negative 5% margin of difference is accepted when agreeing the values. If the difference is within this tolerance, do not complete any further procedures. If it is outside the 5% margin, proceed to procedure 5.5. 5.5. Where the difference noted in 5.4. is above the 5% threshold, obtain the EDIL availability document for the subsequent day (**Sample Day EDIL Availability Document**). Apply the same filter settings in procedures 5.2. and 5.3. 5.6. If the **LSI** identified in procedure 5.3. has a value of 0 in column F "ValueExp" in the **Sample Day EDIL Availability Document**, the unit is unavailable and therefore would not have been selected as the **LSI** in the calculation template on the sample day. If the value listed is 0, complete procedure 5.4. again using the next largest infeed identified in step 5.3. If the value is not 0, report for each **sample day** the difference between the **LSI** identified and the value as noted in cell C5 "NI LSI" on the "Assumptions" tab of the **NTC Calculation File**.		5.4. Agree the **LSI** value as noted in cell Q5 "ROI LSI" on the "Assumptions" tab of the NTC Calculation File to the value identified in procedure 5.3. A positive or negative 5% margin of difference is accepted when agreeing the values. If the difference is within this tolerance, do not complete any further procedures. If it is outside the 5% margin, proceed to procedure 5.5. 5.5. Where the difference noted in 5.4. is above the 5% threshold, obtain the EDIL availability document for the subsequent day (**Sample Day EDIL Availability Document**). Apply the same filter settings in procedures 5.2. and 5.3. 5.6. If the **LSI** identified in procedure 5.3. has a value of 0 in column F "ValueExp" in the **Sample Day EDIL Availability Document**, the unit is unavailable and therefore would not have been selected as the **LSI** in the calculation template on the sample day. If the value listed is 0, complete procedure 5.4. again using the next largest infeed identified in procedure 5.3. If the value is not 0, report for each **sample day** the difference between the **LSI** identified and the value as noted in cell Q5 "ROI LSI" on the "Assumptions" tab of the **NTC Calculation File.**	

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
Inputs - NI/ ROI LSI	Using each sample day selected in procedure 1, perform the following procedures: 6.1. Obtain the generator availability information recorded by SONI Ltd as originating from EDIL in the **EDIL availability document**. 6.2. Obtain the jurisdictional listing contained within the document titled 'List of Gen Units' populated by the **TSO**. Assign the appropriate jurisdiction, "ROI" or "NI", to each generator in the **EDIL availability document** in column I based on the designations included in the jurisdictional listing to compile the **adjusted EDIL availability document**. 6.3. Using the **adjusted EDIL availability document** as per procedure 6.2., identify the total EDIL availability. The total EDIL availability will equal the sum of all units in column F "ValueExp" after applying the following filter settings within the **adjusted EDIL availability document**: - Filter column I "Jurisdiction" for "NI" - In column H "Decl Cat Type" filter for "DECL" - In Column D "Fuel" filter out "Wind" "SOL" and "IC" - In column A "Unit" filter for the following fuel types in column D	The agreed-upon procedures were performed. No findings to report based on the agreed-upon procedures performed for 5 out of 5 sample dates.	Using each sample day selected in procedure 1, perform the following procedures: 6.1. Obtain the generator availability information recorded by EirGrid plc as originating from EDIL in the **EDIL availability document**. 6.2. Obtain the jurisdictional listing contained within the document titled 'List of Gen Units' populated by the **TSO**. Assign the appropriate jurisdiction, "ROI" or "NI", to each generator in the EDIL availability document in column I based on the designations included in the jurisdictional listing to compile the **adjusted EDIL availability document**. 6.3. Using the **adjusted EDIL availability document** as per procedure 6.2., identify the total EDIL availability. The total EDIL availability will equal the sum of all units in column F "ValueExp" after applying the following filter settings within the **adjusted EDIL availability document**: - Filter column I "Jurisdiction" for "ROI" - In column H "Decl Cat Type" filter for "DECL" - In Column D "Fuel" filter out "Wind" "SOL" and "IC"	The agreed-upon procedures were performed. No findings to report based on the agreed-upon procedures performed for 5 out of 5 sample dates.

