



Arven Offshore Wind Farm
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Consultation Response

Attn:

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Delivered to: RIIOElectricityTransmission@ofgem.gov.uk

Arven Offshore Wind Farm Limited's (Arven's) response to Ofgem's Consultation on the proposed regulatory funding and approval framework for onshore transitional Centralised Strategic Network Plan 2 projects

About Arven

Arven is a 2.3GW floating offshore wind development located to the east of the Shetland Islands. Through a 50:50 partnership between Ocean Winds and Mainstream Renewable Power, the two sites were awarded as part of the ScotWind leasing round in 2022. Arven is expected to be operational in the early 2030s. Its output has the potential to provide two million households with clean renewable power, while saving three million tonnes of CO₂ emissions each year.

As one of the largest sites of its kind, Arven is a flagship project for floating wind. It offers a real opportunity to deploy floating technology on an industrial scale, generating jobs as well as wider economic and social benefits for Shetland, Scotland and the wider UK. Realising the potential of floating offshore wind is essential to a successful and sustainable energy transition, for the UK and globally, highlighting the substantial importance of Arven in terms of technology development, deployment and future learnings.

Working together with local stakeholders, the partnership behind Arven aims to cement the UK and Scotland's position as a global leader in floating technology and offshore wind innovation. Our approach seeks to maximise project expenditure primarily in Scotland (including locally in Shetland), and the rest of the UK, supporting domestic supply chain capabilities. Both shareholders have a strong track record in commitment to developing regional and local infrastructure, and local industry will be at the core of Arven's development. Additionally,



around 1500 direct and indirect jobs will be created during the construction phase, plus long-term positions during the operational phase.

Shetland has some of the best wind resources in the world and is well positioned to play a key role in renewable energy development, and a just transition to net zero, due to its geographic location and natural resources. The islands have a proud history of fishing, oil and gas, and maritime industries that have fostered engineering and offshore expertise over time. With its evolving energy and marine infrastructure, and ongoing energy transition, there is also strong interest in power-to-X and other offtake opportunities which are being actively explored by third parties. The opening this week of the 443 MW Viking onshore wind farm, which will be the UK's most productive onshore project by some margin, highlights the scale of the opportunity and the ability to deliver major projects located in Shetland.

Arven very much welcomed the March 2024 publication of the Electricity System Operator's (ESO's) Beyond 2030 report that provided confirmation that Arven will be offered a connection point in Shetland. We look forward to continued engagement with the ESO over the coming months to agree the Transmission Interface Point (TIP) and Completion Date for the project. An offshore scoping report has been submitted to the Scottish Government for the project, and data gathering to inform the environmental impact assessment (EIA) is already underway. It is important for the TIP and a timely Completion Date to be defined as soon as practicable, ideally by the end of Q3 2024, to allow the project's programme to be baselined, the equivalent onshore scoping report to be completed, and to enable time critical surveys to commence.

Arven welcomes the opportunity to respond to Ofgem's consultation on the proposed regulatory funding and approval framework for transitional Centralised Strategic Network Plan 2 (tCSNP2) projects. Timely connection of renewable, low-carbon generation is paramount to achieving the UK's legally binding net zero commitments, a just energy transition, national security of energy supplies, permanent reductions in electricity customers bills, and delivery of near-term 2030 clean energy targets. Arven strongly supports Ofgem's proactive efforts to progress critical transmission infrastructure upgrades to ensure a network capable of keeping pace with the rate of clean energy deployment and providing the necessary investor confidence in the timely delivery of strategic network buildout.

