

Generator Connection Process

Revised Connection Process

22 July 2013



Précis

The attached process flow charts and explanatory tables set out the procedures and actions to be taken by SONI and NIE when dealing with connections to the Northern Ireland Transmission and Distribution networks.

These processes were outlined in the recent consultation and no comments were received.

Upon completion of the normal amendment procedures between SONI, NIE and UREGNI these process documents will be incorporated in a modified version of the Transmission Interface Agreement (TIA) which will be published on the SONI website.

Process Flowcharts

Figure 1: Flowchart for a connection or modification to the Distribution system

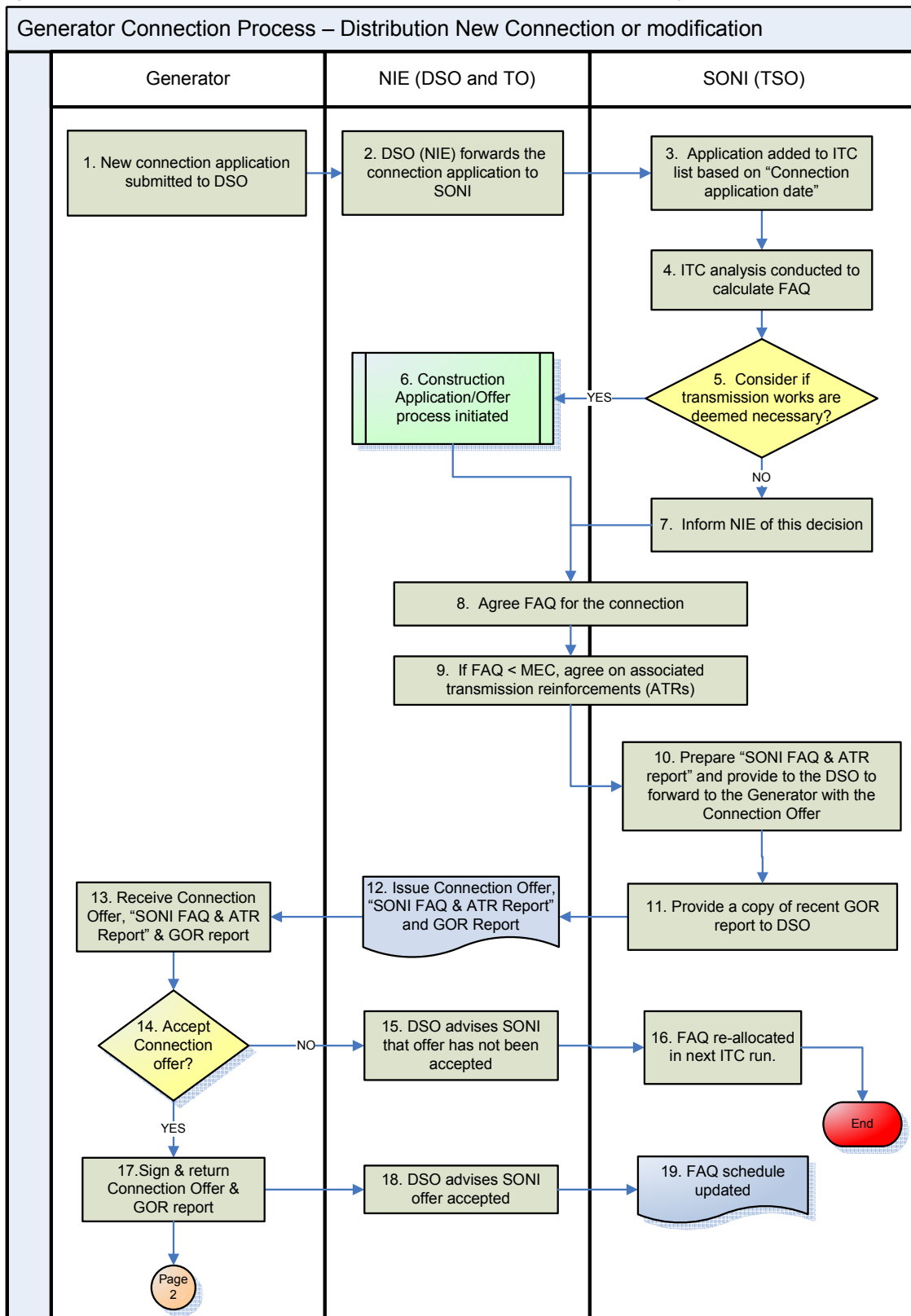


Figure 1 Continued: Flowchart for a connection or modification to the Distribution system

