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May 4, 2020

*Submitted via Email to [mshigdon@tva.gov](mailto:mshigdon@tva.gov)*

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400 W. Summit Hill Drive WT-11B  
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## **RE: TVA Power Supply Flexibility Proposal Draft Environmental Assessment**

Dear Mr. Higdon:

The Southern Environmental Law Center (“SELC”) and our undersigned partners submit these comments on the draft environmental assessment (“Draft EA”) for the Tennessee Valley Authority’s (“TVA”) Power Supply Flexibility Proposal (“Flexibility Proposal”).<sup>1</sup> We thank TVA for considering these comments. We look forward to working with TVA to address the issues discussed below and move towards a brighter, cleaner future for the Valley.

This comment letter highlights numerous legal and policy problems with the Draft EA. As explained further below, the root cause of these problems is TVA’s decision not to conduct an environmental review of its decision in August 2019 to adopt its long-term agreement contract option (“Long-term Contract”) for local power companies. Adopting the Long-term Contract was a major federal action with significant environmental impacts and it was in no way exempt from environmental review under the National Environmental Policy Act (“NEPA”). The Long-term Contract locks in TVA’s local power company customers for twenty years in perpetuity, generally barring them from seeking cheaper and cleaner power from other utilities and independent power producers and guaranteeing TVA’s customer base for the foreseeable future. The Long-term Contract has potentially significant effects on the environment, including, among other things, altering TVA’s pattern of energy resource investment, increasing greenhouse gas and other air pollution, and creating disparate energy burdens.

By unlawfully foregoing any environmental review of the decision to adopt the Long-term Contract, TVA made it essentially impossible to prepare an adequate Draft EA for the Flexibility Proposal. Because TVA had already adopted the Long-term Contract, the outcome of its alternatives analysis in the Draft EA was predetermined; it would develop the Flexibility

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<sup>1</sup> TENN. VALLEY AUTH., TVA POWER SUPPLY FLEXIBILITY PROPOSAL DRAFT ENVIRONMENTAL ASSESSMENT (2020), [https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/environment/environmental-stewardship/nepa-environmental-reviews/tva-power-supply-flexibility-proposal-draft-ea-april-3-2020.pdf?sfvrsn=f364ba4\\_5](https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/environment/environmental-stewardship/nepa-environmental-reviews/tva-power-supply-flexibility-proposal-draft-ea-april-3-2020.pdf?sfvrsn=f364ba4_5) [hereinafter “Draft EA”].

Proposal. Similarly, TVA adopted the Flexibility Proposal specifically to implement a provision in the Long-term Contract, making the two actions inextricably connected for the purpose of environmental analysis. Regardless of their origins, of course, the Draft EA’s narrow scope and predetermined result are flaws in their own right.

The Draft EA also contains multiple serious flaws that do not derive directly from the failure to conduct environmental review of the decision to adopt the Long-term Contract. First and foremost, the decision to adopt the Flexibility Proposal is a major federal action and requires full analysis in an environmental impact statement (“EIS”). This is no less the case to the extent that the Draft EA may purport to tier to analysis in the EIS prepared for TVA’s 2019 Integrated Resources Plan (“IRP”). The more appropriate analysis to tier to would be the EIS—had it been prepared—for TVA’s decision to adopt the Long-term Contract. Furthermore, the Draft EA relies on an impermissibly narrow statement of purpose and need and a flawed and inaccurate No Action Alternative, both of which undermine the reliability of TVA’s alternatives analysis. The Draft EA also fails to even consider reasonable alternatives to the Proposed Action, such as a Zero Carbon alternative, which better meet TVA’s statement of purpose and need; and inadequately supports TVA’s decision to eliminate the Flexible Generation of Greater than Five Percent Alternative from consideration. Finally, the Draft EA fails to fully consider the impacts associated with adoption of the Proposed Action.

TVA cannot lawfully implement the Long-Term Contract and Flexibility Proposal without first complying with NEPA. TVA must prepare an EIS that considers the impacts of these connected actions. We recommend that TVA resolve the issues outlined in these comments before proceeding to implement the Flexibility Proposal.

## **I. FACTUAL BACKGROUND**

TVA is a federal agency and instrumentality of the United States, established by an act of Congress in 1933, to foster the social and economic welfare of the people of the Tennessee Valley region and to promote the proper use and conservation of the region’s natural resources.<sup>2</sup>

TVA posted the final Record of Decision (“ROD”) on its 2019 IRP in the Federal Register on September 17, 2019.<sup>3</sup> In the 2019 IRP, TVA studied a strategy that would have promoted distributed energy resources (“DER”), a broad set of customer-sited energy generation and management tools including solar, energy efficiency and demand response.<sup>4</sup> Although the DER strategy performed similarly to TVA’s business-as-usual strategy,<sup>5</sup> TVA concluded in the 2019 IRP that it would focus on how best to maintain its existing monopoly business model,

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<sup>2</sup> 16 U.S.C. § 831c (1933).

<sup>3</sup> 84 Fed. Reg. 48,987.

<sup>4</sup> Att. 1, TENN. VALLEY AUTH., 2019 INTEGRATED RESOURCE PLAN VOLUME I - FINAL RESOURCE PLAN, 6-7 to 6-9, [https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/default-document-library/site-content/environment/environmental-stewardship/irp/2019-documents/tva-2019-integrated-resource-plan-volume-i-final-resource-plan.pdf?sfvrsn=44251e0a\\_2](https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/default-document-library/site-content/environment/environmental-stewardship/irp/2019-documents/tva-2019-integrated-resource-plan-volume-i-final-resource-plan.pdf?sfvrsn=44251e0a_2) [hereinafter “2019 IRP”].

<sup>5</sup> *Id.* at 7-1 – 7-3.

rather than adapting and changing to the benefit of ratepayers and communities. As a result, the 2019 IRP largely explored how to absorb or stifle the effects of DER, rather than on how to best deploy them to provide least-cost power to the Valley. Having narrowed its focus to utility-scale resources controlled by TVA, the federal utility then identified a broad range of potential resource retirements and additions over the next twenty years, without committing itself to any of them in any particular amount. For example, TVA stated that it might retire anywhere from zero to 2200 MW of coal, build or acquire anywhere from 800 and 5,700 MW of natural gas combined cycle by 2028, and build or acquire anywhere from 1,500 and 8,000 MW of solar by 2028.<sup>6</sup>

On August 22, 2019, the TVA Board approved the Long-Term Partnership Agreement Resolution (“LTP Resolution”).<sup>7</sup> The LTP Resolution provided that, contingent upon completion of required environmental reviews, the Board approved the implementation of a standard long-term agreement consistent with the Standard Elements described in a July 31, 2019 Memorandum.<sup>8</sup>

Through its contracts, TVA requires local power companies in its territory to purchase all of their electricity requirements from TVA.<sup>9</sup> The average length of commitment by local power companies in these “all-requirements” contracts prior to implementation of the Long-term Contract was seven years.<sup>10</sup> The Long-term Contract provides that TVA and the contracting local power company commit to an initial term of *twenty years* from the date the contract is signed.<sup>11</sup> The Long-term Contract further provides that “beginning on the first anniversary of said effective date, and on each subsequent anniversary thereof ... this contract shall be extended automatically without further action of the parties for an additional 1-year renewal term beyond its then-existing time of expiration.<sup>12</sup> If a local power company wishes to terminate the Long-term Contract, it must give TVA 20 years prior written notice, and TVA will have no obligation to make or complete any additions to or changes in any transformation or transmission facilities to service the local power company unless it agrees to reimburse TVA for its non-recoverable costs in connection with the making or completion of such additions or changes.<sup>13</sup> Thus, the Long-term Contract locks in TVA’s local power company customers for twenty years in perpetuity, generally barring them from seeking cheaper and cleaner power from other utilities and independent power producers. The lock-in provision guarantees TVA’s customer base for the foreseeable future.

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<sup>6</sup> *Id.* at 9-3 to 9-4.

<sup>7</sup> Draft EA at 1-1, 1-3; Att. 2, Minutes of Meetings of the Board of Directors Tennessee Valley Authority August 22, 2019, 28-29, [https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/environment/tva\\_board\\_presentation\\_august\\_22\\_2019.pdf?sfvrsn=e22f3b54\\_5](https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/environment/tva_board_presentation_august_22_2019.pdf?sfvrsn=e22f3b54_5).

<sup>8</sup> *Id.*

<sup>9</sup> Att. 1, 2019 IRP 4-2.

<sup>10</sup> Att. 3, TVA Board Exhibit 8-22-19J, Proposed Board Resolution accompanying Memorandum from John M. Thomas, III, EVP, Financial Services and Chief Financial Officer, Tenn. Valley Auth., to Board of Directors of Tenn. Valley Auth. in support of Board resolution approving the Long-term Contract (July 31, 2019).

<sup>11</sup> Att. 3, TVA, Board Exhibit 8-22-19J, Long-term Agreement § 1.

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

In exchange for the perpetual twenty year lock-in provision, the Long-term Contract provides that TVA will apply a wholesale monthly credit equal to 3.1 percent of the amount a distributing local power company pays TVA through wholesale rates.<sup>14</sup> The Long-term Contract also includes the following provision:

TVA commits to collaborating with Distributor [local power company] to develop and provide enhanced power supply flexibility, with mutually agreed-upon pricing structures, for 3-5% of Distributor's energy, by no later than October 1, 2021. If in either of the following cases: (I) TVA does not fulfill its commitment to propose a power supply flexibility solution by the date stated above; or (II) Distributor does not agree to the TVA-proposed power supply flexibility solution, then Distributor may elect, by written notice to TVA not later than 90 days from the TVA Board-approved implementation date, to terminate this agreement. Upon Distributor's payment to TVA of an amount equal to 50% of the sum of all Wholesale Credit amounts received by Distributor ... this agreement terminates.<sup>15</sup>

TVA has no NEPA documentation relating to the Board's adoption of the Long-term Contract option in August 2019 because it determined that "the Board's action was not subject to NEPA review."<sup>16</sup>

Almost immediately, TVA began entering into the Long-term Contract with local power companies. For example, TVA's second largest customer, Nashville Electric Service, agreed to the Long-term Contract six days after the Board adopted the Long-term Contract.<sup>17</sup> As of April 3, 2020, 138 local power companies had adopted the Long-term Contract<sup>18</sup>—which requires them to accept TVA's Flexibility Proposal or terminate the Agreement and pay back 50 percent of the wholesale credit the local power company received pursuant to the contract.

At its February 2020 Board meeting, the TVA Board approved a second resolution, authorizing TVA to "approve implementation of a power supply flexibility option."<sup>19</sup> However, the resolution approving the Long-term Contract had already "delegate[d] authorities to the Chief Executive Officer to implement and change, with oversight, the Standard Elements for such

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<sup>14</sup> *Id.* § 2.

<sup>15</sup> *Id.*

<sup>16</sup> Att. 4, E-mail from Matthew Stephen Higdon, NEPA Specialist, Environmental Compliance & Operations, Tennessee Valley Authority to Amanda Garcia (April 10, 2020, 3:06 pm); *see also* Att. 5, Letter from Denise Smith, TVA, to Amanda Garcia, SELC (April 24, 2020).

<sup>17</sup> Att. 6, NES Contract No. 19-72-316 (executed August 28, 2019).

<sup>18</sup> Att. 7, Environmental Reviews, TVA <https://www.tva.com/Environment/Environmental-Stewardship/Environmental-Reviews/Flexibility-Proposal> (last visited April 22, 2020).

<sup>19</sup> Att. 8, Memorandum from John M. Thomas, III, EVP, Financial Services and Chief Financial Officer, Tenn. Valley Auth., to Board of Directors of Tenn. Valley Auth. in support of Board resolution approving Flexibility Option (January 29, 2020). As of the date of submission of these comments, TVA has not yet approved the minutes of the February 2020 Board meeting, which will document approval of the Flexibility Option resolution.

agreements as described in the Memorandum.”<sup>20</sup> Because the Board had already approved implementation of a power supply flexibility option as a standard element of the Long-term Contract, it is unclear why this action was taken in February 2020—a full six months after TVA had begun implementing the Long-term Contract.

On April 3, 2020, TVA made available for public comment the TVA Power Supply Flexibility Proposal Draft Environmental Assessment, which evaluates the flexible power generation options that would be available to local power companies that enter into a Long-term Contract with TVA.<sup>21</sup> The Draft EA purports to tier to TVA’s 2019 IRP and relies in part on that EIS analysis.<sup>22</sup> TVA’s Proposed Action Alternative allows local power companies to have flexible generation of up to five percent of their average hourly total and use a combination of different forms of generation including natural gas generation and solar.<sup>23</sup> The Proposed Action Alternative would allow generation by local power companies to “reduce monthly demand and energy billing determinants or [] be treated in accordance with an economically equivalent crediting mechanism.”<sup>24</sup>

The EA briefly discusses a No Action Alternative; an alternative allowing flexible generation of greater than five percent; and an alternative expanding TVA’s Flexibility Research Project, which to date has not seen any projects brought into operation.<sup>25</sup> TVA eliminated the alternative that allowed flexible generation of greater than five percent without providing any qualitative analysis justifying the conclusion it would not be reasonable. The EA does not evaluate any other alternatives.

In addition, the Draft EA states that “Valley Partners”—local power companies that have signed the Long-term Contract—“generally receive commercial terms reflective of the long-term commitment they have made to the Valley, resulting in more favorable solutions for their customers.”<sup>26</sup>

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<sup>20</sup> Att. 3, Board Exhibit 8-22-19J, Proposed Board Resolution; *see id.* at Memorandum, p. 3 (identifying power supply flexibility option as “Standard Element”); *see id.* (attaching for reference “a version of such a long-term agreement developed by Management that would be consistent with the Standard Elements listed above”); *see id.* Long-term Contract § 2.e (power supply flexibility provision).

<sup>21</sup> Draft EA at 1-5.

<sup>22</sup> *Id.* at 1-4.

<sup>23</sup> *Id.* at 2-1; 2-2.

<sup>24</sup> *Id.* at 2-1.

<sup>25</sup> *Id.* at 2-2.

<sup>26</sup> *Id.*; *see, e.g.*, Att. 9, Vanderbilt, NES, TVA and Silicon Ranch Partner on Landmark Renewable Energy Deal, TVA (Jan. 22, 2020), <https://www.tva.com/newsroom/press-releases/vanderbilt-nes-tva-and-silicon-ranch-partner-on-landmark-renewable-energy-deal> (“NES’ recent 20-year commitment to public power in the region enabled them to meet the sustainability needs of their largest customer with affordable renewable energy through this new program,” said Doug Perry, TVA vice president of Commercial Energy Solutions”).

## II. LEGAL BACKGROUND

The National Environmental Policy Act (“NEPA”) is “our basic national charter for protection of the environment.” 40 C.F.R. § 1500.1(a); *see* 42 U.S.C. § 4321 (NEPA promotes efforts which “will prevent or eliminate damage to the environment.”). NEPA has “twin aims”: first, it places upon federal entities the obligation to consider every significant aspect of the environmental impact of a proposed action; second, it ensures that a federal entity will inform the public that it has indeed considered environmental concerns in its decision making process, providing a springboard for public comment on the agency’s decision. *Dep’t of Transp. v. Pub. Citizen*, 541 U.S. 752, 768 (2004); *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 97 (1983); *see* 40 C.F.R. § 1502.1(a), (d); *id.* § 1501.2. NEPA accomplishes these goals by requiring federal entities to take a “hard look” at the potential environmental effects through three levels of review. *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 374 (1989).

First, if a proposed action fits within a category “which do[es] not individually or cumulatively have a significant impact on the human environment and which ha[s] been found to have no such effect in procedures adopted by a Federal agency,” the action is categorically excluded from NEPA analysis. 40 C.F.R. § 1508.4; *Sierra Club v. U.S. Forest Serv.*, 828 F.3d 402, 408 (6th Cir. 2016). If an agency wishes to invoke a categorical exclusion it must do so explicitly. *Oak Ridge Envtl. Peace All. v. Perry*, 412 F. Supp. 3d 786, 842 (E.D. Tenn. 2019) (citation omitted); *see Ctr. For Food Safety v. Johanns*, 451 F. Supp. 2d 1165, 1175–76 (D. Haw. 2006). “Post-hoc invocation of a categorical exclusion does not provide assurance that the agency considered the effects of its action before deciding to pursue it” and therefore does not satisfy NEPA. *Wilderness Watch, Inc. v. Creachbaum*, 225 F. Supp. 3d 1192, 1209 (W.D. Wash. 2016), *aff’d*, 731 F. App’x 709 (9th Cir. 2018). Furthermore, even actions that ordinarily would fall into categorical exclusions are subject to exceptions for extraordinary circumstances “in which a normally excluded action may have a significant environmental effect.” 40 C.F.R. § 1508.4; *see Sierra Club v. United States Forest Serv.*, 828 F.3d 402, 408 (6th Cir. 2016); *Alaska Ctr. For Env’t v. U.S. Forest Serv.*, 189 F.3d 851, 858–59 (9th Cir. 1999).