While the tCSNP2 is clearly aimed at advancing key system-critical projects, it comes at a time when there are multiple parallel policy and regulatory changes under consideration, and all remain work-in-progress. Change, by definition, brings risk and uncertainty and Arven, and its shareholders, are maintaining a keen watching brief on the Review of Electricity Market Arrangements (REMA), the new UK Government's Clean Power by 2030 (CPP2030) plan and the release of the Strategic Spatial Energy Plan (SSEP). It is Arven's considered view that the possible introduction of zonal pricing via REMA could pose a very material threat to the delivery of Arven and other key offshore wind projects that are necessary to deliver the UK's legally

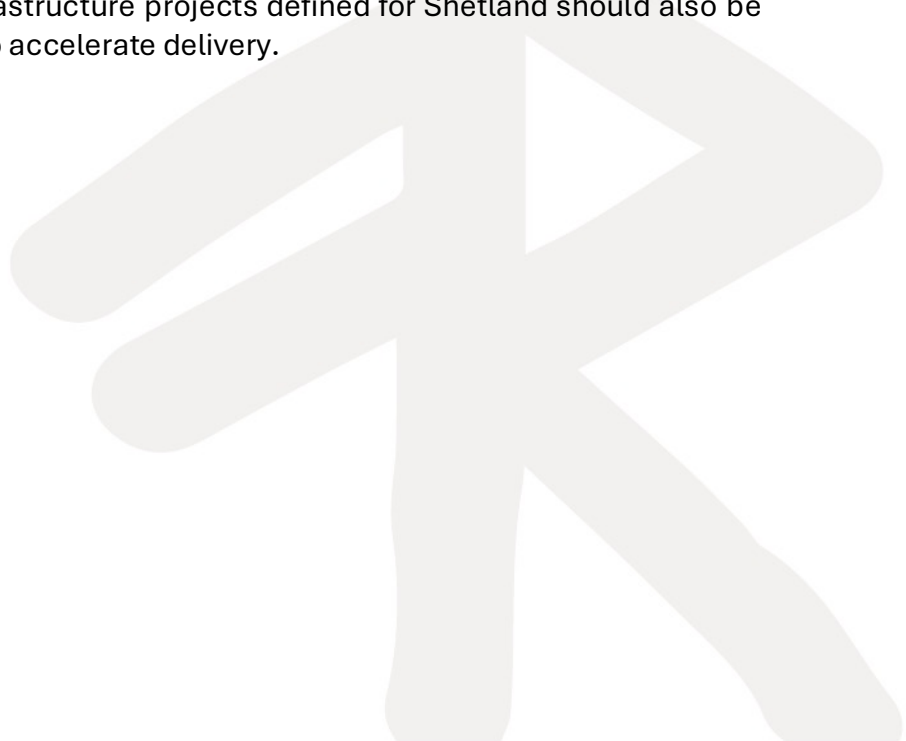
binding net zero targets, and the other significant national benefits listed earlier. Another existential threat comes from the predicted cost trajectory of TNUoS charges and Transmission Loss Multipliers (TLMs) and Arven views this as a policy area in need of urgent review, reform and/or mitigation, as these costs are predicted to soar in coming years, eroding the profitability of new and existing offshore wind farm projects in Scotland to unsustainable levels.

Arven's view is that the transmission projects identified in the tCSNP2, are of critical strategic national importance and they should be delivered effectively and efficiently to ensure confidence that the GB transmission network will be in place to meet net zero targets and reliably deliver clean energy to consumers around the country without delay. The possibility of introducing delays while Ofgem waits for the outcome of the Clean Power Plan 2030 (CPP2030) and the proposal to have a tCSNP2-Refresh in 2026 is concerning to Arven and appears to introduce an unwelcome check to momentum in the intervening period, to the extent that delivery of ScotWind and Net Zero targets could be undermined. The confirmed need for projects should provide the regulator with a solid basis on which to maintain momentum in the delivery of early projects through the lead-in to any further reviews. Any introduction of pauses and delays appears to sit at odds with the new UK Government's policy steer and Ofgem's remit to deliver net zero and protect the interests of future electricity consumers. Arven believes that the proposed tCSNP2-Refresh has the potential to unintentionally introduce unwelcome and damaging uncertainty and delay. We would support a move to eliminate the publication of the tCSNP2-Refresh, and rather focus industry efforts on delivering the forthcoming Centralised Strategic Network Plan (CSNP) on a faster timeline.

