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FAO: Cher-Rae Fairlie, Viljami-Yli-Hemmink
Sent via email to offshore.coordination@ofgem.gov.uk

22nd July 2022

Minded-to Decision and further consultation on Pathway to 2030

Dear Cher-Rae Fairlie and Viljami-Yli-Hemminks,

We have reviewed Ofgem's Minded-to Decision and further consultation on Pathway to 2030, setting our Ofgem's minded-to decision to apply a 'very late competition – generator build' model to non-radial offshore transmission systems in scope of the Pathway to 2030 workstream of the Offshore Transmission Network Review (OTNR), and Equitix are pleased to provide the following feedback.

As you know, Equitix is an investor in four OFTOs (Greater Gabbard, Thanet, Gwynt y Mor, and Humber Gateway) and is the preferred bidder on Triton Knoll OFTO. We are actively bidding the future OFTO pipeline, and an established investor in both the transmission and energy sectors. We are keenly awaiting the proposed Pathway to 2030, to continue to deliver benefits to consumers from introducing competition into the delivery of a more complex offshore electricity transmission projects.

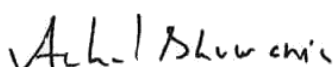
As you will know, Equitix is an independent investor with a track record of developing and selecting market leading partners to deliver Infrastructure Assets. We have an outstanding record of leading consortiums through all stages of infrastructure developments from successfully bidding to achieving contract award and financial close, construction and operations of our infrastructure assets.

Equitix has specifically targeted investments in the Renewable energy and offshore transmission sectors and has successfully bid and invested in four OFTOs and is the preferred bidder on a fifth. Equitix also owns and operates onshore and offshore wind farms, hydro and solar portfolios on sites across the UK and Europe. We are also active in the energy-from-waste, networks and utilities sectors.

Following our success in the OFTO market, this pathway to 2030 is considered a natural progression for our business going forward, making best use of our related experience, expertise and relationships.

We look forward to finding out more about the pathway to 2030 and would be pleased to meet to discuss in more detail.

Yours Sincerely,



Achal Bhuwania,
Chief Investment Officer
Equitix Investment Management Limited

Annex 1 – response to specific consultation questions

Minded-to decision on non-radial assets in scope of Pathway to 2030

Question 1: Do you agree with the findings of the draft impact assessment published alongside this document?

Response 1:

We believe that Option 4 (Early OFTO Competition) is the most appropriate for non-radial connections, rather than Option 6 (Very Late OFTO Competition). As the OFTO has greater control and influence over the technology selection, negotiations with manufactures and contractors and the risk profile of the asset that they will be responsible for over its life.

However, we recognise 2023 is not far away and practically there is limited time to allow for implementation of new regulations, running a competitive tender process and deliver the projects, so this may be the limiting factor in the option selection.

In general, it is Equitix's view that the draft impact assessment focused too heavily on cost impacts / development and construction timeline delays, and does not devote enough attention to the commercial and technical risks associated with the introduction of non-radial connections. Key considerations we believe Ofgem should give more attention to include:

Commercial

- **Construction synergies:** Whilst we are in favour of the OFTO Build model for non-radial connections, as this reduces the number of interfaces between generators, it is hard to compete with the supply chain purchasing power of large generators.
- **Procurement:** Insufficient consideration has been given to how contract novation would work under a non-radial model, particularly given the different approaches to risk management / allocation amongst supply chain contractors in the offshore wind industry.
- **Standardisation:** Already in the OFTO market we see different Developers selecting 220kV and 275kV. Greater standardisation of voltage level, as per every transmission network operator in the UK, is required to ensure equipment is compatible given limited credible OEMs to produce the required equipment. Ideally this would be coordinated with the onshore transmission system operator. This will increase efficiencies and availability of spares etc.
- **Availability:** Insufficient consideration has been given to which generators would take precedent under a loss of availability, and how this process would be managed. It is also possible that, with the introduction of the higher voltage technology required for non-radial connections, overall availability may be lower and the Ofgem 98% threshold may need to be revised down.
- **Coordination / outage / contingency:** Insufficient consideration has been given to how the regime would cater for coordination between generators for outages.
- **Licence Period:** Insufficient consideration has been given to how the Licence period would be determined, and whether there would be one single licence period for all connected generators or several for each connected generator. This would also have implications for potential Licence period extensions in line with different repowering / operating assumptions of generators.

Technical

- **HVDC Technology:** Further consideration should be given to how the move to HVDC technology would impact the regime, for example:
 - HVDC circuits do not have circuit breakers, which could impact the controls and protections for the OFTO in managing the connected generators.
 - Higher voltage transmission technology e.g. 500kV is as yet unproven, and proving the technology is key to be able to continue to fund these projects using Project Finance.
- **Offshore Infrastructure:** Further consideration should be given to the impacts on the required offshore infrastructure based upon increased voltages and the geographical spread of generators.

For example, a non-radial connection may require two Offshore Substation Platforms and the use of 132kV rather than 66kV Array cables.

- **Grid Code Compliance:** Further consideration should be given to the impacts on GCC, for example harmonics, when integration multiple generators particularly if their connection is phased over a period of time (e.g. who would be responsible for paying for harmonic filters if a subsequent generation connection on the same non-radial connection introduced that requirement).

