

Report of the Head of Economic Regeneration & Planning

Development Management and Control Committee

4 December 2014

PROPOSALS FOR THE ENHANCEMENT OF EXISTING POWER GENERATION FACILITIES AT TATA'S PORT TALBOT STEELWORKS

WRITTEN REPRESENTATION

Purpose:	To seek delegated powers to submit written representation to the Planning Inspectorate Examining Authority on behalf of the City and County of Swansea and to deal with the procedural aspects of the examination process.
Policy Framework:	National Policy Statements, Planning Policy Wales and the adopted City & County of Swansea Unitary Development Plan.
Reason for Decision:	To provide a response to the Planning Inspectorate Examining Authority on the impacts of the proposals for the enhancement of existing power generation facilities at Tata's Port Talbot Steelworks and to allow full engagement within the examination process.
Consultation:	Legal Services, Technical Services, Pollution Control, Sustainable Development, Culture, Tourism, Economic Regeneration, Economic Development and Nature and Conservation.
Recommendation(s):	<p>It is recommended:</p> <ol style="list-style-type: none">1. That delegated powers be granted to the Head of Economic Regeneration and Planning to submit written representation relating to the impacts of the proposed development on the City and County of Swansea to the Examining Authority of the Planning Inspectorate in accordance with the timetable for the examination process.2. Delegated powers be given to the Head of Economic Regeneration and Planning to formally contribute to a Statement of Common Ground to be submitted to the Examining Authority of the Planning Inspectorate in accordance with the timetable for the examination process.

<p>3. Delegated powers be given to the Head of Economic Regeneration and Planning to formally respond to the Examining Authority's Inspector questions in accordance with the timetable for the examination process during the course of the examination and also to make comment on the submissions of other parties, including the applicant.</p> <p>4. Delegated powers be given to the Head of Economic Regeneration and Planning to formally represent the views of the City & County of Swansea in any topic specific hearing and subsequent requirements in accordance with the timetable for the examination process during the course of the examination.</p>	
Report Author:	Richard Jones
Finance Officer:	Not applicable
Legal Officer:	Not applicable

1.0 Introduction

- 1.1 Members will recall that an information report was presented to this Committee in March this year to advise Members that Tata Steel UK Limited (Tata Steel) had formally consulted this Council in respect of its pre-application proposals for internal power generation enhancement at its site in Port Talbot. The report appended the response of the Head of Economic Regeneration and Planning, which was not to provide a formal position on the proposals but largely seeks to ensure that the appropriate information is provided at examination stage to allow an informed response to be made to the Planning Inspectorate in due course.
- 1.2 As explained in the aforementioned report, as the proposed development comprises an electricity generating station with a capacity of more than 50MW, it constitutes a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008. An application must therefore be made to the Planning Inspectorate for permission under a development consent order (DCO) from the Secretary of State for Energy and Climate Change.
- 1.3 This application has now been made to the Planning Inspectorate and was accepted for examination on the 2nd September 2014.

2.0 The Proposed Scheme

- 2.1 The application is for the enhancement of existing power generation facilities (hereafter described as the 'proposed development') at Tata's Port Talbot Steelworks.

