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This Report has been cleared for submission to the Director by Senior Inspector Marie O Connor. Signed Joe Reilly Date 28/9/12

LICENSING & RESOURCE USE

Environmental Licensing Programme Memorandum

To: Dara Lynott

FROM: Donal Grant

C.C: Frank Clinton

DATE: 27/09/2012

RE: Application by Endesa Ireland Limited, Great Island Generating Station, Campile, New Ross, County Wexford for a technical amendment to their IPPC licence P0606-03

Background:

The power plant at Great Island was first built in the 1960s and is located in the townland of Great Island, 3.5km west of Campile village, which is approximately 15km south of New Ross, Co. Wexford. It is located on the confluence of the River Suir and the River Barrow estuary. The existing station has a generating capacity of 240MWe (megawatts of electrical output), comprising three conventional steam generating units. The station is fired on heavy fuel oil (HFO) which is shipped directly to the site and stored in the station's own oil tank farm area.

In their application for their existing licence (P0606-03), Endesa Ireland Limited stated that they intended to replace the three conventional HFO-fired generating units with a Combined Cycle Gas Turbine (CCGT) power plant. At the time of their licence review application, the licensee was not in a position to confirm a number of operating parameters of the CCGT.

Technical Amendment:

Recently the licensee has confirmed the design parameters of the CCGT and submitted an application to the Agency for a technical amendment to their licence to accommodate those changes and a number of additional changes. The proposed amendments to the licence are listed below:

1. The surface water discharge point SW13 discharges process waste water from a homogenization pit to the Cooling Water channel, which in turn discharges to the main estuary at SW2. *Schedule B.2 Emissions to Water* of the existing licence sets a maximum temperature limit at SW13 of 25°C and additional temperature limits for the discharge at SW2. The licensee states in its technical amendment application that it was previously not in a position to determine the temperature of the discharge at SW13 however they are now in a position to confirm that the temperature of the process waste water stream will be 45°C as it discharges from the homogenization pit (SW13) to the Cooling Water channel. The Cooling Water channel provides sufficient dilution to ensure the temperature limit at the final discharge point to the estuary (SW2) will not be exceeded. The provisions of *Schedule B.2 Emissions to Water* in relation to the temperature

limit at SW2 shall be sufficient to protect the estuary from any significant impacts. The ELV for temperature at SW13 can be removed from the licence as it does not pertain to a discharge to the receiving environment.

2. With the construction of the CCGT, a number of existing discharges of process waste water from the plant to the Cooling Water channel shall be merged and discharge to the homogenization pit. Therefore the licensee expects the discharge volume at SW13 to increase to a maximum of 1000m³/hr. *Schedule B.2 Emissions to Water* of the existing licence provides for the planned cessation of these other discharges but does not allow for the increased discharge volume at SW13.
As stated above, discharges at SW13 are not directly into the receiving environment and the main estuary is protected by emission limit values for temperature and maximum discharge volume limits at SW2. The maximum discharge volume for SW13 specified in *Schedule B.2 Emissions to Water* can be removed from the licence.
3. Prior to the granting of the Final Determination, *Schedule B.2 Emissions to Water* of the Proposed Determination set maximum volume limits of 600,000 m³ per day and 25,000 m³ per hour to apply from the date of commencement of commercial operations of the new CCGT. The licensee objected to this requirement in the Proposed Determination and following the assessment of the objection by a Technical Committee, the Final Determination was changed to provide for an increase in the maximum hourly limit in Schedule B.2 from 25,000 m³/hr to 33,000 m³/hr. The maximum daily volume limit of 600,000 m³/day was not changed at this time to an extrapolated 24hr daily limit, i.e. 792,000 m³/day (33,000 x 24). The licensee wishes to have this appropriate maximum daily limit inserted into Schedule B.2 of the licence. The increase in the maximum daily limit was not raised in the first party objection to the Proposed Determination and it is beyond the scope of a technical amendment to change an emission limit value in a Final Determination. Any such change to the maximum daily volume discharge limit at SW2 could be carried out only as part of a full licence review.
4. The licensee wishes to amend the boundary of the licensed activity in order to properly reflect changes to the site. Two areas that are currently included within the licence boundary are to be taken over by separate organisations for non-licensable activities. The first of these is the replacement of an existing 220Kv Air Insulated Switching Station with Gas Insulating Switchgear (GIS). The location of the new GIS equipment is on an area of the site leased from Endesa Ireland Limited by Eirgrid, who will be the operators of the new infrastructure. The second change to the boundary involves the long-term (99 year) lease of an area of the site from Endesa Ireland Limited to Bord Gais Networks. This area of the site will be used for the installation and operation of an Above Ground Installation (AGI) by Bord Gais Networks (or a nominated contractor) for the purposes of preparing the natural gas feed to the turbine. A map showing the amended boundary was submitted by the licensee in support of this technical amendment. OEE have confirmed that they are satisfied that the highlighted areas can be excluded from the site boundary.
5. One of the monitoring boreholes (BH3) listed in *Schedule C.5 Ambient Monitoring* of the licence shall cease to be operational upon commencement of the construction of the CCGT. The licensee has asked for it to be removed from

the schedule however the OEE have expressed concerns over elevated levels of arsenic and lead identified from samples at BH3. OEE have asked that a proposal for relocating monitoring point BH3 be submitted to the Agency rather than removing it from the schedule. Condition 3.12 has been amended to reflect the recommendation of OEE.

6. The final amendment relates to changes to *Schedule C.5 Ambient Monitoring* of the licence. In January 2011 changes to this Schedule were agreed by the Office of Environmental Enforcement. The licensee has asked that the changes be incorporated into the licence as part of this technical amendment.


It should be noted that there were no submissions relating to any of these issues prior to the PD being issued. One first party objection to the PD was received and this addressed changes to requirements in *Schedule B.2 Emissions to Water* of the Proposed Determination.

A number of amendments to the Glossary of terms and the insertion of Condition 6.17 have also been included by the Agency into the technical amendment in order to bring the licence into compliance with the provisions of Article 12 of the European Communities Environmental Objectives (Groundwater) Regulations 2010, S.I. No.9 of 2010.

Recommendation:

I recommend that the licence amendment be approved as set out in the attached Recommended Technical Amendment. The Office of Environmental Enforcement were consulted in relation to this application and the views of the OEE Inspector are reflected in this recommendation.

Signed:


Donal Grant,
Inspector

