
CONNECTING FURTHER GENERATION IN NORTHERN IRELAND

Next Steps Paper

29th June 2018



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1. INTRODUCTION

This paper follows the joint SONI and NIE Networks consultation paper published on 31 January 2018 titled ‘Consultation on Connecting Further Generation in Northern Ireland¹’ (the ‘Joint Consultation’) and the NIE Networks ‘Decision Paper on Distribution Generation Process Changes and Introduction of Milestones²’, dated the 4 May 2018 (the “NIE Networks Decision Paper”). The Joint Consultation sought input from industry stakeholders on next steps for the connection process in Northern Ireland following on from; the conclusion of progressing applications under phase 1, the limited unused capacity at Transmission and Distribution level and; in light of considerable uncertainty around the likelihood of further proactive network investment for renewable generation being approved by the Utility Regulator without the support of new government energy policy.

In preparing the Joint Consultation NIE Networks and SONI took account of the responses to the ‘Consultation Call for Evidence³’ dated 12 October (the ‘Call for Evidence’) and gave consideration to a number of relatively complex matters that must be resolved. This included consideration of where further connection opportunities might lie going forward.

The Joint Consultation posed a series of questions to stakeholders with respect to the following areas:

- Imminent Process Modifications – to address immediate issues with the Phase 1 rule set in the changing generation connection process landscape;
- Potential DS3 Prioritisation – to consider how DS3 System Services providers may be prioritised;
- Potential Capacity Solutions – to establish, in parallel with the SONI-EirGrid Hybrid Working Group, an industry working group to investigate potential innovative alternative connection methods.

The opportunity to respond to the Joint Consultation ended on 9 March 2018 and 15 responses were received prior to that date. This paper aims to summarise and provide feedback on these responses and next steps in the process.

¹ www.nienetworks.co.uk/getattachment/Connections/Generation-connections/Generation-Consultation/NI-Gen-Connections-Consultation.pdf.aspx

² www.nienetworks.co.uk/documents/decision-paper-on-distribution-generation-process.aspx

³ www.nienetworks.co.uk/documents/final-cfe-soni_nie-networks.aspx

2. IMMINENT PROCESS MODIFICATIONS

Having considered stakeholder responses to the Call for Evidence alongside industry best practice and licence obligations a number of imminent process modifications were set out in the Joint Consultation. The Joint Consultation highlighted recent changes to SONI's Transmission Connection Policy while also consulting on proposed changes to NIE Network's Distribution Connection Policy. The outcomes of the Joint Consultation have been delivered through two papers, the NIE Networks Decision Paper which dealt with sections 5.2 to 5.4 (Questions 1-6) of the Joint Consultation and this Next Steps Paper which covers the remaining sections. This approach allowed NIE Networks to continue to process generation applications that were in the queue while allowing further time for consideration to determine a way forward for the remaining parts of the Joint Consultation.

2.1 TRANSMISSION PROCESS – SONI CONNECTION POLICY

In January 2018 SONI published a policy explaining the process for making an application to connect to the Transmission System, which became effective 1 February 2018⁴. The policy sets out the steps that the customer must follow to make a valid connection application, the offer requirements (particularly those related to planning permission or other relevant consents for the proposed project), and details the steps for connection to the Northern Ireland Transmission System.

In particular the new policy allows connection applications prior to planning permission or other relevant consents being obtained. However, planning permission will be a key, early milestone within the Transmission Connection Offer Process.

2.2 DISTRIBUTION CONNECTION PROCESS

As detailed above, the NIE Networks Decision Paper was issued in relation to sections 5.2 to 5.4 (Questions 1 – 6) of the Joint Consultation. These sections detailed the changes to queuing principles and presented a number of questions to stakeholders on the potential introduction of milestones which would apply to an offer of terms for connection, issued to a Generating Unit wishing to connect to the Distribution System.

