James Malkin

From: Clark, Graeme [ClarkG@pbworld.com]
Sent: 17 November 2009 11:09
To: James Malkin
Cc: Wearmouth, Richard; Crowder, James
Subject: Centrum Power Station Additional Information (63664)

Dear Jim

Update - Additional Information to support Scoping Document

Centrum Power – Proposed Centrum Power Station – Burton-upon-Trent

Following our previous correspondence, Parsons Brinckerhoff (PB) is currently undertaking an Environmental Impact Assessment (EIA) for a proposed Combined Cycle Gas Turbine (CCGT) power station (Centrum Power Station) to be located on an area of land on the Centrum Business Park between the A38 (T) road and the Trent and Mersey Canal, Burton-upon-Trent, East Staffordshire.

After further evaluation of cooling options for the power plant, it has been concluded that indirect water cooling using Hybrid Cooling Towers may be a feasible alternative to Air Cooled Condensers (ACC). After a discussion with DECC, we have been advised to inform consultees that this alternative cooling option will also be included in the EIA, and provide some background information on what it entails.

The hybrid cooling towers will be arranged in a linear array of two adjacent streets of 8 cells, each 18-20 m high, 125 m length X 20 m width. One street will support one unit hence 2 streets will be required for Centrum Power Station. There will be two pump houses, one per each street.

Hybrid cooling towers utilise water evaporation as a cooling medium and are more energy efficient than ACC's, where sufficient water is available. Makeup water requirements are estimated to be in the region of 1300 m^3/h. It is proposed that the hybrid towers will use either water from the River Trent and/or recycled treated wastewater supplied from Clay Mills Sewage Works. The recycled wastewater will be the final treated effluent, known as grey water, which is suitable for use in the cooling towers. The water will be piped from the Sewage Works to the Centrum Power Station.

Hybrid cooling tower operation is a combination of air cooling and evaporative cooling and can be designed such that they eliminate the visible plume normally associated with cooling towers under almost all weather conditions.

We hope that this information is sufficient and keeps you up to date with the project.

If you require any further information or would like to add to the initial scoping response you have submitted to us, with regards to this alternative option, please feel free to contact us.

Regards

Graeme

Graeme Clark

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