BEFORE THE STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL

IN RE APPLICATION NO. 99-1 SUMAS ENERGY 2 GENERATION FACILITY	EXHIBIT_____(JL-T)

COUNSEL FOR THE ENVIRONMENT'S PREFILED DIRECT TESTIMONY

WITNESS #__: JIM LAZAR

Phase II – Revised Application
October, 2001

I. Introduction and Qualifications

Q. Please state your name, address, and occupation.

A. Jim Lazar, 1063 Capitol Way S. #202, Olympia, Washington, 98501. I am a consulting economist specializing in electric and natural gas utility issues.

Q. Did you previously testify in the initial phase of this proceeding?

A. Yes, I did, on behalf of the Office of Trade and Economic Development (OTED). My testimony and exhibits were admitted as Exhibits 72 through 72.5.

Q. What is the purpose of your testimony in this phase?

A. I have been asked by Counsel for the Environment to update information that I originally provided which are impacted by the revisions to the application and remain under consideration by the Council. These include recent trends; the impact of electrical generation facilities using

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natural gas on the supply and price of natural gas; the impact on state gas supply of the project; conditions which could mitigate those impacts and the adequacy of the site restoration plan. In addition, I have been asked to address site restoration.

Q. What are your principal conclusions?

A. First, the Applicant has addressed some of the previous concerns partially or entirely, such as the obligation to contract a significant portion of the plant's output. Second, other changes, such as the elimination of the oil backup fuel capability while lessening an environmental impact, creates a new economic concern, that the plant will now be more of a burden on the region's natural gas supply under extreme weather, and that could cause adverse impacts on the homes and businesses in the state that rely on natural gas. Finally, the issues of whether there is an adequate gas supply, whether there is adequate natural gas pipeline capacity, and the amount and form of the site restoration bond remain.

Q. What exhibits are you sponsoring in this phase of the proceeding?

A. I have five additional exhibits, numbered consecutively from my previous exhibits, as follows:

JL-6 Convergence: Electricity and Natural Gas in Washington, Office of Trade and Economic Development, May, 2001

JL-7 Two-year price histories for natural gas at Alberta, Sumas, Henry Hub, and Southern California.

JL-8 California Energy Commission Summary and List of Generation Projects for the Western System Coordinating Council.

JL-9 California Power Authority, Table of Projects Under Consideration for Acquisition

JL-10 Calculation of British Columbia / Western Washington / Western Oregon Proposed Gas-Fired Power Plants Compared with Westcoast Pipeline Proposed Upgrade

Q. What have your professional activities been related to this issue since you previously testified before EFSEC?

A. I have continued my consulting practice throughout this period. I assisted the Office of Trade and Economic Development in preparation of a report entitled Convergence: Natural Gas

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and Electricity in Washington, which is attached to this testimony as Exhibit ___(JL-1). I have assisted the Office of the Attorney General, Public Counsel Section, in evaluating the prudence of Avista Corporation continuing with construction of the Coyote Springs II gas-fired generating facility in light of financial constraints. I am assisting the City of Burbank, California, a municipal utility, in evaluating the economics and rate impacts of two potential new natural gas fired power plants.

II. Certain Previous Problems with SE2 Have Been Addressed, but Some Remain

Q. Which of the concerns raised previously by you and other parties have now been addressed?

A. The Applicant has agreed to a minimum 5-year, 60% contracting requirement. It has proposed eliminating the backup oil supply and the associated economic concerns have therefore been eliminated. Finally, it has agreed to a site restoration bond.

A. Agrees to 5-year, 60% contracting requirement

Q. Is the 5-year, 60% contracting adequate to protect the interests of Washington citizens to have access to abundant energy at reasonable cost ?

A. Partially. The proposal is that construction will not begin without such a contract in place. However, there is no commitment to either enter into such a contract with an in-state utility, nor to give in-state utilities preference to the output. The vagueness of this might permit the project to proceed with only an agreement to sell the power to a wholesale power marketer which itself has no customers in the region (or anywhere else). It might even contract with an affiliated power marketing company which has no customers or financial resources, just to satisfy the paper requirement. This loophole frustrates the intent of ensuring access to Washington citizens, and effectively allows the construction of a merchant power plant as originally proposed.

