

JAN HASSELMAN (WSB #29107)
jhasselmann@earthjustice.org
STEPHEN D. MASHUDA (WSB #36968)
smashuda@earthjustice.org
JOSHUA OSBORNE-KLEIN (WSB #36736)
josborne-klein@earthjustice.org
Earthjustice
705 Second Avenue, Suite 203
Seattle, WA 98104
(206) 343-7340
(206) 343-1526 [FAX]

*Attorneys for Northwest Energy Coalition,
Washington Environmental Council and
Sierra Club, Intervenors*

BEFORE THE STATE OF WASHINGTON

ENERGY FACILITY SITE EVALUATION COUNCIL

In the Matter of Application No. 2006-01)	
)	
)	
)	
ENERGY NORTHWEST)	OPENING BRIEF OF
)	INTERVENORS NW ENERGY
)	COALITION, WASHINGTON
)	ENVIRONMENTAL COUNCIL,
)	AND SIERRA CLUB ON
)	ENERGY NORTHWEST'S
)	GREENHOUSE GAS
)	REDUCTION PLAN
)	
PACIFIC MOUNTAIN ENERGY)	
CENTER POWER PROJECT)	
_____)	

OPENING BRIEF OF INTERVENORS NW ENERGY
COALITION, WASHINGTON ENVIRONMENTAL COUNCIL,
AND SIERRA CLUB ON ENERGY NORTHWEST'S
GREENHOUSE GAS REDUCTION PLAN

*Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340*

TABLE OF CONTENTS

BACKGROUND1

ARGUMENT5

I. THE PLAN VIOLATES CHAPTERS 80.80 AND 80.70 RCW AND
RENDERS THE APPLICATION INSUFFICIENT TO PROCEED.....5

A. The Plan does not include full and sufficient technical
documentation to support sequestration.....6

1. Projects across the globe are currently sequestering CO₂ on
the same scale as necessary for PMEC and many other
sequestration projects are at various stages of development.8

2. The Plan applies the wrong standard for determining
whether sequestration is “feasible.”14

B. The Plan Does Not Include the Required Fall-back Plan for
Purchasing Emissions Reductions18

C. The Plan Does Not Include Sufficient Financial Assurances to
Ensure that PMEC Complies with Chapter 80.80 RCW.20

D. EN’s Plan Does Not Provide an Effective Monitoring Program.22

E. The Plan Does Not Provide “Penalties for Failure to Achieve
Implementation” of the Sequestration Plan.23

F. The Plan Does Not Work “In Unison” With Chapter 80.70 RCW
Because it Attempts to Double-Count Emissions Reductions
Toward Compliance With Both Chapter 80.80 RCW and Chapter
80.70 RCW.24

1. Both chapter 80.80 RCW and chapter 80.70 RCW
expressly prohibit EN from double-counting its emissions
offsets.....25

2. The provisions of chapter 80.80 RCW and chapter 80.70
RCW can be harmonized to provide a comprehensive and
cumulative scheme for controlling GHG emissions from
energy facilities.....27

G. Running the plant on natural gas indefinitely is not an adequate
alternative and does not necessarily comply with chapter 80.70
RCW.30

II.	THE COUNCIL SHOULD REMAND THE PLAN TO ENERGY NORTHWEST AND STAY CONSIDERATION OF THE APPLICATION.	31
A.	While Implementing Regulations May Be Helpful For Determining Many Of The Issues Raised, There Is No Need To Stay Consideration Of The Plan Until Rules Implementing Chapter 80.80 RCW Are Adopted.....	31
B.	EN must submit a legally valid Plan to commence the adjudication.....	32
C.	If the Council Finds EN’s Plan Inadequate, EN Can Submit a New Plan Subject to RCW 80.80.040(13).....	33
III.	THE COUNCIL SHOULD NOT ISSUE A CONDITIONAL PERMIT FOR PMEC.....	33
IV.	THE PLAN IS PREMISED ON ASSUMPTIONS THAT VIOLATE THE LAW.	35
A.	EN’s Calculation of the Amount of Emissions Reductions Necessary to Comply With the Emissions Performance Standard Violates RCW 80.80.040(5).	35
B.	EN’s Assumption That 1,100 lb CO ₂ /MWh is the Most Stringent Emissions Performance Standard That PMEC Must Ever Meet Contradicts the Law.	37
C.	EN Cannot Delay Compliance With the Emissions Performance Standard.	38
	CONCLUSION.....	40

“This plan does not propose any specific on-site or off-site sequestration testing or other specific projects.”

Pacific Mountain Energy Center, Greenhouse Gas Reduction Plan (July 30, 2007) at 2.

The Council has asked a series of targeted questions about the Greenhouse Gas Reduction Plan (“Plan”) that Energy Northwest (“EN”) submitted to comply with the requirements of Engrossed Senate Substitute Bill (“ESSB”) 6001 (codified as chapter 80.80 RCW). The Council must decide whether EN’s Plan complies with the requirements of chapter 80.80 RCW. It does not. EN’s Plan falls far short of every vital requirement of this law. The Council should reject the Plan and remand EN’s site application for revision.

Intervenors NW Energy Coalition, Washington Environmental Council, and Sierra Club (collectively “NWECC”) submit this brief answering the Council’s questions. After a short discussion of the requirements of chapter 80.80 RCW, NWECC will address first the Council’s questions concerning the adequacy of the Plan and the relationship between this statute and chapter 80.70 RCW. NWECC will then turn to the Council’s questions regarding whether the adjudication should be stayed pending compliance with the law or the development of implementing regulations. Finally, NWECC will explain why the Council should not issue a conditional permit for PMEC and will explain that the Plan is based on a set of assumptions that violate the law. Within each of these areas, NWECC will identify and answer the specific questions asked by the Council.¹

BACKGROUND

In enacting chapter 80.80 RCW, the Washington State legislature linked visionary greenhouse gas reduction goals with action-forcing requirements for new power plants and long-

¹ For ease of reference, NWECC has noted at the beginning of each section which of the Council’s Question that section addresses.

term power purchases designed to help achieve those goals. The law is intended to make Washington State a leader in greenhouse gas (“GHG”) reduction strategies and to encourage growth of the technologies to achieve those reductions. Chapter 80.80 RCW also seeks to protect industry and consumers from the significant financial risks associated with additional investments in carbon-intensive generating technologies. Animating these goals was the legislature’s recognition that Washington State is especially vulnerable to the impacts of climate change: diminishing snow pack necessary to feed rivers, aquifers, and reservoirs; hotter and drier summers; rising sea levels that will impact our coastal communities; increased risk of fires and insects devastating the state’s forests; and higher water temperatures and lower river flows further stressing already endangered fish populations. At the same time, Washington State is well positioned to do something about it. The state is already a leader in clean energy development and has the resources to develop new technologies to reduce GHG emissions.

At the heart of chapter 80.80 RCW is an emissions performance standard that limits the carbon dioxide (CO₂) that may be emitted by any new thermal power plants built in the state and measures to prohibit electric utilities in Washington from purchasing power from plants that do not meet this emissions performance standard. The emissions performance standard in chapter 80.80 RCW limits GHG emissions from new thermal power plants to the lesser of either: (1) 1,100 pounds of GHGs per megawatt-hour; or (2) the average output of new commercially available combined-cycle natural gas turbines as set by the Department of Community, Trade, and Economic Development (“CTED”) every five years. New thermal generation facilities operating on fuels other than natural gas can meet this standard only by (1) permanent geological carbon sequestration, or (2) permanent carbon sequestration “by other means approved by” the Department of Ecology (“Ecology”). Along with an application for site certification to the

Council, the proponent of any new thermal power plant that will sequester CO₂ emissions to satisfy the emissions performance standard must submit a “carbon sequestration plan” that includes all of the following elements:

- Provisions for geological sequestration commencing within five years of plant operation, RCW 80.80.040(11)(a);
- If applicable, provisions for other permanent sequestration methods commencing within five years of plant operation that have been approved by the Department of Ecology, RCW 80.80.040 (11)(b), RCW 80.80.040(7)(b);
- Full and sufficient technical documentation detailing how it will achieve sequestration, RCW 80.80.040(11)(b);
- A monitoring plan, RCW 80.80.040(11)(c);
- Adequate financial assurances sufficient to ensure successful implementation of the sequestration plan, RCW 80.80.040(11)(a);
- Penalties for failure to achieve implementation of the plan on schedule, RCW 80.80.040 (11)(d);
- Provisions for public notice and comment on the plan, RCW 80.80.040(11)(f).

The legislature crafted a narrow exception available in certain instances to facilities that were already in the permitting pipeline when this statute was passed. That exception requires such facilities to develop and receive approval for a “carbon sequestration plan” containing the above elements and to make a “good faith effort” to implement the plan. RCW 80.80.040(13). If, after making that good faith effort, the applicant concludes that “implementation is not feasible,” it must support this finding with detailed documentation demonstrating the “steps taken to implement” the sequestration plan and providing “evidence of the technological and economic barriers to successful implementation.” *Id.* Upon notifying the Council of these findings, the project may then meet the emissions performance standard by implementing a fall-back plan for purchasing “verifiable greenhouse gases emissions reductions from an electric

generating facility located within the western interconnection, where the reduction would not have occurred otherwise or absent this contractual agreement.” *Id.*; RCW 80.80.040(11)(e). In other words, if an applicant makes a “good faith effort” to implement an approved sequestration plan and fails, it must satisfy the emissions performance standard through the purchase of real and verifiable emissions reductions elsewhere in the western interconnection system.

EN initially submitted an Application to the Council for its Pacific Mountain Energy Center (“PMEC”) in September, 2006. As proposed, the CO₂ emissions from PMEC would total over five million tons per year. This would make PMEC the second largest single emitter of GHG in the state and would represent 7% of all GHG emissions in Washington. EN’s 2006 application proposed an integrated gasification combined cycle (“IGCC”) plant, which enables the plant to burn a variety of fuels, including syngas produced from coal or petroleum coke, and natural gas. While EN describes the fuel it has proposed for PMEC as “clean syngas,” this process results in only a 10-20% reduction in GHG emissions over traditional coal-fired power plants. EN’s original application was made prior to the legislature’s adoption of chapter 80.80 RCW and did not include a plan to reduce these emissions beyond an assertion that the facility would be “carbon capture ready.” After passage of the landmark legislation, EN requested that the Council stay its application. That request was granted.

