# **Generator Connection Process**

## Allocation of Transmission FAQ in N Ireland & ITC Methodology to determine FAQs

Consenting requirements in advance of application for offshore generation connection

**Decision Paper** 

8 October 2014





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## 1 Introduction

In March 2013, the Utility Regulator Northern Ireland (UREGNI) issued a consultation paper addressing the "Connection Arrangements for Offshore Generation" in Northern Ireland (NI). This was still on-going at the time of publication of the July 2013 SONI/NIE Decision Paper on "Generator Connection Process; Allocation of Transmission FAQs in N Ireland & ITC Methodology to determine FAQs". In this July 2013 paper, SONI and NIE stated that the outcome of the UREGNI consultation and associated decisions would be incorporated into the connection and FAQ allocation process at a later date.

Following the UREGNI March 2013 offshore consultation, UREGNI published a "Next Steps" paper in December 2013 and a subsequent "Clarification Notice" in January 2014. However, this Next Steps paper did not fully address the question of whether Connection Applications for offshore developments should be subject to the same consenting requirements as presently apply to onshore developments.

In consideration of these issues SONI and NIE believe it is fundamentally important to retain the existing arrangements for onshore projects<sup>1</sup> in Northern Ireland as they have facilitated the establishment of a well-defined standalone pipeline of projects, the implementation of a fully transparent FAQ allocation process and the provision of clarity around the need for transmission reinforcement and infrastructure development.

Under the connections framework in Northern Ireland, SONI and NIE are responsible for ensuring generation is connected in an efficient and coordinated manner, without undue discrimination in favour of or against any party. In determining the criteria that a connection application for offshore generation should meet, we have considered:

- Our statutory and licence obligations;
- The criteria that onshore connection applications are required to meet;
- The differences between the permitting and consenting regime for onshore and offshore generation.

In April 2014, SONI and NIE issued a Consultation Paper entitled, "Consultation Paper on consenting requirements in advance of application for offshore generation connection." In this consultation SONI and NIE considered whether Connection Applications from offshore developments should be subject to the same consenting requirements as apply to onshore developments and asked the following question,

### "Do you consider that an Exclusivity Agreement and an Agreement for Lease from the Crown Estate alone should be the required level of consent to allow offshore developers to submit a Connection Application?"

SONI and NIE asked interested parties to respond and comment on the above question. This decision paper provides an overview of the submissions received and outlines SONI and

<sup>&</sup>lt;sup>1</sup> For information, "projects" refers only to generation projects.

NIE's response to the issues raised. This document also outlines SONI and NIE's decision having taken account of the comments received. The decision aims to establish reasonable levels of commitment required by SONI and NIE to progress Connection Applications for different categories of generation and include the applicant in the Incremental Transfer Capacity (ITC) Process<sup>2</sup>.

## 2 Responses

SONI and NIE would like to take this opportunity to thank respondents for participating in this consultation. The comments received were informative and SONI and NIE have given careful consideration to these in preparation of this Decision Paper. Eleven submissions were received in response to the consultation, one of which was marked confidential. The ten non-confidential responses can be found on the SONI website<sup>3</sup>. The non-confidential responses were submitted by the following parties:

- ABO Wind
- DW Consultancy Ltd
- ESB
- Fairhead Tidal Ltd
- First Flight Wind Ltd
- Gaelectric Holdings Ltd
- NIRIG
- RES UK & Ireland Limited
- SSE
- Tidal Ventures Ltd

The following sections provide a summary of respondents' views, an overview of the key messages contained in the responses and SONI and NIE's subsequent responses.

## 2.1 Summary

Four respondents disagreed with the proposal that an Exclusivity Agreement and an Agreement for Lease should be the required level of consents for a connection application for offshore projects to be accepted, maintaining that this would be discriminatory.

Seven respondents agreed in principle with the proposal, five of which suggested an amendment to the proposal as worded in the consultation paper. The amendment suggested by five respondents was that <u>either</u> an Exclusivity Agreement <u>or</u> an Agreement for Lease from The Crown Estate alone should be the required level of consent for a connection application for offshore projects to be accepted.

Three respondents differentiated between the requirements for an offshore generation project to be accepted by SONI and NIE and the requirements for an offshore generation project to enter into the ITC Process. Two of these respondents did not agree that this

<sup>&</sup>lt;sup>2</sup> The ITC Process is sometimes referred to as the FAQ Process.

<sup>&</sup>lt;sup>3</sup> <u>http://www.soni.ltd.uk/InformationCentre/Publications/</u>

proposal should follow through to the ITC Process and one of these respondents was unclear as to whether this proposal should follow through to the ITC Process.

## 2.2 Clarification of Terms

For the avoidance of doubt, SONI/NIE would like to clarify:

- the use of the terms "offshore developments" and "offshore developers" covers all generation types not situated on land
- the word *"submit"* should be interpreted as an application which is acceptable by SONI/NIE to initiate the Connection Application process

## 2.3 Decision Making Responsibility

Some parties stated that UREGNI should make the decision regarding the criteria for SONI/NIE to accept and progress a Connection Application.

#### **SONI/NIE Response**

UREGNI consider that this decision is within SONI and NIE's remit. UREGNI is responsible for approving the methodology for calculating connection charges and for resolving any associated disputes. Substantial changes to the legal framework underpinning the connection of generation and demand customers to the network would have to be made to add this decision making responsibility to their vires. The current regulatory framework requires SONI and NIE to make connections to the network in an efficient, economic and coordinated manner, without any undue discrimination in favour of or against any party.

## 2.4 Existing Consenting Arrangements

One respondent agreed with the SONI/NIE view that the existing consenting arrangements in Northern Ireland work well. One respondent disagreed that the existing process works well and questioned its success.

One respondent expressed that they would be opposed to any retrospective changes to the existing connection application and ITC processes.

It was also noted that a stable and investible framework for development and operation of all projects was essential.

#### **SONI/NIE Response**

SONI and NIE wish to confirm the view presented in the consultation that the existing consenting arrangements for onshore projects in Northern Ireland have worked well. A well-defined standalone pipeline of projects has been established, a fully transparent FAQ allocation process has been established and clarity around the need for infrastructure development has been provided resulting in some 19% of energy consumption in Northern Ireland now coming from renewable generation. Hence, SONI and NIE see no reason to move away from this position.

For the avoidance of doubt, SONI and NIE do not propose any retrospective changes to projects that are currently in the formal Connection Application and ITC Process as those projects will retain their position in the FAQ listing.

# 2.5 Level of Commitment afforded by an Exclusivity Agreement or an Agreement for Lease

The level of commitment provided by an Exclusivity Agreement or an Agreement for Lease was debated by several respondents. Four respondents have questioned the level of commitment from a developer provided by an Exclusivity Agreement or an Agreement for Lease from The Crown Estate.