The NIE Networks Decision Paper outlines the responses received from stakeholders in relation to the matters outlined in sections 5.2 to 5.4 and the rationale for NIE Networks' final decision regarding the introduction of milestones into any offer of terms for connection for a Distribution Generating Unit issued after 18 May 2018. The NIE Networks approach was formalised within the 'Distribution Generation Application and Offer Process Statement'⁵ (DGAOPS) which is effective from 18 May 2018. The NIE Network Decision Paper highlights

⁴ Please see the SONI website for more information <http://www.soni.ltd.uk/customer-and-industry/becoming-a-customer/>

⁵ <http://www.nienetworks.co.uk/documents/distribution-generation-application-and-offer-proc.aspx>

the changes to queuing principles and rationale for final decisions regarding milestones. Applicants wishing to connect to the Distribution System (i.e. up to and including 33kV) and operate a Generating Unit in parallel with the NIE Networks' Distribution System (other than micro generation), should refer to the 'Distribution Generation Application and Offer Process Statement'.

3. FURTHER CAPACITY AND NETWORK INFORMATION

Since industry stakeholders are continuing to show a high demand to connect further generation schemes, SONI and NIE Networks recognise there is an even greater appetite for additional information on capacity output restrictions to assist industry stakeholders. Information on transmission capacity is or will be made available through SONI's Transmission Forecast Statement, with the NIE Network's Distribution Capacity Map to be published later this year. Industry stakeholders were therefore asked what other information would be useful and how it may be made available.

3.1 CONSULTATION QUESTION 7

The question posed in the Joint Consultation was:

- *Is there any other information that could be provided in the forecast statement to help inform industry in their commercial decision making?*

3.2 SUMMARY OF RESPONSES

Nine respondents provided a response to question 7 on information provision. There was general agreement among respondents that the timescales required to prepare and publish documents including the forecast statements meant that some input data may have changed between the data freeze date and publication. This can in some instances make the information contained within the forecast statement less useful for later stage commercial decision making.

Respondents did however say that the information published in the forecast statement along with the availability of network models has been essential to inform developers in the early development stage of a project and has replaced the need for pre-feasibility analysis being provided by the system operator.

A number of respondents asked for the further information to be provided as follows:

- Harmonic system data and real time outage information to fully inform operators during constraint conditions;
- Generation and demand at application stage at each transmission node;
- Contracted generation and demand at each transmission node;
- Connected generation at each transmission node.

While further individual respondents requested;

- Lower and Upper bound estimates for capacity availability using a maximum 3 year time horizon;
- Cohesion between the forecast statement, Generation Capacity Statement and connection register as a means to assist industry in its commercial decision making.

There were also requests for updated constraint analysis as the previous constraint analysis was last published in 2016. Respondents also suggested that industry should be allowed to input into determining what information would be most useful and the scenarios to be studied.

3.3 NEXT STEPS

SONI and NIE Networks are working together to develop processes that will allow us to provide appropriate background Harmonic System Data to applicants. This process will include the calculation of background harmonic measurements and provision of harmonic limits to applicants, with the purpose of ensuring that the harmonic distortion on the network does not exceed standards. By the nature of this process this will take time but we will continue to work with industry to expedite this.

SONI currently shares information regarding valid transmission applications via the Connections Register on the SONI website. Additionally, levels of connected and committed generation and demand are available through the Transmission Forecast Statement. It is evident from responses, however, that this information is not as readily accessible to all as might be expected. SONI will review how this information is presented online and will provide greater explanatory information on its website as to how the information provided should be used in an integrated way by Q3 2018.

The information on transmission capacity provided by SONI through its annual Transmission Forecast Statements could reasonably be considered the lower bounds of transmission capacity. This information is presented following extensive network modelling. The calculation of the upper estimate would however be considerably more complex and would require increased reliance on input assumptions over and above those used in the Transmission Forecast Statement methodology.

SONI is drafting the scope of high level updated constraint and curtailment analysis. This information is for the purposes of informing the work of the Connections Innovation Working Group which will be further outlined in this document. This constraint analysis will also look at the impact of connecting additional increments of generation onto the Northern Ireland System. SONI will present this information to the CIWG as part of the process of determining the commercial viability of releasing capacity with zero FAQ.

