R106: BP Cherry Point Refinery Cogeneration Project in Blaine, Washington

Corporate NO: R106 Report COUNCIL DATE: May 14, 2001

REGULAR COUNCIL			
TO:	Mayor & Council	DATE:	May 9, 2001
FROM:	General Manager, Engineering	FILE:	4550-008
SUBJECT:	BP Cherry Point Refinery Cogeneration Project in Blaine, Washington		

RECOMMENDATION

- 1. That the B.P. Cherry Point Cogeneration Project be required to provide net air quality improvement.
- 2. That letters be sent to the GVRD and B.C. Ministry of Environment requesting they ensure the proposed Cherry Point Cogeneration Project does not negatively affect Surrey and regional air quality.
- 3. That Engineering Department staff continue to participate in the project review process, and report back as appropriate if further Council action is required.

INTENT

This report provides information on a new thermal power generating plant proposed in Blaine, Washington.

BACKGROUND

The City received information from the Washington State Energy Facility Site Evaluation Council (EFSEC) regarding a new energy facility proposed for the BP Cherry Point Refinery in Blaine, Washington. The EFSEC hosted a Potential Site Study agency meeting for this project on May 2, 2001 which was attended by Engineering Department staff.

DISCUSSION

Site Information

The BP Cherry Point Refinery is located in Blaine, Washington, approximately 10 km due south of the Canada/U.S. Border crossing at Hwy. 15 / 176 Street. The Cherry Point Refinery is a major producer of petroleum products for the western U.S. and Canada. The refinery process requires significant electricity supply, which BP currently purchases from the regional power authority, as well as significant steam supply, which BP currently generates on-site using large fuel-fired steam boilers.

Project Scope

Due primarily to a roughly 1000% increase in the market price of electricity over the last 18 months, BP is considering developing their own independent power supply. The Cherry Point Cogeneration Project proposes a 750 megawatt (MW) cogeneration plant using a combination of natural gas-fired combustion and steam turbines. In addition to providing the power needs for the refinery, the plant would also supply steam in place of the existing boilers. BP is also considering making surplus power from the proposed plant available at discount rates for regional businesses and communities.

Process and Timelines

The Washington State EFSEC is the regulatory authority responsible for permitting power plants such as the proposed Cherry Point Cogeneration Project. As expected, the review process for projects of this scale is extensive. BP has not yet submitted an application to EFSEC for the Cherry Point Cogeneration Project – they are at the pre-application stage to assess public and agency issues and concerns.

The process and approximate timelines for this project are as follows:

Pre-application Process / Potential Site Study Spring/Summer 2001
Application Submission Fall 2001
Application Review 2002

The application review process is expected to conclude in Fall 2002 with either approval or denial of the site certification. If approval is granted and BP proceeds with the plant, the construction/commissioning would take a further 2-2.5 years.

Potential Implications for Surrey

At this point, the only likely impact to Surrey as a result of the Cherry Point Cogeneration Project is the issue of air quality. BP claim that the plant will be state-of-the-art in terms of efficiency, combustion technology and emissions control. Further, the plant would allow the decommissioning of their 1970s era steam boilers, which are less efficient and are fuelled by heavy fuels such as propane and diesel, and which are less clean burning than the proposed natural gas. BP are currently preparing an Environmental Assessment of the proposed plant to submit with their application, but claim that early results of the EA indicate that air emissions from the refinery as a whole will not increase, and possibly may even be reduced, with the proposed plant compared to their present emissions.

CONCLUSION

The Cherry Point Cogeneration Project is proposed as a significant thermal power generating plant in Blaine,

Washington. The State regulatory and permitting process for the proposed plant is extensive and is expected to occur over the next 18-24 months.

At this point, the only apparent impact to Surrey is the issue of air quality. However, BP's stated objective is to have no net impact – or preferably, a net improvement – in air quality as the new plant would offset emissions from existing, less efficient steam boilers that would be decommissioned. BP should be held accountable to this objective.

Given that air quality in Surrey is administered at the Regional and Provincial levels, it would also be appropriate to send a letter to both the GVRD and MOE, requesting they ensure the Cherry Point Cogeneration Project does not negatively affect Surrey and Regional air quality. Both of these agencies had staff in attendance at the May 2 Potential Site Study agency meeting.

In the meantime, Engineering Department staff will continue to participate in the EFSEC permit review process for this project. Further corporate reports will be brought forward to update Council or if any further Council action is required.

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