ISEA
Irish Solar Energy Association

Northern Ireland Electricity Networks Limited
120 Malone Road
Belfast, BT9 5HT

Dear Sirs:

RE: Alternative Connection Application and Offer Process Proposal

As the trade association representing over 80 businesses involved in the solar PV industry, the Irish Solar Energy Association (ISEA) is responding to the Northern Ireland Electricity's Network (NIE) *Alternative Connection Application and Offer Process Proposal* on their behalf. The purpose of this submission is to provide our insights on the suggested policy design, and recommend additional considerations for subsequent policy design. The solar development companies, active in the development of utility scale solar parks in Northern Ireland, and who contributed to the formation of this response include: BNRG Renewables, Lightsource, Hadstone, Elgin Energy, Island Green Power, and Power Capital

The key points of this submission are:

- ISEA strongly supports the introduction of interim measures that will facilitate the early issuing of connection offers for the following category of generators:
    - New applications and extensions in areas with transmission capacity;
    - Applications for zero export;
    - Application to over install generation and cap MEC to the existing MEC;
    - Applications for a change in Technology or additional technologies at an existing site
    - Remaining capacity at existing clusters

- In the medium term we request the introduction of the necessary legislative changes for the requirement for planning permission to be reintroduced at the application stage

Thank-you for the opportunity to respond to this consultation, we look forward seeing the final policy design.

Kind Regards

David Maguire
Chairman, ISEA

ISEA
Irish Solar Energy Association

Response to Consultation Questions

Question 1: Do you have any additional suggestions for consideration in relation to continuing to apply the existing connection application and offer process given the recent influx of connection applications received?

We believe there is merit in NIE continuing to process grid offers or modifications for connections that will have minimal impacts on the Transmission and Distribution System. This is in line with the NIE/SONI proposals in section 8.8 of the consultation document. We believe these types of connections will not drive the need for large-scale reinforcements and should be prioritised. Given the iterative approach of the proposed batch process it would appear it will be a number of years before grid offers will be issued. Therefore, this will disqualify developers from meeting the March 2017 ROC's deadlines, and some projects will no longer be financially viable.

In order to enable solar developers and other renewable generators to meet the March 2017 ROC deadlines, we would propose the following types of applications be removed from the Batch process:

1) New application or applications for an increase in MEC where NIE have identified there is capacity available and there are negligible impacts at the transmission level.
2) Applications for a zero export scheme.
3) Application to over install generation and cap MEC to the existing MEC of the current Connection Agreement
4) Applications for a change in technology or additional technologies at an existing site
5) Remaining capacity at existing clusters should be allocated

If the above subset of offers are progressed before the main batch process this would enable some developers to progress current projects that already have planning permission and may potentially meet ROC deadlines.

Phased or temporary connections should be offered as part of the interim process. For example, if an application is made for an increase in MEC and the connection works delivery period is a number of months/years, generators connecting could limit their export to the grid to the available capacity. Once the required reinforcement works are delivered the connection agreement could be updated with the increased MEC and the generator would be allowed to export at this new level. Through the modification process, generators could request a temporary zero export (no change to existing MEC) connection as part of the request for an increase in MEC.

Alternatively, if no offers are issued until after the batch processing, the significant investment made for site feasibility, acquisition and planning will be sunk costs for

developers. The above proposal would at least accommodate some level of development whilst the overall batch offer process, or alternative, is established. We recognise that NIE and SONI have started works to identify areas with transmission capacity and potential shallow connection method for applications already made. We request that NIE and SONI continue with this work and prioritise the identification of nodes with transmission capacity and the shallow connection methods at these nodes.

Additionally, in order to expedite the above proposal and stimulate development, we would suggest that an early decision is made on progressing these measures and the batch, or any alternative process, that is decided upon separately. It may be the case that due to the complexity of the batch process that further consultation may be required on the detail of it's implementation. Subject to overall responses from industry, an alternative to the batch process may actually be progressed. Advancing the measures listed above should not be delayed due to the more complex discussions around the batch process. We therefore strongly request that there is a prioritisation of the above subset of offers. We believe this is an optimisation of grid development.

