



State of Washington

ENERGY FACILITY SITE EVALUATION COUNCIL

Sumas Energy 2 Generation Facility

**Prevention of Significant Deterioration/Notice of Construction
Permit No. EFSEC/2002-01, Amendment 1**

RESPONSIVENESS SUMMARY

January 5, 2005*

** Correction of a typographic error in the date on the document considered by EFSEC on January 11, 2005.*

Table of Contents

1. BACKGROUND.....	4
2. GENERAL COMMENTS AND RESPONSES:.....	6
GENERAL COMMENT 1: GENERAL, BUT NON-SPECIFIC OBJECTIONS TO APPROVING THE EXTENSION.	6
GENERAL COMMENT 2: CONSIDERATION SHOULD BE GIVEN TO THE IMPACTS OF AIR POLLUTION IN THE LOWER FRASER VALLEY (LFV) AIRSHED	6
GENERAL COMMENT 3: EFSEC'S BEST AVAILABLE CONTROL TECHNOLOGY (BACT) DETERMINATION WAS INCORRECT OR INADEQUATE.....	11
GENERAL COMMENT 4: ADMINISTRATIVE AND OTHER CONCERNS	11
3. RESPONSES TO WRITTEN COMMENTS.....	15
COMMENT LETTER 1: NANOOK MCCARTHY.....	15
COMMENT LETTER 2: ROBERT GRAY	15
COMMENT LETTER 3: PATRICIA ROSS, CHAIR, AIR QUALITY COMMITTEE, FRASER VALLEY REGIONAL DISTRICT.....	15
COMMENT LETTER 4: RICHARD J. CLERGY.....	16
COMMENT LETTER 5: REV. WALLY KORGULETZ	16
COMMENT LETTER 6: ROBERT BROMLEY, MAYOR, CITY OF SUMAS	17
COMMENT LETTER 7: BRUCE AND JENNIE HASSELBACK	17
COMMENT LETTER 8: HERB WARKENTIN.....	17
COMMENT LETTER 9: E. AND A. BENSON.....	17
COMMENT LETTER 10: DAVE CLYNE	18
COMMENT LETTER 11: JOHN SNYDER	18
COMMENT LETTER 12: BARBARA GOYER.....	18
COMMENT LETTER 13: ECENITH LUKAS.....	19
COMMENT LETTER 14: REV. CLAYTON ARKESTEYN-VOGLER, FRASER PRESBYTERY, UNITED CHURCH OF CANADA.....	19
COMMENT LETTER 15: OWEN SKONBERG.....	19
COMMENT LETTER 16: HARALD TILGNER	19
COMMENT LETTER 17: MARY HELEN HATCH.....	19
COMMENT LETTER 18: JIM COX.....	19
COMMENT LETTER 19: CLINT JACKSON.....	20
COMMENT LETTER 20: DEBORAH LUBBE	20
COMMENT LETTER 21: DAVE CLYNE, A.M. CLYNE, ANDREA CLYNE.....	20
COMMENT LETTER 22: REV. WALLY KROGULETZ.....	21
COMMENT LETTER 23: MARK WARAWA, M.P., LANGLEY	21
COMMENT LETTER 24: SANDRA FARENHOLTZ.....	22
COMMENT LETTER 25: GWEN GREGORIG	22
COMMENT LETTER 26: LAURIE HOEKSTRA.....	22
COMMENT LETTER 27: BOB BILLS, M.P., RED DEER	23
COMMENT LETTER 28: DON PETERSON.....	24
COMMENT LETTER 29: GASP	25
COMMENT LETTER 30: PATRICIA ROSS, COUNCILLOR, CITY OF ABBOTSFORD.....	25
COMMENT LETTER 31: MARY BARRETT, COUNSEL FOR THE ENVIRONMENT.....	25
COMMENT LETTER 32: BOB MARTENS.....	26
COMMENT LETTER 33: SANDRA FARENHOLTZ.....	26
COMMENT LETTER 34: CHRISTINE HORSFIELD	27

COMMENT LETTER 35: STEVE DINICOL.....	27
COMMENT LETTER 36: KAREN MCGAFFEY, PERKINS COIE LLP	27
COMMENT LETTER 37: KIRK JOHNSTONE, PACIFIC AND YUKON REGION, ENVIRONMENT CANADA.....	28
COMMENT LETTER 38: PATRICIA ROSS	28
COMMENT LETTER 39: MARIAN S. COCKROFT.....	29
COMMENT LETTER 40: DAVID BRICKLIN, BRICKLIN NEWMAN DOLD LLP.....	29
(ON BEHALF OF THE PROVINCE OF BRITISH COLUMBIA).....	29
COMMENT LETTER 41: MARY REEVES, MAYOR, CITY OF ABBOTSFORD.....	31
COMMENT LETTER 42: GERDA PEACHEY.....	31
4. RESPONSES TO ORAL COMMENTS, OCTOBER 28, 2004	32
COMMENTOR 1: MARY REEVES, MAYOR, CITY OF ABBOTSFORD.....	32
COMMENTOR 2: HARALD TILGNER	32
COMMENTOR 3: TANYA CHARLES-TAIT, ON BEHALF OF MARK WARAWA, MP FOR LANGLEY	33
COMMENTOR 4: DAVE AND ANDREA CLYNE	33
COMMENTOR 5: OWEN AND CHRIS SKONBERG.....	33
COMMENTOR 6: CLAYTON ARKESTYN VOGLER.....	34
COMMENTOR 7: SANDRA FARENHOLTZ.....	34
COMMENTOR 8: ELIZABETH GRAY.....	34
COMMENTOR 9: PATRICIA ROSS	35
COMMENTOR 10: GWEN GREGORIG	36
COMMENTOR 11: GERDA PEACHEY.....	36
COMMENTOR 12: RICHARD PEACHEY.....	36
COMMENTOR 13: ANDREA MIKULAN.....	37
COMMENTOR 14: AUDREY MOBLEY	38
COMMENTOR 15: MARIANN COCKROFT	38
COMMENTOR 16: ELMER WITT	38
COMMENTOR 17: GARY GRAY	38
COMMENTOR 18: JOHN VAN DONGEN.....	38
COMMENTOR 19: DIANE STUBER.....	39
COMMENTOR 20: LOUISE RIGBY.....	39
COMMENTOR 21: MARIAN BEDDILL, GASP.....	39
COMMENTOR 22: MARY HELEN HATCH.....	39
COMMENTOR 23: MIKE KAUFFMAN.....	39
COMMENTOR 24: WALLY KORGULETZ.....	39
COMMENTOR 25: JOHN VISSERS	40
COMMENTOR 26: BARRY PENNER, MEMBER OF LEGISLATIVE ASSEMBLY FOR CHILLIWACK-KENT.....	40
COMMENTOR 27: CLINT JACKSON.....	41
COMMENTOR 28: LAURIE HOEKSTRA.....	41
5. CHANGES TO THE FINAL PERMIT APPROVAL.....	42

1. Background

In August 2002 the Governor of Washington State approved the construction and operation of the Sumas Energy 2 Generation Facility (SE2GF), an electrical generating facility located in Sumas, Washington. The Notice of Construction/Prevention of Significant Deterioration (NOC/PSD) air emissions permit (“permit”) for this project became effective on April 17, 2003.

Under Condition 22 of the permit, Sumas Energy 2, Inc., (SE2) must initiate construction of the project within eighteen months of the final and effective date of the permit. SE2 has indicated that it will not commence construction of SE2GF until the Canadian National Energy Board (NEB) approves construction of a transmission line that would connect SE2GF to the BC Hydro Clayburn substation in Abbotsford, British Columbia. SE2 believes it is unlikely that NEB will approve construction of the transmission line prior to the construction-initiation deadline of this PSD permit. Consequently, in June 2004 SE2 submitted a request to the Energy Facility Site Evaluation Council (hereinafter referred to as “EFSEC” or the “Council”) for an eighteen month extension of the construction-initiation deadline for PSD/NOC Permit No. EFSEC/2001-02. The proposed new construction deadline is April 17, 2006.

On September 17, 2004, EFSEC issued a preliminary approval of the extension for public comment. EFSEC posted public notice of the comment period and of a public hearing on this matter in the Bellingham Herald (9/22/2004), The Lynden Tribune (9/22/2004), The Abbotsford Times (9/21/2004), and by mailing to EFSEC’s interested persons list for this project, and EFSEC’s minutes and agendas list (9/17/2004). Copies of the draft permit and Technical Support Document were made available for public reference in the Bellingham Library, the Whatcom County Library System (Lynden, Everson, Ferndale and Sumas Branches), the MSA Centennial and Clearbrook libraries in Abbotsford, B.C., the EFSEC offices in Olympia, Ecology’s Offices in Lacey, Washington, on EFSEC’s web site, and to any interested person upon request. On September 17, 2004, EFSEC mailed copies of the notices and the draft permit and fact sheet to a list of 46 tribal, federal, state, provincial and local government and agency representatives interested in this proposal.

EFSEC held a public comment hearing on this matter on October 28, 2004, in Everson, Washington. The public comment period closed on November 1, 2004. To be considered, comments had to be received in EFSEC’s office, or delivered by e-mail, no later than 5:00 p.m. November 1, 2004.

EFSEC received forty-two written comment letters responding to the preliminary approval. Twenty-eight persons commented at the public hearing¹. The following pages summarize the comments received and indicate how the concerns expressed are addressed in the final permit issued by EFSEC. Some of the comments have been paraphrased or generalized to allow direct responses to the concerns expressed. Copies of the original comment letters are available upon request from EFSEC, and are available for public reference upon finalization of the permit at the following locations:

¹ Some oral commentors read from a written statement which they also submitted.

Whatcom County Library System:

- Lynden Branch: 216 - 4th Street, Lynden, WA 98264, 360-354-4883;
- Everson Branch: 104 Kirsch Drive, Everson, WA 98247, 360-966-5100;
- Ferndale Branch: 2222 Main Street, Ferndale WA 98248, 360-384-3647;
- Sumas Branch: 451 - 2nd Street, Sumas, WA 98295. 360-988-2501.

City of Bellingham Public Library: 210 Central Ave, Bellingham, WA 98225, 360-676-6860.

In Abbotsford, British Columbia:

- MSA Centennial Library, 33660 South Fraser Way, Abbotsford, BC V2S 2B9, Canada, 604-853-1753;
- Clearbrook Library, 32320 George Ferguson Way, Abbotsford, BC V2T 6N4, Canada, 604-859-7814.