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Q. How should this obligation be clarified?

A. This obligation should be clarified. The commitment should be to commit a minimum of 60% of the output to electric companies (as defined in RCW 80.28), to electric service providers who sell electricity at retail to end-users in the state such as in-state industries which buy electricity in the wholesale market (such as the aluminum companies), or to Puget Sound Energy's open access customers or other customers with retail access.

B. Oil backup eliminated, but no alternative provided

Q. Turn to the oil backup issue. What has the Applicant committed to?

A. The Applicant has committed to having the plant operate solely on natural gas. It would have no oil storage on-site, and would not be designed to operate on oil.

Q. What is the problem with this aspect of the proposal?

A. The Applicant has not committed to securing a backup supply of natural gas to operate during pipeline curtailments, nor has it committed to paying for newly constructed gas pipeline capacity. This means that the plant would either not be able to operate during times of gas supply constraint, or else it would be directly competing with homes and businesses for a limited supply of natural gas during such supply constraints.

Q. What recommendation do you make to address this concern?

A. I address this concern in detail below and recommend that the granting of a site certification agreement be made contingent on the Applicant contracting for either a sufficient supply of natural gas to meet its requirements, or else contracting for a portion of its needs plus a minimum of 30 days of gas storage capacity for the plant. In addition, I recommend that the Applicant be required to contract for adequate pipeline capacity to deliver gas to Sumas. These conditions will ensure that the power from the plant is reliably available to meet the state's need for electricity without imposing severe impacts on users of natural gas during periods of peak gas and electricity demand.

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C. Agrees to site restoration bond in concept, but amount unspecified

Q. What has the Applicant agreed to with respect to Site Restoration?

A. The Applicant has committed to a site restoration bond, but has not committed either the amount or the form of this bond. I address this in greater detail below.

D. Some issues remain

Q. What are the principal remaining issues that you address in this testimony?

A. The most important issue that I address is the impact that this project will potentially have on the supply of natural gas in the state unless conditions are imposed by the Council. These include both the supply of gas itself (the molecules of methane) and the adequacy of the natural gas pipeline system that serves the state. I also address the conditions which should be set for the site restoration bond.

III. Natural Gas Supply

Q. What are the principal problems with natural gas supply for SE2?

A. If this plant operates, it will be the largest user of natural gas in the state of Washington, and will contribute to unprecedented growth in natural gas usage in the state. It has the potential to impair the reliability of service for other gas customers and to put pressure on gas prices for all residents and businesses relying on gas. In order to assure an adequate and reliable power supply for the state, EFSEC should impose conditions on the Applicant that will mitigate these potential problems. The proliferation of site studies and applications before EFSEC in the past year compounds this potential impact.

Q. How much gas would SE2 use per year, if built, and how does that compare to total statewide usage of gas?

A. Unrefuted during the last round of hearings, the annual requirements for SE2 are approximately 36 million mmbtu (34 billion cubic feet) per year, as shown in the DEIS at P. 3.9-3. Total use of gas for the state of Washington, as reported by the Energy Information Administration, is about 256 billion cubic feet per year. Therefore, SE2 would cause about a 13% increase in gas usage for the state. The next largest current user of gas is only about half of

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the size of SE2. If built, the Chehalis, Satsop, and BP Cherry Point facilities currently before EFSEC will cause a comparable impact on state gas supply. Like SE2, these 3 potential projects would be served by Westcoast pipeline, which I believe does not have sufficient capacity to serve this level of demand.

Q. Is it the amount of gas to be used, or the rate of increase of gas use, which creates the risk to reliability and price that you have identified?

A. Both. This is a huge amount of gas, which creates potential problems for gas supply and a huge increase in usage at a time of other large increases in usage. I am concerned about the potential for infrastructure development falling even further behind load growth.

