

Public Connections Reform

Consultation Response Proforma

Your feedback is important to this process. Please take this opportunity to provide any feedback that you may have. To aid your response, each question is linked back to the relevant document for ease of reference.

Please provide your feedback using this Proforma and sending an electronic copy to box.connectionsreform@nationalenergyso.com by **5pm** on the closing date of **2nd December 2024**.

We encourage early submission ahead of the deadline where possible to aid the processing of responses.

Respondent Details	
Name	Charles Williams
Organisation	Wind2 & Solar2 Limited
Email Address	Charles.williams@wind2.co.uk
Phone Number	07739 429648
Which category best describes your organisation?	<input type="checkbox"/> Consumer body <input type="checkbox"/> Demand <input type="checkbox"/> Distribution Network Operator <input checked="" type="checkbox"/> Generator <input type="checkbox"/> Industry body <input type="checkbox"/> Interconnector <input type="checkbox"/> Storage <input type="checkbox"/> Supplier <input type="checkbox"/> System Operator <input type="checkbox"/> Transmission Owner <input type="checkbox"/> Virtual Lead Party <input type="checkbox"/> Other
Is this response confidential?	<input type="checkbox"/> Yes – I do not wish for this response to be shared publicly; however I understand it will be shared with Ofgem <input checked="" type="checkbox"/> No – I am happy for my response to be available publicly

Public

Section 1 – Policy

You can find the relevant information in the **Great Britain's Connections Reform: Overview**

Document

Commented [RE(1)]: Link needed

<p>1. Do you agree with our intention to align the connections process to Government’s Clean Power 2030 Action Plan?</p>
<p>You can find the relevant information in Section 2 – Context</p> <p>Yes, in principle we agree with the intent to align the connections process to the CP30 Action Plan. We agree with the premise that the grid queue is too long and needs reforming, so that projects that are ready can proceed and so that project developments with a good chance of progressing to FID and construction, can secure a grid connection offer within a reasonable timeframe. However, limiting the number of Gate 2 offers available through zonal technology caps will not, in itself, improve connection dates. Relative ordering of the queue will not be changed and transmission works delivery will continue as planned in CP30 and before in the ‘Pathway to 2030’. Other ways of optimising the use of existing network capacity are not in the scope of this consultation such as encouraging co-location with flexible management, refining engineering assumptions, amending access rights to promote flexibility etc. In particular many developers have sought to optimise available network capacity by developing energy parks with a mix of renewable generation and storage and our concern is that this approach, which is intended to make the best use of the network may be disadvantaged by the proposals around technology capacity caps. Consideration should be given to applying a flexible approach to the application of technology caps to ensure the potential network benefits from co-location or energy parks are not discounted under the proposed rules. Actions to accelerate delivery of network infrastructure are also out of scope of this reform & consultation. In the absence of other reforms to optimise use of existing network capacity, reducing the length of the queue by removing firm connection offers from projects that exceed CP30 quotas will not create more network capacity for the remaining projects.</p> <p>We note that the proposed addition in the connection reforms of a “strategic alignment” requirement in addition to a “readiness” requirement. This is a pragmatic approach to help give the best chance of success of the CP30 plan, but it’s a very significant change of approach to allow NESO to take such a controlling role in determining which technologies connect where in the network and what capacity per technology gets connected in each zone. This is quite different from the free market approach that has been in place since Electricity Privatisation in 1991, and it needs to be carefully regulated to ensure a balance between the grid network evolving in response to customers’ needs and an overly prescriptive approach from NESO as to where generation and what mix of generation will be permitted. The evolution of the network over the next two decades to facilitate connection of a widely distributed decarbonised generation mix needs to be strongly led by where developers are intending to install onshore wind, offshore wind and solar.</p>

Public

One of our concerns with the latest proposed connection reform process is that it creates additional uncertainty for investors. Investors are having to deal with uncertainty around the outcome of the REMA consultation and now the additional uncertainty of whether their project will retain their grid offer under the new proposed requirement to be 'strategically aligned'. NESO are facing a huge task to review all connection offers in the queue to assess whether they meet Gate 2 criteria and to re-order the queue and we're concerned whether this can be completed in the indicated timeframe. In order to help investor confidence and to ensure that there is not a hiatus in build out of renewable projects over the next 2-3 years, it would be beneficial to make sure that the CP30 plan allows for continuity for projects with connection dates in the next 2-3 years.