Arven is particularly keen to highlight a significant Shetland-specific gap in the tCSNP2 project remit. The tCSNP2 does not identify all the works required to facilitate the connection of the NE1 ScotWind projects east of Shetland to the Shetland-to-Coachford link. It is understood that Scottish Hydro Electric Transmission (SHET) is developing a Shetland Whole System Solution that will more precisely define that infrastructure. We therefore consider that SHET's recommendation for the onshore infrastructure projects defined for Shetland should also be prioritised for access to any funding to accelerate delivery.

Sincerely,

Aaron Priest (by email)
Stakeholder Manager – Arven



Consultation Questions

Section 3

Q1. Do you agree with our assessment of the tCSNP2 and the risks that we have identified?

The consultation identifies many key risks. Arven views the ongoing Review of Electricity Market Arrangements (REMA) and the possibility of moving to a zonal wholesale energy market as bringing serious risk to all ScotWind investment and all renewable energy investment in Scotland more generally. The consultation states that zonal pricing “could improve the operation of interconnectors and storage, and potentially impact the location of future generation and demand across the electricity system. This impact in theory would reduce constraints on the network which could in turn make further network reinforcements less beneficial.” The locational signals inherent in zonal pricing, and also the unmitigated locational signals built into current TNUoS charging and TLM methodologies, by their nature, are designed to send strong geographical investment signals to move investment out of Scotland and out of ScotWind, to locations further south. Such strong locational signals appear to run directly contrary to the new UK Government’s stated objective that *“Scotland will lead the clean energy revolution in the United Kingdom, fuelled by the skills, knowledge, and talented workforce the energy sector here contains”*. These signals appear to run directly contrary to any measures aimed at promoting a Just Transition for areas like Northeast Scotland and Shetland and their urgent requirement to transition away from dependence on the oil and gas industry for jobs and prosperity. These strong signals also appear to pay little cognisance to policies aimed at promoting wider national cohesion and the pressing need to underpin domestic energy security for all parts of the United Kingdom in a Net Zero world.

Another existential threat comes from the predicted cost trajectory of TNUoS charges and Transmission Loss Multipliers (TLMs) and Arven views this as a policy area in need of urgent review, reform and/or mitigation, as these costs are predicted to soar in coming years, eroding the profitability of new and existing offshore wind farm projects in Scotland to unsustainable levels.

Arven is of the view that the forthcoming Strategic Spatial Energy Plan (SSEP) brings additional risk and uncertainty in the roll out of tCSNP2 and how the SSEP will impact future projects. We urge Ofgem to ensure that the tCSNP2 and SSEP are effectively aligned.

Arven agrees that variations in the amount of offshore wind connecting to the network need to be accounted for in planning network needs. While the proposed tCSNP2-Refresh may provide a mitigation safety net, we consider that reliance on this mechanism could have the unintended consequence of introducing uncertainty, hiatus and delay. Arven is of the view that delays to the development of offshore wind projects as a result of ongoing network upgrade

uncertainty is an additional risk in its own right, something that Ofgem needs to properly consider. Arven and its investors require confidence and certainty in network connection dates to underpin project programme and investment. Introducing uncertainty until 2026 for the tCSNP2-Refresh, and subsequent revised network design and amended delivery dates, risks an unintended check to the momentum of offshore wind developments. Checking momentum now, brings a real risk that 2030 Government electricity decarbonisation targets are not met.

