From:
To: East Anglia ONE North; East Anglia Two
Cc:

Subject: Invitation from the Secretary of State (BEIS) to comment on East Anglia One North/ East Anglia Two as set out in letter of 2 November 2021.

Date: 30 November 2021 20:03:37

Personal Reference: EA1N: IP - 20024031 / AFP - 132. EA2: IP - 20024032 / AFP - 0134.

(These remarks should be considered in respect of both East Anglia One North and East Anglia Two.

Tessa Wojtczak.

To: The Secretary of State (Business, Energy and Industrial Strategy), the Rt Hon Mr Kwasi Kwarteng MP.

Subject: Invitation from the Secretary of State to comment on ScottishPower Renewables East Anglia One North and East Anglia Two proposed windfarms in respect of Flood Risk.

Introduction:

In response to the Secretary of State, I will address the issue of Flood Risk under the headings:

- a) Local Hydrogeology and Groundwater, with reference to the Aquifer, Risk Assessment and the PSED.
- b) Wider considerations concerning Flood Risk
- c) The significance of NDAs in responding to this invitation
- d) Request for a Split Decision.

Local Hydrogeology and Groundwater.

- 1. On 2 November 2021 the Secretary of State requested further information on a number of topics, including Flood Risk, a matter upon which comment was invited from Interested Parties within the Examination by the deadline of 30 November 2021.
- 2. My remarks here address the related issue of the potentially damaging impact on human health of the proposed development at Landfall and at the adjoining part of the Cable Corridor on the extensive aquifer, supplying potable water, that underlies that entire Thorpeness area of development, and the part of the sea bed at the site of the proposed Landfall. Construction will have an adverse impact on local hydrogeology and groundwater.
- 3. In addition to comments on how these concerns have been addressed in the course of the Examination, I will draw upon an Independent Expert Report that explores these issues in full and informed detail. (**Final independent Hydrogeological Assessment, B.A. Hydro Solutions) (Rep13-076).** (Link below).

https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010077/EN010077-005573-DL13%20-

%20Wardens%20Trust%20Ness%20House%20Final%20Independent%20Hydrogeological%20Assessment.pdf

4. These remarks on the importance and vulnerability of the aquifer are made with specific local relevance to the Wardens Trust, Ness House, Ilex House, Avocet Cottage, and 1 and 2 Ness House Cottages, along with two liveries, all of which are entirely dependent upon this aquifer for their water supply. No mains water supply is available.

5. It is understood that Anglian Water and EDF also rely upon water supply from this aquifer.

Wardens Trust.

- 6. Wardens Trust is a community centre providing year-round resources, services and residential care to large groups of vulnerable people with protected characteristics, including those with disabilities, the elderly, those with neurodevelopmental conditions and other highly sensitive human receptors
- 7. In the light of this fact, I should therefore like these remarks to be considered with specific reference to the Applicants' Responsibilities under the Public Sector Equality Duty (PSED) in this respect.
- 8. It is my belief that The Applicants have failed fully to take into consideration these duties. For further information on how this topic had been addressed within the Examination, please see:

Response to Action Points from Compulsory Acquisition Hearing 3, Point 10. (Rep 8-248)
Applicants' Comments on Tessa Wojtczak's Deadline 8 Submissions (Rep 9 - 025, 2.3.1...).

9. The Trust is situated on an AONB close to a Special Protection Area and the Suffolk Sandlings, within metres of the Cable Corridor construction works, approximately 750 metres north of the Landfall HDD bores, according to the Applicants' estimate, and encircled by other aspects of Landfall and haul road construction. (See **Appendix A** of the **HDD Verification Clarification Note**, (Rep6-024).

Applicants position on the aquifer as a human resource.

10. The Applicants:

"acknowledge that potable water supplies are taken from the aquifer through which the HDD bores will pass "
(Applicants Comments on Submissions on Rep6-021, 4.1.3) ,
and that

"Potable water supplies are taken from the Crag and the Chalk through which the HDD bores will pass (Rep6-021 4.2.4).

- 11. The water level lies at 11.7 metres from ground level; as our local soil is sandy, it is classed as Medium/ High Groundwater susceptibility from chemical leaching into the water supplies below ground.
- 12. For further information on this topic as covered within the Examination, please see:

Applicants' Hydrogeological Risk Assessment (Rep 6-021)
Comments on The Applicants' Deadline 6 Landfall Hydrogeological Risk Assessment (Rep 7 - 096)
Comments on The Applicants' Deadline 6 Landfall Hydrogeological Risk Assessment (Rep 7 - 084)
Applicants Comments on Submissions Regarding the Landfall Hydrogeological Risk Assessment.
(Rep 8 - 052).