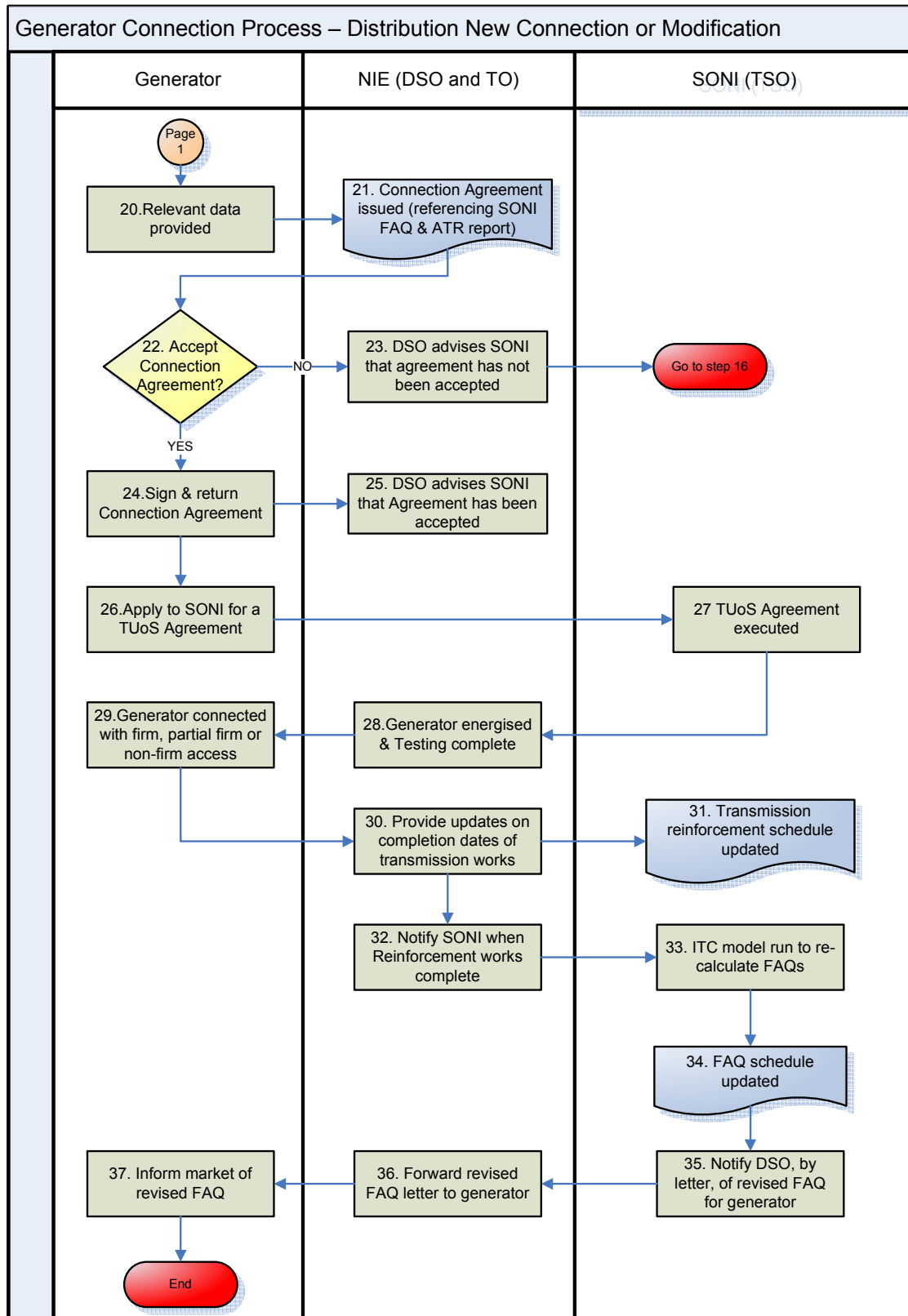


Figure 2: Process Steps for a new connection or modification to the Distribution system

Step #	Step	Description	Party Responsible	Timing
1	New connection application submitted to DSO.	This step triggers the Generator Connection process. A generator wishing to connect to the distribution system, or modify an existing connection, submits a connection application to the DSO, following planning permission approval for the connection.	Generator	At generator's discretion after receipt of planning approval
2	DSO (NIE) forwards the connection application to SONI	The DSO (NIE) will pass details of the application to SONI for the purposes of calculation the FAQ for the connection and assessing any necessary transmission works that are required in order to provide full firm transmission access.	DSO	Within 2 business days of receipt of application
3	Application added to ITC list based on "Connection application date"	SONI add the new connection application to the ITC list. The order on the list is based on the connection application date.	SONI	Within 3 business days of receipt of application
4	ITC analysis conducted to calculate FAQ	SONI perform ITC analysis to calculate FAQ for the new connection application	SONI	Within 3 business days of receipt of application
5	Consider if transmission works are deemed necessary?	SONI consider if transmission reinforcements are necessary in order to provide the connection with FAQ equal to the MEC. <ul style="list-style-type: none"> • If Yes go to step 6 • If no go to step 7 	SONI	Within 3 business days of receipt of application
6	Construction Application/Offer process initiated	The TIA sets out details of the process in place whereby SONI submit a construction application to the TO (NIE) for works to the transmission system. This process will be followed when SONI deem that transmission reinforcements are necessary.	SONI	As set out in TIA
7	Inform NIE of this decision	If SONI feels additional transmission works are not necessary in order to provide the connection with FAQ equal to MEC then this decision will be communicated to NIE.	SONI	Within 5 business days of receipt of application