Second, an agency may prepare an environmental assessment (“EA”), which is a “concise public document” intended to help the agency determine whether to prepare an EIS or finding of no significant impact (“FONSI”). 40 C.F.R. § 1508.9. An EA must include a discussion of the need for the proposal, alternatives to the proposal, the environmental impacts of the proposed action and alternatives in accordance with NEPA § 102(2)(E). 42 U.S.C. § 4332(E); 40 C.F.R. § 1508.9. Although the discussions in an EA may be “brief,” the agency must still take a “hard look” at the environmental consequences of a proposed action. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1211 (9th Cir. 1998). If an EA establishes that an agency’s action may have a significant effect upon the environment, an EIS must be prepared. *House v. U.S. Forest Service, U.S. Dept. of Agriculture*, 974 F. Supp. 1022, 1035 (E.D. Ky. 1997) (citing *Foundation for N. Am. Wild Sheep v. U.S. Dep’t of Agric.*, 681 F.2d 1172, 1178 (9th Cir. 1982)).

The alternatives analysis is the heart of NEPA. 40 C.F.R. § 1502.14. Federal entities must “[r]igorously explore” and “objectively evaluate” all reasonable alternatives including a no action alternative. *Id.* § 1502.14, (a), (d). The alternative analysis requires disclosure and analysis

of direct and indirect individual and cumulative effects of each alternative. *Id.* § 1502.16. Direct effects “are caused by the action and occur at the same time and place.” *Id.* § 1508.8(a). Indirect effects “are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” *Id.* § 1508.8(a). “Cumulative impact is 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 time.” *Id.* § 1508.7.

Third, if a proposal constitutes a “major federal action[] significantly affecting the quality of the human environment,” an agency must prepare an EIS. 42 U.S.C. § 4332(c). A “major federal action” includes an action with effects that may be significant and which are potentially subject to Federal control and responsibility. 40 C.F.R. § 1508.18. The term “major” reinforces but does not have a meaning independent of significantly. *Id.* § 1508.18. To determine significance, an agency must consider both context and intensity. *Id.* § 1508.27. Context means the significance of an action in the context of “society as a whole (human, national), the affected region, the affected interests, and the locality.” *Id.* § 1508.27(a). Intensity requires consideration of the following factors, among others:

- (1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
- (2) The degree to which the proposed action affects public health or safety.
- (3) The degree to which the effects on the quality of the human environment are likely to be highly controversial.
- (4) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- (5) The 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.
- (6) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

*Id.* § 1508.27(b).

An action may be significant if any one of the factors identified in the regulations is met. *Ocean Advocates v. U.S. Army Corps of Eng’rs*, 361 F.3d 1108, 1125 (9th Cir. 2004). If an agency must complete an EIS, it must also “[r]igorously explore” and “objectively evaluate” reasonable alternatives, including a no action alternative, and must analyze the direct and indirect individual and cumulative effects of those alternatives. 40 C.F.R. § 1502.14(a), (d); *id.* § 1508.8(a). 40 C.F.R. § 15-8.25(a) applies to EIS and EA analyses. *Del. Riverkeeper Network v.*

*FERC*, 753 F.3d 1304, 1314 (D.C. Cir. 2014). The agency must “devote substantial treatment” to each alternative “so that reviewers may evaluate their comparative merits.” *Id.* § 1502.14(b).

### **A. Segmentation**

Agencies “cannot evade [their] responsibilities under [NEPA] by artificially dividing a major federal action into smaller components, each without a significant impact.” *PEACH v. U.S. Army Corps of Eng’rs*, 87 F.3d 1242, 1247 (11th Cir. 1996). This prohibition, known as NEPA’s anti-segmentation rule, arises from CEQ’s regulations requiring that agencies consider all “connected actions,” “cumulative actions,” and “similar actions” within a single EIS. 40 C.F.R. § 1508.25(a); *see Del. Riverkeeper Network*, 753 F.3d at 1313-14 (NEPA does not permit agencies to divide “one project into multiple individual actions ...”); *Tenn. Env’tl. Council v. TVA*, 32 F. Supp. 3d 876, 890 (E.D. Tenn. 2014). As explained by the District of Columbia Court of Appeals:

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; this rule ensures that an agency considers the full environmental impact of connected, cumulative, or similar actions before they are undertaken, so that it can assess the true costs of an integrated project when it is best situated to evaluate different courses of action and mitigate anticipated effects.

*City of Boston Delegation v. FERC*, 897 F.3d 241, 252 (D.C. Cir. 2018).

Connected actions are those that “(i) automatically trigger other actions which may require [an EIS]; (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.” 40 C.F.R. § 1508.25(a)(1); *see Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*, 301 F. Supp. 3d 50, 67 (D.D.C. 2018). Projects that are “connected and interrelated” and “functionally and financially interdependent,” or have a significant “temporal overlap” should not be segmented. *Standing Rock Sioux Tribe*, 301 F. Supp. 3d at 67. In determining whether projects are “functionally and financially interdependent” courts consider “whether one project will serve a significant purpose even if a second related project is not built” and look at the “commercial and financial viability of a project when considered in isolation from other actions.” *Id.*

### **B. Tiering**

Agencies may tier environmental reviews when appropriate. “Tiering” involves covering broader environmental effects in a programmatic EIS, followed by detailed site-specific assessments in narrower NEPA analyses that incorporate by reference discussions contained in the programmatic EIS and concentrate solely on the issues specific to the later, site-specific EIS. 40 C.F.R. § 1508.28; *see Oak Ridge Env’tl Peace All.*, 412 F. Supp. 3d at 805. Tiering is appropriate when the sequence of statement of analyses is:

(a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis.

(b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe.

40 C.F.R. § 1508.28.

### C. Timing

“NEPA’s effectiveness depends entirely on involving environmental consideration in the initial decision[-]making process.” *Metcalf v. Daley*, 214 F.3d 1135, 1145 (9th Cir. 2000) (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989)). Therefore, Federal entities are required to integrate the NEPA process with other planning at the “earliest possible time.” 40 C.F.R. § 1501.2. By complying with this requirement, the agency will be able to “[i]dentify environmental effects and values in adequate detail so they can be compared to economic and technical analyses.” *Id.* § 1501.2(b).

Accordingly, federal agencies are prohibited from taking any action that would “have an adverse environmental impact or limit the choice of reasonable alternatives” before NEPA analysis is complete. *Id.* § 1506.1(a). If a federal agency “irreversibly and irretrievably commits itself to a plan of action that is dependent upon the NEPA environmental analysis producing a certain outcome, before the agency has completed that environmental analysis[,]” the agency has impermissibly predetermined the outcome of the analysis and therefore violated NEPA. *Tenn. Envtl. Council*, 32 F. Supp. 3d at 884.

### **III. TVA HAS FAILED TO MEANINGFULLY ENGAGE THE PUBLIC AS REQUIRED BY NEPA.**

Public participation and transparency are crucial aspects of the NEPA process. *See* 40 C.F.R. § 1500.2(d) (requiring agencies to “[e]ncourage and facilitate public involvement in decisions which affect the quality of the human environment”); *id.* § 1506.6(a) (requiring agencies to “[m]ake diligent efforts to involve the public in preparing and implementing their NEPA procedures”); *id.* § 1506.6(d) (requiring agencies to “[s]olicit information from the public”). The “touchstone of NEPA compliance is whether an EA’s selection and discussion of alternatives fosters informed decision-making and informed public participation.” *California v. Block*, 690 F.2d 753, 767 (9th Cir. 1982) (internal citations omitted); *see Nat’l Audubon Soc. v. Dep’t of the Navy*, 422 F.3d 174, 184 (4th Cir. 2005) (By requiring agencies to make public the environmental impact of its actions, NEPA “ensures that the public and government agencies will be able to analyze and comment on the action’s environmental implications.”). Here, TVA

issued—and refused to extend the brief comment period for—the Draft EA during an unprecedented public health crisis that limits advocates’ ability to participate in the NEPA process; failed to give the public an opportunity to comment on the Long-term Contract before implementing the Agreement; and refused to produce requested public documents necessary for the public to fully and meaningfully comment on the Draft EA.

TVA made members of the public aware of the opportunity to comment on the Draft EA on April 3, 2020.<sup>27</sup> The public comment periods ends on May 4, 2020.<sup>28</sup> This brief 30-day public comment period coincides with the peak of the COVID-19 pandemic currently impacting the United States.<sup>29</sup> The pandemic has hit the Southeast United States—including TVA territory—particularly hard.<sup>30</sup> On April 2, 2020, Tennessee Governor Bill Lee issued an executive order requiring residents to stay home except for essential business.<sup>31</sup> In spite of this unprecedented health crisis, TVA has refused to extend the public comment period for the Draft EA.<sup>32</sup> Limiting public comment on a major federal action to a period of time when most residents are unable to leave their homes, and thousands more are ill or caring for family and friends is antithetical to NEPA’s purpose. *See Western Watersheds Project*, 336 F. Supp. 3d 1204, 1239 (D. Idaho 2018) (When the public is “not being allowed to participate... or has to hurriedly clamber to do so because of ... the limited time frame and other constraints upon public participation” decisions are made “without the full benefit of public input.”).

While the Flexibility Proposal Draft EA was at least made available for public notice and comment, TVA altogether failed to conduct NEPA analysis or involve the public in the development and adoption of the Long-term Contract. Instead, TVA developed the Long-term Contract terms behind closed doors, adopted the Long-term Contract at a board meeting without any public input or involvement, and immediately began entering into Long-term Contract deals with local power companies. As discussed below, TVA’s failure to analyze the environmental impacts of the Long-term Contract violates NEPA’s substantive provisions.<sup>33</sup> But as importantly, TVA’s decision to spring a brand new long-term contract that significantly impacts the potential for renewable energy development in the Tennessee Valley runs afoul of NEPA’s transparency mandate.

Finally, on April 13, 2020, SELC submitted a Freedom of Information Act (“FOIA”) request seeking documents TVA prepared for the purpose of developing and evaluating the

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<sup>27</sup> Att. 10, Email from TVA Stakeholder Relations Team to Amanda Garcia, SELC (April 3, 2020, 9:59 AM EST).

<sup>28</sup> Att. 11, Flexibility Proposal, TVA <https://www.tva.com/environment/environmental-stewardship/environmental-reviews/nepa-detail/flexibility-proposal> (last visited May 1, 2020).

<sup>29</sup> Att. 12, *Coronavirus in the U.S.: Latest Map and Case Count*, N.Y. TIMES

<https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html> (Updated May 1, 2020).

<sup>30</sup> *See* Att. 13, Richard Fausset and Rick Rojas, *Across the South, ‘Walking a Tightrope’ While Awaiting the Worst*, N.Y. TIMES, (April 8, 2020) <https://www.nytimes.com/2020/04/09/us/coronavirus-american-south.html>.

<sup>31</sup> Att. 14, Samantha Max, *Tennessee Orders Residents to Remain Home*, NPR, (April 2, 2020)

<https://www.npr.org/sections/coronavirus-live-updates/2020/04/02/826274244/tennessee-orders-residents-to-remain-home>.

<sup>32</sup> Att. 15, E-mail from Matthew Higdon, TVA to Amanda Garcia, SELC (April 24, 2020 4:18 PM EST).

<sup>33</sup> *See infra* pp. 11-46.

Long-term Contract, Flexibility Proposal, and the Draft EA.<sup>34</sup> In particular, SELC sought documents regarding the impact of the 3.1% credit provided by the Long-term Contract on electricity demand, sales, and levels of penetration of distributed energy resources.<sup>35</sup> SELC also requested documents supporting TVA's assertion in the Draft EA that "the range of three to five percent [flexible generation] balanced the risk of revenue erosion with the expected benefits of rate and financial stability from longer commitment periods."<sup>36</sup> On April 24, 2020, TVA responded to SELC's FOIA request with an extremely small number of documents—some of which were already available on TVA's website—and that failed to answer many of SELC's questions regarding TVA's claim that a five percent flexible generation cap was necessary or the impact of the wholesale credit on wholesale or retail electricity demand and sales or on levels of penetration of distributed energy resources.<sup>37</sup> On April 27, 2020, SELC sent a letter to TVA asking for clarification as to whether the April 24, 2020 response was complete.<sup>38</sup> Although SELC reminded TVA of the impending comment deadline and its rejection of an extension request based in part on its prompt response to SELC's FOIA,<sup>39</sup> TVA did not provide clarification or additional documents before Conservation Groups submitted these comments on May 4, 2020, the unchanged comment period end date. TVA's failure to provide documents justifying basic assumptions in the EA violates NEPA and prevents SELC from submitting comments that are as detailed and meaningful as they would be with full information. *U.S. v. Nova Scotia Food Products Corp.*, 586 F.2d 240, 252 (2d Cir. 1977) ("To suppress meaningful comment by failure to disclose the basic data relied upon is akin to rejecting comment altogether.").

#### **IV. TVA MUST PREPARE AN EIS.**

TVA is required to prepare a full EIS for the Flexibility Proposal; an EA is insufficient. First, the Board's adoption of the Long-term Contract option is a major federal action with potentially significant environmental impacts that must be, and never was, reviewed under NEPA. Second, the Long-term Contract and Flexibility Proposal are connected actions that must be analyzed in the same EIS under the rule against artificially segmenting actions to avoid NEPA review. Third, TVA's action adopting the Long-term Contract option is not eligible for a categorical exclusion and likely requires an EIS. Fourth, the Flexibility Proposal will have a significant effect on the human environment in its own right. Finally, tiering to the EIS for the 2019 IRP is inappropriate because the 2019 IRP did not analyze the environmental impacts of the Long-term Contract and did not consider the demand impacts of the Long-term Contract's 3.1% rate discount for local power companies that sign the Contract.

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<sup>34</sup> Att. 16, Letter from Amanda Garcia, SELC, to Denise Smith, TVA 1 (April 13, 2020).

<sup>35</sup> *Id.*

<sup>36</sup> *Id.* at 2.

<sup>37</sup> Att. 5, Letter from Denise Smith, TVA, to Amanda Garcia, SELC (April 24, 2020).

<sup>38</sup> Att. 17, Letter from Amanda Garcia, SELC, to Denise Smith, TVA 1 (April 27, 2020).

<sup>39</sup> Att. 18, Email from Denise Smith, TVA, to Amanda Garcia, SELC (April 30, 2020).

**A. NEPA review was required for TVA’s decision to adopt the Long-term Contract option.**

Although TVA recognized the possibility that the Long-term Contract might be subject to environmental review,<sup>40</sup> it has no NEPA documentation relating to the Board’s adoption of the Long-term Contract option in August 2019 because it determined that the action was not subject to NEPA review.<sup>41</sup> This conclusion is incorrect.

*1. The Long-term Contract is a major federal action.*

TVA’s decision to adopt the Long-term Contract option is a major federal action that will significantly affect the quality of the human environment. *See* 42 U.S.C. § 4332(2)(C). “NEPA regulations define ‘major federal action’ broadly: ‘Major Federal action includes actions with effects that may be major and which are potentially subject to Federal control and responsibility.’” *Sherwood v. Tennessee Valley Auth.*, 590 F. App’x 451, 457 (6th Cir. 2014) (quoting 40 C.F.R. § 1508.18). Major federal actions also include “new and continuing activities, including . . . new or revised agency rules, regulations, plans, policies, or procedures.” 40 C.F.R. § 1508.18(a). Furthermore, typical categories of major federal actions include “official policy,” “formal plans” that will guide how an agency uses resources, and “programs, such as a group of concerted actions to implement a specific policy or plan.” 40 C.F.R. § 1508.18(b)(1), (2), (3). TVA’s decision to adopt the Long-term Contract option is precisely this sort of action: it is an official policy that now governs TVA’s business with at least 138 local power companies.<sup>42</sup>

TVA should be aware that policy changes like adopting the Long-term Contract option are major federal actions. In *Sherwood*, TVA unsuccessfully argued that its “15-foot policy” concerning tree removal from power-line rights of way was not a new policy but merely a continuation of its existing vegetation management policy. 590 F. App’x at 460. The Sixth Circuit rejected this argument and held, on the basis of public statements and other documents in the record, that TVA had established a new policy and was required to take a “hard look” at its environmental consequences pursuant to NEPA. *Id.* In a subsequent appeal, the court rejected TVA’s argument that the case was moot after it voluntarily abandoned the policy yet continued to apply it in practice. *Sherwood v. Tenn. Valley Auth.*, 842 F.3d 400, 406 (6th Cir. 2016). Furthermore, TVA must conduct at least a programmatic NEPA review of its decisions to enter into coal contracts. *Nat. Res. Def. Council, Inc. v. Tenn. Valley Auth.*, 367 F. Supp. 128, 131 (E.D. Tenn. 1973), *aff’d*, 502 F.2d 852 (6th Cir. 1974).

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<sup>40</sup> Att. 3 TVA, Exhibit 8-22-19J, Memorandum at 2 (stating that “implementation of the proposed long-term agreement would be contingent upon satisfactory completion of any required environmental reviews”).

<sup>41</sup> Att. 5, Letter from Denise Smith, TVA, to Amanda Garcia, SELC (April 24, 2020); Att. 4, E-mail from Matthew Stephen Higdon, TVA, to Amanda Garcia, SELC (April 10, 2020, 3:06 pm).