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	"fuel" where more than one row is included for the same unit: • For any unit that has a fuel type "COAL" in column D "Fuel", remove all other fuel types for that unit • For any unit that does not have a fuel type "COAL" in column D "Fuel", remove the fuel type "DIST" - Sum the values within Column F "ValueExp" to identify the total EDIL availability. 6.4. Agree the total availability of plant value as noted in cell F3 "EDIL Avail" on the "Assumptions" tab of the **NTC Calculation File** to the value identified in procedure 6.3. A margin of difference up to the value of the **LSI** identified within procedure 5.3. (or procedure 5.6. if the second largest infeed identified was used) is accepted when agreeing the values. Report for each **sample day** the difference between the total EDIL availability and the value as noted in cell F3 "EDIL Avail" on the "Assumptions" tab of the **NTC Calculation File** where this margin of difference is exceeded.		- In column A "Unit" filter for the following fuel types in column D "fuel" where more than one row is included for the same unit: • For any unit that has a fuel type "COAL" in column D "Fuel", remove all other fuel types for that unit unless the unit is MP2 in which case all duplicate entries other than "Oil" in column D should be removed • For any unit that does not have a fuel type "COAL" in column D "Fuel", remove the fuel type "DIST" - Sum the values within Column F "ValueExp" to identify the total EDIL availability. 6.4. Agree the total availability of plant value as noted in cell T3 "EDIL Avail" on the "Assumptions" tab of the **NTC Calculation File** to the value identified in procedure 6.3. A margin of difference up to the value of the **LSI** identified within procedure 5.3. (or procedure 5.6. if the second largest infeed identified was used) is accepted when agreeing the values. Report for each **sample day** the difference between the total EDIL availability and the value as noted in cell F3 "EDIL Avail" on the "Assumptions" tab of the **NTC Calculation File** where this margin of difference is exceeded.	

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
NTC Calculations	Using each sample day selected in procedure 1, perform the following procedures: 7.1. Check that the value within the "**shortfall**" column of the "Assumptions" tab of the NTC Calculation File is equal to "0". If the **shortfall value**" for any sample period is not equal to "0" ("**relevant period**"), proceed to procedure 7.2. If there are no sample periods where the **shortfall value** is not 0, no further procedures need to be performed. 7.2. For each **relevant period**, check if the values under "**Moyle NTC/ Schedule**" are equal to "0". If for any periods where the relevant period and the value under **MOYLE NTC/ Schedule** are also not equal to "0", proceed to procedure 7.3. 7.3. In the "Email Template" tab of the NTC Calculation file, identify the row titled "Ramp Check" under the Moyle "TSO change of Transfer Capacity Notification template". For each cell in the row, examine if it contains the appropriate formula (see Appendix 3, "Expected Formula for Procedure 7"). If it does not contain the expected formula, report the differences noted. If each cell does contain the expected formula, proceed to procedure 7.4.	The agreed-upon procedures were performed. No findings to report based on the agreed-upon procedures performed for 5 out of 5 sample dates. Please note that due to the outcome of agreed-upon procedure 7.1., it was not required to perform agreed-upon procedures 7.2. - 7.4. for 3 out of 5 sample dates. It was required to perform agreed-upon procedures 7.2. - 7.3. for 1 sample date and 7.2. – 7.4. for the remaining sample date.	Using each sample day selected in procedure 1, perform the following procedures: 7.1. Check that the value within the "**shortfall**" column of the "Assumptions" tab of the NTC Calculation File is equal to "0". If the "**shortfall value**" for any sample period is not equal to "0" ("**relevant period**"), proceed to procedure 7.2. If there are no sample periods where the **shortfall value** is not 0, no further procedures need to be performed. 7.2. For each **relevant period**, check if the values under "**EWIC NTC/ Schedule**" are equal to "0". If for any periods where the relevant period and the value under **EWIC NTC/ Schedule** are also not equal to "0", proceed to procedure 7.3. 7.3. In the "Email Template" tab of the NTC Calculation file, identify the row titled "Ramp Check" under the EWIC "TSO change of Transfer Capacity Notification template". For each cell in the row, examine if it contains the appropriate formula (see Appendix 3, "Expected Formula for Procedure 7"). If it does not contain the expected formula, report the differences noted. If each cell does contain the expected formula, proceed to procedure 7.4.	The agreed-upon procedures were performed. No findings to report based on the agreed-upon procedures performed for 5 out of 5 sample dates. Please note that due to the outcome of procedure 7.1., it was not required to perform agreed-upon procedures 7.2. - 7.4. for 3 out of 5 sample dates. It was required to perform agreed-upon procedures 7.2. - 7.3. for 1 sample date and 7.2. – 7.4. for the remaining sample date.