We feel that it's important to note that the key objective is the decarbonisation of our electricity generation, and that the grid reform process is intended to help enable this key objective. NESO's proposed design is intended to tackle the issue that the connections queue is excessively long and their proposal is to radically cut the queue by applying a new 'strategically aligned' criteria. It's very important that the proposed approach should not inadvertently go too far, so that good projects lose their place in the grid queue because of the application of the 'strategically aligned' criteria or by applying strict rules to failure to meet project Milestones. We would urge that NESO adopt a flexible and helpful approach to developers to help ensure that good projects retain their connection offers, particularly when projects are delayed by matters outside their control.

2. Do you agree with our proposal for overall design 2 (that the reformed connections queue should be limited to and prioritised to only include ready projects that align with Government's Clean Power 2030 Action Plan, NESO Designated Projects, and directly connected demand projects outside the scope of Government Clean Power 2030 Action Plan)?

You can find the relevant information in **Section 5 - Our overall preferred connections reform design**

The recent proposed change from prioritising projects that are "ready" to "ready and strategically aligned" will be very problematic to projects already in the queue which fall foul of the new requirement. The proposed design 1 or design 3 would therefore be more preferable from a renewable generation developer's perspective, but we recognise that design 2 will be effective in aligning the queue with the aims of CP30. However, our view is that design 2 goes too far in cutting the queue in line with NESO designated regional and technology related capacity limits. These limits are likely to restrict the likelihood of meeting CP30 renewable growth target as it relies on NESO's forecasting being correct in each zone. In our view the zonal capacity targets need to be much more flexible. If the decision is to move forward with design 2 then we would ask that consideration should be given to allowing flexibility in the CP30 Action Plan. We would urge flexibility in the target level of technology generation types, as the overall aim is decarbonisation of generation and it shouldn't be necessary to be too prescriptive of whether the decarbonised generation comes from onshore wind, offshore wind or solar. The Government's targets to double onshore wind capacity, treble solar and quadruple offshore wind are not firm technology targets

Public

and clearly the most important thing is to meet the overall target decarbonisation target. Similar flexibility would be welcome regarding the locational element.

The analysis provided by NESO shows that there is a projected undersupply of solar and offshore wind versus the CP30 Plan and a small oversupply of onshore wind, in the low readiness case. As indicated above we suggest that it would be pragmatic to allow undersupply of a particular technology to connect technologies where there is oversupply. The same should not logically apply to storage where NESO's analysis shows that there is over 300GW of oversupply, which is the major contributor towards the current problems with the length of the grid queue. The proposed design 2 should address this issue by scaling back Gate 2 storage connections in line with the CP30 Plan.

We see other issues with NESO's proposed approach to allocate connection capacity by technology and zone. Planning performance varies significantly throughout GB and this results in variable planning success rates, and hence attrition rates across regions. Projects which are successful in planning won't necessarily get built out depending on projected project financial return, and this can lead to further attrition potentially concentrated in particular technologies or zones. These practicalities suggest that a very flexible approach is needed to capacity allocation by zone & technology, and allow more oversupply of projects within the selected 'design'. This approach should help ensure that there is more competition in CfD allocation which will feed through to better value for consumers.

Many solar and wind projects developments include co-located storage projects, or in some cases all three technologies. Renewable project developers typically include storage as part of their project design so that they have the option to build out a co-located scheme if the Final Investment Decision (FID) supports the case for including storage, and because storage can be helpful to alleviate any local grid constraints. Given NESO's analysis of an excess of storage connection applications versus the strategic requirement, then it will be important that the reformed connection process allows for co-located projects to proceed without storage if the storage element of the connection offer doesn't fit with the CP30 Plan, but also recognition should be given to whether co-located storage would be beneficial to the local network. We note that energy parks with onshore wind, solar and storage, allow the most efficient use of grid capacity and will lead to much higher grid useage (load factor) than connections for one technology.