On July 30, 2007, EN submitted a “Greenhouse Gas Reduction Plan” in an attempt to comply with the emissions performance standard for PMEC and asked the Council to reopen consideration of its application based on this Plan. EN’s Plan, however, fails to provide any of the required information for sequestration. It also fails to provide the detailed fall-back plan to purchase emissions reductions in the event attempts to sequester fail. Instead, the Plan provides an incomplete and inaccurate description of sequestration technology coupled with vague

promises to develop the required elements of a sequestration plan sometime in the future. A “plan to make a plan” does not meet the requirements of chapter 80.80 RCW.

ARGUMENT

I. THE PLAN VIOLATES CHAPTERS 80.80 AND 80.70 RCW AND RENDERS THE APPLICATION INSUFFICIENT TO PROCEED.

[Addressing Council Questions 1(b), 2(a), 2(b), 2(d), 2(e), 2(f)]

EN candidly admits at the outset that the Plan does not include all of the elements required by the statute, but is instead based on the assumption that EN may wait until just before commercial operation of PMEC to detail “its efforts to achieve sequestration.” Plan at 3. Only if EN concludes at that time that sequestration is not feasible will it “document how it will meet the performance standard by purchasing verifiable GHG reductions” from other plants in the western interconnection. Plan at 3. Chapter 80.80 RCW, however, requires that this and other information be included in a sequestration plan for review during the approval process, not sometime in the future. As submitted, this Plan lacks any detail about how and when EN will sequester CO₂ from PMEC, omits any discussion of the substantial body of existing knowledge about sequestration and how EN will apply this knowledge to PMEC, lacks a back-up plan for purchasing qualifying emissions reductions in the event sequestration does not work within five years of plant operations, and fails to provide adequate financial assurances to support its efforts to implement a sequestration plan or any penalties for such failure. At bottom, EN has converted the statutory language into a menu of options that it might (or might not) decide to implement several years from now. This is not a “sequestration plan” that shows the Council and the public what EN will actually *do* to meet the requirements of the law, even though, as discussed in more detail below, assembling such a plan is possible and mandatory. Because the Plan lacks any of the elements required by law, it cannot provide a sufficient basis for EN’s application to proceed.

A. The Plan does not include full and sufficient technical documentation to support sequestration.

The requirement that EN's Plan include "full and sufficient technical documentation to support the planned sequestration" lies at the heart of chapter 80.80 RCW. See RCW 80.80.040(11)(b). For new thermal power plants such as PMEC, the legislature expressed a clear preference for complying with the emissions performance standard through permanent sequestration. See, e.g., RCW 80.80.040(7)(a)-(b); RCW 80.80.040(13) (requiring applicants already in permitting process to first make "good faith effort" to sequester before turning to alternate methods to meet the standard). In other words, the law requires EN to demonstrate the steps it will take to meet the emissions performance standard through permanent sequestration and to use all of its efforts to make that method work. Unfortunately, the Plan EN has submitted does little more than promise it will complete an "in-depth study" of the potential for sequestration that will be "developed in detail [and] . . . presented to EFSEC for review" at some undefined point in the future. Plan at 3, 3 n.1. This study and potential for a future plan does not satisfy the statutory command.

In its questions, the Council asked "[h]ow may the applicant meet the requirement of 'full and sufficient documentation to support the planned sequestration' if technology to support plans for geological sequestration does not yet exist?" Council Questions About The Pacific Mountain Energy Center Greenhouse Gas Reduction Plan ("Council Questions") # 2(e). NWECC respectfully submits that this question is built on an incorrect premise – repeated throughout EN's Plan – that technology for geologic sequestration does not currently exist. See, e.g., Plan at 12 ("Though geological sequestration looks promising, it is still in the early stages of research and development with many questions to be resolved. . . ."); id. ("Due to the uncertainty and early scientific state of GHG sequestration research . . ."); id. ("PMEC will implement

geological sequestration when and if the technology of geological storage applications is proven viable. . . .”); *id.* at 2 (“Due to the scientific, regulatory, and legal uncertainties surrounding sequestration, it may be impossible within the next few years to determine whether geological sequestration will be technologically or economically feasible during PMEC’s operating life.”); *id.* at 13 (“At this time, geological sequestration is not technologically or economically feasible for PMEC’s expected CO₂ emissions.”).

EN’s representations about the current state of sequestration technology suffer from two fatal flaws. First, the Plan paints a wholly inaccurate picture of the current state of geological carbon sequestration that runs counter to the published literature, such as reports from the United Nations Intergovernmental Panel on Climate Change (“IPCC”) and the State of California’s Energy Commission. Contrary to EN’s characterizations, there is a vast body of existing knowledge and decades of experience concerning sequestration techniques and technology that EN could have used to develop a plan to achieve sequestration. Second, EN seeks to avoid developing a sequestration plan conforming to the law by claiming that sequestration is not currently commercially available to the mass market. The law provides no exception to development of a sequestration plan, and it will be years before EN can ascertain whether implementing the sequestration plan by the fifth year of plant operations is feasible. Moreover, contrary to EN’s assertion, mass market commercial availability is not the same as feasibility. A technology may be feasible, i.e. capable of being done, long before it is commercially available to a mass market. The Washington legislature intended for the state to be a leader in employing sequestration technologies for commercial power plant usage. Waiting for sequestration technology to become commercial-scale before it may be implemented at PMEC defies the technology-forcing mandates of chapter 80.80 RCW.

1. *Projects across the globe are currently sequestering CO₂ on the same scale as necessary for PMEC and many other sequestration projects are at various stages of development.*

Contrary to EN's representations, there is a large body of scientific literature describing projects that inject and sequester CO₂ in geological formations across the globe. In 2005, the IPCC published a comprehensive survey of CO₂ Capture and Storage ("CCS") that summarized these efforts and drew conclusions about the feasibility of this technology. IPCC Special Report on Carbon Dioxide Capture and Storage, Chapter 5. Cambridge University Press, Cambridge, United Kingdom (2005).² The IPCC discussed in great detail the current state of knowledge about sequestration beginning with recognition that the techniques and technology for geologic sequestration have been around for several decades. The IPCC found that "injection of CO₂ in deep geological formations uses technologies that have been developed for and applied by, the oil and gas industry." *Id.* at 197. Today, more than "30 Mt [megatons] of non-anthropogenic CO₂ are injected annually, mostly in west Texas, to recover oil from over 50 individual projects, some of which started in the early 1970s." *Id.* at 197. Contrary to EN's assertions, "[a]s research has progressed and as demonstration and commercial projects have been successfully undertaken, the level of confidence in the technology has increased." *Id.* at 200.

Indeed, the IPCC examined several large-scale CO₂ sequestration projects that are currently operating or proposed throughout the world. *See, e.g., id.* at 201, Table 5.1 (summarizing then-current and future geological storage projects). It discussed three of the larger-scale projects in some detail. The IPCC noted that "[g]eological storage of CO₂ is in practice today beneath the North Sea, where nearly 1 MtCO₂ has been successfully injected annually at Sleipner since 1996 and in Algeria in the In-Salah oil and gas field." *Id.* at 197. *See*

² Relevant pages from this report are attached to this brief as Exhibit 1. The entire report is available at http://www.ipcc.ch/activity/srccs/SRCCS_Chapter5.pdf (last viewed Oct. 18, 2007).

also id. at 200 (“At the Sleipner Project . . . more than 7 MtCO₂ has been injected into a deep sub-sea saline formation since 1996.”). The third example, the Weyburn Project in Canada, is currently injecting “1-2 MtCO₂” annually and “combines E[nhanced] O[il] R[ecovery] with a comprehensive monitoring and modeling programme to evaluate CO₂ storage.” Id. at 197. These current projects, such as Sleipner and Weyburn, involve sequestration of large amounts of CO₂ at levels that are well within the range of the 1.6 to 1.8 million tons per year that EN predicts it will need to sequester at PMEC. See Plan at 10.

After discussing these projects and the state of the available technology, the IPCC concluded that “[t]hese projects . . . demonstrate that *subsurface injection of CO₂ is not for the distant future, but is being implemented now* for environmental and/or commercial reasons.” Id. at 204 (emphasis added). See also id. at 198 (“Despite the fact that more work is needed to improve technologies and decrease uncertainty, there appear to be no insurmountable technical barriers to an increased uptake of geological storage as an effective mitigation option.”). Indeed, the IPCC’s conclusion that “it is feasible to store CO₂ in geological formations as a CO₂ mitigation option,” id. at 197, contrasts sharply with EN’s assessment in its Plan that “PMEC will implement geological sequestration *when and if* the technology of geological storage applications is proven viable.” Plan at 12 (emphasis added).

Other studies have reached similar conclusions. The California Energy Commission, in a recently issued draft report to the California legislature – required under a law similar to chapter 80.80 RCW – concluded that “[w]hile technical challenges remain, the primary barriers to progressing with initial geologic sequestration projects in the state lie within the statutory and regulatory arena.” California Energy Commission, Draft Staff Report: Geologic Carbon Sequestration Strategies for California, The Assembly Bill 1925 Report to the California

Legislature at 143 (Sept. 2007).³ A recent Massachusetts Institute of Technology study similarly concluded that “[o]ur overall judgment is that the prospect for geological CO₂ sequestration is excellent. We base this judgment on 30 years of injection experience and the ability of the earth’s crust to trap CO₂.” Massachusetts Institute of Technology, The Future of Coal at 59 (2007).⁴ See also id. at 44 (“Additional work will reduce the uncertainties associated with long-term efficacy and numerical estimates of storage volume capacity, but no knowledge gaps today appear to cast doubt on the fundamental likelihood of the feasibility of CCS.”). Here again, EN’s characterization of geological sequestration as “still in the early stages of research and development with many questions to be resolved,” Plan at 12, collides with the conclusions of both the foremost scientific experts and the opinions of other states’ regulators.