13. Concerns break down into 2 primary categories:

14. Pollution by saline water.

- 15. Horizontal Directional Drilling will pass through the aquifer and curve into the seabed, thus allowing the potential for saline water to backfill along the drill route and into the aquifer.
- 16. The Applicants have acknowledged that their HDD process cannot avoid piercing and boring through the aquifer from above.

- 17. Equally clearly, the progress back up through the sea bed starts to arrive at the "punch- out " point cannot avoid drilling through the aquifer from a second time from below, this time adding sea- water to the potential chemical pollutants.
- 18. In their response to these concerns, the Applicants have referenced the use of "environmentally friendly drilling fluids "without providing further detail as to their composition, despite requests for further clarification from the Examining Authority.
- 19. Please see also the response of the Environment Agency on this point as referenced below.

20. Susceptibility of groundwater to contamination.

- 21. According to ScottishPower Renewables' own initial Scoping Report,
- 22. "A temporary construction consolidation site (CCS) will be required to support the landfill works to house the equipment and personnel associated with either HDD or trenching works as well as the installation of the transition bays.
- 23. The equipment will include mechanical excavators, drill rigs, pumps, generators, office containers, crew containers, welfare containers, Non Road Mobile Machinery, and two transition bays to connect the on- and offshore cables, plus everything needed to service the construction of the 75 meter wide cable trenches, installation of fencing and 24-hour lighting and security presence.
- 24. To service the site, a haul road will be constructed to transport equipment, personnel and support maintainance, with high density vehicle movement across the area.
- 25. Working space for construction access and equipment lay-down will be required at intervals along the route. These will be large compounds for lay- down of heavy machinery, storage, servicing and work areas, to exist **for the duration of the project.** (my emphasis.).
- 26. All of this infrastructure with its associated contaminants is proposed to be situated 11.7 metres above the water level on sandy soil which is classed as Medium/ High groundwater susceptibility. The duration of the project(s), repeatedly referred to by the Applicants as "temporary", will recur over a period of several years, significantly longer should Nautilis, Eurolink and other projects follow in their wake as is clearly envisaged by the Energy Industry.
- 27. Significant breach of the aquifer caused by HDD, and toxicity affecting groundwater draining into the water table that feeds the aquifer will have disastrous effects. This has raised serious questions in the course of the Examination as to the suitability of this location for development as proposed by SPR, and indeed multiple other projects. The potential leaching of contaminants from HDD, associated waste and pollution and, significantly, erosion of onshore ground conditions or offshore sea- bed disturbance will compromise this resource.
- 28. Nevertheless, the Applicants confine their remarks to potential harmful effects of HDD on the aquifer, and only at Landfall. I believe the risks assessed should cover these wider aspects of terrain where work is likely to interact with the aquifer. These interactions are not confined to Landfall, and will not be caused solely by HDD.
- 29. In respect of ground susceptibility, within my own experience the water supply at this location was rendered unsafe to drink and requiring treatment after a period of habitation by pigs on the land required by SPR due to a build-up of nitrates within the groundwater. That period did not exceed that of SPRs proposed presence on the same land.

- 30. In response to these concerns, the Applicants repeatedly state that agreement with the Environment Agency in the Statement of Common Ground will be undertaken for works requiring excavations "below Im within 250 metres of boreholes or springs (e.g(sic) the sources of private water supplies.)
- 31. The Applicants seem not to recognise that the private water supply depends not upon a spring or borehole, but on the entire structure of porous rock saturated with groundwater that underlies the selected site of their development. Additionally, the effect of the presence of pigs on the water level 11.7 metres below them indicates how vulnerable the groundwater supply is in this location.
- 32. In addition, work at Landfall is likely to cause distortion of the floodplain locally, which will be detrimental to the aquifer's integrity.

Independent Report.