SONI will publish updated Associated Transmission Reinforcements (ATRs) along with indicative timelines quarterly on SONI's website⁶. Where there is a material impact on

⁶ Available in the Library section of the SONI website www.soni.ltd.uk/library/

connectees awaiting full FAQ, SONI will update individual projects. More generally, SONI will also continue to provide updates on network developments through the RGLG and other forums.

4. QUEUE INFORMATION

Through responses to both the Call for Evidence and individual discussions with stakeholders, NIE Networks has been asked to provide further queue information. However Article 63 of the Energy (Northern Ireland) Order 2003 and Condition 10 of the NIE Networks' Distribution Licence each prevent NIE Networks from publicly disclosing information received by NIE Networks regarding individual connection applications without the express permission of the respective applicants. For Grid Code compliant generators, information can be published by SONI under the terms of the Grid Code⁷. Such generator information can be found on SONI's connection register⁸.

In light of the legislative / regulatory issues and the request by stakeholders to share generator information, a voluntary trial was carried out with applicants in the queue for capacity at a cluster substation. Applicants were asked to voluntarily grant permission to share information on the basis that the generator information would only be shared if everyone was to opt in. A significant portion of the parties in the queue did not opt in, suggesting that this voluntary method may not be practical to implement or provide much benefit to the wider industry.

4.1 CONSULTATION QUESTION 8

The question posed in the Joint Consultation regarding sharing generator information was:

- *Would stakeholders be in favour of a clause requiring mandatory disclosure of generator information to be published?*

Please note that this will not be achievable solely by NIE Networks, but responses would inform how NIE Networks might approach engagement with parties such as the Utility Regulator or DfE on the matter.

(This only applies to non-grid code compliant generation connections as grid code compliant connections are already published).

4.2 SUMMARY OF RESPONSES

This question was answered by 12 respondents with all but one of them in favour of a clause requiring mandatory disclosure of generation information to be published. Those in favour

⁷ <http://www.soni.ltd.uk/customer-and-industry/general-customer-information/grid-code/>

⁸ Available in the Library section of the SONI website <http://www.soni.ltd.uk/library/>

believed it was essential to keep developers fully informed and some suggested that the same level of information should be published as currently published by EirGrid and ESB Networks. Two respondents suggested that connection applicants could agree to the sharing of such information at the application stage. The respondent who did not agree with this approach, because they were more familiar with the UK system where generator information is not published, recommended further consultation to see how such sharing of information would be implemented. The suggestion for further consultation was also supported substantially by those who agreed with the disclosure of information. Some suggested that the consultation and decision paper should be carried out by the body that can ultimately approve the mandatory disclosure of this information.

4.3 NEXT STEPS

Following the widespread request in the consultation responses for NIE Networks to publish generator information in a similar format to ESB/EirGrid on generation applicants, NIE Networks has carried out further investigations as to how it may be able to share such information. ESB and EirGrid publish 3 different sets of information as outlined below⁹:

- Connected generation for wind and non-wind
- Committed generation for wind and non-wind
- Application list

NIE Networks is prevented from publishing certain information under Article 63 of the Energy (Northern Ireland) Order 2003. Article 63 does however permit disclosure of information if NIE Networks is required by its Distribution Licence to make such disclosure. NIE Networks therefore may be able to achieve publication of generation queue information shown above through a modification to Condition 10 of the Distribution Licence. NIE Networks will engage with the Utility Regulator to put forward industry views regarding the need for a consultation prior to any modification of the Distribution Licence by Utility Regulator. It should also be noted that wider data protection legislation, such as the General Data Protection Regulation (GDPR) must also be considered.

5. PRIORTISATION OF DS3 CONNECTIONS

In the Call for Evidence a number of respondents put forward the view that some provision for prioritisation should be made in any new connection process for those wishing to connect to the System to provide DS3 System Services. Given this view and in light of the proposal set out in the Enduring Connection Policy Stage 1 in Ireland (ECP-1)¹⁰ that Connection Offers of DS3 service providers be prioritised, SONI sought views on how this should be addressed in Northern Ireland.