<sup>42</sup> Att. 7, *Environmental Reviews*, TENN. VALLEY AUTH., <https://www.tva.com/Environment/Environmental-Stewardship/Environmental-Reviews/Flexibility-Proposal> (last visited Apr. 22, 2020) (giving statistic as of April 3, 2020).

2. *The Long-term Contract will significantly affect the quality of the human environment.*

The decision to adopt the Long-term Contract option will have significant environmental consequences, completing the “major federal action” test. 40 C.F.R. § 1508.27; *see* 40 C.F.R. § 1508.18 (“Major reinforces but does not have a meaning independent of significantly (§ 1508.27).”); *Minn. Pub. Interest Research Grp. v. Butz*, 498 F.2d 1314, 1321–22 (8th Cir. 1974). The analysis proceeds in two steps. First, “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.” 40 C.F.R. § 1508.27(a). Here, the Long-term Contract will affect TVA’s entire region. Currently at least 138 of the 154 local power companies in TVA territory have signed the Long-term Contract.<sup>43</sup> It will affect residents of TVA’s region in terms of air quality, public health, and clean-energy jobs; and it will affect the customers of these local power companies through its impact on their bills. Second, the “intensity” or “the severity of impact” of the action must be analyzed. *Id.* § 1508.27(b). NEPA regulations provide ten factors to consider when evaluating intensity. The first is simply environmental impacts. *Id.* § 1508.27(b)(1). Additional factors include impacts to public health, *id.* § 1508.27(b)(2), “[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial,” *id.* § 1508.27(b)(4), “[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,” *id.* § 1508.27(b)(6), and cumulative impacts, *id.* § 1508.27(b)(7). As described below, the Long-term Contract will have these impacts and more.

The Long-term Contract commits local power companies that sign it to an exclusive contract with TVA to supply all power to the local power companies’ customers<sup>44</sup> in perpetuity with the requirement of twenty years’ notice before the local power companies may terminate the agreement.<sup>45</sup> Before the Long-term Contract option was adopted, the weighted average length of the termination notice that was required under TVA’s wholesale power contracts with local power companies that distribute TVA power was less than seven years.<sup>46</sup> TVA itself does not enter contracts with terms longer than twenty years for energy or twenty-five years for forward capacity.<sup>47</sup> Whereas previously TVA would be required to compete with other power suppliers at regular intervals more often than every seven years, under the new contract it will be insulated from competition indefinitely.

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<sup>43</sup> Draft EA at 1-1.

<sup>44</sup> Att. 3, TVA, Exhibit 8-22-19J, Long-term Agreement § 1 (“TVA commits to produce and deliver, and Distributor agrees to take and distribute, all of the power supplied to consumers in the Distributor’s service area.”).

<sup>45</sup> Att. 3, TVA, Exhibit 8-22-19J, Long-term Agreement § 1 (replacing “term of contract” section of power contract entirely with new section that specifies, “beginning on the first anniversary of said effective date, and on each subsequent anniversary thereof . . . this contract shall be extended automatically without further action of the parties for an additional 1-year renewal term . . . [LPC] may terminate this contract at any time upon not less than 20 years’ prior written notice . . .”).

<sup>46</sup> Att. 3, TVA, Exhibit 8-22-19J, Board Resolution.

<sup>47</sup> Att. 2, Minutes of Meeting of the Board of Directors, Tenn. Valley Auth. 12-13 (Aug. 22, 2019).

This insulation is valuable to TVA.<sup>48</sup> Although a local power company technically may terminate the contract, the twenty-year notice requirement makes it nearly impossible for a competitor to compete for an local power company's business; to do so, it would need to make the local power company an offer superior to TVA's and then be willing to wait for twenty years before gaining its client. Of course, the business cycle makes this all but impossible. Furthermore, the local power company would immediately begin to lose the 3.1 percent rate credit established under the Long-term Contract, which would be phased out in equal percentages over the following ten years, leaving the last ten years at the full wholesale rate.<sup>49</sup> As a result, the potential competitor's offer would need not only to beat TVA but also compensate the local power company for this difference. All of this, of course, is the purpose of the Long-term Contract—effectively to lock in local power companies in perpetuity.

The Long-term Contract will have the effect of constraining the development of renewable energy in the TVA region and likely constraining the percentage of TVA's generation that comes from renewable energy, thus resulting in greater emissions of greenhouse gases ("GHG") and other air pollutants than the baseline of extending TVA's existing shorter-term contracts. The Long-term Contract does not give local power companies an opportunity to negotiate with TVA about the sources of its generation. Local power companies may terminate the Long-term Contract early only if TVA raises rates by set percentages and renegotiation fails, and then they may terminate only ten years early.<sup>50</sup> The one provision that allows a local power company potentially to negotiate with TVA to increase the percentage of renewable generating serving the local power company (provided by the local power company, TVA, or a third party) commits TVA only to "develop and provide enhanced power supply flexibility, with mutually agreed-upon pricing structures, for 3-5% of Distributor's energy . . . ."<sup>51</sup> TVA has proposed the Flexibility Proposal to comply with this section. However, nothing in this section requires the "flexible" power supply to be low-carbon and in the end TVA's proposed Flexibility Proposal could result entirely in new fossil gas generation.<sup>52</sup>

Local power companies that sign the Long-term Contract will be constrained to TVA's generation portfolio, as modified by any "flexible" generation that a local power company chooses to develop under the Flexibility Proposal, in perpetuity. The result will very likely be

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<sup>48</sup> Att. 3, TVA, Exhibit 8-22-19J, Tenn. Valley Auth., Board Resolution (stating that "increasing the length of TVA's wholesale power contracts with its LPCs provides the best opportunity (i) to ensure that TVA has the revenue necessary to satisfy its long-term financial obligations as they come due and (ii) to provide more certainty in TVA's long-term generation and financial planning"); *see also* Att. 19, Tenn. Valley Auth., Sec. Exchange Comm'n Form 10-K/A, Am. No. 1 at 11 (Nov. 15, 2019), <https://www.sec.gov/Archives/edgar/data/1376986/000137698619000040/tve-10xka09302019.htm> [hereinafter "TVA SEC Form 10-K/A"] (stating that "Revenues from LPCs accounted for approximately 91 percent of TVA's total operating revenues in 2019.").

<sup>49</sup> Att. 3, TVA, Exhibit 8-22-19J, Long-term Agreement § 2(c).

<sup>50</sup> Att. 3, TVA, Exhibit 8-22-19J, Long-term Agreement § 2(a).

<sup>51</sup> Att. 3, TVA, Exhibit 8-22-19J, Long-term Agreement § 2(3).

<sup>52</sup> Draft EA at 2 ("Consistent with DER identified in the 2019 IRP, community solar, rooftop solar, co-located solar and battery installations, natural gas-fired generators, and high efficiency natural gas-fired combined heat and power projects would be eligible.").

more pollution and higher costs for the local power companies' customers compared to a future in which the local power companies renegotiated their contracts with TVA more often than every seven years.

- a) *Memphis' exploration of alternative power suppliers illustrates the Long-term Contract's environmental impacts.*

Memphis is the case in point. Memphis Light, Gas & Water ("MLGW"), the municipal utility serving Memphis and parts of Shelby County, is TVA's largest customer, constituting between nine and eleven percent of the load TVA serves.<sup>53</sup> Under its existing contract with TVA, MLGW must give TVA five years' notice before terminating its purchases.<sup>54</sup> In 2016, TVA sold its unfinished Bellefonte Nuclear Power Plant to developer Franklin Haney's Nuclear Development LLC at auction.<sup>55</sup> Haney planned to complete the plant and sell its power to MLGW.<sup>56</sup> After he made an offer, notwithstanding its eighty-year relationship with TVA, MLGW decided to evaluate its options.<sup>57</sup> As we file these comments, MLGW has not yet signed the Long-Term Contract.

Memphis' power supply alternatives evaluation is ongoing,<sup>58</sup> but the studies prepared have been revealing. A study prepared by the Brattle Group for Friends of the Earth evaluated three alternative portfolios meant to typify a range of options for 2024 (after the five-year notice period): a "Cost-Minimizing" portfolio comprising fossil gas generators and solar, a "Local + RE" portfolio that substitutes 500MW of wind and 500 of four-hour-duration battery storage for one combustion turbine, and a "Higher RE" portfolio that also imports wind generation from the

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<sup>53</sup> Att. 20, *About*, MLGW, <http://www.mlgw.com/about> (last visited Apr. 23, 2020) (stating 11% of TVA's load); Att. 21, MEMPHIS LIGHT GAS AND WATER DIVISION, INTEGRATED RESOURCE PLAN AND TRANSMISSION ANALYSIS – REQUEST FOR PROPOSAL (RFP) 2 (2019), [http://www.mlgw.com/images/content/files/pdf/Integrated%20Resource%20Plan\\_RFP\\_Memphis%20Light%20Gas%20and%20Water%20Division\\_04-03-19.pdf](http://www.mlgw.com/images/content/files/pdf/Integrated%20Resource%20Plan_RFP_Memphis%20Light%20Gas%20and%20Water%20Division_04-03-19.pdf) (stating approximately 10% of TVA's load); see Att. 19, *TVA SEC Form 10-K/A supra* note 48 at 125 ("Sales to MLGW and NES accounted for nine percent and eight percent, respectively, of TVA's total operating revenues in 2019.").

<sup>54</sup> Att. 22, MLGW Power Supply Advisory Team (PSAT), Presentation: Orientation Meeting at 31 (April 30, 2019), [http://www.mlgw.com/images/content/files/pdf/PSAT%20Orientation%20Meeting\\_Final%20Formatted5\\_jty.pdf](http://www.mlgw.com/images/content/files/pdf/PSAT%20Orientation%20Meeting_Final%20Formatted5_jty.pdf).

<sup>55</sup> Att. 23, Darrell Proctor, *Judge: TVA Deal for Bellefonte Nuclear Plant Stays in Place*, POWER (May 17, 2019), <https://www.powermag.com/judge-tva-deal-for-bellefonte-nuclear-plant-stays-in-place/>.

<sup>56</sup> Att. 24, Marc Perrusquia, *POWER BROKER: SPECIAL REPORT: Inside a long-shot plan to buy a never-opened nuclear plant and sell its power to a single customer: MLGW*, DAILY MEMPHIAN (May 17, 2019 12:35 AM CT), <https://dailymemphian.com/article/1174/POWER-BROKER>.

<sup>57</sup> Att. 25, Dave Flessner, *Memphis Light Gas & Water studies leaving TVA, eyes energy options*, CHATTANOOGA TIMES FREE PRESS (Feb. 24, 2019), <https://www.timesfreepress.com/news/business/aroundregion/story/2019/feb/24/memphstudies-leaving-tvamlgw-eyes-energy-opti/489158/>.

<sup>58</sup> See Att. 26, Mike Suriani, *MLGW officials consider ending power supply relationship with TVA*, NEWS CHANNEL 3 WREG MEMPHIS (Feb. 27, 2020 / 06:56 PM CST), <https://wreg.com/news/mlgw-officials-considers-ending-power-supply-relationship-with-tva/> (stating that draft report expected mid-April and final plan summer 2020).

Midcontinent Independent System Operator (“MISO”) and the Southwest Power Pool (“SPP”).<sup>59</sup> The percentage of Memphis load served by renewable generation increased by three percent, seventeen percent, and twenty-six or thirty-two percent, respectively, under these alternative portfolios.<sup>60</sup> At the same time, these portfolios would save approximately \$200 million to \$333 million annually.<sup>61</sup>

Similarly, a study prepared by ACES estimated that by joining MISO, MLGW could save \$9.2 billion between 2024 and 2038, while serving fully twenty-five percent of its load with renewable generation.<sup>62</sup>

ICF Resources LLC (“ICF”) prepared a study for FLH Company, the parent company of Nuclear Development LLC, to evaluate the effect of purchasing power from the Bellefonte plant.<sup>63</sup> ICF concluded that the Bellefonte plant would meet approximately seventy percent of MLGW’s load while the remaining “incremental power” and capacity could be purchased in a variety of way such as through a partial requirements contract with TVA, from other utilities, or on the spot market.<sup>64</sup> ICF estimated savings of \$335 million in the first year and \$7.9 billion over the twenty-year term of a power purchase agreement (“PPA”).<sup>65</sup> Setting aside some lifecycle costs, and although it raises other environmental concerns, nuclear generation is carbon-free.<sup>66</sup>

Finally, a study by GDS Associates, Inc. looked at four alternative scenarios: MLGW as its own balancing authority, supplied by the Bellefonte plant and either MISO or new resources; and MLGW within MISO, with or without power from Bellefonte.<sup>67</sup> Although the study did not consider the cost of capital expansion such as new transmission to join MISO, it projected significant savings compared to remaining with TVA.<sup>68</sup> The study included a sensitivity for each scenario based on importing wind power from MISO and concluded that this could be done for

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<sup>59</sup> Att. 27, JURGEN WEISS, ET AL., THE BRATTLE GROUP, POWER TO MEMPHIS: OPTIONS FOR A RELIABLE, AFFORDABLE AND GREENER FUTURE 8-9 (2019),

<http://www.mlgw.com/images/content/files/pdf/Brattle%20Study.pdf>.

<sup>60</sup> *Id.* at 11-12.

<sup>61</sup> *Id.* at 16.

<sup>62</sup> Att. 28, ACES, MEMPHIS LIGHT, GAS AND WATER LONG-TERM PORTFOLIO CONSIDERATIONS 3, 7 (2019),

<http://www.mlgw.com/images/content/files/pdf/ACES%20Supply%20Study.pdf>.

<sup>63</sup> Att. 29, JUDAH ROSE, ET AL., ICF RESOURCES LLC, ASSESSMENT OF WHOLESALE POWER OPTIONS FOR MEMPHIS LIGHT, GAS AND WATER: PRELIMINARY DRAFT (2018),

<http://www.mlgw.com/images/content/files/pdf/ICF%20very%20clean.pdf>.

<sup>64</sup> *Id.* at 4-6.

<sup>65</sup> *Id.* at 3-4.

<sup>66</sup> See Att. 30, Nuclear, TENN. VALLEY AUTH., <https://www.tva.com/energy/our-power-system/nuclear> (last visited Apr. 23, 2020).

<sup>67</sup> See Att. 31, SETH BROWN, GDS ASSOCIATES, INC., EVALUATION OF LONG-TERM POWER SUPPLY ALTERNATIVES: MEMPHIS LIGHT GAS & WATER (MLGW) (Draft as of January 28, 2019),

[http://www.mlgw.com/images/content/files/pdf/MLGW%20Long%20Term%20Power%20Supply%20Alts%20draft\\_V0\\_7%20202-1-2019.pdf](http://www.mlgw.com/images/content/files/pdf/MLGW%20Long%20Term%20Power%20Supply%20Alts%20draft_V0_7%20202-1-2019.pdf).

<sup>68</sup> *Id.* at 3-4.

little additional cost.<sup>69</sup> It recommended MLGW commission an integrated resources plan (“IRP”).<sup>70</sup>

Following these studies, MLGW decided to commission an IRP looking out twenty years to fully evaluate its options outside of renewing its contract with TVA.<sup>71</sup> It selected Siemens to prepare the IRP.<sup>72</sup> As noted, Siemens has not finished the IRP but expects to have a draft completed soon and a plan this summer. However, preliminary results are very promising. According to a recent presentation the reference case includes 2.55 gigawatts (“GW”) of renewable generation.<sup>73</sup> Further, renewable generation is the most economic option and exceeds targets.<sup>74</sup> Renewable generation is expected to meet twenty-five to fifty percent of demand.<sup>75</sup>

This compares favorably to TVA’s plans. For example, if MLGW develops 2.55GW of renewable generation in the coming twenty years, that is more than the minimum total renewable generation that TVA itself anticipates bringing online in about the same timeframe, to serve ten times the load.<sup>76</sup> It is difficult to draw conclusions about TVA’s future generation portfolio from its 2019 IRP because the document gives its recommendation as a series of wide ranges;<sup>77</sup> nevertheless, what the Memphis example makes abundantly clear is that the Long-term Contract lock-in provision would inhibit the growth of renewables relative to the baseline contract length. In addition to environmental benefits, a recent study by Synapse Energy Economics, Inc. concludes that TVA presents an ongoing risk of rate increases, driven substantially by its plan to continue to rely on fossil fuel generation.<sup>78</sup> Rate increases could also result in significant socioeconomic, energy, air, climate and other impacts.

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<sup>69</sup> *Id.* at 4, 15-24.

<sup>70</sup> *Id.* at 45.

<sup>71</sup> Att. 21, MEMPHIS LIGHT GAS AND WATER DIVISION, INTEGRATED RESOURCE PLAN AND TRANSMISSION ANALYSIS – REQUEST FOR PROPOSAL (RFP) (2019), [http://www.mlgw.com/images/content/files/pdf/Integrated%20Resource%20Plan\\_RFP\\_Memphis%20Light%20Gas%20and%20Water%20Division\\_04-03-19.pdf](http://www.mlgw.com/images/content/files/pdf/Integrated%20Resource%20Plan_RFP_Memphis%20Light%20Gas%20and%20Water%20Division_04-03-19.pdf).

