UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
	)	**Docket No. 50-391**
TENNESSEE VALLEY AUTHORITY	)	
	)	
(Watts Bar Unit 2)	)	

SOUTHERN ALLIANCE FOR CLEAN ENERGY'S PETITION FOR INTERLOCUTORY REVIEW OF LBP-10-12 (DENYING SACE'S WAIVER PETITION)

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I. INTRODUCTION AND SUMMARY OF GROUNDS FOR PETITION

Pursuant to 10 C.F.R. §§ 2.341(b) and 2.341(f)(2), Petitioner Southern Alliance for Clean Energy ("SACE") hereby petitions the U.S. Nuclear Regulatory Commission ("NRC" or "Commission") for interlocutory review of LBP-10-12, Memorandum and Order (Denial of Petition to Waive 10 C.F.R. §§ 51.53(b), 51.95(b), 51.106(c) in the Watts Bar Operating License Proceeding) (June 29, 2010) ("LBP-10-12").[1] In LBP-10-12, the Atomic Safety and Licensing Board ("ASLB") refused to refer to the Commission SACE's request for a waiver of NRC regulations excusing consideration of need for power and the cost-effectiveness of alternative energy sources in operating license proceedings for nuclear power plants. SACE seeks such a waiver for purposes of assessing the need for and energy alternatives to the Tennessee Valley Authority's ("TVA's") proposed Watts Bar Unit 2 nuclear power plant. *See* Petition for Waiver of 10

[1] The Commission has previously ruled that decisions regarding waiver petitions are not final and therefore petitions for review must meet the NRC's standards for interlocutory review. *Louisiana Energy Services* (Claiborne Enrichment Center), CLI-95-7, 41 NRC 383, 384 (1995).

C.F.R. §§ 51.53(b) and 51.95(b) With Respect to Admission of Contention Regarding Need for Power and Consideration of Alternative Energy Sources (February 4, 2010) ("Waiver Petition").

The principal ground for the ASLB's decision was its conclusion that SACE had failed to meet the test set forth in *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), ALAB-837, 23 NRC 525, 546-48 (1986) that a waiver petitioner must show that the costs and environmental impacts of operating the reactor in question would be greater than the costs and environmental impacts of continuing to rely on existing baseload capacity, such as coal-fired plants. *Id.*, slip op. at 16-17. The ASLB's conclusion raises the following important questions of law, fact, and policy:

First, the ASLB failed to recognize that the rationale undergirding both *Carolina Power & Light* and the NRC regulations, which excuse operating license applicants and the NRC Staff from evaluating the need for power and energy alternatives issues at the operating license stage, is inapposite to this case. *Carolina Power & Light* concerned a reactor for which construction was substantially complete. 23 NRC at 547. Where construction of a reactor has been completed, the Commission considers it reasonable to assume that the facility "would not be abandoned in favor of some other means of generating electricity." Proposed Rule, Need for Power and Alternative Energy Issues in the Operating License Proceedings, 46 Fed. Reg. 39,440, 39,441 (August 3, 1981). Therefore the Commission does not require a need for power or energy alternatives analysis at the operating license stage. Final Rule, Need for Power and Alternative Energy Issues in Operating License Proceedings, 47 Fed. Reg. 12,940, 12,941 (March 26,

1982). In contrast, construction of Watts Bar Unit 2 is far from complete. At the time the FSEIS was written in 2007, it was only 60% complete and $2.5 billion remained to be spent on construction of the reactor. *See* Waiver Petition at 4. Thus, it is "not a foregone conclusion" that it would be economical to use Watts Bar Unit 2 to replace existing baseload capacity. Declaration of Dr. Arjun Makhijani in Support of Southern Alliance for Clean Energy's Petition for Waiver of or Exception to 10 C.F.R. §§ 51.53(b) and 51.95(b), Etc., par. 14 (February 4, 2010) ("Makhijani 2/4/10 Declaration").

