

**UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF KENTUCKY  
OWENSBORO DIVISION**

**CIVIL ACTION NO. 4:14CV-00073-JHM**

**KENTUCKY COAL ASSOCIATION, INC, ET AL.**

**PLAINTIFFS**

**VS.**

**TENNESSEE VALLEY AUTHORITY**

**DEFENDANT**

**MEMORANDUM OPINION AND ORDER**

This matter is before the Court on cross-motions for judgment on the administrative record [DN 32, DN 46]. Fully briefed, this matter is ripe for decision.

**I. BACKGROUND**

On February 16, 2012, the Environmental Protection Agency (EPA) issued regulations known as the Mercury and Air Toxics Standards (MATS) requiring operators of coal-fired power plants, including Tennessee Valley Authority, to reduce hazardous pollutants emitted from their plants by April 16, 2015, or by April 16, 2016, if an extension was granted. In August of 2012, TVA Board of Directors approved a budget that included the funding to upgrade the existing emission controls at Paradise Units 1 and 2 by installing pulse jet fabric filter systems to comply with MATS emission mandates. In April of 2013, TVA again indicated its intent to upgrade Paradise Units 1 and 2.

In August of 2013, in an effort to comply with MATS, TVA announced a change in its position regarding Paradise Units 1 and 2. TVA released a Draft Environmental Assessment (“EA”) that proposed the following alternatives: (1) the No Action Alternative, under which TVA would allow the facility to operate out of compliance with the governing laws and regulations (Alternative A); (2) construction and operation of pulse jet fabric filter systems for

emission control on Paradise Units 1 and 2 (Alternative B); and (3) retirement of Paradise Units 1 and 2 and construction and operation of a new natural gas-fueled power generating CT/CC plant (Alternative C). Unit 3 at Paradise would remain operational. According to the Draft EA, TVA also considered six other emission reduction alternatives, but eliminated them from detailed analysis because they were determined not to be technically or economically practical or feasible. TVA offered a 30-day comment period, which TVA notes was not required. TVA received 304 comments on the draft EA and most of those comments supported the second alternative.

In November of 2013, TVA issued a 153-page Final EA determining that Alternative C, the proposed action of retiring Paradise Units 1 and 2 and replacing them with a natural gas fueled power plant, was the preferred alternative. TVA determined that the proposed action would not significantly impact the environment and issued a Finding of No Significant Impact (“FONSI”) in accordance with the National Environmental Policy Act (“NEPA”), the Council on Environmental Quality (“CEQ”) regulations, and TVA’s procedures. TVA represents that the Paradise EA builds on or tiers from Environmental Impact Statements (“EIS”) that TVA issued for its 1995 and 2011 Integrated Resource Plan (“IRP”). An IRP is the culmination of a comprehensive utility planning process that evaluates the merits of using different kinds of energy resources to meet forecasted future demand for electricity with the goal of meeting demand reliably and cost effectively. According to TVA, tiering permits an agency to go from a broader NEPA review to a more site-specific NEPA review without readdressing issues or repeating information. TVA states that its decision to replace two coal-fired units with natural gas generation at its Paradise Plant is supported by two linked environmental reviews—the 2011 IRP and the Paradise Final EA.

On July 10, 2014, Plaintiffs, Kentucky Coal Association, Inc., James Rogers III, J.L. Rogers Family, LLC, Talmage Rogers, Talmar of FL., LLC, Pat Early, Kirstine Early, Buckingham Hollow, LLC, Kevin Lawrence, and Big Bucks, LLC, filed an eight-count complaint seeking a declaration that Defendant, Tennessee Valley Authority, violated the National Environmental Policy Act (NEPA), 42 U.S.C. § 4332, the Administrative Procedures Act, 5 U.S.C. § 555 et seq, and the TVA Act, 16 U.S.C. § 831n-4(f), by conducting a faulty EA, improperly issuing a FONSI, and failing to prepare and issue an EIS concerning the project. The Plaintiffs then filed a motion seeking a preliminary injunction enjoining TVA and its representatives from any activities that implementing TVA's November 13, 2013, decision to retire Paradise Units 1 and 2 and to construct a new gas-powered generating facility and accompanying gas transport infrastructure. On December 19, 2014, the Court denied the motion for preliminary injunction finding that Plaintiffs had not met their heavy burden to show that a preliminary injunction should be granted.

In September of 2014, Defendants moved for judgment on the administrative record arguing that TVA properly analyzed its decision to replace two coal-fired units at its Paradise Plant with natural gas generation under NEPA and that TVA's action was neither arbitrary nor capricious under NEPA or the Energy Policy Act of 1992. In November of 2014, Plaintiffs filed a cross-motion for judgment on the administrative record arguing that that TVA failed to undertake required environmental analysis under NEPA and failed to engage in least-cost planning under the TVA Act in connection with its decision to proceed with Alternative C. Plaintiffs contend that TVA should have conducted an EIS for this project which is required by NEPA, but instead TVA conducted only a more limited EA. According to Plaintiffs, because TVA failed to comply with its statutory mandates under NEPA and the TVA Act, the Court

should find TVA's action arbitrary and capricious and enter judgment for Plaintiffs under both claims.

## II. ADMINISTRATIVE REVIEW OF THE NEPA CLAIM

The National Environmental Protection Act “is ‘our basic national charter for protection of the environment,’ 40 C.F.R. § 1500.1(a), and is designed to ‘declare a national policy which will encourage productive and enjoyable harmony between man and his environment[, and] to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man.’ 42 U.S.C. § 4321.” Tennessee Environmental Council v. Tennessee Valley Authority, 32 F. Supp. 3d 876, 2014 WL 3810740, \*3 (E.D. Tenn. Aug. 1, 2014). NEPA requires federal agencies to take a “hard look” at the environmental consequences of their projects before taking action. Id. (citing Marsh v. Oregon Natural Res. Council, 490 U.S. 360, 374 (1989); 42 U.S.C. § 4332(2)(C)). “NEPA also requires that federal agencies follow the necessary process in assessing the environmental effects of projects; it does not, however, mandate a specific result.” Id. (quoting Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989)); see also Strycker’s Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223, 227–28 (1980). “In other words, NEPA’s mandate is essentially procedural.” Id.