- 33. I will refer here to an independent report produced by B.A. Hydro Solutions Limited assessing the risks from East Anglia One North and East Anglia Two to the well upon which this small community depends. (**Rep13-076)** (Link above).
- 34. I would respectfully ask that the Secretary of State addresses the entire report, and **also that it be brought to the attention of the Environment Agency** if they have not yet had the opportunity to review it.
- 35. The following quotations indicate the unsuitability of this location for development such as that proposed by SPR, and an independent opinion on the Hydrogeological Risk Assessment that the Applicants have submitted into the Examination in response to repeated requests for clarification on these matters.
- 36. "This assessment concludes the emplacement of a low permeability barrier running west to east around 200 m south of the well in association with the installation of the cables could starve the well of water, could distort ground water flow and result in a measurably larger proportion of seawater being drawn into the well, affecting quality.
- 37. "The evidence of past land use affecting the quality of water drawn from the well shows it is vulnerable to surface activities in the local area. As there would be a long build duration affecting the land surrounding Ness house there is a risk the disturbance to the ground would affect the quality (chemically, microbiological and physically such as turbidity) during and for many years after the installation (my emphasis). This would be in addition to any effects from changing the hydrogeological setting.
- 38. "The combination of changing the hydrogeological setting through the drilling, with the risk posed from surface and subsurface work all around Ness House, in addition to coast erosion, sea level rise, drought effects and climate change means the proposal represents an existential threat to the well.
- 39. "It is our professional opinion that the very limited, basic and relatively poor- quality hydrogeological work completed to date are inadequate, they have not started to accurately characterise or quantity the hydrogeological setting. They have not identified the Ness House Well as a reception at risk. They have provided woefully inadequate information on which stakeholders can make no meaningful assessment (my emphasis)) forcing them to conduct their own investigation and deduce, from the experience of professional hydrogeological, the true nature and impact their water supply is at risk of. "
- 40. "the hydrogeological work presented by ScottishPower Renewables should be rejected as incomplete and inadequate. No approval for any of the activities in the vicinity of Ness House should be granted". (my emphasis).
- 41. These concerns about the potential risk to this water supply upon which large groups of vulnerable people are reliant have been placed before the Examining Authority, but at the time of writing no conclusive reassurance has been received as to the security of this supply.

- 42. In response to request for clarification as to mitigation measures should contamination occur, the Applicants propose a "temporary water supply (to be) tied in to the existing well."
 43. Despite requests for more information, none is forthcoming. We assume that bowsers are being proposed, despite the Wardens Trustees indicating that this would not be a preferred solution.
 44. These howeers would be required, in the case of contamination, to service for considerable periods.
- 44. These bowsers would be required, in the case of contamination, to service for considerable periods several households () a busy residential amenity providing care for large groups of the vulnerable, requiring shower and hygiene facilities and all food and drink, including during the summer months, bathing days for the elderly, provision for livestock, and the re- filling of a wildlife pond, attractant to rarely seen species for educational purposes. The volume and size of these bowsers, and where and how they are to be located, has not been addressed.

45. The Environment Agency's position.

- 46. At Deadline 11, The Environment Agency (EA) submitted a document (Rep11-112), addressing the Applicants' Hydrogeological Risk Assessment on HDD at Landfall. (Rep 6-021).
- 47. The submission, in the form of a letter from a planning specialist, considers the wider effect of HDD on the aquifer, and on the water abstraction at Ness house, and, briefly, matters concerning the substation at Friston.
- 48. As the EA had previously expressed no interest in the potential damage to the aquifer, or to the private water supply at Ness house and Wardens within the Examination, I assume that the EA's submission, at that critical stage in the examination, had been provided to the Examining Authority at the request of the Applicants in their own support. This indicates that the Applicants recognise the significance of this issue in their application for Consent.
- 49. I cannot comment on any technical remarks in this letter regarding water flow, but would make the following remarks:
- 50. I note that throughout the submission, the EA's position in respect of the applicant's researches to date is extremely tentative.
- 51. The letter notes that:
- 52. "whilst we have no objection to the work completed to date, further study and explanation regarding protection of water supplies will be required prior to the commencement of construction."
- 53. I feel it is not appropriate or acceptable that this further explanation was not made available during the course of the Examination, despite requests from the Examining Authority. No reasonable judgment in favour of the Applicants on this point can be made in the continued absence of such detailed evidence.
- 54. The letter goes on to note that:
- 55. Horizontal Directional Drilling (HDD) is a <u>fairly widely used technique</u>, and <u>may</u> be proposed to avoid disruption to surface water features or designated ecological sites. "(my emphasis).
- 56. As support for SPR's position, this is vague.
- 57. The EA goes on to state that :