Q. What is our recent experience with sudden large increases in natural gas demand?

A. During the summer and fall of 2000, as a result of a severe drought which reduced supplies of hydroelectric power, natural gas demand for electric generation soared in the Western United States. As a result of this huge increase in demand for natural gas, supplies were very tight, and wholesale prices rose from around $2 per million btu to as much as $20 per million btu. Exhibit 72.5, included in my original testimony (prior to the huge increase in gas demand from construction of new power plants) showed that gas prices had doubled. Exhibit __(JL-7) is an update of this, showing that gas prices continued to rise into December of last year, and remained very high into the spring of this year when electric loads moderated and gas consumption and prices declined sharply.

Q. Is the problem you noted in your original testimony, that construction of new natural gas fired power plants was placing extreme pressure on the natural gas supply system, still a concern?

A. Yes. Following my testimony in the previous phase of this proceeding, I worked with OTED staff in the preparation of *Convergence*. At page 15 this report details how the construction of natural gas power plants could have a massive impact on the demand for natural gas. Part 3 of that report addresses pipeline constraint issues, and Part 4 details concerns about the ability of the supply of natural gas to keep up with demand.

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Q. What is the status of natural gas power plant development in the west?

A. It continues at an extremely fast pace, both in the Northwest and in other parts of the interconnected gas and electric transmission systems of which we are a part. Page 14 of Convergence lists gas power plant development in Washington, and Page 16 summarizes development throughout the interconnected Western System Coordinating Council. It shows that over 11,000 megawatts of new natural gas construction is underway. The table below, taken from the California Energy Commission's June 2001 analysis, shows what I consider a frightening level of generation development, the vast majority of which is gas-fired.

New Generation Under Construction and Proposed
Western System Coordinating Council

Status	**Northwest**	**Southwest**	**Rocky Mtn**	**Cal/Mx**	**Total**
Permitted or Under Construction	5,313	9,141	552	8,771	23,777
Approved for Construction	3,676	2,256	1,327	4,926	12,185
Application Under Review	8,174	12,166	1,215	9,647	31,202
Starting Application Process	6,928	30	1,080	10,205	18,243
Press Release Only	2,752	7,530	2,391	3,491	16,164
Total	**26,843**	**31,123**	**6,565**	**37,040**	**101,571**

To put this into some perspective, the total annual energy load of the Western System Coordinating Council is only about 87,000 average megawatts, so this represents an approximate doubling of the electricity supply in the western system. The compound growth rate for the western system is about 2% per year; the amount under construction already is sufficient to provide for about ten years of growth.

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Exhibit __(JL-8) is the source document for the above table, prepared by the California Energy Commission.

Exhibit ___(JL-9) is a recent list prepared by the California Power Authority showing that it has recommended entering into letters of intent with developers of 1,846 mw of new gas-fired generation and conducting further evaluation with developers of an additional 5,968 mw. It proposes no further action on 10.867 mw.

While all of these figures are a bit dynamic from month to month, the sheer magnitude is quite intimidating.

Q. What is the importance of the fact that about 24,000 megawatts are permitted or under construction?

A. These plants are all in a position to impose additional gas demand on the west coast gas system within about a two-year time frame. Plants that are not yet permitted do not impose that type of imminent risk.

Q. In your opinion, is there a sufficient supply of natural gas in the west that can be developed in time to serve the level of natural gas generation under construction plus the proposed Sumas Energy power plant?

A. It will be very difficult. The rate of increase in gas use for electric generation is creating gas demand growth in excess of any level previously experienced. While it may be possible to develop sufficient supplies of gas to serve this level of growth, I question whether it can happen fast enough to meet demand in dry years or periods of extreme weather (cold or hot). The past two years have seen the most rapid level of gas development in Canadian history, but the rate of growth has not been nearly fast enough to keep up with the rate of development of natural gas generation. Much of the new drilling is needed to make up for depletion of existing gas wells, which have experienced annual declines of as much as 20%. I have seen no evidence in reports from the National Energy Board of Canada to suggest that a dramatic increase in the rate of

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development is likely or achievable. Most of the record number of wells now being drilled are needed just to replace expiring resources; actual growth in supply remains moderate.