Indeed, as detailed in the attached Declaration of George Peridas, Ph. D., all of this information was available to EN as it assembled its Plan. Declaration of George Peridas, Ph. D. (“Peridas Decl.”) at ¶¶ 2-3 (discussing and attaching a June 20, 2007 presentation he gave to EN’s Executive Board). Dr. Peridas explains that “[t]here are three elements to successful geologic sequestration of carbon dioxide: capture, transportation, and sequestration. All three of these elements have been demonstrated and operated in commercial, large scale installations.” Peridas Decl. at ¶ 4. While there are currently no commercial power plants that sequester their CO₂ emissions, Dr. Peridas explains that the reasons for this are regulatory and legal, not due to technological shortcomings. Id. at ¶ 15; see also id. at ¶ 6 (explaining that “under today’s laws it is cheaper to release CO₂ to the air than capture it”), and ¶ 16 (“I share the view of many

³ Relevant excerpts of this Report are attached to this brief as Exhibit 2. The entire report is available at <http://www.energy.ca.gov/2007publications/CEC-500-2007-100/CEC-500-2007-100-SD.PDF> (last viewed Oct. 18, 2007)

⁴ Relevant excerpts of this Report are attached to this brief as Exhibit 3. The entire report is available at http://web.mit.edu/coal/The_Future_of_Coal.pdf (last viewed Oct. 18, 2007).

scientists, established experts, and corporations that there are no technological showstoppers to the deployment of CCS today – only policy, legal and economic hurdles.”). After reviewing the extensive published literature and track record of sequestration technology, *id.* at ¶¶ 8-9, Dr.

Peridas concludes that:

to sequester CO₂ emissions at PMEC, the task for Energy Northwest is not to develop the technology from scratch or even to radically alter it. . . . each of the three elements for successful sequestration has been developed and used in a variety of other contexts over the years. Energy Northwest’s task is to combine the three elements and apply the existing knowledge and techniques to PMEC.

Id. at ¶ 11. Dr. Peridas provides an overview of the types of studies and plans that could assist EN in achieving this result. *Id.* at ¶¶ 12-14, 16. In sum, what is needed to sequester emissions at PMEC is not a technological breakthrough, but rather a legal imperative (supplied here by the requirements of RCW 80.80.040), combined with a thoughtful and detailed plan that includes study, testing, and monitoring. See also *id.* at ¶ 16 (“It is my firm belief that any barriers identified in the context of a project like PMEC can be resolved with collective action and over the appropriate timeframes.”).

In addition, as EN’s own prefiled testimony indicates, there are a number of detailed steps that can and should be taken to provide for sequestration at or near the PMEC site. See Prefiled Testimony of Travis McLing at 7-9 (filed Sept. 20, 2007). The three-step process Mr. McLing describes begins with a literature review of existing geological information, proceeds to on-the-ground-testing of promising sites, and concludes with actual design of the sequestration facilities. *Id.* at 7, lines 7-16 (summarizing the steps). Mr. McLing also correctly notes that there are other projects that “have completed the budgeting and permitting for this type of activity.” *Id.* at 8, lines 11-18. These other sequestration projects have developed processes to complete the necessary evaluation and planning for sequestration that EN could have utilized

here. For example, the FutureGen project has detailed protocols, processes, and results for the general kinds of studies necessary for such site characterizations. See, e.g., FutureGen Initial Conceptual Design Report, Revision 2 (May 25, 2007) at 5.1 to 6.13 (outlining methodology for site selection and describing in detail seismic and other tests done to determine suitability at four potential sites).⁵

Of perhaps even greater relevance, the proponents of another IGCC project in Washington State have assembled and are implementing plans for site evaluation. See Field Activity Plan: Characterization Test for CO₂ Sequestration in the Columbia River Basalt Group, Battelle Northwest (June 2007).⁶ Despite the fact that the project sponsors have not yet submitted an application to the Council, the study request and supporting documents contain a level of detail far beyond what EN has included in this Plan. For example, the Field Activity Plan identifies the critical questions that must be answered, Field Activity Plan at 1, specifies site-specific locations for testing and verification, id. at 3 and 7, includes a specific schedule for implementation, id. at 26-30 (including many actions already in progress and proposing completion by mid-2010), outlines the tests and methods that it will utilize, id. at 7-14, and sets out a monitoring and evaluation plan, id. at 15-20.

Although these examples of sequestration implementation plans exist, EN's plan utterly lacks any comparable details. Instead, EN summarizes its entire study process in a single paragraph in the Plan, see Plan at 19, and promises to "develop a study plan in detail" at some

⁵ The relevant portions of this document are attached as Exhibit 4. The entire report is available at http://www.futuregenalliance.org/publications/fg_icdr_052507_v2.pdf (last viewed Oct. 22, 2007).

⁶ A copy of the activity plan is attached at Exhibit 5. The plan is also available at <http://www.efsec.wa.gov/WERC/Wallula%20Site%20Field%20Activity%20Plan.pdf> (last viewed Oct. 22, 2007).

point in the future when it will present it to the Council for review. Plan at 3, 3 n.1.⁷ The legal requirement that the applicant present “full and sufficient technical documentation” demands that more detail be presented with the Plan itself.⁸ At a minimum, EN must detail what specific questions must be answered to achieve sequestration at P MEC, commit to the methods, tests, or technology it will use to answer those questions, and establish a binding schedule that includes benchmarks for implementation.⁹

* * * *

While the law does not bind EN to use geologic sequestration should it prove infeasible, it does require EN to submit a plan to achieve sequestration and to make a good faith effort to implement that Plan. Though sequestration has yet to be employed specifically for CO₂ emissions from a power plant, other industries have already successfully sequestered CO₂ utilizing the same technology that would apply at P MEC. Still others have gone further down the path toward achieving sequestration at power plants and have produced a growing body of

⁷ Indeed, while the deadlines have been altered, this single paragraph is a near duplication of several bullet points made by Dr. George Peridas in a June 20, 2007 presentation to EN’s Executive Board. See Peridas Decl. at ¶ 13 and Attachment B thereto at 6-7. As Dr. Peridas explains in his declaration, that general summary was merely an overview and was in no way intended to serve as an example of the level of detail that should be provided in a sequestration plan.

⁸ In addition to its failure to provide sufficient technical documentation to support geological sequestration, EN has included a list of options for “other permanent sequestration” that fails to satisfy the law in at least two important respects. First, no “other” means of permanent sequestration can be used to meet the emissions performance standard in RCW 80.80.040(1), unless and until it has been approved by the Department of Ecology. RCW 80.80.040(7)(b). Ecology has not approved any such methods. Second, the options presented in the Plan do not qualify as “permanent” and do not satisfy the statute. See, e.g., Plan at 20 (including “no-till” farming practices, and “grass planting”). The Council should reject EN’s attempt to define “permanent sequestration” to include such temporary methods.

⁹ It is significant that the legislature required that the Council and Ecology to develop and enforce rules for sequestration plans that include penalties “for failure to achieve the implementation of the plan on schedule.” RCW 80.80.040(11)(e). As discussed infra at 23-24, EN’s failure to develop an implementation schedule robs this provision of any meaning or utility.

knowledge and examples of how it may be accomplished. EN has unfortunately ignored all of this work and data in the Plan it has submitted. At the very least, chapter 80.80 RCW's requirement that the plan include "sufficient technical documentation" requires EN to fully consider the vast amount of data on the current state of the technology, develop a plan for employing that technology at P MEC, and characterize the site(s) where it hopes to sequester its emissions. Though the ultimate answer may not be 100% clear at this stage, EN must, at a minimum, present a plan that identifies any remaining knowledge gaps and includes a strategy and action items to fill them. Its abject failure to submit such a plan violates the law.

2. *The Plan applies the wrong standard for determining whether sequestration is "feasible."*

Rather than explaining how it will make sequestration work for P MEC, EN spends the bulk of the Plan attempting to justify its assertion that sequestration is not "feasible." See, e.g., Plan at 12 ("Though geological sequestration looks promising, it is still in the early stages of research and development with many questions to be resolved before *commercial-scale* application is possible for P MEC") (emphasis added); id. at 14 ("The Electric Power Research Institute (EPRI) estimates that *commercial* sequestration applications will be available in the year 2020") (emphasis added); id. at 18 ("[L]arge-scale *commercial* units are expected to come on-line around 2020. As a result, geological sequestration is not technologically or economically feasible for P MEC's expected CO₂ emissions at this time, although Energy Northwest expects it to be technologically or economically feasible within P MEC's operating life time.") (emphasis added).

As a threshold matter, it is premature to predict at this stage in the process whether sequestration will ultimately prove "feasible" at P MEC. The Washington legislature designed chapter 80.80 RCW to make Washington a leader, to spur technological development, and to

ensure that Washington meets its responsibility to reduce global warming impacts from power generation. See RCW 80.80.005(d), (f), (g). Nothing in the law excuses a project from submitting a valid carbon sequestration plan by claiming sequestration is infeasible at the outset. RCW 80.80.040(11), (13). Projects under consideration, like P MEC, must abide by this requirement, like all others. Accordingly, EN must submit a carbon sequestration plan that includes all the requirements of RCW 80.80.040(11). Since the sequestration plan must provide for sequestration within five years of plant operation, the plan must anticipate technological advances and the growing experience with sequestration over that time frame.

Feasibility comes into play only after EN has made a good faith effort to implement the sequestration plan. RCW 80.80.040(13) allows EN to make a determination that sequestration is “not feasible” only *if* it produces a sequestration plan that “include[s] all of the requirements of subsection (11)” and only *after* it makes a “good faith effort to implement the sequestration plan.” To date, EN has not produced a sequestration plan that complies with subsection (11), and it obviously has not made a good faith effort to implement such a plan.¹⁰

Under RCW 80.80.040(13), EN could implement an alternative offset plan *after* making a good faith effort to implement a sequestration plan and *after* determining that implementation is not feasible. In the Plan, EN tries to predetermine the outcome of any implementation efforts by claiming infeasibility based on the fact that sequestration is not available today on a

¹⁰ The Council has asked whether EN’s Plan is sufficient to demonstrate “good faith effort to implement [the law].” Council Question # 2(d). As discussed above, the “good faith effort” standard is relevant only to the determination under RCW 80.80.040(13) of whether an applicant has sufficiently attempted to implement its sequestration Plan before reporting to the Council that sequestration is not feasible. The relevant legal standard for the Council at this stage is whether the sequestration plan “include[s] all of the requirements of subsection (11).” If those elements are lacking, the Plan cannot provide a sufficient basis for any future inquiry into whether EN has made a good faith effort to implement the plan. EN must put together a valid sequestration plan before the question of whether it has made a “good faith effort to implement the sequestration plan” may be considered.