One respondent stated that no evidence had been provided to suggest that the Crown Estate agreements provide a higher level of commitment to a project that had been granted an onshore land lease agreement. They explained that if the Crown Estate Agreements were to become eligible criteria for offshore projects that onshore land lease agreements should also be eligible consenting criteria for onshore projects.

Some respondents indicated that projects with agreements from The Crown Estate in Great Britain (GB) have subsequently dropped out and so these agreements do not show a high level of commitment from developers.

One respondent commented that the terms of The Crown Estate agreements sufficiently demonstrate adequate commitment to the project at that point provided that further commitment is required as the projects moves forward.

Two respondents have articulated how an Exclusivity Agreement or an Agreement for Lease from The Crown Estate shows a significant level of commitment by the offshore developer. The respondents have explained that for the Northern Ireland leasing round, the award of an Exclusivity Agreement or an Agreement for Lease followed a full competitive tendering process involved considerable work by each prospective tenderer. They argued that this shows significant commitment by the developers and that the financial commitment by an offshore developer in this process is similar to the financial commitment by an onshore developer in the planning process. One respondent also explained that under the Crown Estate Agreement for Lease terms that certain milestones are to be met by the developer to ensure the project is progressing appropriately.

In addition, one respondent commented that the tender process followed the Strategic Energy Assessment (SEA) and the Offshore Renewable Energy Strategic Action undertaken by Department of Enterprise Trade and Investment (DETI) and that this plan led approach prevents the risk of speculative projects.

#### **SONI/NIE Response**

The Crown Estate agreements deliver the following to a developer:<sup>4</sup>

- An Exclusivity Agreement gives the developer a contractual commitment from The Crown Estate that it will not permit any other developer to use the specified area of seabed or seabed rights for the duration of the Exclusivity Agreement without the developer's consent<sup>5</sup>. This allows the developer to undertake environmental and engineering studies to identify a project, following which a developer may apply to The Crown Estate for an Agreement for Lease to facilitate the further development of that project.
- An Agreement for Lease enables the developer to undertake all the appropriate technical and environmental studies at a project level and provides a platform to bring the project forward for statutory consenting within the planning system.

These agreements are normally entered into following an objective competitive tendering process, run by The Crown Estate. As part of the Agreement for Lease, the developer is granted an option over the identified development site to allow it to (among other things) obtain the necessary statutory consents for the project, following which they will have a defined period of time to exercise the option to be granted a lease and construct the project. Concurrently, the developer must typically meet development milestones set out by The Crown Estate to enable both a timely build out phase and to enable The Crown Estate to meet its statutory requirements to optimise the management of the seabed.

Should the developer decide not to take the project forward then The Crown Estate will take into account relevant information in their decision as to whether to offer the site by way of a competitive process to another developer. Recognising the nature of development funding, The Crown Estate's agreements usually contain "change of control" provisions that allow new investors to be brought on board with the consent of The Crown Estate. This is often essential in providing the capital necessary to build a project.

For these reasons, SONI and NIE judge that for the purposes of applying for a grid connection, the exclusivity granted by an Exclusivity Agreement or Agreement for Lease from The Crown Estate for offshore projects is an equivalent level of commitment to the Mineral Prospecting Licence for CAES plants and Planning Permission for onshore generation.

<sup>&</sup>lt;sup>4</sup> <u>www.thecrownestate.co.uk</u>

<sup>&</sup>lt;sup>5</sup> Subject, of course, to The Crown Estate's unfettered ability to do all things reasonably required to discharge its statutory obligations

## 2.6 Attaining a Marine Licence

#### Evidence to suggest Marine Licensing process is more onerous

Respondents raised issue with the SONI/NIE view that the securing of a Marine Licence is likely to be much more onerous than the granting of planning permission for an onshore wind farm.

Respondents noted that the planning process for large onshore projects can also be difficult indicating that if the level of difficulty in attaining planning permission were to become the eligibility criteria for connection application rather than the attainment planning permission itself, it would be unfair to limit this to offshore developments. One respondent noted that if the scale of the project is what is making the planning process for offshore developments more onerous, then this should not be limited to offshore developments.

One respondent stated that the marine licence is not a comparable consenting requirement to the onshore planning permission consenting requirement.

Four respondents questioned the evidence provided by SONI/NIE to come to the conclusion that the marine licence was more onerous that onshore planning permission. There is no evidence that the timeframes involved in attaining a marine licence are disproportionately higher than planning permission for onshore projects.

#### **Marine Licence process in Northern Ireland**

Some respondents recognised that the process to obtain a Marine Licence in Northern Ireland is being reviewed and that changing the consenting requirements for Connection Application prior to this change could be a premature decision. One respondent commented that although this is the case there is a lot of uncertainty with the process as it has not been tested.

One respondent noted that there was more certainty around onshore planning permission in Northern Ireland.

One respondent commented that although there was no experience in Northern Ireland of an offshore renewable generation projects going through the marine licensing process that the uncertainty around this was not a credible justification.

#### Certainty around grid connections and coordinated onshore and offshore consents

One respondent was of the view that it is necessary for offshore developers to have the opportunity to submit a Connection Application prior to full planning consent as the design of an offshore development and the Environmental Impact Assessment (EIA) both require a full understanding of the complete connection arrangements prior to the planning application being submitted. If the offshore development was required to have full planning permission before submitting a Connection Application, the consenting envelope could be very large, making the process longer and more expensive than needed.

#### Consenting costs

Some respondents explained that the costs associated with the offshore consenting process may be larger than for an onshore wind farm, but that this in itself does not make the process more onerous, just more expensive. Two respondents also commented that when considering the costs of planning consent between onshore and offshore developments that the scale of the developments is important. One respondent argued that the cost per MW for planning consents for an onshore wind farm is likely to be higher than the cost per MW for the planning consents for an offshore development.

One respondent explained that the cost of environmental assessments and other surveys for an offshore development are significantly higher than for an equivalent onshore development due to the nature of the harsh environment, weather conditions having the potential to cause delays and limited availability of specialist vessels and resources to carry out the work.

#### Feasibility Study Option

One respondent suggested that offshore developers could avail of the Feasibility Study facility offered by both SONI and NIE outside of the formal Connection Application process so that grid connection options can be assessed and this information used in the planning process.

#### SONI/NIE Response

The Department of Environment (DoE) Marine Division carries out the marine licensing function under the Marine and Coastal Access Act (MCAA) Part 4 in all Northern Ireland Inshore Waters (i.e. from the mean high water spring tide out to 12 nautical miles).