In Olympia, Washington:

- Washington Energy Facility Site Evaluation Council: 925 Plum Street SE, Building 4, Olympia, Washington 98504-3172, (360) 956-2121; www.efsec.wa.gov;
- Washington State Library, Joel M. Pritchard Library: 6880 Capital Boulevard South, Olympia, Washington 98501-5513;
- Washington State Department of Ecology: 300 Desmond Drive, Lacey, Washington. (Please contact Bernard Brady at (360) 407-6803).

2. General Comments and Responses:

General Comment 1: General, but non-specific objections to approving the extension.

The Council acknowledges the comments objecting to the permit extension. As a regulatory agency, the Council is required to consider SE2's request in accordance with applicable state and federal laws, regulations and guidance documents. The criteria for considering a request for extension were laid out in the Technical Support Document that accompanied the draft permit extension. After due consideration of all the comments received, both written and oral, the Council has determined, based on the *applicable legal requirements*, that extension of the SE2GF NOC/PSD permit remains warranted.

A large number of comments addressed the adequacy of the original issued permit, and/or the adequacy of the analyses performed as the basis for the permit approval process. Many of these objections have already been addressed in previous permit documents issued by EFSEC and EPA Region 10, including the September 28, 2001 Draft Fact Sheet issued with the draft Approval of Permit No. EFSEC/2002-01; the May 24, 2002 Responsiveness Summary for Approval of Permit No. EFSEC/2002-01; EFSEC's and EPA Region 10's responses to the Province of British Columbia and Environment Canada's petitions for review before the Environmental Appeals Board (EAB); and the EAB's Order on the petitions for review issued on March 25, 2003². EFSEC has also chosen to address such comments in General Comment 2 below, and in Sections 3 and 4 of this document.

General Comment 2: Consideration should be given to the impacts of air pollution in the Lower Fraser Valley (LFV) airshed

a. The Council should consider the air quality impact of SE2GF on the existing "stressed" nature of the LFV Airshed.

As part of the evaluation supporting issuance of the original permit for the SE2GF, EFSEC considered the existing air quality and impacts on the existing air quality in the LFV airshed. Since then, EFSEC has reviewed a number of documents prepared by Canadian regulatory agencies that assess the recent status of air quality in the LFV.^{3,4} These documents reflect that, although a few exceedances of "Desirable" or "Acceptable" Objectives have occurred, on the whole ambient pollutant concentrations have not significantly increased in the area, nor has air quality significantly worsened, since the original review of the SE2GF conducted in the 2000-2002 period. The

² Environmental Appeals Board, PSD Appeal Nos. 02-10 and 02-11, Order Remanding in Part, and Denying Review in Part, March 25, 2003.

³ Lower Fraser Valley Ambient Air Quality Reports for 2001 (dated October 2002), 2002 (dated September 2003), and 2003 (dated August 2004), Greater Vancouver Regional District and Fraser Valley Regional District.

⁴ Forecast and Backcast of the 2000 Emission Inventory for the Lower Fraser Valley Airshed 1985-2025, July 2003, Greater Vancouver Regional District and Fraser Valley Regional District, <http://www.gvrd.bc.ca/publications/file.asp?ID=392>

documents further consistently state that Air Quality Index readings are “similar to conditions recorded during the past few years”⁵. Air quality monitors in Abbotsford indicate "best" air quality over 96% of the time, and never "poor". Therefore, between the time the original permit was approved and the present, air quality has not changed materially in the LFV Airshed. As such, EFSEC concludes that the SE2GF will not cause a significant impact on the air quality in the LFV.

Furthermore, the monitored background pollutant concentrations are below the National Ambient Air Quality Standards (NAAQS) which have been established by U.S. EPA. The monitored background pollutant concentrations are also below the Canada-Wide Standards/Objectives.

Based on the Emissions Forecast/Backcast, EFSEC noted in the Technical Support Document that "annual emissions in the Lower Fraser Valley for each pollutant subject to review under PSD/NOC ... declined up to 9% between 2000 and 2003 or remained unchanged." EFSEC acknowledges, and apologizes for not noting that ammonia emissions have increased during that period. However, it should be noted that ammonia is not a PSD-regulated pollutant, but emissions of ammonia may be limited to address collateral impacts. Nonetheless, the ammonia trend in the cited report projects that over 70% of the increase in ammonia will come from the local agricultural industry. In fact, the ammonia emissions from SE2GF will represent less than 0.8% of the total LFV ammonia emissions based on Calendar Year 2000 estimates. Further, the ammonia emissions from SE2GF will represent a decreasing proportion as agricultural ammonia emissions continue to increase.

b. The Council should consider impacts from pollution that result from anticipated growth in the LFV.

Several comments cited articles that discuss how pollutant emissions from many different sources will continue to increase along with the LFV population. These comments stated that this was an adequate reason for denying the SE2GF permit extension. The articles discussed the *Characterization of the Georgia Basin/Puget Sound Airshed*, a report jointly issued in October 2004 by Environment Canada and the US EPA.⁶ EFSEC reviewed this study during the assessment of this permit extension.

Although EFSEC acknowledges that emissions of some pollutants will increase in the LFV as a result of economic and population growth, the study cited above indicates that agriculture and vehicular pollutant emissions will be the overwhelming sources of nitrogen oxides (NO_x), carbon monoxide (CO), ammonia, sulfur oxides, and particulate matter. Volatile organic compound emissions will also come from these sources as well as from natural sources, solvent evaporation, and marine vessels. Therefore, the *Characterization of the Georgia Basin/Puget Sound Airshed* report indicates that the source of the potential future emissions increases will not originate from facilities such as SE2GF but will instead originate from other sources associated with population growth.

⁵ See Lower Fraser Valley Ambient Air Quality Report for 2003, cited previously.

⁶ Characterization of the Georgia Basin/Puget Sound Airshed, Environment Canada and US Environmental Protection Agency, http://www.pyr.ec.gc.ca/Air/gb_ps_airshed/summary_e.htm, September 2004.

Furthermore, as indicated in the July 2003 Emission Forecast and Backcast, SE2GF, and all electrical generation sources combined, will contribute only a tiny fraction of the projected pollutant emissions in Whatcom County and in the LFV.

EFSEC does acknowledge that both studies cite electric power generation as a significant emitter of carbon dioxide. Carbon dioxide, however, is not subject to PSD permitting. It should further be noted that in the Site Certification Agreement, issued pursuant to Washington State law and not the federal Clean Air Act, EFSEC already required that SE2GF's carbon dioxide emissions be mitigated.

Therefore, in assessing the permit extension request, EFSEC did consider potential impacts that result from population and economic growth in the LFV. EFSEC concluded that SE2GF will contribute only a small fraction of the projected future emissions in the LFV.

c. EFSEC should consider health impacts to residents of the Lower Fraser Valley.

Many comments indicated that the emissions from the SE2GF would pose imminent health risks to residents on both sides of the border in the Lower Fraser Valley, including health risks to the more sensitive sectors of the populations (*i.e.*, elderly and children).

Air quality impacts on both sides of the international border were extensively modeled. This modeling took into account both LFV's topography and characteristic meteorology. After lengthy and thorough review, based on State and Federal legal requirements, EFSEC found that the emissions would not cause exceedances of any NAAQS or Canada-Wide Standards/Objectives (*see also*, General Comment 2.a), would not exceed regulated thresholds for potential toxicity effects (with respect to toxic air pollutants), and would not create serious visibility impacts. The standards against which the pollutant concentrations were compared were established taking into account thresholds for the more sensitive populations. Therefore, in evaluating the permit extension request, EFSEC did consider health impacts to residents of the LFV.

d. EFSEC should consider the cumulative impacts of the SE2GF emissions and other significant emissions in the LFV Airshed.

Some comments indicated that the SE2GF emissions should be considered in combination with emissions from the BP Cherry Point Cogeneration Project, and other emissions in the LFV Airshed.

The application that served as the basis for approval of the original NOC/PSD permit for the SE2GF demonstrated no monitoring or modeling "significant impact level," or SIL, was exceeded by the SE2GF project emissions. This means that SE2GF's impacts were below permitting trigger levels that require cumulative impacts analysis. The case was the same for the BP Cherry Point Cogeneration Project.

Moreover, in the BP Cherry Point Cogeneration Project Environmental Impact Statement (EIS), EFSEC did conservatively evaluate the cumulative impacts of both projects.⁷ The cumulative impacts of the BP Cherry Point Cogeneration Facility and the SE2GF were estimated for the Sumas/Abbotsford area. These estimates were then compared to the respective NAAQS and Canada Wide Objectives. The results are shown in the tables on the following page (Tables 3.2-32 and 3.2-33) which were excerpted from the BP Cherry Point Cogeneration Project Final EIS.

These tables provide a *very conservative estimate* of the cumulative air quality impact of both facilities. In this estimate the maximum impacts evaluated separately for each project were added. The maximum impacts may have occurred on different days with different local meteorological conditions, and maximum impacts from one project would not coincide in time with the occurrence of maximum impacts from the second project. This conservative estimate indicates that the cumulative emissions from both of these facilities would be below the applicable NAAQS and Canada-Wide Objectives/Standards.

e. EFSEC should consider new information available since the permit was issued.

Many comments noted that new information has become available since issuance of the permit. First, many of these comments do not discuss what type of new information has become available, although some refer to new studies linking air pollution to impacts to human health. EFSEC believes that it has reviewed all relevant new information that has become available since the time the permit was issued.

Second, some of the comments state that new information shows that more stringent air quality standards should be established. Establishing “new” ambient air quality standards, as requested in the comments, is a separate regulatory task, independent from the review of individual approvals such as the SE2GF. In the U.S., the Federal Clean Air Act requires that ambient air quality standards be reassessed on a regular basis. During that reassessment, the regulatory agency (U.S. EPA) takes into account new information regarding the thresholds for health impacts, including thresholds for sensitive populations, for each specific pollutant. For example, in 2005, the U.S. EPA will begin evaluating whether EPA should retain or revise the particulate matter, and whether ozone ambient air quality standards in the U.S. should be modified.⁸ U.S. EPA has already begun considering information gathered and developed since establishment of the existing standards. At this time, however, there has been no determination whether new ambient air quality standards will be established for particulate matter and ozone.

EFSEC does not have the regulatory authority to establish new ambient air quality standards in Washington. Instead, EFSEC must use *existing* ambient air quality standards in evaluating a PSD permit application or PSD permit extension application. EFSEC has followed the required approach and applied *existing* ambient air quality standards in the PSD permit extension.

⁷ BP Cherry Point Cogeneration Project, Final Environmental Impact Statement, DOE-EIS 0349, August 2004, Energy Facility Site Evaluation Council and Bonneville Power Administration.