⁹ www.esbnetworks.ie/new-connections/generator-connections/generator-connection-statistics

¹⁰ CRU Enduring Connection Policy Stage 1 (ECP-1) www.cru.ie/wp-content/uploads/2017/04/CRU17309-ECP-1-Proposed-Decision-FINAL.pdf

5.1 CONSULTATION QUESTIONS 9 AND 10

The two questions posed in the Joint Consultation were

- *Do you agree that a provision should be made in the Northern Ireland Connections Process to enable the prioritisation of connection applicants to provide DS3 System Services?*
- *In the absence of a batch process, do you have any other suggestions or specific comments on how the approach discussed above should be augmented for Northern Ireland? What, if any, pre-conditions rules or limits do you think should be applied?*

5.2 SUMMARY OF RESPONSES

There was a mixed response to the potential introduction of some form of prioritisation of connection applicants that provide DS3 System Services. A small number of respondents were in favour of prioritisation; however the majority of responses did not see the need for prioritisation in the absence of a batch process in Northern Ireland, particularly in light of limited available network capacity. A consistent theme through responses was that such a process could be viewed as unduly discriminatory. Some respondents felt that more information in the form of a proposed approach was required in order to provide a fully considered response.

5.3 NEXT STEPS

SONI acknowledges that in the current environment for connections, where there is limited available network capacity at a small number of nodes, the introduction of prioritisation of applicants seeking to provide DS3 services may be of limited benefit. In considering this, SONI and NIE Networks do not intend to implement a prioritisation mechanism at this time. For clarity where network capacity still exists, applications will continue to be processed that would enable entry into relevant DS3 System Services mechanisms; however, such applications will not be prioritised ahead of other applicants.

6. POTENTIAL CAPACITY SOLUTIONS

Within the responses to the Call for Evidence there was a clear desire from industry stakeholders that, in the absence of investment in the near future in transmission reinforcements (in addition to those required for already contracted generation), alternative connection methods should be investigated to better exploit existing transmission capacity where practical. As such both SONI and NIE Networks believed it would be prudent for all parties to gain a greater understanding of the impact of these potential solutions from a system perspective (including the impact on system stability and security) and the commercial implications for industry.

Industry stakeholders welcomed the formation of and continued work of the Hybrid Site Working group, set up to investigate the operational, legal and market issues related to the establishment of Hybrid sites. SONI and NIE Networks proposed the establishment of a Connections Innovation Working Group in parallel to coordinate how alternative connection methods could be further investigated and potentially developed.

SONI and NIE Networks sought views on both the level of industry interest in pursuing the potential areas of investigation, the scope of each and how these should be best coordinated. Two proposed working group areas were set out in Joint Consultation paper.

- Working Group Area 1 – Connection offers with zero FAQ
- Working Group Area 2 – Active Network Management (ANM) schemes – Optimising cluster capacity

It was acknowledged that the positive findings of Area 1 would be a prerequisite for the progression of Area 2.

6.1 CONSULTATION QUESTIONS 11 AND 12

The two questions posed in the Joint Consultation regarding Working Group Area 1, were:

- *Is there industry appetite for Zero FAQ connections with no assurance of full FAQ being achieved?*
- *What indicative level of curtailment and constraint does industry believe such a solution would become commercially unviable?*

6.2 SUMMARY OF RESPONSES

Eight respondents answered the first question with the majority stating how current policy provides for applicants to proceed to connection on the basis that SONI and NIE Networks will implement ATRs to make connection fully firm. However, under the current framework, funding for ATRs is subject to regulatory approval; there are no guarantees or assurance on the timings of the reinforcements. Respondents felt that limited progress has been made to date in the progression of ATRs. Respondents requested SONI and NIE Networks to provide clear timelines to make connected and committed generation fully firm.

Several respondents also noted that the refusal by NIE Networks to process connection applications on the basis of a lack of capacity makes distribution connected generation unique in the island of Ireland and within the UK. They believed that this approach is discriminatory. These respondents also referred to an inconsistent approach between SONI and NIE Networks and stated that this could lead to gaming which the industry is keen to avoid.