<sup>72</sup> Att. 32, Press Release: MLGW selects consultant for Integrated Resource Plan, MLGW (July 22, 2019), [http://www.mlgw.com/news/news\\_22719](http://www.mlgw.com/news/news_22719).

<sup>73</sup> Att. 33, Siemens, Presentation: Integrated Resource Plan and Transmission Analysis 13 (Feb. 27, 2020) [http://www.mlgw.com/images/content/files/pdf/PSAT\\_Siemens%20Presentation\\_02-27-2020.pdf](http://www.mlgw.com/images/content/files/pdf/PSAT_Siemens%20Presentation_02-27-2020.pdf).

<sup>74</sup> *Id.* at 16.

<sup>75</sup> *Id.* at 16-17.

<sup>76</sup> Att. 1, 2019 IRP 9-3 to 9-4, [https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/default-document-library/site-content/environmental-stewardship/irp/2019-documents/tva-2019-integrated-resource-plan-volume-i-final-resource-plan.pdf?sfvrsn=44251e0a\\_2](https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/default-document-library/site-content/environmental-stewardship/irp/2019-documents/tva-2019-integrated-resource-plan-volume-i-final-resource-plan.pdf?sfvrsn=44251e0a_2).

<sup>77</sup> *Id.*; see Att. 2, Minutes of Meeting of the Board of Directors, Tennessee Valley Authority 10 (Aug. 22, 2019) (resolving to affirm “the merits of a diverse energy resource portfolio and of maintaining the flexibility to make energy resource decisions consistent with least-cost planning that fall within the resource ranges depicted in Figure 9-1 of the Final 2019 IRP”); Att. 34, Maggie Shober, *TVA releases final long-term resource plan, and we are underwhelmed*, SOUTHERN ALL. FOR CLEAN ENERGY (June 29, 2019), <https://cleanenergy.org/blog/tva-releases-final-long-term-resource-plan-and-we-are-underwhelmed/>.

<sup>78</sup> Att. 35, DAVID WHITE, ET AL., SYNAPSE ENERGY ECONOMICS, INC., MEMPHIS AND TENNESSEE VALLEY AUTHORITY: RISK ANALYSIS OF FUTURE TVA RATES FOR MEMPHIS 5-17 (2019),

Memphis is perhaps the most developed case, but it is not alone. Multiple cities in TVA's region have more ambitious GHG-reduction and renewable generation goals.<sup>79</sup> In eastern Tennessee, Volunteer Energy Cooperative has expressed opposition to TVA's rate hikes<sup>80</sup> and cited a desire to purchase generation from renewable sources when explaining its decision not to execute the Long-term Contract.<sup>81</sup> In comments on TVA's draft 2019 IRP, the City of Knoxville expressed its strong desire to see TVA reduce GHG emissions and increase its support for renewable generation and other low-carbon technology.<sup>82</sup>

- b) *By locking local power companies into perpetual service, the Long-term Contract insulates TVA from competitive pressure to provide more access to renewables and DERs.*

What the Memphis example clearly shows is that TVA's decision to adopt the Long-term Contract option very likely will significantly affect the environment by locking in TVA's customers and limiting access to renewables, and is therefore a major federal action that requires NEPA review. The Long-term Contract will have the direct effect of locking local power companies into TVA's generation load, meaning that one way to measure its environmental impact is to compare TVA's generation portfolio and its likely future portfolio—best sketched out by TVA's 2019 IRP—against the generation resources that local power companies would procure if independent. Different local power companies will be differently situated; for example, Memphis benefits in its negotiations with TVA by being located near the edge of TVA's territory with the ability to connect to MISO and SPP. But Memphis could also be served by the Bellefonte plant over two hundred miles away. The Memphis example sufficiently illustrates the potential environmental effects of TVA's decision. *See Sherwood*, 590 F. App'x at 456 (discussing plaintiffs' evidence of trees to be removed, tracts of land containing trees that would be removed under policy, and environmental consequences of removing trees).

The Long-term Contract likely will also have an environmental impact in terms of its indirect effect on TVA's own activities. TVA acknowledges as much by tiering to its EIS for its 2019 IRP in the Draft EA and asserting that the environmental impacts resulting from changes to

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<https://1bps6437gg8c169i0y1drtgz-wpengine.netdna-ssl.com/wp-content/uploads/2019/12/Synapse-2019-Memphis-TVA-Report-Final-2019.12.11.pdf>.

<sup>79</sup> Att. 36, James Bruggers, *Southern Cities' Renewable Energy Push Could Be Stifled as Utility Locks Them Into Longer Contracts*, INSIDE CLIMATE NEWS (Dec. 16, 2019), <https://insideclimatenews.org/news/15122019/tva-rate-lock-in-renewable-energy-cities-nashville-memphis-knoxville>; Att. 37, James Bruggers, *Cities Pressure TVA to Boost Renewable Energy as Memphis Weighs Breaking Away*, INSIDE CLIMATE NEWS (Apr. 30, 2019), <https://insideclimatenews.org/news/30042019/tva-renewable-energy-memphis-nashville-knoxville-climate-change-coal-costs>.

<sup>80</sup> *See* Att. 38, Volunteer Elec. Coop., Press Release: TVA Board Approves Rate Increase, Passed Through by VEC Board (Oct. 1, 2018), <https://vec.org/tva-board-approves-rate-increase-passed-through-by-vec-board/>; Att. 39, Volunteer Elec. Coop., Press Release: TVA Rates Increased in October (Dec. 21, 2017), <https://vec.org/tva-rates-increased-october/>.

<sup>81</sup> Att. 36, Bruggers, *Southern Cities' Renewable Energy Push Could Be Stifled*.

<sup>82</sup> Att. 40, Letter from Medline Rogero, Mayor, City of Knoxville to Hunter Hydas, IRP Program Manager, TVA (Apr. 8, 2019), <http://www.tvanepacomments.com/Attachments/92-Rogero-Madeline-20190404112920.pdf>.

TVA's system would be within the range discussed in the EIS.<sup>83</sup> But the Long-term Contract will have indirect effects beyond any articulated in the EIS for the 2019 IRP or Draft EA, neither of which examine the effects of the Long-term Contract as a whole or its lock-in provision. Local power companies that are locked into service through the Long-term Contract have lost much of their leverage to negotiate with TVA for pro-environment and pro-end use customer policies, whether it be increased renewable generation, support for energy-efficiency programs, or more favorable policies for distributed energy resources.<sup>84</sup> This is particularly concerning because as noted above, TVA does not commit to a particular level of renewable growth in the 2019 IRP.

Moreover, in recent years, TVA has largely abandoned its energy efficiency and distributed energy programs, with the exception of some scattered low-income energy efficiency efforts. For example, in 2018 TVA adopted an unjustified rate structure change that was specifically intended to obstruct the growth of DER in its service territory.<sup>85</sup> The 2019 IRP itself focused on how to absorb or stifle the effects of DER, rather than on how to best deploy them to provide least-cost power to the Valley.<sup>86</sup> And, in 2019, TVA terminated its Green Power Providers program, a rooftop solar program that compensated customers who generate their own solar for the value they provide to the grid and to the Valley.<sup>87</sup> TVA has similarly walked back its energy efficiency programs: as the 2019 IRP itself acknowledges, TVA has “reduced”<sup>88</sup> energy incentives and instead implements the eScore system for residential customers, which provides advice but no rebates or incentives.<sup>89</sup> In commercial and industrial sectors, TVA includes “some standard rebates” but focuses on “customized solutions” such as Strategic Energy Management, which is a platform for industrial and commercial customers to talk about efficiency options but does not incentivize adopting those options.<sup>90</sup>

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<sup>83</sup> See, e.g., Draft EA at 3-10.

<sup>84</sup> See Att. 36, Bruggers, *Southern Cities' Renewable Energy Push Could Be Stifled*, *supra* note 79.

<sup>85</sup> Att. 41, TVA, 2018 Wholesale Rate Change, Draft Environmental Assessment, i (March 2018) (asserting that “TVA’s current energy prices over-incentivize consumer installation of DER” and that rate change is needed to “mitigate[e] the effects”) [hereinafter “2018 Rate Change EA”]; Att. 42, TVA, 2018 Wholesale Rate Change, Final Environmental Assessment, I, (May 2018).

<sup>86</sup> Att. 1, TENN. VALLEY AUTH., 2019 INTEGRATED RESOURCE PLAN, VOLUME I, :—FINAL RESOURCE PLAN (2019), [https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/default-document-library/site-content/environment/environmental-stewardship/irp/2019-documents/tva-2019-integrated-resource-plan-volume-i-final-resource-plan.pdf?sfvrsn=44251e0a\\_2](https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/default-document-library/site-content/environment/environmental-stewardship/irp/2019-documents/tva-2019-integrated-resource-plan-volume-i-final-resource-plan.pdf?sfvrsn=44251e0a_2); Att. 43, TENN. VALLEY AUTH., 2019 INTEGRATED RESOURCE PLAN, VOLUME II - FINAL ENVIRONMENTAL IMPACT STATEMENT, [https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/default-document-library/site-content/environment/environmental-stewardship/irp/2019-documents/tva-2019-integrated-resource-plan-volume-ii-final-eis.pdf?sfvrsn=99a30a7d\\_2](https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/default-document-library/site-content/environment/environmental-stewardship/irp/2019-documents/tva-2019-integrated-resource-plan-volume-ii-final-eis.pdf?sfvrsn=99a30a7d_2) [hereinafter “2019 IRP EIS”].

<sup>87</sup> Att. 44, Tenn. Valley Auth., CHANGES TO GREEN POWER PROVIDERS PROGRAM FINAL ENVIRONMENTAL ASSESSMENT (Dec. 2019) <https://www.tva.com/energy/valley-renewable-energy/green-power-providers>; Att. 45, SELC et al. Comments on Changes to Green Power Providers Program Draft Environmental Assessment (November 8, 2019).

<sup>88</sup> 2019 IRP at B-1.

<sup>89</sup> *Id.* at B-4.

<sup>90</sup> *Id.* at B-6.

TVA has acknowledged in filings with the Securities Exchange Commission (“SEC”) that its customers’ growing preference for renewable and other DERs is a key challenge.<sup>91</sup> Further, it has specifically identified it as a competitive challenge:

TVA also faces competition in the form of emerging technologies. Improvements in energy efficiency technologies, smart technologies, and energy storage technologies may reduce the demand for centrally provided power. The growing interest by customers in generating their own power through DER has the potential to lead to a reduction in the load served by TVA as well as cause TVA to re-evaluate how it operates the overall grid system to continue to provide highly reliable power at affordable rates. See Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations — *Key Initiatives and Challenges — Distributed Energy Resources*.<sup>92</sup>

TVA has also identified it as a general business risk:

**TVA may have difficulty in adapting its business model to changes in the utility industry and customer preferences.**

The traditional business model for power production, selling power from centrally located plants, is facing pressure from a variety of sources, including the potential for self-generation by current or potential customers, new technologies such as energy storage, and increased energy efficiency. These pressures may reduce the demand for TVA power. If TVA does not or cannot adapt to this pressure by adequately changing its business model, TVA's financial condition and results of operations could be negatively affected.<sup>93</sup>

To address this challenge, TVA appears to have responded in at least two ways. One response was to begin work on its 2019 IRP “sooner than originally planned,”<sup>94</sup> and include a focus on distributed energy resources. As mentioned, the 2019 IRP’s recommendations are ambiguous but it proposes possibly increasing its own renewable portfolio, while rejecting a strategy that would have a similar cost profile but promote distributed energy resources owned and controlled by others.<sup>95</sup> In other words, one response was to compete by indicating that the federal utility might develop new renewable projects while making clear that it would continue to emphasize utility-scale resources under its control.

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<sup>91</sup> See Att. 19, TVA SEC Form 10-K/A, *supra* note 48, at 64 (listing “Distributed Energy Resources” and “Changing Customer Preferences” first among key initiatives and challenges).

<sup>92</sup> *Id.*

<sup>93</sup> *Id.* at 41.

<sup>94</sup> *Id.* at 65.

<sup>95</sup> Att. 1, 2019 IRP Vol. I; Att. 43, 2019 IRP Vol. II; Att. 46, SELC et al. Comments on TVA’s Draft Integrated Resource Plan and Draft Environmental Impact Statement (April 7, 2019).

The other side of TVA's response is the Long-term Contract: more firmly locking local power companies into their all-requirements contracts with TVA and insulating TVA from the need to adapt and compete.<sup>96</sup> To be sure, TVA's stated purpose for developing the Long-term Contract was to improve TVA's financial position by guaranteeing customers, thereby reducing the risk that TVA would be unable to pay for its long-term capital investments and reducing the cost of capital on those investments.<sup>97</sup> But the question is not whether TVA adopted the Long-term Contract option *for the purpose* of preventing local power companies from seeking environmentally superior generation sources or for the purpose of avoiding environmentally beneficial changes to TVA's own operations. For the purpose of NEPA review, the question is whether adopting the Long-term Contract option would have these or other significant impacts on the quality of the human environment. Regardless of TVA's intent, TVA should have been aware that it would. What NEPA requires is simply recognizing the range of potential significant impacts and evaluating them: look before you leap.

Adopting the Long-term Contract would have other foreseeable environmental impacts as well. For example, the 3.1 percent discount of wholesale rates that local power companies receive under the Long-term Contract, assuming it is passed on to customers, will increase demand.<sup>98</sup> Residential customers in TVA's region have been found to be the most responsive to electricity prices in the United States in the long term, and second-most responsive in the short term.<sup>99</sup> As more local power companies execute the Long-term Contract, TVA may be forced to raise prices to compensate,<sup>100</sup> but even then this effect is likely to remain in force to some

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<sup>96</sup> See Att. 19, TVA SEC Form 10-K/A, at 11 (stating that TVA receives ninety-one percent of its revenue from LPCs, the twenty-year rolling Long-term Contract "better aligns the length of LPC contracts with TVA's long-term commitments" and "enables TVA to recover its long-term financial commitments over a commensurate period," noting that 131 LPCs had signed the agreement, representing fifty-six percent of TVA's operating revenues in 2019); *id.* at 50 (same), 53 (same), 70 (same, noting that agreement is automatically extended indefinitely), 125 (same); see also Att. 47, MarketWatch, Press Release: 10-Q: TENNESSEE VALLEY AUTHORITY (Feb. 5, 2020), [https://www.marketwatch.com/press-release/10-q-tennessee-valley-authority-2020-02-05?mod=mw\\_quote\\_news](https://www.marketwatch.com/press-release/10-q-tennessee-valley-authority-2020-02-05?mod=mw_quote_news) (explaining that Long-term Contract is part of "Strategic Financial Plan" approved by TVA board in 2019 to "maintaining rates as low as feasible, establishing better alignment between the length of local power company customer ('LPC') contracts and TVA's long-term commitments, stabilizing debt, and pursuing operational efficiencies"); Att. 48, Tenn. Valley Auth., Presentation: Board Meeting, August 22, 2019, Knoxville, Tennessee at 91, <http://www.sn1.com/Cache/IRCache/cc8bcfa4-a1a4-87ee-3251-27b329f6484a.PDF?O=PDF&T=&Y=&D=&FID=cc8bcfa4-a1a4-87ee-3251-27b329f6484a&iid=4063363> (listing "inconsistent contract length v. asset obligations" among benefits of Long-term Contract identified by TVA).

<sup>97</sup> See Att. 19, TVA SEC Form 10-K/A, at 11 (Nov. 15, 2019), Att. 3, TVA, Exhibit 8-22-19J, Memorandum at 2 (stating that "benefits to TVA's financial risk profile by the existence of such long-term relationships would be shared with participating LPCs in the form of a wholesale bill credit").

<sup>98</sup> See Att. 49, Greenlink Analytics, Evaluating TVA's Newly Proposed Wholesale Reductions and Capacity Additions, Table 1 and accompanying text (May 2020); Att. 50, TATYANA DERYUGINA, ET AL., THE LONG-RUN ELASTICITY OF ELECTRICITY DEMAND: EVIDENCE FROM MUNICIPAL ELECTRIC AGGREGATION 25 (2017), <https://www.econ.pitt.edu/sites/default/files/Deryugina.Electricity%20Aggregation.pdf> (concluding that residential electricity demand is responsive to price and approximately twice as responsive in the long term).

<sup>99</sup> Att. 51, M.A. Bernstein and J. Griffin, RAND Corporation, Regional Differences in the Price-Elasticity of Demand for Energy 24, 29 (2006), <https://www.nrel.gov/docs/fy06osti/39512.pdf>.