- 58. Prior to the commencement of the works, the Applicant will need to, provide further information on how seawater entry will be precluded and to indicate whether the inflow of saline water would in any way reduce the capacity to seal the HDD bore. It would also be useful for the Applicant to provide an assessment of the impact on the aquifer should saline water enter the bore and move into the surrounding aquifer. (my emphasis)
- 59. The EA therefore recognises the risk of seawater contamination and considers that the Applicants have not yet adequately addressed the issue.
- 60. The EA goes on to suggest that it would be "Useful to look more directly at the potential for impact at the Ness House well."
- 61. The EA's caution here is notable. It is disappointing however that at this point in their argument the EA has been wrongly informed, either by The Applicants or their own research.
- 62. They state that:
- 63. "Given that the Ness House Well is Unlicensed, the owners may only pump a maximum of 20m3/ a day. This is a very low rate...."
- 64. Data was made available within the Examination to confirm that the Well is not unlicensed. It is hard to understand why the EA are misinformed on this important point. They may also be unaware of the thousands of visitors to the site at Wardens Trust. It is unlikely that such a low rate, as cited above, is being pumped to service all the needs of these many visitors and permanent and temporary residents.
- 65. In the light of the fact that they may not be in possession of the full facts, I would respectfully ask that this information be made available to the Environment Agency for their comments.
- 66. The final point I'd like to make here is that any contamination may become apparent retroactively. In that case no mitigation provided in the course of works would be effective.
- 67. I therefore place this matter before the Secretary of State for consideration, in respect of the wider implications of ScottishPower Renewables proposed construction work for East Anglia One North and East Anglia Two, particularly in the light of the fact that if they should gain Consent for development at this location, multiple energy projects are to follow. The first of these, National Grid's Nautilus, is already seeking to establish Landfall and build a Cable Corridor on the same terrain.

- 68. Wider considerations concerning Flood Risk.
- 69. Cumulative Impact;

The East of England Energy Group.

Threat to the Protected Status of Areas of Outstanding Natural Beauty.

- 70. As an Interested Party, I feel it is impossible to consider the element of **Flood Risk** in respect of the two ScottishPower Renewables Projects, East Anglia One North and East Anglia Two, without a full awareness of the wider picture that faces this region and will impact the same water resources and pose the same key risks that are being considered here.
- 71. Throughout this Examination IPs have been acutely aware of the issue of the **Cumulative Impact** of the many Energy Projects and NSIPs planned for this region.
- 72. This is a topic upon which the Applicants have refused to engage, claiming that there has been insufficient information in the public domain for them to take a position, a claim which we dispute, and which we claim invalidates their argument.

73. We are already engaged with National Grid on the **Nautilus** project, and are uncomfortably aware that they, and wider powers, may be seeking to **reduce building constraints and compromise the protected status** associated with **Areas of Outstanding Natural Beauty** in order to facilitate the development of their own and other projects on such protected land. This is a matter of national significance at a time when the Government's own **Energy White Paper** states that:

We will safeguard our cherished landscapes, restore habitats for wildlife in order to combat biodiversity loss and adapt to climate change, all while creating green jobs.

- 74. While we engage in this final stage of Condultatuon for EA1 N and EA2, there is a keen awareness that other discussions are going on in different fora.
- **75. Iberdrola's** website (SPR parent group) has long made clear its global ambition to "create a world-beating macro Windfarm Complex, the East Anglia Hub, of which these two projects (EA1N and EA2) form an integral part along with EA3.
- 76. Iberdrola's intention is to develop all 3 simultaneously in order to "minimise cost" to itself and its shareholders. In order to ensure speed, intrusive investigation works have commenced well in advance of any decision, and SPR have firmly rejected a Pathfinder role.
- 77. On Tuesday 19th October 2021, we learned that Iberdrola's £ 6 billion of investment in the East Anglia Hub (2/3 of which is presently under review by the Secretary of State) is already included in a " *raft of measures to combat climate change and create green growth*" as part of the government's Net Zero Strategy. (Ref: iTV online news , Environment, article by Tania Mercer, Tuesday 19 October 2021, 6.47 pm.)
- 78. It is one of 18 deals announced by Boris Johnson at the Global Investment Summit.
- 79. At the same time, these very projects are under impartial review by the Secretary of State.
- 80. Interested Parties were uncomfortable with the fact that ScottishPower Renewables were awarded an unprecedented extra 3 months to complete their case, which they had been unable to do within the Examination, without any opportunity for Interested Parties to engage with this extended process.
- 81. On November 4th, we learn that East Anglia can become the "energy house of the UK" and that experts believe that the large gas facility at Bacton could be converted into the hydrogen hub of the future". (Links below).