Respondents also expressed concern that the introduction of zero FAQ offers would erode the viability of existing non-firm generators as the market rules at present require constraints

to be shared. These respondents stated the importance of SONI providing greater information on potential constraints for existing and new generators.

In terms of indicating the level of curtailment and constraints which respondents believed would render a project commercially unviable, respondents highlighted the need for additional constraint analyses in order for them to be able to provide an informed answer to this question.

It was also recognised by respondents that the industry is currently adjusting to a number of changes including removal of NIRO, the introduction of I-SEM and uncertainty on options for route to market. With so many additional cost pressures respondents indicated that it is not easy to determine a credible level of curtailment and constraint that can be tolerated. One respondent believed that an offer with zero firm access quantity for certain types of technologies would be commercially challenging due to the inherent uncertainty involved.

Respondents also stated that there is no substitute to reinforcement to address network constraints. A number of respondents believed that there is an urgent need at transmission level to plan, develop and build appropriate infrastructure and urged NIE Networks and SONI to go beyond only considering classic solutions to reinforcement based on traditional designs and consider the latest innovative approaches.

For the next steps relating to this section see Section 7.5.

6.3 CONSULTATION QUESTIONS 13, 14 AND 15

The three questions posed in the Joint Consultation regarding Working Group Area 2 were:

- *Does industry agree that a working group is required to deal with the more complex matters above including [A] technical and [B] process-commercial matters [YES/NO]*
- *With respect to the potential ANM solution set out in Appendix 4 do you have any views on the various options outlined?*
- *If the answer to (1) (2) or both is [NO] – please advise what alternative approach you believe might be workable*

6.4 SUMMARY OF RESPONSES

Of the 10 respondents that answered these questions, all 10 supported the formation of the Connection Innovation Working Group (CIWG), with agreement that this was the best way to deal with the more complex matters including technical and commercial matters. It was suggested that SONI and NIE Networks should derive a 'rule set' for Active Network Management (ANM) connections which could then be developed and agreed by the working group. Two stakeholders requested to be part of this working group.

Respondents again highlighted the need for updated constraint analysis and also requested further information on what potential capacity could be released by such an ANM solution, in order for the industry to provide an informed perspective on many of the questions relating to the CIWG.

Some respondents also noted that the Utility Regulator has stated that Northern Ireland should be an innovation follower rather than a leader in ANM technologies – i.e. that proven solutions on other similar networks (e.g. GB/RoI) should be adopted. Respondents believe that the Utility Regulator should support sufficient allowances for SONI and NIE Networks to permit such investment to happen.

There was agreement that large scale generator connections to clusters and the maximisation of reverse power capability of clusters present opportunities to explore the enabling of further connection of generation through ANM. They also agreed that there were future possibilities or ANM schemes (which may include Dynamic Line Rating (DLR) at clusters, ANM at bulk supply points and primary substations) which should be explored, subject to outcomes of the working group discussions. One respondent suggested that Magherakeel cluster should be used as a test site as there are currently consented projects in close proximity to it which cannot be connected due to lack of capacity.

Those who answered question 14 indicated that without more accurate knowledge of the information available to generators seeking an ANM connection, including associated costs for switchgear, control and communication equipment and a knowledge of the potential curtailment delivered by the ANM connection, it is difficult to decide how much a new applicant could determine the financial viability (and bankability) of their project. They felt that discussion in the working group will help to guide ideas and solutions.

A number of respondents believe that a fund should be available to cover the costs to facilitate the development for ANM solutions based on a Price Control Allowance. They also stated that if it couldn't be then it should be included within the connection cost offer.

A number of respondents stated that they are keen to work closely with NIE Networks and SONI to develop and agree a workable 'rule set' for ANM connection and again highlighted how they did not believe that it is possible to provide an informed perspective on many of the questions above without adequate constraint analyses. They also believe that although they had responded 'yes' in the previous questions, that there is currently no credible alternative to installing the required transmission and distribution capacity to provide F&A for currently installed, contracted and new generation. Respondents indicated that they were looking forward with anticipation to the proposed SONI Transmission Development Plan, hopefully in draft form by late 2018 and final committed form in early 2019 followed by appropriate price control allowance, Utility Regulator approval and the required construction plans to facilitate these system reinforcements as soon as possible.