Step #	Step	Description	Party Responsible	Timing
8	Agree FAQ for the connection	SONI will provide NIE with the calculated FAQ that can be facilitated based on the existing network. This value is produced using the approved ITC methodology. This value will be agreed with NIE.	SONI/DSO	Within 5 business days of receipt of application
9	If FAQ is less than MEC, agree on associated transmission reinforcements (ATRs)	In the situation where full firm access cannot be granted SONI and the TO (NIE) will agree on the necessary transmission reinforcements that are required to provide the connection with FAQ equal to MEC. These required reinforcements are known as the Associated Transmission Reinforcements (ATRs). The ATRs are specific to each connection. SONI and NIE will also agree the expected dates when the ATRs are scheduled for completion according to NIE development plans.	SONI /TO	Within 80 days of connection application date (consistent with TIA timelines)
10	Prepare “SONI FAQ & ATR report” and provide to the DSO to forward to the Generator along with the Connection Offer	<p>SONI will prepare a “FAQ and ATR report” for each Generator connection. This report will detail the following:</p> <ol style="list-style-type: none"> 1. The FAQ for the connection, based on ITC calculations. 2. In the situation where full firm access cannot be granted it will detail the ATR’s required to allow the generator to have full firm access equal to MEC. 3. Dates when the ATRs are scheduled for completion, according to NIE development plans 4. The FAQ schedule will be referenced. The FAQ schedule is a document which will be prepared and published by SONI, on the SONI website, and will outline up to date FAQs for all generator connections. <p>The” SONI FAQ & ATR Report” will be sent to the DSO to forward to the connecting generator along with the Connection Offer. Both the Connection Offer and the Connection Agreement will make reference to the “SONI FAQ and ATR report”.</p>	SONI	On completion of step 9.
11	Provide a copy of recent GOR report to DSO	SONI will provide the DSO (NIE) with a copy of the most recent GOR report which will also be forwarded to the generator along with the Connection Offer.	SONI	Within 3 business days of receipt of application

Step #	Step	Description	Party Responsible	Timing
12	Issue connection Offer, “SONI FAQ & ATR Report” and GOR Report	The DSO (NIE) will issue a Connection Offer for the connection. The “SONI FAQ & ATR Report” will form part of the connection Offer as it will be referenced in the Connection Offer and will be forwarded to the generator, by the DSO, along with the Connection Offer. A copy of the GOR report will be issued along with the Connection Offer.	DSO	As set out in DSO licence
13	Receive Connection Offer, “SONI FAQ & ATR Report” & GOR report	The generator receives the documents described in step 12.	Generator	
14	Accept Connection offer?	The generator assesses the Connection Offer. The offer is valid for 90 days from issue. If it is not accepted in this time the FAQ will be re-allocated in the next ITC study. <ul style="list-style-type: none"> • If the answer is No go to step 15 • If the answer is Yes go to step 17 	Generator	As detailed in the Connection Offer
15	DSO (NIE) advises SONI offer has not been accepted	When a Connection Offer is not accepted within the validity period of 90 days from issue, the DSO (NIE) will inform SONI that the offer is no longer valid	DSO	ASAP or 91 days after offer issue date
16	FAQ re-allocated in next ITC run	If SONI has been advised that a Connection Offer has not been accepted within the validity period this connection application will be removed from the ITC model and the FAQ will be re-allocated in the next ITC study. In this situation the connection process ends.	SONI	91 days after offer issue date
17	Sign & return Connection Offer & GOR report	When a generator accepts an offer the Connection Offer document will be signed and returned within 90 days of issue. The GOR report will also be signed and returned to NIE	Generator	As set out in Connection Offer
18	DSO (NIE) advises SONI offer has been accepted	The DSO (NIE) will advise SONI when a party accepts a Connection Offer.	DSO	Within 1 day of Connection Offer acceptance
19	FAQ schedule updated	SONI will update the FAQ schedule which is available on the SONI website to confirm that FAQ that is allocated to a connecting generator.	SONI	Within 3 business days of acceptance