⁸ Air Quality Criteria for Particulate Matter (October 2004), U.S. Environmental Protection Agency, <http://cfpub.epa.gov/ncea/cfm/partmatt.cfm>

Tables excerpted from the BP Cherry Point Cogeneration Project EIS

Table 3.2-32: Cumulative Total Concentrations Compared to Canadian Air Quality Objective

Criteria Pollutant	Averaging Period	Highest and Cumulative Concentrations ($\mu\text{g}/\text{m}^3$)				Most Stringent of Canadian Objective ($\mu\text{g}/\text{m}^3$)
		Maximum Existing Background Concentration ($\mu\text{g}/\text{m}^3$) ¹	Modeled Maximum Impacts of Sumas Energy 2 ($\mu\text{g}/\text{m}^3$) ²	Modeled Maximum Impacts of BP Cogeneration Facility in Abbotsford ($\mu\text{g}/\text{m}^3$)	Cumulative Impact ($\mu\text{g}/\text{m}^3$)	
SO ₂	Annual	3	0.13	0.0014	3.13	25
	24-hour	8	1.22	0.058	9.80	150
	3-hour	21	4	0.353	25.35	375
	1-hour	29	5.13	1.04	35.17	450
PM ₁₀	Annual	14	0.38	0.0079	14.39	30
	24-hour	36	3.67	0.16	39.83	50
CO	8-hour	3,480	3.32	0.45	3,484	5,500
	1-hour	6,960	6.5	2.7	6,969	14,300
NO ₂	Annual	29	0.26	0.006	29.27	60
	24-hour	73	2.54	0.12	75.66	200
	1-hour	109	10.73	3.2	122.93	400

Source: BP 2002, GVRD 1999, 2000, 2001

1 Maximum concentration from a three year monitoring period (1999, 2000, 2001).

2 Modeled maximum impacts of Sumas Energy 2 are taken from the SE2 Second Revised Application dated June 29, 2001, Table 6.1-16.

Table 3.2-33: Cumulative Total Concentrations Compared to NAAQS or WAAQS

Criteria Pollutant	Averaging Period	Highest and Cumulative Concentrations ($\mu\text{g}/\text{m}^3$)				Most Stringent of NAAQS or WAAQS ($\mu\text{g}/\text{m}^3$)
		Maximum Existing Background Concentration ($\mu\text{g}/\text{m}^3$) ¹	Modeled Maximum Impacts of Sumas Energy 2 ($\mu\text{g}/\text{m}^3$) ²	Modeled Maximum Impacts of BP Cogeneration Facility in Sumas ($\mu\text{g}/\text{m}^3$)	Cumulative Impact ($\mu\text{g}/\text{m}^3$)	
SO ₂	Annual	3	0.13	0.0046	3.13	52
	24-hour	8	1.4	0.13	9.53	262
	3-hour	21	3	0.57	24.6	1,300
	1-hour	29	6.97	1.7	37.7	1,050
PM ₁₀	Annual	14	0.39	0.027	14.4	50
	24-hour	36	4.23	0.43	40.7	150
CO	8-hour	3,480	4.57	0.81	3,485	10,000
	1-hour	6,960	8.82	4.4	6,973	40,000
NO ₂	Annual	29	0.27	0.021	29.3	100

Source: BP 2002, GVRD 1999, 2000, 2001

1 Maximum concentration from a three year monitoring period (1999, 2000, 2001).

2 Modeled maximum impacts of Sumas Energy 2 are taken from the SE2 Second Revised Application dated June 29, 2001, Table 6.1-16.

General Comment 3: EFSEC's Best Available Control Technology (BACT) determination was incorrect or inadequate

a. PM10 and VOC emissions should be the most stringent possible.

A number of comments suggest that even though BACT has not changed for PM10 and VOC emissions, these emissions should nevertheless require more stringent controls.

The details of EFSEC's BACT determination for each regulated pollutant are given in the 2001 Draft Fact Sheet for the original permit. These details were updated in the Technical Support Document for the permit extension. *See* Technical Support Document at p. 4.

As documented in the May 26, 2004 application for a permit extension, the newer gas turbine projects are also using the same control strategies as for SE2GF – i.e. good combustion practices and using natural gas as fuel. No examples of add-on particulate control for natural gas-fueled combustion turbines or similar natural gas combustion sources could be found in the EPA RACT/BACT/LAER Clearinghouse (RBLC), or from suppliers of control equipment. The particulate control measures that were found included combustion of a low ash fuel such as natural gas and use of good combustion practices in well designed combustion devices. Variations in emission limits can be attributed to project-specific factors such as turbine model and natural gas properties. For this project, the turbine vendor has provided an emission guarantee that provides the basis for the BACT emission limit. BACT is applied on a case-by-case basis, and in this instance, the BACT emission limits established for PM10 and VOC in the original permit still constitute BACT .

b. EFSEC should require EMx (SCONOx) as BACT for NO_x emissions instead of Selective Catalytic Reduction (SCR) technology.

In the Fact Sheet to the original permit, EFSEC provided an extensive analysis of the technical feasibility of applying SCONOxTM technology (now called EMxTM) to the SE2GF. EFSEC determined that the EMxTM technology was marginally technically feasible in light of at least a seven-fold scaleup that would be required from the largest EMxTM installation. EFSEC did not elaborate further on that determination because there is no evidence that the BACT analysis with regard to EMxTM has changed. In fact, the evidence indicates that the most recent installations of EMxTM are even smaller than the early ones (only about 1.5% of the size of SE2GF's turbines). Further, EMxTM's vendor claims that the technology may be better than selective catalytic (NO_x) reduction only for "*smaller-scale* applications," and that the "relative costs of these technologies ... cannot be predicted with any certainty at this time." EFSEC believes these shortcomings adequately explain and *continue to confirm* its conclusion that EMxTM is not BACT for the SE2GF.

General Comment 4: Administrative and Other Concerns

a. The extension should not be granted because Canada's National Energy Board (NEB) rejected SE2GF's application. If the extension is granted, it should be postponed until SE2GF's appeal

process to the NEB for reconsideration is complete, or EFSEC should only be given a twelve month extension.

Some comments suggest that EFSEC should not grant the permit extension for the same reasons the NEB denied the request for transmission lines into Canada. Further, many comments state that the NEB denied the request for transmission lines due to the air quality impacts that would result from the SE2GF. The NEB's denial was not based solely on air quality impacts. Instead, the NEB considered numerous factors as required under Canadian law. The analysis employed by the NEB to deny SE2's request is different than the analysis EFSEC is required to conduct to comply with PSD regulations. Furthermore, EFSEC did not have the same administrative record before it. Therefore, the basis for the NEB's denial of SE2's request for transmission lines does not provide EFSEC with a basis for denying the permit extension request.

40 C.F.R. Section 52.21(r)(2) allows EFSEC to extend the permit period "upon a satisfactory showing that an extension is justified." 40 C.F.R. §52.21(r)(2). In SE2's permit extension request, SE2 stated that "[a]s a result of the delays attributable to the NEB approval process, construction of the SE2GF has not yet begun and will not start before the NOC/PSD permit is scheduled to expire. SE2 is therefore seeking renewal and extension of the NOC/PSD permit for the SE2GF." Permit Extension Request at p. 1. Thus, SE2's justification is that SE2 could not commence construction of the SE2GF because the NEB did not grant SE2's request for transmission lines, which are essential to the SE2GF. SE2 has appealed the NEB's decision to the Canadian Court of Appeal and the appeal is pending. EFSEC finds that the NEB decision caused an unforeseen delay in the construction of the SE2GF. This provides a satisfactory showing to justify an extension of the PSD/NOC permit.

b. EFSEC should deny SE2's permit extension request because EFSEC's action to grant the permit extension will occur after the permit expires. EFSEC should also deny the permit extension request because the request was not submitted six months before the permit expires.

Many comments requested EFSEC to deny SE2's permit extension request because EFSEC's action to grant the permit extension will occur after the permit expires. These comments cite to a draft guidance document related to modifications of PSD permits, dated June 1991 ("1991 Draft Guidance Document"). This document is a preliminary staff draft of a Federal Register notice that has never been completed. Therefore, this draft document, as well as any other drafts of the document, do not represent EPA policy on the subject matter, and should not be relied upon.

In any event, here, the original permit expired on October 17, 2004. SE2 submitted the permit extension request *before* the permit expired (*i.e.*, June 2, 2004). EFSEC finds that the request was made in a timely manner; therefore, EFSEC can grant the permit extension.

An additional comment requested EFSEC deny SE2's permit extension request because SE2 did not submit the request at least six (6) months before the permit expiration date. The comment cites to the 1991 Draft Guidance Document which states that a company constructing a phased multi-unit project should submit a permit extension request to the "review agency at least 6 months prior to the date on which the permit would become invalid." As stated above, this document is a preliminary staff draft of a Federal Register notice that has never been completed. Therefore, this draft

document, as well as any other drafts of the document, do not represent EPA policy on the subject matter, and should not be relied upon.

c. SE2 did not provide an adequate "revised construction schedule."

Many comments cite to both the 1991 Draft Guidance Document and the Region IX Policy on PSD Permit Extensions, dated July 1988, to argue that the permit extension request should be denied because SE2 did not provide an adequately revised construction schedule.

As explained above, the 1991 Draft Guidance Document is a preliminary staff draft of a Federal Register notice that has never been completed. Therefore, this draft document, as well as any other drafts of the document do not represent EPA policy on the subject matter, and should not be relied upon. In any event, as discussed below, EFSEC believes that SE2 did provide an adequately revised construction schedule in its permit extension request.

In its original permit application, SE2 expressed its construction schedule as an intent to initiate construction once all necessary permits had been acquired. Similarly, in the permit extension request, SE2 has repeated this intention after explaining the delays that occurred in attempting to obtain all the necessary permits. This is not a situation where SE2 is simply waiting until the business climate or market improves before it decides to begin construction of the SE2GF. Instead, this is a situation where SE2 has not obtained required approvals for a key component of its project. There is no evidence contradicting SE2's belief that it will be able to resolve the NEB issue and its statement that it will begin construction during the permit extension period. EFSEC is satisfied that the information provided by SE2 constitutes an adequate revision of SE2GF's intended construction schedule and that SE2 has provided a satisfactory showing to justify the extension.

d. EFSEC should have notified interested parties of the permit extension request.

40 C.F.R. Part 124 sets forth the public notice requirements for PSD permits. Part 124 does not require EFSEC to notify interested parties that a permit extension application has been filed. Further, EFSEC has complied with all notification requirements set out in State and Federal laws and regulations.

As early as June 2, 2004, the Fraser Valley Regional District ("FVRD") was notified by letter of SE2's request for permit extension, including a copy of the application. As noted in the Technical Support Document, representatives from the Greater Vancouver Regional District ("GVRD"), FVRD, and the City of Abbotsford were contacted in July 2004 for comments prior to issuance of the proposed approval of the extension request to the general public. Information received from these agencies through this consultation was considered prior to issuing the Draft NOC/PSD permit for public comment. Thus, despite not being required to provide notification of the permit extension application, EFSEC did notify the government entities of the application.