Second, by refusing to consider the new and significant information and circumstances presented in SACE's waiver petition, the ASLB violated the National Environmental Policy Act ("NEPA") as interpreted by the U.S. Supreme Court in *Marsh v. Oregon Natural Resources Council*, 489 U.S. 360, 374 (1989). *See also* 10 C.F.R. § 51.92(a). Both *Marsh* and 10 C.F.R. § 51.92(a) impose a non-discretionary duty on the NRC to consider new and significant information or changed circumstances if they have a bearing on the outcome of an agency's environmental analysis for a proposed facility. Here, although SACE showed how an array of changed circumstances and new information would significantly affect the outcome of the environmental analysis for Watts Bar Unit 2, the ASLB disregarded a significant portion of that information and instead imposed the irrelevant *Carolina Power & Light* test. By applying the *Carolina Power & Light* standard without regard to the new information and circumstances presented by SACE, the ASLB exceeded its authority under NEPA. Thus, LBP-10-12 "raises substantial questions of NEPA jurisprudence." *Pai'ina Hawaii, L.L.C.* (Materials License Application), CLI-10-18, slip op. at 20 (July 8, 2010).

Third, as the ASLB implicitly recognized in LBP-10-12, this case raises major questions of law, policy and discretion that warrant review, regardless of whether the Commission believes SACE has satisfied the waiver standard:

> Given the passage of almost four decades since the [construction permit application for Watts Bar 2] was submitted, the Commission may well wish to consider whether the need for power and the availability of alternative energy sources should be factored into the decision to grant or deny the OL.

Id., slip op. at 17. *See also* LBP-09-26, Memorandum and Order (Granting Petition to Intervene), slip op. at 44 (November 19, 2009) ("LBP-09-26"): "the fact pattern presented here, where construction of the facility is suspended for more than a quarter century, is unusual and not anticipated or discussed by the regulations."

Fourth, TVA and the Staff have both demonstrated, by their own actions, that the need for power review conducted by the NRC in the 1970's is obsolete and should be redone in order to comply with NEPA. TVA addressed both the issues of need for power and energy alternatives in its 2007 Final Supplemental Environmental Impact Statement ("FSEIS") for Watts Bar Unit 2 at 11-19 (June 2007). In fact, the FSEIS explicitly refers to these pages as "*the need for power analysis* presented in Chapter 1 [that] shows how completion of WBN Unit 2 would help TVA meet expected demands for increased baseload power and the need for greater operating reserves." FSEIS at 19 (emphasis added). The NRC Staff followed up on the FSEIS' need for power analysis with a Request for Additional Information, thus demonstrating that in the NRC Staff's technical judgment, the need for power issue should be revisited. *See* Waiver Petition at 5.

Finally, as demonstrated by SACE's Contention 4, TVA's analysis of the need for power and energy alternatives is inadequate to satisfy NEPA. Petition to Intervene and Hearing Request at 16-12 ("Hearing Request").

Therefore LBP-10-12 warrants review under 10 C.F.R. § 2.341(b)(4)(i), (ii) and (iii).

This petition also meets the standard for interlocutory review in 10 C.F.R. § 2.341(f)(2) because construction is now proceeding on Watts Bar Unit 2 and may be substantially complete by the time this case is over and LBP-10-12 is subject to review as part of the ASLB's final licensing decision. Once construction is completed, the issues of need for power and cost-effectiveness of energy alternatives may well be moot.[2]

II. FACTUAL AND PROCEDURAL BACKGROUND

A. Contention 4

In its July 13, 2009, petition to intervene and hearing request regarding TVA's application for an operating license for the Watts Bar Unit 2 reactor, SACE submitted a set of contentions that included Contention 4, challenging the adequacy of the need for power and energy alternatives analysis in TVA's FSEIS for Watts Bar Unit 2. Contention 4 was supported by Dr. Makhijani's expert declaration and report.[3]

As demonstrated in Contention 4 and Dr. Makhijani's report, TVA's analysis of the need for power and energy alternatives in the FSEIS is deficient in a number of significant respects. For instance, the FSEIS' energy demand projections are based on

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[2] SACE is currently preparing a request for suspension of construction of Watts Bar Unit 2 pending the resolution of the issues raised by this petition for review, which it expects to file in the near future.