“A primary provision of NEPA is the requirement that all federal agencies prepare an EIS for ‘major [f]ederal actions significantly affecting the quality of the human environment.’” Id. at \*4 (citing 42 U.S.C. § 4332(2)(C); 40 C.F.R. §§ 1502.1, 1508.15; Southwest Williamson County Community Ass’n, Inc. v. Slater, 243 F.3d 270, 274 n. 3 (6th Cir. 2001)). “Major” has no meaning independent of “significantly,” and “actions” include “new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by federal agencies; new or revised agency rules, regulations, plans, policies, or

procedures; and legislative proposals.” 40 C.F.R. § 1508.18. An EIS is the most detailed and comprehensive level of review under NEPA regulations. Tennessee Environmental Council, 2014 WL 3810740, \*4 (citing 40 C.F.R. § 1508.11; 40 C.F.R. Part 1502); Heartwood, Inc. v. Agpaoa, 628 F.3d 261, 264 (6th Cir. 2010).

“Prior to preparing an EIS, the agency may, however, prepare an EA as a preliminary step in determining whether the environmental impact of the proposed action is sufficiently significant to warrant an EIS.” Tennessee Environmental Council, 2014 WL 3810740, \*4; 40 C.F.R. § 1508.9(a)(1). “The EA is to be a ‘concise public document’ that ‘[b]riefly provide[s] sufficient evidence and analysis for determining whether to prepare an [EIS].’” Id. (quoting Department of Transp. v. Public Citizen, 541 U.S. 752, 757 (2004) (alterations in original) (quoting 40 C.F.R. § 1508.9(a)). If, pursuant to an EA, “an agency determines that an EIS is not required under applicable [regulations issued by the Council on Environmental Quality (“CEQ”)], it must issue a ‘[FONSI]’ which briefly presents the reasons why proposed agency action will not have a significant impact on the human environment.” Id. (citing 40 C.F.R. §§ 1501.4(e), 1508.13).

Federal courts have jurisdiction to review NEPA claims pursuant to the Administrative Procedure Act (the “APA”), 5 U.S.C. § 704. Sierra Club v. Slater, 120 F.3d 623, 630–31 (6th Cir. 1997). “It is well settled that a reviewing court grants substantial deference to an agency’s determination under NEPA, including decisions regarding what level of environmental review is needed. Such a determination will be upheld so long as the determination was not arbitrary, capricious, or an abuse of discretion.” Tennessee Environmental Council, 2014 WL 3810740, \*4 (citing Kelley v. Selin, 42 F.3d 1501, 1518 (6th Cir. 1995); Kleppe v. Sierra Club, 427 U.S. 390, 410 n. 21, 412 (1976); Marsh, 490 U.S. at 376)). See also Sierra Club v. Van Antwerp, 526 F.3d

1353, 1361 (11th Cir. 2008)(“This standard requires substantial deference to the agency, not only when reviewing decisions like what evidence to find credible and whether to issue a FONSI or EIS, but also when reviewing drafting decisions like how much discussion to include on each topic, and how much data is necessary to fully address each issue.”). Thus, “an agency’s decision must be ‘reasonable under the circumstances’ when reviewed ‘in the light of the mandatory requirements and the standard set by (NEPA).” Tennessee Environmental Council, 2014 WL 3810740, \*4 (quoting Kelley, 42 F.3d at 1519). “‘When it is possible to offer a reasoned explanation, based on the evidence, for a particular outcome, that outcome is not arbitrary or capricious.’” Id. (quoting Davis v. Kentucky Fin. Cos. Ret. Plan, 887 F.2d 689, 693 (6th Cir.1989) (citation omitted)).

In engaging in its review, “a court cannot ‘substitute [its] judgment of the environmental impact for the judgment of the agency, once the agency has adequately studied the issue.’” Tennessee Environmental Council, 2014 WL 3810740, \*5 (quoting Kelley, 42 F.3d at 1518). “A court must, however, ‘determine whether the agency has, in fact, adequately studied the issue and taken a hard look at the environmental consequences of its decision.’” Id. (citation omitted). Ultimately, the review is a “narrow one.” Id.

Initially, TVA argues that Plaintiffs waived any claims related to predetermination, cumulative impacts, and segmentation by failing to raise these claim to TVA during the public comment period. Plaintiffs disagree arguing that they satisfactorily gave notice to TVA by raising these claims in their motion for preliminary injunction that was filed during the public comment period of the EA. Given the Court’s review of the administrative decision, the Court finds it unnecessary to address this issue because the additional claims raised do not render TVA’s decision arbitrary and capricious.

### **A. Violation of TVA's NEPA Procedures**

Plaintiffs maintain that TVA violated its own NEPA procedures by failing to prepare and issue an EIS concerning the project. TVA's NEPA procedures identify the types of actions that "normally require an environmental impact statement" to include (a) actions involving "[m]ajor power generating facilities;" (b) "any major action, the environmental impact of which is expected to be highly controversial;" (c) "any other major action which will have a significant effect on the quality of the human environment." See Tenn. Valley Auth., Procedures for Compliance with NEPA.

Plaintiffs argue that because TVA's preferred alternative is the construction and operation of a new 1,025 MW CT/CC gas plant and qualifies as a major power generating facility, the appropriate level of NEPA review under TVA's own procedures is an EIS, not an EA. Plaintiffs cite numerous cases in which TVA conducted Environmental Impact Statements for the construction and operation of new power generating facilities. Plaintiffs maintain that TVA's failure to conduct an EIS in light of its own procedures renders TVA's decision arbitrary and capricious.