Step #	Step	Description	Party Responsible	Timing
20	Relevant data provided	Connecting Generator provides all relevant data that is required in order for the DSO to issue a Connection Agreement.	Generator	As outlined in Connection Offer
21	Connection Agreement issued (referencing "SONI FAQ & ATR report")	The DSO (NIE) will issue a Connection Agreement to the generator which will refer to the "SONI FAQ & ATR report".	DSO	As outlined in Connection Offer
22	Accept Connection Agreement?	<p>The generator decides whether to accept the connection agreement.</p> <ul style="list-style-type: none"> • If Yes go to step 23 • If not the connection process as detailed cannot be completed. Depending on the circumstances that are preventing the generator from accepting the agreement, it may be necessary to apply actions 15 and 16. 	Generator	As outlined in Connection Agreement
23	DSO advises SONI that agreement has not been accepted	When a connection Agreement is not accepted within the validity period, the DSO (NIE) will inform SONI that the Agreement is no longer valid	DSO	As outlined in Connection Agreement
24	Sign & return Connection Agreement	The generator signs and returns the Connection Agreement to DSO (NIE).	Generator	As outlined in Connection Agreement
25	DSO advises SONI that Connection Agreement accepted	The DSO (NIE) will advise SONI when a party accepts a connection Agreement.	DSO	Within 1 day of Connection Agreement acceptance
26	Apply to SONI for a TUoS Agreement	The generator must apply to SONI for a TUoS offer. This application can be made any time following submission of the connection application.	Generator	ASAP after submitting a connection application
27	TUoS Agreement executed	SONI and the generator enter into a TUoS agreement. The TUoS agreement will also make reference to the FAQ schedule.	SONI	ASAP

Step #	Step	Description	Party Responsible	Timing
28	Generator energised & Testing complete	NIE will complete necessary testing and energise the generator	DSO	As agreed
29	Generator connected with firm, partial firm or non-firm access	The generator may have firm access, or partial firm access and the remainder with non-firm access or all non-firm access to the transmission system until reinforcements are complete. The generator is responsible for informing the market of the FAQ that has been allocated to it.		As agreed
30	Provide updates on completion dates of transmission works	If the completion of an associated transmission reinforcement (ATR) is delayed, the TO (NIE) will provide an update of the scheduled completion time to SONI so that the Transmission Reinforcement scheduled can be updated and the generator can be made aware of the revised scheduled completion time.	TO	When information becomes available
31	Transmission reinforcement schedule updated	SONI will update the transmission reinforcement schedule as necessary following step 28.	SONI	When information becomes available
32	Notify SONI when Reinforcement works complete	As transmission reinforcements are complete the TO (NIE) will inform SONI so that FAQ can be increased as soon as possible	TO	Within 2 days of completion of reinforcement
33	ITC model run to re-calculate FAQs	When an ATR has been complete SONI will recalculate FAQs so that any FAQ can be increased.	SONI	Within 3 business days of notification
34	FAQ schedule updated	SONI will update the published FAQ schedule with revised FAQs.	SONI	Within 3 business days of notification
35	Notify DSO, by letter, of revised FAQ for generator	SONI will inform the DSO (NIE) in writing of the revised FAQ for any generator connections. This formal notification will be forwarded to the generator by the DSO.	SONI	Within 3 business days of notification

Step #	Step	Description	Party Responsible	Timing
36	Forward revised FAQ letter to generator	The DSO will forward the letter from SONI, outlining the revised FAQ, to the generator. This notification of updated FAQ forms part of the overall "Connection Agreement Package". When a generator holds an executed Connection agreement <u>and</u> a formal letter of notification that all ATRs have been complete and FAQ is equal to MEC, this party has then full firm access to the transmission system.	DSO	Within 3 business days of notification
37	Inform market of revised FAQ	The generator must inform the market of the new FAQ and its effective date.	Generator	ASAP
	End			

All timings stated are indicative and will have to be formally agreed by NIE and SONI for inclusion in the TIA