In addition, EFSEC provided timely notice of the draft approval of the permit extension request as required under 40 C.F.R. Part 124. EFSEC mailed notice of the preliminary approval to approximately 980 persons, most of whom were on EFSEC's mailing list for the SE2GF project. EFSEC e-mailed the same notice to approximately 381 persons. Notice of the proposed approval

was published in public media (*see* details in Section 1, Background, above) and made available on EFSEC's website. Notice of the preliminary approval, the draft permit extension, and the technical support document were mailed to 46 tribal, federal, state and local governments or agencies. A hearing was held to solicit comments from any former or newly interested parties.

e. The extension should be denied because SE2GF has not satisfied, nor will it be able to satisfy, its Site Certification Agreement requirement to acquire offsets for PM10 and NO_x emissions.

Acquisition of offsets for PM10 and NO_x emissions is not a requirement of the Federal PSD program. Instead, the acquisition of offsets is a requirement of the Site Certification Agreement that was entered into on August 23, 2002. The Site Certification Agreement is not a component of the PSD process. Therefore, acquisition of offsets is not an issue to be considered with respect to the request for NOC/PSD permit extension.

It should be noted, however, that the PM10 and NO_x emissions offsets remain an integral requirement of the Site Certification Agreement that SE2 must fulfill.

f. The extension should be denied because of power market uncertainty.

A number of comments indicated that the extension should be denied because recent regional power plans⁹ have said that gas-fired turbine-based power generation will not be needed in the immediate future. Others indicated that now that the BP Cherry Point Cogeneration Project has been approved,¹⁰ the SE2GF is no longer needed.

Need for electrical generation capacity is not a requirement of the Federal PSD program, and is not an issue to be considered with respect to extension of the PSD permit. Nevertheless, EFSEC has reviewed the plan cited above. Market forces will determine the economic viability of the various power generation projects that have been permitted throughout the Pacific Northwest region.

g. Abbotsford residents should not be required to bear the impacts of a transmission line if such a line is not allowed in Whatcom County.

Approval or disapproval of a transmission line in Abbotsford is not a requirement of the Federal PSD program, and is not an issue to be considered with respect to extension of the PSD permit. Canadian government agencies (*i.e.*, the National Energy Board) are responsible for review of requests to construct and operate electrical transmission lines in Canada. Their decisions are based on applicable laws and regulations; however, approval of transmission lines are not a factor in determining whether to extend a PSD permit.

⁹ Draft Fifth Power Plan, Power Planning and Conservation Council, December 2004;
<http://www.nwppc.org/energy/powerplan/draftplan/Default.htm>

¹⁰ During the comment period, the BP Cherry Point Cogeneration Project had not been "approved" by the Governor, though a recommendation of approval had been transmitted by EFSEC to Governor Locke. Governor Locke approved the BP Cherry Point Cogeneration Project on December 21, 2004.

3. Responses to Written Comments

Comment Letter 1: Nanook McCarthy

Comment 1: "It never ceases to amaze how the State of Washington ignores the effect that this proposal would have on the people who live north of you, B.C., Canada."

Response 1: Please see response to General Comment 1, above.

Comment Letter 2: Robert Gray

Comment 1: "I would like to give my opinion on the Sumas Energy 2 project, but am unwilling to do so because I am afraid I will be sued."

Response 1: Federal and State laws provide for a public comment period before issuance of a NOC/PSD permit. If an individual feels that he/she is being intimidated or threatened, then that person should notify the proper government authorities. However, without submitting an opinion or comment on the permit extension application, EFSEC is unable to adequately address this comment.

Comment Letter 3: Patricia Ross, Chair, Air Quality Committee, Fraser Valley Regional District

Comment 1: There is no EPA or EFSEC legal requirement for PSD/NOC amendment applications to be circulated to stakeholders for comment. However, considering the level of concern about this plant, it would be prudent to advise all interested parties that an application has been received and to allow for pertinent comments to be made. The lack of notification appears to constitute a gap in the approval process which should be filled. EFSEC should have notified parties interested in the SE2GF project established during previous project review.

Response 1: Please see response to General Comment 4.d., above.

Comment 2: The Canadian Court of Appeal has granted leave to appeal the denial of the NEB application to SE2. The appeal concerns the denial by the NEB of an application for a Certificate of Public Convenience and necessity to construct transmission lines to connect the project to the power grid at the Clayburn substation. Because the appeal process is lengthy, and may exceed the three year BACT review period cited in EPA's 1991 guidance, EFSEC should postpone its decision to extend the SE2 permit until the Court has ruled on the NEB decision.

Response 2: Please see response to General Comment 4.a, above. The 1991 Draft Guidance Document is a preliminary staff draft of a Federal Register notice that has never been completed. Therefore, this draft document, as well as any other drafts of the document, do not represent EPA policy on the subject matter, and should not be relied upon.

Comment 3: EFSEC's review has concluded that the BACT determination remains the same. However, PM 10 and VOC conditions in the current permit are not the most restrictive relative to other permits reviewed. The permit limits for these parameters should be as restrictive as possible.

Response: Please see response to General Comment 3.a, above.

Comment Letter 4: Richard J. Clergy

Comment 1: The NOC/PSD permit extensions should not be granted.

Response 1: Please see response to General Comment 1, above.

Comment 2: The emissions from SE2 will definitely add to the pollutants in the Fraser Valley Airshed, and one only has to look at the horizon on any first or later hot day to see that [we] need no added ugly, unhealthy smog.

Response 2: Please see responses to General Comment 2, above.

Comment 3: The allowable emissions are deemed OK. There will be variations and errors, or production challenges that will cause SE2 to exceed these levels.

Response 3: The BACT determination specifies the emissions limits for each pollutant. The permit requires continuous emission monitoring for NO_x and CO, monitoring of ammonia use, recording of the sulfur content in all fuels, and periodic standard testing of emission levels of PM₁₀, VOCs, and H₂SO₄. Failure to comply with the emission limits or the monitoring, recordkeeping and reporting requirements in the permit are grounds for a penalty action or an action for injunctive relief by the regulatory agencies. In addition, the Clean Air Act contains citizen suit authority under Section 304 of the Clean Air Act.

Comment 4: The Canadian NEB has ruled clearly that they don't want a transmission line coming across the border at Sumas. The extension should not be approved.

Response 4: Please see response to General Comment 4.a, above.

Comment Letter 5: Rev. Wally Korguletz

Comment 1: The SE2GF is proposed in the wrong location, and will add additional pollution to the Fraser Valley Airshed. Residents want to be spared the kind of smog and pollution which plagues the Los Angeles Valley.

Response 1: Please see responses to General Comment 2, above.

Comment 2: The residents in the LFV are subject to "unavoidable" increases in pollution due to local growth (continuous and increasing housing construction; increased traffic on local highways;

increased usage or major railways and the Abbotsford airport; farms and local industries). The pollution of SE2GF is an avoidable source.

Response 2: Please see response to General Comment 2.b, above.

Comment Letter 6: Robert Bromley, Mayor, City of Sumas

Comment 1: The City of Sumas concurs with EFSEC's conclusion that the BACT determination and related permit conditions under the original NPC/PSD permit remain valid. Designation of SCONO_x remains unjustified because the technology has not been demonstrated economically and technologically justifiable, SE2GF is located in an attainment area, and the pollutant concentrations attributable to SE2GF are far lower than the NAAQS and Canada-Wide Standards (CWS).

Response 1: EFSEC concurs with the statements.

Comment 2: The City of Sumas also concurs with EFSEC's conclusion that interim changes in emission in the Lower Fraser Valley are not of such a nature to indicate the impacts of the SE2GF would be of greater significance than determined three years ago.

Response 2: EFSEC concurs with the statements.

Comment Letter 7: Bruce and Jennie Hasselback

Comment 1: The commentors are opposed to the extension of the SE2 permit. They attach an article about the recently released "Characterization of the Georgia Basin Puget Sound Airshed Study."

Response 1: Please see responses to General Comments 1 and 2, above.

Comment Letter 8: Herb Warkentin

Comment 1: The commentor requests that, in the interest of residents of both Whatcom County and the Fraser Valley, the permit not be extended.

Response 1: Please see response to General Comment 1, above.

Comment Letter 9: E. and A. Benson

Comment 1: The permit extension should be rejected on the basis that there is no need for the power being produced and effects on people's health.

Response 1: Please see responses to General Comments 2.c. and 4.f., above.

Comment Letter 10: Dave Clyne

Comment 1: The extension should not be granted.

Response 1: Please see response to General Comment 1, above.

Comment Letter 11: John Snyder

Comment 1: Extension of the SE2GF permit is not justified because of the NEB's denial of approval to construct a transmission line. At the hearing, all levels of Canadian government expressed opposition to the project due to the high levels of pollution that would be placed in the Lower Fraser Valley Airshed.

Response 1: Please see responses to General Comments 1, 2 and 4.a, above.

Comment 2: Extension of the SE2GF permit is not justified because of the shape of the Fraser Valley and prevailing winds heading towards Chilliwack and Hope, and the high levels of pollution emitted into the valley.

Response 2: Please see responses to General Comment 2, above.

Comment 3: Regulators in Olympia, WA, and Washington D.C. are unaware of the fact that the City of Sumas is a village in a rural/wilderness area, that the project is being sited for economic benefit in this "rural backwater", and that a large population center is located just north of the U.S. Border.

Response 3: The factors cited in the comment were all considered by EFSEC and the Governor of Washington in their recommendation and decision to approve the SE2GF. In its review of the project, the Council and U.S. EPA considered extensive public testimony and scientific analyses regarding the potential impacts of air pollution in the Lower Fraser Valley. Both EFSEC and U.S. EPA consulted with, and heard from, Canadian governments at all levels prior to issuing the original approvals for the project, and this extension.

Comment Letter 12: Barbara Goyer

Comment 1: The commentor is opposed to extension of the permit; there is a great deal of pollution in the Fraser Valley, and the SE2GF will make it worse.

Response 1: Please see responses to General Comment 2, above.

Comment 2: EFSEC should consider the opposition voiced against the project.

Response 2: Please see response to General Comment 1, above.

Comment Letter 13: Ecenith Lukas

Comment 1: The commentor is opposed to extension of the permit. The Fraser Valley is stressed to the maximum now. Respiratory problems and the incidence of cancer are on the rise.

Response 1: Please see responses to General Comments 1 and 2, above.

**Comment Letter 14: Rev. Clayton Arkesteyn-Vogler, Fraser Presbytery,
United Church of Canada**

Comment 1: The young and the elderly have the most to lose if the SE2 project goes ahead. The extension should not be granted.