Offshore projects need to make 3 applications:

- 1. Apply to the DoE Planning for Planning Permission for both the onshore elements of the project down to the low water mark.
- 2. Apply to DoE Marine Division for a marine licence for works from the Mean High Water Spring Tide out to 12 nautical miles.
- 3. Apply to DETI for the consent required for construction of a generating station as per Article 39 of The Electricity (Northern Ireland) Order 1992.

The offshore renewable projects will be screened under the relevant consenting Regulations to determine whether or not an Environmental Impact Assessment (EIA) is required. The requirement for an EIA depends on the project type, scale, location and potential impact on the environment. There are 3 stages in the EIA:

- Screening
- Scoping
- Environmental statement review and submission

The Marine Licensing Guidance Document for Environmental Impact Assessment under Part 4 of the Marine and Coastal Access Act (MCAA) August 2012 states that, "A particular marine licensing proposal should not be considered in isolation if, in reality, it is properly to be regarded as an integral part of a more substantial plan or project. In such cases, the need for EIA must be considered in respect of all of the proposed works or activities." It also states that, "Ultimately it is a matter of judgement for the competent authority, in most cases DoE, to decide whether one or more separate projects should be considered together to determine whether an EIA is required."

It is at the screening stage that the competent authority decides whether or not an EIA is required. The current offshore project developers in Northern Ireland have been through the EIA screening stage for the offshore elements of the projects and DoE Marine Division and DETI have confirmed that the projects require an EIA.

The DoE have advised SONI/NIE that in line with the spirit of the EIA Directive, however, the totality of a project must be considered in any consenting decision and therefore the project as a whole will be considered in any consenting decision made by the competent authority.

As this is the case it is reasonable to say that certainty around grid connection location is a necessary element in this licensing and consenting process.

SONI and NIE conclude that the consenting process for an offshore project is therefore unique.

SONI and NIE are aware that DETI and the DoE have a Memorandum of Understanding which includes provisions to streamline the multiple consents processes and there are efforts being made in this area. SONI and NIE acknowledge that the marine licensing process in Northern Ireland has been in place since 2011 and that there is a system in place to manage this. However, a marine licence for the development of an offshore renewable project in Northern Ireland has not yet been awarded and therefore there are no existing test cases in Northern Ireland. This gives rise to uncertainty around this process for any prospective offshore developers. The onshore planning permission process has been fully tested in Northern Ireland and therefore there is much more certainty around this process for prospective onshore developers.

There is experience in Great Britain (GB) of offshore projects going through the marine licensing and associated consenting processes, however the consenting regimes in England and Wales and in Scotland are both different to the consenting regimes in Northern Ireland.

In addition, as per the Utility Regulator's December 2013 Next Steps Paper on the "Connection Arrangements for Offshore Generation," the licensing framework for offshore connection assets and circuitry in Northern Ireland differs from that in GB.

For these reasons it is not possible for SONI and NIE to carry out an appropriate comparison between the consenting processes for onshore and offshore projects based on actual experience. SONI and NIE would remind all developers, both onshore and offshore, of the availability of the Feasibility Study option in the early stages of their project. The Feasibility Studies aim to provide the developer with indicative electrical connection options for their project. It is important to highlight that while the Feasibility Studies are useful, they do not constitute a connection offer and it will not provide detailed analysis of route selection for the connection options studied. Therefore even with the results from such a study, it will still be difficult for a developer to seek Planning Permission as the electrical connection option will not have been decided, the route will not have been selected and detailed design of both will not have been carried out.

SONI and NIE would acknowledge that the planning process for large onshore projects can be difficult and costly and did not intend to understate this or to imply that the quantum of difficulty and cost should, on their own, be determining factors. They are however considerations that inform an overall judgement.

With no previous experience of large scale offshore projects in Northern Ireland, it is difficult to comment on the cost of such a project securing a Marine Licence therefore SONI/NIE would like to clarify that the rationale behind the decision is not one of cost borne by the developer but rather ensuring that equivalent levels of consents are required by all connection projects whist avoiding placing unacceptable barriers on offshore developers to entering into the Connection Application process.

### 2.7 Point at which SONI/NIE start to work on connection design

The consultation made reference to the possibility that, to enable the connection of offshore projects, very significant network developments could be required and how delaying the point at which SONI/NIE start the connection design could place undue delays on the progression of the offshore project. Some respondents commented that significant network developments are often required to enable the connection of onshore projects and these network developments can equally cause delays for onshore projects.

Some respondents commented that if the scale of network development required for a connection was to become a factor in deciding the eligible criteria for offshore projects then onshore projects should be able to avail of this as well.

#### **SONI/NIE Response**

SONI and NIE are obliged through their Licences to progress a Connection Application in a non-discriminatory manner. Going forward it is anticipated that the vast majority of onshore generation will be considered under the wind farm cluster arrangements and therefore actual work on the connection design commences for wind farms on the basis of planning application submissions, not secured planning permissions. For a generator still in the planning approval stage, a factor of 0.8 is applied to the capacity that they have submitted for, clusters are scoped out and pre-construction activities will commence. This happens before the wind farms have secured planning permission and submitted a Connection Application. Therefore for many onshore wind farm connections the point at which SONI/NIE start to plan and work towards the physical connection of these wind farms to the

transmission network (i.e. cluster route selection, environmental studies, land access, applying for planning permission etc.) can commence well in advance of applicant's connection application to NIE/SONI. The cluster methodology as approved by the UREGNI provides for this.

In addition, present cluster arrangements do not preclude the commencement of physical work associated with the transmission aspects of connection to the network before generators submit their connection application or have made full financial contribution towards the establishment of the shared connection assets. This work is subsidised by the establishment of a Regulatory Asset Base (RAB) to support the unfunded element of the transmission infrastructure. This does not only include works associated with clusters but other network developments such as the Medium Term Plan to strengthen 110kV corridors.

SONI and NIE recognise that if we accept a connection application based on an Exclusivity Agreement or an Agreement for Lease from The Crown Estate this is not equivalent to the level of support the onshore wind farms can receive through the cluster arrangements, but remains pragmatic to the circumstances and the level of certainty of many onshore generators seeking connection and does not represent undue discrimination against the offshore developers. Hence SONI and NIE are complying with their licence obligations in this regard.

#### 2.8 Link between Connection Application and the ITC Process

One respondent suggested that the link between the Connection Application and ITC Listing should be broken for offshore generation only so as to allow the connection design to progress with entry into the ITC Listing only granted when full planning permission is attained for the project.

Another respondent expressed the view that the Connection Application process and the ITC Process cannot be split. It was explained that if entry into the ITC Listing was not permitted on Connection Application date then "...it would be difficult to afford any degree of confidence to the connection offer because any subsequent FAQ calculation process might determine alternative connection arrangements as optimal, thus invalidating the conclusions set out in the original grid connection offer and rendering the consented connection arrangements."