Q. What could the Applicant do to improve the probability that an adequate supply of natural gas is available so that this facility can provide reliable service to the state?

A. It could contract with gas well developers to drill new wells to supply the plant and contract with those developers for the output of those wells for a multi-year period. This would ensure that the plant's needs do not compete with other gas users for existing gas supplies.

Q. What has the Applicant stated with regard to gas acquisition?

A. At page 3.5-4 of the Application, it states:

> *"SE2 will enter into gas supply contracts with one or more Canadian suppliers and/or marketers who have offered to sell gas to it. To provide security in fuel supply, SE2 may also acquire an ownership interest in Canadian natural gas reserves to provide a portion of the supply to the project. A portion of the supply will also be purchased on the short term market."*

In sum, the applicant has done nothing new in the revised application to address the issue of the tightening supply brought on by the proliferation of gas fired plants.

Q. What is your recommendation for EFSEC?

A. I recommend that approval of a site certification agreement with the Applicant be conditioned on the Applicant securing a long-term dependable supply of gas. One option would be for SE2 to acquire an ownership interest in reserves sufficient to meet the plant's needs for five years. Alternatively, it could be required to enter into at least a five-year contract for natural gas supply from newly developed wells. If the amount of gas contracted for is less than the annual requirements of the plant, the Company should be required to secure storage for at least 30 days of operation as discussed below. This is to assure that the portion of the output of the plant committed to Washington utilities is protected from fuel cost and supply volatility. In the event that the Applicant does not need all of this gas in a particular year because output is curtailed for any reason, it could dispose of that surplus in the west coast gas market. Because

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the Applicant is an affiliate of a gas developer, this requirement should not impose an unreasonable burden.

A. The 2000 - 2001 gas "Price Spike" was caused by electric generation demands on the natural gas system

Q. What happened to natural gas prices in Washington last winter?

A. Wholesale rates tripled, retail rates as much as doubled, and the amount of money paid by Washington gas ratepayers for their gas service increased by about $430 million on an annual basis. The table below, extracted from page 22 of *Convergence* and from the WUTC staff agenda memoranda, shows the impact by utility:

Increase in Residential Gas Bills, January 2000 vs. January 2001

	% Increase	$/year Increase
Puget Sound Energy (Seattle)	+ 64%	$314 million
Cascade Natural Gas (Bellingham)	+46%	$61 million
Avista (Spokane)	+77%	$58 million
Northwest Natural Gas (Vancouver)	+36%	$7 million

1. The Price Spike was a result of electric generation, not other increases in gas usage

Q. On what basis do you conclude that the price spike was the result of electric generation, not other increases in gas usage?

A. Residential and commercial usage of gas did not increase in any significant way; the only major sectors of gas usage increases were industrial (where electricity cogeneration occurs) and electric generation. Utility consumption in the second half of 2000 and first half of 2001 was up about ten-fold over usage in 1999.

Q. How does an increase in demand affect prices?

A. As demand increases, producers can insist on increasing prices in order to sell their gas. Due to the deregulated nature of the gas market, the higher prices apply not only to the additional demand of gas-fired electric generating facilities, but also to all other gas users unless they have

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secured long-term fixed price contracts. Thus, while the amount of gas used for electric generation increased by 57%, and the price of gas increased by about 200%, the total cost of gas increased by more like 300% -- the result of compounding these two factors. This is a huge hit to the state economy.