Arven suggests that Ofgem consider forgoing the reliance on the tCSNP2-Refresh in early 2026 and focus on publishing the CSNP more expeditiously. Industry should recognise the value of the tCSNP2 to deliver on its objectives without requiring a refresh, as this alternative approach would minimise potential delays and uncertainty created by requiring the publication of an additional transitional plan. Instead, efforts should be focused on delivering the CSNP on a faster timeline for a more efficient use of industry resources. Arven would be supportive of this approach as it reduces risk, maintains momentum to deliver projects, and eliminates duplication of work between the tCSNP2-Refresh and CSNP.

Arven is, again, particularly keen to highlight a significant Shetland-specific gap in the tCSNP2 project remit. The tCSNP2 does not identify all the works required to facilitate the connection of the NE1 ScotWind projects east of Shetland to the Shetland-to-Coachford link. It is understood that Scottish Hydro Electric Transmission (SHET) is developing a Shetland Whole System Solution that will more precisely define that infrastructure. We therefore consider that SHET's recommendation for the onshore infrastructure projects defined for Shetland should also be prioritised for access to any funding to accelerate delivery.

Section 4

Q2. Do you agree with our proposals for the “Development track”?

Yes, Arven largely agrees with the “Development track” proposals. The development track price control deliverable (PCD) is set at achieving ESO maturity rating 3 by 30 June 2025. However, we would like to highlight the possibility of a regulatory funding gap between submission for the delivery track in June 2025, which could be achieved even earlier, and the introduction of a tCSNP2-Refresh in 2026 (or, as we recommend, the publication of the CSNP on a faster timeline). Projects that would have reached delivery track level will not be able to access Pre-Construction Funding (PCF) until at least six months later. In addition, there is no information given around the circumstances if a project reaches maturity level 3 significantly earlier than the June 2025 date. Arven urges Ofgem to consider these potential scenarios to ensure there are no avoidable delays that could impact the timely delivery of key projects.

Q3. Do you agree with our proposals for the “Delivery track”?

Yes, Arven agrees with the “Delivery track” proposals and the approach to mirror the 2.5% PCF arrangement that has proved successful under the Accelerated Strategic Transmission Investment (ASTI) scheme. However, as with those projects that fall into the development

track, there is uncertainty around the progression of these projects beyond the tCSNP2-Refresh date (or, as we recommend, the publication of the CSNP on a faster timeline). While there is reference to Output Delivery Incentives (ODIs) being set within RII0-T3, it is unclear how the two funding streams will align and what this will mean for the projects.

Q4. Do you agree with our proposals for the “Small / Medium Sized Project Delivery track”?

Yes, Arven agrees with the “Small/Medium Sized Project Delivery track” proposals.

Section 5

Q5. Do you agree with our categorisation of tCSNP2 projects?

Yes, Arven is largely supportive of the categorisation of tCSNP2 projects. We agree with the projects that have been categorised as delivery track projects – these are critical for delivering the connection of offshore wind in Scotland and therefore should be incentivised to progress to submission of planning consent applications.

As noted in the Beyond 2030 report, Eastern Green Link 3 (EGL3) was identified as network infrastructure that was required to be delivered by 2030 to deliver the Pathway to 2030. However, now “the current delivery date estimates sit beyond this”. If it is not possible to recover the delays on EGL3, then Arven believes that other projects from the tCSNP2 should be accelerated to mitigate the EGL3 delay and provide network capacity to transmit offshore wind generation from the north-east of Scotland southwards.

Arven welcomes Ofgem’s proposal that certain tCSNP2 projects should be delivered as part of the existing projects in the Transmission Owners’ (TOs) licences (as set out in table 12 of the consultation). We agree that the TOs should be able to apply for additional funding to reflect the changed project scope but are of the opinion that the TOs should be held to delivery dates already stated in their licences to ensure the timely delivery of the necessary network infrastructure.

Q6. Do you agree with our proposed approach for the tCSNP2 asset classification projects?

Agree

Yes, Arven supports the categorisation of the Shetland-to-Coachford link as a *delivery track* project. We agree with the position set out in paragraphs 5.19 to 5.22.