“commercial scale.” EN has erroneously equated current commercial-scale availability of sequestration with its feasibility over the life of the sequestration plan under RCW 80.80.040(13). The Council should reject EN’s self-serving definition of feasibility in its review of EN’s sequestration plan in order to confine EN’s ability to abandon the plan upon flimsy claims of infeasibility and to conform its review to the requirements and purpose of subsections (11)-(13).

Sequestration technology need not be available, off-the-shelf today on a “commercial-scale” in order to be “feasible,” particularly when the term “feasible” is used in a technology-forcing statute. To the contrary, the dictionary definition of “feasible” means “capable of being done, executed, or effected.” American Textile Manufacturers Inst. v. Donovan, 452 U.S. 490, 508-509 (1981) (quoting Webster’s Third New International Dictionary of the English Language at 881 (1976)). The Washington Supreme Court similarly construed the phrase “to the extent feasible” to mean “capable of being economically and technologically accomplished.” Rios v. Washington Dep’t of Labor and Indus., 145 Wn.2d 483, 498-99, 39 P.3d 961 (2002). Both constructions call for an objective determination of feasibility by the regulator, based on both current and emerging technologies. In contrast, “commercial” means “involved in work that is intended for the mass market . . . [or] distributed in large quantities for use by industry.” American Heritage Dictionary 280 (3rd ed. 2000). Here, the relevant legal standard is whether sequestration is “capable of being done,” not whether sequestration has achieved an economy of scale where it has become available “for the mass market.”

By its plain terms, RCW 80.80.040(11)(b) calls for a sequestration plan that provides for sequestration within five years of plant operation. Whether sequestration is available for the mass market today begs the question of whether EN can put it to use within five years of plant

operation at PMEC. The sequestration plan must make provision for implementation of sequestration at PMEC during that time frame, and EN can be excused from implementing this plan only if sequestration is not capable of being done. See supra at 9-14 (discussing steps that can be taken now beyond what EN proposes to implement sequestration at PMEC and discussing evidence that sequestration is technologically feasible as it is already being done elsewhere). See also IPCC Report at 204 (concluding that “subsurface injection of CO₂ . . . is being implemented now for environmental and/or commercial reasons.”).

Compounding its legal error, EN has offered an interpretation of “feasible” that defines “economic infeasibility” at an inexplicably low level. The Plan assumes that sequestration will be economical for PMEC only if it costs less than \$5/tonne. Plan at 7, 8. The Plan provides no explanation of the rationale underpinning this figure. Instead, it appears to be based solely on the amount that EN is willing to pay for sequestration, not on what sequestration might actually cost. See infra at 24-25 (discussing EN’s failure to provide adequate financial assurances).

Accordingly, the Council is left without any way to judge, for example, if it is the point at which operating on cheaper fuels that produce more carbon emissions becomes too expensive, or whether the plant itself could not be built at all. Had EN provided its rationale for the \$5/tonne cut-off, the Council could then assess whether sequestration costs are already higher than that figure and whether the legislature knew that sequestration would result in such costs when it enacted RCW 80.80.040 (13). Feasibility is an objective standard, and RCW 80.80.040(12)(b) directs the Council to “consider the adequacy of sequestration or the sequestration plan in its adjudicative proceedings.” The Council should reject EN’s attempt to set its own feasibility standard in its Plan. Ultimately, it is the Council’s responsibility to determine whether implementation of a sequestration plan is “feasible” after EN has shown its good faith effort to

implement that plan.

Moreover, one of the fundamental purposes of chapter 80.80 RCW is to foster innovation and to encourage entities to develop and advance the technology necessary to meet the emissions performance standard. RCW 80.80.005(1)(g) (legislature finding that “[a]ctions to reduce greenhouse gases emissions will spur technology development and increase efficiency, thus resulting in benefits to Washington’s economy and businesses”). EN’s Plan is, at best, a vague commitment to study its own site characteristics to determine if it could sequester in those areas, but to wait for others to develop and test the technology to actually perform sequestration and make it “commercial.” While studying site characteristics is certainly one necessary step in the process of making sequestration feasible for PMEC, it is not the only one. Sequestration technology is established and is rapidly developing elsewhere, yet EN has proposed nothing in its Plan that would advance this technology beyond its current state. There is a vast difference between attempting to advance this technology – as required by the law – and simply being ready to use it once others make it cheap enough to be commercially available at the low costs that EN would prefer to expend. Such a passive approach violates both the purposes and the action-forcing requirements of chapter 80.80 RCW.

B. The Plan Does Not Include the Required Fall-back Plan for Purchasing Emissions Reductions

If, after making a “good faith effort to implement the sequestration plan,” and “demonstrat[ing] the steps taken to implement the sequestration plan and evidence of the technological and economic barriers to successful implementation,” necessary to show that “implementation is not feasible,” EN is required to notify the Council “that they shall *implement the plan* that requires the project owner to meet the greenhouse gas emissions performance standard by purchasing verifiable greenhouse gas emissions reduction from an electric

generating facility located within the western interconnection.” RCW 80.80.040(13) (emphasis added). This provision, which requires immediate implementation of “the plan” to comply with the mandatory emissions performance standard, necessarily contemplates that EN already has developed “the plan” at the time the provision is triggered.

EN however, has not proposed such a “plan,” nor does it provide any information (beyond the number of fossil-fuel power plants within the western interconnection) that demonstrates that such emissions reductions are available, affordable, or that they “would not have occurred otherwise or absent . . . contractual agreement.” Indeed, there is nothing in the Plan to indicate that EN has conducted even an overview study of the opportunities for such reductions within the western interconnection, or that it has begun to explore which plants might be of an age or condition to be a potential emissions reduction candidate.¹¹ The Plan provides no detail for how and when EN plans to purchase these reductions – there are no set deadlines, no accountability.

EN has set a maximum price of \$5/tonne for its “measure of . . . economic feasibility” for sequestration. Plan at 7. Although, as NWECA has discussed, this is an inappropriate yardstick to measure feasibility, there is presumably a price point at which EN cannot afford to purchase offsets. Just as its Plan fails to tether its estimates for sequestration to any realistic assessment of the true cost, EN omits any discussion of how much it can afford to pay for emissions reductions, and omits any details about even the potential availability of such reductions in the western interconnection, or the current price of those reductions. This information is available. For

¹¹ Overlaying this lack of detail is a great deal of uncertainty about the future price of carbon in the United States. While the margin of increase is unclear, the high likelihood of some form of national cap-and-trade or carbon tax legislation means that the demand for carbon credits and consequently, their economic value, will increase over time. EN does not acknowledge this possibility, much less disclose a strategy for how it might deal with it.

example, in his prefiled testimony, EN's witness Michael Burnett testifies that "the current market for greenhouse gas offsets is at approximately \$5/tonne. . . . is growing at a rapid rate and it is anticipated that prices will increase as demand increases and regulations are implemented." Prefiled Testimony Of Michael S. Burnett at 12, lines 7-11. See Opening Comments Of NW Energy Coalition and others to the Oregon Public Utility Commission (July 26, 2007) (attached as Exhibit 6) at 19, Table 4 (showing price of carbon under all current national legislation ranging between \$12/ton and \$60/ton by 2015 and rising from there).

While the legislature gave EN some flexibility regarding how to meet the emissions performance standard, the standard itself is not flexible. The statute requires that PMEC meet the standard either by sequestration or, in particular narrow circumstances, through the purchase of emissions reductions. If there is any chance that it will be infeasible for EN to sequester its carbon emissions by the end of the 5-year period provided in RCW 80.80.040(11)(b), it must *today* demonstrate that a credible package of qualified emissions reductions is possible and must provide an objective assessment of its ability to afford and purchase them.

C. The Plan Does Not Include Sufficient Financial Assurances to Ensure that PMEC Complies with Chapter 80.80 RCW.

RCW 80.80.040(11)(a) requires a carbon sequestration plan to contain "[p]rovisions for financial assurances, as a condition of plant operation, sufficient to ensure successful implementation of the carbon sequestration plan, including construction and operation of necessary equipment, and any other significant costs." EN has failed to satisfy this obligation. It has based its "financial assurances" on the amount it is willing to pay for sequestration, not any assessment of the realistic costs for implementing a sequestration plan for PMEC.

As discussed above, EN has announced that it will spend no more than \$5/tonne to implement sequestration (which amounts to \$240-270 million over PMEC 30-year operating

life). Plan at 7 (defining “feasibility” as a “cost of \$5/tonne CO₂ (\$240-270 million) inclusive of the \$50 million carbon capture investment.”). It reaches this figure by adding the \$50 million it is willing to pay for CO₂ capture technology, with \$10 million it will pay for studies to characterize geologic sequestration opportunities near Kalama, and \$200 million it will pay “for implementation of sequestration or mitigation as required,” for a total of \$260 million. EN divides the \$260 million figure by the amount of CO₂ it assumes it will have to sequester (1.6 to 1.8 million tonnes of CO₂/year for 30 years) to arrive at the \$5/tonne threshold. Put another way, EN is willing to spend only \$8 million per year on sequestration, including all research, capital, and operational costs.¹²

The amount EN is willing to pay is an inadequate basis for calculating financial assurances required under RCW 80.80.040(11)(a). Instead, EN should have estimated the realistic costs of implementing a sequestration plan, disclosed its available bond capacity should the costs of implementation exceed estimates, and projected the costs and availability of offsets in the western interconnection should sequestration fail. This would have tethered the required financial assurances to an assessment of what is realistically needed to satisfy the emissions performance standard.¹³ Because EN has disclosed only the amount it is willing to pay, but not for the realistic costs of complying with chapter 80.80 RCW, EN has failed to provide the

¹² Because EN has not broken down the lump-sum amounts it is willing to pay for sequestration, it is difficult to determine whether the amount EN proposes is sufficient to cover all sequestration costs. For example, as discussed in the next section, monitoring – both during carbon injection and long after well closure – is a crucial element of any sequestration plan. The figures that EN uses do not include the money necessary to fund this vital and long-term process. See Plan at 7 (stating that sum is based on “carbon capture, compression, transport and storage” only).