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	7.4. For each period identified in procedure 7.2. where the **shortfall value** does not equal 0 and the value under Moyle NTC/ Schedule does not equal 0, examine in the row "Ramp Check" and inspect if the output of the expected formula has returned "OK". Report for each **sample day** the number of **relevant periods** in the row "Ramp Check" where the expected formula does not return "OK".		7.4. For each period identified in procedure 7.2. where the **shortfall value** does not equal 0 and the value under EWIC NTC/ Schedule does not equal 0, examine in the row "Ramp Check" and inspect if the output of the expected formula has returned "OK". Report for each **sample day** the number of **relevant periods** in the row "Ramp Check" where the expected formula does not return "OK".	
Output	8.1. Select 10 **sample days** haphazardly from the period 01 January 2023-31 December 2023. For each **sample day** selected, obtain the **NTC Calculation File**, where the date of the document corresponds with the selected day. 8.2. For the sample days selected in procedure 8.1., identify if an "**NTC reduction**" was required. An **NTC reduction** is identified on the "Assumptions" tab of the NTC Calculation File if any of the values under column B "Moyle NTC/Schedule" are not equal to the "Moyle NTC (NI)" value stated in cell C4. From the instances in sample days where an **NTC reduction** occurs, select 5 days haphazardly. If 5 instances cannot be identified, select additional sample days until 5 days where an **NTC reduction** has occurred have been identified.	The agreed-upon procedures were performed. No findings to report based on the agreed-upon procedures performed for 5 out of 5 sample dates where an **NTC Reduction** was identified.	8.1. Select 10 **sample days** haphazardly from the period 01 January 2023-31 December 2023. For each **sample day** selected, obtain the **NTC Calculation File**, where the date of the document corresponds with the selected day. 8.2. For the sample days selected in procedure 8.1., identify if an "**NTC reduction**" was required. An **NTC reduction** is identified on the "Assumptions" tab of the NTC Calculation File if any of the values under column P "EWIC NTC/Schedule" are not equal to the "EWIC NTC (IE)" value stated in cell Q4 From the instances in sample days where an **NTC reduction** occurs, select 5 days haphazardly. If 5 instances cannot be identified, select additional sample days until 5 days where an **NTC reduction** has occurred have been identified.	The agreed-upon procedures were performed. No findings to report based on the agreed-upon procedures performed for 4 out of 5 sample dates where an **NTC Reduction** was identified. For the remaining sample where an **NTC Reduction** was identified, the below finding was noted. **Agreed-Upon Procedure 8.5. finding** For the sample day 14 March 2023, it was noted that for 19 out of 24 1-hour intervals the "Adjusted Capacity Values" of the "Email Template" tab within the **NTC Calculation File** did not agree to the **NTC Reduction** values within the **EWIC NTC Email**.