<sup>100</sup> See Att. 3, Board Exhibit 8-22-19J, Memorandum at 4 (stating that a credit higher than 3.1% would require TVA to raise rates); Att. 5, Letter from Denise Smith, TVA, to Amanda Garcia, SELC 2 (Apr. 24, 2020) (acknowledging that TVA did not estimate the effect of 3.1% credit on demand).

degree. Similarly, the Long-term Contract constrains TVA's ability to raise rates if necessary through the provision allowing local power companies to renegotiate or, eventually, leave if TVA raises rates more than ten percent during any five-year period or five percent from 2019 levels before 2024.<sup>101</sup> This constraint could have a negative impact on the environment, for example, if it makes it more difficult for TVA to retire existing fossil generation, to install pollution controls, or to fund various beneficial programs.

At the same time, the Long-term Contract will have significant socio-economic impacts that must be analyzed under NEPA. As the Memphis example shows, local power companies may be able to reduce rates substantially by seeking power elsewhere. Although MLGW customers pay low bills compared to customers in other parts of the country,<sup>102</sup> nevertheless Memphians experience the worst energy burden in the nation.<sup>103</sup> When economic and social impacts of a proposed action are interrelated with its environmental impacts they must be analyzed. 40 C.F.R. § 1508.14; *Highland Co-op. v. City of Lansing*, 492 F. Supp. 1372, 1380 (W.D. Mich. 1980); *see also* 40 C.F.R. § 1502.16(g).

Accordingly, TVA's decision to adopt the Long-term Contract is a major federal action that will significantly affect the quality of the human environment and likely already has done so, thus requiring a full EIS under NEPA. It will have a range of environmental impacts, primarily through hindering renewable generation. 40 C.F.R. § 1508.27(b)(1). This will result in poorer air quality, impacting public health. *Id.* § 1508.27(b)(2). The contract has proven highly controversial, not least in the case of Memphis. *Id.* § 1508.27(b)(4). The contract plainly established a precedent for future action, foremost among them entering into the Long-term Contract with 138 local power companies, and, now, offering the Flexibility Proposal. *Id.* § 1508.27(b)(6). It also has cumulative impacts, adding to a number of TVA's previous actions that also hamper renewable generation. *Id.* § 1508.27(b)(7). At the very least, TVA should have prepared an EA to determine whether an EIS was necessary. *See* 40 C.F.R. § 1508.9; *Sherwood*, 590 F. App'x at 457 (explaining use of EA as screening device).

**B. The Long-term Contract and the Flexibility Proposal are connected actions that must be analyzed in the same NEPA document.**

It is a "fundamental NEPA principle ... that connected actions must be analyzed together[.]" *Defenders of Wildlife v. U.S. Dep't of Navy*, 733 F.3d 1106, 1116 (11th Cir. 2013); *Am. Rivers & Ala. Rivers All. v. FERC*, 895 F.3d 32, 55 (D.C. Cir. 2018) (NEPA document must address "the total impacts and cannot isolate a proposed project, viewing it in a vacuum."); *see Oak Ridge Env'tl. Peace All.*, 412 F. Supp. 3d at 805 ("The rule against segmentation prevents

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<sup>101</sup> Att. 3, TVA, Exhibit 8-22-19J, Long-term Agreement § 2(a).

<sup>102</sup> Att. 22, MLGW Power Supply Advisory Team (PSAT), Presentation: Orientation Meeting at 26-29 (April 30, 2019), [http://www.mlgw.com/images/content/files/pdf/PSAT%20Orientation%20Meeting\\_Final%20Formatted5\\_jty.pdf](http://www.mlgw.com/images/content/files/pdf/PSAT%20Orientation%20Meeting_Final%20Formatted5_jty.pdf).

<sup>103</sup> Att. 52, Am. Council for an Energy-Efficient Econ., Press Release: Report: "Energy Burden" on Low-Income, African American, & Latino Households up to Three Times as High as Other Homes, More Energy Efficiency Needed (Apr. 20, 2016), <https://www.aceee.org/press/2016/04/report-energy-burden-low-income>.

agencies from evading their responsibilities under NEPA by artificially dividing a federal action into smaller components so the action would no longer be considered ‘major,’ or so that no significant environmental impacts would be detected.”). TVA violated this principle by considering the environmental impacts of the Flexibility Proposal separately from the impacts of the Long-term Contract.

The Flexibility Proposal and the Long-term Contract are connected actions. In fact, they fulfill all three definitions of connected actions set forth in CEQ’s NEPA regulations. First and foremost, the Flexibility Proposal “cannot or will not proceed unless other actions are taken previously or simultaneously,” because the Flexibility Proposal is only available to local power companies that have signed the Long-term Contract. 40 C.F.R. § 1508.25(a)(1); see *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*, 301 F. Supp. 3d 50, 67 (D.D.C. 2018).<sup>104</sup> Second, the Long-term Contract “automatically trigger[s]” the Flexibility Proposal because the development and implementation of the Flexibility Proposal is a *term* of the Long-term Contract.<sup>105</sup> 40 C.F.R. § 1508.25(a)(1). Third, the Long-term Contract and Flexibility Proposal are properly viewed as “interdependent parts of a larger action” that “depend on the larger action for their justification.” *Id.* The Flexibility Proposal would serve no “significant purpose” without the Long-term Contract—it would not be applicable to any of TVA’s customers. Therefore, the Flexibility Proposal and the Long-term Contract are “connected and interrelated” and “functionally and financially interdependent” and may not be considered in isolation from one another. *Standing Rock Sioux Tribe*, 301 F. Supp. 3d at 67.

In spite of these well-established principles of NEPA compliance, TVA has failed to examine the environmental impacts of the Long-term Contract at all, and has evaluated the Flexibility Proposal’s impacts in an EA that omits any consideration of how the Long-term Contract—through which the Flexibility Proposal would be implemented—affects the environment. TVA has overlooked the environmental impacts of the Long-term Contract and impermissibly narrowed the scope of its environmental analysis to the Flexibility Proposal, despite the fact that the Flexibility Proposal cannot—and as matter of fact does not—exist separately from the Long-term Contract. TVA’s artificial division of these connected actions violates NEPA. See *PEACH v. U.S. Army Corps of Eng’rs*, 87 F.3d at 1247.

**C. TVA’s decision to adopt and implement the Long-term Contract is not categorically excluded from the obligation to prepare an EA or EIS.**

TVA has not invoked any categorical exclusion for its decision to adopt the Long-term Contract without analyzing its environmental impacts, and this alone rules out applicability of any categorical exclusion to its decision. As noted, TVA has explained that it does not have

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<sup>104</sup> Draft EA at 1-1 (“[TVA] is proposing to provide enhanced power supply flexibility to local power companies... that have entered in to Long-Term Partnership (LTP) agreements with TVA”).

<sup>105</sup> Att. 3, Board Exhibit 8-22-19J, Long-term Agreement § 2; see Draft EA at 1-1 (“TVA committed to develop an option for power supply flexibility for Valley Partners to generate up to five percent of energy, by October 1, 2021. If TVA does not provide an agreeable power supply flexibility option by the specified date, LPCs have the option to terminate their LTP agreement.”).

NEPA documentation for the decision because it determined that NEPA did not apply.<sup>106</sup> However, by issuing an EA on the Flexibility Proposal, TVA has essentially conceded that the Long-term Contract—of which the Flexibility Proposal is an express term—required NEPA review before implementation. In any event, when an action is covered by a categorical exclusion that does not mean that NEPA does not apply. “Categorical exclusions are not exemptions or waivers of NEPA review; they are simply one type of NEPA review.” *United Keetoowah Band of Cherokee Indians in Okl. v. Fed. Comm’n’s Comm’n*, 933 F.3d 728, 735 (D.C. Cir. 2019) (quoting Council on Environmental Quality, Memorandum for Heads of Federal Dep’ts and Agencies: Establishing, Applying & Revising Categorical Exclusions under [NEPA] 2 (2010)); see *Oak Ridge Envtl. Peace All.*, 412 F. Supp. 3d at 826 (explaining that applying categorical exclusion exempts action from *further* NEPA review). Accordingly, TVA’s explanation is not an invocation of a categorical exclusion but a bare assertion that NEPA does not apply. As explained above, that is incorrect.

Were TVA to invoke a categorical exclusion now, it would be too late. “There does not appear to be any specific process an agency must follow in determining that a categorical exclusion applies and that an exception to that exclusion does not apply; the agency must simply explain its decision in a reasoned manner.” *Ctr. For Food Safety v. Johanns*, 451 F. Supp. 2d 1165, 1175–76 (D. Haw. 2006). At a minimum, however, an agency must invoke a categorical exclusion explicitly. *Oak Ridge Envtl. Peace All.*, 412 F. Supp. 3d at 842 (citation omitted). “Post-hoc invocation of a categorical exclusion does not provide assurance that the agency considered the effects of its action before deciding to pursue it.” *Wilderness Watch, Inc. v. Creachbaum*, 225 F. Supp. 3d 1192, 1209 (W.D. Wash. 2016), *aff’d*, 731 F. App’x 709 (9th Cir. 2018); see *Sherwood*, 590 F. App’x at 459 (rejecting post-hoc invocation of categorical exclusions).

The decision to adopt the Long-term Contract would not have been eligible for a categorical exclusion had TVA chosen to invoke one. Categorical exclusions apply to actions that do not “normally” require an EA or EIS, 40 C.F.R. § 1507.3(b)(2)(ii); 40 C.F.R. § 1501.4(a), and which “do not individually or cumulatively have a significant effect on the human environment,” 40 C.F.R. § 1508.4. Agencies must identify categorical exclusions in their NEPA procedures. *Id.* They must also identify the “extraordinary circumstances” under which “a normally excluded action may have a significant environmental effect.” 40 C.F.R. § 1508.4.

The TVA’s NEPA procedures include twenty-eight categorical exclusions, subject to just two extraordinary circumstances, identified in bold text:

Categories of actions listed in this section are those which do not normally have, either individually or cumulatively, a significant impact on the quality of the human environment and require neither the preparation of an EA nor an EIS. The office proposing to initiate an action shall determine, in consultation with the

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<sup>106</sup> See Att. 4, E-mail from Matthew Stephen Higdon (April 10, 2020, 3:06 pm).

Environmental Quality Staff as appropriate, whether or not the proposed action is categorically excluded. **An action which would normally qualify as a categorical exclusion shall not be so classified if: (1) the proposed action could have a potentially significant impact on a threatened or endangered species, wetland or floodplain, cultural or historical resource, important farmland, or other environmentally significant resource; or (2) substantial controversy over the significance of the environmental impacts associated with the proposed action has developed or is likely to develop.** Categorical exclusion actions are:

...

6. Contracts or agreements for the sale, purchase, or interchange of electricity.

....

Proposed Revisions to Procedures Implementing the National Environmental Policy Act (NEPA) and Executive Order Nos. 11988 (Floodplain Management) and 11990 (Protection of Wetlands), 47 Fed. Reg. 54,586-01 (1982), adopted in 48 Fed. Reg. 19,264 (1983).

TVA has finalized new NEPA procedures,<sup>107</sup> which became effective April 27, 2020. Procedures for Implementing the National Environmental Policy Act, 85 Fed. Reg. 17,434-01 (Mar. 27, 2020). The new regulations dramatically expand the number of categorical exclusions that the agency recognizes. 85 Fed. Reg. at 17,460-63. They preserve the categorical exclusion for contracts for the sale of electricity. *Id.* They also preserve the extraordinary circumstances from the previous iteration in much the same form, including actions that have “the potential to significantly impact environmental resources” or where the “significance of the environmental impacts associated with the proposed action is or may be highly controversial.” 85 Fed. Reg. at 17,460. In the new NEPA procedures, TVA redefined “controversial” to mean “scientifically supported commentary that casts substantial doubt on the agency’s methodology or data, but does not mean commentary expressing mere opposition.” 85 Fed. Reg. at 17,459. This definition is overly narrow and likely violates NEPA. *See* 40 C.F.R. § 1508.27(b)(4). Here, TVA has so far failed to provide its own relevant technical analyses supporting the Long Term Contract and the Flexibility Proposal. TVA may not simultaneously withhold its technical analyses and demand that the public comply with its narrow definition of “controversial.” Furthermore, the definition is too narrow to capture relevant aspects of the ongoing controversy.

Under either version of the regulations, the TVA categorical exclusion most likely to apply to the decision to adopt the Long-term Contract option is No. 6, quoted above. However, as TVA made clear in response to comments on No. 6, that categorical exclusion does not apply to electricity contracts that would “spur expansion or development of facilities and/or transmission infrastructure . . .”<sup>108</sup> The Long-term Contract would spur development of facilities

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<sup>107</sup> For a summary of rulemaking actions, *see* Att. 53, *Changes to TVA’s NEPA Procedures*, TENN. VALLEY AUTH, <https://www.tva.com/environment/environmental-stewardship/environmental-reviews/nepa-detail/Proposed-Changes-to-TVAs-NEPA-Procedures> (last visited Apr. 20, 2020).

<sup>108</sup> Att. 54, TENN. VALLEY AUTH., RESPONSE TO PUBLIC COMMENTS: PUBLIC REVIEW OF TVA’S PROPOSED AMENDMENTS TO PROCEDURES FOR IMPLEMENTING THE NATIONAL ENVIRONMENTAL POLICY ACT (June to

and infrastructure in at least three ways: increasing demand, limiting exit, and providing the option for local power companies to obtain 3-5 percent of their generation from non-TVA sources, including new renewable and gas generation. Accordingly, by TVA's own terms, No. 6 would not apply.

Even if adopting the Long-term Contract did fall within categorical exclusion No. 6, both of the extraordinary circumstances that TVA has identified pertain and it could not be used. As described above, the Long-term Contract option is likely to have significant impacts on environmentally significant resources such as the air quality in the TVA region and global atmospheric GHG concentrations. Furthermore, substantial controversy over the environmental impacts of the Long-term Contract option has developed and is likely to develop further.<sup>109</sup> As demonstrated throughout these comments, this is true even under the new unreasonably narrow definition of "controversy." Because there is substantial evidence of extraordinary circumstances TVA would be required to have provided more than a bare invocation of a categorical exclusion were it to invoke one. *Oak Ridge Env'tl. Peace All.*, 412 F. Supp. 3d at 842.

Accordingly, TVA's decision to adopt the Long-term Contract option is not categorically excluded from the NEPA requirement to prepare an EA or EIS. TVA did not invoke a categorical exclusion; it is too late to invoke one now; no categorical exclusion under either version of TVA's NEPA procedures applies; and even if one did, under either version there are extraordinary circumstances precluding the use of a categorical exclusion.

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September 2017), (March 2020) [https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/environment/environmental-stewardship/nepa-environmental-reviews/tva\\_nepa\\_procedures\\_comment\\_response\\_report\\_3-25-2020\\_final.pdf?sfvrsn=8622d330\\_3](https://tva-azr-eastus-cdn-ep-tvawcm-prd.azureedge.net/cdn-tvawcma/docs/default-source/environment/environmental-stewardship/nepa-environmental-reviews/tva_nepa_procedures_comment_response_report_3-25-2020_final.pdf?sfvrsn=8622d330_3) ("The proposed revision to the CE established by TVA in 1980 was intended to clarify that transactions that spur expansion or development of facilities and/or transmission infrastructure are not covered under the CE. Upon further internal deliberation, however, TVA determined that no clarification was needed to the CE, as staff shared that understanding of the existing CE. In the final rule, TVA carries forward the existing CE without revision as CE 6.")<sup>109</sup> See, e.g., Att. 55, James Bruggers for Inside Climate News, *TVA's push for lengthy utility deals could set back green initiatives in Tennessee cities*, KNOX NEWS (5:00 a.m. ET Jan. 8, 2020), <https://www.knoxnews.com/story/news/local/tennessee/2020/01/08/tva-trying-lock-tennessee-cities-into-lengthy-utility-deals/2698982001/>; Att. 56, Daniel Tait & Joe Smyth, *TVA attempts to chain local power companies to longer contracts in effort to prevent defection risk: New TVA contract could prevent municipal utilities, co-ops from pursuing local renewable energy, storage*, ENERGY & POL'Y INST. (Sept. 22, 2019), <https://www.energyandpolicy.org/tva-local-power-companies-defection/>; Att. 57, Samuel Hardiman for The Commercial Appeal, *Here's TVA's final offer to Memphis*, ENERGY CENTRAL (Jan 3, 2020 6:53 am GMT) ("Outside experts from renewable energy lobbyist groups have blasted the 20-year offer as a lopsided one that keeps local utilities buying fossil-fuel generated power, slows the transition to renewable energy and cements TVA's monopoly."); Att. 58, Pam Sohn, *Is TVA locking the South out of the future?*, CHATTANOOGA TIMES FREE PRESS (December 21st, 2019), <https://www.timesfreepress.com/news/opinion/times/story/2019/dec/21/sohn-tvlocking-south-out-future/511057/>.

**D. The Flexibility Proposal will significantly affect the environment and requires an EIS.**

The Flexibility Proposal will significantly affect the quality of the human environment and therefore requires analysis in a full EIS. 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1508.27. The Flexibility Proposal is a major federal action. It is an official policy. Much like the “15-foot policy” at issue in *Sherwood*, which governed the way that TVA maintenance personnel would manage the acreage within its vast rights of way, the Flexibility Proposal will govern TVA’s relationship with local power companies. 590 F. App’x 451.