#### **SONI/NIE Response**

SONI and NIE clarify that although the inherent link between the Connection Application Process and the ITC Process was not mentioned in the consultation, the intention was to maintain the link for all connections.

SONI and NIE believe that a Connection Offer is incomplete without FAQ information so that on receipt of the offer the customer has all the information required to enable them to either accept or reject the offer.

## 2.9 Hoarding FAQ

Some respondents believed that the proposed change to the Connection Application process and hence entry into the ITC Listing would allow offshore developers to effectively jump the FAQ queue and hoard firm access to the Northern Ireland transmission network. One respondent stated that there could be the potential for FAQ to become a commercial asset for the offshore developer, particularly if the generation capacity were to be relocated onshore.

Respondents also commented that the actual size of the offshore project is not established until survey and design works of the offshore project has been completed. It was also noted that the actual capacity of an onshore project is not certain until planning permission has been secured and that it is not unusual for the capacity to drop. It was also stated that the offshore developments could be speculatively booking grid capacity.

#### **SONI/NIE Response**

Whilst SONI accepts that the commitment to FAQ in advance of the securing of all permissions could lead to the FAQ not being exercised or used, it would not characterise this as "hoarding" of capacity to the disadvantage of others. Should any generator, even with all permissions, drop out of the connection process then the FAQ is available to other connecting parties. Also SONI and NIE consider that The Crown Estate, in granting an offshore project an Exclusivity Agreement or Agreement for Lease, will have conducted a level of diligence that provide assurance that such projects are not speculative to the extent as to challenge inclusion in the FAQ listing. SONI and NIE consider their proposal to represent an equivalent level of commitment as implied by the Mineral Prospecting Licence for CAES plants and Planning Permission for onshore generation and therefore offshore projects should also be permitted entry into the ITC Listing based on Application Date. No undue discrimination is applied in permitting offshore to enter the ITC Listing with an Exclusivity Agreement or Agreement for Lease from The Crown Estate therefore the offshore projects are attaining FAQ on an equivalent basis to other projects. In summary SONI and NIE consider that hoarding relates to speculative gaming of capacity and that this is not the case where parties have committed the considerable effort required to acquire the permissions described above.

## 2.10 FAQ Impact Analysis

A few respondents commented that in the absence of an assessment looking at the impact of permitting offshore projects to enter the ITC listing when they have attained an Exclusivity Agreement or an Agreement for Lease it is difficult to come to a firm conclusion on the proposal and in particular to decide whether the proposal will treat all generators on an equitable basis.

Another respondent believed that it is not necessary to carry out such an impact assessment before making a decision on this matter as the result would not change the rationale behind the decision on criteria required for offshore projects to progress and Connection Application.

#### **SONI/NIE Response**

SONI have carried out a study to assess the impact of projects with Crown Estate Agreements entering into the ITC Listing before projects that are currently progressing planning applications. In carrying out this study a number of assumptions were made to so that it would be possible to provide <u>indicative</u> results. Key assumptions are:

- The capacity of generation with connection applications submitted have been included in the FAQ listing for the assessment.
- The capacity of generation >5MW progressing planning applications in Northern Ireland totals 732MW
- The capacity of generation with agreements from The Crown Estate in Northern Ireland totals is estimated at 600MW
- Each project in planning was assumed to connect to the nearest existing or planned transmission node
- Each project with agreements from The Crown Estate was assumed to connect to one of the nodes explored in their respective Feasibility Studies
- Entry into the ITC Listing for the projects progressing planning applications was based on planning application date as connection applications have yet to be submitted
- ITC methodology and assumptions such as network build, demand, dispatches etc. all remain as per SONI's March 2013 Consultation Paper on the ITC methodology

It is important to bear in mind that FAQ is based on the transmission node to which a generator is connected. It is also important to recognise that once FAQ is awarded, for example, in year 2014, a generator will not lose this FAQ in subsequent years.

Scenarios	Results Show
Scenarios A and B Tests the effect of permitting both the offshore wind and tidal projects to enter the ITC Listing before the onshore projects in planning, where offshore wind enters the list before tidal.	There is a 2% reduction in FAQ allocated to onshore projects in planning in 2014 followed by a marginal increase in FAQ allocated to onshore projects in planning in subsequent years.
Scenarios C and D Tests the effect of permitting both the offshore wind and tidal projects to enter the ITC Listing before the onshore projects in planning, where tidal enters the list before offshore wind.	There is a 16% increase in FAQ allocated to onshore projects in planning in 2014 followed by a 20-22% reduction in FAQ allocated to onshore projects in planning in subsequent years.
Scenarios E and F Tests the effect of the tidal project only entering the ITC Listing before the onshore projects in planning.	There is no change in FAQ allocated to onshore projects in planning up to 2017 followed by a 7% reduction in FAQ allocated to onshore projects in planning in subsequent years.
Scenarios G and H Tests the effect the offshore wind project only entering the ITC Listing before the onshore projects in planning.	35% increase in FAQ allocated to onshore projects in planning in 2014 followed by marginal to no effect on FAQ allocated to onshore projects in planning in subsequent years

Table 1: Summary of scenarios and impact on FAQ allocated to onshore projects in planning

In summary, the impact of permitting the offshore projects to enter the ITC Listing before the onshore projects currently in planning on the FAQ allocated to onshore projects is very dependent on the order in which in each individual project enters the list and also the transmission node to which a project connects.

The results indicate that the impact on the onshore projects could range from marginal to no impact to around 20% reduction in the FAQ allocated.

It is evident that there are numerous other scenarios that could be tested with the potential of each producing different results. Until projects actually apply for connection and enter the ITC Listing, it is very difficult to say exactly what the impact will be. SONI have selected

the scenarios above as these should show the maximum impact on both the onshore projects in planning and also the offshore projects with Crown Estate agreements.

In conclusion the indicative results from this analysis show that permitting the known offshore projects into the ITC Listing with their agreements from The Crown Estate could have a marginal to 20% (reduction) impact on the allocation of FAQ to known projects progressing planning applications. This impact is considered by SONI to be low and although it has helped to formulate the decision presented, the results themselves show that there is only so much weight that can be applied when considering the results of this assessment.

Detailed results can be found in Appendix A.