¹³ EN asks the Council to rely on its bonding capacity for any additional revenue needed to operate PMEC. Plan at 5 n.2. However, EN has failed to disclose its bond capacity or its creditworthiness, which may be problematic considering that EN previously committed one of the largest bond defaults in U.S. history.

financial assurances necessary to “ensure successful implementation of the sequestration plan,” as RCW 80.80.040(11)(a) requires.

D. EN’s Plan Does Not Provide an Effective Monitoring Program.

Monitoring the effectiveness and safety of CO₂ sequestration is an important scientific and policy consideration. A Plan to sequester carbon must include a robust, detailed monitoring plan to ensure that CO₂ injected into the ground stays in the ground – especially as the law requires *permanent* sequestration. To ensure this happens, a monitoring should generally include at least the following elements:

[a] verification system that is capable of tracking the evolution of CO₂ in the subsurface and either verify containment or provide triggers for remedial action; mitigation or remediation action to ensure that CO₂ remains contained underground without endangering underground sources of drinking water or being released to the atmosphere A number of monitoring techniques and tools are readily available. . . Determining what monitoring techniques will be used is vital, since for sequestration to qualify as sequestration and not merely injection, MMV is a necessity.

Peridas Decl. at ¶¶ 11, 14. Because EN has not actually proposed to take any specific steps toward making sequestration work for PMEC, however, the Plan includes almost nothing about this important topic. Here again, other projects provide at least some guideposts to evaluate EN’s silence regarding a monitoring plan. For example, FutureGen summarized the following approach to monitoring:

Measuring, monitoring, and verification activities are standard elements of underground injection permitting and of reservoir management in hydrocarbon production, enhanced oil recovery, natural gas storage, and industrial waste disposal in deep geologic formations. Regulatory requirements and best practices from all these related fields have informed the process of determining the appropriate technologies and level of MM&V [monitoring, measurement and valuation] necessary for the Alliance to demonstrate that CO₂ storage has been successful. The Offeror for each of the four candidate FutureGen sites has submitted a site-specific monitoring program in support of the NEPA process (Table 7.1). These monitoring approaches were compared between sites,

consolidated, and compared with regulatory approaches, standard approaches used by related industries, and approaches published by CO₂ storage experts.

Exhibit 4, FutureGen Initial Conceptual Design Report, Revision 2 (May, 2007) at 7.1 -7.2. See also Exhibit 5 at 15-20, Field Activity Plan (detailing monitoring program, including methods, for its test injections sites). These evaluations, which draw specific monitoring techniques from a number of different fields, contrasts sharply with EN's vague assertion that "long-term monitoring will be established to ensure permanency in accordance with a plan submitted to EFSEC for approval once additional details are known." Plan at 6.

E. The Plan Does Not Provide "Penalties for Failure to Achieve Implementation" of the Sequestration Plan.

EN incorrectly asserts that it has met this criterion because a sufficient "penalty" for PMEC would be the requirement that it "operate on natural gas or any combination of fuels that result in GHG emissions below 1,100 lb GHG/MWh" if it does not sequester sufficient carbon to meet the emissions performance standard.¹⁴ Plan at 6. The requirement that PMEC meet the emissions performance standard is not a "penalty" but rather an independent binding legal obligation.

The statute provides for penalties specifically for "failure to achieve implementation of the plan on schedule." RCW 80.80.040(11)(d). This provision provides a means to ensure that an applicant stays on track to implement its sequestration plan. In those instances, the Council's authority to levy fines for failing to comply with a site certification agreement could provide an appropriate penalty. RCW 80.50.150(5) (Council has the authority to issue penalties up to \$5,000 per day for violations). For more serious violations, the Council's ability to revoke or

¹⁴ As an initial matter, it difficult to understand how operating on natural gas qualifies as a "penalty" when EN has proposed to operate PMEC on natural gas for over a year at the outset. See Plan at 7 (Assumption D).

suspend a site certification under RCW 80.50.130 is an appropriate penalty.

Each of these penalties for failing to “achieve implementation of the plan on schedule” can provide a meaningful penalty only if EN’s Plan has deadlines and benchmarks for its steps to implement sequestration or other mandatory aspects of the Plan. EN has not produced a binding schedule to implement sequestration, leaving inadequate remedies under the Council’s general authority to ensure compliance with a site certification agreement. The Council has asked if prohibiting PMEC from operating “until EFSEC finds compliance” would be a sufficient penalty. Council Question 2(d). As explained infra at 34-36, the Council should not permit construction of the plant unless and until EN complies with the law. When and if EN has submitted a valid sequestration plan, however, NWECA agrees that prohibiting plant operation (or shutting it down) would be an appropriate penalty for failing to implement the sequestration plan. It is essential that EN be held to strict compliance with each step in the Plan to implement sequestration for PMEC. The Plan must contain sufficient deadlines and benchmarks to foreclose any claims of infeasibility without giving sequestration the best possible opportunity to work at the project.

F. The Plan Does Not Work “In Unison” With Chapter 80.70 RCW Because it Attempts to Double-Count Emissions Reductions Toward Compliance With Both Chapter 80.80 RCW and Chapter 80.70 RCW.

Chapter 80.80 RCW and chapter 80.70 RCW represent two different but complementary strategies for controlling GHG emissions from energy facilities. Chapter 80.80 RCW requires power plants to *reduce* emissions in order to comply with an emissions performance standard initially set by the legislature and subject to modification by CTED. RCW 80.80.040(1)-(2). Chapter 80.70 RCW requires energy facilities to *mitigate* 20% of their “total carbon dioxide emissions.” RCW 80.70.020(4). Though EN’s Plan does not accomplish either of these

requirements, these two chapters of Title 80 RCW are easily harmonized and work “in unison” to provide a cumulative and comprehensive program for controlling GHG emissions from energy facilities in Washington State. RCW 80.80.005(1)(e).

1. *Both chapter 80.80 RCW and chapter 80.70 RCW expressly prohibit EN from double-counting its emissions offsets.*

EN contends that it may double-count efforts to comply with the emissions performance standard in RCW 80.80.040 as simultaneously satisfying the mitigation requirements of chapter 80.70 RCW. Throughout its Plan, EN assumes that sequestration (or offsets in the event that sequestration is not feasible) to comply with 80.80 RCW can also be used to satisfy the mitigation mandates of 80.70 RCW:

To comply with the ESSB 6001 GHG emissions standard . . . PMEC will sequester or offset more than 20% of its emissions. Thus, PMEC will meet the requirements of RCW 80.70 through its compliance with ESSB 6001. This plan is submitted in satisfaction of ESSB 6001 and RCW 80.70.

. . . .

This Greenhouse Gas Reduction Plan (plan) sets out three parallel paths (geological sequestration, other sequestration and offset purchases) that PMEC will follow to comply with ESSB 6001 and RCW 80.70.

Plan at 2; *id.* at 7 (“To the extent that PMEC’s GHG emissions are sequestered or mitigated to comply with ESSB 6001, such sequestration or mitigation will also count in unison toward PMEC’s mitigation obligations under RCW 80.70”).¹⁵ In other words, EN believes that since chapter 80.80 RCW requires it to sequester or offset more than 20% of its emissions, the mitigation requirements of chapter 80.70 RCW are automatically satisfied without any additional

¹⁵ EN estimates that it will need to reduce 1.6 to 1.8 million tons of GHG emissions “annually to comply with both ESSB 6001 and RCW 80.70.” Prefiled Testimony of Theodore J. Beatty at 5, lines 7-8. However, EN admits in its GHG Plan that these figures are in fact the estimate of what is needed to reduce PMEC’s emissions to satisfy the emissions performance standard, not the additional mitigation required under chapter 80.70 RCW. *See* Plan at 10.

action.

In making these assumptions, EN has ignored the provisions of chapter 80.70 RCW specifically prohibiting double-counting of carbon offsets as a way of satisfying the mitigation mandate. Chapter 80.70 RCW specifically requires that:

Carbon dioxide mitigation plans relying on purchase of permanent carbon credits must meet the following criteria:

- (a) Credits must derive from real, verified, permanent, and enforceable carbon dioxide or carbon dioxide equivalents emission mitigation *not otherwise required by statute*, regulation, or other legal requirements;
- (b) The credits must be acquired after July 1, 2004; and
- (c) The credits *may not have been used for other carbon dioxide mitigation projects*.

RCW 80.70.030(1) (emphases added). EN's attempt to double-count reductions toward compliance with both laws is essentially an argument that chapter 80.80 RCW somehow impliedly repealed the provisions in RCW 80.70.030(1)(a) and (c) expressly prohibiting that result. Such an interpretation flies in the face of the legislature's command that the two requirements be interpreted "in unison." RCW 80.80.005(e).

If the legislature had intended to repeal portions of chapter 80.70 RCW, it would have clearly expressed such intent. Cf. State v. Conte, 159 Wn.2d 797, 815, 154 P.3d 194 (2007) ("Implied repeal is disfavored and will be found only (1) where the later act covers the entire field of the earlier one, is complete in itself, and is intended to supersede prior legislation, or (2) where the two acts cannot be reconciled and both given effect by a fair and reasonable construction.") (citations omitted); Amalgamated Transit Union Legislative Council v. State, 145 Wn.2d 544, 559, 40 P.3d 656 (2002) ("Repeal by implication is strongly disfavored. The legislature is presumed to be aware of its own enactments . . .") (citations omitted). It is

untenable to suggest that the legislature affected an implied repeal of the earlier-enacted chapter

OPENING BRIEF OF INTERVENORS NW ENERGY
COALITION, WASHINGTON ENVIRONMENTAL COUNCIL,
AND SIERRA CLUB ON ENERGY NORTHWEST'S
GREENHOUSE GAS REDUCTION PLAN -26-

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

80.70 RCW simply by directing, in the intent section of RCW 80.80.005, that these two laws be implemented “in unison.”

Moreover, EN’s attempt to satisfy both statutes with the same amount of emissions reductions runs afoul of the plain language of chapter 80.80 RCW. The only emissions reductions that EN may count toward meeting the emissions performance standard set in chapter 80.80 RCW are those “reduction[s that] would not have occurred otherwise or absent this contractual agreement.” RCW 80.80.040(13). If emissions reductions are purchased as carbon credits necessary to comply with chapter 80.70 RCW, the attendant reduction “would have occurred” even without a contract to meet the requirements of chapter 80.80 RCW. EN’s plan, which seeks to double-count its purchased emissions reductions, violates the prohibitions of both chapter 80.80 RCW and chapter 80.70 RCW. The Council should give effect to all the provisions of both laws, including those provisions prohibiting the double-counting of emissions reductions.