Figure 3: Revised Information flow for a connection to the distribution system

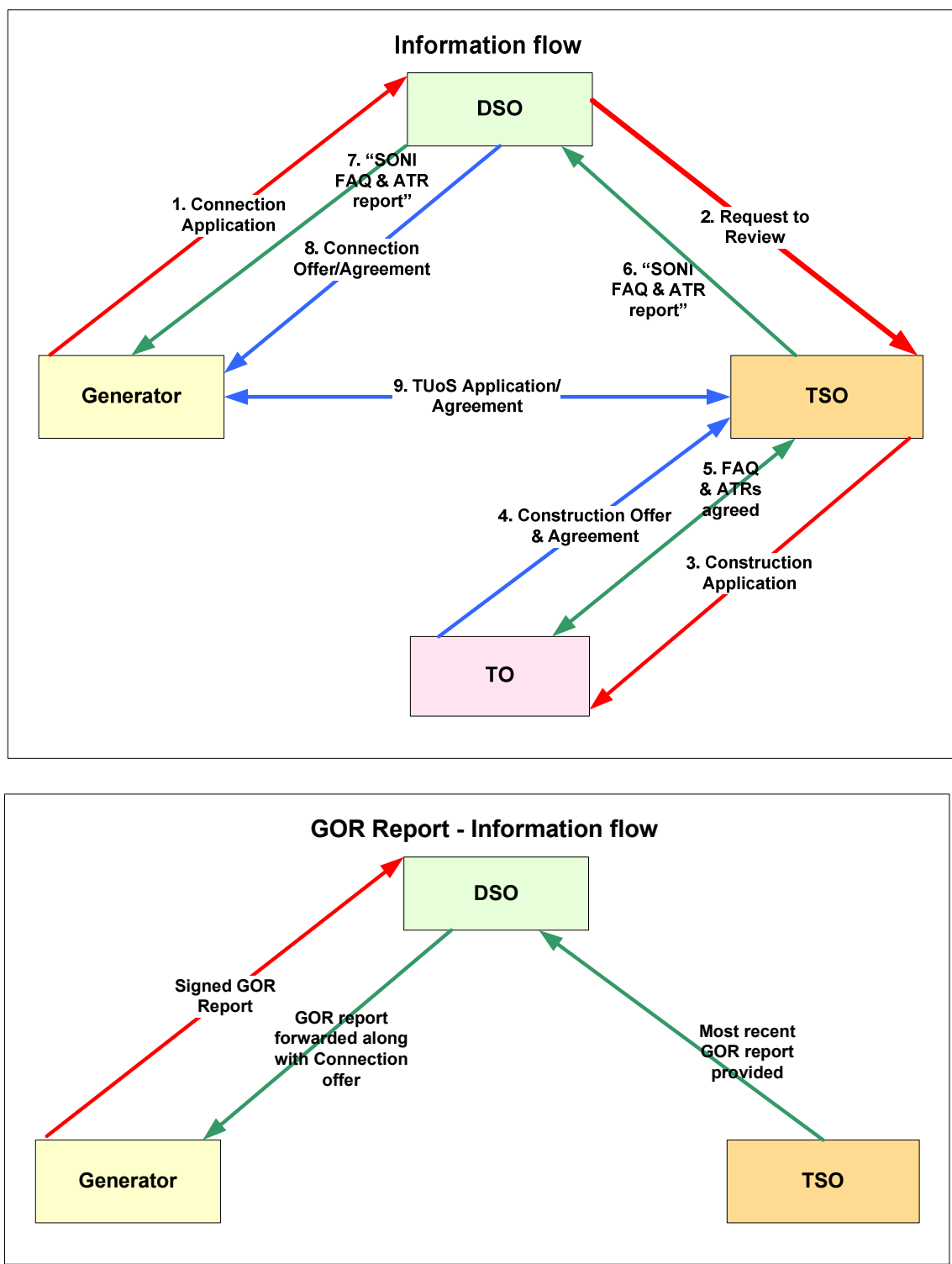


Figure 4: Flowchart for a new connection or modification to the Transmission system