2. The Price Spike cost Washington consumers of natural gas more than $430 million dollars

Q. How much additional money did the price spike cause consumers to pay in the last year?

A. Based on data in the WUTC's Purchased Gas Adjustment filings discussed above, I estimate the spike caused Washington gas consumers to pay a total of about $430 million dollars in additional costs over the course of a year's usage. I have not included the higher costs paid by electric consumers for power generated using gas because that would tend to confuse the "cause" and the "effect" of the increase in gas usage for electric generation causing an increase in gas prices. Because large industrial consumers buy their gas directly from producers, not from WUTC-regulated utilities, the higher costs paid by industry is also excluded**.**

Q. Have gas prices come back down?

A. Yes. Natural gas demand for electric generation has declined because electric loads have declined sharply. Part of the decline is due to contractual arrangements with aluminum smelters in the Northwest to close their operations and part is the result of moderate summer weather, higher prices and conservation efforts in the Northwest and in California causing a decline in electric loads across all sectors. The wholesale price of gas has dropped back to more normal levels of around $2.00/mmbtu in recent months as electric generation from gas has subsided as loads have decreased.

B. Require SE2 to contract for new gas supplies

Q. How could SE2 cause adverse impacts on the supply and price for SE2?

A. If SE2 does not contract for firm gas supplies from newly developed gas resources, it will be competing with existing users for existing limited gas supplies. If supplies remain at historical levels, but demand increases, then prices can be expected to rise again. Only if the new demand

created by SE2 is met with new supplies can we expect current prices to remain in the range they are today.

Q. How could SE2 enter into such contracts?

A. SE2 could enter into contracts with gas developers for newly developed resources. It is relatively easy to monitor and ensure that the seller is actually drilling new wells and bringing new supplies to market. Or, SE2 could acquire currently untapped reserves in the ground and produce gas from those reserves.

Q. Wouldn't this happen anyway, with higher demand causing new supplies to be developed?

A. The only way that drillers not now developing resources will develop new resources is if the price increases above current levels. If SE2 enters service and then seeks gas supplies in competition with other users, it will tend to put upward pressure on prices which will affect all other users. Conversely, if SE2 must contract for new supplies, then existing supplies will still serve the end-users they do now, and price pressure will be mitigated.

Q. Should SE2 be required to secure 100% of its gas needs in advance?

A. No, but if it does not do so, it should be required to maintain a minimum of 30 days of storage so it can operate during a period of tight gas supply.

Q. What is the risk if this is not required?

A. The Applicant states on page 3.5-4 that it will purchase a portion of its supply in the spot market. If SE2 enters the spot market during a period of tight gas supply, as existed last winter, it will drive up the price of gas and impair the reliability of gas supply for all Washingtonians. By requiring a 30-day supply of stored gas, SE2 will be able to rely on stored gas during such situations and not compound the price or reliability of supply for other consumers.

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Q. What type of storage is appropriate for this purpose?

A. There are two principal types of gas storage facility. The first is underground storage fields such as those near Chehalis, Washington (Jackson Prairie) and near Mist, Oregon (Mist). The second is liquefied natural gas storage facilities such as those at Newport, Oregon and Plymouth, Washington. From a reliability and price impact perspective, all that really matters is that the storage is in a location where delivering that gas into the pipeline system will not be constrained by pipeline capacity. Any location in Western Washington, Northwestern Oregon, or the Lower Mainland of British Columbia should satisfy this constraint.

Q. Please make your recommendation explicit.

A. EFSEC should condition approval of SE2 on the Applicant securing either firm gas supplies to meet 100% of its maximum annual requirements, or else secure firm gas supplies to meet 60% of its maximum annual requirements AND also secure natural gas storage capacity to meet a minimum of 30 days of its maximum requirements.

Q. When you refer to liquefied natural gas storage, what type of facility are you describing?

A. A typical liquefied natural gas (LNG) storage facility consists of a single large spherical tank, approximately 150 feet in diameter. The facility previously proposed by Pacific Gas Transmission for construction at Sumas is typical of this type of facility and would have occupied a 60-acre site. During the previous phase of the hearing, Counsel for the Applicant was apparently confused that I was recommending a compressed natural gas (CNG) storage option, which is a very different and more land-intensive option.