Industry also welcomed the work of the Hybrid Sites Working Group. One respondent believed that it should be fully resourced and empowered to address all aspects of hybrid connections such as Grid Code changes, market changes, connection policy changes etc., to ensure that the site maximum export capacity and consequent connection assets can be optimised. Another respondent indicated that the progress and implementation of solutions

from the Hybrid Sites Working Group will be fundamental to ensuring the development of a flexible and modern grid for Northern Ireland and are supportive of it going forward. Of specific interest; different generation technology types behind one connection type and sites with generation and demand behind one connection point.

6.5 NEXT STEPS

While supportive of the formation of the Connections Innovation Working Group respondents were clearly of the view that there is no adequate substitute for reinforcement of the transmission network. This view was shared by all parties at the RGLG meeting on the 5 June 2018. SONI will as is required by licence continue to put forward network reinforcement options to the Utility Regulator alongside a cost benefit analysis report for carrying out such reinforcement in line with Utility Regulator guidance published March 2018.

Respondents also requested that SONI and NIE Networks should provide clear timelines to make connected and committed generation fully firm. Going forward, SONI has published updated ATRs along with indicative timelines on its website and will update these quarterly on the SONI website¹¹. Where there is a material impact on connectees awaiting full FAQ SONI will update individual projects. More generally SONI will also continue to provide updates on network developments through the RGLG and other forums.

In response to the comments regarding the approach taken by NIE Networks to refuse connection due to lack of capacity, NIE Networks can confirm that its approach is consistent with Article 21 of the Electricity (Northern Ireland) Order 1992 and Condition 30 of its Distribution licence. With regards to the approach taken by SONI this is also consistent with its legislative and regulatory obligations. In so far as respondents stated that these approaches are inconsistent, no proposals were made to address such inconsistencies or the consequences that may flow from them. Consequently NIE Networks and SONI are not in a position to propose any next steps in relation to these comments.

SONI is drafting the scope of a high level constraint and curtailment analysis for the purpose of informing the work of the Connections Innovation Working Group (CIWG). This analysis will look at the impact on constraints and curtailment of connecting increments of additional generation onto the Northern Ireland System. SONI will present this information to the CIWG at an early stage to assist with the process of determining the commercial viability of releasing capacity with zero FAQ for both new and existing generators.

A number of respondents suggested that a fund should be available to facilitate cost for ANM solutions based on Price Control Allowance. In the event that the group progresses to investigating the viability of smart network schemes, SONI and NIE Networks will engage with the Utility Regulator around the funding options for such schemes. It should be cautioned that while potentially less costly than traditional reinforcement methods, there is

¹¹ Available in the Library section of the SONI website <http://www.soni.ltd.uk/library/>

no certainty around funding of innovative approaches as these too are driven by existing RES policy.

SONI and NIE Networks have developed a draft terms of reference for the CIWG which will be agreed and finalised once the group has been established (see Appendix 1).

Membership of the group will be sought from across industry through expressions of interest sought from industry via the Consultation, RGLG, Grid Code and Distribution Code mailing lists. SONI and NIE Networks will review applicants in respect of relevant experience and interest in the group.

It is expected that members of the group represent the interests of industry and not just their own commercial position. Therefore members should take an active role in the dissemination of relevant information to industry.

Detailed below are the key milestones and proposed dates for the formation of the CIWG.

Key Milestones	Proposed Dates
Expression of Interest called for	27 July 2018
Expressions of Interest closed for all stakeholders	17 August 2018
Connections Innovation Working Group participant list finalised	7 September 2018
Connections Innovation Working Group first meeting held.	End of September 2018

7. OTHER GENERAL COMMENTS

In the Call for Evidence, SONI and NIE Networks outlined that with network capacity exhausted and in the absence of additional energy policy drivers that might permit an economic case to be made by NIE Networks or SONI, for future network investment, SONI and NIE Networks were seeking input from industry on a way forward for generation connections. SONI and NIE Networks initiated the consultation process with Industry (at the workshop of 18 August) to determine what alternatives there are to the existing NI connection methods and network investment approaches. The aim of the consultation process was to take forward solutions which are both commercially viable for developers and also compliant with the wider statutory obligations on SONI and NIE Networks to develop an economic and efficient grid.