## 3 Decision

Having considered the responses received and being cognisant of our statutory and licence duties, SONI and NIE have decided on the following:

- i. The required level of consent for onshore projects<sup>6</sup> to progress a connection application acceptable to SONI/NIE will remain as full Planning Permission.
- ii. The required level of consent to progress a connection application acceptable to SONI/NIE for a Compressed Air Energy Storage (CAES) plant that requires a Mineral Prospecting Licence will remain as obtaining that licence.
- iii. The required level of consent for offshore projects to progress a connection application acceptable to SONI/NIE will be either an Exclusivity Agreement or an Agreement for Lease from The Crown Estate.
- iv. Entry into the ITC Listing for all projects, both onshore and offshore, will be connection application date subject to the application being complete and having met the above consenting requirements. For the avoidance of doubt, FAQ will only be allocated to a project on acceptance of a connection offer.

In reaching these decisions SONI and NIE were mindful of Article 12(2) of The Electricity (Northern Ireland) Order 1992 to "...take such steps as are reasonably practicable to ensure the development and maintenance of an efficient, co-ordinated and economical system of electricity transmission which has the long-term ability to meet reasonable demands for the transmission of electricity..." In addition SONI and NIE licence obligations as laid out in Condition 15 not to "...unduly discriminate as between any persons or class or classes of persons..."

In providing offers for connection to the network we require confidence for all connection projects around:

- 1. Exclusivity
- 2. Financial commitment

SONI and NIE conclude that securing Planning Permission for onshore projects, attaining a Mineral Prospecting Licence for CAES plants, and being awarded an Exclusivity Agreement or an Agreement for Lease for offshore projects satisfy our requirements for a project to be able to demonstrate equivalent levels of exclusivity and financial commitment to a particular project. In addition SONI/NIE believe that these are reasonable requests to enable the progression of a Connection Application and that any such requests are covered under Article 20 of the Order.

SONI and NIE believe that seeking the above levels of commitment from the various categories of connection projects is pragmatic and reasonable so as to provide sufficient

<sup>&</sup>lt;sup>6</sup> Onshore projects include generation projects such as conventional generators, wind farms, solar parks, biomass plants, energy from waste plants amongst others.

certainty of a project proceeding while at the same time not unnecessarily impacting the overall project time line. This ensures that NIE and SONI meet their obligations within the Order.

SONI and NIE wish to confirm the view presented in the consultation that the existing consenting arrangements for onshore projects in Northern Ireland have worked well. A well-defined standalone pipeline of projects has been established, a fully transparent FAQ allocation process has been established and clarity around the need for infrastructure development has been provided resulting in some 19% of energy consumption in Northern Ireland now coming from renewable generation. Hence, SONI and NIE see no reason to move away from this position.

For the avoidance of doubt, SONI and NIE do not propose any retrospective changes to projects that are currently in the formal Connection Application process or ITC Process and that those projects will maintain their position in the FAQ listing.

In the SONI/NIE Decision Paper of July 2013, "Generator Connection Process; Allocation of Transmission FAQs in N Ireland & ITC Methodology to determine FAQs," it was explained that the Mineral Prospecting Licence that can be attained by a CAES plant provides SONI with the required level of exclusivity and assurance that the project will proceed and can therefore apply for grid connection.

SONI/NIE believe that the required level of consent referred to above removes the existing barrier to entry into the formal Connection Application process for offshore projects while the securing of an Exclusivity Agreement or an Agreement for Lease from The Crown Estate provides the required level of assurance that the project will proceed and exclusivity that no other party can compete to develop in the area awarded to the developer.

## **Appendix A: Impact Analysis Results**

#### Scenarios

The impact analysis considered the following scenarios and sensitivity studies. It is difficult to predict which of the offshore projects in Northern Ireland would make application first and hence enter into the ITC Listing so the following matrix of scenarios were studied to show the fact that FAQ is very much dependent upon the connection node. It also attempts to show that although FAQ is locational, projects connecting elsewhere in the system do affect power flows on the network and therefore can influence the FAQ awarded in other areas of the network.

Scenario	Capacity of Proj	ects Assessed (MW)	Order in ITC Listing
Scenario	Onshore	Offshore	Order in ITC Listing
			1. Onshore projects in planning
Α	732	600	2. Offshore wind project
			3. Tidal project
			1. Offshore wind project
В	732	600	2. Tidal project
			3. Onshore projects in planning
			1. Onshore projects in planning
С	732	600	2. Tidal project
			3. Offshore wind project
			1. Tidal project
D	732	600	2. Offshore wind project
			3. Onshore projects in planning
-	722	200	1. Onshore projects in planning
E	732	200	2. Tidal project
F	722	200	1. Tidal project
r r	732	200	2. Onshore projects in planning
G	732	400	1. Onshore projects in planning
G	/32	400	2. Offshore wind project
	722	400	1. Offshore wind project
H	732	400	2. Onshore projects in planning

**Table 2:** Matrix of scenarios studied for impact analysis

Note that scenarios E-H are sensitivity studies which show how the connection location of a project can affect FAQ on the rest of the network and are purely for indicative purposes only. The scenarios are not attempting to pre-judge the likelihood of any applications.

#### **Presentation of Results**

The results have been presented in pairs of scenarios to show the impact on FAQ awarded to onshore projects in planning with the offshore projects entering the ITC Listing before and after the onshore projects in planning.

Scenarios Compared	Results Show
A and B	The effect of permitting both the offshore wind and tidal projects to enter the ITC Listing before the onshore projects in planning, where offshore wind enters the list before tidal.
C and D	The effect of permitting both the offshore wind and tidal projects to enter the ITC Listing before the onshore projects in planning, where tidal enters the list before offshore wind.
E and F	The effect of the tidal project only entering the ITC Listing before the onshore projects in planning.
G and H	The effect the offshore wind project only entering the ITC Listing before the onshore projects in planning.

 Table 3: Comparison of scenarios

#### **Summary of Results**

The following graph and table summarise the results of the impact analysis. The summary focuses on the impact to FAQ allocated to onshore projects when the offshore projects are permitted entry into the ITC Listing before the onshore projects in planning.

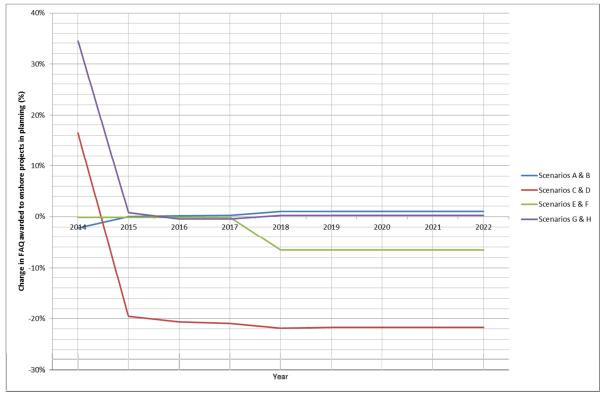


Figure 1: Results summary showing change in FAQ allocated to onshore projects in planning

Scenarios Compared	Findings
A and B	There is a 2% reduction in FAQ allocated to onshore projects in planning in 2014 followed by a marginal increase in FAQ allocated to onshore projects in planning in subsequent years.
C and D	There is a 16% increase in FAQ allocated to onshore projects in planning in 2014 followed by a 20-22% reduction in FAQ allocated to onshore projects in planning in subsequent years.
E and F	There is no change in FAQ allocated to onshore projects in planning up to 2017 followed by a 7% reduction in FAQ allocated to onshore projects in planning in subsequent years.
G and H	35% increase in FAQ allocated to onshore projects in planning in 2014 followed by marginal to no effect on FAQ allocated to onshore projects in planning in subsequent years

 Table 4: Summary of results

The remainder of this section provides tables of results and graphs for each pair of scenarios as described above.