Response 1: Please see responses to General Comment 1 and 2, above.

Comment Letter 15: Owen Skonberg

Comment 1: The extension request should not be approved.

Response 1: Please see response to General Comment 1, above.

Comment Letter 16: Harald Tilgner

Comment 1: The extension should be rejected because Whatcom County would not allow a 230 kV transmission line to be built, and the NEB has also denied SE2's application for transmission. The project is in the wrong location.

Response 1: Please see responses to General Comments 1, 2, 4.a and 4.g above.

Comment Letter 17: Mary Helen Hatch

Comment 1: The commentor endorses all comments presented to the Council, and requests that the permit extension be denied.

Response 1: Please see response to General Comment 1, above.

Comment Letter 18: Jim Cox

Comment 1: The extension should be denied because the NEB decision is in appeal before the Canadian Court of Appeal, and there is no certainty as to when project construction could commence.

Response 1: Please see response to General Comment 4.a, above.

Comment 2: SE2 should have to show compelling evidence why they desire the extension be granted, and EFSEC should reevaluate the need for the facility on an ongoing basis, in particular on an application for renewal.

Response 2: Please see responses to General Comment 4, above. The purpose of placing an 18-month deadline to construct in a PSD permit, and the purpose of requiring that BACT be re-evaluated if the permittee requests that the permit be extended is to show that the most up-to-date control technologies are being used at the facility.

Comment Letter 19: Clint Jackson

Comment 1: The lack of turnout at the meeting is due to a rumor of lawsuits against those who speak out against the SE2GF.

Response 1: Please see response to Comment Letter 2, Response 1.

Note: Additional points in the written submittal were also included in the oral comments, and are addressed in Section 4, Response to Oral Comments, Commentor 27 (Clint Jackson), below.

Comment Letter 20: Deborah Lubbe

Comment 1: Economic development in Whatcom County should focus on environmentally friendly jobs that support the recreation industry. The permit should not be extended.

Response 1: Please see response to General Comment 1, above.

Comment Letter 21: Dave Clyne, A.M. Clyne, Andrea Clyne

Comment 1: Growth is a significant concern in the Georgia Basin/Puget Sound Airshed, with nine million residents anticipated by 2020, which will increase the pollution level considerably.

Response 1: Please see response to General Comment 2.b, above.

Comment 2: Additional pollution should not be added to the sensitive Fraser Valley Airshed where pollution gets trapped. Smog in the valley has recently been decreasing due to Aircare, the Georgia Basin Action Plan, and other interventions as well as individual changes.

Response 2: Please see responses to General Comment 2, above. EFSEC has given extensive consideration to the nature of the Lower Fraser Valley Airshed, as well as to the beneficial impacts of air quality management programs undertaken by local agencies. In addition to the requirements of the PSD program, EFSEC has also required in the Site Certification Agreement that SE2 provide offsets for PM₁₀ and NO_x emissions from the SE2GF.

Comment 3: SE2GF should be relocated where the energy produced will be used, far south of Sumas.

Response 3: When reviewing an application, EFSEC does not have the authority to “move” a project to a different location. As indicated in response to General Comment 2, EFSEC evaluated the impacts of the SE2GF at the proposed location, and determined that there would be no significant adverse environmental impacts from the project. For purposes of the extension of the PSD permit, requiring a proponent to move their project is beyond the scope of authority granted in applicable laws and regulations.

Comment Letter 22: Rev. Wally Kroguletz

Note: this is the same as Comment Letter No. 5, above.

Comment Letter 23: Mark Warawa, M.P., Langley

Comment 1: There is no ambiguity surrounding the serious influx of toxins to the Canadian environment expected by the air emissions. These toxins will have deleterious environmental and health effects on Canadians in the Fraser Valley.

Response 1: Please see responses to General Comment 2, above.

Comment 2: EFSEC should defer rendering a decision on extension of the permit until the appeal to the Canadian Court of Appeal has been decided.

Response 2: Please see response to General Comment 4.a, above.

Comment 3: The critical issue is the location of SE2GF. These deleterious effects would counteract the extreme measures that lower mainland and Fraser Valley residents are already legislated to endure in an effort to reduce emissions that settle in the Fraser Valley. The Fraser Valley Airshed is delicate, susceptible and already damaged potentially beyond repair. The emissions proposed by SE2 would decimate the work being done to alleviate the problems already experienced.

Response 3: Please see responses to General Comment 2, above.

Comment 4: EFSEC should deny or defer the request to extend the permit.

Response 4: Please see responses to General Comments 1 and 4.a, above.

Comment Letter 24: Sandra Farenholtz

Comment 1: After a further two years of study, Canadian and American scientists agree that our pollution will increase in the future. The air quality experts seem to be concerned about power plants potentially being built near the grid in the confined airshed. It seems that both countries are working on strategy to implement new air quality.

Response 1: Please see response to General Comment 2.b, above.

Comment 2: Following denial of authorization by the NEB to construct a transmission line, and facing the inability to market its power, perhaps SE2 would realize that their power plant is not wanted or required at this location in Sumas.

Response 2: Please see responses to General Comment 4.a. and 4.f. SE2 has filed a request to extend their NOC/PSD permit, indicating to EFSEC that they do indeed wish to proceed with the SE2GF at some future date. Market forces are not a consideration in the permit extension analysis.

Comment Letter 25: Gwen Gregorig

Comment 1: Thousands of residents, adults, and children will be directly affected by the 2.5 tons daily of pollutants spewed into the Abbotsford air by the SE2GF.

Response 1: The ambient impact analysis indicates that these emissions will not harm the public; SE2GF's impact is much lower than EPA's health-based ambient air quality standards. Please see response to General Comment 2.c., above.

Comment 2: Why would SE2 be allowed to build a transmission line in downtown Abbotsford if they are not allowed to build a transmission line in Whatcom County. Are Abbotsford residents less deserving of clean air and an atmosphere free of more electro-magnetic emissions. The Council should not grant the permit extension.

Response 2: Please see responses to General Comments 1, 2, and 4.g, above.

Comment Letter 26: Laurie Hoekstra

Comment 1: The market for new electrical generation capacity, and the subsequent expansion of regional natural gas transmission systems required for such generation, has changed significantly since the SE2GF received approval from Washington. Given that demand for electricity has dropped, SE2 cannot make an effective argument for need for the project, and the extension should therefore be denied.

Response 1: Please see response to General Comment 4.f, above.

Comment 2: SE2 has not acquired mitigation offsets, either because none are available or because SE2 was insincere in its attempts to secure the offsets. More time granted will not see a change in the situation.

Response 2: Please see response to General Comment 4.e. The requirement for SE2 to obtain offsets for emissions of certain pollutants is not a condition of the NOC/PSD permit.

Comment 3: The quality of the airshed has not improved over the last 18 months. Air quality experts have determined that air quality has deteriorated and the addition of SE2 would add further to that deterioration. The Fraser Valley wants to see the air quality improve.

Response 3: Please see responses to General Comments 2.a and 2.b, above.

Comment 4: SE2 has not received the required approvals from Canadian governments, and opposition to the project remains at all levels of Canadian government. This will not change in 18 months. SE2 should provide evidence of receipt of the necessary approvals.

Response 4: Please see response to General Comment 4.a, above.

Comment 5: New information has come to light on the environmental impact SE2 would have on the LFV. Not only should the permit extension be denied, but the Site Certification Agreement issued by EFSEC in May 2002 should be considered past its "Best Before" date.

Response 5: Please see responses to General Comment 2 and 4.e., above. The Site Certification Agreement is not a component of the PSD permit program. Therefore, this is not the proper forum for requests for reconsideration of requirements in the Site Certification Agreement.

Comment Letter 27: Bob Bills, M.P., Red Deer

Comment 1: The extension should be denied in view of the NEB's denial to allow SE2 to construct a transmission line through Abbotsford, and continuing widespread opposition in Canada to the project.

Response 1: Please see responses to General Comments 1 and 4.a, above.

Comment 2: SE2 has submitted the application for extension to avoid future requirements of the Canada-US Clean Air Agreement when it is extended to cover Washington and British Columbia in 2005. Federal governments in both countries have made a priority of tackling air pollution, including in the Fraser Valley/Puget Sound airshed. Granting an 18 month extension makes a point of ignoring this priority.

Response 2: EFSEC and U.S. EPA are aware of federal government responsibilities under the Canada-US Clean Air Agreement. Both agencies have fulfilled the notification and consultation requirements of the agreement. The deadline for SE2's request for permit extension (18 months from original permit effectiveness) is mandated by state and federal regulation.

Comment 3: Under the North American Free Trade Agreement (NAFTA) problems on projects like this are to be considered by a panel.

Response 3: NAFTA has several avenues for resolution of disputes, but they relate primarily to business practices or economic tariffs that the plaintiff alleges contravene NAFTA. These disputes are resolved by panels.

Under NAFTA, a citizen or organization of a country that has participated in the review of a project is allowed to challenge that country's decision on environmental grounds. Such suits are filed with the Council for Environmental Cooperation. No such suits have been filed in the U.S.

The "Agreement Between the Government of Canada and the Government of the United States of America on Air Quality" also has provisions for resolution of issues between federal governments (Article 12, Referrals and Article 13, Settlement of Disputes). According to the Agreement, if after consultation, a dispute remains between Canada and the U.S., the two governments must begin negotiations with each other. If a dispute is not resolved through negotiations, either Canada or the U.S. must formally file a dispute with the International Joint Commission in accordance with the Boundary Waters Treaty. At this time, Canada has not indicated that negotiations with the U.S. are warranted and no "dispute" has been formally filed by Canada with the International Joint Commission.

Comment 4: Consideration should be given to alternative energy technologies.

Response 4: The Council's authority is limited to reviewing applications submitted to EFSEC. The legislature has not given EFSEC the authority to require a proponent to choose one form of energy generation technology over another.

Comment Letter 28: Don Peterson

Comment 1: EFSEC should extend the NOC/PSD permit. The SE2GF meets and exceeds requirements protecting air quality, and it meets Canadian air quality objectives. SE2 has also agreed to mitigate SE2GF emissions beyond the requirements of the PSD program.

Response 1: EFSEC concurs with these statements.

Comment 2: Canadian officials have approved the construction of two natural gas fired plants. Neither of these plants will generate electricity as efficiently as the SE2GF. B.C. Hydro has stated the plants could provide energy for domestic use, or for the US market.

Response 2: Please see responses to General Comment 2, above. The PSD program requires review of the potential impacts of the project in question. Because the SE2GF emissions were below applicable thresholds, consideration of other projects that could affect the Lower Fraser Valley Airshed is not warranted.