[3] As noted by the ASLB in LBP-10-12 (slip op. at 17 n.76), Dr. Makhijani's report was mistakenly dated July 10, 2007.

outdated studies, including TVA's 1972 FEIS, which was proven wrong by the suspension of work on Watts Bar Unit 2. Hearing Request at 17. TVA also relies on its 1995 Integrated Resource Plan ("IRP") to justify Watts Bar Unit 2, even though the 1995 IRP intentionally *excluded* Watts Bar Unit 2 from its "preferred portfolio." *Id.* at 18. TVA also fails to account for the steadily declining demand for electricity in recent years and the national economic recession that has caused a devastating decline in regional industry and rise in unemployment rates. *Id.* at 18-19. The economic downturn is reflected in a steep decline in TVA power sales. *Id.*

Contention 4 charges that in light of these severe economic conditions, TVA has not provided sufficient information to show that the energy that would be produced by Watts Bar Unit 2 is needed. Given that TVA's cost of purchased power is less than the *operating cost* of some of its existing units, it is necessary to consider whether (i) purchased power, (ii) operating the units that are now idle as a result of lower demand, or (iii) some combination of purchased power contracts and operating idle units, would be preferable to completion of Watts Bar Unit 2. *Id.*

Contention 4 also asserts that the FSEIS does not provide a detailed analysis of energy alternatives, and rests on the mistaken implication that only a nuclear or fossil fuel plant can satisfy the need for baseload capacity. *Id.* at 20. This is no longer the case as the production of cleaner and more sustainable renewable energy sources, such as wind energy, has matured and become a major industry both in the United States and abroad. *Id.* Finally, the FSEIS fails to show that TVA has taken into account the requirements of the Energy Independence and Security Act of 2007 or that TVA is using its own energy

planning process to make a reasoned decision about whether Watts Bar Unit 2 is needed to satisfy regional energy demand. *Id.* at 21.

B. Contention 4 Dismissed in LBP-09-26

The ASLB rejected Contention 4 in LBP-09-26, on the sole ground that it constituted an impermissible challenge to the NRC's regulations. *Id.*, slip op. at 44. The ASLB did not reach the merits of Contention 4. *Id.*

C. SACE's Waiver Petition

On February 4, 2010, SACE submitted to the ASLB a petition for waiver of 10 C.F.R. §§ 51.53(b) and 51.95(b) (collectively "the No-New-Analysis Regulations"), to the extent those regulations bar consideration of the need for power and alternative energy sources (including energy efficiency/no action) in the licensing proceeding for Watts Bar Unit 2. Petition for Waiver of 10 C.F.R. §§ 51.53(b) and 51.95(b) With Respect to Admission of Contention Regarding Need for Power and Consideration of Alternative Energy Sources ("Waiver Petition").[4] Like Contention 4, the waiver petition was supported by the expert declaration of Dr. Arjun Makhijani ("Makhijani 2/4/10 Declaration").

SACE addressed and satisfied all of the criteria for granting a waiver petition. First, the waiver petition demonstrated that the circumstances of this case are unique in several important respects:

- Over 30 years have passed between the issuance of a construction permit and the conduct of an operating license proceeding. Waiver Petition at 4.

[4] Subsequently, SACE amended the waiver petition to add a request for waiver of 10 C.F.R. § 51.106(c). The ASLB granted the request in LBP-10-12. Slip op. at 13-14.