This would be in line with the following High Level Principles of the alternative connection application process:

- Aids more efficient and timely issue of connection offers;
- Allows for optimal development of the transmission and distribution systems;
- Allows for efficient network investment by the Northern Ireland customer base;
- Allocates scarce network capacity efficiently;
- Makes efficient use of TSO and DNO resources.

There is a major concern that due to the removal of the requirement for planning permission at application stage, speculative projects that are unlikely to be developed will be included in distribution and transmission plans. This will drive the need for an inappropriate grid infrastructure. Lessons Learnt from the Republic of Ireland (ROI) offer process should be considered. There is an on-going offer process in ROI to introduce planning permission as a criterion due to this issue.

Question 2: Do you consider that the underpinning principles of the proposed connection application and offer process at a high level address the approach necessary to deal with the influx of connection applications? Can you suggest any further principles that should be considered?

Yes, we would agree with the underpinning principles of the proposed connection application and offer process. We would like to propose the following 2 principles be added:

1) Guaranteed standards of performance
2) Innovation

We would propose that "Guaranteed Standards of Performance" be added, as transparency and guarantees of timescales and costs will enable developers to make informed decisions and provide necessary assurances to project investors.

Innovation should be added to encourage innovation in offer policy and also in technical connection methodology to ensure cost effective connection charges.

Question 3: Do you agree that the Batch Process is the most pragmatic alternative connection application and offer process to deal with the recent influx of applications? Do you have any other suggestions or specific comments on the proposed approach?

As stated above we believe a subset of applications can be treated before the processing of the main batch process. As the batch process will take a considerable amount of time to be established and will have an iterative approach, we believe it would be pragmatic to process this subset of applications in advance.

Regarding the batch approach, we understand the requirement for planning permission has been removed from the application stage. However, we would propose the following;

- **Medium Term**
  Introduction of the necessary legislative changes for the requirement for planning permission to be reintroduced at the application stage

- **Interim Process**
  Issue offers to the subset of applications as outlined above in Question 1. At a minimum those projects with planning permission or within the planning process should be given a higher weighting or priority. To ensure only viable projects are progressed, proof of planning should be demonstrated within 2 months of acceptance. This will mitigate against inappropriate assumptions being made by NIE and SONI as they model and plan the future network.

Question 4: Do you agree with the proposal to remove all consenting requirements for transmission connection applications?

No we do not agree with this. Planning should remain as a criterion for transmission and be reintroduced for distribution as this will enable the grid to be planned and developed in an appropriate manner. It is important the same rules should apply for transmission and distribution applications.

Question 5: Do you agree with the types of connection applications that are proposed to be included in the Batch? Please provide reasons for any views expressed.

As per our response in Question 1, we believe the subset of applications below should be removed and processed ahead of the main batch process:

- **New applications or applications for an increased MEC in areas with transmission capacity;**

If the existing connection can accommodate the increase in MEC, with minor or minimal works and negligible impact on the transmission system we believe these should be progressed, as this allows for the optimal development of the transmission and distribution system. New applications in areas with transmission capacity should also be progressed. This is in line with the NIE and SONI proposals in section 8.8 of the consultation document. In the event that the delivery period of these connections is lengthy, as per our response to question 1, phased or temporary connections should be allowed. In this instance, generators can cap the MEC at the temporary connection to the existing MEC until the connection works are completed. Once the connections works are complete, the connection agreement can be updated to the increased level of MEC and the Generators can then export at this level.

- **Applications for zero export schemes;**

In the instances of zero export applications again these should be processed as generators are not requesting any increase in MEC. Fault level and thermal contributions from solar farms are minimal. Minimal connection works would be required.

- **Applications to over-install generation and cap at MEC;**

Changes to installed capacity should be treated as a modification to the existing agreement rather than as a new application. Any impact on short circuits will generally be minimal and NIE/SONI should be able to complete the necessary analysis to determine if there is an impact on existing users. NIE should also be able to identify the sites requesting over-installed capacity that will not impact on existing managed connection applications and allow them to proceed. Not all applications impact on managed connections, for example projects connecting directly to 110kV substations.

- **Applications for a change in technology or additional technologies at an existing site;**

Existing generators are bound by the MEC of their connection agreement. In the instances where existing generators are not fully utilising their full MEC, they should be enabled to do so with an additional technology as they have paid for, and are contracted to the MEC in

their connection agreement. Their original connection would have been designed and installed to accommodate the contracted MEC.