2. *The provisions of chapter 80.80 RCW and chapter 80.70 RCW can be harmonized to provide a comprehensive and cumulative scheme for controlling GHG emissions from energy facilities.*

Instead of interpreting chapter 80.80 RCW as impliedly repealing portions of chapter 80.70 RCW, or interpreting chapter 80.80 RCW as subsuming the requirements of chapter 80.70 RCW, these statutes can and should be read in harmony. See, e.g., Anderson v. Dept. of Corrections, 159 Wn.2d 849, 858-59, 154 P.3d 220 (2007) (“[W]here potentially conflicting acts can be harmonized, we construe each to maintain the integrity of the other.”) (citing Mastered v. Wash. Mineral Prods., Inc., 85 Wn.2d 166, 168, 531 P.2d 805 (1975)) (footnote omitted).

Giving effect to the legislature’s use of “in unison,” the total emissions subject to the mitigation requirements of chapter 80.70 RCW do not include those emissions reductions offset or

sequestered under RCW 80.80.040(13). Indeed, the legislature expressly excluded reductions taken to comply with the emissions performance standard from its definition of “emissions.” RCW 80.80.040(7)(c) (“Those emissions sequestered or mitigated as approved under subsection (13) of this section . . . shall not be counted as emissions of the power plant in determining compliance with the greenhouse gases emission performance standard.”). However, 20% of the “emissions” remaining after compliance with the emissions performance standard must still be mitigated pursuant to chapter 80.70 RCW.¹⁶ In short, compliance with chapter 80.80 RCW’s emissions performance standard must come first and the mitigation required by chapter 80.70 RCW is calculated based on the “emissions” remaining after the emissions performance standard is achieved.

This harmonious interpretation of the statutory scheme is buttressed by the fact that the two statutes are intended to address GHG emissions in two very different ways. RCW 80.70.020(4) requires a facility to “*provide mitigation* for twenty percent of the total carbon dioxide emissions produced by the facility.” (emphasis added). Under chapter 80.70 RCW “mitigation” includes a broad sweep of measures such as “energy efficiency measures, clean and

¹⁶ EN has acknowledged that if it opts to satisfy chapter 80.80 RCW by running the facility on natural gas, it still must comply with chapter 80.70 RCW by mitigating 20% of the emissions. See Plan at 7 (“Any PMEC natural gas power generation delivered for commercial sale before plant operation will be mitigated under RCW 80.70 using the purchase of carbon credits, payments to third parties or applicant controlled reduction projects.”); *id.* at 11 (stating that when running on natural gas, “PMEC would not be required to reduce GHG emissions under ESSB 6001. . . .” but commits that it “would still meet the requirements of RCW 80.70 under this scenario”). EN cannot explain why it *would* mitigate 20% of its emissions to meet chapter 80.70 RCW when burning natural gas (and hence also meeting the emissions performance standard), but *would not* mitigate 20% of its emissions if it was burning coal and sequestering to meet the emissions performance standard. An IGCC plant burning coal or petcoke syngas (and sequestering its emissions to meet the 1,100 lb GHG/MWh performance standard) should not be treated differently than a plant that complies with the emissions performance standard by burning natural gas. Under chapter 80.70 RCW, *both* types of plants must mitigate 20% of the emissions remaining after achieving compliance with the emissions performance standard.

efficient transportation measures, qualified alternative energy resources, demand side management of electricity consumption, and carbon sequestration programs . . . verified carbon credits . . . enforceable and permanent reductions in carbon dioxide . . . through process change, equipment shutdown. . .” RCW 80.70.010(12)(a)-(d).¹⁷ The “total carbon dioxide emissions” are the calculated lump sum of emissions over a thirty-year period. RCW 80.70.010. Chapter 80.70 RCW allows the mitigation to be completed piecemeal or all once, with a “lump sum” purchase of approved mitigation credits. See RCW 80.70.020(4). In contrast, chapter 80.80 RCW limits the amount of emissions allowable at the “commence[ment] of operation” and requires emissions reductions to be calculated based on “the total emissions associated with producing electricity.” RCW 80.80.040(2), (5). In contrast to the mitigation required under chapter 80.70 RCW, the emissions performance standard in chapter 80.80 RCW is focused on reducing the amount of CO₂ that is emitted in the first place. Furthermore, as mentioned above, the “emissions” for purposes of meeting the emissions performance standard do not include those that are sequestered or mitigated pursuant to RCW 80.80.040(13). See RCW 80.80.040(7)(a)-(c).

In sum, chapter 80.80 RCW, read “in unison” with chapter 80.70 RCW, allows emissions reductions used to satisfy chapter 80.80 RCW’s emissions performance standard to be subtracted from the “total carbon emissions” subject to the independent mitigation mandate of chapter 80.70

¹⁷ Though sequestration is one acceptable form of mitigation for compliance with RCW 80.70.010(12), it does not follow that *any* sequestration done to comply with the separate requirements of chapter 80.80 RCW may be “counted” toward the 20% mitigation standard in chapter 80.70 RCW. Certainly, EN is free to utilize sequestration to satisfy each of the statutory mandates, but the calculation of the total amount of CO₂ to be sequestered in this scenario must first account for meeting the emissions performance standard in chapter 80.80 RCW. The amount of sequestration necessary to comply with the 20% mitigation requirement in chapter 80.70 RCW would then be calculated based on the emissions remaining after compliance with 80.80 RCW. Emissions sequestered to comply with the emissions performance standard are not counted as emissions when calculating the required 20% mitigation under chapter 80.70 RCW.

RCW. EN's Plan is legally insufficient because it does not provide for mitigation of 20% of its "total carbon emissions" excluding those emissions sequestered pursuant to RCW 80.80.040(7) or offset pursuant to RCW 80.80.040(13).

G. Running the plant on natural gas indefinitely is not an adequate alternative and does not necessarily comply with chapter 80.70 RCW.

In Question 2(f), the Council has asked whether firing PMEC on natural gas indefinitely (i.e., operates as a natural gas-fired facility) would be an adequate alternative that complies with chapters 80.80 and 80.70 RCW. Presuming that the emissions from burning natural gas at PMEC would be within the range that EN predicts in its Plan (i.e., between 800-900 lb GHG/MWh), operating the facility on natural gas would comply with the emissions performance standard in RCW 80.80.040. Operating on natural gas would not by itself, however, achieve compliance with chapter 80.70 RCW. As EN recognizes, a natural gas plant must still mitigate its carbon emissions under chapter 80.70 RCW. See supra at 28, n.16 (quoting Plan). As with every other element of this Plan, there is nothing in this document to demonstrate what strategies EN would pursue to comply with the independent requirements of chapter 80.70 RCW if operating on natural gas. Without more detail, it is not possible to conclude that PMEC would comply with chapter 80.70 RCW if it operated solely on natural gas.

Moreover, a more simplified, combined-cycle natural gas plant is not the project that EN has proposed to build. Instead, it has proposed to construct a far more expensive IGCC plant capable of burning many different types of fuel. If the plant were permitted and constructed as proposed, but was only permitted to burn natural gas, the additional cost of constructing an IGCC plant would be wasted. More important, there are a number of different environmental and economic impacts associated with running on natural gas that affect a determination of whether siting a natural-gas-fired plant (of whatever design) will "preserve and protect the

quality of the environment; [] enhance the public's opportunity to enjoy the esthetic and recreational benefits of the air, water and land resources; [] promote air cleanliness; and [] pursue beneficial changes in the environment" and will "provide abundant energy at reasonable cost." RCW 80.50.010(2)-(3). A full examination of those impacts is required as part of this adjudication and should not be delayed until the proposed IGCC plant is constructed and ready for operation.

II. THE COUNCIL SHOULD REMAND THE PLAN TO ENERGY NORTHWEST AND STAY CONSIDERATION OF THE APPLICATION.

[Addressing Council Questions 1(a), 2(c), 3(a), 3(b), 3(c), 4(a), 4(b)]

A. While Implementing Regulations May Be Helpful For Determining Many Of The Issues Raised, There Is No Need To Stay Consideration Of The Plan Until Rules Implementing Chapter 80.80 RCW Are Adopted.

NWEC anticipates that the implementing regulations under development would be helpful in evaluating many aspects of EN's Plan. The legislature provided a tight deadline for development of these rules and there has been no indication that staying this proceeding until their adoption on June 30, 2008, would prejudice the applicant. Moreover, many of the issues addressed in this brief would benefit from criteria that will likely be included in the rules. Having objective criteria to evaluate such elements of sequestration plans as monitoring and the adequacy of financial assurances would help the Council evaluate this Plan and achieve consistent application of the statute over time.

However, NWEC believes that the substantive inadequacies in EN's Plan detailed in this memorandum are so fundamental that the Council is capable of determining immediately that the Plan violates the plain requirements of chapter 80.80 RCW, rather than waiting until the Department of Ecology and EFSEC have adopted regulations. For example, while regulations fleshing out the hallmarks of "sufficient technical documentation to support the planned

sequestration” could be useful in evaluating carbon sequestration plans, there can be no reasonable dispute that in *this Plan*, EN has failed to provide *any* technical documentation to support sequestration. See supra at 9-14. See also Plan at 2 and 3, n.1 (admitting that “[t]his plan does not propose any specific on-site or off-site sequestration testing or other specific projects” and promising to submit the first phase of a study plan that merely starts to consider sequestration “when the study plan is developed in detail.”). Because the Plan fails to provide even the basic requirements of the plain language of the statute, awaiting the regulations would likely only delay the inevitable.

B. EN must submit a legally valid Plan to commence the adjudication.

EN must submit a legally valid Plan for the Council to initiate the full-scale adjudication. A valid greenhouse gas reduction Plan is a fundamental requirement of the law, without which this adjudication cannot lawfully proceed. If EN cannot demonstrate compliance with the emissions performance standard, the legislature has already commanded that PMEC may not be permitted and built. An adequate sequestration plan is a prerequisite to proceeding with a coal-fired power plant. There is nothing to be gained by moving forward to adjudicate a host of other issues raised by the application for a plant that may never be constructed because the applicant cannot demonstrate compliance with the law.

