

Natural Resources Wales permitting decisions

Variation

We have decided to issue the variation for Connah's Quay Power Station operated by Uniper UK Limited.

The variation number is EPR/NP3037AF/V003.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

Unless the decision document specifies otherwise we have accepted the applicant's proposals.

Structure of this document

- Key issues
- Annex 1 the decision checklist

Key issues of the decision

Removal of noise attenuators from Cooling Towers 3 and 4

We have reviewed the applicant's noise impact assessment for the removal of the noise attenuators on the outlets of all fan cells within cooling towers 3 and 4. The assessment predicts an increase in sound power levels of 3dB above the measured background noise levels at nearby sensitive receptors which is below the BS4142:2014 threshold of adverse impact.

Amendment of monitoring averaging periods for emissions from thermal oxidiser

We have revised the averaging periods for monitoring of emissions of sulphur dioxide, oxides of nitrogen and carbon monoxide from 10 minute averages to

hourly averages. This is to account for changes in the composition of the gas treated in the thermal oxidiser as the gas supply from the Liverpool gas field comes to an end. Hourly average referenced periods are used widely within the electricity supply combustion sector and are in line with guidelines given in the Large Combustion Plant BRef. We therefore consider this change to be sufficiently protective of human health and the environment.

Re-instatement of monitoring requirements for discharge of cooling waters

The previous version of the permit (reference EPR/NP3037AF/V002), issued in December 2015, included incorrect parameters in relation to the monitoring of emissions of cooling water from the purge lagoons at the emission point W1. We have reinstated the parameters from the previous version of the permit, making slight amendments to the wording to provide clarity where required. The impact assessment from the original permit application has been reviewed to ensure that the amendments accurately reflect the findings of the impact assessment. The following table documents the amendments we have made:

Wording in permit ref. EPR/NP3037AF/V002	Wording in current variation (ref. EPR/NP3037AF/V003)	Justification for amendments
Maximum temperature April – October – 25 °C.	Maximum temperature – 25 °C.	V002 wording was an incorrect translation of the wording from the previous version of the permit (ref. EPR/NP3037AF).
Temperature difference April-October – 13 °C.	Maximum temperature difference April – October - 13 °C.	'Maximum' added to provide clarity.
Temperature difference November-March 95 percentile - 13 °C.	Maximum temperature difference November-March – 13 °C (limit based upon a rate of 95% compliance of all average values in the period November to March).	Description of compliance method expanded to add clarity.

In addition, we have also re-instated the requirement that the maximum temperature difference between November and March shall not exceed 20 °C.

Improvement conditions

We have extended the deadline for submission of the report outlining the implementation of Stage 2 of the Chlorine Dioxide Dosing Plan to 28th February 2018. Due to other work pressures at the site – namely the installation and commissioning of the Dry Low-NO_x 2.6 Burners - Stage 2 of the Chlorine Dioxide Dosing project has not yet been initiated. The operator anticipates that it will take up to the end of August 2017 to complete installation and commission the dosing system (into the cooling water intake), after which a period of six months operation will then be required to review and assess monitoring data to fulfil the obligations of IC21.

We have included an improvement condition (IC24) requiring the operator to carry out repairs to all malfunctioning cooling fans on cooling tower 3 and 4 to ensure that emissions of tonal noise from the fans is minimised. For each fan,

IC24 requires that the operator undertake this work within three months of the fan attenuator being removed.

We have also included IC25 requiring the operator to include a procedure for the timely maintenance and monitoring of the fans referred to in IC24 in its Environmental Management System. This work is required to be completed within three months of the date of removal of the first fan attenuator referred to in IC24.

Annex 1: decision checklist

This document should be read in conjunction with the Duly Making checklist, the application and supporting information and notice.

Aspect considered	Justification / Detail
Applicable directives	All applicable European directives have been considered in the determination of the application.
Biodiversity, Heritage, Landscape and Nature Conservation	The application is within the relevant distance criteria of a site of heritage, landscape or nature conservation, and/or protected species or habitat. Operations at the site have not changed as a result of this variation and the assessment carried out as part of the determination of the original permit application still stands and agrees with NRW agreed criteria for ruling out significant effects. Therefore it is considered not likely to have a significant effect on any Natura 2000/Ramsar sites, either alone or in-combination with other plans and projects. We have not formally consulted on the application. The decision was taken in accordance with our guidance.
Environmental risk	We have reviewed the operator's assessment of the environmental risk from the facility. The operator's risk assessment is satisfactory.
Improvement conditions	Based on the information on the application, we consider that we need to impose improvement conditions. We have imposed improvement conditions to ensure that: the appropriate measures are in place to prevent annoyance from noise and vibration. See Key Issues section.
Incorporating the application	We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process. These descriptions are specified in the Operating Techniques table in the permit.

Aspect considered	Justification / Detail
Emission limits	We have amended some of the emission limits specified in the permit. See Key Issues section.
Monitoring	We have amended some of the monitoring requirements specified in the permit. See Key Issues section.
Financial provision	There is no known reason to consider that the operator will not be financially able to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.