Phase in the NTC calculation process[1]	Agreed-upon Procedures to be performed in respect of the SONI Limited day- ahead Interconnector (Moyle) NTC calculations	Results of procedures performed by PwC: SONI Limited	Agreed-upon Procedures to be performed in respect of the EirGrid plc day-ahead Interconnector (EWIC) NTC calculations	Results of procedures performed by PwC: EirGrid plc
	8.3. For each instance selected in procedure 8.2., obtain the document titled 'Moyle Transfer Capacity Restriction DD MM YY ("**Moyle NTC Email**")' which is the email sent by the **TSO** to the relevant interconnector operator informing them for which periods an NTC reduction is required for the following day. 8.4. For each 1-hour interval for the **sample day** selected in procedures 8.2., identify the NTC reduction value within the "**Moyle NTC Email**" (obtained as part of procedure 8.3.). 8.5. Agree the value noted in the row "**Adjusted capacity values**" of the "Email Template" tab within the **NTC Calculation File** to the value noted in procedure 8.4. for each 1-hour interval within the **trading day**. Report for each **sample day** the number of 1-hour intervals where the "Adjusted capacity values" of the "Email Template" tab within the **NTC Calculation File** did not agree to the **NTC Reduction** values within the **Moyle NTC Email**.		8.3. For each instance selected in procedure 8.2., obtain the document titled 'EWIC Transfer Capacity Restriction DD MM YY ("**EWIC NTC Email**")' which is the email sent by the **TSO** to the relevant interconnector operator informing them for which periods an NTC reduction is required for the following day. 8.4. For each 1-hour interval for the **sample day** selected in procedures 8.2., identify the NTC reduction value within the "**EWIC NTC Email**" (obtained as part of procedure 8.3.). 8.5. Agree the value noted in the row "Adjusted capacity values" of the "Email Template" tab within the **NTC Calculation File** to the value noted in procedure 8.4. for each 1-hour interval within the **trading day**. Report for each **sample day** the number of 1-hour intervals where the "Adjusted capacity values" of the "Email Template" tab within the **NTC Calculation File** did not agree to the **NTC Reduction** values within the **EWIC NTC Email**.	

Appendix 2- Interconnector Net Transfer Capacity Calculations: Process overview and agreed-upon procedures scope for the period 1 January 2023 to 31 December 2023

Interconnector Net Transfer Capacity Calculations

Process overview and agreed-upon procedures scope for the period 1 January 2023 to 31 December 2023

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1. Introduction

In response to Articles 3:15 & 16 of the 'Interim Cross-zonal arrangements', the control centres within EirGrid plc and SONI Limited (the Transmission System Operators or "TSOs") complete a daily Interconnector Net Transfer Capacity ("NTC") calculation.

The purpose of the Interconnector NTC calculation is to identify, in advance, the expected supply of energy compared to the demand for energy (which consists of expected demand from the island of Ireland and expected exports). Any additional supply may be considered for further export through the Interconnector. Any shortfall will result in the TSOs reducing Interconnector Transfer Capacity. If this calculation was not completed, export levels may put the Single Electricity Market (SEM) at risk of not meeting forecasted demand and potentially having to trigger demand reduction schemes.

The NTC calculations are therefore the independent assessments, by EirGrid plc and SONI Limited, of the maximum Transfer Capacity that they can offer to the market on the EWIC and Moyle Interconnectors, to ensure the operation of a secure system.

The TSOs have engaged PwC ("the practitioner") to perform agreed-upon procedures (AUP) in respect of specified elements of the NTC calculation process, as set out below. The engagement will be performed in accordance with the International Standard on Related Services (ISRS) 4400 (Revised) 'Agreed-Upon Procedures Engagements'. In an AUP engagement the practitioner is engaged to carry out procedures that have been agreed upon by the practitioner and the engaging party (in this case the TSOs) and to communicate the procedures performed and the related findings in an AUP report. The practitioner reports only the results of the AUPs performed and does not express any form of opinion or assurance conclusion. The procedures to be performed and number of items to be tested are determined by EirGrid plc and SONI Limited.

2. NTC Calculation process

The daily NTC calculation process consists of four overarching steps. Each step and an explanation thereof is set out below. The nature of an AUP engagement is that (i) the procedures are capable of being described objectively, in terms that are clear, not misleading and not subject to varying interpretations; and (ii) the findings are capable of being objectively verified and there is limited need for the practitioner to exercise professional judgement (ISRS 4400, A.23). In each instance where a step in the process or parts thereof was not included by the TSOs in the AUP engagement scope, further information has been provided in Table 1 to explain the rationale for the exclusion.