NESO's Risks and Mitigations presentation on design 2 includes reference to including an upfront allowance for attrition. Experience over 20+ years of renewable generation shows that attrition rates through the project development process up to FID are significant for renewables and for storage projects. We would therefore suggest that CP30 Plan limits on technology capacities should include a healthy allowance for attrition.

Public

We have a further concern that the new Queue Management Milestones will make it very challenging for projects with Gate 2 Offers to retain those offers by meeting milestones, when many elements of the development process cannot be controlled by the developer. This is a further reason to allow for healthy attrition rates when setting technology connection capacity limits, but we would also argue that NESO should endeavour to take a flexible approach to actions taken when milestones are missed, because the developer has been impacted by events outside its control. Development of renewable energy projects is an expensive proposition and NESO should try and help manage milestone dates where the developer is clearly proactively working to meet milestone deadlines.

The latest proposal to introduce a “strategically aligned” requirement for Gate 2 connection offers combined with the Queue management Milestones to be included in connection offers and the possible introduction of a requirement to provide a Financial Instrument, exposes developers to very significant additional development risks and the very real possibility of forfeiting sunk development funding for projects that lose their place in the grid queue and won’t be able to obtain a connection offer until post 2035. Many of these risks are outside the Developers control such as application of “strategically aligned” criteria, planning decisions and the length of time for determination by under resourced planning authorities, and timescales for construction with the background that the planned acceleration of delivery of renewable generation over the next decade will inevitably put pressure on construction timescales. While these reforms add very significant increases to project development risks, there is no reference in the consultations to grid operators being liable for delivery of connections to time and cost. Connection Offers have always been one sided in favour of grid operators but the latest reforms add significant further risk on developers without any consideration of balancing this with delivery obligations on grid operators.

3. Do you think all ‘ready’ projects should be included in the reformed connections queue (overall design 3)? If so, how would you propose that we mitigate risks to consumers or developers of material misalignment to the SSEP?

You can find the relevant information in **Section 6 – Assessment of alternative design for connections reform**

Our view is that design 3 is a viable option. It won’t be as effective as design 2 in substantially reducing the queue but it will have the same benefit of prioritising projects which are ‘ready’ and ‘strategically aligned’, leaving projects which are ready but not aligned with CP30 lower in the queue, with a connection date initially beyond 2035. However, because of the point made earlier about attrition of projects and flexibility on technology caps and zonal caps it should be possible that these projects could be advanced if they become aligned with CP30.

We have a related concern that NESO have indicated that the proposed new north-south transmission line in Wales has a 2037 completion date. Under design 2 would many renewable projects in Wales whose connection offers are dependent on completion of the proposed north-south link be able to obtain a Gate 2 offer. The answer would appear to be no, whereas it would be possible under design 3.

Public

4. Do you agree that the reformed connections queue should initially focus on the 2035 time horizon?
You can find the relevant information in Section 4 - Key building blocks for aligning connections to strategic energy plans
We agree with the arguments set out by NESO that the reformed connection queue should be focussed on 2035 rather than 2030. A 10 year time horizon is a more practical timeframe for the proposed connection reform, and will help investor confidence.

Implementation Questions

You can find the relevant information in the **Great Britain's Connections Reform: Overview Document**

Commented [RE(2)]: Link needed

5. Do NESO's preferred options against each of the variables discussed in the Overview Document best deliver efficient alignment to Government CP30 Plan?
You can find the relevant information in Section 5 - Our overall preferred connections reform design and Section 7 - Further variables and options to align connections reform with strategic energy planning
As noted in response to Q2, we believe design 2 will deliver alignment to the CP30 Plan, subject to the caveats raised in Q2. In Q3 we have indicated that we also believe that design 3 would deliver alignment with the CP30 Plan and would be preferable as it is more likely to successfully deliver the CP30 Plan.
How would the variable regarding the approach to undersupply best be managed? It seems to us that this variable would be better managed through design 3 rather than design 2 as design 3 should have a longer queue of Gate 2 connection offers which would be available to tackle the undersupply. A similar argument would apply to the variable of the approach to project attrition.
As discussed in question 2, introducing more flexibility between zonal technology caps in the CP30 plan could promote use of innovative solutions to meet system needs. Where the current project pipeline cannot deliver volumes required under the CP30 plan, NESO/DNOs should specify the system requirements (e.g. carbon intensity, import/export profile, power quality etc.) and allow the market to propose solutions to meet this. Being less prescriptive about technology

Public

caps would promote innovation such as use of private/microgrid networks to add on more generation, storage and demand behind a single metered connection. By encouraging creative solutions to meet system needs, NESO will de-risk delivery of CP30 by leveraging the potential of the market to propose solutions.