TVA concedes its procedures list "major power generating facilities" as one of the "actions [that] normally will require an EIS." However, TVA argues that "normally" does not mean that an EIS is always required for major power generating facilities where the agency determines that an action will have no major environmental impacts. TVA states that such is the situation at Paradise. The Court agrees. As discussed in the Memorandum Opinion and Order denying Plaintiffs' motion for preliminary injunction, TVA has discretion to determine whether the "normal" preparation of an EIS is warranted under NEPA. As noted by the Tenth Circuit, "actions which an agency determines will normally require an EIS, do not always require an

EIS.” Committee to Preserve Boomer Lake Park v. Department of Transp., 4 F.3d 1543, 1555 (10th Cir. 1993). In the present case, TVA determined that the action would have no major environmental impacts and would actually have important environmental benefits, and therefore, determined that no EIS was necessary. Despite TVA’s own procedures to normally conduct an EIS in actions involving major power generating facilities, TVA’s decision to prepare an EA in the present case, as opposed to EIS, does not automatically warrant a finding that the review conducted by TVA was arbitrary and capricious. Instead, the Court will analyze TVA’s decision under the appropriate CEQ regulations. Furthermore, the cases relied upon by Plaintiffs for the position that an EIS is required for the construction and operation of a new power generating facility are distinguishable in that the construction of the power generating facilities in those cases were to occur on a green field site, as opposed to an existing power generating facility.

### **B. Significant Impact**

“A primary provision of NEPA is the requirement that all federal agencies prepare an EIS for ‘major [f]ederal actions significantly affecting the quality of the human environment.’” Tennessee Environmental Council, 2014 WL 3810740, \*4 (citing 42 U.S.C. § 4332(2)(C); 40 C.F.R. §§ 1502.1, 1508.15). The Council on Environmental Quality (“CEQ”) “has issued regulations prescribing the considerations agencies must take into account when performing EAs and determining that the proposed agency action would not ‘significantly affect [ ] the quality of the human environment,’ 42 U.S.C. § 4332(2)(C), so as to obviate the need for an EIS.” Anglers of the AU Sable v. U.S. Forest Service, 402 F. Supp. 2d 826, 831-832 (E.D. Mich. 2005)(quoting Friends of Fiery Gizzard v. Farmers Home Admin., 61 F.3d 501, 504 (6th Cir. 1995)( noting that an EA was a “rough-cut, low-budget environmental impact statement [that] serves, among other things, to aid an agency’s compliance with NEPA when no environmental impact statement is



necessary [and] . . . is a highly significant ‘first step’ that determines whether the next step will or will not be the preparation of a fully polished, high-budget environmental impact statement”) (internal quotes and citations omitted)).

“The Federal Regulations direct agencies to consider both ‘context’ and ‘intensity’ when determining whether environmental quality will be ‘significantly’ affected.” Anglers of the AU Sable, 402 F. Supp. 2d at 832. “Context ‘means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality.’” Id. (quoting 40 C.F.R. § 1508.27(a)). “Intensity ‘refers to the severity of impact.’” Id. (quoting 40 C.F.R. § 1508.27(b)). Included in the regulation are ten intensity factors such as “[t]he degree to which the proposed action affects public health or safety[;]” “[u]nique characteristics of the geographic area such as proximity to historic or cultural resources, . . . wetlands, . . . or ecologically critical areas[;]” “[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial[;]” “[t]he degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration[;]” “[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts[;]” and “[t]he degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.” 40 C.F.R. § 1508.27(b)(2), (3), (4), (6), (7) & (9). An action is not necessarily “significant,” thus requiring an EIS, whenever one of the ten intensity factors is met. To the contrary, as noted by the Sixth Circuit, “[w]hile the ten [intensity] factors may show that the [agency] could have prepared an [EIS], they do not show that the [agency] acted arbitrarily and capriciously in not

completing one.” Klein v. U.S. Dep’t of Energy, 753 F.3d 576, 584 (6th Cir. 2014) (emphasis in original).

First, Plaintiffs argue that the EA fails to examine the negative affects to the human environment created by TVA’s decision to replace coal-fueled generation with natural gas. Specifically, Plaintiffs maintain that TVA ignored the importance of the availability of an adequate supply of electricity at a reasonable price. Plaintiffs contend that Alternative C will result in more expensive electricity for TVA rate-payers which will disparately impact the poor. Furthermore, Plaintiffs maintain that the Final EA does not address the potential negative effects of the volatility in natural gas prices, the increasing demand for natural gas, and the potential for brown-outs and black-outs during peak load periods should natural gas be unavailable in sufficient quantities to meet the demand.

As discussed in the December 19, 2014, Memorandum Opinion and Order, the record reveals that the 2011 IRP addressed the system cost, reliability, and socio-economic considerations of the demand for electricity from the TVA system for the next 20 years, including utilization of nuclear and natural gas generation along with coal-fired units to achieve a more balanced and diversified portfolio. TVA’s conclusions with regard to energy prices are consistent with the finding of the EPA in support of MATS. (2011 IRP at AR 1892-2173, 2187, 2248-2249.) As to the reliability concerns, TVA’s action with respect to the Paradise facility is an effort to comply with MATS while maintaining the required generating capacity. In contrast to Plaintiffs’ argument, experts with TVA have articulated that the switch to natural gas generation would reinforce reliability of the system and reduce the risks of power outages.

Second, in their complaint and motion for preliminary injunction<sup>1</sup>, Plaintiffs argue that TVA did not take into account the significant job losses at the Paradise facility itself and in other related industries like trucking, engineering, and surveying if TVA stops burning coal in Paradise Units 1 and 2. Further, Plaintiffs contend that local owners of coal-producing property, such as some of the Plaintiffs, will lose revenue from the loss of coal sales. The record reflects that the EA did examine the employment impacts on the labor market in Muhlenburg County and adjacent counties. In fact, TVA concluded that there would be adverse impacts to employment under Alternative C from the reduction of positions at the Paradise facility and from the decreased demand for coal mined in western Kentucky. TVA also concluded that its tax equivalent payments to the state would increase because the value of the CC/CT units would be higher than the coal-fired units. (AR at 268.) While TVA recognized that there would be adverse impacts to employment under Alternative C, “economic or social effects are not intended by themselves to require preparation of an environmental impact statement.” 40 C.F.R. § 1508.14.