- 2.2 This Application for development consent is for the installation of up to two new boilers (nominally 164 Mega Watt thermal (MWth) each) and associated new steam turbine sets with a gross capacity of up to 150 Mega Watt electrical (MWe), which would be connected to the existing process gases (i.e. blast furnace gas, etc) distribution network in order to receive these gases through new pipe work, all to be located within the Order Limits. The proposed development also includes the 66kV electrical connection to the grid (a cable route of around 2.8km in length) and extensions to the existing on-site utility connections (water, nitrogen, natural gas and compressed air).
- 2.3 The proposed development would result in the total on-site power generation capacity at the Port Talbot site increasing up to a maximum of 245 MWe.
- 2.4 The current total on-site power generation capacity of the Port Talbot site is 115.7 MWe. This capacity provides electrical power and process steam to the production processes on-site. However the majority of this existing power generation equipment dates back to the 1950's and is becoming increasingly unreliable and inefficient due to its age. Combined with the variable cycle of process gas production, this results in an average power generation of 75 MWe. Combined with the grid import of 50MWe, this meets current site demand of 125 MWe.
- 2.5 It is stated that energy represents a large proportion of steel manufacturing costs. The iron and steel making process also generates by-product gases which, if not utilised or recycled by the site, are burnt through the flare stacks. The current minimum operational flare is approximately 1 Petajoule (PJ). In order to remain competitive within the market place, the Applicant has embarked on a series of improvement measures, of which energy efficiency is one.
- 2.6 It is advised that the Applicant has an ambition to increase production to 4.7 million tonnes of iron per annum at the Port Talbot site. Once production increases to this level, and in the absence of the proposed development and/or any other energy efficiency improvements, the amount of process gas being flared would increase to approximately 7 PJ per annum. With on-going tactical improvements and capital projects, the flare could be reduced by 2.2 PJ to 4.8 PJ per annum and therefore deliver a reduction in reliance on imported fuel (natural gas).
- 2.7 As noted, the existing power generation facilities contain equipment dating back to the 1950s and do not have sufficient capacity to convert the available process gases associated with the current and increased iron production.
- 2.8 In terms of demand for electricity, at 4.7 million tonnes of iron per annum the site would require approximately 140 MWe, but the total average site capacity, without the proposed development, would remain the same (at 75 MWe), resulting in electrical imports increasing to 65 MWe from 50 MWe.

- 2.9 In order to improve efficiency and increase generation, the Applicant proposes to enhance the total on-site power generation by installing up to two new boilers (nominally 164 MWth each) and associated steam turbine sets with a gross capacity of 150 MWe. The proposed development would be housed in a new building and would be connected to the existing blast furnace gas distribution network in order to receive fuel gases through new pipe work.
- 2.10 The enhancement of the existing on-site power generation through the development of new facilities will allow the existing inefficient facilities to be decommissioned as part of the proposed development. It is proposed that the decommissioned facilities would be retained in situ on site but would not be operational.
- 2.11 The total on-site power generation capacity, inclusive of the proposed development, would be increased up to a maximum of 245 MWe. This would result in an average power generation of approximately 130 MWe (due to the variable cycle of process gas production on-site). This would result in a reduction of grid import to 10 MWe (a decrease of 55Mwe). The estimated amount of process gases being flared would significantly reduce by 4.3 PJ to approximately 0.5 PJ per annum.
- 2.12 The Applicant therefore states that the proposed development would have a number of net benefits including:
- Air quality improvements through the reduction in flared process gases;
 - Saving of up to approximately 400,000 tonnes per annum of CO₂ compared to grid generators (based on generation from coal fired stations);
 - Reduced on-site electricity imports (to 10Mwe on average);
 - Increased operational efficiency and reliability of on-site power and steam production; and
 - Increased economic efficiency through cost reduction to protect the longterm future of steelmaking in South Wales.
- 2.13 In summary, the submission is that the increase in total on-site power generation capacity as a result of the proposed development would reduce the requirement for electricity imports and hence significantly reduce the site's cost base and improve its environmental performance through reduction in flaring of process gases.
- 2.14 In physical terms, the proposed development comprises the following major components and ancillary buildings:
- up to two steam boilers and their associated stacks (maximum 80m in height), annexe bay and boiler house;
 - a turbine hall housing turbine sets and associated condensers;
 - cooling tower units;
 - an electrical switchgear station building;
 - a condensate storage tank and additional condensate polishing units;
 - water treatment plant and chemical dosing system skids;

- administration, workshop, pump house, gas booster house, control buildings and ancillary infrastructure;
- the extension of existing pipe work connections (for water, nitrogen, process gases, natural gas and compressed air) from the existing on site utilities pipe work infrastructure to the generating station;
- a 66kV electrical connection up to 2.8km in length to connect the generating station to the existing on-site substations on the southeast of the site;
- modifications to the two existing on-site substations to accept the electrical connection including the installation of new 66kV bays at each substation;
- security infrastructure, including perimeter fencing and site lighting infrastructure;
- connections to the existing internal road layout for the provision of site vehicular access(es), roads, pedestrian network, parking and cycle storage;
- temporary construction compounds; and
- connection to site drainage systems.