Arven applauds SHET’s proactivity in developing a “Whole System Solution” (WSS) for Shetland, with the Shetland-to-Coachford link central to these plans. Arven recognises and supports a well-planned and implemented WSS for Shetland as being the best mechanism to ensure efficiency and best value for electricity customers. Arven supports the development of a strategic plan to ensure that the transmission network is designed in a way which accounts for the multiple generation (including the 2.3 GW Arven project) and demand project requirements in the islands, rather than piecemeal and incrementally. Arven also recognises

the need for additional resilience in the security of supply to the islands, the additional strategic benefit of supporting the Scottish government's Hydrogen Action Plan and the need for additional capacity for the transmission of power from several current and future onshore wind farms currently in development. SHET's strategic foresight is to be applauded in securing a significant inward investment and capacity reservation agreement to manufacture and deliver cable for a Shetland2 HVDC link, as an anchor project that will enable the construction of a factory in the north of Scotland. Arven shares Ofgem's high degree of confidence that a second HVDC link to Shetland will be needed and strongly agrees with the minded-to decision to put Shetland-to-Coachford into the Delivery track, confirming SHET as the delivery body, and providing PCF as per the Delivery track arrangements. Arven also fully supports a decision to "ensure that funding to meet efficient costs incurred in placing a capacity reservation agreement (CRA) are made available to SHET through the advanced procurement mechanism".

For the record, a PCD requiring submission of all material planning consent applications for SHL2 by a 31st Dec 2026 delivery date, as stated in the consultation, aligns with Arven's programme for submitting its consent applications to Scottish Ministers for their determination.

Section 6

Q7. Do you agree with our approach to identifying a project for early competition?

Q8. Do you agree with our approach to identifying a first project for early competition?

Arven is generally supportive of the approach to identifying early competition projects. However, we urge that attention is given to ensure competition does not result in delays in project advancement. Delays to the delivery of the critical projects considered under this consultation could significantly impact the timely delivery of system-wide targets. All efforts to minimise the chance of delays should be made.

Section 7

Q9. Do you agree with our expectations for the TOs and ESO?

Yes, Arven is generally supportive of the expectations laid out for the TOs and ESO. However, we have concerns around the planned successive releases of the tCSNP2-Refresh in early 2026 and the CSNP which is also expected in 2026. These regulatory frameworks are time and resource-intensive, cover overlapping remits, and could be difficult to deliver on time. Resources should be utilised efficiently and effectively to ensure there is no unnecessary duplication of work, and that future materials are delivered in a timely manner to minimise project delays and additional uncertainty. To this end, Arven would be supportive of a combined work product that captures the intended scope of the tCSNP2-Refresh and CSNP to minimise the risk that delays to one publication creates knock-on delays to following products. The value of the tCSNP2 should be recognised and allowed to stand on its own

without requiring another transitional plan be developed. Rather, efforts should focus on publishing the CSNP more expeditiously.

Section 8

Q10. Do you agree with our proposals to introduce a scope change governance process for onshore transmission projects?

Yes, Arven is generally supportive of the scope change governance process for onshore transmission projects. However, we believe that the proposals should be expanded so that the process considers the impact of changes on offshore transmission projects (i.e. generator-build transmission assets), generators, and users. Affected generators and users should be consulted in this process to determine what impact, if any, the proposed change has on them. For example, if the TO proposes to change the location for a new substation that will be the Transmission Interface Point (TIP) for an offshore wind farm the wind farm developer should be consulted and their views factored into the process. If the developer has already obtained planning consent, secured land and progressed design for its onshore substation and cable route based on the original TIP, then the TO's proposed change in TIP location could have a significant detrimental impact on the delivery timescales for the offshore wind farm, potentially negating the perceived benefit of the TO's proposals.

To this end, we suggest that the governance panel should include generators/offshore wind representatives to ensure cohesion across regulatory processes.

