From: < >

Sent: 01 January 2024 11:43

To: Rampion2 < Rampion2@planninginspectorate.gov.uk >

Cc: Savage, Jennifer @planninginspectorate.gov.uk>

Subject: EN010117 - Rampion 2 Offshore Wind Farm - Draft Development Consent Order. Grounds for

objecting.

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For the attention of Jennifer Savage, Case Officer.

Reference: Rampion 2 Wind Farm Draft Development Consent Order (DCO) Category 3 – Development Consent Order. Date: August 2023 Revision A. Document Reference: 3.1 Pursuant to: APFP Regulation 5 (2) (b). Ecodoc number: 004866005-01

Grounds for objecting to the above DCO includes "the failure to consider reasonable alternatives (including modifications.)"

An undersea connection between the Rampion 2 offshore windfarm and 400 kV substation at the National Grid supply point at Dungeness should have been considered as "a reasonable alternative" to the proposed over land connection to the grid connection point at Bolney but I have not found any reference in documents submitted by Rampion Extension Development Limited, the applicant for Rampion 2 windfarm and associated infrastructure, for examination by the Planning Inspectorate.

This option would avoid crossing the South Downs National Park and other environmentally and socially sensitive areas, be a far more sustainable option and significantly reduce the social, economic, and environmental impacts. It would in all probability be a less expensive, less disruptive, quicker and more sustainable option.

The pdf attachment to this email outlines a case for Rampion 2 cable grid connection at Dungeness, via undersea cables, instead of the overland option to the substation at Bolney.

If this option has any technical merits, then I urge you to consider it during the examination process.

Paul Lightburn Cowfold West Sussex

The case for Rampion 2 cable grid connection at Dungeness, via undersea cables, instead of the overland option to the substation at Bolney.

Introduction

Laying cables under water has far fewer adverse environmental impacts than laying cables over land. The interference with and disruption to existing infrastructure, roads, livelihoods and flora and fauna is significantly reduced. Undersea Special Protection Areas (SPAs) can easily be avoided.

Undersea cable laying technology is well proven and cost effective and there are many precedents. Only recently Development Consent has been granted for the Eastern Green Link 2 (EGL2), a joint venture between SSEN Transmission and NGET, an underwater electrical 'superhighway' cable link to be laid from Peterhead in Aberdeenshire, to near Bridlington in East Yorkshire.

Indicative costs (1):

Cost estimates for underground cable is between £10.2m and £24.1m per kilometre. Cost estimates for laying cables on the sea-bed and depth is between £2 million to £5 million per kilometre.

Relative distances:

Approx distance from Rampion 2 to Bolney (via South Downs National Park) \sim 50km Approx. distance from Rampion 2 to Dungeness (sea route) \sim 120km

Net output of Rampion2 and Dungeness power stations:

Dungeness A 438 Mwe (Ceased output on 31 December 2006)

Dungeness B 1090 MWe (Non-operational since June 2021: now being defueled)

Rampion 2 ~1200 MWe

Neither Dungeness A and B power stations are exporting power so there is > 1500 MWe spare input capacity at the Dungeness Grid Supply Point/substation, which has direct connection to the substation at Bolney and other south coast grid connections.

Although over twice the distance, the cost per km for an undersea route is less than the underground options. It would remove the need to build a new substation at Oakendene, Cowfold and reduce the significant adverse social, economic, and environmental impacts on the South Downs National Park and other environmentally and socially sensitive areas.

① References.

Cost Analysis and Comparison of HVAC, LFAC and HVDC for Offshore Wind Power Connection. X. Xiang, M. M. C. Merlin, T. C. Green. Imperial College London, UK.

Electricity Transmission Costing Study - An Independent Report Endorsed by the Institution of Engineering & Technology.