Comment 3: The comment lists examples of projects developed in British Columbia that have impacted water quality in the United States.

Response 3: The NOC/PSD program is limited to consideration of air quality impacts.

Comment Letter 29: GASP

Comment 1: The combined emissions of the SE2GF and the recently approved BP Cherry Point Cogeneration Project should be examined.

Response 1: Please see response to General Comment 2.d., above.

Comment 2: SE2 proposed to be using BACT back in 2001 and 2002. With the future of this project being held up in Canada's Court of Appeal until 2005, the BACT will be updated.

Response 2: One of the primary requirements of review of a permit extension request is to ensure that current BACT will be applied. The reasons for which BACT for this project has not changed were presented in the Technical Support Document. The project still proposes to use the most up-to-date BACT.

Comment Letter 30: Patricia Ross, Councillor, City of Abbotsford

Comment 1: The permit extension should not be granted because SE2 has not secured emissions offsets required by the Site Certification Agreement.

Response 1: Please see response to General Comment 4.e., above.

Comment 2: In addition to the amount of pollutants that this project will emit into the airshed, the Council should consider the length of time the emissions will remain in the airshed due to the topography of the mountains combined with poor airflow.

Response 2: Please see responses to General Comment 2.

Comment 3: The permit did not adequately consider the cumulative effects of SE2 with other pollutants in the airshed.

Response 3: Please see responses to General Comment 2.b. and 2.d.

Comment Letter 31: Mary Barrett, Counsel for the Environment

Comment 1: The technical document notes that "Several new permits show more restrictive limits for total PM10 and VOC's while using the same control technologies". It then without explanation concludes that "post-combustion control equipment to reduce PM10 emissions from a natural gas-fired combustion turbine remains economically infeasible." This conclusion needs to be explained so the public and EFSEC knows if lower emissions could be achieved by reevaluating the quality of the natural gas supplied; the factors used to determine the costs of post combustion control equipment and despite turbine design not being a factor under permit review, asking the broader question if the turbine is appropriate given the evolution in technology.

Response 1: On the issue of post-combustion control equipment for particulate matter emissions, please see response to General Comment 3.a., above.

On the issue of evaluating “if the turbine is appropriate given evolution in technology,” it should be noted that this is not a consideration in the PSD review process. If the project complies with applicable standards, and controls emissions according to BACT requirements, a permit can be granted.

Comment 2: EFSEC should not rely on the 2000 Air Issue Summary for decision making purposes because the summary reached its conclusions anticipating the project would/could burn fuel oil.

Response 2: Allowing the facility to burn fuel for electricity production was not related to the comments made in the referenced document relative to potential ozone impacts from the SE2GF. Oil-burning would have taken place in the winter. Potential ozone-generation problems occur only in the summer. The referenced document remains relevant to the consideration of SE2GF's currently proposed operating scenario. Canadian environmental agencies have not produced new SE2GF specific analyses to change the conclusions made in the 2000 Air Issue Summary.

Comment 3: The communities affected by operation of the SE2GF would be better served by a new PSD permit rather than relying on a PSD application from 2001. Granting an extension runs the risk that if construction began in 2006 this facility would be using outdated technology rather than BACT and would be authorized to discharge levels of emissions which due to the evolution of technology could be better controlled and economically viable.

Response 3: Please see responses to General Comment 3, above. BACT was reassessed as though the extension were a new permit. EFSEC found that the project still proposes to use the most up-to-date BACT.

Comment Letter 32: Bob Martens

Comment 1: The comment urges that EFSEC not grant the request for extension.

Response 1: Please see response to General Comment 1, above.

Comment Letter 33: Sandra Farenholtz

Comment 1: If SE2 has not complied with the agency's regulations regarding revised construction schedule then why consider extending the permit.

Response 1: Please see response to General Comment 4.c., above.

Comment 2: EFSEC should wait for the outcome of SE2's appeals before Canadian Court of Appeal prior to extending the permit. If the appeals process is not favorable the project may not look at constructing transmission lines in Whatcom County, and the BP Cherry Point project would be up and running, so that SE2GF would not be required.

Response 2: Please refer to General Comment 4.a., above.

Comment Letter 34: Christine Horsfield

Comment 1: Whatcom County would not allow the construction of high voltage transmission lines due to concerns regarding health, safety and economic impacts.

Response 1: Please see response to General Comment 4.g., above.

Comment 2: The joint aquifer will have 1,000,000 gallons a day drawn from it, and effluent will be pumped into the Fraser River.

Response 2: The water withdrawals and discharges are not a consideration of this permit extension. The PSD permit review only concerns impacts to air quality.

Comment 3: The pollution from the proposed plant will adversely affect the air in Abbotsford because of the geographical location and the primarily southwest winds.

Response 3: Please refer to responses to General Comment 2, above.

Comment 4: There will be serious consequences on the health of our citizens, especially the children and elderly. At present asthma is the primary reason for absenteeism in our schools.

Response 4: Please refer to response to General Comment 2.c., above.

Comment Letter 35: Steve Dinicol

Comment 1: Allowing the SE2GF to be built is like dumping your trash in the neighbor's yard.

Response 1: Please see response to General Comment 1, above.

Comment Letter 36: Karen McGaffey, Perkins Coie LLP

The comments in this letter were in support of the determinations made in the preliminary approval and supported issuance of the extension.

Comment 1: SE2GF's permit limits still reflect the best available control technology (BACT).

Response 1: Please see responses to General Comment 3.

Comment 2: SE2 emissions will not adversely affect air quality.

Response 2: Please see responses to General Comment 2.

Comment 3: “New information” does not provide a basis for denying the permit extension.

Response 3: Please see responses to General Comments above, as follows:

- Air quality in the Lower Fraser valley Airshed: General Comment 2a;
- Potential health effects of air pollution and need for more stringent standards: General Comments 2.c. and 2.e.;
- New information includes the NEB decision: General Comment 4.a.

Comment 4: The cumulative effect of SE2 and the Cherry Point Cogeneration Project emissions would not adversely affect air quality.

Response 4: Please see response to General Comment 2.d.

Comment 5: SE2 has satisfied procedural requirements for permit extension.

Response 5: Please see responses to General Comment 4.

Comment Letter 37: Kirk Johnstone, Pacific and Yukon Region, Environment Canada

Comment 1: The recent BACT determinations in the September 17, 2004 Technical Support Document do not directly address ammonia emissions, and the air quality impacts section incorrectly suggests that ammonia emissions have declined or remained unchanged in the Lower Fraser Valley between 2000 and 2003. Ammonia emissions have increased by approximately 5% in the LFV and are forecast to continue to increase in the future. EFSEC should ensure that the analysis and determination for ammonia be updated to reflect current requirements for the control of ammonia emissions.

Response 1: Please see response to General Comment 2.a., above.

Comment 2: Finding 15 of the permit may be incorrectly referring to Finding 13.

Response 2: The comment is correct, and the correction has been made in the final permit.

Comment Letter 38: Patricia Ross

Comment 1: SE2 has not fulfilled the requirements of finding emissions offsets required by the Site Certification Agreement. There are no point sources anywhere near the level of SE2 emissions that would be a realistic offset in the airshed. The \$1 million dollars that SE2 would have to pay if no offsets are found is insufficient to cover even the NO_x emissions alone. This is ample grounds to not extend the PSD permit.

Response 1: Please see response to General Comment 4.e., above.

Comment Letter 39: Marian S. Cockroft

Comment 1: How can EFSEC approve a plant at least 4 times the size of the existing SE1 facility and subject Canadians, and the residents of Sumas to the pollutants?

Response 1: Please see responses to General Comments 1 and 2, above.

Comment Letter 40: David Bricklin, Bricklin Newman Dold LLP (on behalf of the Province of British Columbia)

Comment 1: The receiving airshed is already under stress, heavily populated, and vulnerable to additional pollution. The airshed is under active air quality management by BC agencies. Citizens of Abbotsford would receive the brunt of SE2GF's pollution with Sumas Mountain, a rapidly developing residential hillside, being projected to have the highest concentrations levels of SE2's pollution.

Response 1: Please refer to responses to General Comment 2, regarding the stressed nature of the airshed, and consideration of regional growth..

Analyses of impacts to ambient air quality performed in support of the original permit (Section 6, PSD Application, Second Revised Application, EFSEC No. 99-01, Revised June 29, 2001) indicate that the highest pollutant concentrations resulting from operation of the SE2GF (excluding background) occur in the U.S., approximately 4 kilometers to the Southeast of the project. Concentrations on Sumas Mountain (B.C.) are the highest in Canada, but are lower than those in the U.S. (see tables 6.1-15 and -16 of the Second Revised Application, June 2001). Notwithstanding, as indicated in the responses to General Comment 2, concentrations of all regulated air pollutants are less than applicable ambient air quality standards or objectives, in both countries.

Comment 2: SE2's request should be denied because it is untimely. SE2 submitted its request for extension five months prior to expiration of the permit (in contradiction with a 6 month deadline cited in 1991 Draft Guidance Document regarding permit extensions), and EFSEC's action to extend the permit would occur after expiration of the permit.

Response 2: Please see response to General Comment 4.b., above. The 1991 Draft Guidance Document is a preliminary staff document of a Federal Register notice that has never been completed. Therefore, this draft document, as well as any other drafts of the document, do not represent agency policy on the subject matter, and should not be relied upon.

Comment 3: EFSEC should deny the request for extension because SE2 did not include a certification that the company currently plans to commence construction by a specific date that falls within the requested extension, nor does the request include a revised construction schedule.

Response 3: Please see response to General comment 4.c., above.

Comment 4: The extension should be denied because SE2 did not include a BACT analysis for control of emissions during startup and shutdown in its request for permit extension, and that the technical Support Document failed to consider the issue. Startup and shutdown issues must be re-examined if an extension is requested.

Response 4: Regardless of whether the permittee did or did not include a BACT analysis for control of emissions during startup and shutdown in its request for extension, EFSEC did review this issue in the consideration of the extension.

EFSEC clearly identified the basis for the BACT determination for consideration of the extension in Section 2.2 of the September 2004 Technical Support Document, i.e. the September 2001 Fact Sheet For Prevention of Significant Deterioration Sumas Energy 2 Generation Facility Project, Sumas, Washington (2001 Fact Sheet). The 2001 Fact Sheet was also included as an attachment to the 2004 Technical Support Document.

As memorialized by the 2001 Fact Sheet, EFSEC did consider BACT conditions for startup and shutdown emissions. Section 2 of the 2001 Fact Sheet addressed the “Determination of Best Available Control Technology”, with subsection 2.2 further focusing on the “BACT Analysis for Criteria Pollutants”, and Subsection 2.2.9 even more narrowly considering the “Emission Limits for Startup and Shutdown Conditions”.