#### **Detailed Results**

<u>Comparison of Scenarios A and B</u> The effect of permitting both the offshore wind and tidal projects to enter the ITC	Listing b	efore th	e onsho	ore proje	ects in p	lanning,	where	offshore	e wind
enters the list before tidal. Projects Assessed	2014	2015	2016	2017	2018	2019	2020	2021	2022
MW in Planning	732	732	732	732	732	732	732	732	732
MW with Crown Estate Agreements	600	600	600	600	600	600	600	600	600
Total MW	1332	1332	1332	1332	1332	1332	1332	1332	1332
Projects with Crown Estate Agreements entering ITC List AFTER projects progressi	ng planni	ng appli	ications		•		•	•	
MW in planning that were awarded FAQ	43	43	43	43	89	89	89	89	89
MW with Crown Estate Agreements that were awarded FAQ	523	523	523	523	523	523	523	523	523
Total overall MW that were awarded FAQ	566	566	566	566	612	612	612	612	612
% in planning that were awarded FAQ	6%	6%	6%	6%	12%	12%	12%	12%	12%
% with Crown Estate Agreements that were awarded FAQ	87%	87%	87%	87%	87%	87%	87%	87%	87%
% of total that were awarded FAQ	42%	42%	42%	42%	46%	46%	46%	46%	46%
Projects with Crown Estate Agreements entering ITC List <u>BEFORE</u> projects progres	sing planı	ning app	olication	S					
MW in planning that were awarded FAQ	27	43	44	45	96	96	96	96	96
MW with Crown Estate Agreements that were awarded FAQ	585	585	599	599	600	600	600	600	600
Total MW that were awarded FAQ	612	628	643	644	696	696	696	696	696
% in planning that were awarded FAQ	4%	6%	6%	6%	13%	13%	13%	13%	13%
% with Crown Estate Agreements that were awarded FAQ	98%	98%	100%	100%	100%	100%	100%	100%	100%
% of total that were awarded FAQ	46%	47%	48%	48%	52%	52%	52%	52%	52%
PERCENTAGE CHANGE in FAQ awarded to projects in planning when projects with	Crown E	state Ag	greemen	ts entei	r ITC List	: before	projects	s progre	ssing
planning applications	-								
% change in FAQ that were awarded to projects in planning	-2%	0%	0%	0%	1%	1%	1%	1%	1%
% change in FAQ that were awarded to projects with Crown Estate Agreements	10%	10%	13%	13%	13%	13%	13%	13%	13%
% change in FAQ that were awarded to all projects	3%	5%	6%	6%	6%	6%	6%	6%	6%

 Table 5: Comparison of Scenarios A and B

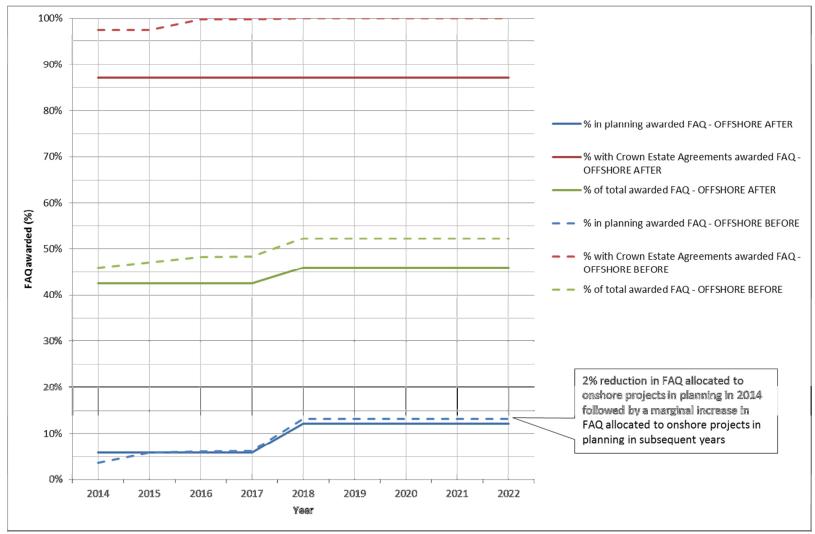


Figure 2: Comparison of Scenarios A and B

Comparison of Scenarios C and D									
The effect of permitting both the offshore wind and tidal projects to enter the ITC	Listing b	efore the	onshore	e projeci	ts in pla	nning, v	vhere ti	dal ente	rs the
list before offshore wind.									
Projects Assessed	2014	2015	2016	2017	2018	2019	2020	2021	2022
MW in Planning	732	732	732	732	732	732	732	732	732
MW with Crown Estate Agreements	600	600	600	600	600	600	600	600	600
Total MW	1332	1332	1332	1332	1332	1332	1332	1332	1332
Projects with Crown Estate Agreements entering ITC List AFTER projects progressi	ng planni	ng applic	ations						
MW in planning that were awarded FAQ	43	308	317	319	326	326	326	326	326
MW with Crown Estate Agreements that were awarded FAQ	400	400	400	400	455	455	455	455	455
Total overall MW that were awarded FAQ	443	708	717	719	781	781	781	781	781
% in planning that were awarded FAQ	6%	42%	43%	44%	45%	45%	45%	45%	45%
% with Crown Estate Agreements that were awarded FAQ	67%	67%	67%	67%	76%	76%	76%	76%	76%
% of total that were awarded FAQ	33%	53%	54%	54%	59%	59%	59%	59%	59%
Projects with Crown Estate Agreements entering ITC List <u>BEFORE</u> projects progres	sing planı	ning appl	ications						
MW in planning that were awarded FAQ	164	165	166	166	166	167	167	167	167
MW with Crown Estate Agreements that were awarded FAQ	400	400	400	400	454	454	454	454	454
Total MW that were awarded FAQ	564	565	566	566	620	621	621	621	621
% in planning that were awarded FAQ	22%	22%	23%	23%	23%	23%	23%	23%	23%
% with Crown Estate Agreements that were awarded FAQ	67%	67%	67%	67%	76%	76%	76%	76%	76%
% of total that were awarded FAQ	42%	42%	42%	42%	47%	47%	47%	47%	47%
PERCENTAGE CHANGE in FAQ awarded to projects in planning when projects with	Crown E	state Agr	eements	s enter l'	TC List k	pefore p	rojects p	orogress	sing
planning applications		1	<b>-</b>	<b>I</b>		1	T	1	
% change in FAQ that were awarded to projects in planning	16%	-20%	-21%	-21%	-22%	-22%	-22%	-22%	-22%
% change in FAQ that were awarded to projects with Crown Estate Agreements	0%	0%	0%	0%	0%	0%	0%	0%	0%
% change in FAQ that were awarded to all projects	9%	-11%	-11%	-12%	-12%	-12%	-12%	-12%	-12%