We have made comments in answer to earlier questions that work could be done to optimise use of connection capacity and accelerating network build out. Not making a recommendation due to further work being required is a missed opportunity to optimise use of the network.

6. Do the methodologies deliver our preferred options against each of the variables?

You can find the relevant information in **Section 3 – Overview of framework of codes and methodologies for connections reform**

Again our comments noted in response to previous questions indicate our view that design 3 may better deliver some of the variables, than design 2.

In the consultation document the question indicates that we should comment with respect to the content of Section 3 – “Overview of framework of codes and methodologies for connections reform”. This section makes reference to the potential introduction of an additional financial instrument which would be payable when projects accept a Gate 2 Offer. We have recently responded to a separate consultation on this proposal. In summary, our view is that the proposed quantum of the financial instrument (£20,000/MW) would place a very significant financial burden on project developers, and would inevitably lead to a substantial reduction in renewable project development. Our view is that the proposal is poorly targeted in addressing the concern about ‘speculative re-seller projects’ and will reduce the likelihood of meeting Government targets for decarbonisation of power generation.

7. Are there key policy areas that are not covered by our preferred options against each of the variables or that would not be delivered by the methodologies?

You can find the relevant information in **Section 5 – Our overall preferred connections reform design** and **Section 7 – Further variables and options to align connections reform with strategic energy planning**

We would request that some attention is focussed on ensuring that transmission and distribution embedded connection offers are handled in a way that ensures equitable treatment. It will be important to ensure that ENA guidelines for DNOs are consistent with NESO’s proposals. Our experience has been that delays can occur in obtaining a complete distribution connection offer because of delays through the DNO/ESO interface and large variations in approach and timescales between DNOs. Under the proposed new process with twice annual connection windows, developers will rely on timely actions by the DNO to ensure their connection offers don’t miss out on the targeted window.

The approach for embedded/distribution connected projects should be covered in more detail for developers to understand the implications. Differences between ENAs guidelines and NESOs options include i) different methodologies for technology/zonal caps, ii) different provisions for Gate 2 assessment, iii) different queue management milestones and land & planning compliance,

Public

and iv) different treatment of smaller generation and demand on the distribution network but not being covered by the reformed connection process.

8. Do you agree with our approach to managing project attrition between 2025-2030, and 2031-2035, whilst ensuring that the SSEP can deliver maximum benefits to GB consumers?

You can find the relevant information at **Section 7 - Further variables and options to align connections reform with strategic energy planning**

As per previous comments we believe that design 3 may be a better option to help manage project attrition than design 2. We have also commented that we expect potentially quite high rates of attrition of Gate 2 connection offers and we think it would be prudent to allow for a high level of attrition when setting technology and locational capacity limits.

Connections Network Design Methodology

You can find the relevant information in the **Connections Network Design Methodology - Detailed Document**

9. Do you agree with the approach to applying the Gate 2 Readiness Criteria and the Gate 2 Strategic Alignment Criteria to the existing queue and future Gate 2 Tranches?

The approach outlined looks logical. One concern noted in response to a previous question relates to how connection offers for hybrid projects with import and export are treated in the Gate 2 process. NESO have indicated that the level of connection applications for storage project is very high compared to the CP30 Plan requirement. This suggests that hybrid projects may be at risk of being considered as not strategically aligned with CP30 because of the storage element of their hybrid connection offer. The CNDM should allow for developers, if necessary, to have the option of deleting the storage element on their connection application, in such cases so that the renewable technology element of the connection application can obtain a Gate 2 offer.

Public

In applying Gate 2 criteria to projects that are already in the queue, consideration should be given to exempting those projects which are at an advanced stage, with planning consent secured and with a secured route to market (CfD or PPA). We should try and avoid the proposed reformed process inadvertently delaying or terminating connection offers for advance projects which will be ready to construct soon.