The Flexibility Proposal will significantly affect the quality of the human environment. *See* 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1508.27. As discussed above, the analysis proceeds in two steps. First, “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.” 40 C.F.R. § 1508.27(a). Here again, TVA’s policy will affect its entire region. The Flexibility Proposal applies to local power companies that have signed the Long-term Contract, currently at least 138 of the 154 local power companies in TVA territory.<sup>110</sup> It will affect residents of TVA’s region in terms of air quality, public health, and clean-energy jobs, and will affect the customers of these local power companies through its impact on their bills.

Second, the “intensity” or “the severity of impact” of the action must be analyzed. 40 C.F.R. § 1508.27(b). NEPA regulations provide ten factors to consider when evaluating intensity. The first is simply environmental impacts. 40 C.F.R. § 1508.27(b)(1). Additional factors include impacts to public health, *id.* § 1508.27(b)(2), “[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial,” *id.* § 1508.27(b)(4), “[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,” *id.* § 1508.27(b)(6), and cumulative impacts, *id.* § 1508.27(b)(7). Like the Long-term Contract, the Flexibility Proposal will have these impacts.

For those local power companies that have signed the Long-term Contract, the Flexibility Proposal will govern their ability to deploy their own generation resources. Under the Flexibility Proposal, local power companies must not violate five “principles” established by TVA.<sup>111</sup> These principles limit local power companies’ self-generation *capacity* to five percent of a local power company’s average total *energy* sales during the previous five TVA fiscal years, with a minimum of 1 MW.<sup>112</sup> This limitation plainly has a direct impact on the environment by effectively capping the amount of distributed generation that local power companies may deploy. As the

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<sup>110</sup> Draft EA at 1-1.

<sup>111</sup> *Id.* at 2-1 to -2.

<sup>112</sup> *Id.* at 2-1.

price of renewable generation continues to decrease and customers continue to demand it, local power companies might otherwise exceed the threshold.<sup>113</sup>

Other “principles” of the Flexibility Proposal also generate significant environmental impacts. The second principle requires that qualifying “flexible” generation must be located within the local power company’s service territory.<sup>114</sup> Depending on the quality of renewable generation resources in a local power company’s territory compared to other areas, this limitation may make it more expensive for a local power company to develop renewable generation and therefore may decrease the capacity developed.

The fourth principle explains that “TVA will remain obligated to provide the full power requirements of the Valley Partner.”<sup>115</sup> Thus, TVA appears to assign local power companies’ “flexible” generation zero capacity value, and to honor this provision it will need to plan as though this is the case. Doing so overestimates the capacity that TVA needs and likely overvalues the capacity value of TVA’s existing resources such as coal-burning power plants. This in turn will likely lead TVA to conclude that it must keep those plants operating longer than otherwise necessary.

Finally, the fifth principle requires that “flexible” generation be consistent with TVA’s IRP. TVA explains that “[c]onsistent with DER identified in the 2019 IRP, community solar, rooftop solar, co-located solar and battery installations, natural gas-fired generators, and high efficiency natural gas-fired combined heat and power projects would be eligible,” although diesel- and coal-burning generators would not.<sup>116</sup> Plainly, including fossil gas-burning generators among the types of eligible generation will have a negative environmental impact compared to excluding them, assuming that any local power company chooses to develop them.

As long as local power companies abide by these rules, TVA renounces all control over the generation sources they select,<sup>117</sup> meaning there is nothing to prevent local power companies from selecting fossil gas-burning plants for all “flexible” generation. When it comes to analyzing the environmental impacts of the Flexibility Proposal, however, TVA assumes that no more than fifty percent of the generation deployed under the Flexibility Proposal will be fossil gas-burning. TVA analyzes three deployment scenarios: 100 percent solar, ninety percent solar and ten percent gas, and fifty-fifty solar and gas.<sup>118</sup> TVA asserts, without explanation, that these three scenarios represent the “likely” range of generation mixes and explains that this is the range “that would ensure that TVA’s carbon position is improved.”<sup>119</sup> In other words, TVA acknowledges

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<sup>113</sup> Under the terms of the Long-term Contract the Flexibility Proposal may not permit “flexible” generation in excess of five percent of the LPC’s energy use; however, far from showing that the environmental impact of this cap does not need to be analyzed under NEPA, at best it shows simply that the Long-term Contract needs to undergo NEPA review.

<sup>114</sup> Draft EA at 2-1.

<sup>115</sup> *Id.* at 2-1.

<sup>116</sup> *Id.* at 2-2.

<sup>117</sup> *Id.*

<sup>118</sup> *Id.* at 3-1.

<sup>119</sup> *Id.*

that if more than fifty percent of the “flexible” generation that local power companies develop under the Flexibility Proposal is fossil gas-burning, then TVA’s contribution to climate change will be greater than it otherwise would. Accordingly, the EA is internally inconsistent and the basis for TVA’s conclusion that the Flexibility Proposal will not have significant environmental impacts is arbitrary.

In these ways and more, the Flexibility Proposal will significantly affect the quality of the human environment. *See* 40 C.F.R. § 1508.27. It will stifle the growth of renewable energy, resulting in greater air pollution which will worsen public health and exacerbate climate change. Largely for this reason, the proposal has proven controversial, as noted above. *See id.* § 1508.27(b)(2). Of course, the Flexibility Proposal is precedent for each individual flexibility agreement that TVA will subsequently enter with local power companies, which will have significant environmental impacts of their own, not least concerning whether the generation in question is renewable or not. *See id.* § 1508.27(b)(6). And the Flexibility Proposal will have cumulative impacts on top of those of the existing and un-analyzed Long-term Contract and other actions by TVA that have constrained the growth of renewable energy. *See id.* § 1508.27(b)(7).

#### **E. Tiering the Draft EA to the 2019 IRP in inappropriate.**

The draft EA for the Flexibility Proposal purports to tier to the EIS for the 2019 IRP.<sup>120</sup> “Tiering” is the practice of first preparing an EIS for a broader agency action such as an overall program, and later incorporating applicable parts of the general discussion into the NEPA analyses for narrower agency actions such as site-specific projects. 40 C.F.R. § 1508.28; *see* Proposed Revisions to Procedures Implementing the National Environmental Policy Act (NEPA) and Executive Order Nos. 11988 (Floodplain Management) and 11990 (Protection of Wetlands) § 5.8.6., 47 Fed. Reg. 54,586-01 (1982), adopted in 48 Fed. Reg. 19,264 (1983); Procedures for Implementing the National Environmental Policy Act, 85 Fed. Reg. 17,434-01, 17465. “Whenever a broad environmental impact statement has been prepared (such as a program or policy statement) and a subsequent statement or environmental assessment is then prepared on an action included within the entire program or policy (such as a site-specific action),” the agency should summarize the issues discussed in the broader statement and “concentrate on the issues specific to the subsequent action.” 40 C.F.R. § 1502.20.

There are at least two problems with TVA’s attempt to tier to the EIS for the 2019 IRP in this case. First, the EIS did not analyze the effects of actions like the Flexibility Proposal. To serve as a sufficient basis for tiering, the EIS for a broader action must evaluate the effects of the later narrower action whose environmental documents tiers to it. *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 997-98 (9th Cir. 2004) (explaining that broader EIS tiered from must have accounted for specific impacts of later action). To some degree, this requires anticipating the type of action for whose environmental document the agency later seeks

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<sup>120</sup> *Id.* at 1-4 to -5.

to tier to the broader EIS. *See* 40 C.F.R. § 1502.20 (“an action included within the entire program or policy”).

The EIS for the 2019 IRP did not analyze the effects of actions like the Flexibility Proposal, nor did it anticipate similar actions. In the Draft EA, TVA makes clear that it considers the Flexibility Proposal to be a form of DER analyzed in the sections of the EIS addressing DERs:

TVA considered the promotion of DER most explicitly under Strategy B (“Promote DER”). Under that strategy, TVA would focus on increasing the pace of DER adoption by incentivizing distributed solar generation and storage, combined heat and power, energy efficiency, and demand response. High penetration of distributed generation was also considered under the different scenarios evaluated in the IRP (TVA 2019a).<sup>121</sup>

The EIS explains that “Strategy B focuses on increasing the pace of DER adoption by incentivizing distributed solar and storage, combined heat and power, energy efficiency and demand response.”<sup>122</sup> This list does not contain “natural gas-fired generators,” which are eligible for the Flexibility Proposal.<sup>123</sup> Nor does the Flexibility Proposal include energy efficiency and demand response, two important components of the Promote DER strategy analyzed in the 2019 IRP. Further, the draft EA acknowledges that “The 2019 IRP EIS did not provide general information about generating resources of the scale contemplated in the Flexibility Proposal,”<sup>124</sup> meaning, apparently, relatively small-capacity installations.

Furthermore, the Draft EA denies any capacity value to the “flexible” resources that LPCs may deploy. Its analysis of the effects of the Flexibility Proposal on energy production and use simply states that solar and fossil gas-burning generation would displace fossil-gas burning generation that TVA would have deployed, and

due to the relatively small proportion of TVA’s overall generating capacity that would be provided by LPCs under the Proposed Action Alternative, and particularly LPC natural gas-fired generation, the Proposed Action Alternative is unlikely to markedly alter the TVA long-term power supply plan (TVA 2019a) or the timing of the construction of new generating capacity and retirement of existing generating capacity.<sup>125</sup>

In other words, any “flexible” generation would displace fossil gas-burning generation in the moment, but none of it would affect TVA’s plans. By contrast, in the EIS for the 2019 IRP TVA

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<sup>121</sup> Draft EA at 1-4.

<sup>122</sup> Att. 43, 2019 IRP EIS at 3-8.

<sup>123</sup> Draft EA at 2-2.

<sup>124</sup> Draft EA at 1-4.

<sup>125</sup> Draft EA at 3-5.

acknowledges that DER deployment will decrease demand,<sup>126</sup> which will decrease the reserve capacity TVA needs.<sup>127</sup>

Second, the EIS for the 2019 IRP did not take into account the effect of a rate discount on demand. The 2019 IRP relies on the assumption that DER deployment will decrease demand.<sup>128</sup> This is surely true. However, assuming that local power companies that sign the Long-term Contract pass at least some of the 3.1 percent wholesale discount on their consumers, the discount will increase demand.<sup>129</sup> Because TVA incorrectly failed to conduct a NEPA review of its decision to adopt the Long-term Contract, the effect of this increase in demand has never been analyzed. Accordingly, it must be analyzed now. At a minimum, the demand increase caused by the 3.1 percent wholesale rate credit should be analyzed in conjunction with the reduction in demand caused by varying levels of local power company deployment of “flexible” resources under the Flexibility Proposal. Demand growth as a result of the discount will offset and could even overtake the reduction in demand caused by local power companies’ deployment of “flexible” generation under the Flexibility Proposal.<sup>130</sup> That relative (or absolute) increase in demand will have a significant environmental impact not contemplated at all in the EIS for the 2019 IRP. Under NEPA, it is TVA’s charge to analyze the effect on demand of its wholesale credit, compare it to any renewable generation TVA expects to be developed under the Flexibility Proposal, and assess the overall environmental impacts.

TVA purports to “tier its analysis to address more site-specific impacts that may occur based on likely local power company deployment scenarios,”<sup>131</sup> but the EA does not analyze any site-specific impacts.<sup>132</sup> Although tiering to the EIS for a broader agency action is perfectly permissible, it does not insulate the later narrower agency action from full NEPA review including the requirement to prepare an EIS to evaluate significant impacts. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1214 (9th Cir. 1998). As set forth above, there are significant environmental impacts to the Flexibility Proposal that have not been analyzed in the Draft EA and were not analyzed in the EIS for the 2019 IRP.

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<sup>126</sup> Att. 43, 2019 IRP EIS, 4-5 to -6.

<sup>127</sup> *Id.* at 4-7 (explaining that reserve capacity needs depend on peak load).

<sup>128</sup> *Id.* At 4-5 to -6, 6-4.

<sup>129</sup> Att. 49, Greenlink Analytics, Evaluating TVA’s Newly Proposed Wholesale Reductions and Capacity Additions, Table 1 and accompanying text (May 2020).

<sup>130</sup> *Id.* at Table 4 and accompanying text. For this analysis, Greenlink Analytics used the 90 percent solar, 10 percent gas scenario that TVA identified as most likely to occur, and used a conservative assumption that the full five percent flexibility is utilized by local power companies.

<sup>131</sup> Draft EA at 1-4.

<sup>132</sup> *See id.* (“Because the Flexibility Proposal establishes a ‘program’ applying to any LPC that has a long-term agreement with TVA, the EA’s analysis is largely generic in nature as site specific information about the location or type of power generation resource LPCs would utilize is unknown.”); 3-3 (“TVA would not have approval authority over LPC generation resources that may be adopted under the Flexibility Proposal. Therefore, this EA addresses the potential impacts of the construction and operation of the flexible generation resources under the control of the LPCs in a generic non-site specific context and to the extent those impacts are foreseeable.”).

In addition to tiering to the EIS for the 2019 IRP, the Draft EA “incorporates by reference TVA’s 2018 Wholesale Rate Change EA.”<sup>133</sup> TVA does not purport to tier to the document but appears to attempt to incorporate the whole of its analysis. This is improper. *See* 40 C.F.R. § 1502.21 (allowing incorporation by reference for EIS but making no provision for EA); *Nat. Res. Def. Council v. Duvall*, 777 F. Supp. 1533, 1538 (E.D. Cal. 1991). Further, TVA’s brief description of the rate-change EA is insufficient for incorporation by reference. *See* 40 C.F.R. § 1502.21; *Recent Past Pres. Network v. Latschar*, 701 F. Supp. 2d 49, 59 (D.D.C. 2010). Finally, had TVA intended to tier, it could not, because a NEPA document may tier only to an EIS. 40 C.F.R. § 1502.20 (“Whenever a broad environmental impact statement has been prepared . . .”); *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 810 (9th Cir. 1999).

## **V. TVA INAPPROPRIATELY PREDETERMINED THE OUTCOME OF ITS NEPA ANALYSIS.**

NEPA prescribes the process that Federal agencies must follow before taking any action that significantly affects the environment. *Coal. For Advancement of Regional Transp. v. FHWA*, 9595 F. Supp. 2d 982, 993 (W.D. Ky. 2013). To that end, NEPA prohibits Federal agencies from predetermining the outcome of the NEPA process, 40 C.F.R. §§ 1501.2; 1502.5 1506.1(a), and proscribes agencies from making “irreversible and irretrievable commitments of resources” before completing their environmental analysis. *Center for Biological Diversity v. U.S. Forest Serv.*, 2020 WL 142569 \*8 (S.D. Oh. Mar. 13, 2020). TVA has flipped the NEPA process on its head: rolling out the Long-term Contract and promising local power companies a flexibility option that allowed up to five percent flexible generation, entering into at least 138 contracts with terms of 20 plus years, and only now producing an inadequate environmental analysis of the Flexibility Proposal, without ever having analyzed the impacts associated with the Long-term Contract as a whole. In doing so, TVA impermissibly predetermined the outcome of its belated NEPA analysis.

The Long-term Contract provides that TVA will “develop and provide enhanced power supply flexibility, with mutually agreed-upon pricing structures, for 3-5 percent of Distributor’s energy, by no later than October 1, 2021.”<sup>134</sup> This commitment predetermined TVA’s subsequent NEPA analysis because in order to comply with the Long-term Contract, TVA must propose a flexibility option that allows local power companies flexibility with regard to no less than three percent and no more than five percent of their demand. Unlike local power companies, which can choose to terminate the agreement if they do not find the Flexibility Proposal agreeable or if TVA fails to propose a flexibility option, the contract does not give TVA the ability to conclude that no Flexibility Proposal is necessary or select an alternative that would allow local power companies generate over five percent of their annual demand.<sup>135</sup> In other words, TVA “irreversibly and irretrievably committed itself to a plan of action that is dependent on the NEPA environmental analysis producing a certain outcome, before the agency has

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<sup>133</sup> *Id.* at 3-7.

<sup>134</sup> Att. 3, TVA, Board Exhibit 8-22-19J, Long-term Agreement § 2.

<sup>135</sup> *Id.*

completed that environmental analysis.” *Forest Guardians v. U.S. Fish and Wildlife Serv.*, 611 F.3d 682, 714 (10th Cir. 2010); *Tenn. Envtl. Council*, 32 F. Supp. 3d at 884. The “point of commitment” came when TVA began signing Long-term Contracts with local power companies in August 2019. *Metcalf v. Daley*, 214 F.3d 1135, 1143-44 (9th Cir. 2000) (Upon signing a contract, agency made an “irreversible and irretrievable commitment of resources”); *Save the Yaak Comm. v. Block*, 540 F.2d 714, 718, 718-19 (9th Cir. 1988) (The awarding of contracts prior to preparation of EAs demonstrates that the agency did not comply with NEPA’s requirements concerning the timing of their environmental analysis). Since then, TVA has signed at least 137 additional Long-term Contract contracts with local power companies.