- **Remaining capacity at existing clusters should be allocated**

It would maximise existing connections assets and minimise the cost of clusters to the NI consumer to allocate any remaining capacity at existing clusters to new applicants.
We believe this subset of applications allows for the optimal development of the transmission and distribution system. The above connections would require minimal connection works as the grid connections already exist in some cases. Therefore, strongly aligned with the underpinning connection principles below:

- Allows for optimal development of the transmission and distribution systems;
- Allows for efficient network investment by the Northern Ireland customer base;
- Allocates scarce network capacity efficiently;
- Makes efficient use of TSO and DNO resources

Question 6: What do you believe would be an adequate length of time between a decision paper from this consultation process being issued and the proposed Closure Date? Do you agree that a 4-week period would be adequate? Please provide reasons for any preference.

Yes, we agree 4 weeks is sufficient.

Question 7: Is there any information you can provide to describe how it is proposed that the over-installed plant, particularly in the case where there is a mix of generation technologies, is capped to MEC safely and securely?

This is standard practice in England and in the Republic of Ireland. The generator controller will manage and ensure that the MEC is not exceeded. Additional reverse power protection can be installed on the distribution/transmission switchgear, which will switch off the solar farm in the event the contracted MEC is exceeded.

Question 8: Is there any information you can provide to describe how it is proposed to limit the availability declarations from the generation site to the SEM and the SONI control centre via SCADA?

It is noted this is really a market issue rather than a connection offer process issue. If required, there is no reason why generators should not be able to provide this information in the format required by SEMO/SONI. Please see attached "Power Plant Controller

Presentation" and "PPC-AEN131810W" which shows details of the SMA Power Plant Controller capabilities.

Question 9: Please provide any information you feel could explain how, if there is more than one technology type on site, the generation behind the connection point will be reduced in the event of a system constraint or curtailment?

Generators have the technical capabilities to implement control systems to meet the requirements of SEM tie-break rules on curtailment. For hybrid sites this may require signals for the resource availability of individual technologies to be passed onto SONI via SCADA. As per question 7, the generator controller can provide the necessary functionality.

Question 10: Are there any further considerations for the TSO and DNO before this type of connection can be facilitated?

No extra comments

Question 11: Do you agree with the proposal for allocating any remaining Cluster capacity as a priority and issue these offers outside of the Batch Process? Can you suggest any alternatives for consideration?

We believe this would be a pragmatic proposal and enable optimisation of the grid. It would maximise existing connections assets and minimise the cost of clusters to the NI consumer by allocating any remaining capacity at existing clusters to new applicants.

Question 12: Do you agree that a change may be required to the weighting of projects connecting into Clusters that have not submitted for planning permission and subsequent connection offers have expired or been rejected? Would you consider a weighting of zero for such projects to be acceptable?

Yes, a weighting of zero would be appropriate as some projects may never progress.

Question 13: Do you agree that the proposal to order the transmission assessments of the Groups based on the Groups with the earliest individual Valid Connection Application is a practical approach? If not, can you suggest any alternatives?

Yes and we would propose that a priority or a weighting is introduced for projects at a defined stage in the planning process, for example planning submitted or planning received.

Question 14: Do you believe it would be a prudent approach in the first instance for the TSO to determine whether there is existing grid capacity and issue offers where there is capacity as a priority, accepting that other applicants not included in this phase 1 would need to wait longer for connection offers?

Yes, we strongly agree. This is a prudent approach as this may enable some developers to meet financial deadlines.

For this approach to be successful it is critical that connection offers are issued as soon as possible after this consultation is complete. To enable this we request that the decision for progressing the subset of applications discussed in the SONI/NIE consultation and in our response is fast tracked with the more complex decision on the batch process and associated policy issues made afterwards.

We recognise that NIE and SONI have started works to identify areas with transmission capacity and potential shallow connection method for applications already made. We request the NIE and SONI continue with this work and prioritise the identification of nodes with transmission capacity and the shallow connection methods at these nodes.

The applications from projects that are successful in meeting this criterion should have offers issued as soon as they can be prepared. Where possible NIE's 90 days process should be shortened, especially if NIE have already started works on these connection applications. There is no requirement for these generators to receive ATR, FAQ and constraint information before they have to accept the offers. This information can follow as soon as it can be made available.