- Although the operating license proceeding has commenced, construction is far from complete: 40% of the facility remains unfinished, with an estimated cost of completion of $2.5 billion. *Id.* (citing Makhijani 2/4/10 Declaration, par. 13).
- In 1972, TVA predicted in its construction permit EIS that the power generated by Watts Bar Unit 2 was needed. In the decades that followed, TVA obviously found it more economical to rely on other sources of energy, including demand side management and efficiency, to the extent of purposely excluding Watts Bar 2 from the energy portfolio that it developed in the mid-1990's. Waiver Petition at 4-5.
- The past several decades have witnessed a number of fundamental changes in the regional economy, energy technology, and the administrative and political landscape. First, there have been steep declines in the regional economy in the TVA service area, including the automobile industry. Second, TVA has exhibited its own post-1972 pattern of chronic delays and escalating costs in nuclear plant construction. Third, TVA instituted a resource planning program that aggressively pursues efficiency and conservation, and that purposely excluded Watts Bar 2 from its energy plans through 1995. Finally, the cost of purchased power for TVA has been decreasing. All of these changes significantly undermined the validity of TVA's 1972 prediction of need for Watts Bar Unit 2. Waiver Petition at 5.
- The NRC's actions are internally contradictory with respect to considering issues of the need for power and energy alternatives. On the one hand, in this

adjudication the ASLB has interpreted 10 C.F.R. 10 C.F.R. §§ 51.53(b) and 51.95(b) to bar consideration of SACE's Contention 4. On the other hand, the NRC Staff (with TVA's cooperation) has taken up the issue of the need for power in its review of TVA's operating license application. In a December 3, 2009, Request for Additional Information ("RAI"), the NRC Staff posed a set of questions to TVA regarding the need for power. TVA agreed to answer the NRC Staff's questions, responding to some in an RAI Response on December 23, 2009, and postponing other answers until later. Waiver Petition at 5.

Second, SACE demonstrated that the purpose of the No-New-Analysis Regulations would not be served by applying them in this case. Waiver Petition at 6-8. As the NRC explained in proposing 10 C.F.R. §§ 51.53(b) and 51.95(c), the general purpose of those regulations is to avoid, at the operating license stage, the unnecessary duplication of need for power and energy alternatives analyses that were completed at the construction permit stage. Proposed Rule, Need for Power and Alternative Energy Issues in Operating License Proceedings, 46 Fed. Reg. 39,440 (August 3, 1981).

For several reasons, the Commission believed that once construction of a nuclear power plant is completed, any changes in the need for power or availability of energy alternatives would not be great enough to have a meaningful effect on an NRC operating licensing decision:

- At the construction permit stage, because there has been little site disruption or capital investment, "real alternatives to the construction and operation of the proposed facility exist, including no additional generating capacity at all if no

'need' exists or generation of the needed electricity by some non-nuclear energy source." Waiver Petition at 6 (citing 46 Fed. Reg. at 39,440).

- In contrast, once construction of a nuclear reactor is completed, it would almost always be cost-beneficial to operate the plant. *Id.* As the Commission explained:

> Operation of a nuclear power plant entails some environmental cost which should be justified, under NEPA, by some benefit from plant operation. In all cases to date, and in all foreseeable future cases, there will be some benefit in terms of either meeting increased energy needs or replacing older less economical generating capacity. Experience shows that completed plants are in fact used to their maximum availability for either purpose. Such facilities are not abandoned in favor of some other means of generating electricity. For purposes of this proposed rule the Commission has assumed, conservatively, that the plant is not needed to satisfy increased energy needs, but rather is justified, if at all, as a substitute for other generating capacity.

  Waiver Petition at 6 (citing 46 Fed. Reg. at 39,441).

- With respect to the analysis of energy alternatives, the Commission stated that it was not necessary to repeat the analyses absent "new information or new developments" showing that an alternative means of generating baseload power existed that was both environmentally and economically superior, and that this combination was extremely unlikely to occur. Waiver Petition at 7 (citing 46 Fed. Reg. at 39,441).