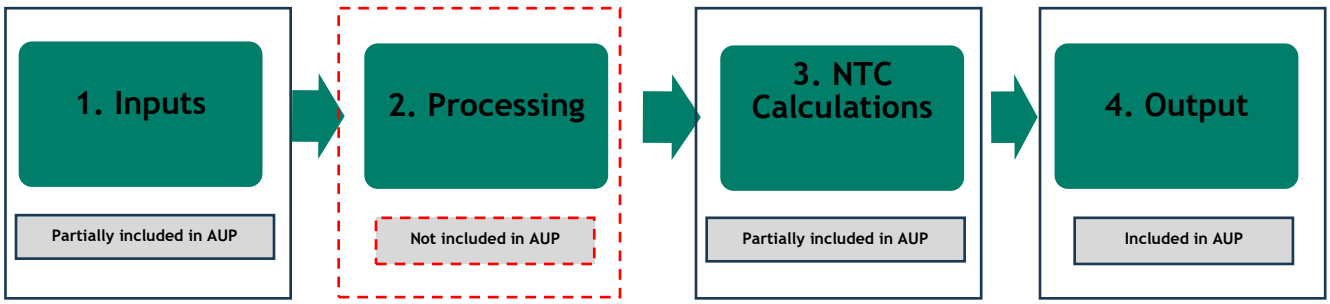

Table 1: NTC Calculation process and mapping to AUP procedures

Process step	Explanation of step	Included in AUP procedures	Reasoning for exclusion from scope of AUP
Inputs	Data is input into the NTC Calculation File from defined sources being various applicable systems and any relevant communication received from appropriate management within	**Partially**, tested in procedure: 1,2,3,4,5 & 6. Refer to Appendix A with further	As shown in Appendix A several inputs are not included within the scope of the AUP. These inputs were identified as involving operator adjustment, based on the operator's judgement and knowledge of the system. As they were not considered capable of being objectively described and verified, they were not included in the scope

	Eirgrid, SONI or the unit's management team regarding unit availability information	breakdown of Inputs.	of the AUP. For those inputs which are included, the AUP encompasses procedures over the accurate reflection of the source data in the NTC Calculation File.
Processing	The processing that the NTC Calculation File completes when all inputs have been inserted and the calculation is run.	No	The NTC Calculation File (which is a spreadsheet) is considered to be fit for purpose by the TSOs and was tested at the inception of the process before it was implemented in the normal course of business. The processing phase is not included in the scope of the AUPs.
NTC Calculations	Following the processing of the NTC Calculation File the operator manually adjusts the spreadsheet to identify the correct NTC values required for the day to avoid Amber Alert.	**Partially**, tested in procedure: 7.	System Operator Adjustments are required in instances when the calculation indicates that the system could enter Amber Alert state. In these instances, adjustments will be made based on knowledge of the power system by the operator to keep the system out of the alert state. Part of this procedure involves assessing the availability of long-term batteries and DSU's, which relies on the operator's judgement. Consequently, these elements of the process are not included in the scope of the AUP. The Interconnector adjustment itself is the last step in the process and determining if such an adjustment was made is included in the scope of the AUP.
Output	The output of the NTC calculation is the submission of the calculation conclusions to the Trading Operation teams, by way of a daily email. This is the end of the TSO process.	**Yes**, tested in procedure: 8.	N/A The submission of this NTC calculation conclusion is included within the scope of the AUP.

A. Appendix A - Further information on Inputs

The input data assumption rules that must be adhered to when performing day-ahead Interconnector NTC calculations are summarised below. All references to data entry in this document relate to entries in the Daily NTC Calculation Files. This document assumes that NTC calculations are being performed in advance of the IDA1 (Intraday Auction 1) market gate closure for the following trading day, but the general principles specified herein shall apply to all NTC calculations.

Note: From 18/02/2023 onwards, the naming convention which the NTC Calculation File was saved under was changed. Prior to this date, the file was saved under the name 'Margin Check 2023MMDD". After this date, the file was saved under the name 'NTC Calculations TD2023MMDD-IDA1 Final'. This change is only to the name of the file itself.

See appendix B for a glossary of terms.