Third, in their complaint and motion for preliminary injunction, Plaintiffs contend that the selection of Alternative C by TVA without the preparation of an EIS will have a significant effect on future TVA decisions if it is allowed to stand as precedent because (1) TVA has inappropriately elevated carbon dioxide emissions and related air quality issues above all other environmental impacts which has no legal basis under NEPA or its implementing regulations and (2) TVA improperly relied on portfolio diversity as a basis for its decision to adopt Alternative C, rather than on measuring the environmental impacts of the particular alternatives. Plaintiffs argue that TVA improperly utilized the outcome of the Gallatin Plant (TN) NEPA process where it decided to install controls to justify its decision not to install the same controls in the present

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<sup>1</sup> Many of these issues were addressed previously in the Court’s December 19, 2014, Memorandum Opinion and Order. Given the different standard of review for a judgment on the administrative record, the Court reviews these arguments again.

NEPA process. Specifically, TVA in the Final EA stated “[h]aving preserved coal-fired generation capacity at Gallatin, TVA now has greater latitude to shift from coal to gas at [Paradise] in the interest of maintaining a diverse portfolio.” (AR at 190.)

A review of the EA reveals that TVA considered the intensity factors and determined that the natural gas alternative would not have a significant adverse effect on the human environment, but would produce significant benefits to regional air quality, result in significant reduction in carbon dioxide emissions, greatly reduce water withdrawal and heated discharge into the Green River, and reduce the production of coal combustion waste. With respect to the use of the Gallatin Plant NEPA process, TVA correctly points out that 16 U.S.C. § 831m-1 requires TVA to consider energy resource diversity in its least-cost energy resource planning process. Additionally, with respect to considering the carbon dioxide emissions, TVA is required to consider “other factors of risk” under 16 U.S.C. § 831m-1(b)(2)(A) as well as environmental compliance, § 831m-1(b)(3).

For these reasons and as discussed in more detail below, the Court finds that TVA’s determination that the project does not “significantly” affect environmental quality was arbitrary and capricious. While it is clear that Plaintiffs disagree with the findings of TVA regarding whether Paradise Units 1 and 2 should be replaced with a gas-powered generation system, it is not the Court’s job to substitute its judgment for that of the agency.

### **C. Improper Segmentation of Project Components.**

“An agency impermissibly ‘segments’ NEPA review when it divides connected, cumulative, or similar federal actions into separate projects and thereby fails to address the true scope and impact of the activities that should be under consideration.” Delaware Riverkeeper Network v. F.E.R.C., 753 F.3d 1304, 1313 (D.C. Cir. 2014). Regulations promulgated by the

CEQ dictate the appropriate scope of a NEPA document. The regulations state, in relevant part, that:

To determine the scope of environmental impact statements, agencies shall consider 3 types of actions. . . . They include:

(a) Actions (other than unconnected single actions) which may be:

(1) Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they: (i) Automatically trigger other actions which may require environmental impact statements; (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously; [or] (iii) Are interdependent parts of a larger action and depend on the larger action for their justification.”).

(2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.

(3) Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography. . . .

40 C.F.R. § 1508.25. Cumulative effects are defined by the CEQ as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7. Thus, when determining the contents of an EA or an EIS, an agency must consider all “connected actions,” “cumulative actions,” and “similar actions.” 40 C.F.R. § 1508.25(a).

The justification for the rule against segmentation is obvious: it “prevent[s] agencies from dividing one project into multiple individual actions each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.” Delaware

Riverkeeper Network, 753 F.3d at 1314 (citing Natural Resources Defense Council, Inc. v. Hodel, 865 F.2d 288, 297 (D.C. Cir. 1988)). “The doctrine of improper segmentation is limited, however, to proposed actions; NEPA does not require an agency to consider the possible environmental impacts of less imminent actions.” Bullwinkel v. U.S. Dept. of Energy, 899 F. Supp. 2d 712, 729 (W.D. Tenn. 2012) (internal quotation marks omitted) (quoting Anglers of the Au Sable v. U.S. Forest Serv., 565 F. Supp. 2d 812, 831 (E.D. Mich. 2008)); Tennessee Environmental Council, 2014 WL 3810740, \* 10.

Plaintiffs argue that, in the NEPA review of Alternative C, TVA was required to assess the reasonably foreseeable connected or cumulative actions and resulting environmental impacts associated with the significant impacts of the decommissioning and demolition of Paradise Fossil Units 1 and 2, as well as the impact from the connected action of construction of the new natural gas pipeline.

First, in both the complaint and motion for preliminary injunction, Plaintiffs argue that TVA did not address the significance of the retirement of Units 1 and 2. TVA stated in the Final EA that “[l]ong-term actions related to retirement, such as potential demolition of the units, are outside the scope of this EA and will be addressed by TVA in the future should Alternative C be implemented.” (EA § 2.1.3, AR 173.) TVA concluded that the potential effects of decommissioning and demolition of Units 1 and 2 were too speculative and would be examined in the future by TVA when the decision to decommission and demolish the units were proposed. TVA presented evidence the decision by TVA to decommission or demolish coal units had been made in some cases over 10 to 20 years after the unit was retired.

The Court agrees with TVA that the possibility is too speculative at present. The evidence at this stage of the proceeding reflects that TVA’s decision to retire Paradise Units 1

and 2 does not automatically trigger the decommissioning and demolition of Units 1 and 2. Because the timing and manner of the decommissioning of the coal units are indefinite, it was proper for TVA to analyze retirement of the units separately from their possible decommission in the future. Furthermore, the construction of the gas generation plant is not dependent upon the demolition of the fossil units. See Coalition on West Valley Nuclear Waste v. Chu, 592 F.3d 306, 311 (2d Cir. 2009); Coal v. Bodman, 625 F. Supp. 2d 109, 118-119 (W.D.N.Y. 2007). “As the Supreme Court observed in Kleppe v. Sierra Club, NEPA ‘speaks solely in terms of Proposed actions; it does not require an agency to consider the possible environmental impacts of less imminent actions.’” City of Riverview v. Surface Transp. Bd., 398 F.3d 434, 442 (6th Cir. 2005)(citing Kleppe v. Sierra Club, 427 U.S. 390, 410 n. 20 (1976)); Bullwinkel, 899 F. Supp. 2d at 729; Anglers of the Au Sable, 565 F. Supp. 2d at 831; Tennessee Environmental Council, 2014 WL 3810740, \* 10. TVA’s decision to decommission and demolish the units is not a proposed action, but rather a less imminent action that may or may not occur. Therefore, based on the evidence currently before the Court, it was entirely appropriate for TVA to defer analysis of the potential environmental impacts associated with decommissioning and demolition of Paradise Fossil Units 1 and 2, and therefore, cannot be said to be arbitrary and capricious.

