



December 30, 2022

**VIA REGULATIONS.GOV**

Office of NEPA Policy and Compliance  
United States Department of Energy

**Re: Request for Information: Categorical Exclusions, 87 Fed. Reg. 68,385 (Nov. 15, 2022)**

To Whom It May Concern:

The Delaware Riverkeeper Network and Delaware Riverkeeper, Maya K. van Rossum (collectively, "DRN") thanks the Department of Energy ("DOE") for the opportunity to provide response to the DOE's November 15, 2022, Request for Information regarding Categorical Exclusions.

The Delaware Riverkeeper Network is a Pennsylvania non-profit organization established in 1988 and has more than 25,000 members. Members include individuals concerned about the protection and restoration of the Delaware River, and its tributaries, habitats and resources. Delaware Riverkeeper Network's members are dedicated to preserving and improving the cultural, historic and environmental resources of the Delaware River watershed. Our mission is to protect and restore the Delaware River, and its tributaries, habitats and resources. To achieve these goals, Delaware Riverkeeper Network organizes and implements stream bank restorations, a volunteer monitoring program, educational programs, environmental advocacy initiatives, recreational activities, and environmental law enforcement efforts throughout the entire Delaware River watershed—an area which includes portions of Pennsylvania, New York, New Jersey and Delaware—and on the national level when necessary to achieve its mission.

Maya K. van Rossum, the Delaware Riverkeeper, is a full-time privately funded ombudsman responsible for the protection of the waterways in the Delaware River Watershed. Ms. van Rossum advocates for the protection and restoration of the cultural, historical, ecological, recreational, commercial and aesthetic qualities of the Delaware River and its tributaries, habitats and resources.

DRN submits this response to meaningfully assist DOE in its decision-making process to determine whether to undertake revisions to its National Environmental Policy Act

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(“NEPA”)<sup>1</sup> regulations, specifically those governing categorical exclusions. NEPA sets forth a host of procedural requirements intended, in part, to ensure that the federal government “fulfill[s] the responsibilities of each generation as trustee of the environment for succeeding generations.”<sup>2</sup> As will be discussed throughout this response, DRN urges DOE: 1) not to promulgate categorical exclusions for the purpose of accelerating the buildout of desired energy infrastructure; 2) not to create any new categorical exclusions for fossil fuel projects; and 3) to rescind existing categorical exclusion B5.7.

### **I. DOE should not promulgate categorical exclusions for the purpose of expediting review of new technologies.**

Although recent legislation has kickstarted the nation’s transition to clean energy, DOE should not use this funding to cut corners on the vitally important environmental review required by NEPA. Identifying activities associated with DOE’s furtherance of clean energy projects and clean energy infrastructure and categorically excluding them from environmental review under NEPA is premature when the nature and degree of these activities are yet to be known.

A categorical exclusion is defined as “a category of actions that the agency has determined, in its agency NEPA procedures . . . , normally do not have a significant effect on the human environment.”<sup>3</sup> An agency establishes a new categorical exclusion by “determin[ing] whether a proposed activity is one that, on the basis of past experience, normally does not require further environmental review,” because “it is not expected to have significant individual or cumulative environmental effects.”<sup>4</sup> Without empirical experience regarding the nature and degree of new energy technologies, DOE should hesitate to categorically exclude any activities associated with them.

To determine whether an activity should be categorically excluded from an agency’s NEPA review, that agency must first determine the significance of the activity’s effects.<sup>5</sup> This evaluation includes consideration of an activity’s cumulative impacts, which must necessarily—in the case of the nationwide initiatives cited by DOE—be programmatic and global in nature.<sup>6</sup> In addition, where there is controversy due to substantial questions as to the risk, size, nature, and effects of an action, a categorical exclusion is not appropriate.<sup>7</sup> DRN urges DOE to resolve the unknowns regarding new clean energy technologies through thorough NEPA reviews, which will only strengthen as time passes and additional technologies are deployed. Only after going through this process should DOE consider identifying activities to be categorically excluded.

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<sup>1</sup> 42 U.S.C. §§ 4321–4370m-11.

<sup>2</sup> *Id.* § 4331(b)(1).

<sup>3</sup> 40 C.F.R. 1508.1(d).

<sup>4</sup> Coun. on Env’tl. Quality, Establishing, Applying, and Revising Categorical Exclusions under the National Environmental Policy Act at 2, 4 (Nov. 23, 2010).

<sup>5</sup> *See Sierra Club v. Bosworth*, 510 F.3d 1016, 1027 (9<sup>th</sup> Cir. 2007).

<sup>6</sup> *See id.* at 1027–30.

<sup>7</sup> *See id.* at 1030–32.

Just because an activity supports so-called clean energy, or just because an activity's purpose is to mitigate climate change, does not mean that the activity does not have a significant effect on the human environment. Especially now, when many of these technologies are in their nascent form, it is not possible to know the degree to which the technologies will be used, a/k/a what path dependencies will be created. Novel technologies, or even established technologies that have not seen widespread use during their lifetimes, must be carefully evaluated through the NEPA process to ensure that they do not result in unanticipated environmental impacts.