This situation is analogous to that considered by the Ninth Circuit Court of Appeals in *Metcalf*, 214 F.3d 1135. In *Metcalf*, plaintiffs argued that a federal agency failed to comply with 40 C.F.R. §§ 1501.2 and 1502.5’s requirement that federal agencies begin the NEPA process as early as possible, and made an “irreversible and irretrievable commitment of resources” by entering into a contract with an indigenous group agreeing to support the group’s application to the International Whaling Commission for a whaling quota of five grey whales a year before the EA was prepared. *Id.* at 1143. The Ninth Circuit Court of Appeals held that the federal agency had predetermined the outcome of its environmental analysis in violation of NEPA:

The Federal Defendants did not engage the NEPA process “at the earliest possible time.” Instead, the record makes clear that the Federal Defendants did not even consider the potential environmental effects of the proposed action until long after they had already committed in writing to support the Makah whaling proposal. The “point of commitment” in this case came when NOAA signed the contract with the Makah in March 1996 and then worked to effectuate the agreement. It was at this juncture that it made an “irreversible and irretrievable commitment of resources.” ... Had NOAA/NMFS found after signing the Agreement that allowing the Makah to resume whaling would have a significant effect on the environment, the Federal Defendants would have been required to prepare an EIS, and they may not have been able to fulfill their written commitment to the Tribe. As such, NOAA would have been in breach of contract.

*Id.* at 1144-45.

So it is here. By entering into the Long-term Contract with local power companies promising the development of a Flexibility Proposal that allowed three to five percent flexible generation before even beginning its NEPA analysis, TVA “irretrievably and irreversibly” committed itself to a particular outcome. If TVA had found, after completing its Draft EA, that flexible generation of three to five percent would have a significant effect on the environment, and been required to prepare an EIS, it may not have had time to fulfill its written commitment to the LPCs by October 21. Similarly, if TVA had found that flexible generation of less than three percent or greater than five percent was a reasonable alternative to the Preferred Alternative, TVA would have had to breach its contract with local power companies in order to propose such an alternative. Therefore, TVA failed to comply with NEPA by making an “irretrievably and

irreversible” commitment of resources prior to completing—or even starting—its environmental analysis.

## **VI. TVA’ S ALTERNATIVES ANALYSIS IS ARBITRARY AND CAPRICIOUS.**

The touchstone of NEPA compliance is whether selection and discussion of alternatives within an EA fosters informed decision-making and informed public participation. *Mont. Wilderness Ass’n v. Fry*, 310 F. Supp. 2d 1127, 1144 (D. Mon. 2004); *Cal. v. Block*, 690 F.2d 753, 767 (9th Cir. 1982). The Draft EA fails this test. TVA relies on a Statement of Purpose and Need that is impermissibly narrow; bases its analysis on a flawed and inaccurate No Action Alternative; and fails to analyze a full range of reasonable alternatives in sufficient detail.

### **A. TVA’s Statement of Purpose and Need is impermissibly narrow.**

Agencies may not rely on purpose and need statements that are so narrow as to “compel the selection of a particular alternative.” *Theodore Roosevelt Conservation P’ship v. Salazar*, 661 F.3d 66, 74 (D.C. Cir. 2011). “An agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative would accomplish the goals of the agency's action, and [NEPA] would become a foreordained formality.” *Tenn. Envtl. Council*, 32 F. Supp. 3d at 876. In other words, it is arbitrary and capricious for an agency to “define [a] project so narrowly that it foreclose[s] a reasonable consideration of alternatives.” *Utah Envtl. Cong. v. Bosworth*, 439 F.3d 1184, 1195 (10th Cir. 2006).

TVA states that the purpose and need for the proposed action is to: (1) enhance the Valley’s energy resource development, and (2) respond to customer demand for renewable energy resources.<sup>136</sup> However, in describing the Purpose and Need for the Proposed Action, TVA repeatedly references its commitment in the Long-term Contract to “develop an option for power supply flexibility for Valley Partners to generate *up to five percent of energy*.”<sup>137</sup> By including the five percent limit of any power flexibility option in its statement of purpose and need TVA assured that only one alternative—the Proposed Action Alternative—could be selected.

Agencies are permitted to set reasonable bounds on a statement of purpose and need. *Airport Neighbors Alliance, Inc. v. U.S.*, 90 F.3d 426, 432 (10th Cir. 1996). But here, TVA has not provided any tangible justification for the five percent cap on flexible generation. TVA has not provided any quantitative analysis demonstrating that a five percent cap is necessary to “ensure[] the financial health” of TVA, and has failed to articulate any reason—other than the fact that TVA pre-committed to offering up to five percent flexibility generation in the Long-term Contract—for not considering higher

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<sup>136</sup> Draft EA at 1-1.

<sup>137</sup> Draft EA at 1-1 (emphasis added); *see id.* (“The five percent flexibility level would provide Valley Partners sufficient flexibility to meet their customers’ need while ensuring that the financial health impact to TVA is at a level that fits within the current strategic financial plan.”); *see also id.* at 2-2 (describing elimination of the Flexible Generation of Greater than Five Percent Alternative).

levels of solar generation. When SELC requested documents regarding the development of this Statement of Purpose and Need, TVA failed to provide any information supporting its statement that five percent generation cap is necessary to “ensure[] the financial health” of TVA.<sup>138</sup> Instead, TVA disclosed only its most recent 10-Q Report and copies of the minutes and presentation from TVA’s August 22, 2019 board meeting.<sup>139</sup> None of these documents explain the basis for the five percent limit on flexible generation in Draft EA’s Statement of Purpose and Need. Therefore, TVA acted arbitrarily by artificially constraining the statement of purpose and need in a manner that compelled the selection of TVA’s Proposed Action Alternative.

### **B. TVA’s “No Action” Alternative is unrealistic and flawed.**

TVA’s No Action Alternative is inaccurate, produces an unreliable baseline against which to evaluate the impacts of the proposed alternative, and renders the entire alternatives analysis arbitrary and capricious. TVA states that “[u]nder the No Action Alternative, TVA would continue to implement the Long-term Contracts but would not offer power supply flexibility options.”<sup>140</sup> This means that “LPCs have the option to terminate their LTP agreement.”<sup>141</sup> In other words, the No Action Alternative assumes the existence of the Long-term Contract. TVA’s formulation of the No Action Alternative is flawed two major ways. First, it assumes the existence of the Long-term Contract without accounting for any of the environmental impacts of the Long-term Contract—which to date remain unanalyzed.<sup>142</sup> Second, the No Action Alternative does not account for changes in the number of local power companies participating in the Long-term Contract if the Flexibility Proposal were not adopted.

Under normal circumstances, analyzing a no action alternative “in terms of continuing with the present course of action until that action is changed” would be reasonable. 46 Fed. Reg. 18,026, 18,027 (1981). However, TVA never actually evaluated the environmental impacts of the “current plan or action”—the Long-term Contract. As a result, the No Action Alternative, which assumes the existence of the Long-term Contract but does not account for environmental and other impacts of the Long-term Contract, is inaccurate and flawed. Instead of acknowledging the yet-unquantified impacts of the Long-term Contract, TVA assumes that the world with Long-term Contracts is exactly the same as the world without Long-term Contracts. This is simply not true. For example, the 3.1 percent decrease in wholesale prices for local power companies that sign Long-term Contracts would likely increase demand for energy.<sup>143</sup> This increase in load could affect TVA’s generation practices and have environmental impacts. Furthermore, decreases in wholesale prices could impact the adoption and viability of energy efficiency

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<sup>138</sup> Att. 16, Letter from Amanda Garcia, SELC, to Denise Smith, TVA 1 (April 13, 2020).

<sup>139</sup> Att. 5, Letter from Denise Smith, TVA, to Amanda Garcia, SELC (Apr. 24, 2020).

<sup>140</sup> Draft EA at 3-4 (“TVA would continue to implement the LTP agreements but would not offer power supply flexibility options.”)

<sup>141</sup> Draft EA at 1-1.

<sup>142</sup> See *supra* pp. 12-22.

<sup>143</sup> See Att. 49, Greenlink Analytics, Evaluating TVA’s Newly Proposed Wholesale Reductions and Capacity Additions (May 2020); Att. 50, TATYANA DERYUGINA, ET AL.

programs and distributed solar—when energy is cheaper, customers have less of an incentive to adopt energy efficiency measures and invest in distributed solar. The EA does not consider any of these likely impacts. Instead, TVA irrationally assumes that the existence of the Long-term Contract will have no impact whatsoever.

Furthermore, the No Action Alternative does not account for local power companies that would cease their participation in the Long-term Contract if the Flexibility Proposal is not adopted. Even if the Long-term Contract’s environmental impacts had been properly considered—and they were not—TVA would be required to analyze how the adoption of the Proposed Alternative would impact local power companies’ participation in the Long-term Contract. TVA acknowledges that under the No Action alternative “LPCs have the option to terminate their LTP agreement”<sup>144</sup> but fails to consider whether local power companies would actually exercise this right and how termination of the Long-term Contract by some local power companies would impact that program. Many of TVA’s largest local power companies developed community solar projects under a former TVA program, and, as described elsewhere in these comments, at least two of TVA’s largest local power companies’ customers (NES and KUB) have recently taken advantage of TVA’s Green Invest program, indicating a strong interest in developing renewable projects at a local scale.<sup>145</sup> Further, as discussed above, at least one local power company is actively engaged in evaluating terminating its contract with TVA in part to obtain cheaper, cleaner power from other sources.<sup>146</sup> In other words, if TVA insists on inaccurately including the Long-term Contract in the No Action Alternative, it must at least consider the impact the absence of a Flexibility Proposal would have on the number of local power companies continuing to contract with TVA under the Long-term Contract.

### C. TVA failed to analyze a reasonable range of alternatives.

NEPA requires agencies to “[r]igorously explore” and “objectively evaluate” all “reasonable alternatives.” 40 C.F.R. § 1502.14, (a), (d); *see Meister v. U.S. Dep’t of Agric.*, 623 F.3d 363,377 (6th Cir. 2010) (Courts “will insist that the agency has, in fact, adequately studied the issue and taken a hard look at the environmental consequences of its decision.”). This obligation applies whether an agency is preparing an EIS or an EA. *Western Watersheds Project*, 719 F.3d at 1050. While an agency’s obligation to discuss alternatives is less in an EA than an EIS, it must still “give full and meaningful consideration to all reasonable alternatives” in an EA. *Id.*; *see Coal. For Advancement of Reg’l Transp.*, 959 F. Supp. 2d at 1003 (Agencies must “rigorously explore and objectively evaluate all reasonable alternatives[.]”). “The existence of a viable but unexamined alternative renders and EA inadequate.” *Western Watersheds Project*, 719 F.3d at 1050. Furthermore, feasible alternatives must be considered in detail. *Id.*; *see Muckleshoot Indian Tribe*, at 814 (concluding that the Forest Service violated NEPA by considering but preliminarily dismissing several feasible alternatives). The Draft EA only analyzed the No Action Alternative and the Proposed Action Alternative in detail.<sup>147</sup> TVA also

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<sup>144</sup> Draft EA 1-1.

<sup>145</sup> *See infra* pp. 38-40.

<sup>146</sup> *See supra* pp. 15-18.

<sup>147</sup> *Id.* at 2-1

briefly considered two additional alternatives: Flexible Generation of Greater than Five Percent and Expansion of the TVA Flexibility Research Project.<sup>148</sup> The Draft EA is inadequate because it altogether failed to consider several reasonable alternatives and dismissed the Flexible Generation of Greater than Five Percent and Expansion without sufficiently detailed analysis.

### 1. *Zero-Carbon Alternative*

The Draft EA failed to even consider reasonable alternatives that would meet TVA's stated purpose of enhancing the Tennessee Valley's resource diversity and responding to customer demand for renewable energy resources.<sup>149</sup> For example, TVA did not evaluate a Zero-Carbon Alternative that would, like the Proposed Action Alternative, allow LPCs to generate up to five percent of their average annual demand but would limit that generation to zero-carbon resources. A Zero-Carbon Alternative would enhance the Valley's resource diversity by encouraging renewable energy resource development and respond to customer demand for renewable energy resources more effectively than the Proposed Action Alternative, considers natural gas generation to be eligible flexible generation.<sup>150</sup> Unlike renewable generation, such as solar panels, gas-fired generators and natural gas-fired combined heat and power projects have numerous significant environmental impacts.<sup>151</sup> Furthermore, as TVA notes in the Purpose and Need portion of the Draft EA, the economics of renewables are continuing to advance.<sup>152</sup> Innovative renewable generation arrangements such as storage plus storage facilities can improve TVA's operational agility and avoid the need for costly and environmentally damaging long-term investments in dirty generation sources such as natural gas.

Because a Zero-Carbon Alternative would bring about TVA's stated project purpose and is within the "ambit of an existing standard" TVA may not reject it outright. *See Meister*, 623 F.3d at 379 ("An alternative within the ambit of an existing standard ... generally may not be abandoned without any consideration whatsoever."). TVA's NEPA analysis will continue to be inadequate unless a Zero-Carbon Alternative is analyzed in detail and objectively evaluated. *See Western Watersheds Project*, 719 F.3d at 1050.

### 2. *Flexible Generation of Greater than Five Percent Alternative*

Furthermore, to the extent that TVA did consider a Flexibility Proposal that would allow greater than five percent flexible generation, TVA's analysis was inadequate. TVA dismissed the Flexible Generation of Greater than Five Percent Alternative with minimal explanation:

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<sup>148</sup> *See id.* at 2-2.

<sup>149</sup> *Id.* at 1-1.

<sup>150</sup> *Id.* at 2-2.

<sup>151</sup> Att. 59, IMPACTS OF NATURAL GAS, UNION OF CONCERNED SCIENTISTS (Jun. 19, 2014) <https://www.ucsusa.org/resources/environmental-impacts-natural-gas>; Att. 60, David Roberts, *More natural gas isn't a "middle ground" – it's a climate disaster*, VOX (May 30, 2019) <https://www.vox.com/energy-and-environment/2019/5/30/18643819/climate-change-natural-gas-middle-ground>.

<sup>152</sup> Draft EA at 1-1.

TVA considered allowing Valley Partners to have flexible generation of greater than five percent of their average total hourly energy sales over the last five TVA fiscal years. When developing the LTP agreement, TVA determined that the range of three to five percent balanced the risk of revenue erosion with the expected benefits of rate and financial stability from longer commitment periods, and moves this new concept gradually. Additionally, TVA determined that while five percent power supply flexibility would provide LPCs with substantially more flexibility than three percent, any flexibility greater than five percent would impose a higher risk to the financial plan. For these reasons, this alternative was eliminated from further consideration.<sup>153</sup>

First, TVA's reliance on the commitment it made in the Long-term Contract to justify elimination of this alternative is further evidence of improper bias and predetermination in the NEPA process.<sup>154</sup>

Second, TVA's conclusory assertions that "any flexibility greater than five percent would impose a higher risk to the financial plan" and "the range of three to five percent balanced the risk of revenue erosion with the expected benefits of rate and financial stability from longer commitment periods" lack any justification. As a matter of law, NEPA documents must contain data "sufficient to enable those who did not have a part" in the compilation of the analysis "to understand and consider meaningfully the factors involved." *Oak Ridge Env'tl. Peace All.*, 412 F. Supp. 3d at 806 (citing *Izaak Walton League of Am. v. Marsh*, 655 F.2d 346, 368-69 (D.C. Cir. 1981)). As such, an agency is obligated to insure the professional integrity of the discussions and analyses in NEPA documents and "identify any methodologies used with explicitly reference to the scientific and other sources relied upon for any conclusions." 40 C.F.R. § 1502.24; *Oak Ridge Env'tl. Peace All.*, 412 F. Supp. 3d at 806. The Draft EA fails to provide any analytical support for TVA's assertions regarding the need for a five percent flexibility cap, and does not reference any scientific or other sources relied upon for these conclusions.

When SELC attempted to obtain documentation supporting these statements, TVA failed to provide any data or analysis supporting its conclusion that flexible generation must be capped at five percent.<sup>155</sup> Instead, in response to SELC's request, TVA disclosed its most recent 10-Q Report and copies of the minutes and presentation from TVA's August 22, 2019 board meeting.<sup>156</sup> None of these documents provide any additional detail regarding how the three-to-five percent range was derived, or why TVA considers flexible generation in excess of five percent to be unreasonable.

Therefore, TVA's rejection of the Flexible Generation of Greater than Five Percent Alternative is based entirely on conclusory statements that appear to lack any analytical justification. This is a far cry from the "full and meaningful consideration" that NEPA requires.

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<sup>153</sup> Draft EA at 2-2.

<sup>154</sup> See *supra* pp. 31-33.

<sup>155</sup> Att. 16, Letter from Amanda Garcia, SELC, to Denise Smith, TVA 1 (April 13, 2020).

<sup>156</sup> Att. 5, Letter from Denise Smith, TVA, to Amanda Garcia, SELC (Apr. 24, 2020).

*Western Watersheds Project*, 719 F.3d at 1050; *see Oak Ridge Envtl. Peace All.*, 412 F. Supp. 3d at 806.