Second, Plaintiffs argue that TVA improperly segmented the analysis of the construction and operation of the new natural gas pipeline. NEPA requires an EIS to include “[c]onnected actions,” which are actions that (1) automatically trigger other actions that may require environmental impact statements; (2) cannot or will not proceed unless other actions are taken previously or simultaneously; and (3) are interdependent parts of a larger action and depend on the larger action for their justification. 40 C.F.R. § 1508.25(a)(1). See Hirt v. Richardson, 127 F. Supp. 2d 833, 842 (W.D. Mich. 1999). As discussed previously in the December 19, 2015,

Memorandum Opinion and Order, TVA considered the construction and operation of the new natural gas pipeline a connected activity. TVA analyzed, to the extent possible, the potential impacts of constructing and operating the pipeline along two alternative pipeline routes. TVA's analysis of the pipeline impact can be found throughout the EA in various pertinent environment sections. For example, TVA acknowledged that federally protected terrestrial and aquatic species, wetlands, and historical and cultural resources could be implicated. TVA represented that its analysis is preliminary because Texas Gas Transmission, LLC, ("Texas Gas"), the natural gas supplier for the facility, will determine the final pipeline route and additional environmental review of those impacts would be considered by the Federal Energy Regulatory Commission ("FERC") before it certified the pipeline. See 15 U.S.C. § 717f, n. TVA noted that it would serve as a cooperating agency under the FERC EA or EIS. Furthermore, at the hearing, TVA represented to the Court that the proposed natural gas pipeline route has already changed from the routes initially proposed in the EA. The Court finds that it is proper for an agency to defer analysis where it cannot practically assess the environmental effects of actions whose details are not yet certain. Coalition for Advancement of Regional Transp. v. Federal Highway Administration, 576 Fed. Appx. 477, 491 (6th Cir. 2014).

In Coalition for Advancement of Regional Transp., the Federal Highway Administration in a supplemental final EIS discussed the potential impacts related to tunnel spoil in relation to a bridge project. However, the EIS provided that because "excess material sites for disposal of construction spoil have not been determined at this time," those sites will be investigated later when a determination is made regarding construction phasing. Id. The Sixth Circuit held that "defendants rationally deferred a consideration of the environment impacts until the precise spoil locations would be identified." Id. (citing Environmental Prot. Info. Ctr. v. U.S. Forest Serv.,



451 F.3d 1005, 1014 (9th Cir. 2006) (if not enough information is available to permit a meaningful consideration of possible environmental impacts, NEPA does not require the government to do the impractical)). Similarly, in Environmental Prot. Info. Ctr. v. U.S. Forest Serv., 451 F.3d 1005 (9th Cir. 2006), the Court noted that the agency did sufficiently analyze the effect of a related project “based on the information known about the proposed project *at that time.*” Id. at 1014 (emphasis added). In the present case based on the above case law, TVA included “a reasonably complete discussion of the [natural gas pipeline] based on the project parameters that were known at that point in time.” Id. at 1015. Accordingly, TVA did not improperly segment the analysis of the construction and operation of the natural gas pipeline.

Third, Plaintiffs contend that because the project was improperly segmented, TVA failed to consider the natural gas pipeline’s impact on the wetlands, endangered species, biological vegetation, and historic and cultural properties as required by 40 C.F.R. § 1508.27.

#### **1. Wetlands, Biological Vegetation, and Wildlife**

Plaintiffs contend that the project’s impact on the wetlands within the pipeline corridor, as well as the biological vegetation and wildlife, was not adequately considered or evaluated in the EA. Specifically, Plaintiffs maintain that TVA is required to comply with the Clean Water Act and Executive Order 11990 requiring federal agencies to “minimize the destruction, loss, or degradation of wetlands.” Further, Plaintiffs assert that TVA did not consult with the U.S. Army Corps of Engineers with respect to wetland delineation, impacts, and permitting. Plaintiffs argue that without knowing the location of the pipeline and water intake structures, TVA could not accurately identify measures taken to avoid and minimize wetland impacts and could not accurately conclude that Alternative C will comply with Executive Order 11990. Plaintiffs likewise argue that without knowing the location of the pipeline, TVA could not accurately

identify the areas of important biological vegetation and wildlife habitat so as to avoid or minimize impacts.

In the EA, TVA indicated that the construction and operation of the CT/CC plant would be consistent with Executive Order 11990. The record reflects that TVA's wetland expert consulted U.S. Fish and Wildlife Service National Wetland Inventory maps, aerial photographs, and land use/land cover data to determine that the only wetlands on the Paradise site are classified as L1UBHx. (AR at 215-217, AR Doc. 63.) These wetlands are classified as non-jurisdictional by the Corps because they are not hydrologically connected to navigable water and, as a result, fall outside the definition of "waters of the United States" in Section 404 of the Clean Water Act. Thus, TVA concluded in the EA that "[n]o jurisdictional wetlands are known to occur within the project footprint at [Paradise]" such that "there would be no direct impacts to jurisdictional wetlands from the construction of the CT/CC plant." (AR at 216.) This determination does not appear to be arbitrary, capricious, or an abuse of discretion. With respect to TVA's initial discussion of the two potential pipeline corridors and the pipeline's potential impact to wetlands, biological vegetation, and wildlife, TVA concluded that the final pipeline corridor could be mitigated in accordance with TVA's and FERC's Best Management Practices. (AR at 204-205, 217.) As discussed above, an agency's decision to defer further analysis where it could not practically assess the environmental effects of the actions whose details are not yet certain is not arbitrary and capricious. Coalition for Advancement of Regional Transp., 576 Fed. Appx. at 491.