As SACE noted, in the final rule, the Commission repeated its previous conclusion that once construction of a nuclear reactor is completed, it would almost always be cost-beneficial to operate the plant. Waiver Petition at 7. The Commission also rejected a comment that the combination of energy conservation and alternative energy sources usually result in lower costs than operating a nuclear plant. *Id.* (citing 47 Fed. Reg. at

12,941). According to the Commission, "[i]f conservation lowers demand, then utility companies take the most expensive operating plants off-line first. Thus, a completed nuclear plant would be used as a substitute for less economical generating capacity," *i.e.*, coal fired plants. *Id.*

SACE demonstrated that the regulations' purpose is not satisfied here because construction of Watts Bar Unit 2 is not complete and TVA has demonstrated that it does not need Watts Bar Unit 2. Waiver Petition at 8. The No-New-Analysis Regulations are premised on a fundamental and indispensable assumption: that at the time of the operating license proceeding, construction of the proposed reactor has been finished. Only by assuming that the investment of large amounts of construction capital has been completed could the Commission reasonably conclude that operation of a new nuclear reactor would always be cost-effective. *Id.*

SACE pointed out that in the unique circumstances of this case, however, the Commission's essential assumption is unfulfilled: as of the date of preparation of the FSEIS, Watts Bar Unit 2 was only 60% complete, and TVA has $2.5 billion in capital expenditures ahead of it. Waiver Petition at 8 (citing Makhijani 2/4/10 Declaration, par. 13). The very fact that TVA has been able to satisfy its energy needs through means other than Watts Bar 2 for over three decades fatally undermines any assumption that it would be cost-effective for TVA to spend $2.5 billion to finish Watts Bar Unit 2. *Id.* Even TVA has admitted that construction is not complete and proposes to "update" the need for power analysis. FSEIS at 1.

SACE also cited Dr. Makhijani's declaration for the proposition that significant changes in the regional economy, energy technology, and the administrative and political landscape have significantly depressed the demand for energy in TVA's service area and altered the types of energy alternatives available to and pursued by TVA. Under the circumstances, it is not a foregone conclusion that operation of Watts Bar Unit 2 would be preferable to other energy alternatives. Waiver Petition at 8-9 (citing Makhijani 2/4/10 Declaration, par. 17).

SACE relied on Dr. Makhijani's declaration and his expert report in support of Contention 4 to demonstrate that TVA has not provided sufficient information to show that the energy that would be produced by Watts Bar Unit 2 is needed; nor has TVA provided an adequate discussion of the relative costs and benefits of energy alternatives. As Dr. Makhijani explains, given that TVA's cost of purchased power is less than the *operating cost* of some if its existing units, it is necessary to consider whether (i) purchased power, (ii) operating the units that are now idle as a result of lower demand, or (iii) some combination of purchased power contracts and operating idle units would be preferable to completion of Watts Bar Unit 2. Makhijani 2/4/10 Declaration, par. 26.

Thus, SACE showed that TVA's circumstances have changed so dramatically since it predicted the need for Watts Bar Unit 2 in 1972, and are so different from the circumstances assumed by the Commission in the No-New-Analysis Regulations, that the NRC has no lawful basis under NEPA for refusing to re-examine the need for the power generated by Watts Bar Unit 2 or the relative costs and benefits of relying on other energy alternatives. In order to fulfill its obligation under NEPA to make a well-

informed environmental decision regarding the licensing of Watts Bar 2, based on all current information that could affect the outcome of that decision, the NRC must waive 10 C.F.R. §§ 51.53(b) and 51.95(b) and examine the need for Watts Bar Unit 2 and the relative costs and benefits of energy alternatives. *Marsh*, 490 U.S. at 374. Waiver Petition at 9-10.

Finally, SACE argued that the NRC Staff has demonstrated, through the issuance of an RAI, that it considers the issue of the need for power to be relevant to the agency's licensing decision for Watts Bar Unit 2. Waiver Petition at 10. Given the conceded relevance of the issue to the NRC's licensing decision, SACE contended that it would be unlawful for the ASLB or the Commission to refuse SACE a hearing on the issue. Waiver Petition at 10 (citing *Union of Concerned Scientists v. NRC,* 735 F.2d 1437, 1439 (D.C. Cir. 1984), cert. denied, 469 U.S. 1132 (1985)). While the NRC Staff has not explicitly questioned TVA on the issue of energy alternatives, the issues of the need for power and energy alternatives are so closely related that both should be subject to a hearing.[5]