A number of responses received to the Joint Consultation do not fall within the scope of this consultation process and therefore will not be dealt with through this consultation process or the CIWG. Although not relevant to this Joint Consultation or the CIWG, these responses are still important and therefore SONI and NIE Networks have provided a summary of these responses below together with a high level description of the current status of any works being carried out in relation to these responses.

7.1 SUMMARY OF RESPONSES

A large majority of respondents stated how there is no adequate substitution for network build and reinforcement and they urge the Utility Regulator, DfE, SONI and NIE Networks to work together on facilitating an appropriate programme of works that will provide Northern Ireland with the future-proofed network that is required to facilitate economic development and a secure, safe and sustainable electricity supply.

A substantial number of respondents believe that planning permission should be pre-requisite for a grid connection application. They understood that this required legislative change and felt that the Utility Regulator should have additional powers to allow them to set connection policy rather than requiring a legislative change every time connection policy is required to be changed.

A small number of respondents believed that there is merit in reviewing cluster policy as the commercial environment for connection applicants has been totally transformed by the removal of ROCs and grouping applicants with others means that the entire cluster can only progress at the pace of the slowest applicant. Respondents stated that this is not conducive to encouraging investment. They felt that the whole policy of clustering applicants needs to be reviewed in the light of any new wider energy policy as well as land use planning policy.

Respondents expressed disappointment that the situation in respect of rebates has still not been resolved and believe that NIE Networks should outline their proposals alongside a timeline for facilitating rebates.

7.2 NEXT STEPS

With regards to network reinforcement SONI and NIE Networks will continue to put forward networks reinforcement options to the Utility Regulator alongside a cost benefit analysis report for carrying out such reinforcement(s).

Implementation of planning permission as a pre-requisite for applying for a generator connection at both Transmission and Distribution is outside the control of both SONI and NIE Networks. Primary legislation would be required to be amended in order for this to occur. SONI and NIE Networks have formally passed on industry views to both the Utility Regulator and DfE at the RGLG meeting held on the 5 June 2018 for their consideration. SONI and NIE Networks will be happy to engage further with the Utility Regulator and DfE on this matter if required.

Stakeholders were of the view that the Utility Regulator should be given additional powers to enable them to set connection policy due to the ever changing environment. This view was also shared at the RGLG meeting as again this is outside the control of both SONI and NIE Networks.

The current cluster methodology has been successful in releasing circa 660MW of capacity over the last 5 years. NIE Networks recognises that there would be merits in reviewing the

current cluster policy as a result of any changes emerging from wider energy policy or developments in connecting further generation in Northern Ireland through the CIWG.

In the Utility Regulator's "Review of Distribution and Transmission Connection Policy" Decision paper, the Utility Regulator stated that they had written to the Department, noting respondents views and that they are open to engagement on this issue. NIE Networks and SONI are willing to engage.

8. ACKNOWLEDGEMENTS

NIE Networks and SONI would like to formally acknowledge and thank stakeholders for supporting and engaging throughout this consultation process through the various means of engagement such as the work shops, consultation responses and industry forums. We look forward to engaging further through the Connections Innovation Working Group and regular forums such as the Renewable Grid Liason Group.

9. APPENDIX 1: CONNECTIONS INNOVATION WORKING GROUP- DRAFT TERMS OF REFERENCE

OVERVIEW

Responses from industry to the Consultation on Connecting Further Generation in Northern Ireland published by NIE Networks and SONI in January 2018, welcomed the proposed establishment of a Connections Innovation Working Group. This was in recognition that, with limited policy support for investment in transmission reinforcements further to those required for already contracted generation, alternative connection methods should be investigated to better exploit existing transmission capacity where practical.