## **2. Threatened or Endangered Species**

Plaintiffs maintain that the Administrative Record fails to reflect that TVA took a hard look at the environmental impacts on threatened or endangered species as required by Section 7

of the Endangered Species Act, 16 U.S.C. § 1531. Plaintiffs complain that while the EA acknowledges that several listed species and habitats could be affected by the construction and operation of the gas pipeline, TVA failed to conduct sufficient consultation with the U.S. Fish and Wildlife Service or FERC. Further, Plaintiffs contend that TVA failed to explain in the EA how mitigation measures, such as clearing outside the Indiana bat nesting season or contributing to the Indiana Bat Conservation Fund, will ensure that impacts of the project will not be significant.

In the EA, TVA determined that none of the state or federally-listed plants, terrestrial animals, and aquatic animals are expected to be adversely affected by the construction of the CT/CC plant. However, TVA acknowledged that the construction and operation of the natural gas pipeline has the potential to affect several state-listed species, the federally listed Indiana bat, and the northern long-eared bat. TVA concluded that the state-listed species occur in early successional habitat that would be restored after the pipeline construction or in wetland areas that would be minimally impacted. Additionally, TVA indicated that suitable summer roost habitat for the Indiana and northern long-eared bats would be affected by pipeline construction. TVA noted that appropriate mitigation measures would be taken including clearing suitable forest habitat only between November 15 and March 31 and could include mitigation payments to the Indiana Bat Conservation Fund. TVA indicated that once the pipeline route is proposed by the gas provider, field surveys would be conducted, would follow applicable Service guidelines, and would be addressed “as part of the FERC licensing process.” (AR at 212.)

By letter issued September 5, 2013, the U.S. Fish and Wildlife Service confirmed that Alternatives B and C would not likely adversely affect the gray bat, fanshell, purple cat’s paw, and rough pigtoe. (AR at 10188-10190.) The Forest Service agreed with TVA that the pipeline

construction under Alternative C could affect Indiana bats and acknowledged TVA's commitment to consult with the Forest Service on this impact and ensure that the action would fully comply with Section 7 of the Endangered Species Act. (AR at 297-298.) As discussed above, TVA included "a reasonably complete discussion of the [natural gas pipeline] based on the project parameters that were known at that point in time." Environmental Prot. Info. Ctr., 451 F.3d at 1015; see also Coalition for Advancement of Regional Transp., 576 Fed. Appx. at 491. TVA's examination of the environmental impacts on threatened and endangered species from the CT/CC plant, as well as the potential gas pipeline impacts, was not arbitrary, capricious, or an abuse of discretion.

### **3. Historic and Cultural Properties**

Plaintiffs maintain that the Administrative Record fails to reflect that TVA took a hard look at the project's impact on historic and cultural properties pursuant to the National Historic Preservation Act, 16 U.S.C. § 470, and its implementing regulations. Specifically, Plaintiffs argue that although the EA acknowledged that numerous historic and cultural properties exist in the area, TVA did not survey all of the proposed pipeline corridors.

The Administrative Record reflects that TVA complied with the National Historic Preservation Act. On October 11, 2013, TVA wrote to the Kentucky State Historic Preservation Office (SHPO) with an update that TVA was considering a CC/CT plant. (AR at 6941.) TVA notified SHPO that the CC/CT plant would be associated with a transmission line and one or more gas pipelines to bring natural gas to the plant and that TVA would be using a "phased identification and evaluation process for the identification of historic properties, evaluations of effect, and resolution of adverse effects associated with these related undertaking." (Id.) The phased identification process is provided for in the National Historic Preservation Act's

regulations. 36 C.F.R. § 800.4(b)(2). SHPO did not respond to TVA's October 2013 letter within thirty days. Thus, under the applicable regulations, TVA's responsibilities under the Act were fulfilled. See 36 C.F.R. § 800.4(d)(1)(iv)(A) ("If the Council does not respond within 30 days of receipt of the request, the agency official's responsibilities under section 106 are fulfilled."). Notwithstanding, TVA provided additional information to SHPO on March 25, 2014, pursuant to a request from SHPO. By letter dated April 29, 2014, SHPO acknowledged receipt of the information concerning the assessment of impacts of the CC/CT project on historic properties. Thus, consistent with the National Historic Preservation Act, TVA afforded the SHPO an opportunity to comment on the impacts of the CC/CT project on historic properties.

Finally, in the EA, TVA acknowledges that once pipeline routes are proposed by the gas supplier, field surveys will be conducted to verify the presence of archaeological and architectural resources within the pipeline routes and potential impacts will be addressed in consultation with SHPO as part of the FERC licensing process. As discussed above, TVA's decision to defer analysis where it cannot practically assess the environmental effects of actions whose details are not yet certain is not inappropriate in the present case. Coalition for Advancement of Regional Transp., 576 Fed. Appx. at 491. Thus, TVA's examination of the impacts on historical and cultural properties from the CT/CC plant, as well as the potential gas pipeline impacts, was not arbitrary, capricious, or an abuse of discretion.

#### **4. Floodplains**

Plaintiffs maintain that TVA failed to take a hard look at potential impacts that could occur within the 100-year floodplain as a result of the construction of the water intake structure and the pipeline in violation of Executive Order 11988. TVA's NEPA procedures incorporate Executive Order 11988 and provide in part "[w]hen a class of routine or recurring actions exists

and the consideration of whether to locate in a floodplain or wetland are substantially similar . . . a floodplain or wetland evaluation of the class may be undertaken.” 44 Fed. Reg. 45516. TVA undertook such class evaluation finding that there is normally no practicable alternative to siting in the floodplain for “[u]nderground, overhead, or anchored utility and related lines and support structures,” and “[w]ater intake structures” and the adverse impacts of such actions could be minimized through routine criteria listed in the Federal Register notice. 46 Fed. Reg. 22845, 22846. Thus, TVA’s finding of no significant impact to floodplains from the water intake structure or the underground gas line was based on TVA’s class evaluation and is not arbitrary or capricious.