#	Inputs as per the NTC calculation sheet	Use of input in the NTC calculation spreadsheet	Inputs included in AUP*
1	Load Forecast	The total forecast demand assumed for each jurisdiction for each trading period shall precisely match the corresponding values from the latest available MMS LTS scheduling run, as at the time the NTC calculations are performed and entered into the NTC Calculation File.	✓
2	Wind & Solar Forecast	The total forecast wind & solar generation assumed for each jurisdiction for each trading period shall be the average of the latest forecasts provided by the two renewables forecast providers (Weprog & Overspeed) circa 13:00 during Daylight Saving Time or circa 12:00 outside of Daylight-Saving Time. Note: From 27/10/2023 onwards, Solar generation was included within the forecast values as part of the NTC Calculation process to take generation from solar units into account. This remained in place for the remainder of the 2023 period.	✓
3	EDIL Avail	For each jurisdiction the total assumed availability of plant dispatchable via EDIL shall exactly match the total availability calculated by EDIL as at the time the NTC calculations are performed.	✓

4	NI Long Notice	Any unit that is not synchronised or scheduled to synchronise, as at the time the NTC calculations are performed, is to be assumed unavailable until 18:30 that day plus the expected notification time of the unit as at 18:30. The assumed notification time of the unit shall reflect the expected heat state of the unit as at 18:30. The total assumed unavailability of all such plants shall be reflected in the NTC calculations.
		The 'Long Notice' data input shall also be used to account for other differences between the currently declared availability of units in EDIL and the expected availability of those units across the day for which the NTC calculations are being performed. For each trading period and each jurisdiction, the entries in the 'Long Notice' data input shall:
		• Reflect the scheduled start and end of planned outages of units as authoritative sources of unit availability information:
		  ○ Any unit scheduled to return from short term planned outage (an outage with a duration of 7 days or less) shall be assumed available across relevant trading periods;
		  ○ Any unit that has very recently tripped or is returning from long term outage (an outage with a duration of greater than 7 days) shall not be assumed available for the purposes of NTC calculations given the increased risk of the unit failing to synchronise.
		• Reflect expected changes in the declared availability of units based on unit-specific factors e.g., the ability of a unit to run at a higher MW output for several hours without violating emissions limits;
		• Discount the availability of units that are scheduled to be carrying out testing;
			X

#	Inputs as per the NTC calculation sheet	Use of input in the NTC calculation spreadsheet	Inputs included in AUP*
		• Do not reflect the impact of transmission constraints on generation, which is dealt with separately. The details of assumptions regarding the above point shall be noted in the associated NTC calculation documentation.	
5	DSU + Derate%	In each jurisdiction the total availability of DSUs to be fully or partially discounted from the NTC calculations shall be the summation of the declared EDIL availabilities of all DSUs incapable of running on an indefinite basis, as at the time the NTC calculations are performed. It shall be assumed all DSUs in each jurisdiction run at least twice across the day for which NTC calculations are being performed. As per DSU Grid Code requirements, the DSU shall have a maximum duration of 2 hours and shall be spaced apart by at least 3 hours. The DSU runs shall coincide with the periods of tightest margin in each jurisdiction.	X
6	Batteries	Given the current inability of the MMS and EMS to adequately handle scheduling of battery units and battery unit reserve provision, battery units shall not be considered available for the purposes of NTC calculations. The total potential contribution from battery units to be discounted from the NTC calculations shall be the summation of the declared EDIL availabilities of the battery units in each jurisdiction as at the time the NTC calculations are performed.	X
7	Unusable Hydro (ROI Only)	For the purposes of NTC calculations the assumed contribution of run-of-river hydro generation to the overall supply and demand balance shall reflect the forecast running of the units as indicated by the ESB Hydro Control Centre (HCC) via phone call and/or email. The values entered shall be based on the information provided by HCC and the currently declared availability of each unit in EDIL as at the time the calculations are performed. Details of the information provided by HCC shall be noted in the associated NTC Calculation documentation.	X
8	TX Constraint	The full or partial unavailability of a plant due to anticipated transmission constraints shall be reflected in NTC calculations. For each trading period and each jurisdiction, the values entered shall take account of all transmission outages that are scheduled to commence or end across the day for which the NTC calculations are being performed. Plant on forced outage, as at the time the NTC calculations are performed, shall be assumed to remain on forced outage. Assumed transmission constraints shall take into account renewable generation forecasts and shall be supported by load flow analysis where necessary. The details of how the transmission constraint values were determined shall be noted in the associated NTC documentation.	✗
9	S-N/N-S TTC	The maximum TTC limit assumed in the North-South and South-North flow directions shall align with the values published in the most recent applicable Weekly Operational Constraints Update report. The TTC limits may be amended in the following circumstances: • A forced outage or tripping of one or more key items of transmission equipment is deemed to have rendered the original TTC calculations obsolete. • The LSAT Real Time or Look Ahead functions indicate system security violations for N-G loss of the largest single infeed in either jurisdiction. Deviations from the published TTC limits should be based on the findings of load flow studies and / or any corrective actions recommended by LSAT. Deviations from the published TTC limits shall be noted in the associated NTC calculation documentation, including the reasons and justification for the amendments.	✗
10	Moyle/EWIC NTC	The baseline NTC limits in the export direction on the Moyle Interconnector shall align with the values most recently published in ICMP at the time the NTC calculation is performed. The baseline NTC limits in the export direction on the EWIC Interconnector shall align with the values most recently published in EDIL at the time the NTC calculation is performed.	✓
11	NI/ROI LSI	The size of the Largest Single Infeed (LSI) in each jurisdiction shall equal the maximum MW output of the largest unit expected to be available in each jurisdiction across the period for which NTC calculations are being performed. This shall take account of units that are scheduled to commence a planned outage or scheduled to return from planned outage, as per the 'Daily Margins' committed outage programme, the Nord Pool REMIT platform and any communication received from appropriate management within EirGrid, SONI or the unit's management team regarding unit availability information.	✓