Careful consideration needs to be given to how capacity allocated to the DNOs is managed, to ensure connection offers are managed as efficiently by the DNOs as the process proposed by NESO. There are problems with the current process for managing distribution connection offers as the timely issue of connection offers is often delayed by the TO/DNO interface and the time taken for NESO to confirm applications are technically competent. The most equitable approach to this will be ordering projects based on the date by which they signed connection offers with the TO/DNOs they applied to. We understand that, from a transmission works perspective, the queue is ordered for embedded projects based on date at which project progression outcomes were issued from the TO. This risks disadvantaging projects based on the time it took for DNOs to submit transmission impact assessment requests to the TOs, which varies greatly between DNOs. We would suggest that a statutory timescale should be set for delivery of Statements of Work to ensure embedded generation projects are not disadvantaged.

It's unclear how 'zonal sub-queues' will be integrated into the 'GB-wide queue' as discussed in CNDC p.26 paragraph 5.4.6. It's also unclear how this process should work for distribution level queues.

10. Do you agree with the approach to managing advancement requests?

The principal of advancing projects in the queue as space becomes available is a fundamental principle of the connection reform process. We note that there is strong pressure for projects to confirm that they will be able to advance under the design 2 methodology or otherwise they will be unable to get a Gate 2 connection offer before 2035. As indicated in previous answers we feel that design 3 may be a better option in this respect as projects are left in a longer queue without the need to confirm their ability to advance.

As a more general comment, the purpose of the CP30 Plan is to facilitate a major acceleration of the rate of deployment of renewable generation and storage at a much greater pace than we have seen previously. This will put pressure on resources in planning, development, grid companies, suppliers and contractors. Looked at an international context some of these resources are seeing similar pressure globally. One small example is the limitation of police escorts for turbine deliveries in Scotland where Police Scotland are currently only able to manage 8 abnormal loads per week. Because of these resource pressures it will inevitably mean that it will

Public

be difficult to meet project timescales and milestones and this may cause projects which indicate they can advance to not be able to do that.

The possibility that projects offered the opportunity to advance may be subject to a change in the point of connection will create a challenge in creating a requirement to adjust planning related to the point of connection and related land agreements, which take additional time. It's beneficial to offer projects the opportunity to advance with a different point of connection but it may not be feasible for a project to do this and consideration should be given to allow a project to retain its original point of connection and queue position.

NESO's proposals allow advancement but only within the pre 2030 band and the 2031-2035 band. We would question why it's necessary to apply this restriction which will hinder the chances of successfully achieving the 2030 target.

11. Do you agree with the approach to reserving Connection Points and Capacity at Gate 1?

We can see the sense of this approach from the perspective of the grid companies in terms of giving further powers to influence spatial/locational connection design. However, the impact of this approach may be to the detriment of some Gate 2 offers that are not deemed to be strategically aligned due to a lack of local capacity caused by reserving capacity for Gate 1. We would therefore comment that the use of the approach of reserving Connection Points and Capacity at Gate 1 needs to be limited and carefully regulated to ensure that Gate 2 offers do not lose their place in the queue as a result. NESO's proposals indicate that Gate 1 reservations will be prioritised after Gate 2 offers, which will limit opportunities for Gate 2 offers which are ready to be advanced. NESO should ensure that projects filling these reserved bays are sized appropriately to make best use of network capacity

12. Do you agree with the approaches to reallocating capacity when 2030 pathway projects and 2035 pathway projects exit the queue?

Yes, we agree with the proposed reallocation approach. We welcome the comments about applying a flexible approach to reallocation outlined in 7.16.4 and 7.18.3. NESO will need to work in close harmony with DNOs and IDNOs to ensure efficient reallocation of capacity between directly connected and embedded connections.

Public

Gate 2 Criteria Methodology

You can find the relevant information in the [Gate 2 Criteria Methodology- Detailed Document](#)

13. Do you agree with the following elements of this Gate 2 Criteria Methodology?

- a. Gate 2 Readiness Criteria – Land (Chapter 4)
- b. Gate 2 Readiness Criteria – Planning (Chapter 5)
- c. Gate 2 Criteria Evidence assessment (Chapter 8)
- d. Self-Declaration Templates (Chapter 9)

a)Our view is that the requirement to have land under option within the red line boundary and the Energy Density Table are reasonable and acceptable. We would suggest that a declaration by the Project's legal counsel of the compliance of the Option Agreements with NESO's requirements should suffice as evidence so as not to burden NESO with the responsibility of protecting our confidential information. NESO would have the right to see the Option Agreements if they doubt the declaration but there would be no need to have copies (redacted or not) to keep on file.