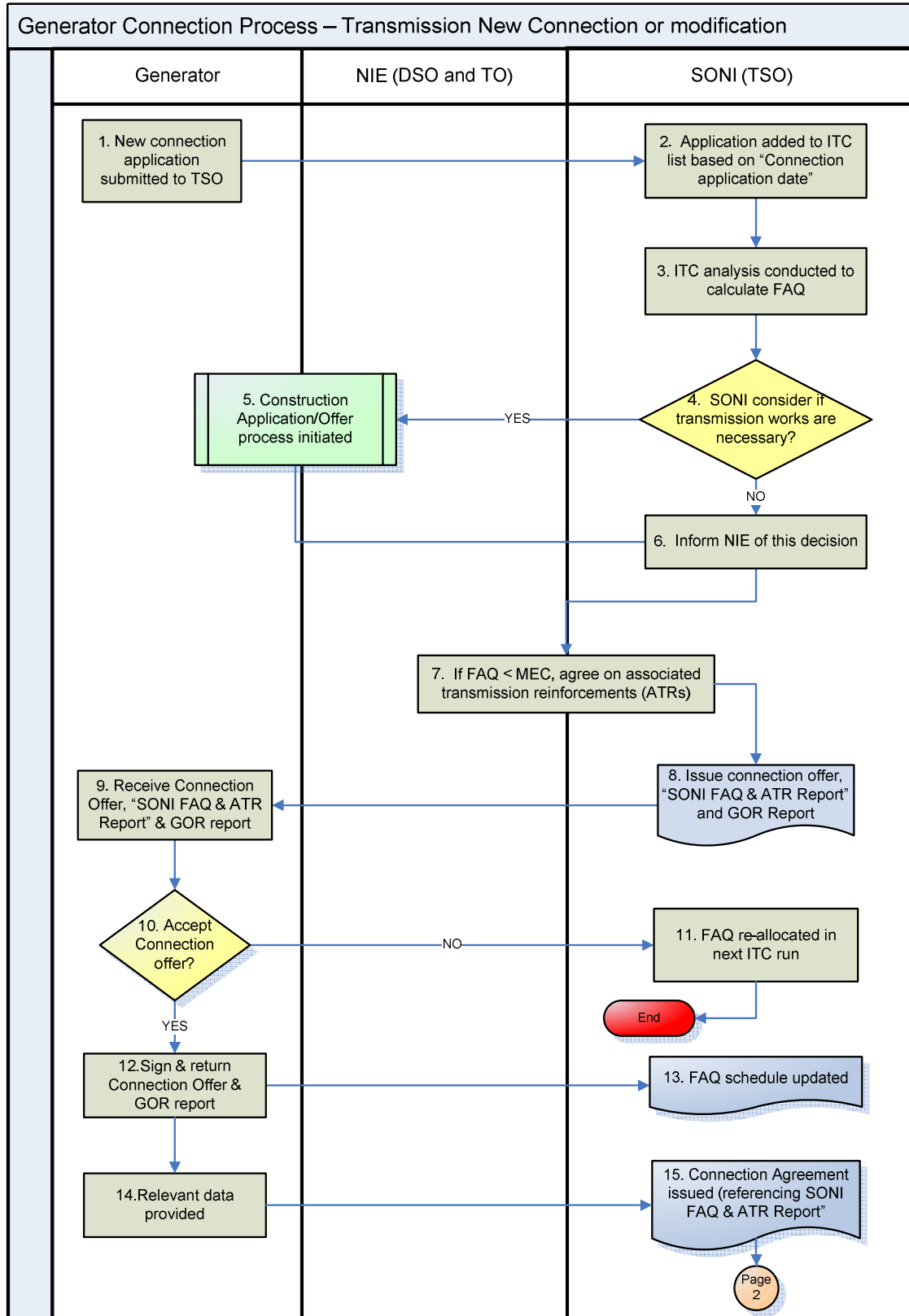


Figure 4 Continued: Flowchart for a new connection or modification to the Transmission system