## **VII. TVA’S ANALYSIS OF IMPACTS IS DEFICIENT.**

NEPA requires that Federal Agencies analyze the direct, indirect, and cumulative impacts of a proposed action. 40 C.F.R. §§ 1502.16, 1508.7, 1508.8. For the reasons discussed in below, TVA has failed to do so.

### **A. TVA failed to consider the indirect effects of granting preference LPCs that sign the Long-term Contract.**

TVA’s Green Invest program, which promotes DER development in the Valley, helps undertake renewable energy agreements to build new, large-scale renewable energy installations through a competitive bid process.<sup>157</sup> However, according to TVA, Valley Partners—local companies that have signed the Long-term Contract—“generally receive commercial terms reflective of the long-term commitment they have made to the Valley, resulting in more favorable solution for their customers.”<sup>158</sup>

As an initial matter, this policy of promising vague “more favorable solutions” to local power companies that sign onto long-term buy-all-sell-all contracts is exactly the kind of predatory behavior that led to monopolies being disfavored as a matter of public policy in this country. *U.S. v. Griffith*, 334 U.S. 100, 107 (1948) (“So it is that monopoly power, whether lawfully or unlawfully acquired, may itself constitute an evil and stand condemned...”). In fact, federal law aims to prevent monopolies by prohibiting sellers from offering lower prices to favored buyers and higher prices to disfavored buyers. *See, e.g., Afshari v. Copper John Corp.*, 2019 WL 320576 at \*2 (E.D. Ky. 2019) (citing 15 U.S.C. § 13(a)).

Beyond being bad public policy, TVA’s promise to favor infrastructure development for local power companies that sign Long-term Contracts reveals another yet-unexamined impact of the Long-term Contract and Flexibility Proposal. NEPA requires Federal agencies to consider direct effects that “are caused by the action and occur at the same time and place” and indirect effects that the action foreseeably causes, but that are removed from the action in time and location. 40 C.F.R. § 1508.8. In particular agencies are required to analyze whether an alternative “would [] lead to secondary impacts with respect to shifts in patterns of population movement and growth, public service demands, or changes in business and economic activities.” *See Barnes v. U.S. Dep’t of Transp.*, 655 F.3d 1124 (9th Cir 2011) (In light of the potential to create demand, even if the stated purpose of new airport runway project was to increase safety and efficiency,

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<sup>157</sup> Draft EA 3-18.

<sup>158</sup> *Id.*; *see e.g.*, Att. 9, Vanderbilt, NES, TVA and Silicon Ranch Partner on Landmark Renewable Energy Deal, TVA (Jan. 22, 2020) <https://www.tva.com/newsroom/press-releases/vanderbilt-nes-tva-and-silicon-ranch-partner-on-landmark-renewable-energy-deal>. (“NES’ recent 20-year commitment to public power in the region enabled them to meet the sustainability needs of their largest customer with affordable renewable energy through this new program”).

agencies were required to analyze the impacts of the increased demand attributable to the additional runway as growth-inducing effects under NEPA.).

The Green Invest program, which encourages infrastructure investment and development, is being used as an incentive to encourage local power companies to sign Long-term Contracts. Therefore, an indirect impact of the Flexibility Proposal and Long-term Contract is that energy infrastructure development patterns in TVA territory are likely change. For example, the Knoxville Utilities Board, which was initially wary of entering into the Long-term Contract due to the length of the new contract and ability access sufficient renewable generation under the five percent generation cap, decided to sign a Long-term Contract after engaging TVA in a “separate agreement under its Green Invest program to apply a portion of [KUB’s] annual partnership credit (\$1.1 million) towards approximately 212 MW of solar power.”<sup>159</sup> Despite this clear connection between the Long-term Contract, the Flexibility Proposal, and the Green Invest program, TVA has failed to consider how to the promise of “more favorable solutions” to local power companies that sign a Long-term Contract will impact infrastructure development patterns in its service territory. In doing so, TVA has failed to take the required “hard look” at indirect impacts associated with the Proposed Action.

**B. The EA fails to consider the cumulative impacts of the Long-term Contract.**

As previously discussed, NEPA requires TVA to (1) analyze the environmental impacts of the Long-term Contract in an EIS and (2) analyze the Flexibility Proposal together with the Long-term Contract in a single EIS as connected actions.<sup>160</sup> However, even if this were not the case, TVA would be required to analyze the environmental impacts of the Long-term Contract in the Draft EA as a cumulative impact. A cumulative impact is “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[.]” 40 C.F.R. 1508.7; *see Kentucky Riverkeeper, Inc. v. Rowlette*, 714 F.3d 402, 408 (6th Cir. 2013); *Am. Rivers & Ala. Rivers Alliance*, 895 F.3d at 54-55.

As described above, the Long-term Contract has caused and will continue to cause significant impacts on the environment. By locking local power companies into perpetual contracts with TVA, the Long-term Contract insulates TVA from the competitive pressure of increasingly appealing renewable generation sources, denying local power companies the ability to use those sources at a capacity greater than five percent of their average annual generation and allowing TVA to maintain a less competitive generation portfolio.<sup>161</sup> The Long-term Contract is part of the background against which the Flexibility Proposal will operate; the environmental impacts of the Flexibility Proposal will be laid on top of those of the Long-term Contract. Yet the Draft EA fails to analyze the environmental impact of the Long-term Contract at all. NEPA requires that it do so. *See Kentucky Riverkeeper, Inc.*, at 410 (“An environmental assessment that

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<sup>159</sup> Att. 61, Knoxville Utilities Board, Board Meeting Agenda Thursday, March 12, 2020.

<sup>160</sup> *See supra* pp. 12-23

<sup>161</sup> *See supra* pp. 12-22.

omits consideration of past impacts, followed by a conclusory suggestion that past impacts did not matter, cannot be in conformance.”).

The Draft EA lists a collection of cumulative impacts stemming from “the Green Power Providers, Green Power Switch and Green Invest programs, economic development efforts, rate changes, and energy efficiency programs for residences, businesses, and industries (e.g., TVA EnergyRight programs).”<sup>162</sup> TVA then describes each of these actions. But it does not actually analyze their cumulative impacts. Instead, it simply asserts that the overall cumulative impacts of the Flexibility Proposal and previous actions “are expected to be minimal and within the bounds of the impacts described in the 2019 IRP EIS (TVA 2019a).”<sup>163</sup> In fact, these actions will have significant cumulative impacts as discussed throughout this letter, including slowing the growth of renewables and harming public health. TVA’s expectation to the contrary is unsupported and unexplained.

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<sup>162</sup> Draft EA 3-18.

<sup>163</sup> Draft EA 3-19.

## VIII. CONCLUSION

We again thank TVA for considering these comments. We recognize the invaluable role TVA has played in the history of the Valley and we believe TVA has a vital role to play in the Valley's ongoing transition to a clean-energy economy, which will improve public health, the economy, and the environment for all residents. Addressing the issues discussed above will be a step down this path. We look forward to working with TVA on these and other issues in the coming months and years.

William Moll  
Conservation Chair  
Tennessee Chapter Sierra Club

Thad Culley  
Regional Director  
Vote Solar

Brianna Knisley  
Tennessee Campaign Coordinator  
Appalachian Voices

Howard Crystal  
Legal Director | Senior Attorney  
Energy Justice Program  
Center for Biological Diversity

Sincerely,



Amanda Garcia  
Nick Jimenez  
Maia Hutt  
Attorneys  
Southern Environmental Law Center

Betsy Garber  
President  
Tennessee Interfaith Power & Light

Daniel Tait  
Chief Operating Officer  
Energy Alabama

Attachments listed below and provided via ShareFile:

<https://southernenvironment.sharefile.com/d-s7a1f49190184371a>

### **List of Attachments**

Att. 1, TENN. VALLEY AUTH., 2019 INTEGRATED RESOURCE PLAN VOLUME I - FINAL RESOURCE PLAN

Att. 2, Minutes of Meetings of the Board of Directors Tennessee Valley Authority August 22, 2019

Att. 3, TVA, Board Exhibit 8-22-19J

Att. 4, E-mail from Matthew Stephen Higdon, NEPA Specialist, Environmental Compliance & Operations, Tennessee Valley Authority to Amanda Garcia (April 10, 2020, 3:06 pm)

Att. 5, Letter from Denise Smith, TVA, to Amanda Garcia, SELC (April 24, 2020)

Att. 6, NES Contract No. 19-72-316 (executed August 28, 2019)

Att. 7, Environmental Reviews, TVA (last visited April 22, 2020).

Att. 8, Memo from John M. Thomas, III, EVP, Financial Services and Chief Financial Officer, Tenn. Valley Auth., to Board of Directors of Tenn. Valley Auth. in support of Board resolution approving Flexibility Option (January 29, 2020)

Att. 9, Vanderbilt, NES, TVA and Silicon Ranch Partner on Landmark Renewable Energy Deal, TVA (Jan. 22, 2020)

Att. 10, Email from TVA Stakeholder Relations Team to Amanda Garcia, SELC (April 3, 2020, 9:59 AM EST)

Att. 11, Flexibility Proposal, TVA

Att. 12, *Coronavirus in the U.S.: Latest Map and Case Count*, N.Y. TIMES (Updated May 1, 2020).

Att. 13, Richard Fausset and Rick Rojas, *Across the South, 'Walking a Tightrope' While Awaiting the Worst*, N.Y. TIMES, (April 8, 2020)

Att. 14, Samantha Max, *Tennessee Orders Residents to Remain Home*, NPR, (April 2, 2020)

Att. 15, E-mail from Matthew Higdon, TVA to Amanda Garcia, SELC (April 24, 2020 4:18 PM EST)

Att. 16, Letter from Amanda Garcia, SELC, to Denise Smith, TVA (April 13, 2020)

Att. 17, Letter from Amanda Garcia, SELC, to Denise Smith, TVA (April 27, 2020)

Att. 18, Email from Denise Smith, TVA, to Amanda Garcia, SELC (April 30, 2020)

Att. 19, Tenn. Valley Auth., Sec. Exchange Comm'n Form 10-K/A, Am. No. 1 (Nov. 15, 2019)

Att. 20, *About*, MLGW (last visited Apr. 23, 2020)

Att. 21, MEMPHIS LIGHT GAS AND WATER DIVISION, INTEGRATED RESOURCE PLAN AND TRANSMISSION ANALYSIS – REQUEST FOR PROPOSAL (RFP) (2019)

Att. 22, MLGW Power Supply Advisory Team (PSAT), Presentation: Orientation Meeting (April 30, 2019)

Att. 23, Darrell Proctor, *Judge: TVA Deal for Bellefonte Nuclear Plant Stays in Place*, POWER (May 17, 2019)

Att. 24, Marc Perrusquia, *POWER BROKER: SPECIAL REPORT: Inside a long-shot plan to buy a never-opened nuclear plant and sell its power to a single customer: MLGW*, DAILY MEMPHIAN (May 17, 2019 12:35 AM CT)

Att. 25, Dave Flessner, *Memphis Light Gas & Water studies leaving TVA, eyes energy options*, CHATTANOOGA TIMES FREE PRESS (Feb. 24, 2019)

Att. 26, Mike Suriani, *MLGW officials consider ending power supply relationship with TVA*, NEWS CHANNEL 3 WREG MEMPHIS (Feb. 27, 2020 / 06:56 PM CST)

Att. 27, JURGEN WEISS, ET AL., THE BRATTLE GROUP, POWER TO MEMPHIS: OPTIONS FOR A RELIABLE, AFFORDABLE AND GREENER FUTURE (2019)

Att. 28, ACES, MEMPHIS LIGHT, GAS AND WATER LONG-TERM PORTFOLIO CONSIDERATIONS (2019)

Att. 29, JUDAH ROSE, ET AL., ICF RESOURCES LLC, ASSESSMENT OF WHOLESALE POWER OPTIONS FOR MEMPHIS LIGHT, GAS AND WATER: PRELIMINARY DRAFT (2018)

Att. 30, *Nuclear*, TENN. VALLEY AUTH., (last visited Apr. 23, 2020)

Att. 31, SETH BROWN, GDS ASSOCIATES, INC., EVALUATION OF LONG-TERM POWER SUPPLY ALTERNATIVES: MEMPHIS LIGHT GAS & WATER (MLGW) (Draft as of January 28, 2019)

Att. 32, Press Release: MLGW selects consultant for Integrated Resource Plan, MLGW (July 22, 2019)

Att. 33, Siemens, Presentation: Integrated Resource Plan and Transmission Analysis (Feb. 27, 2020)

Att. 34, Maggie Shober, *TVA releases final long-term resource plan, and we are underwhelmed*, SOUTHERN ALL. FOR CLEAN ENERGY (June 29, 2019)

Att. 35, DAVID WHITE, ET AL., SYNAPSE ENERGY ECONOMICS, INC., MEMPHIS AND TENNESSEE VALLEY AUTHORITY: RISK ANALYSIS OF FUTURE TVA RATES FOR MEMPHIS (2019)

Att. 36, James Bruggers, *Southern Cities' Renewable Energy Push Could Be Stifled as Utility Locks Them Into Longer Contracts*, INSIDE CLIMATE NEWS (Dec. 16, 2019)

Att. 37, James Bruggers, *Cities Pressure TVA to Boost Renewable Energy as Memphis Weighs Breaking Away*, INSIDE CLIMATE NEWS (Apr. 30, 2019)

Att. 38, Volunteer Elec. Coop., Press Release: TVA Board Approves Rate Increase, Passed Through by VEC Board (Oct. 1, 2018)

Att. 39, Volunteer Elec. Coop., Press Release: TVA Rates Increased in October (Dec. 21, 2017)

Att. 40, Letter from Medline Rogero, Mayor, City of Knoxville to Hunter Hydas, IRP Program Manager, TVA (Apr. 8, 2019)

Att. 41, TVA, 2018 Wholesale Rate Change, Draft Environmental Assessment, (March 2018)

Att. 42, TVA, 2018 Wholesale Rate Change, Final Environmental Assessment, (May 2018)

Att. 43, TENN. VALLEY AUTH., 2019 INTEGRATED RESOURCE PLAN, VOLUME II - FINAL ENVIRONMENTAL IMPACT STATEMENT

Att. 44, Tenn. Valley Auth., CHANGES TO GREEN POWER PROVIDERS PROGRAM FINAL ENVIRONMENTAL ASSESSMENT (Dec. 2019)

Att. 45, SELC et al., Comments on Changes to Green Power Providers Program Draft Environmental Assessment (November 8, 2019)

Att. 46, SELC et al. Comments on TVA's Draft Integrated Resource Plan and Draft Environmental Impact Statement (April 7, 2019).

Att. 47, MarketWatch, Press Release: 10-Q: TENNESSEE VALLEY AUTHORITY (Feb. 5, 2020)

Att. 48, Tenn. Valley Auth., Presentation: Board Meeting, August 22, 2019, Knoxville, Tennessee

Att. 49, Greenlink Analytics, Evaluating TVA's Newly Proposed Wholesale Reductions and Capacity Additions (May 2020)

Att. 50, TATYANA DERYUGINA, ET AL., THE LONG-RUN ELASTICITY OF ELECTRICITY DEMAND: EVIDENCE FROM MUNICIPAL ELECTRIC AGGREGATION (2017)

Att. 51, M.A. Bernstein and J. Griffin, RAND Corporation, Regional Differences in the Price-Elasticity of Demand for Energy (2006)

Att. 52, Am. Council for an Energy-Efficient Econ., Press Release: Report: “Energy Burden” on Low-Income, African American, & Latino Households up to Three Times as High as Other Homes, More Energy Efficiency Needed (Apr. 20, 2016)

Att. 53, *Changes to TVA’s NEPA Procedures*, TENN. VALLEY AUTH

Att. 54, TENN. VALLEY AUTH., RESPONSE TO PUBLIC COMMENTS: PUBLIC REVIEW OF TVA’S PROPOSED AMENDMENTS TO PROCEDURES FOR IMPLEMENTING THE NATIONAL ENVIRONMENTAL POLICY ACT (June to September 2017), (March 2020)

Att. 55, James Bruggers for Inside Climate News, *TVA’s push for lengthy utility deals could set back green initiatives in Tennessee cities*, KNOX NEWS (5:00 a.m. ET Jan. 8, 2020)

Att. 56, Daniel Tait & Joe Smyth, *TVA attempts to chain local power companies to longer contracts in effort to prevent defection risk: New TVA contract could prevent municipal utilities, co-ops from pursuing local renewable energy, storage*, ENERGY & POL’Y INST. (Sept. 22, 2019)

Att. 57, Samuel Hardiman for The Commercial Appeal, *Here’s TVA’s final offer to Memphis*, ENERGY CENTRAL (Jan 3, 2020 6:53 am GMT)

Att. 58, Pam Sohn, *Is TVA locking the South out of the future?*, CHATTANOOGA TIMES FREE PRESS (December 21st, 2019)

Att. 59, IMPACTS OF NATURAL GAS, UNION OF CONCERNED SCIENTISTS (Jun. 19, 2014)

Att. 60, David Roberts, *More natural gas isn’t a “middle ground” – it’s a climate disaster*, VOX (May 30, 2019)

Att. 61, Knoxville Utilities Board, Board Meeting Agenda Thursday, March 12, 2020