C. Require SE2 to contract for new gas pipeline capacity

Q. Were pipeline constraints a part of the gas price increases experienced last fall in Washington?

A. Yes. Exhibit ___(JL-7) shows the Sumas, Southern California, Alberta, and Henry Hub wholesale prices for natural gas. While the wholesale price in Alberta rose as high as $10/mmbtu, the prices in Sumas reached double that level. The U.S. domestic hub for natural

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gas reached above $8, but never reached the levels we experienced here on the west coast. The only explanation that gas would be available at much lower prices at the trading hubs than in the west coast population centers is constrained pipeline capacity. An August 2001 report by the California Energy Commission entitled Natural Gas Infrastructure Issues, reaches the conclusion that the failure to maintain slack capacity above the needs of power plant operators, was a principal cause of the gas price spike last year.

Q. How do the potential increases in natural gas demand for electric generating facilities compare with the planned increases in pipeline capacity?

A. If all of the electric generating facilities proposed for construction in the Northwest that are identified by the California Energy Commission as "Under Construction / Complete" or "Approved" were built and operated (about 9,000 mw of capacity), natural gas consumption in the Northwest would more than double. Conversely, the proposed pipeline capacity upgrades are only sufficient to serve about half of this growth.

The problem is most acute west of the Cascades where Westcoast Pipeline has identified only 300 mmcf/d of future pipeline expansions (Convergence, P. 42, of which 100 mmcf/d is needed for core customer (residential, commercial, and small industrial) needs and 200 mmcf/d was identified by Westcoast for new gas-fired generation.

SE2 would require one-third of this total expansion, or one-half of the amount available for gas-fired power plants. There are enough gas-fired power plants approved for construction or in the permitting process to utilize about four times the available amount, as shown in Exhibit ___ (JL-10). Therefore, even without SE2, the state of Washington is exposed to a shortfall of pipeline capacity.

Q. Do you believe that all of the facilities listed on Exhibit ___(JL-10) will be constructed in the next few years, and that this level of gas demand will materialize?

A. No, I think it extremely unlikely that all of these facilities will be built. The concern, however, is that any or all of them could be built, and if built, would place additional strain on the already stressed gas pipeline system. For that reason, I have recommended that if this particular facility is granted a site certification agreement, it should be with a condition that the

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gas pipeline capacity and gas supply are secure, so that it will not contribute unduly to the stress that already exists.

Q. Can adequate pipeline capacity be built to serve SE2?

A. Yes. The Applicant has stated, at page 3.5-2 of the Application that "Westcoast is willing and able to expand its existing facilities to serve the interconnection with SE2." Westcoast is normally willing to expand capacity to serve customers willing to contract for firm capacity. Unless there are construction constraints within Canada that I am unfamiliar with, Westcoast should be able to upgrade the pipeline in the same timeframe that SE2 could be constructed.

Q. Do you have some concerns that this plant might not be able to access gas if it does not contract for firm capacity?

A. Yes. First and foremost, without a contract for firm capacity, it would be a "standby" or as-available customer of the pipeline. Perhaps more significantly, however, Duke Energy has just announced a purchase of Westcoast. Duke is a major owner of gas-fired power plants in California. These are the very plants that were the source of much of the demand increase last winter which caused the price spike. If this acquisition were consummated, this would leave SE2 at risk for gas supply from a pipeline owned by one of its largest competitors. Were this to occur, SE2 could not provide a reliable source of electricity for the state of Washington.

Q. Does the planned Southern Crossing pipeline from southern Alberta to Sumas provide an alternative to Westcoast?

A. Potentially; if SE2 chooses to contract for capacity on that pipeline, it must also be required to contract for capacity further north on the Alberta system to the sources of gas supply. Merely having rights on Southern Crossing does not provide a reliable source of supply to Washington.

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Q. In order to protect the reliability of service to other Washington gas users, what condition should be placed on SE2?

A. SE2 should be required to contract for sufficient newly constructed firm capacity on Westcoast to meet it's maximum daily demand of approximately 100 mmcf/d as a condition of a Site Certification Agreement, with delivery to begin concurrent with completion of construction.

IV. Site Restoration

Q. You were a consultant to EFSEC on the issue of site restoration of energy facilities. What was the purpose of that work?