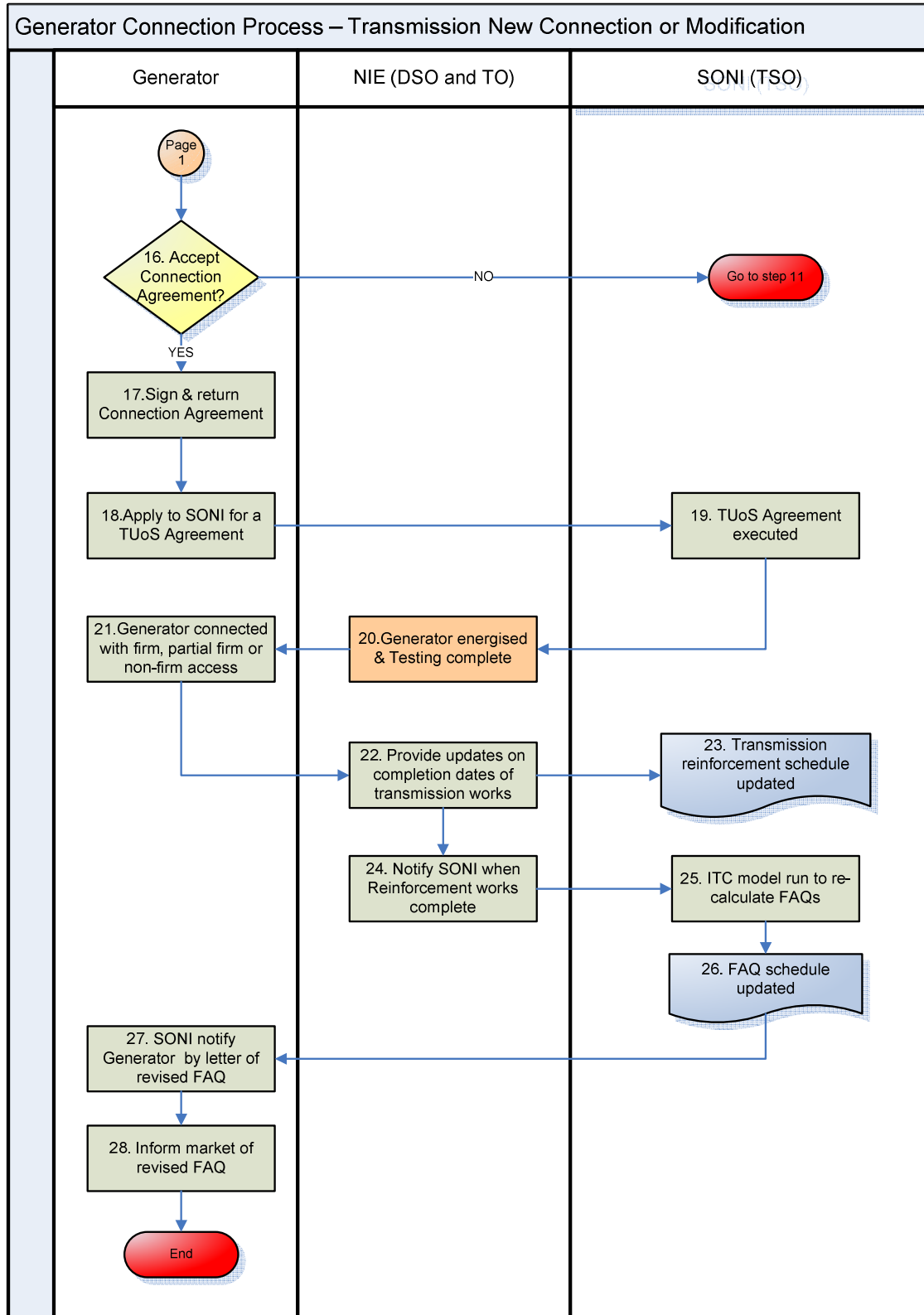


Figure 5: Process Steps for a connection or modification to the Transmission System

Step #	Step	Description	Party Responsible	Timing
1	New connection application submitted to TSO	A generator wishing to connect to the transmission system submits a connection application to the TSO following planning permission approval for the connection.	Generator	As soon as possible after receipt of planning approval
2	Application added to ITC list based on "Connection application date"	SONI adds the new connection application to the ITC list. The order on the list is based on the connection application date which is the date on which the TSO receive the connection application.	SONI (TSO)	Within 3 business days of receipt of application
3	ITC analysis conducted to calculate FAQ	SONI will calculate the FAQ that can be facilitated based on the existing network, using ITC methodology. This value will be included in the "SONI FAQ & ATR Report" that is issued to the generator along with the Connection offer.	SONI	Within 3 business days of receipt of application
4	Consider if transmission works are deemed necessary?	SONI will consider if transmission reinforcements are necessary in order to provide the connection with FAQ equal to the MEC. <ul style="list-style-type: none"> • If Yes go to step 5 • If no go to step 6 	SONI	Within 3 business days of receipt of application
5	Construction Application/Offer process initiated	The TIA sets out details of the process in place whereby SONI submit a construction application to the TO (NIE) for works to the transmission system. This process will be followed when SONI deem that transmission reinforcements are necessary.	SONI/NIE	As set out in TIA
6	Inform NIE of this decision	If SONI feels additional transmission works are not necessary in order to provide the connection with FAQ equal to MEC then this decision will be communicated to TO.	SONI	Within 5 business days of receipt of application

Step #	Step	Description	Party Responsible	Timing
7	If FAQ is less than MEC, agree on associated transmission reinforcements (ATRs)	In the situation where full firm access cannot be granted SONI and the TO will agree on the necessary transmission reinforcements that are required to provide the connection with FAQ equal to MEC, these are known as Associated Transmission Reinforcements (ATRs).	SONI and TO	Within 80 days of connection application date (consistent with TIA timelines)
8	Issue connection offer, "SONI FAQ & ATR Report" and GOR Report	<p>SONI will make a Connection offer to the generator. In addition, SONI will prepare a report detailing the FAQ that is available for the connection. In the situation where FAQ is less than the MEC this report will outline the specific ATRs necessary for the connection to have full firm access and when these are scheduled for completion, according to NIE development plans. This report, known as the "SONI FAQ & ATR Report" will be given to the generator along with the Connection Offer. The "SONI FAQ & ATR Report" will also explain the FAQ schedule and how this will be updated as FAQs change. The "SONI FAQ & ATR report" and the FAQ schedule form part of the Connection Agreement package.</p> <p>A copy of the GOR report will be issued along with the connection offer. A connecting generator will sign the GOR report and return with the connection offer to acknowledge receipt of this data.</p>	SONI	As set out in TSO licence
9	Receive Connection Offer, "SONI FAQ & ATR Report" & GOR report	The generator receives the documents described in step 8.	Generator	
10	Accept Connection offer?	<p>The generator assesses the connection offer and either accepts this or declines this. The offer is valid for 90 days from issue. If it is not accepted in this time it becomes invalid and the FAQ will be re-allocated in the next ITC study.</p> <ul style="list-style-type: none"> • If the answer is No go to step 11 • If the answer is Yes go to step 12 	Generator	As detailed in Connection offer