At the conclusion of section 2.2 of the 2004 Technical Support Document, EFSEC clearly states its conclusion: “EFSEC concludes that the BACT determination and related permit terms and conditions under the original PSD/NOC Permit No. EFSEC/2001-02 remain valid.” This conclusion was made based on the entirety of the BACT analysis presented in the 2001 Fact Sheet.

Furthermore, even though the Environmental Appeals Board (EAB) did not grant review of the startup/shutdown conditions of the original permit to the Province, the EAB clearly acknowledged the “serious effort” made by EFSEC to consider startup and shutdown conditions. *In re: Sumas Energy 2 Generation Facility*, PSD Appeal Nos. 02-10 & 02-11. *Id.* at 13-20. There have been no technological changes that would alter the BACT determination as related to startup and shutdown operation.

Comment 5: EMx technology should be selected as NOx BACT for this project.

Response 5: Please see response to General Comment 3.b., above.

Comment 6: If EFSEC approves the extension, it should be limited to twelve months to be consistent with the Region IX Policy. If an 18 month extension is granted, it should be backdated to the expiration date of the original permit.

Response 6: The Region IX Policy indicates that EPA *may* limit an extension to twelve (12) months if there are concerns that growth rights and public participation are impeded, and to ensure that state-of-the-art BACT is employed. Here, limiting the extension to twelve (12) months is not warranted. Approval of the extension would not prevent other growth from occurring in the region; public participation has been provided for by EFSEC as required by state and federal regulation; and

EFSEC has verified that the BACT required by the permit is indeed state-of-the-art. EFSEC has, thus, decided to extend the permit for 18 months, starting from the date when the first permit would have expired.

Comment Letter 41: Mary Reeves, Mayor, City of Abbotsford

Comment 1: In addition to the uncertainties in the outcome of the Canadian Court of Appeal, the Council should consider changes to the power market as reflected in the Draft Fifth Pacific Northwest Electric Power and Conservation Plan. Construction of generating resources may not be required until 2010, and construction of natural gas fired facilities may be preceded by construction of coal fired, and wind generation facilities.

Response 1: Please see response to General Comment 4.f., above. EFSEC has reviewed the cited plan. The draft power plan cited indicates that even though coal-based generation resources may be favored in the medium term, shifting natural gas-based resources to the long term, in order to assure adequate power supply at reasonable price levels, an inventory of ready-to-construct projects should be maintained.

Comment Letter 42: Gerda Peachey

Comment 1: The proposed Sumas Energy 2 plant will seriously impact the 250,000 residents of the Central and Upper Fraser Valley. The Council should consider residents north of the border in making its decision. (Appended - excerpts from various documents relating to analysis of emissions from the SE2GF).

Response 1: Please see responses to General Comments 1 and 2, above. The Council has reviewed the excerpted documents^{11,12} (prepared by Canadian governmental agencies) relating to the impacts of SE2GF emissions prior to making a recommendation to the Governor of Washington. It was determined at that time, that the SE2GF would meet all US and Canadian air quality standards/objectives.

¹¹ Sumas Energy 2 Generation Facility Air Quality Issue Summary, September 11, 2000; BC Ministry of Environment, lands and Parks, <http://wlapwww.gov.bc.ca/air/airquality/pdfs/sumas2.pdf>.

¹² A numerical simulation of impacts on ambient ground-level ozone concentration from the proposed Sumas Energy 2, Inc. power generation facility, Unpublished manuscript, Colin DiCenzo and Joanne Pottier, Environment Canada, January 2000.

4. Responses to Oral Comments, October 28, 2004

Commentor 1: Mary Reeves, Mayor, City of Abbotsford

Comment 1: The extension should not be granted because of the uncertainty and delay in resolution of appeals before the Canadian Court of Appeal. There is a strong chance that SE2 will not have the required approvals [to construct a transmission line in Abbotsford, B.C.] from Canadian Authorities prior to April 2006.

Response 1: Please see response to General Comment 4.a., above.

Comment 2: This is an opportune time for the Council to re-examine this entire proposal, especially in light of Governor Locke's recent executive order on greenhouse gases and sustainable development.

Response 2: The Governor of Washington has approved the construction and operation of the SE2GF, and the approval as a whole is not in question as part of the PSD permit extension process. The Governor's Executive Order¹³ requires that state agencies adopt energy reduction and sustainability practices in their own operations; the Executive Order does not apply to permits or certifications being granted by state agencies to applicants.

Comment 3: Given the recent approval of the BP Cherry Point Cogeneration Project, SE2's arguments for "need for power" are questionable, and a reason for denial of the extension.

Response 3: Please refer to response to General Comment 4.f., above.

Comment 4: Expiration dates are put on permits and applications because things change, and the original data and information that formed the basis of an application is no longer relevant.

Response 4: The commentor is correct. As indicated in the Technical Support Document, the purpose of the extension process is indeed to consider new information that may have come to light, and to ensure that the most up-to-date BACT is being employed to control emissions. EFSEC performed this review and concluded that the original analyses are up-to-date and relevant, and that new information available has not led to change in the BACT analysis and approval. Please see responses to General Comment 3, above.

Commentor 2: Harald Tilgner

Comment 1: A lengthy hearing process was just concluded in Canada, where it was determined that it was not in the best interest to construct this project at this location because the airshed is very much loaded with pollution; an additional 2.5 million tons would certainly overload the airshed at this time.

¹³ Executive Order 04-06, Establishing Sustainability and Efficiency Goals for State Operations, October 20, 2004.

Response 1: Please refer to responses to General Comment 2, and 4.a. None of the information collected by EFSEC indicates that an additional 2.5 million tons of pollution would be added to the LFV Airshed. EFSEC is not aware of any information that reflects this statement. SE2GF has satisfied the requirements of the PSD program as they apply to the quantity of emissions. Moreover, extensive modeling was performed to determine the actual impact of SE2GF emissions on ambient air quality in the airshed. In the case of the SE2GF, it was demonstrated that project emissions would not cause any exceedances of ambient air quality standards.

Comment 2: Even though there are programs underway to manage air quality in the airshed, air quality is still bad; there are times when poor visibility presents seeing the mountains 10 kilometers away.

Response 2: Please see responses to General Comment 2, and Response 1 to Comment Letter 42 (Gerda Peachey), above.

Comment 3: Why have a public meeting if the decision has already been made?

Response 3: A decision on issuing the extension was not “already made”. In accordance with State and Federal laws and regulations, the request for extension was reviewed, and it was determined that it met the criteria for approval. State and Federal regulations provide for a public comment period to allow EFSEC to consider whether these comments affect approval of the PSD permit. EFSEC made its final decision after considering all public comments received, and this response summary.

Commentor 3: Tanya Charles-Tait, on behalf of Mark Warawa, MP for Langley

The commentor read the submittal of Mark Warawa, member of Parliament for Langley, British Columbia. Please see responses to Comment Letter 23, above.

Commentor 4: Dave and Andrea Clyne

The commentor read the written submittal. Please refer to Section 3, Comment Letter 21, above.

Commentor 5: Owen and Chris Skonberg

Comment 1: As an educator and school administrator, the commentor, has experienced that the number of respiratory problems among students has increased two-fold.

Response 1: Please refer to responses to General Comment 2.

Comment 2: It is getting more difficult each day to see the mountains and all the other beautiful things in the Fraser Valley.

Response 2: Please refer to responses to General Comment 2, and Response 1 to Comment Letter 42 (Gerda Peachey).

Commentor 6: Clayton Arkestyn Vogler

Comment 1: The SE2GF will have the most impact on children and the elderly, who are more compromised by air and water pollution.

Response 1: Please see responses to General Comment 2.c., above

Commentor 7: Sandra Farenholtz

The commentor read their written submittal. Please see responses to Comment Letter 24, above.

Commentor 8: Elizabeth Gray

Comment 1: Time limits on the PSD permit are established for two reasons: a) possible policy changes in legislation or policy, and b) new science and/or information which shows a need for new standards. The commentor informed the Council of two recently issued reports. The first report was a study released in the New England Journal of Medicine (NEJM) in October 2004, regarding the impacts of air pollution, and particulate matter, on human health. The other was the Georgia Basin-Puget Sound Airshed Study.

Response 1: As indicated in the Technical Support Document, time limits on a PSD permit are established to ensure that:

- a) The Best Available Control Technology (BACT) analysis and determination is updated to current standards.
- b) PSD increment consumption and air quality impacts must be reassessed to assure that interim source growth would not materially alter the conclusions made relative to the original permit decision.

This review is performed to specifically assess the project's implementation of up-to-date BACT, and the project's impact on consumption of increment and growth in the airshed where it would be located.

No changes in legislation or policy exist that would alter EFSEC's decision.

With respect to impacts of particulate matter emissions on human health, the commentor did not submit a copy of the German study referred to in her testimony. Abstracts of articles appearing in the NEJM were reviewed, and it is likely that the commentor was referring to an article entitled

“Exposure to Traffic and the Onset of Myocardial Infarction”¹⁴. As explained in the response to General Comment 2.e., it is beyond the Council’s authority to set new standards based on studies that are publicly issued..

Please see response to General Comment 2.b regarding the Georgia Basin-Puget Sound airshed study.

Comment 2: The Council should consider air pollution impacts to the most sensitive sectors of the population in making its decision to extend the permit, and new information made available regarding the impacts of PM emissions on human health, as well as the recently issued Georgia Basin Puget Sound airshed study.

Response 2: Please refer to responses to General Comment 2.c. and 2.e., above.

Commentor 9: Patricia Ross

Comment 1: The original permit did not adequately consider the consequences on the particular location and the uniqueness of the airshed; SE2’s request for an extension does not show any more regard for this complication.

Response 1: Please see responses to General Comment 2, above. Prior to making its recommendation to the Governor of Washington in 2002, the Council gave lengthy consideration to the impacts of the SE2GF in both the US and Canada. The Council made a recommendation to approve the project, and subsequently issued the PSD permit, in accordance with the requirements laid out in US laws and regulations.

As stated in response to General Comment 1, the Council has reviewed the extension request in accordance with applicable legal requirements. As part of this review the Council’s permit writer has contacted Canadian agencies for input with respect to changes that may have occurred in the airshed. The Council’s permit writer has also verified that BACT has not changed since the original permit has been issued.

Comment 2: PSD permits are given time limitations for a reason, including new information and science, technological advances, a heightened awareness of air-quality issues and their effects on health that may direct new policy standards, enforcement or technological requirements.

Response 2: Please refer to Response 1 of Oral Commentor 8 (Elizabeth Gray) above.

