Pat Moran

The Mount

Cheekpoint

County Waterford

15/05/23

Ref –SSE Plc Submission dated 4/4/23 in regard to appeal of Licence Review P0600 – 04 and associated Planning Ref No 26 PA 0016 as referred to SSE Submission

Dear Sir/ Madam

In reference to the submission of the SSE Plc letter dated 04/04/23 to the EPA (SSE letter re: Notice pursuant to Regulation 28 of the EPA (Industrial Emissions) (Licensing) Regulations 2013 in respect of the proposed determination on a licence review application by SSE Generation Ireland Limited Reg No P0606-04).

Due to seriousness of the issues raised by the SSE Submission and the SSE letter of the 25/03/20 (Sodium Hypochlorite Usage) for An Bord Pleanala, EPA and SSE. The EPA should refer the file to the Attorney General for a legal interpretation of all the issues raised in the review of Licence p0606-03 and the appeal of Licence P0606-04 and if granting Licence P0606-04 a Licence based on a retrospective Licence retrospectively corrects Licence P0606-03 along with retrospectively correcting Planning Ref No 26 PA 0016 and the 2009 EIA

“SSE confirms that planning permission is in place for the Installation, **as constructed and operated** and **has been agreed with the planning authority**.”

Agreement as constructed and operated?

An Bord Pleanala and the EPA need to clarify if there was/is an agreement in place around the construction and operation of the installation. Also there needs to be clarification around the 5-tonne **relevance** and **purpose** in both Planning and Licensing and also if the 5 tonne is irrelevant in the “As Built” installation. Was there an agreement put in place with An Bord Pleanala (EPA?) that the installation “As Built” need only be compliant with the EPA Licence which the EPA believe is not to be bound by Planning?

The EPA policy is - The EPA “ Does not seek to regulate the quantity of Sodium Hypochlorite used at the Power station.

The SSE operation of the installation is the same as the EPA policy. The SSE installation according to the above ref SSE letter 23/03/20 (attached) has been operating to EPA Licencing not Planning. In the letter Sodium Hypochlorite usage, figures show there is no compliance with the 5 tonne in Planning.

Can the installation as constructed run on a 5-tonne use and discharge annually? Is it possible that the 5 tonnes could become irrelevant in the above without an agreement in place and what was the point of having 5 tonne inserted?

The situation came to light in 2019, The OEE have become aware that the Licence advised in the **(P0606-03) application** that the annual usage of Sodium Hypochlorite for de-fouling the cooling water system was **circa 5 tonnes/year**. (See EPA page attached). For the EPA the “Error” as events has shown was not up to 1300 tonne over the annual discharge of 5 tonne in Planning but that it had no scientific survey report in Planning and Licensing validating the amount of Chlorine that was needed to review Licence P0606-03 for the purposes of regularising SW8 which has been operating outside the Licence since its inception. For the review to succeed the original EIA from 2009 with the irrelevant5 tonne had to be attached to the review file for SW8 and a retrospective report had then to be attached to validate Licence P0606-03 which the Power station was/is operating too.

Licence P0606-03 is now a retrospective Licence with the retrospective Chlorine report (which the EPA know to be compromised and without Scientific value as regards the Ecology of the estuary which is needed to regularise SW8 and also validate Licence P0606-03. Has Licence P0606-04 based on a retrospective Licence retrospectively altered Planning permission and the original 2009 EIA.

The 5 tonne was in Planning for the purpose (purpose only?) of demonstrating that the amount of Chlorine used would not be significant when based on its previous administration and use over 40 years of less than 5 tonnes annually which was proven to have protected the estuary. Licence P0606-04 based on a retrospective Licence dismisses that as being irrelevant and that replacing it with 1000+ tonnes of use and discharge of Chlorine is better. Dismissing historical evidence was truly a horrendous decision.

The plant has been allowed to operate since the discovery (2019) without Planning and a valid Licence based on Planning, the EPA need to impose the 5 tonne in Planning and if the plant cannot operate with that amount, it should close, or the installation should be closed altogether until an investigation into the Planning and Licensing of the installation is complete. The EPA have a problem adhering to Planning and the Science that the EU Directives are based on for the protection of the environment as that Science became totally irrelevant when the so called “Error” was discovered up to the present day and has continued,

Please find a list of some of the questions that have yet to be answered as regards the Licence appeal. Furthermore, please find attached SSE letter (25/03/20) and page from EPA document.

Yours sincerely

Pat Moran - Stakeholder

List of Questions

1/ Was there an agreement put in place by the statutory authorities outside Planning and Licensing for the Great Island CCGT installation?

2/ When did the EPA know the installation “As Built” could not operate on 5 tonne and when should the EPA have said that was the case?

3/ Can Planning be changed retrospectively or does it need new Planning?

4/ EPA Licence policy, can its scope go so far outside Planning 5 tonne to 1000 tonne plus?

5/ SSE submission – recommissioning and testing 2014-2015 what where the use and discharge figures?

6/ SSE letter dated 25/03/20- Continuous Dosing? For the full 12 months regardless of temperature and Licence over how many years?

7/ SSE letter regarding previous Planning 13/06/18 alterations to chemical storage. There should be an audit of all chemicals purchased and used to ensure there was no potential loss of coolant chemicals to the estuary during and in the years before any of the breakdowns?

8/ Does Licence P0606-04 which is based on retrospective Licence P0606-03 become a valid Licence or is it just another retrospective Licence? Also what of the EIA and Planning were they retrospectively altered along with the Licence?

9/ Can a Licence review take place on a Licence with an “Error” without first addressing the “Error”?

10/ Clarification from the EPA in regard Licence P0606-04 for a reduction of Chlorine emissions and to look for alternatives to use of biocide totally in contradiction of EPA working policy of no limit on the amount of Chlorine used?