D. Waiver Petition denied in LBP-10-12

In LBP-10-12, the ASLB rejected arguments that SACE's waiver petition was inexcusably late and that SACE had fatally erred by failing initially to request a waiver of 10 C.F.R. § 51.106(c). *Id.,* slip op. at 13-14. However, the ASLB denied SACE's waiver petition on the substantive ground that SACE failed to make a *prima facie* showing that Watts Bar Unit 2 "'is not needed to meet increased energy demand and that it need not be used to displace an equivalent amount of older, less economical capacity.'" *Id.,* slip op.

[5] *See* Makhijani 2/4/10 Declaration, par. 18.

at 15 (quoting *Carolina Power & Light*, 23 NRC at 547). The ASLB also found that SACE had failed to "'establish that all of the applicant's fossil fuel baseload generation that is less efficient than [the facility under consideration] has been accounted for.'" *Id.* (citing *Carolina Power & Light*, 23 NRC at 548). In particular, the ASLB faulted SACE's expert, Dr. Makhijani, for failing to specify exactly what work remains to be completed at Watts Bar Unit 2 or its environmental impacts. LBP-10-12, slip op. at 16. The ASLB also found insufficient Dr. Makhijani's statement that "TVA continues to have more than enough idle capacity to generate electricity in the absence of Watts Bar [Unit] 2" and that "at all times during 2009 it was cheaper for TVA to purchase power than to operate some of its less efficient generation plants," because Dr. Makhijani offered "no information regarding the comparative financial and environmental cost of operating WBN Unit 2 as opposed to the continued operation of the fifty-nine coal-fired generating units or twenty-nine hydroelectric dams now relied upon for baseload power by TVA." LBP-10-12, slip op. at 16. Finally, the ASLB found that Dr. Makhijani had failed to show that alternative energy sources are environmentally and economically preferable to Watts Bar Unit 2. *Id.*

III. ARGUMENT

A. SACE Meets the Standard for Review in 10 C.F.R. § 2.341(b).

The central conclusion of LBP-10-12 – that in order to justify a waiver of the NRC's No-New-Analysis Regulations, SACE must compare the cost and environmental impacts of operating Watts Bar Unit 2 to the costs and environmental impacts of

continuing to operate TVA's existing baseload capacity -- is fatally defective on legal, factual, and policy grounds.

1. The ASLB erroneously relied on *Carolina Power & Light.*

LBP-10-12 incorrectly holds that *Carolina Power & Light* is "binding" in this case and precludes referral of SACE's waiver petition to the Commission. *Id.,* slip op. at 16-17. In *Carolina Power & Light,* the Appeal Board found it appropriate to require a waiver petitioner to show that the new reactor "need not be used to displace an equivalent amount of older, less economical capacity." *Id.* But *Carolina Power & Light* is inapposite because it concerned a reactor for which construction was already substantially complete. 23 NRC at 547. As the Commission recognized in promulgating the No-New-Analysis Regulations, once construction of a reactor is complete and the costs of building a new reactor have been expended, operating the reactor will almost always be cost-effective. Proposed Rule, 46 Fed. Reg. at 39,440.

Here, where construction of a reactor is significantly incomplete at the operating license stage and billions of dollars remain unspent, it is not reasonable to presume that it will be cost-effective to complete construction and operate the proposed reactor. Waiver Petition at 8. As Dr. Makhijani pointed out, the present value of the operating cost for Watts Bar Unit 2, plus the capital cost for completion of the plant, is about $5 billion (assuming operating costs of 2 cents per kWh in constant dollars for 40 years and a 6% constant-dollar discount rate). Makhijani 2/4/10 Declaration, par. 16. Given the incomplete status of construction of Watts Bar Unit 2, it is "not a foregone conclusion that it would be cost-effective for TVA to finish construction and operate the plant." *Id.,*

par. 17. Indeed, the very fact that TVA has been able to satisfy its energy needs through means other than Watts Bar Unit 2 for over three decades, also shows that neither TVA nor the NRC Staff has a reasonable basis to presume that it would be cost-effective for to spend $2.5 billion to finish building Watts Bar Unit 2. Waiver Petition at 8 (citing Makhijani 2/4/10 Declaration pars. 14-16.)