Step #	Step	Description	Party Responsible	Timing
11	FAQ re-allocated in next ITC run	If a connection offer has not been accepted and it has lapsed the connection application will be removed from the ITC model and the FAQ will be re-allocated in the next ITC study.	SONI	91 days after offer issue date
12	Sign & return Connection Offer & GOR report	When a generator accepts an offer the connection offer document will be signed and returned within 90 days of issue. The GOR report will also be signed and returned to SONI.	Generator	As set out in Connection offer
13	FAQ schedule updated	SONI will update the FAQ schedule which is available on the SONI website to confirm the FAQ that is allocated to a connecting generator.	SONI	Within 3 business days of acceptance
14	Relevant data provided	The connecting Generator provides SONI with all relevant data required to issue a Connection Agreement.	Generator	As outlined in connection offer
15	Connection Agreement issued	SONI issue a Connection Agreement to the generator which will refer to the "SONI FAQ & ATR report" and the FAQ schedule. The FAQ schedule is a document maintained and published by SONI on the SONI website and will outline all up to date FAQs.	SONI	As outlined in Connection Offer
16	Accept Connection Agreement?	The generator decides if it will accept the connection agreement. <ul style="list-style-type: none"> • If Yes go to step 17 • If not the connection process cannot be completed, go to step 11. 	Generator	As outlined in Connection Agreement
17	Sign & return Connection Agreement	The generator signs and returns the Connection Agreement.	Generator	As outlined in Connection Agreement
18	Apply to SONI for a TUoS Agreement	The generator must apply to SONI for a TUoS offer. This application can be made any time following the connection application.	Generator	ASAP after submitting a connection application
19	TUoS Agreement executed	SONI and the generator enter into a TUoS agreement. The TUoS agreement will also reference the "SONI FAQ & ATR Report" and the FAQ schedule.	SONI	ASAP
20	Generator energised & Testing complete	SONI / NIE will complete necessary testing and energise the generator	SONI	As agreed

Step #	Step	Description	Party Responsible	Timing
21	Generator connected with firm, partial firm or non-firm access	The generator may have firm access, partial firm access (some firm and some non-firm capacity) or non-firm access to the transmission system until reinforcements are complete. The generator is responsible for informing the market of the FAQ that has been allocated to it.		As agreed
22	Provide updates on completion dates of transmission works	If the completion of an associated transmission reinforcement (ATR) is delayed, TO will provide an update of the scheduled completion time to SONI so that the Transmission Reinforcement schedule can be updated and the generator can be made aware of the revised scheduled completion time.	TO	When information becomes available
23	Transmission reinforcement schedule updated	SONI will update the transmission reinforcement schedule as necessary following step 22.	SONI	When information becomes available
24	Notify SONI when Reinforcement works complete	As transmission reinforcements are complete NIE will inform SONI so that FAQ for a connection can be increased as soon as possible	NIE	Within 2 days of completion of reinforcement
25	ITC model run to recalculate FAQs	When an ATR has been complete SONI will recalculate FAQs so that any FAQ can be increased.	SONI	Within 3 business days of notification
26	FAQ schedule updated	SONI will update the published FAQ schedule with revised FAQs	SONI	Within 3 business days of notification
27	Notify Generator by letter of revised FAQ	SONI will inform the generator in writing of the revised FAQs. When a generator holds an executed Connection agreement and a formal letter of notification from the System operator that all ATRs have been complete and FAQ is equal to MEC, this party has then full firm access to the transmission system.	SONI	Within 3 business days of notification from SONI
28	Inform market of revised FAQ	The generator must inform the market of the new FAQ and its effective date.	Generator	ASAP

All timings stated are indicative and will have to be formally agreed by NIE and SONI for inclusion in the TIA

Please note

SONI do not believe it is appropriate at this stage to conclude the discussions regarding generator output reductions as there is still a significant amount of ongoing consideration by both Industry and Regulator. These issues will be subject to further consultation responding to issues raised by respondents in the Oct '11 consultation paper and to propose a way forward. SONI believe it is essential to deliver reports on Generator Output Reductions, in conjunction with EirGrid, on an all-island basis once all the decisions regarding relevant policies have been formally agreed and implemented.