11/ Is there any connection with the long close down in 2022 and the increase in Spatfall in the estuary during that time in 2022?

12/ The accumulative effects we now know that there is a Chlorine pump Chlorinating streams at Dunmore East. Has the EPA investigated to see if there are more Chlorine treatments operated by the Councils and Irish Water presently and historically at there discharges and storm outfalls?

PAGE FROM EPA DOCUMENT.

The EPA received a complaint from a member of the public regarding excess foaming in the estuary on 29/05/2019, a second compliant in relation to shellfish concerns was received on 08/07/2019. The complainants expressed concern in relation to possible environmental impacts of the cooling water on the River Suir/Barrow estuary.

The EPA requested SSE investigate the complaint and submit details of samples of the cooling water discharge. Reports on the complaint investigations were submitted to the EPA on 06/06/2019 & 12/07/2019. Cooling water was compliant with the ELVs in the licence for the concerning period. Sodium hypochlorite is added at the intake and is used for mussel control on pumps and equipment. Chlorine is measured in the cooling water discharge on a weekly basis by the licensee and there have been no reported exceedances of the licensed emission limit value of 0.3mg/l.

The licensee investigated the foam at the cooling water outfall and found it does not pose any risk to the environment and is caused by the mechanical churning of the river water and breaking up of micro-organisms in the water creating the white foam. The speed and fall of the cooling water over the weir also contributes to the foam generation.

During the site investigation, the licensee confirmed they are in the process of designing and implementing a foam control/abatement system to reduce the mechanical foam generation at the cooling water outfall (SW2).

The OEE Inspector took grab samples of the process effluent water (SW2) & storm water (SW3b) on 28/06/2019 which were analysed in the EPA Regional Laboratory & contractor laboratory (see EPA Laboratory Test Report - SV18111 for results).

SW2 results were typical of saline estuarine samples for the parameters analysed. See SV18111 for cooling water sample results.

SW3b results displayed elevated concentrations of Total Petroleum Hydrocarbons (TPH) and suspended solids (SS) and were deemed unsatisfactory. The licensee shall immediately investigate the elevated concentrations and submit details including timeframes for corrective actions to the EPA by 05/08/2019.

Observation:

1. The licensee shall submit details of the final proposed design of the foam abatement/control system as a licensee return in EDEN.
2. The licensee shall submit a report on the investigations and corrective actions taken regarding elevated EPH and SS concentrations detected in SW3b via EDEN by 05/08/2019.
3. The licensee shall submit QA/QC controls in place for chlorine sampling including methods, procedures, calibrations and training records via EDEN by 05/08/2019.

		Answer	Condition Number	Non Compliance	Observation
5.6	Carry out investigation into any impacts on receiving estuary environment	Checked			Yes

Comment / Corrective Action

The OEE have become aware that the licensee advised in the (P0606-03) application that the annual usage of sodium hypochlorite for de-fouling the cooling water system was circa 5 tonnes / year. The licensee advised during recent telephone conversations that the actual usage is in the region of 1,300 tonnes / year. The OEE also note that monitoring of the discharge by the licensee is complaint with the 0.3 mg/l emission limit value for chlorine.

Observation:

To assess if this apparent error in the licence application poses any significant risk to the environment, the OEE requests that the licensee submits an assessment of the likely impact(s) of the discharge on the receiving environment in the estuary (including biological, chemical and physical assessment) under current conditions i.e. (different hypochlorite usage to licence application and subsequent mass emission). Submit this report by 31/12/2019.

Appendix 2

SSE Generation Ireland Ltd.
Great Island CCGT
Campile
New Ross
County Wexford
Ireland

Mr. Billy Shanahan,
Office of Environmental Enforcement,
Southeast Regional Enforcement Team A,
Co. Wexford.

25th March 2020

Re: - Request for Information regarding sodium hypochlorite dosing.

Dear Mr Shanahan,

Please find the response to the Request for Information raised on 25/03/2020 via telephone.

The purpose of dosing the cooling water with sodium hypochlorite is to prevent macrofouling of the cooling water system. Macrofouling causes significant damage, integrity and maintenance issues of cooling water intake tunnels, culverts, pump chambers and heat exchangers. In latter years dosing has been increased to combat macrofouling and ensure business continuity, whilst also strictly complying with the site IPPC licence limit of 0.3mg/l free chlorine.

Sodium Hypochlorite Usage

Year	Tonnes	Comment
2020	800	Predicted usage based on river temperature
2019	1128	Dosing for 11 months
2018	280	Dosing for full calendar year
2017	140	Dosing for full calendar year
2016	196	Dosing for full calendar year

Due to a greater understanding on macrofouling and seasonal variances, Great Island does not currently dose when the river temperature is less than 10°C, this instruction was implemented for the first-time during autumn/winter of 2019. Dosing for 2019 was effectively stopped on the November 12th, 2019 but occasionally put back in service to enable Great Island to accommodate and complete the hypochlorite modelling report as performed by Mott Macdonald (Document reference: 414088 001 A) as requested by the EPA. As an indicative guide on previous years data, it would be around the middle of April before dosing starts again, giving approximately 150 days without dosing.

Since Great Island CCGT has been in operation (circa 2015) it has never breached its IPPC licence condition of 0.3mg/l free chlorine at the outfall.

The hypochlorite modelling report was submitted to the EPA on the 03/02/2020 and SSE are awaiting feedback from the agency on this report. However, the executive summary concluded that the chlorine concentrations predicted by the model do not raise concerns with regards to the ecology in the Barrow Estuary.

Please do not hesitate to contact me if you have any further queries or questions on this.

Yours sincerely,

Jonathan Storey.
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