Question 2: Where you disagree with the draft impact assessment, does this raise any issues with our minded-to decisions?

Response 2:

We believe consultation with the OEMs is required to confirm the anticipated delivery window of 3-5 years. We are moving into a period where a limited number of OEMs are expected to be able to deliver equipment for a significant increase in offshore Projects including offshore wind, floating wind, interconnectors and potential electrification of oil and gas platforms in the North Sea. 3-5 years may be realistic on the current deployment, but manufacturing and vessel availability are likely to become bottle necks if there isn't active engagement to ensure the industry can deliver to this scale and time frames.

Pathway to 2030 - Gateway assessment process

Question 3: Do you agree with the proposed introduction of a new Tender Entry Condition in the Tender Regulations requiring the confirmation of the offshore transmission system as 'economic, efficient and coordinated'?

Response 3:

We agree this is appropriate, although has a lesser impact on the OFTO. However, it is crucial that the regime is as inclusive as possible to ensure consistency across all generators. Ensuring approval ahead of the OFTO transfer process will provide certainty that developers and investors require.

Question 4: Do you agree with the introduction of the proposed gateway stage assessment process?

Response 4:

We agree this is appropriate, as it provides developers with greater certainty on the assets as they develop them.

Question 5: Do you think the information sought as part of the gateway assessment process is appropriate and proportionate? Is anything missing?

In regard to the proposed criteria, we would agree as follows:

Description of how the detailed network design meets the required outputs of the HND	Yes
Detailed description of the proposed infrastructure	Yes
Detailed description on how the proposed design would contribute to the development of an economic, efficient and coordinated system of electricity transmission	Yes
Detailed information on the interaction between all users and prospective users of the coordinated assets, including a clear summary on the timelines for all relevant projects and a summary of engagement to date with other relevant developers/projects	Yes
A detailed timeline for the initial project including through to energisation of the system and proposed asset transfer date to the OFTO	Yes
To the extent a developer intends to make anticipatory investment on behalf of a later project, details of that anticipatory investment should be provided	Yes

For the avoidance of doubt the above response is on the understanding that as the projects develop the details will be updated with each gate as is the nature of early development projects as more information is gathered and as the design process progresses. We believe the criteria could also look to include:

- Detail around the proposed contracting strategy / risk allocation
- Detail around the proposed surveys / protections that will be undertaken / sought

Question 6: Do you have any views on the timing of the gateway assessment process?

Response 6:

We feel more time should be allowed for the ITT and a minimum of 9 months for the ITT will be required. Recognising the time constraints to deliver the EPQ timing could be condensed and the requirements adjusted to ensure this is deliverable. The extension to the ITT Stage will allow for:

- The time required to evaluate construction, the contracting strategy, and risk allocation (6 months)
- Information / DD for funders and insurers (2 months)
- Producing the submission (1-2 months)

Question 7: Is there any other information which you believe should be included in the confirmation to developers?

Response 7:

No comment.

Very late competition model tender policy

Question 8: Do you think changes are required to the current process to facilitate a very late competition model for non-radial assets?

Response 8:

The new model for non-radial assets has a different risk profile and will require the OFTO to provide different services including NETS and boundary relief, rather than a simple point to point connection with flow in one direction and further consideration into the allocation of that risk is required.

Any faults of the OFTO assets will have greater implications than just taking a single asset of line and prioritisation of the system and fair allocation of risk and asset health need much further consideration. Greater coordination will be required with ESO an TO, to ensure the transmission system meets their requirements as well as the generators requirements, as discussed above, these requirements will be dynamic and how this is managed as new generators come on and offline at different times will need to be carefully considered too.

Policy considerations for implementing non-radial offshore transmission

Question 9: Do you think changes are required to the current package of OFTO obligations and incentives due to the introduction of non-radial offshore transmission assets?

Response 9:

- **Incentives:** Given the benefit to the consumer of reduced transmission infrastructure, OFTOs should be greater incentivized / rewarded for delivering cost outperformance.
- **Performance:** Given the more complicated technology / integration, OFTOs should be better rewarded for high performance / availability levels.
- **New asset investment:** Clearer indication on the process for new asset investment (given cable capacity is the limiting factor, as well as transformer / line losses), so that technology can be appropriately chosen in advance.

- **Third Package unbundling:** Consideration of how this regime will apply and if amendment is required to accommodate these more complex projects.

Question 10: Do you think changes are required to other aspects of the OFTO regime, eg asset life or duration of the revenue stream?

Response 10:

Equitix considers that a number of policy changes could be beneficial to the OFTO regime:

- **Costs:** Incentivization Cost savings in Construction and Operations, for example akin to the RAB model used by the network utilities, which would incentivise outperformance rather than encouraging bidders to submit aggressive bid positions with only downside.
- **Asset Life:** Asset life for the OFTO needs to be aligned to the offshore wind / project finance market which has evolved since the original Tender Rounds.
- **Oil & Gas Platform Electrification:** Due to current uncertainty around who will own the transmission network for O&G platform electrification, clarity would be welcomed around whether this will be included in the OFTO regime going forward and how this will relate to the existing OFTO infrastructure.