A. Two previously approved projects, WPPSS Nuclear Plants 4 and 5, were abandoned during the construction phase without adequate provision to implement the site restoration requirements of the site certification agreements. I was asked by EFSEC to recommend alternatives which could help to achieve the site restoration on those projects, and to make recommendations for methods to avoid this problem in the future. One of my principal recommendations to EFSEC at that time was to require a site restoration bond of some sort from new projects.

Q. Have previous energy facilities in Washington been abandoned without provision for cleanup?

A. Yes. The best known is Gasworks Park in Seattle, formerly the site of a manufactured gas facility. Others include the Tacoma Tide Flats manufactured gas project and some coal mine issues in the Maple Valley area.

Q. What is the risk with a facility such as SE2?

A. The EIS describes the type of facilities that will be located and the types of hazardous materials which will be used on site. I am not an expert at either the type of demolition work that would be required to remove the facilities, nor the type of environmental remediation work that might be required if hazardous materials were released into the ground, but these are the types of risks. It's relatively small compared with a nuclear power plant, which are estimated to cost $200 - $400 million to dismantle and decontaminate, but a risk remains nonetheless.

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This risk is compounded by the form of corporate organization of SE2. This plant will apparently be owned by a single-asset corporation. This means that if the plant fails or becomes economically unviable, there may be no other assets to pursue. This is similar to the situation with WNP-4 at Hanford. Conversely, when the Tacoma Tide Flats problem arose, Washington Natural Gas (the successor to the owner) had other assets and operating properties and was able to pay the multi-million dollar cost of site cleanup.

Q. What has the Applicant proposed?

A. The Applicant proposes a minimum of $10 million in pollution liability insurance, plus an unspecified site restoration bond.

Q. What should EFSEC require as a condition of approval of a site certification agreement?

A. If EFSEC grants a site certification agreement, it should be conditioned upon posting of a site restoration bond with the state. The amount of the bond should be determined by EFSEC prior to the initiation of construction, through retention of a qualified consultant to estimate the potential costs in the event of a catastrophic failure of the facility that renders the Applicant financially insolvent.

Q. What form should the bond take?

A. The Surety industry currently provides bonds for similar contingencies, such as the restoration of coal mines after the coal is extracted. It is my understanding that a defined liability for a defined period of time is the most readily available product, while an unlimited liability for an unlimited period of time is not an available product. Over time, the developer should therefore provide an actual escrow funding for site restoration.

To ensure that the public is not at risk, the initial amount of the bond should be adequate to restore the site in the event of a catastrophic failure. The bond amount could remain fixed, while the developer pays into an external escrow account on an annual basis so that the total amount available rises with inflation.

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Finally, the bond should be issued by a surety registered with the Insurance Commissioner with an A.M. Best rating of at least A-Plus. This type of Surety, historically, has only a 0.02% probability of failure for three years after the date of the rating.

Q. Are there similar types of requirements for the site restoration of other types of energy facilities?

A. Yes. It is my understanding that the Nuclear Regulatory Commission now requires a combination of early-decommissioning insurance plus an external escrow fund to assure that such power plants can be dismantled if and when it is needed. For a gas-fired power plant, the same mechanism could be used, but the amount of funding required would be a small fraction of the amount for a nuclear unit.

V. Build Window

Q. What has changed since the original consideration of this Application which makes the build window an important issue to address in this phase of the proceeding?

A. We have just come through a winter when the gas pipeline system was severely stressed because there were more gas-fired power plants drawing gas than there was gas pipeline capacity or gas supply available to serve them. The existence of a large backlog of approved, but unbuilt, gas-fired power plants could make this situation even worse were a similar drought to occur in the future. By limiting the "build window" it is possible to ameliorate this in two ways. First, with a shorter build window, it is likely that there will be a smaller backlog of potential gas demand. Second, with a shorter build window, there will less trepidation to initiate projects on the part of non-gas generation developers, such as wind and geothermal producers, and it may be possible that new generation which does not further stress the gas supply may be more forthcoming as a result.