## **5. Greenhouse Gas Emissions**

Plaintiffs argue that TVA failed to properly analyze the life cycle of greenhouse gas emissions because it assessed only carbon dioxide in considering the project’s possible impacts and did not consider methane, nitrous oxide, or sulfur hexafluoride. Plaintiffs also contend that TVA failed to examine the most current research on the subject of greenhouse gas emissions and, as a result, the EA understates the greenhouse gas impacts of natural gas by at least 25 percent.

Contrary to Plaintiffs’ argument, the EA discussed greenhouse gas emissions noting in relevant part that “[m]ost of the observed increase in globally averaged temperatures since the mid-20th century is very likely because of the observed increases in concentrations of carbon dioxide . . . , and other greenhouse gases (GHG) including methane . . . and nitrous oxide.” (AR at 197.) Additionally, the Administrative Record includes documents concerning climate change that address methane, nitrous oxide, and sulfur hexafluoride. (See AR 7970, 7978, 8016, 8051, 8083, 8097-98). With respect to the greenhouse gas research relied upon by TVA, the majority of documents TVA cited were published in 2012, the year TVA conducted its NEPA analysis.

NEPA does not require an agency to continuously update its analysis to consider ever-evolving research because “[t]o require otherwise would render agency decisionmaking intractable, always awaiting updated information only to find the new information outdated by the time a decision is made.” Marsh v. Oregon Natural Res. Council, 490 U.S. 360, 373 (1989).

#### **D. Predetermination**

Plaintiffs argue that TVA predetermined its decision to retire two coal-fueled units at the Paradise Facility and build a new CT/CC plant fueled by natural gas. According to Plaintiffs, after more than a year of planning to comply with MATS at the Paradise Facility by installing jet-pulse fabric filters on the coal-fueled Units 1 and 2, TVA suddenly altered its decision, rushed through the EA, and issued a FONSI in an effort to begin construction of TVA’s preferred new CT/CC plant in time to meet MATS requirements.

“NEPA does not require subjective impartiality.” Tennessee Environmental Council v. Tennessee Valley Authority, 2014 WL 3810740, \*6 (citing Forest Guardians v. U.S. Fish and Wildlife Serv., 611 F.3d 692, 712 (10th Cir. 2010)). “An agency can have a preferred alternative in mind when it conducts a NEPA analysis.” Id. (citation omitted). Thus, “[t]he proper inquiry in a NEPA case is therefore not whether an agency has focused on its preferred alternative, but instead whether it has gone too far in doing so, reaching the point where it actually has ‘limited the choice of reasonable alternatives.’” Id. (quoting 40 C.F.R. § 1506.1(a)(2)). Further, courts recognize that “it is proper for agencies to engage in design and engineering work and take minor steps toward a course of action that the agency initially prefers.” Id. In the present case, Plaintiffs have not identified any evidence that indicates that prior to the issuance of the EA, TVA had made an “irreversible and irretrievable commitment of resources” to its decision to retire Paradise Units 1 and 2 and build a new gas-fueled generation plant. Id. at \*7. For this

reason, the Court finds that TVA's decision to replace Paradise Units 1 and 2 with a new CT/CC plant was not predetermined.

### **E. No Action Alternative**

In their complaint and motion for preliminary injunction, Plaintiffs argue that TVA failed to consider the proper No Action Alternative. Plaintiffs contend that TVA used a materially flawed starting point by delineating the status quo of continued operation of Units 1 and 2 without measures to control emissions of particulate matter as the benchmark No Action Alternative.

“NEPA requires an agency to ‘present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public.’” Tennessee Environmental Council, 2014 WL 3810740, \*7 (quoting 40 C.F.R. § 1502.14). As part of this analysis, agencies are required to include the alternative of no action. § 1504.14(d). “In requiring consideration of a no-action alternative, the Council on Environmental Quality intended that agencies compare the potential impacts of the proposed major federal action to the known impacts of maintaining the status quo. In other words, the current level of activity is used as a benchmark.” Tennessee Environmental Council, 2014 WL 3810740, \*7 (quoting Custer Cnty. Action Ass'n v. Garvey, 256 F.3d 1024, 1040 (10th Cir. 2001) (internal citations omitted)). In fact, the CEQ regulations “require the analysis of the no action alternative even if the agency is under a court order or legislative command to act.” Tennessee Environmental Council, 2014 WL 3810740, \*7-\*8 (citing Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18026 (Mar. 23, 1981)). After a review of the EA in light of the



appropriate case law, the Court finds that the No Action Alternative utilized by TVA in the EA conforms to CEQ requirement reflecting the *current* status quo. Id.

For the reasons set forth above, the Court concludes that the Defendants took a “hard look” at the effects of the project as required by NEPA. Based on the administrative record, the Court upholds the sufficiency of the Environmental Assessment as a basis for the Finding of No Significant Impact and concludes that TVA’s decision to not prepare an Environmental Impact Statement was not arbitrary or capricious.

### **III. ADMINISTRATIVE REVIEW OF THE TVA ACT CLAIM**

Plaintiffs argue that they are entitled to judgment on the TVA Act claim. Plaintiffs maintain that TVA’s decision to abandon Paradise Units 1 and 2 for a newly constructed natural gas CC/CT facility did not comply the least-cost planning that is required by the statute, 16 U.S.C. § 831m-1(b)(1). According to Plaintiffs, the 2011 Integrated Resource Plan (“IRP”) did not satisfy TVA’s statutorily-mandated least-cost planning process with respect to this project because the 2011 IRP did not contemplate or address retiring Paradise Units 1 and 2. Plaintiffs further argue the remainder of the administrative record does not evidence any project-specific examination of costs that meets the statutory requirements of providing adequate and reliable service at the lowest system cost to its customers. 16 U.S.C. § 831m-1(b)(2)(A).