SONI and NIE Networks believe it would be prudent for all stakeholders and industry to gain a greater understanding of the impact of various solutions proposed from a system position and commercially for industry. NIE Networks and SONI are committed to bringing forward an overall strategy which will address these matters in a co-ordinated way, subject to what is within the remit of NIE Networks and/or SONI.

AIM

To find solutions that facilitate the connection of further Distributed Energy Resources (DER- Generation & Storage) in Northern Ireland, which are technically and commercially feasible for the Network and System Operators and for DER developers/operators of both new and existing projects.

The group must also ensure that any decisions on solutions are published in a timely manner.

AREAS IN SCOPE

1. Connection offers with no Firm Access Quantity on a long term basis

This area will include investigation of:

- The technical feasibility of allowing connections to be made on a potentially permanent basis with no firm access quantity and how this can be managed by the TSO.
- The commercial viability of such connections for DER operators of new and existing projects, taking account of factors including:
 - Constraint/curtailment information and forecasting;
 - Network chargeability issues.
- How these connections sit within current and future market arrangements.
- How the network capacity allocation and connection process would operate for these connections.

In assessing the above the impact of further generation will be understood. Subject to the outworkings of the above the following may also form part of the scope:

2. Active Network Management Schemes

This area will include investigation of:

- Identifying areas on the network with sufficient potential for ANM
- The technical feasibility of such schemes
- The commercial viability of such connections for DER operators, including:
 - Constraint/curtailment info and forecasting;
 - Network chargeability issues.
- How the capacity allocation, queuing and connection process would operate for these connections. (E.g. Individual or Clustering approach, Last-In-First-Out vs shared constraint etc.)
- Contractual arrangements
- Potential to scope area(s) for trial dependent on progress made in the areas above

DELIVERABLES

1. Decision on implementation of Zero FAQ Offers for Connected Generation
2. Decision on potential use of Active Network Management Schemes
3. Potential revised policies

ADMINISTRATION OF THE WORKING GROUP

The working group will be administered as follows:

Establishment and Membership

The members of the working group will include at least;

- 3 representatives from the TSO (SONI)
- 3 representatives from the DNO (NIE Networks)
- 6 representatives for DER developers/operators
- 3 representatives from DS3 project developers
- 1 representative from Utility Regulator
- 1 representative from DfE

In late July SONI and NIE networks will be seeking expressions of interest from industry to join the working group via the Consultation, RGLG, Grid Code and Distribution Code mailing lists. SONI and NIE Networks will review applicants in respect of relevant experience and interest in the group.

It is expected that members of the group represent the interests of industry and not just their own commercial position. Therefore members should take an active role in the dissemination of relevant information to industry.

Notice of Meetings

All meetings shall be called by the Secretary on at least ten (10) business days written. The notice of each meeting shall be given to all members of the Connections Innovation Working Group and shall contain the time, date and venue of the meeting, an agenda and a summary of the business to be conducted.

Minutes

The Secretary shall circulate copies of the minutes of each meeting to each member of the Connections Innovation Working Group as soon as practicable (and in any event within ten (10) Business Days) after the relevant meeting has been held. Each member shall notify the Secretary of the member's approval or disapproval of the minutes of each meeting within ten (10) Business Days of receipt of the minutes. A Member who fails to do so will be deemed to have approved the minutes. If the Secretary receives any comments on the minutes, the Secretary shall then include those aspects of the minutes upon which there is disagreement into the agenda for the next meeting of the Connections Innovation Working Group.

Timescales

Key Milestones	Proposed Dates
Expression of Interest called for	27 July 2018
Expressions of Interest closed for all stakeholders	17 August 2018
Connections Innovation Working Group participant list finalised	7 September 2018
Connections Innovation Working Group first meeting held.	End of September 2018

Milestones and timelines will be agreed at the first Connection Innovation Working Group.

In order to establish the terms of the group a number of meetings in close succession may be required initially. Once established this will revert to at least quarterly (this will be reviewed throughout the lifetime of the Connections Innovation Working Group and the meeting frequency will be adjusted as necessary).

It is expected that the meetings will be held in two locations (SONI Offices – Castlereagh House and NIE Networks Offices – Channel Wharf)