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Q. Why is this issue important to the people of the state if the EFSEC agrees to require the applicant to secure sufficient firm capacity and supply?

A. The public has an interest in a reliable and adequate power supply. If a potential facility owner holds a permit for construction, it is able to move forward much faster than an owner of a facility that does not. The existence of one or more permitted, but unbuilt facilities, therefore, is a potential deterrent to any new facility sponsor moving forward. By limiting the time for construction, EFSEC would ensure that if this Applicant was undecided whether to build or not, that would only create uncertainty for other potential project sponsors for a limited period of time.

Q. Are there examples of project sponsors which secured their permits, but then elected to not proceed?

A. Yes. The Weyerhaeuser Longview Cogeneration Facility was approved by EFSEC in 1994, but has not been built. The same is true for the WPPSS Satsop facility (1996), and the Northwest Regional Power Facility in Creston (1996). This huge backlog of potential projects is, in my opinion, a deterrent to potential facility developers, because they recognize the risk that by the time they receive approval, their competitors could be so far along that it would not be economic to proceed.

Q. What is the best solution to assure an adequate and reliable energy supply for the state?

A. Providing a limited build window after site approval ensures that applicants will either proceed to construction or shelve their projects within a reasonable time.

Q. Has EFSEC applied build windows in previous site certification agreements?

A. Yes, in past Site Certification Agreements developers have been allowed up to five years to begin construction.

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Q. Is that an appropriate build window today?

A. No. That may have been appropriate in the coal and nuclear power plant era. Those plants would take 5 - 10 years to complete, cost billions of dollars, and were subject to federal licensing requirements which could take years to resolve. A natural gas facility does not have these requirements, risks, or costs, and a much shorter window is appropriate.

Q. What is your recommendation to EFSEC?

A. I recommend that the Applicant be required to begin construction within 30 months of a site certification agreement and complete construction within 60 months. This is well within the timeline proposed by this Applicant but would avoid the great uncertainty caused by the long build windows allowed in the past. The requirement for commercial operation is necessary to assure that the Applicant does not finesse this obligation by turning one spade of dirt within 30 months to protect its SCA and thereby turn the build window into a perpetual opportunity.

VI. Conclusion and Recommendations

Q. Please summarize your recommendations.

A. First, with respect to the commitment of the output of the plant, the Applicant should be required to enter into contracts for a minimum of 5 years with electric utilities within the state or power marketers having firm contracts with electric consumers within the state for a minimum of 60% of the output of the project.

Second, with respect to natural gas supply, the Applicant should be required to satisfy one of two commitments in order to provide a reasonable assurance that its gas demand will not interfere with reliable gas service to other gas users in the state. The first option would be to acquire (either ownership of reserves or contracts for supply) a firm gas supply equal to the estimated annual requirements of 36 trillion btu/year. The second option would be to acquire (either ownership of reserves, or contracts for supply) a firm gas supply equal to sixty percent of the estimated annual requirements, plus firm natural gas storage capacity (either underground or LNG) west of the Cascades sufficient to meet 30 days of operation at full capacity.

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Third, with respect to natural gas pipeline capacity, the Applicant should be required to contract with Westcoast for 100 mmcf/d of firm pipeline capacity for delivery at the border. This will assure that the Applicant does not impair the access of existing gas users to existing pipeline capacity.

Fourth, with respect to Site Restoration, the Applicant should be required to provide pollution liability insurance and a site restoration bond adequate to pay for restoration of the site to its current condition. EFSEC should retain a qualified consultant to determine the amount of the bond.

Finally, with respect to the Build Window, EFSEC should condition the Site Certification Agreement on a construction start within 30 months of the date of the Agreement and commercial operation within 60 months.

Q. Does this complete your prepared testimony?

A. Yes.

END OF TESTIMONY

I declare under penalty of perjury that the above testimony is true and correct to the best of my knowledge.

DATED this _____ day of October, 2001.

By_____
JIM LAZAR

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