The Energy Policy Act of 1992 “was designed to create a ‘comprehensive national energy policy that gradually and steadily increases U.S. energy security in cost-effective and environmentally beneficial ways.’” Center For Biological Diversity v. Abraham, 218 F. Supp. 2d 1143, 1149 (N.D. Cal. 2002). Section 113 of the Act requires TVA to conduct a least-cost planning program “which evaluates the full range of existing and incremental resources (including new power supplies, energy conservation and efficiency, and renewable energy

resources) in order to provide adequate and reliable service to electric customers of the Tennessee Valley Authority at the lowest system cost.” 16 U.S.C. § 831m-1(b)(1). TVA is directed to take into account “necessary features for system operation, including diversity, reliability, dispatchability, and other factors of risk.” *Id.* at § 831m-1(b)(2). “System cost” is defined as “all direct and quantifiable net costs for an energy resource over its available life, including the cost of production, transportation, utilization, waste management, environmental compliance, and, in the case of imported energy resources, maintaining access to foreign sources of supply.” *Id.* at § 831m-1(b)(3).

First, TVA argues that its least-cost planning activities are not subject to judicial review because 16 U.S.C. § 831m-1 does not provide the Court with judicially manageable standards for evaluating them. “[J]udicial review of a final agency action by an aggrieved person will not be cut off unless there is persuasive reason to believe that such was the purpose of Congress.” Abbott Laboratories v. Gardner, 387 U.S. 136, 140 (1967). In determining whether review is available under the APA, the Sixth Circuit cautions that courts must be “wary of interpreting the APA in a manner that precludes any judicial review of agency decisions, requiring a ‘showing of clear and convincing evidence’ that Congress intended to eliminate judicial review in matters of agency discretion.” Fligiel v. Samson, 440 F.3d 747, 751 (6th Cir. 2006)(citing UHI Inc. v. Thompson, 250 F.3d 993, 996 (6th Cir. 2001))(discussing United States v. Fausto, 484 U.S. 439 (1988)). While TVA accurately cites case law discussing the narrow exception of “committed to agency discretion” under 5 U.S.C. § 701(a)(2), TVA fails to cite any case law which addresses this exception in the context of the least-cost planning requirement of 16 U.S.C. § 831m-1. Therefore, the Court declines to exercise this narrow exception and will consider this claim under the APA guidelines.

Second, contrary to Plaintiffs' argument, TVA's reliance on the 2011 IRP in an effort to satisfy the directives concerning least-cost planning under 16 U.S.C. § 831m-1 is not arbitrary, capricious, or an abuse of discretion. The Final EA indicates that it tiers from EISs issued by TVA for its 1995 and 2011 IRP. TVA's IRP process evaluated the effects of system-wide resource options on TVA's environment and its economy utilizing models that link electricity sales to the price of electricity and natural gas, economic growth, and other factors that impact demand. TVA then employed the results of its 2011 IRP process in the decision-making process leading to the decision to replace the Paradise units with natural gas. TVA's duty to engage in a least-cost planning program under § 831m-1 is satisfied by implementation of the IRP. See 16 U.S.C. § 831m-1(a),(b),(c). An IRP need not address site-specific energy-resource decisions in order to comply with § 831m-1(a),(b), and (c). Accordingly, the 2011 IRP did not need to specifically consider any decisions related to Paradise Units 1 and 2 in order to satisfy TVA's required compliance with the least-cost planning program. Thus, TVA's decision to replace Paradise Units 1 and 2 with natural gas is supported by the 2011 IRP.


Third, Plaintiffs assert that the Alternative Cost Comparison specifically comparing the costs of Alternative B and C fails to consider financial impacts across the TVA system. For example, according to Plaintiffs, a reduction of the combined generating capacity from 1,200 MW for Paradise Units 1 and 2 to 800 to 1000 MW for the CT/CC alternative will reduce TVA's generating capacity by at least 200 MW and will cost at least \$210 million to replace the lost capacity. Additionally, Plaintiffs contend that the replacement of Paradise Units 1 and 2 with gas-fueled units will result in a tremendous shift of power generation to other parts of the TVA system.

Despite Plaintiffs' differing calculations, the EA specifically analyzed how much generation TVA needed if it retired Paradise Units 1 and 2 based on net dependable capacity, as opposed to nameplate capacity as advocated by Plaintiffs. (AR at 1692 n.3.) TVA determined that 800 MW of generation was needed. The record reflects that the net dependable capacity of the gas-fueled plant is approximately 1,025 MW; therefore, under TVA's calculations, no shortfall is expected. (AR at 298, 317.) Further, while reaching a different result than Plaintiffs' experts, TVA considered power generation shifts and determined that gas generation is suited to meet "swing" energy needs because it can easily provide more or less power as needed. (AR at 1747.) In contrast, the coal-fired units cannot easily adapt to energy-use fluctuations. TVA's determination regarding the amount of generation needed is not arbitrary or capricious.

Finally, Plaintiffs contend that retiring Units 1 and 2 will increase the costs for TVA customers by \$500 million to \$1.7 billion and that installing the new gas fired generation at Paradise will require \$600 million more in capital than retrofitting Paradise 1 & 2 with environmental upgrades. TVA's analysis with respect to the costs related to replacing Paradise Units 1 and 2 with gas generation satisfies the arbitrary and capricious standard of review. A substantial part of Plaintiffs' argument centers on a cost comparison between retrofitting the coal-fired units and installing gas generation units. However, the least-cost planning program directs TVA to take into account "necessary features for system operation, including diversity, reliability, dispatchability, and other factors of risk." 16 U.S.C. § 831m-1(b)(2). Accordingly, the lowest system cost is not necessarily the "cheapest" option. In the present case, relying upon the 2011 IRP, TVA offers a reasoned explanation, based on the evidence, for the particular outcome in question, and therefore its decision is not arbitrary and capricious.

#### IV. CONCLUSION

For the reasons set forth above, **IT IS HEREBY ORDERED** that Defendant's motion for judgment on the administrative record [DN 32] is **GRANTED** and the Plaintiffs' motion for judgment on the administrative record [DN 46] is **DENIED**. A judgment shall be entered consistent with this opinion.

  
Joseph H. McKinley, Jr., Chief Judge  
United States District Court

cc: counsel of record

February 2, 2015