The ASLB acknowledges SACE's evidence regarding TVA's behavior over the past three decades, but rejects its relevance on the basis that SACE offers "no information regarding the comparative financial and environmental cost of operating WBN Unit 2 as opposed to the continued operation of the fifty-nine coal-fired generating units or twenty-nine hydroelectric dams now relied upon for baseload power by TVA." LBP-10-12, slip op. at 16. This criticism might be justified if TVA had completed its investment in Watts Bar Unit 2. In relation to the incomplete Watts Bar Unit 2, however, it is both illogical and inconsistent with the rationale underlying the No-New-Analysis Regulations. Moreover, Dr. Makhijani explicitly provided calculations that showed that TVA had overstated its power requirements by thousands of megawatts – far more than the capacity that Watts Bar 2 would add. Makhijani 2/4/10 Declaration, pars. 18 - 24.

2. LBP-10-12 violates NEPA.

By strictly applying the inapposite standard of *Carolina Power & Light* to the circumstances of this case, the ASLB violated NEPA as interpreted by the U.S. Supreme Court in *Marsh v. Oregon Natural Resources Council*, 489 U.S. 360, 367 (1989). *See also* 10 C.F.R. § 51.92(a). Both *Marsh* and 10 C.F.R. § 51.92(a) impose a non-discretionary duty on the NRC to consider new and significant information or changed

circumstances if they have a bearing on the outcome of an agency's environmental analysis for a proposed facility.

Here, SACE's waiver petition set forth a wide array of new information regarding circumstances that had significantly changed since the construction permit EIS for Watts Bar was prepared in 1972, as well as circumstances that were not anticipated in the No-New-Analysis Regulations. SACE also showed how this new information and changed circumstances would significantly affect the outcome of the environmental analysis for Watts Bar Unit 2. SACE also showed that the purpose of the No-New-Analysis Regulations was not satisfied in this case, because the No-New-Analysis Regulations are designed to fit circumstances that – while they might be ordinarily apply to the vast majority of reactors – do not apply in this case.

In LBP-10-12, the ASLB could have and should have applied 10 C.F.R. § 2.335 in a manner consistent with *Marsh* and 10 C.F.R. § 51.92 and granted SACE's waiver petition. Instead, the ASLB disregarded a significant portion of the new information and circumstances presented by SACE and imposed the irrelevant *Carolina Power & Light* test. By applying the *Carolina Power & Light* standard without regard to the new information and circumstances presented by SACE, the ASLB exceeded its authority under NEPA. Thus, LBP-10-12 "raises substantial questions of NEPA jurisprudence" that warrant review. *Pai'ina Hawaii, L.L.C.* (Materials License Application), CLI-10-18, slip op. at 20 (July 8, 2010).

3. The passage of over 30 years without an updated NEPA review raises major questions of law, policy and discretion.

As the ASLB implicitly recognizes in LBP-10-12, this case raises major questions of law, policy and discretion that warrant review, regardless of whether the Commission believes SACE has satisfied the waiver standard:

> Given the passage of almost four decades since the [construction permit application for Watts Bar 2] was submitted, the Commission may well wish to consider whether the need for power and the availability of alternative energy sources should be factored into the decision to grant or deny the OL.