We would like to clarify that agreement should only be required with the main landowners within the red line boundary and not with Crofters, Commoners, Tenants, or other parties who have rights over the land but are not the main landowner. We also wanted to note that some parts of land within red line boundaries may be on unregistered land, which in itself does not hinder development and should not be a reason to not allow the Gate 2 Readiness Criteria for land to be met.

b)Planning authorities are often under resourced and the situation may get worse with the expected increase in planning applications in line with the CP30 Plan. There can often be delays in obtaining verification of a planning submission date from Planners and we would suggest that

Public

this is recognised and plenty of time is allowed to provide verification after the actual date of planning submission.

c) Slide 8.8 indicates that NESO/DNOs will do an initial check of submitted criteria evidence and indicate whether there are any errors with the information submitted. NESO say that providing the information is submitted early in the Gated Application Window then there may be time to correct errors before the window closes. This will also rely on the speed of the NESO/DNO initial check and response. Wouldn't it be preferable to say that Gate 2 applicants will be given a time period (at least 10 days) to correct any errors, irrespective of whether this falls within the Application Window?

d) We support the option to request to advance the current connection date as long as this does not unfairly disadvantage other projects that are ahead in the queue.

14. Do you agree that the alternative route of meeting the Gate 2 Readiness Criteria should be only limited to projects that seek planning consent through the Development Consent Order route?

Yes, we agree that the alternative route should be limited to projects seeking consent through the DCO route. We note that CPO rights can be obtained through a generation license rather than a DCO.

Public

Project Designation Methodology

You can find the relevant information in the [Project Designation Methodology – Detailed Document](#)

15. Do you agree that the categories of projects that we have identified are the appropriate ones to potentially be designated?

As a developer our concern is that there is a level playing field and we would therefore hope that there should be very limited occasions where projects are prioritised in the grid queue where they are defined as Designated Projects. The criteria for NESO selecting Designated Projects are set out in para 2.1 of the consultation and look reasonable (subject to further definition), but we take comfort from the wording in 2.2.3, where NESO say that projects will only be designated in exceptional circumstances. We would suggest that there should be regulatory oversight to ensure that these powers are not over used to the detriment of projects seeking Gate 2 offers.

16. Do you agree with the proposed criteria for assessing Designated Projects?

Yes, we agree with the proposed criteria.

17. Do you agree with the indicative process NESO will follow for designating projects?

Para 4.1.3 says that NESO will have sole decision making powers on designating projects. To ensure that these powers are not used too frequently, would it be prudent to include for regulatory oversight of the extent and scale of Designated Projects to ensure compliance with the statement that projects will only be designated in exceptional circumstances? As noted previously we would like to see clearer definitions of what might be considered as Designated Projects.



Public

Additional Questions

18. Do you have any other comments (including whether there was anything else you were expecting to be covered in these documents)?

Lack of transparency and quality of network data continues to be a problem for developers wishing to connect. Introducing zonal technology capacity caps and additional requirements to entering and remaining in the connection queue will only increase the need for transparency for developers. Data on network conditions, the queue, and NESO plans are all important, yet current data provision is inconsistent and low quality. NESO should provide leadership for all networks to share data in line with the Energy Data Taskforce recommendations.

There is a risk that other markets are impacted by a loss in competition between developers as some retain connection offers pre-2030 and others lose out. This may reduce competitive tension in CfD and capacity market allocations, as well as potentially impacting bargaining powers of developers with respect to supply chain, land etc. The potential impact of this has not been assessed in the documents.

We are also concerned about the deliverability of the full queue assessment and reform process in Q2 2025. We agree that it's important to move quickly on this reform, but we should try and avoid forcing developers to take decisions at a quicker pace than necessary, as deadlines are missed (as has been seen at several prior stages in the connection reform journey).