2.15 The following table provides the physical dimensions of the above components:

Summary of Project Description Components for Single Phased Build (Option 1)	
Item	Indicative & Maximum Dimensions
Stack(s)	Up to two stacks, both at 80m high
Cooling Tower Units	Up to 22m high x 160m long x 16m wide
Turbine Hall	Up to 25m high x 55m long x 65m wide
Boiler House	Up to 35m high (at apex) x 60m long x 65m wide
Electrical Connection	66kV cables, approximately 2.8km in length to be run underground, off existing above ground infrastructure, on a cable bridge or a combination of both
Switchgear Station Building	Up to 35m long x 55m wide

2.16 There is the potential for a two phase construction approach. Option 1 would involve the full and complete construction of the proposed development. Option 2 would involve half the proposed development (one stack, one boiler and associated turbine sets) being installed (Phase 1) with all foundation and engineering being undertaken in that Phase. Phase 2 of Option 2 would involve the second and complete installation of the second stack, boiler and associated turbine sets. Phase 2 could occur up to 10 years after Phase 1.

2.17 As Members will be aware, the Port Talbot steelworks is located wholly within the County Borough of Neath Port Talbot and extends to a total of 1005.5 hectares, which comprises all of the major components of the steelworks, together with the ancillary structures/buildings. The application site extends to an area of approximately 23 hectares within the within the northern part steelworks site adjacent to the existing power generation facilities.

3.0 The Planning Process

- 3.1 As stated above, an application for the proposed development has been accepted for examination by the Planning Inspectorate.
- 3.2 As no part of the proposed development falls within the City & County of Swansea, it has been necessary to formally register this Council as an interested party for involvement in the examination.
- 3.3 The application at present is currently at what is known as the pre-examination stage which concludes on the 9th December 2014 with the Preliminary Meeting (PM). As this Council is now registered as an interested party, it has been invited to attend the PM, the purpose of which is to give interested parties the opportunity to make representations to the Planning Inspectorate about how the application should be examined. The Preliminary Meeting will concern itself only with the procedure for examining the application, including, setting the timetable for making more detailed written representations. It will not concern itself with the merits of the application.
- 3.4 The examination process formally commences the day after the PM (10th December). The Planning Inspectorate has six months to carry out the examination and must prepare a report on the application to the Secretary of State, including a recommendation, within 3 months of the close of the examination. The Secretary of State then has a further 3 months to make the decision on whether to grant or refuse development consent. Once a decision has been issued by the Secretary of State, there is a six week period in which the decision may be challenged in the High Court. This process of legal challenge is known as Judicial Review.
- 3.5 A draft timetable for the examination process has already been prepared for the PM, but Deadline 1 has already been fixed for the 15th January 2015 for the submission of written representation by interested parties.
- 3.6 Unfortunately this deadline falls between the dates for this Committee in December 2014 and February 2015.
- 3.7 This report therefore seeks delegated powers be granted to the Head of Economic Regeneration and Planning to submit written representation relating to the impacts of the proposed development on the City and County of Swansea to the Examining Authority of the Planning Inspectorate in accordance with the timetable for the examination.
- 3.8 Potential positive, negative and neutral impacts identified at this stage affecting the City & County of Swansea are:
- Socio economic impacts;
 - Landscape and visual impacts;
 - Ecological impacts; and
 - Air quality impacts.

3.9 This report also seeks delegated powers be granted to the Head of Economic Regeneration and Planning to formally contribute to a Statement of Common Ground, respond to any questions raised by the Examining Authority and to represent, if necessary, the views of the City & County of Swansea in any topic specific hearing during the course of the examination.

4.0 Financial Implications

4.1 There are no financial implications associated with this report.

5.0 Legal Implications

5.1 There are no legal implications associated with this report.

Background Papers: The Planning Act 2008 (as amended), National Policy Statements, Planning Policy Wales, adopted City & County of Swansea Unitary Development Plan and the Tata Steel UK Ltd Preliminary Environmental Report.

Appendices:

Appendix A - Site location plan.