The ability to make minor modifications to the application under WAC 463-10-116 does not alter this result. Though WAC 463-10-116 allows an applicant to make minor amendments under narrowly prescribed conditions during the adjudication, an attempt to repair EN’s facially invalid Plan is not the type of modification that can be fixed by such a routine amendment.

Permitting EN to continually supplement and modify the Plan would also add needless complexity to the process as the parties attempt to address a moving target. For an element of

the application as fundamental as compliance with chapter 80.80 RCW, EN must at this stage inform the Council and the parties what it will do.

C. If the Council Finds EN's Plan Inadequate, EN Can Submit a New Plan Subject to RCW 80.80.040(13).

Although EN's proposed Plan is inadequate and cannot simply be supplemented as the adjudication moves forward, this does not necessarily mean that EN loses the benefits of RCW 80.80.040(13). The legislature crafted a very narrow and conditional exception for "projects" already in the permit process when the bill was enacted. For those applicants, RCW 80.80.040(13) provides that "a project under consideration . . . by July 22, 2007" must submit an adequate sequestration plan like all other projects and must make a good faith effort to implement that plan. However, if it later proves infeasible to implement the plan, this subset of projects (consisting only of PMEC) qualify for the alternative method of meeting the emissions performance standard by purchasing emissions reductions. RCW 80.80.040(13).

If the Council rejects EN's current Plan – and it should – EN may resubmit a sequestration plan that complies with the law. So long as the new plan did not fundamentally alter PMEC such that it is no longer the same "project" that the Council was considering on July 27, 2007, the exception provided by 80.80.040 (13) would apply. Assuming that after public comment and briefing on the legal sufficiency of that plan, the Council approves that plan, EN may still pursue the option of purchasing emissions reductions if it validly concludes that sequestration is not feasible after a "good faith effort" to implement that Plan.

III. THE COUNCIL SHOULD NOT ISSUE A CONDITIONAL PERMIT FOR PMEC

As indicated by the Council's decision to bifurcate this adjudication, EN's compliance with chapter 80.80 RCW is a legal question that, in the interest of judicial and administrative economy, must be resolved up front. While the Council has the authority to issue a conditional

permit under some circumstances, RCW 80.80.040(12)(b) requires EFSEC to “consider the adequacy of sequestration or the plan for sequestration in its adjudicative proceedings . . . and incorporate specific findings regarding the adequacy in its recommendation to the governor.” Moreover, WAC 463-30-320(6) requires that “every recommendation to the governor shall . . . [c]ontain a recommendation disposing of all contested issues” in the adjudication. Together, these provisions require that a final determination of the adequacy of the plan be made now, before the Council makes a recommendation to the Governor.

Compliance with chapter 80.80 RCW is fundamental to EN’s ability to build and operate PMEC. By establishing a mandatory emissions reduction standard, the legislature has prohibited projects that are incapable of meeting that standard. That determination must be made as part of this adjudication. Without a definitive resolution now, EN is very likely to take further action, expend additional resources, and build momentum for this project in reliance on its inadequate Plan. With each step taken (especially including construction of PMEC itself), the less likely it becomes that alternatives, modifications, or even the option of abandoning the project altogether will be considered or implemented. Cf. Northern Cheyenne Tribe v. Hodel, 851 F.2d 1152 (9th Cir. 1988) (noting that “[b]ureaucratic rationalization and bureaucratic momentum are real dangers to be anticipated and avoided”); Sierra Club v. Marsh, 872 F.2d 497, 504 (1st Cir.1989) (taking account of the “difficulty of stopping a bureaucratic steam roller,” in issuing injunction under National Environmental Policy Act); Calvert Cliffs’ Coordinating Comm. v. Atomic Energy Comm’n., 449 F.2d 1109, 1128 (D.C. Cir. 1971) (same). For example, if the only way for EN to comply with the emissions performance standard is to operate on natural gas, that determination is best made long before EN expends its – and ultimately its ratepayers’ – dollars to build a more expensive IGCC plant. As a practical matter, fundamental design changes or

other alternatives and modifications available before the plant is constructed will likely be foreclosed by actual construction. This raises the possibility that structural or design alternatives that may facilitate compliance with the law will be off the table by the time they are identified. A decision to change the proposal for PMEC in any way should be made now, not several years down the road when EN is ready to begin operation of an expensive (and at that point potentially wasteful) IGCC plant.

IV. THE PLAN IS PREMISED ON ASSUMPTIONS THAT VIOLATE THE LAW.

Although the Council's questions cover a number of the inadequacies in EN's Plan, there are several additional legal defects in the Plan that do not fit neatly into the categories addressed above. Many of these violations stem from assumptions embedded in the Plan and render it fatally deficient. NWECC discusses those issues here in order to provide for a comprehensive consideration of the legal inadequacies in the Plan.

A. EN's Calculation of the Amount of Emissions Reductions Necessary to Comply With the Emissions Performance Standard Violates RCW 80.80.040(5).

EN concludes that when operating on syngas produced from coal or petroleum coke, PMEC's "GHG emissions rate is estimated at 1500-1700 lb GHG/MWh." Plan at 10. EN predicts that it will need to sequester 400-600 lb GHG/MWh (approximately 1.6 to 1.8 million tonnes of CO₂ per year) to meet the 1,100 lb/MWh emissions performance standard. *Id.* While it is far from clear how EN arrived at these figures, it appears that EN based its measurements only on the amount of CO₂ that is emitted by burning "the syngas . . . entering the combustion turbines . . . divided by the net power output to yield an appropriate GHG emissions rate." Plan at 9. The Plan defines "net power output" as "the maximum continuous electric generating station capacity, less auxiliary load consumed for electricity production." Plan at 8 (Assumption

O). Put another way, EN has excluded all of the emissions associated with procuring and

producing the syngas from its estimation of total GHG emissions.

The production of syngas is itself an energy intensive process. As EN describes on its website,

[t]he process begins with an air separation unit that splits ambient air into oxygen and nitrogen. The gasifier uses 96% of the oxygen stream, and the sulfur recovery process consumes the remaining 4% . . . Coal or petroleum coke is blended, pulverized, and mixed with water to produce a 62-68% coal/water slurry. The slurry is injected with oxygen at high pressure (375 psi) into the gasifier. Partial oxidation of the coal produces 2400-2700°F temperatures and transforms the slurry into steam. The combination of heat, pressure, and steam breaks down the feedstock and creates chemical reactions that produce a hydrogen (H₂) carbon monoxide (CO) synthesis gas, or syngas.

<http://www.energy-northwest.com/generation/igcc/technical.php> (last viewed Oct. 21, 2007).

Indeed, roughly 20% of the power produced by a typical IGCC plant of this size is consumed by the operating needs of the plant. See Steve Jenkins, URS Corporation, “IGCC 101” Presentation to Colorado Public Utilities Commission at 47 of 70 (Feb. 12, 2007).¹⁸ Mr. Krueger explains in his prefiled testimony that the “air separation unit” alone “requires approximately 83 MW of power for its operation.” Prefiled Testimony of Thomas W. Krueger at 4, lines 1-3 (explaining that EN has contracted with an external company to supply the necessary nitrogen and oxygen).¹⁹

The law requires a far more comprehensive examination of the amount of CO₂ that will result from operation of P MEC. Chapter 80.80 RCW requires that “in determining the rate of emissions of greenhouse gases for baseload electric generation, the *total emissions associated with producing electricity shall be included.*” RCW 80.80.040(5) (emphasis added). While the legislature did not define the precise boundaries of this term, a comparison of this language to

¹⁸ A copy of this presentation is available at http://www.dora.state.co.us/puc/electric/CO_PUC_IGCC_101.pdf (last viewed Oct. 23, 2007).

¹⁹ Under the broad language of 80.80.040 (5), EN is not permitted to ignore the power required to produce gases essential to syngas production, regardless of where that production takes place.

the emissions addressed in chapter 80.70 RCW provides some guidance. As discussed supra at 28-30, chapter 80.70 RCW defines and addresses emissions in the context of “total carbon dioxide emissions” emitted “by the facility.” RCW 80.70.010(17), .020(4). In contrast, the plain terms of RCW 80.80.040(5) indicate that the legislature was concerned with a far broader profile of emissions. The expansive sweep of the phrase “total emissions associated with producing electricity” must encompass those emissions associated with obtaining and preparing the fuels used to run the plant. In addition to the energy-intensive process for producing syngas from any feedstock, there are a number of other emissions that result from the mining, refining, and transportation of this fuel. For example, there are large CO₂ emissions produced by mining and transportation of coal from Wyoming and Montana to P MEC. All of the emissions from these various stages of energy production must be included in the “total emissions associated with producing electricity.”

EN fails to include any of these emissions in its estimate of P MEC GHG emissions rate. While there are likely many other emissions “associated with producing electricity” at P MEC, EN has violated RCW 80.80.040(5) by limiting its consideration to the most narrow set of CO₂ emissions possible – those generated by burning the refined syngas. A valid Plan must include a far more comprehensive assessment of the emissions “associated” with the proposal. Only when these emissions have been accounted for and included within the “total emissions associated with producing electricity” can EN present a valid picture of the amount of CO₂ that it must reduce to comply with the law.

B. EN’s Assumption That 1,100 lb CO₂/MWh is the Most Stringent Emissions Performance Standard That P MEC Must Ever Meet Contradicts the Law.

EN also erroneously assumes that “P MEC will not be required to meet any GHG emissions performance standard under ESSB 6001 that is more burdensome than 1,100 lb

GHG/MWh.” Plan at 7 (Assumption L). However, RCW 80.80.040 does not permanently establish 1,100 lb GHG/MWh as the emissions performance standard. Instead, it sets the standard as “the lower of” that amount or “the average available greenhouse gases emissions output as determined under RCW 80.80.050.” RCW 80.80.040(1)(b). RCW 80.80.050 requires that every five years CTED shall complete a “survey of new combined-cycle natural gas thermal electric generation turbines commercially available . . . to determine the average rate of emissions of greenhouse gases for these turbines . . . [and] shall adopt by rule the average available greenhouse gas emissions output.”