As we move forward with the critically necessary energy transition, NEPA's tools are needed now more than ever, not only to foresee an activity's environmental effects, but to compare the impacts of various alternatives. Because NEPA requires DOE to evaluate alternatives to any proposed major Federal action,<sup>8</sup> and CEQ regulations require agencies to discuss alternatives in an environmental assessment,<sup>9</sup> the only way to avoid such an evaluation is through a categorical exclusion. By promulgating a categorical exclusion for an activity associated with a novel clean energy technology, DOE relinquishes the ability to determine whether a less impactful technology could serve the same purpose.

DOE should also refrain from creating new categorical exclusions associated with "clean energy" that risk the segmentation of larger activities. CEQ guidance explains that "[c]ategorical exclusions should not be established or used for a segment or an interdependent part of a larger proposed action" but rather must be "stand-alone actions that have independent utility."<sup>10</sup> Where certain activities associated with new technologies are proposed for categorical exclusion, DOE should not rely on mere assertions that these actions are discrete with independent utility, but should instead continue to fully analyze them in the context of a broader project-specific environmental assessment or environmental impact statement until time and experience show that a particular activity indeed does have independent utility.

"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."<sup>11</sup> If DOE preemptively categorically excludes certain activities from NEPA review, then it is deprived of the opportunity at a later date to "consider[] 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."<sup>12</sup>

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<sup>8</sup> 42 U.S.C. § 4332(2)(C)(iii).

<sup>9</sup> 40 C.F.R. § 1501.5(c)(2).

<sup>10</sup> Coun. on Env'tl. Quality, Establishing, Applying, and Revising Categorical Exclusions under the National Environmental Policy Act at 5 (Nov. 23, 2010).

<sup>11</sup> *Food & Water Watch v. FERC*, 28 F.4th 277, 291 (D.C. Cir. 2022) (quoting *Del. Riverkeeper Network v. FERC*, 753 F.3d 1304, 1313 (D.C. Cir. 2014)).

<sup>12</sup> *Id.* (quoting *City of Bos. Delegation v. FERC*, 897 F.3d 241, 251–52 (D.C. Cir. 2018)).

Thus, DOE's effort to preemptively identify activities associated with clean energy infrastructure buildout and to categorically exclude them from its environmental review under NEPA presents three major risks: (1) overlooking the effects of new technologies that have not been deployed at a large scale; (2) failing to appreciate alternatives that may have less environmentally harmful impacts; and (3) artificially segmenting projects by labeling interdependent actions as categorically excluded, thus minimizing and failing to document the overall environmental impact of a proposed activity.

## **II. DOE should not create new categorical exclusions that will support the continued use of fossil fuels.**

Acknowledging that DOE has been authorized under the Infrastructure Investment and Jobs Act/Bipartisan Infrastructure Law (BIL), Inflation Reduction Act, and the CHIPS and Science Act to facilitate the transition of the nation's energy economy to clean energy, DOE must commit towards the authorization of clean energy projects, not the subsidization of continued fossil fuel energy projects. Creating new categorical exclusions for fossil fuel projects would thwart DOE's charge to lead the nation to this long-overdue transition to a clean energy economy. Accordingly, DRN urges DOE not to create any new categorical exclusions for fossil fuel projects.

Key examples of the type of fossil fuel activities for which DRN urges DOE not to create categorical exclusions include production, transportation, and storage activities associated with "gray" and "blue" hydrogen<sup>13</sup> proposals for BIL regional hydrogen hub funding. Through FOIA requests to DOE, DRN has learned that several potential applicants for BIL funding for regional hydrogen hubs may simply repurpose existing natural gas infrastructure by "blending" hydrogen gas into existing natural gas pipelines for transportation. The empirical safety of this type of blending is not known.<sup>14</sup> Additionally, serious structural issues, such as metal embrittlement of existing pipelines and the risk of hydrogen leakage given the size of the molecules, help illustrate why DOE should not promulgate or revise categorical exclusions for activities relating to the use of existing natural gas pipelines for the blending and transportation of hydrogen in its NEPA reviews.<sup>15</sup>

Modeling and laboratory-scale experimental work alone are insufficient to adequately determine whether and to what extent hydrogen can be "safely" blended into natural gas pipelines. Because "it is critical to conduct real world demonstration of hydrogen blending under safe and controlled conditions"<sup>16</sup>—something which has not yet occurred as of the date of this response—DOE cannot reasonably determine at this stage, for example,

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<sup>13</sup> U.S. DEP'T OF ENERGY & NAT'L ENERGY TECH. LAB., ENABLING AN ACCELERATED AND AFFORDABLE CLEAN HYDROGEN FUTURE—FOSSIL ENERGY SECTOR'S ROLE WORKSHOP FINAL REPORT 3 (2021)(providing in FN 4 that "'blue' hydrogen is produced from fossil fuels with carbon capture and storage (CCS), while 'gray' hydrogen does not include CCS.>").

