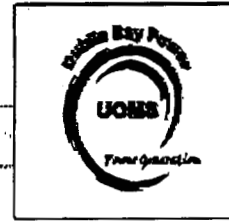


053 (13)

Utility, O&M Services Ltd.,  
Dublin Bay Power Plant,  
Ringsend,  
Dublin 4.



facsimile transmittal

**To:** Dr Jonathan Derham      **Fax:** 053 9160699

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**From:** Fergal O'Loughlin      **Date:** Monday, December 17, 2007

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**Re:** Informacion fiscal 2006      **Pages:** 1

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**CC:**

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**Urgent**

Please find attached a letter detailing our concerns regarding the Waste to Energy Plant licence application Reg. No. WO232-01.

Regards

Fergal O'Loughlin,  
Plant Manager.

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<b>RECEIVED</b>	
Time	1635
17 DEC 2007	
Signature	<i>[Signature]</i>
Environmental Protection Agency, HQ. P.O. Box 3000, Johnstown Castle Estate, Co. Wexford.	



Pigeon House Road, Ringsend, Dublin 4, Ireland  
Tel: 00 353 1 663 2160 Fax: 00 3543 1 6632163  
e.mail: dublinbaypower@synergen.ie

Environmental Protection Agency  
PO Box 3000  
Johnstown Castle Estate  
Co. Wexford

12 December 2007

**Ref: EC.EPA.0156 - Waste Licence Application Reg. No. W0232-01**

**Dear Sir/Madam,**

The above refers to an application by Dublin City Council for a licence for a waste to energy (WtE) facility at Pigeon House Road, Ringsend, Dublin 4 and the Proposed Decision issued by the EPA.

This submission is made by Synergen Power Ltd., Pigeon House Road, Ringsend, Dublin 4. Synergen's interest in the application arises as owner of a combined cycle gas turbine (CCGT) electricity generating station (also known as Dublin Bay Power Plant), which is to the west of the proposed development. The Dublin Bay Power Plant is one of the largest single units feeding into the national grid. Its availability and reliability are therefore important to the security of the electricity system in Ireland.

Synergen reiterates that in principle it does not oppose the proposed development of a WtE facility, however Synergen is concerned that the impact of the plant on the environment and the operation of Dublin Bay Power plant may not have been adequately assessed by the applicant.

It is noted that the Inspector, in his report, acknowledges the fact that the Recommended Decision (RD) as outlined will require a concomitant technical modification of the Synergen IPPC licence (IPPC Register P0486-01). Synergen looks forward to discussions with the Agency regarding the necessary modifications.

However, there remain issues that Synergen feels have not been fully clarified and wishes the Agency to take into account in its permitting of the WtE facility.

#### **Cooling Water Discharge**

~~The Inspector, in his report, notes Synergen's concerns regarding cooling water recirculation as a consequence of the WtE cooling water discharge and its potential impact on the cooling water intake temperature. However, it is believed that the impact of the proposed WtE cooling water discharge in combination with Synergen's licensed cooling water discharge requires elaboration and explanation.~~

Synergen is of the opinion that the modelling undertaken as part of the WtE Environmental Impact Statement (EIS) does not adequately describe the effects of the combined cooling water discharges.

- The licensed Synergen thermal discharge is 250MWth, whereas the modelling was based on a lower figure.
- The Synergen inputs to the model are detailed as a flow 7.6 m<sup>3</sup>/s with a temperature rise of 6.6 °C. The licensed inputs are 8.4 m<sup>3</sup>/s and 9.0-9.5 °C.
- The EIS states that for normal conditions the maximum excess temperature at the Synergen cooling water intake is about 0.5 °C for normal operation, occurring on average for less than an hour on each tide. It remains unclear as to the exact conditions under which this could arise, e.g. spatial extent and depth at which this will occur.
- The excess temperature is predicted to increase to 1.0 – 1.5 °C for abnormal operations. Again, it is unclear as to the conditions under which this could arise in terms of their frequency and duration.
- Further to the above, the model was calibrated with data collected during two periods. It is unclear if the data recorded during these calibration periods was representative of conditions normally experienced in the estuary, i.e. whether the Synergen plant was on full load. Thus, the potential recirculation impact may be more significant than outlined.
- A necessity to undertake excavations in the cooling water channel has been identified, but its potential impacts on operations at Synergen appear not to be addressed.
- The WtE report refers to conditions 'at the intake' of the Synergen MCW system. The intake comprises an opening 4.57 metres tall and it is unclear whether the impact of the WtE thermal plume is being quoted for the top, middle or bottom of the intake.
- The proposed location of the WtE cooling water intake is at the outlet of the existing open channel that conveys cooling water discharge from Synergen and is proposed to convey cooling water discharge from the WtE facility. The potential impact of the WtE CW intake location on absolute cooling water discharge temperature does not appear to have been addressed. There is a concern that elevated intake temperatures as a result of the location may adversely effect absolute discharge temperatures and impact on marine life and the operations at Synergen.

As previously stated, the issue of concern to Synergen is recirculation of cooling water discharge and its implications, which are twofold. Firstly, it will reduce the thermal efficiency of the Synergen plant, resulting in a loss of output, and, secondly, will sub-optimize the environmental performance due to the attendant loss of process efficiency. Synergen further notes that the efficiency and hence environmental impact of the WtE plant may also be adversely impacted by the location of the WtE plants intake at the CW outfall from the Dublin Bay Power Plant.

**Dust**

The inclusion of conditions in the Proposed Decision to address concerns regarding dust is acknowledged. However, the previously pointed out apparent anomalies in the WtE EIS regarding dust impacts during both construction and operation remain.

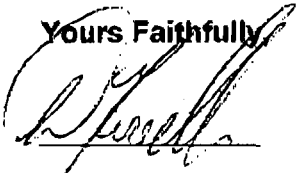
The EIS noted that *"there may be some impact on nearby properties due to dust emissions from the construction site and other activities"*.

Any such dust impact from the WtE facility would be a major concern for Synergen, as clean combustion air is critical to its process. The implications arising are a reduction in the output and efficiency of the process as a consequence of fouling of the filters, a requirement to replace the air filters more frequently, loss of production during replacement of air filters and additional fuel costs.

**Conclusion**

In addition to the associated environmental impacts, the combined effects of the proposed CW layout and dust during construction could have a serious impact on the operation of Synergen's Dublin Bay Power Plant. Representatives from the WtE were not available to discuss these concerns prior to making this submission. Synergen has commissioned an environmental and engineering review of the information provided to the EPA and has concluded that the published information provided in the EIS is inadequate to confirm that the WtE plant will not have a material impact on Synergen's operation.

Yours Faithfully,



**Mr David Farrell  
General Manager  
Synergen Power Ltd.**

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