 Table 6: Comparison of Scenarios C and D

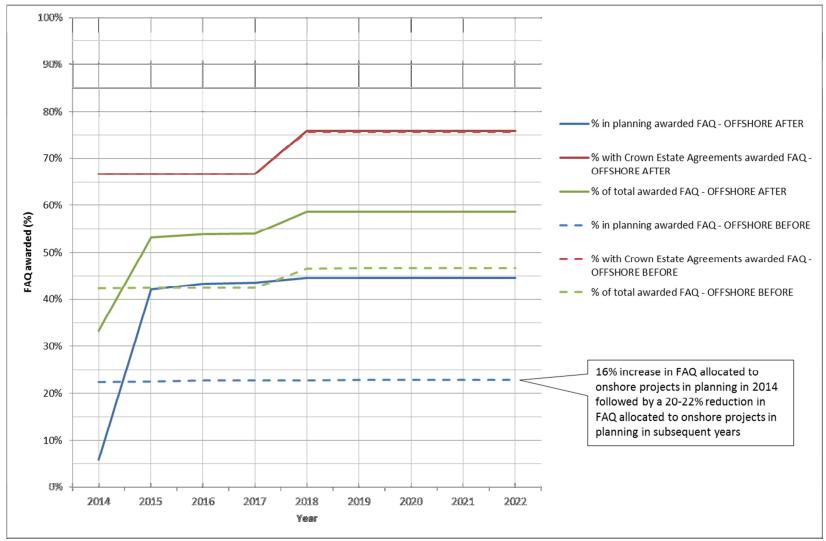


Figure 3: Comparison of Scenarios C and D

<u>Comparison of Scenarios E and F</u> The effect of the tidal project only entering the ITC Listing before the onshore pro	jects in pl	anning.							
Projects Assessed	2014	2015	2016	2017	2018	2019	2020	2021	2022
MW in Planning	732	732	732	732	732	732	732	732	732
MW with Crown Estate Agreements	200	200	200	200	200	200	200	200	200
Total MW	932	932	932	932	932	932	932	932	932
Projects with Crown Estate Agreements entering ITC List AFTER projects progressi	ng planni	ng applic	ations	<u> </u>	<u> </u>	<u> </u>		<u>.</u>	
MW in planning that were awarded FAQ	44	44	44	44	91	91	91	91	91
MW with Crown Estate Agreements that were awarded FAQ	0	0	0	0	0	0	0	0	0
Total overall MW that were awarded FAQ	44	44	44	44	91	91	91	91	91
% in planning that were awarded FAQ	6%	6%	6%	6%	12%	12%	12%	12%	12%
% with Crown Estate Agreements that were awarded FAQ	0%	0%	0%	0%	0%	0%	0%	0%	0%
% of total that were awarded FAQ	5%	5%	5%	5%	10%	10%	10%	10%	10%
Projects with Crown Estate Agreements entering ITC List <u>BEFORE</u> projects progress	sing planı	ning appl	ications						
MW in planning that were awarded FAQ	43	43	43	43	43	43	43	43	43
MW with Crown Estate Agreements that were awarded FAQ	0	0	0	0	38	38	38	38	38
Total MW that were awarded FAQ	43	43	43	43	81	81	81	81	81
% in planning that were awarded FAQ	6%	6%	6%	6%	6%	6%	6%	6%	6%
% with Crown Estate Agreements that were awarded FAQ	0%	0%	0%	0%	19%	19%	19%	19%	19%
% of total that were awarded FAQ	5%	5%	5%	5%	9%	9%	9%	9%	9%
PERCENTAGE CHANGE in FAQ awarded to projects in planning when projects with	Crown E	state Agr	eements	s enter l	TC List k	pefore p	rojects p	orogress	ing
planning applications									
% change in FAQ that were awarded to projects in planning	0%	0%	0%	0%	-7%	-7%	-7%	-7%	-7%
% change in FAQ that were awarded to projects with Crown Estate Agreements	0%	0%	0%	0%	19%	19%	19%	19%	19%
% change in FAQ that were awarded to all projects	0%	0%	0%	0%	-1%	-1%	-1%	-1%	-1%