Id., slip op. at 17. *See also* LBP-09-26, slip op. at 44: "the fact pattern presented here, where construction of the facility is suspended for more than a quarter century, is unusual and not anticipated or discussed by the regulations."[6] Other highly significant developments over the past several decades, which are not anticipated or discussed by the regulations -- and whose significance is ignored by the ASLB in LBP-10-12 -- are the steep decline in the regional economy (including the automobile industry) in the TVA service area, TVA's own post-1972 pattern of chronic delays and escalating costs in nuclear plant construction, TVA's institution of a resource planning program that aggressively pursues efficiency and conservation and that purposely excluded Watts Bar from its energy plans through 1995, and the decreasing cost of purchased power for TVA. Waiver Petition at 4-5 (citing Makhijani 2/4/10 Declaration, par. 17). In order to ensure that it fully complies with the requirements of NEPA and makes a fully informed decision regarding its options for protection of the environment in light of these

[6] The NRC Staff has also recognized that Watts Bar Units 1 and 2 have "a unique licensing history and regulatory framework." NRC Office Instruction LIC-110, Watts Bar Unit 2 License Application Review at 1 (September 2, 2008) (ADAMS Accession No. ML082460988).

significant developments, the Commission should grant SACE's waiver petition and admit Contention 4.

4. The actions of TVA and the NRC Staff demonstrate that the previous need for power analysis must be updated to comply with NEPA.

TVA and the Staff have both demonstrated, by their own actions, that the need for power review conducted by the NRC in the 1970's is obsolete and should be redone in order to comply with NEPA. TVA addressed both the issues of need for power and energy alternatives in its 2007 FSEIS at 12 and 13. The NRC Staff followed up with a Request for Additional Information regarding the issue of the need for power. Waiver Petition at 5 (citing Letter from Joel S. Wiebe, NRC, to Ashok S. Bhatnagar, TVA, re: Watts Bar Nuclear Plant, Unit 2 – Request for Additional Information Regarding Environmental Review (TAC No. MD8203) (December 3, 2009) (ADAMS Accession No. ML093030148)).

Although SACE believes TVA correctly identified the need to update the previous need for power and energy alternatives analysis for Watts Bar Unit 2, TVA's analyses themselves are inadequate to satisfy NEPA. *See* Contention 4. Therefore, as a matter of law, policy, and discretion, the Commission should follow the technical judgment of the TVA and the Staff regarding the appropriateness of a new need for power review, waive the need for power regulations, and order the ASLB to admit Contention 4.

B. SACE Meets the Standard for Interlocutory Review.

This petition meets the standard for interlocutory review in 10 C.F.R. § 2.341(f)(2) because construction is now proceeding on Watts Bar Unit 2 and may be finished by the time this case is over and SACE has the right to petition for review of LBP-10-12 as part of the ASLB's final licensing decision. Once construction is completed, the issues of need for power and cost-effectiveness of energy alternatives may well be considered moot. *See* 46 Fed. Reg. at 39,441, 47 Fed. Reg. at 12,941. Therefore, in order to ensure the consideration of reasonable and less environmentally or economically costly alternatives to operation of Watts Bar Unit 2, the Commission should resolve this petition and admit Contention 4 without awaiting the conclusion of this proceeding.

IV. CONCLUSION

For the foregoing reasons, the Commission should take review of LBP-10-12 and reverse it, requiring consideration of need for power and energy alternatives in the environmental report and EIS for Watts Bar Unit 2. The Commission should also admit SACE's Contention 4.

Respectfully submitted,

(Electronically signed by)
Diane Curran
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July 14, 2010

CERTIFICATE OF SERVICE

I certify that on July 14, 2010, I posted on the NRC's Electronic Information Exchange System copies of the foregoing Southern Alliance for Clean Energy's Petition for Interlocutory Review of LBP-10-12 (Denying SACE's Waiver Petition). It is my understanding that as a result, the following parties were served:

Lawrence G. McDade, Chair Paul B. Abramson Gary S. Arnold Atomic Safety and Licensing Board Panel U.S. Nuclear Regulatory Commission Mail Stop T-3F23 Lgm1@nrc.gov, pba@nrc.gov, wxb3@nrc.gov	Kathryn M. Sutton, Esq. Paul M. Bessette, Esq. Morgan, Lewis & Bockius, L.L.P. 1111 Pennsylvania Avenue N.W. Washington, D.C. 20004 ksutton@morganlewis.com pbessette@morganlewis.com
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