- 85. In this same reports Simon Grey ,Executive Director of Policy and External Affairs at the East of England Energy Group (EEEGR) expresses concerns that "campaigners" may gain traction and slow down the process of welcoming the next wave of windfarms in the pipeline off the coast. He states, in respect of the call for the Offshore Transmission System to protect local communities, economies and the environment from the destructive effect of multiple landfalls and Cable Corridors connecting to substations, that it is far too late to change course now and that "time is of the essence", ressoning that it's the "better of two evils". "We can't wait for this Grid to be built, "he is quoted as saying.
- 86. At the same forum, the East of England Energy Group UkK Wind Week (sponsored by SPR among others) Peter Aldous, **MP for Waveney**, says that our region could become a "global exemplar", "the engine room of the UK" for investment, innovation and skills for **decades to come**.

- 87. It is clear that Energy Companies have plans for this region which will change its character and function entirely, while at the same time urging speed and resisting the voices of local communities whose economy and environment will be devastated by the decades of development intended for it.
- 88. Meanwhile, Suffolk County Council draw attention to the 14 NSIPs planned for this region with many more in the pipeline. These projects are largely concentrated along the coast. Councillor Richard Rout emphasises the pressure on communities and calls for more joined up work between projects; the very work for which Simon Grey insists time is not available. (Link below)

89.

90. At the same time as these multiple developments are being proposed for the region, there are calls for an **Air Quality Summit** to promote local well- being, and Suffolk beauty spots, primarily along the coast where industrialisation is being urged, are ranked among the best in the UK. (links below.) These attractions, along with our artistic heritage, are precisely the eel which form our thriving local economy, which must be take into consideration.

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92.

93. I have listed these facts, voices and initiatives to attempt to illustrate the disquieting sense that while local communities are engaged in the regulated process of National Infrastructure Planning, other interests are moving and acting at a different pace, and the two are not in synergy.

94. Non- disclosure agreements.

- 95. I fully support and endorse Suffolk Energy Action Solutions Response to the Secretary of State in respect of ScottishPower Renewables' use of Non Disclosure Agreements within the Examination. It is significant at this point in that many of the people directly affected by issues connected with Flood Risk at Friston will be not be in a position to respond to the Secretary of State's request for further information.
- 96. As the Secretary of State will be aware, the Examining Authority issued a Procedural Decision stating that SPR's conduct raised serious concerns which could affect the conduct of the entire proceedings. These concerns have , by the close of the Public part of the Examination, not been addressed by SPR. Therefore SPR's case, as it stands before the Secretary of State at present, is not transparent and essentially flawed.

97. A Split Decision.

- 98. Along with SEAS, SASES, and Save Our Sandlings, I urge the Secretary of State to award a split decision.
- 99. In this way, the Offshore Turbines can be granted Consent and proceed in the timely manner that SPR and Net Zero require.
- 100. Additionally, the Onshore infrastructure should be relocated in favour of a full reconsideration of better locations, as recommended by Thérèse Coffey, our local MP.
- 101. Thus green energy is advanced, job are targeted where they are needed, and the local ecology, biodiversity, economy and quality of life is protected, thus ensuring that East Anglia is a whole, and not a partial, beneficiary.

Thank you for giving your consideration to these points. Tessa Wojtczak 30 November 2021. END. The latest Intergovernmental Panel on climate NDA. Cadet Gas a,OMG other withdrawing earlier submissions. Why? If a body has been persuaded by sound argument, is it not enough simply to cease to object? Deadline 6 bats... ESC. Important Hedgerow. SPR Response. Thorpeness cliffs. Collapse, Concerto, uncovered ancient shipwrecks at Thorpeness and Covehithe. Exposed above sea level originally 3 metres below the level of beach and seabed. Instability. The exposure was caused by a regular ly occurinf spring tide coinciding with a tidal surge along the East

Suffolk Coast, a not uncommon event. Local conditions. Other stuff. Loss of foreshore over the last 50 years

comes to o we have lost over 70 yards of foreshore over the last 50 years. R Reeves Deadline 5., in larger print further to, oral submission at ISH 7.

Compelling case that beach and cliff top at Thorpeness point is the only viable choice of location to bring cabling adore.

Commitment HDD upon which their case relies may in fact only be one of several methods.

R Reeves Deadline

I

Identify all rep numbers.