Meeting note

Project name Keadby Hydrogen Project

File reference EN0110001

Status FINAL

Author The Planning Inspectorate

Date 22 February 2024

Meeting with SSE Thermal Venue Microsoft Teams

Meeting Inception

objectives

Circulation All attendees

Summary of key points discussed, and advice given.

The Planning Inspectorate (the Inspectorate) advised that a note of the meeting would be taken and published on its website in accordance with section 51 of the Planning Act 2008 (the PA2008). Any advice given under section 51 would not constitute legal advice upon which applicants (or others) could rely.

The Inspectorate explained that the publication of the meeting note could be delayed up to six months (if requested by an Applicant for commercial reasons), or until a formal scoping request had been submitted.

Project overview

Keadby Hydrogen Power Station is a low carbon power station project with the purpose of developing a low carbon enabled high efficiency Combined Cycle Gas Turbine (CCGT) (910MW) aiming to be the first 100% hydrogen-capable power station. The Applicant explained that initially the plant may need to operate on natural gas until a hydrogen supply is commercially available; discussions have taken place with hydrogen suppliers to determine timescales for connection for the site. The Applicant believes that the project can drive development by providing an off taker.

The Applicant intends for the project to be developed in addition to the consented Keadby 3 project. A Development Consent Order (DCO) for the Keadby 3 Carbon Capture project was granted by the Secretary of State for Business, Energy and Industrial Strategy on 07 December 2022 and the project is awaiting Carbon Dioxide transport and storage network connection to site. In addition to this, the Keadby site currently has:

- Keadby 1 CCGT (735MW) operating since 1996.
- Keadby 2 CCGT (910MW) operating since 2023.
- Pulverised Fuel Ash (PFA) disposal area from a former coal-fired station northwest of the sites

- National Grid substation for grid connection
- Keadby Wind Farm is situated to the north and a Network Rail line lies to the south.

The Applicant seeks optionality within the DCO to use existing Keadby site's utility connections where appropriate and the inclusion of on-site gas, grid, and water connections. The Applicant stated that depending on the exact location of the development on the Keadby site, the Keadby 2 Carbon Capture Readiness (CCR) area may require reprovisioning to make space for the Keadby Hydrogen Power Station with the CCR allocation later being adapted to meet Decarbonisation Readiness tests for Keadby 2 regarding the use of Hydrogen instead of Carbon Capture and Storage (CCS).

Engineering and Environmental Considerations

The Applicant presented its engineering and environmental considerations. The Applicant will employ Best Available Techniques (BAT) required for technology selection, cooling, and emissions performance. The Applicant will consider NOx (Nitrous Oxides) emissions and the need for Selective Catalytic Reduction (SCR) as a means of converting Nitrogen Oxides (NOx) into Nitrogen and Water. Further, the Applicant will consider the cumulative effect of Keadby 2 and the proposed Keadby Hydrogen Power Plant and will consider its development strategy for interfaces with the consented Keadby 3 CCS project. The Applicant will be assessing the potential increase of water abstraction requirements.

Environmental Impact Assessment (EIA) scoping currently being drafted will cover both 100% hydrogen fired CCGT and any initial use of natural gas. The Applicant plans to engage with the Environment Agency on air quality issues and BAT, water abstraction and potential cumulative effects. The Applicant confirmed that although the ash tip area to the west of the Keadby site is not designated it is ecologically valuable and it aims to preserve ecology as much as is possible.

The Inspectorate flagged that the Applicant should consider how a worst-case scenario would be presented in the ES with regards to impacts from natural gas versus hydrogen.

Consultation

The Applicant is compiling its consultation strategy. Meeting with Local Planning Authorities are being arranged; the Applicant confirmed that SSE also has a good rapport with Local Authorities through the existing Keadby projects. The Applicant intends to hold one round of formal consultation supported by broader consultation including public events to be held near the site, combined virtual and face-to-face events and early dialogues with the Environment Agency (EA) and Natural England (NE). A webpage dedicated to the project has been set up on the SSE website. The Inspectorate advised to begin conversation as early as possible with organisation such as EA, NE, Health and Safety Executive and Network Rail, particularly with regards to any protective provisions. The Inspectorate advised further that should the Applicant be considering using the canal for water abstraction, the Canals and River Trust should also be engaged early in the process. Further, the Inspectorate advised the Applicant to consider discharge impacts in the River Trent and its impacts downriver.

Provisional Project timeline

- EIA Scoping: late March / April 2024
- Preparation of the Preliminary Environmental Impact Report (PEIR): April September 2024
- Publication of the PEIR and Statutory Consultation: September to October 2024
- **Application Submission:** from January 2025 (Applicant would like to discuss earlier submission and fast-tracking, see below)

The Inspectorate requested that the Shapefile is provided at least 10 days prior to the Scoping request and that a draft documents review, should this be required, takes 6-8 weeks to complete.

The Applicant sought advice on possible fast-tracking of the application. The Inspectorate confirmed that it is possible for applications to be examined in less than the current statutory 6-month timescales; this depends on the quality of the application and engagement of statutory consultees. In terms of NSIP reform, the Inspectorate confirmed that further information about future pre-application services is likely to be published shortly.