B. Appendix B – Glossary of Terms

Acronyms Used

- AUP – Agreed-upon procedure
- DSU – Demand Side Unit
- EDIL – Electronic Dispatch Instruction Logger
- ESB – Electricity Supply Board
- EWIC – East West Interconnector
- EMS – Energy Management System
- LSAT – Long-Term Security Assessment Tool
- LTS – Long Term Scheduling
- MMS – Market Management System
- NTC – Net Transfer Capacity
- REMIT – Regulation on Wholesale Energy Market Integrity & Transparency
- TSOs – Transmission System Operators EirGrid plc and SONI Limited
- TTC – Total Transfer Capacity

Appendix 3- Expected Formula for Procedure 7

Further to Procedure 7, the expected formula should read as follows:

- **For a NI sample for the first time period (23:00):**

```
=IF(ABS(IF(B16="",$AC$11,B16)-$AC$11)<=300,"OK",ABS(IF(B16="",$AC$11,B16)-$AC$11))
```

- Where B16 is the "Adjusted Capacity Value" for the time period
- Where AC11 is "NTC GB Moyle" Interconnector Losses per the Interconnector Losses Table on the Email Template Tab

- **For a NI sample for the remaining time periods (00:00-23:00)**

```
=IF(ABS(IF(C16="",$AC$11,C16)-
    IF(B16="",$AC$11,B16))<=300,"OK",ABS(IF(C16="",$AC$11,C16)-IF(B16="",$AC$11,B16)))
```

- Where C16 is the "Adjusted Capacity Value" for the time period
- Where B16 is the "Adjusted Capacity Value" for the time period immediately before
- Where AC11 is "NTC GB Moyle" Interconnector Losses per the Interconnector Losses Table on the Email Template Tab

- **For a ROI sample for the first time period (23:00):**

```
=IF(ABS(IF(B32="",$AD$11,B32)-AD11)<=300,"OK",ABS(IF(B32="",$AD$11,B32)-$AD$11))
```

- Where B32 is the "Adjusted Capacity Value" for the time period
- Where AD11 is "NTC GB EWIC" Interconnector Losses per the Interconnector Losses Table on the Email Template Tab

- **For a ROI sample for the remaining time periods**

```
=IF(ABS(IF(C32="",$AD$11,C32)-
    IF(B32="",$AD$11,B32))<=300,"OK",ABS(IF(C32="",$AD$11,C32)-IF(B32="",$AD$11,B32)))
```

- Where C32 is the "Adjusted Capacity Value" for the time period
- Where B32 is the "Adjusted Capacity Value" for the time period immediately before
- Where AD 11 is "NTC GB EWIC" Interconnector Losses per the Interconnector Losses Table on the Email Template Tab

Note for each time period in the "Ramp Check" row, the cell referenced in the formula that is not locked should correspond to the "Adjusted Capacity Values" row for the same time period. The cell reference that is locked should remain the same for each time period in the row.