In other words, the legislature provided for the emissions performance standard to be progressively tightened every five years as natural gas turbine technology advances and natural gas facilities are able to produce more power with fewer CO₂ emissions. EN’s contrary assumption that the 1,100 lb GHG/MWh standard will never change not only conflicts with this provision, but is unreasonable. EN provides no basis to assume – especially in light of higher prices for natural gas – that natural gas turbine efficiency will remain static in the 30-year projected operating life of P MEC. Indeed, this assumption contradicts EN’s admission that, if P MEC were operated on natural gas, it would already emitting less than 1,100 lb GHG per MWh. See Plan at 10 (estimating that P MEC would emit “800-900 lb GHG/MWh for natural gas operations.”). EN’s unwarranted assumption that the emissions performance standard will never be lower than 1,100 lb GHG/MWh results in a gross underestimate in its calculations of the amount of carbon it must reduce to comply with chapter 80.80 RCW.

C. EN Cannot Delay Compliance With the Emissions Performance Standard.

In a final pair of confusing assumptions, EN seeks to duck its responsibility to comply with the emissions performance standard for at least five years after P MEC begins operation.

EN first assumes that “ESSB 6001 does not require PMEC to implement GHG reductions projects until five years following plant operation.” Plan at 7 (Assumption B). EN then assumes, somewhat inconsistently, that it may comply with the emissions performance standard for the first five years of operation by violating the standard and then “exceeding emissions reduction requirements over the remaining operating life of PMEC.” *Id.* (Assumption C). The emissions performance standard in RCW 80.80.040(1) is not nearly so malleable as to permit this “pollute now, potentially pay later” approach.

The emissions performance standard in RCW 80.80.040, which becomes effective on July 1, 2008, must be met on the first day that PMEC begins operations. There is no five-year grace period for meeting this standard. Instead, the legislature crafted a single narrow exception allowing entities that have assembled and made a good faith effort to implement a sequestration plan that includes all of the elements of RCW 80.80.040(11) up to five years to begin sequestering CO₂. RCW 80.80.040(11)(b); see also id. at .040(11) (directing EFSEC and Ecology to develop rules to evaluate carbon sequestration plans from those entities that “*will commence sequestration after the date that electricity is first produced*”) (emphasis added). If the legislature had intended, as EN evidently believes, for the standard to remain generally dormant for five more years, it would have set an effective date in 2013 rather than in 2008. EN’s assumptions are based on an untenable reading of the statute and must be rejected.

As discussed throughout this brief, *this* Plan, however, is not a plan to sequester carbon as required by RCW 80.80.040(11) and .040(11)(b). At best, the Plan serves to delay EN’s obligation to present the requisite detail until some unspecified point in the future. At worst, it is a legally and factually flawed attempt to end-run EN’s statutory obligation to make a good faith effort to implement sequestration at PMEC by moving directly to the fallback provisions

allowing it to meet the standard by purchasing emissions reductions. RCW 80.80.040(13). In either case, P MEC is not eligible to delay compliance with the law for five years.

CONCLUSION

Chapter 80.80 RCW does not give EN a free pass to build P MEC, begin operations, and delay until after five years of operation its proposal to the Council for compliance with the law. But this is exactly what EN's Plan proposes. Instead, the options at this stage are clear – EN must compile a plan that includes all of the elements of RCW 80.80.040(11), including full and sufficient technical documentation to support sequestration, and make a “good faith” effort to sequester. It must also demonstrate that it can assemble “the plan that requires the project owner” to purchase emissions reductions to meet the emissions performance standard if sequestration fails. EN's proposed “Greenhouse Gas Reduction Plan” contains neither a strategy to sequester emissions at P MEC, nor the required back-up plan for purchasing emissions reductions from other power plants should the sequestration efforts fail. Because the Plan is fundamentally insufficient, the Council should reject the Plan and remand EN's site application for revisions. In the alternative, the Council should stay the adjudication until such time as EN submits a plan – subject to public input and Council review – that complies with the law.

Respectfully submitted this 25th day of October, 2007.

/s/ Stephen D. Mashuda

JAN HASSELMAN (WSB #29107)
STEPHEN D. MASHUDA (WSB #36968)
JOSHUA OSBORNE-KLEIN (WSB #36736)
705 Second Avenue, Suite 203
Seattle, WA 98104
(206) 343-7340
(206) 343-1526 [FAX]
jhasselman@earthjustice.org
smashuda@earthjustice.org
josborne-klein@earthjustice.org

*Attorneys for Northwest Energy Coalition,
Washington Environmental Council and
Sierra Club, Intervenors*

CERTIFICATE OF SERVICE

I am a citizen of the United States and a resident of the State of Washington. I am over 18 years of age and not a party to this action. My business address is 705 Second Avenue, Suite 203, Seattle, Washington 98104.

On October 25, 2007, I served a true and correct copy of the following documents on the parties listed below:

- 1. Opening Brief of Intervenors NW Energy Coalition, Washington Environmental Council, and Sierra Club on Energy Northwest's Greenhouse Gas Reduction Plan; and
- 2. Declaration of George Peridas, Ph.D. in Support of Northwest Energy Coalition's Opening Brief on Energy Northwest's Greenhouse Gas Reduction Plan.

Mr. Allen J. Fiksdal (original and 15 copies)

EFSEC Manager
Energy Facility Site Evaluation Council
905 Plum Street SE, Building 3, 3rd Floor
PO Box 43172
Olympia, WA 98504-3172
allenf@acted.wa.gov
stephenp@cted.wa.gov

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Ted Beatty
Energy Northwest
Columbia Generating Station
76 North Power Plant Loop
Richland, WA 99354
P.O. Box 968
Richland, WA 99352
E-mail: tbeatty@energy-northwest.com
Phone: (509) 371-5531
Fax: (509) 377-8124
E-mail: tbeatty@energy-northwest.com
Applicant

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Tom Krueger
Energy Northwest
PO Box 968
Richland, WA 99352
tkrueger@energy-northwest.com
Applicant

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Elizabeth Thomas
K&L Gates
925 Fourth Avenue, Suite 2900
Seattle, WA 98104
Phone: (206) 623-7580
Fax: (206) 370-6109
E-mail: liz.thomas@klgates.com
Applicant Energy Northwest

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Denise M. Lietz
K&L Gates LLP
925 4th Ave., Suite 2900
Seattle, WA 98104-1158
Phone: (206) 370-8024
Fax: (206) 370-6288
Denise.lietz@klgates.com
Applicant Energy Northwest

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Katy Chaney
URS Corporation
1501 4th Avenue, Suite 1400
Seattle, WA 98101
Phone: (206) 438-2061
Fax: (866) 489-8791
E-mail: katychaney@urscorp.com
Applicant - Energy Northwest

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Kyle Crews
Assistant Attorney General
P.O. Box 40108
Olympia, WA 98504
Phone: (360) 664-2510
Fax: (360) 586-3595
E-mail: kylec@atg.wa.gov

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Bob Wallace
Administrative Law Judge
c/o EFSEC
905 Plum Street SE Building 4
P.O. Box 43172
Olympia, WA 98504-3172
Phone: (360) 956-2121
Fax: (360) 956-2158

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Michael Tribble
Assistant Attorney General
Counsel for the Environment
Office of the Attorney General
1125 Washington St. S.E.
P.O. Box 40100
Olympia, WA 98504-0100
Phone: (360) 753-2711
Fax: (360) 664-0229
E-mail: michaeltl@atg.wa.gov
NicoleT@atg.wa.gov
Counsel for the Environment

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Laura J. Watson
Assistant Attorney General
Attorney General of Washington
Ecology Division.
2425 Bristol Court SW, 2nd Floor
Olympia, WA 98502
Phone: (360) 586-4614
E-mail: LauraWa2@atg.wa.gov
ECYOLYEF@atg.wa.gov
Counsel for Department of Ecology

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Tony Usibelli
Assistant Director, Energy Policy Division
CTED
P.O. Box 43173
Olympia, WA 98504-3173
Phone: (360) 956-2125
Fax: (360) 956-2180
E-mail: tonyu@cted.wa.gov
*Washington State Department of Community, Trade and
Economic Development*

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Alice Blado
Assistant Attorney General
CTED
P.O. Box 40109
Olympia, WA 98504-0117
Phone: (360) 753-6216
E-mail: Aliceb@atg.wa.gov
*Washington State Department of Community, Trade and
Economic Development*

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Mark Anderson
Senior Energy Policy Specialist
CTED
PO Box 43173
Olympia, WA 98504-3173
Phone: (360) 725-3117
Fax: (360) 586-0049
E-mail: marka@cted.wa.gov
*Washington State Department of Community, Trade and
Economic Development*

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Brett VandenHeuvel
Columbia Riverkeeper
917 SW Oak St., Suite 414
Portland, OR 97205
Phone: (503) 224-3240
E-mail: brett@lawofficebv.com
Columbia Riverkeepers

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Scott Jerger
Field Jerger LLP
610 SW Alder Street, Suite 910
Portland, OR 97205
Phone: (503) 228-9115
E-mail: scott@fieldjerger.com
Columbia Riverkeepers

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Mark Wilson
Manager of Planning
Port of Kalama
380 W. marine Drive
Kalama, WA 98625
Phone: (360) 673-2325
E-mail: markwilson@portofkalama.com
Port of Kalama

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Mike Wojtowicz, Director
Dept. of Building and Planning
Cowlitz County
207 4th Avenue
Kelso, WA 98626
Phone: (360) 577-3052
Fax: (360) 414-5550
E-mail: wojtowiczm@co.cowlitz.wa.us
Cowlitz County

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

Pete Poulsen, Mayor
City of Kalama
320 N. First
P.O. Box 1007
Kalama, WA 98625
Phone: (360) 673-4561
Fax: (360) 673-4560
E-mail: cityofkalama@kalama.com
City of Kalama

- via facsimile
- via overnight courier
- via first-class U.S. mail
- via hand delivery
- via e-mail
- via certified mail
- via electronic service by Clerk

I, Cheryl McEvoy, declare under penalty of perjury that the foregoing is true and correct.

Executed this 25th day of October, 2007, at Seattle, Washington.


Cheryl McEvoy