Question 15: In relation to connection offer validity periods, what length of time do you suggest would strike a balance between giving customers enough time to consider the connection offer and not unduly delay starting to process the remainder of the Batch?

30 days should be sufficient.

Question 16: In order to reduce time, it is proposed to allow a period of 10 days from information on initial nodal assignment being provided for a decision to be made on whether to withdraw from an application from the process. Do you consider that the suggested 10 day period will provide an adequate balance between reducing delays and allowing high level decisions to be made by developers?

Yes, we agree.

Question 17: Do you believe that high level information on estimated nodal assignment, connection method, potential charges and estimated timeframes for delivery would be of value and enable a decision to withdraw early to be made?

Yes, in most cases, it would enable developers to make a decision. It would also be appropriate to disclose who the other participants are in the same group, their MEC and location.

Question 18: Can you suggest any alternatives to ensure that customers are committed to their connection application?

Customers should be made to demonstrate financial spend on projects, such as submitted planning applications and acquisition of land rights.

Question 19: Do you agree with the proposal to share the costs of common connection assets between applicants on a per MW basis as described?

Yes, we agree.

Question 20: Do you think Proposal A or Proposal B is preferable for entry into the FAQ list? Do you have any other suggestions for entry into the FAQ list?

We would agree with Proposal A, as this will inform the projects that are most likely to be developed.

Question 21: Would a connection offer for generators of 5MW and above without firm access assessment provide sufficient information for that offer to be accepted or for high level decisions on project viability to be made?

Offers being issued before the batch process will not require this information to a make a decision to accept the offer, as they will have firm access. However, it should be provided as soon as is practically possible.

For offers being issued under the batch process, it is unlikely that a developer would be able to accept an offer without the firm access assessment information being available, or at least, a worst case assumption of the constraint and curtailment levels.

Question 22: Would a connection offer which does not contain GOR information provide sufficient information for that offer to be accepted or high level decisions on project viability to be made?

As above, for the batch process this information should be provided before an offer has to be accepted or a worst case assumption of the constraint or curtailment levels.

Question 23: Is it essential for GOR information to be issued along with FAQ and ATR information or is GOR information alone sufficient information for an offer to be accepted?

The GOR information would be of some help as it may give an indication of the worst case constraint or curtailment percentage.

Question 24: Do you agree that the offer acceptance criteria outlined above strikes the right balance between ensuring that applicants are committed to their projects, without being too onerous that applicants will not be in a position to accept their offer?

- **Interim Process**
  We believe proof of planning permission within 2 months of offer acceptance should be a criterion to ensure committed projects progress. This will prevent hoarding of capacity and incorrect assumptions being made when NIE and SONI are planning the future distribution and transmission system. Lessons learnt should be considered from the ROI Gate offer Process and Renewable Integration Development Project (RIPD) in Northern Ireland. Significant investment was made in planning transmission projects that may not materialise.

  If planning is not included as an acceptance criterion it should be heavily weighted so that projects with planning permission or within the planning process get priority in the offer process.

- **Medium Term**
  In the medium term, it should also be investigated if the necessary legislative changes for the requirement for planning permission can be reintroduced at application stage.

Question 25: Do you agree that project milestones relating specifically to securing planning permission are required now that the planning permission pre-requisite has been removed for applications to the Distribution System? What do you believe to be an adequate length of time to secure planning permission after a connection offer has been accepted?

- **Interim Process**
  The period of 12 months after acceptance is too lengthy for the interim process. This should be reduced to 2 months post acceptance. This will ensure only viable projects are progressed.

Question 26: Do you believe that the outcome of the Ofgem milestone consultation in GB should be applied in Northern Ireland without further consultation?

For the Interim process, we believe that stricter acceptance criteria as above are needed due to the existing influx of offers in Northern Ireland and the heavily constrained distribution and transmission network. In England the grid is not as heavily constrained and also the connection offer process is being managed by "Interactivity" by DNO's and "Statement of Works" by National Grid. This enables developers a level of predictability in the offer process.

In the medium term, we would welcome the necessary legislative changes for the requirement for planning permission to be reintroduced at the application stage.