Comment 3: There is no EPA or EFSEC legal requirement for PSD/NOC amendment applications to be circulated to stakeholders for comment. However, considering the level of concern about this

¹⁴ Exposure to Traffic and the Onset of Myocardial Infarction, Annette Peters, Ph.D., Stephanie von Klot, M.P.H., Margit Heier, M.D., Ines Trentinaglia, B.S., Allmut Hörmann, M.S., H. Erich Wichmann, M.D., Ph.D., Hannelore Löwel, M.D., for the Cooperative Health Research in the Region of Augsburg Study Group, New England Journal of Medicine, Volume 351:1721-1730, October 21, 2004, Number 17.

plant, it would be prudent to advise all interested parties that an application has been received and to allow for pertinent comments to be made.

Response 3: Please see Response 1, Comment Letter 3 (Patricia Ross), above.

Comment 4: Because of the uncertain and lengthy appeals process undertaken by SE2 before the Canadian Court of Appeal, the extension should not be granted.

Response 4: Please see response to General Comment 4.a, above.

Comment 5: The restrictions on VOC and PM10 emissions are not the most restrictive relative to other permits listed in the RBLC. At the very least, the permit should be made as restrictive as possible for these pollutants.

Response 5: Please see response to General Comment 3.a., above.

Commentor 10: Gwen Gregorig

Comment 1: The commentor, like thousands of other residents in Abbotsford, would be affected by the pollution resulting from the SE2GF.

Response 1: Please see response to General Comment 2., above.

Comment 2: Why would SE2 be allowed to build a transmission line in downtown Abbotsford if they are not allowed to build a transmission line in Whatcom County. Are Abbotsford residents less deserving of clean air and an atmosphere free of more electro-magnetic emissions? The Council should not grant the permit extension.

Response 2: Please see responses to General Comments 2 and 4.g, above.

Commentor 11: Gerda Peachey

Comment 1: The EFSEC Council did not consider available studies of what the SE2GF would do to 250,000 people north of the border. The commentor cites excerpts from several Canadian studies regarding the impacts of the SE2GF.

Response 1: In issuing its recommendation to Governor Locke in 2002, the Council did consider the cited documents. Please refer to Response 1, Comment letter 42 (Gerda Peachey), above.

Commentor 12: Richard Peachey

Comment 1: The Council should take into consideration the overwhelming opposition to the project, and not grant the request for extension. In addition, the Council should consider the health impacts on children.

Response 1: Please refer to response to General Comment 1.

Comment 2: The Council should take into consideration the NEB's decision to deny SE2's request to construct a powerline.

Response 2: Please refer to response to General Comment 4.a.

Comment 3: Why would SE2 be allowed to build a transmission line in downtown Abbotsford if they are not allowed to build a transmission line in Whatcom County ?

Response 3: Please refer to response to General Comments 4.g, above.

Comment 4: Our grandson will reside near Sumas Mountain, where the maximum point of pollutant impingement will occur.

Response 4: Please refer to response to Comment Letter 40, Response 1, above.

Commentor 13: Andrea Mikulan

Comment 1: EFSEC should not grant the extension. Prevailing winds will bring the emissions from SE2GF into Canada. Farmland will be in the path of the emissions.

Response 1: Please refer to responses to General Comments 1 and 2. The analysis of the impact of SE2GF's emissions on vegetation in original permit review concluded that impacts to vegetation were very unlikely¹⁵:

“According to the EPA’s New Source Review guidance (*op. cit.*), for most types of soils and vegetation, ambient concentrations of criteria pollutants below the secondary national ambient air quality standards will not result in harmful effects. Ambient criteria pollutant concentrations attributable to SE2GF are expected to be a small fraction of the secondary national ambient air quality standards. Modeled annual surface deposition rates of nitrogen and sulfur would not exceed 0.1% of the USFS/National Park Service criteria for soil and aquatic protection. Maximum ozone, nitrogen oxides, and sulfur oxides concentration increases and surface deposition caused by SE2GF in British Columbia’s national parks should be even lower than estimated for the U.S. Class I areas. Surface deposition of nitrogenous compounds from SE2GF in the British Columbia’s Lower Fraser Valley should be about 1% of the total from all sources², and about 2 % of the US Forest Service threshold for potential injury to plants and forest ecosystems. The average sulfur compound deposition rate attributable to SE2GF in the Lower Fraser Valley should be about 9% of the total from all sources (*op. cit.*) and 5% of the US Forest Service threshold for likely effects on terrestrial ecosystems. Current deposition rates of sulfur compounds in the Lower Fraser Valley are about one-half the US Forest Service threshold for likely effects on terrestrial ecosystems.”

¹⁵ September 2001 Draft Fact Sheet, cited previously.

² Belzer, Wayne, Ammonia, Nitrate, and Sulfate: Concentrations in Air and Rainfall and Their Contribution to Fine Particulate Formation in the Lower Fraser Valley of British Columbia, Presented at the Air and Waste Management Assoc. 91st Ann. Meeting (June 14-18, 1998)

Commentor 14: Audrey Mobley

Comment 1: The commentor is part of the population who is sensitive to impacts of particulate matter pollution (elderly and children). The commentor requests that the extension be denied.

Response 1: Please see responses to General Comments 1 and 2, above.

Commentor 15: Mariann Cockroft

Comment 1: The commentor requests that the extension be denied.

Response 1: Please refer to responses to General Comments 1 and 2, above.

Commentor 16: Elmer Witt

Comment 1: The commentor concurs with others requesting that the extension be denied.

Response 1: Please see responses to General Comments 1 and 2 above.

Commentor 17: Gary Gray

Comment 1: The commentor concurs with others requesting that the extension be denied.

Response 1: Please see responses to General Comments 1 and 2 above.

Commentor 18: John Van Dongen

Comment 1: Concerns about air quality in the area have been addressed for the past 13 years through the AirCare Program, and active automotive emissions program. Progress is being made on certain aspects of air quality in the region, but it is unacceptable that a large, long-term, single point source of new emissions added to the airshed absorb the little bit of cushion that has been built up.

Response 1: The Technical Support Document acknowledges the gains in protecting air quality that have been made in the Lower Fraser Valley.

Comment 2: The Council should consider that BC Hydro has decided not to construct any new generation sources in the Lower Fraser Valley, and other better options, such as the BP Cherry Point Cogeneration Project, exist.

Response 2: Please refer to responses to General Comment 2.

Commentor 19: Diane Stuber

Comment 1: The commentor concurs with others requesting that the extension be denied.

Response 1: Please see response to General Comment 1.

Commentor 20: Louise Rigby

Comment 1: The commentor concurs with others requesting that the extension be denied.

Response 1: Please see response to General Comment 1.

Commentor 21: Marian Beddill, GASP

The commentor reiterated the written submittal of GASP. Please refer to Section 3, Comment Letter 29, above.

Commentor 22: Mary Helen Hatch

Comment 1: The commentor concurs with others requesting that the extension be denied.

Response 1: Please see response to General Comment 1.

Commentor 23: Mike Kauffman

Comment 1: The Council should apply a broader definition of “Best Available Control Technology” in examining the request for extension. The Council should also consider the location of the proposal, the water use, the source and delivery of natural gas fuel, renewable energy sources and energy conservation, and the BP Cherry Point Cogeneration Project’s shutting down of old boilers.

Response 1: The Council is required by federal law to consider BACT as defined in the federal Clean Air Act. Please see responses to General Comment 3, above.

Commentor 24: Wally Korguletz

The commentor reiterated his written submittal. Please refer to Section 3, Comment Letter 5, above.

Commentor 25: John Vissers

Comment 1: The upland bowl of Sumas Mountain has not been considered in the overall assessments of health impacts due to particulate fallout downwind from the SE2GF.

Response 1: The original analyses considered by EFSEC for the SE2GF¹⁶ did include Sumas Mountain. In addition, studies performed by Canadian agencies (2000 Air Quality Summary) also included a consideration of impacts to residents of Sumas Mountain. All of these analyses were considered by EFSEC in its recommendation to the Governor.

Comment 2: Since 2001 when the original assessments were made, the population of Sumas Mountain residential areas has increased by several thousand and will grow in the foreseeable future.

Response 2: EFSEC has considered the impacts of growth in the Lower Fraser Valley. Please refer to response to General Comment 2.

Comment 3: Impact studies indicated long ago that a measurable increase in mortality due to worsening air quality would occur.

Response 3: Please see responses to General Comment 2.c.

Comment 4: The SE2GF will undo the effort and monetary expense that has gone into improving air quality in the airshed through the AirCare program.

Response 4: The Technical Support Document acknowledged the gains in protecting air quality that have been made in the Lower Fraser Valley. Please also see responses to General Comment 2, above.

Comment 5: The Applicant should be subject to all the new information that other applicants would also face.

Response 5: Please see response to General Comments 2.e. and 4, above.

Commentor 26: Barry Penner, Member of Legislative Assembly for Chilliwack-Kent

Comment 1: The request for extension should be denied because it was not made in a timely fashion.

Response 1: Please refer to response to General Comment 4.b.

¹⁶ Sumas Energy 2 Generation Facility, Application for Site Certification, 99-01. Second Revised Application June 2001, Part 6 PSD Application.

Comment 2: The request for extension should be denied because it did not contain a certification that construction will be started by the end of the renewal period.

Response 2: Please refer to response to General Comment 4.c.

Comment 3: The request for extension should be denied because of the uncertainty and timeline associated with SE2's judicial process before the Canadian Court of Appeals with respect to the NEB decision.

Response 3: Please refer to response to General Comment 4.a.

Comment 4: EFSEC should consider EMX (SCONOx) technology instead of SCR as BACT for NOx emissions.

Response 4: Please refer to response to General Comment 3.b.

Comment 5: EFSEC should only approve one of SE2GF or the BP Cherry Point Cogeneration Project because the energy market would not support both.

Response 5: Please refer to response to General Comment 4.f., above.

Commentor 27: Clint Jackson

Comment 1: The SE2GF will be an imminent threat to vegetation, and to the health of residents in areas downwind of the project.

Response 1: Please see responses to General Comment 2. Please refer to the discussion regarding impacts to vegetation in the response to Commentor 13 (Andrea Mikulan), above.

Comment 2: The SE2GF should be located on the Hanford Reservation, and not in vibrant community such as Abbotsford/Sumas. The SE2GF emissions will impact residents in Bellingham when the wind direction changes.

Response 2: Please see responses to General Comment 2, and Comment Letter 21, above.

Commentor 28: Laurie Hoekstra

The commentor reiterated their written submittal. Please see responses to Comment Letter 26, above.

5. Changes to the Final Permit Approval

The following typographical error in the Findings portion of the permit has been noted and will be corrected. The Findings are an explanatory section, and are not enforceable elements of the permit.

- Finding 15 should refer to Finding 14.