 Table 7: Comparison of Scenarios E and F

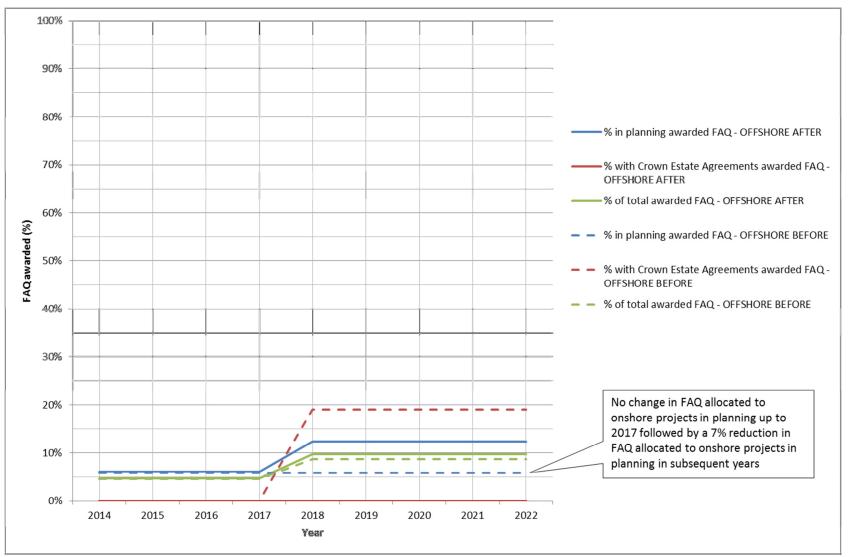


Figure 4: Comparison of Scenarios E and F

<u>Comparison of Scenarios G and H</u> The effect of the tidal project only entering the ITC Listing before the onshore proje	ects in pl	anning.							
Projects Assessed	2014	2015	2016	2017	2018	2019	2020	2021	2022
MW in Planning	732	732	732	732	732	732	732	732	732
MW with Crown Estate Agreements	400	400	400	400	400	400	400	400	400
Total MW	1132	1132	1132	1132	1132	1132	1132	1132	1132
Projects with Crown Estate Agreements entering ITC List <u>AFTER</u> projects progressin	ıg planni	ng applic	ations						
MW in planning that were awarded FAQ	41	288	298	298	302	302	302	302	302
MW with Crown Estate Agreements that were awarded FAQ	400	400	400	400	400	400	400	400	400
Total overall MW that were awarded FAQ	441	688	698	698	702	702	702	702	702
% in planning that were awarded FAQ	6%	39%	41%	41%	41%	41%	41%	41%	41%
% with Crown Estate Agreements that were awarded FAQ	100%	100%	100%	100%	100%	100%	100%	100%	100%
% of total that were awarded FAQ	39%	61%	62%	62%	62%	62%	<b>62%</b>	62%	62%
Projects with Crown Estate Agreements entering ITC List <u>BEFORE</u> projects progression	ing planr	ning appl	ications						
MW in planning that were awarded FAQ	294	294	294	294	304	304	304	304	304
MW with Crown Estate Agreements that were awarded FAQ	400	400	400	400	400	400	400	400	400
Total MW that were awarded FAQ	694	694	694	694	704	704	704	704	704
% in planning that were awarded FAQ	40%	40%	40%	40%	42%	42%	42%	42%	42%
% with Crown Estate Agreements that were awarded FAQ	100%	100%	100%	100%	100%	100%	100%	100%	100%
% of total that were awarded FAQ	61%	61%	61%	61%	62%	62%	62%	62%	62%
PERCENTAGE CHANGE in FAQ awarded to projects in planning when projects with Crown Estate Agreements enter ITC List before projects progressing planning applications									
% change in FAQ that were awarded to projects in planning	35%	1%	0%	0%	0%	0%	0%	0%	0%
% change in FAQ that were awarded to projects with Crown Estate Agreements	0%	0%	0%	0%	0%	0%	0%	0%	0%
% change in FAQ that were awarded to all projects	22%	1%	0%	0%	0%	0%	0%	0%	0%

 Table 8: Comparison of Scenarios G and H

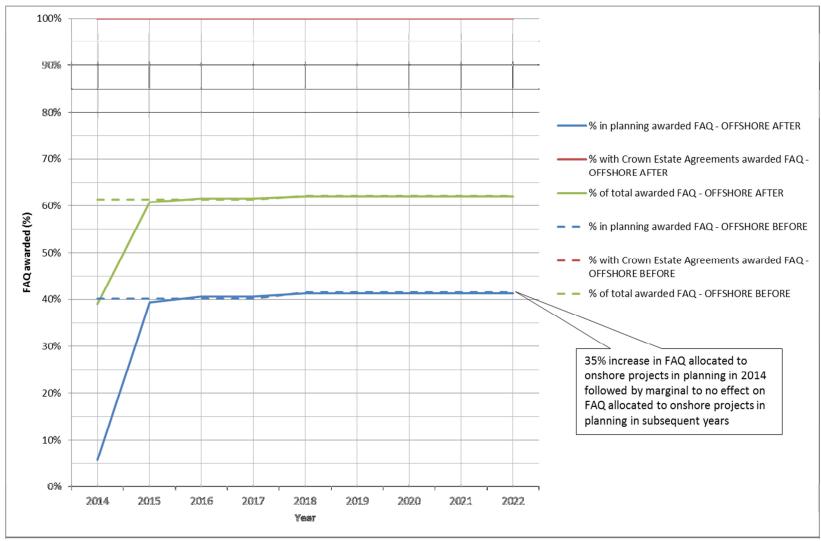


Figure 5: Comparison of Scenarios G and H

## Appendix B: Related Documents

- "Generator Connection Process; ITC Methodology to determine FAQs & Generator Output Reductions Analysis" – SONI/NIE Consultation Paper, October 2011. <u>http://www.soni.ltd.uk/media/documents/Archive/Generator%20Connection%20Pr</u> <u>ocess%20Consultation%20Paper%20-%20October%202011.pdf</u>
- "Connection Arrangements for Offshore Generation" UREGNI Consultation Paper, March 2013.

http://www.uregni.gov.uk/uploads/publications/Connection arrangements for offs hore renewable generation consultation paper - March 2013.pdf

- "Generator Connection Process; ITC Methodology to determine FAQs & Generator Output Reductions Analysis" – SONI/NIE Response and Further Consultation Paper, March 2013.
- <u>http://www.soni.ltd.uk/media/documents/Consultations/ClosedConsultations/Gen%</u> <u>20Connection%20Process%20Allocation%20Of%20FAQ%20and%20ITC%20Methodol</u> <u>ogy%20NI%20response%20and%20further%20consultation%20March%202013.pdf</u>
- "Generator Connection Process; Allocation of Transmission FAQ in N Ireland & ITC Methodology to determine FAQs"- SONI/NIE Decision Paper, July 2013. <u>http://www.soni.ltd.uk/media/documents/Consultations/Generator%20Connection</u> %20Process%20Decision%20Paper%20-%20July%202013.pdf
- "Connection Arrangements for Offshore Generation" UREGNI Next Steps Paper, December 2013. <u>http://www.uregni.gov.uk/uploads/publications/Connection Arrangements for Off</u> <u>shore Generation Next Steps Paper.pdf</u>
- "Connection Arrangements for Offshore Generation" UREGNI Clarification Notice, January 2013.
   <u>http://www.uregni.gov.uk/uploads/publications/Connection arrangements for offs</u> hore generation update 17 January 2014.pdf
- "Consultation Paper on consenting requirements in advance of application for offshore generation connection"- SONI/NIE Consultation Paper, April 2013. http://www.soni.ltd.uk/media/documents/Operations/Generators/SONI-NIE%20Consultation%20Paper%20on%20Consenting%20Requirements%20in%20Ad vance%20of%20Application%20for%20Offshore%20Generation%20Connection v2.0
   .pdf
- "Consultation Paper on consenting requirements in advance of application for offshore generation connection"- SONI/NIE Clarification Note, April 2013. http://www.soni.ltd.uk/media/documents/Operations/Renewables/Clarification%20
   <u>Note\_SONI-</u> <u>NIE%20Consultation%20Paper%20on%20Consenting%20Requirements%20in%20Ad</u>

vance%20of%20Application%20for%20Offshore%20Generation%20Connection v2% 200.pdf