<sup>14</sup> Miroslav Penchev et. al, Hydrogen Blending Impacts Study Final Report. Agreement Number: 19NS1662 (2022)(prepared for the California Public Utilities Commission)[hereinafter Hydrogen Blending Impacts Study Final Report]; Zhiyuan Fan et. al, *Hydrogen Leakage: A Potential Risk for the Hydrogen Economy*, COLUM. U. CTR. ON GLOBAL ENERGY POL'Y 1 (July 2022)[hereinafter *Hydrogen Leakage*].

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

<sup>16</sup> Hydrogen Blending Impacts Study Final Report, *supra* note 14 at 4.

that hydrogen blending is an activity which, “on the basis of *past experience*, normally does not require further environmental review.”<sup>17</sup> A categorical exclusion for activities associated with hydrogen blending would be unsupportable.

Additional gaps in knowledge, planning, feasibility, and scaling exist which prevent DOE from issuing any new categorical exclusions for actions related to hydrogen hubs under the auspices of “clean” energy. For example, because the proposed methods by which some BIL funding applicants may produce hydrogen—such as steam methane reformation, pyrolysis, or hydrolysis—are not yet finalized, categorically excluding actions that individually or collectively facilitate hydrogen production at this time is improper and against the purpose of NEPA to give proper consideration to the environment prior to undertaking any major federal action that significantly affects the environment.

A dearth of information encumbers plans for underground storage of hydrogen, which some BIL applicants prop up as a viable and attractive component of “blue” and “green” hydrogen/clean energy projects, as well. As noted by the National Energy Technology Laboratory as recently as August 2022, “the impacts of underground hydrogen storage on reservoirs, hydrogen leakage risks, and flow behavior of hydrogen and blended mixtures are not well understood.”<sup>18</sup>

At its core, new classes of actions related to hydrogen hub proposals, and correlated federal funding phases will evolve at a rate that outpaces DOE’s ability to properly issue any new categorical exclusions. Promulgating new categorical exclusions for clean energy project activities or revising existing categorical exclusions for fossil fuel-related activities at a time when DOE plainly does not have sufficient information to meaningfully inform its decision-making compromises the integrity of the NEPA review process and stymies the public participation process NEPA contemplates.

DOE has been charged with leading the transition of our nation’s energy economy to clean energy. Proposals for “clean” energy projects that, for example, involve producing hydrogen from methane and rely on natural gas and pipeline infrastructure as a conduit to transportation are solutions neither for our energy needs nor climate crisis. Resultingly, DOE should not promulgate or revise any categorical exclusions for “clean” energy activities that simply reinforce our nation’s reliance on fossil fuels.

### **III. DOE must rescind categorical exclusion B5.7.**

Finally, despite DOE’s request for information to potentially *expand* its categorical exclusion list, DRN respectfully urges DOE to rescind Categorical Exclusion B5.7,<sup>19</sup> which governs the export of natural gas and associated transportation by marine vessel pursuant

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<sup>17</sup> COUNCIL ON ENVTL. QUALITY, EXEC. OFFICE OF THE PRESIDENT, ESTABLISHING, APPLYING, AND REVISING CATEGORICAL EXCLUSIONS UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT 2 (2010).

<sup>18</sup> NAT’L. ENERGY TECH. LAB, *Underground Hydrogen Storage Remains a Key Research Topic for NETL*, <https://netl.doe.gov/node/11982> (Aug. 22, 2022) (last visited Dec. 29, 2022).

<sup>19</sup> 10 C.F.R. Part 1021, Appendix B.

to DOE's authority under the Natural Gas Act ("NGA").<sup>20</sup> In 2020, DOE determined that "[a]pprovals or disapprovals of new authorizations or amendments of existing authorizations to export natural gas under section 3 of the Natural Gas Act and any associated transportation of natural gas by marine vessel" would be categorically excluded from its NEPA review.<sup>21</sup> In its revised NEPA regulations promulgated in December 2020, DOE significantly and unnecessarily narrowed the scope of its NEPA review for the export of natural gas. DRN submitted public comment to DOE when it issued its proposed rules, enclosed, and incorporates the arguments made therein.<sup>22</sup>

Categorical Exclusion B5.7 is contrary to the purpose of NEPA and poses a great risk of creating a gap in the review of environmental harms of liquefied natural gas ("LNG") export facilities where FERC declines to exercise jurisdiction.<sup>23</sup> For example, on March 25, 2022, in response to a petition filed by Nopetro LNG, LLC, FERC issued an order declaring that Nopetro's "construction and operation of a natural gas liquefaction and truck loading facility and proposed transloading operations in Port St. Joe, Florida, would not be subject to the Commission's jurisdiction under section 3 or section 7 of the Natural Gas Act (NGA)."<sup>24</sup> In that declaratory order, FERC explained that "although the facility is not subject to our environmental review, the facility *has been subject to NEPA review* through DOE's issuance of a categorical exclusion . . . ."<sup>25</sup>

Bewilderingly, DOE based its categorical exclusion B5.7 on the desire to avoid "unnecessary environmental documentation" and to continue its practice of relying on FERC's NEPA review of "the potential environmental impacts of the construction and operation of the LNG terminals."<sup>26</sup> Thus, both agencies are basing their decision not to engage in an environmental review on the erroneous assumption that the other agency has it covered. If DOE's categorical exclusion is based on an assumption that export facilities are being reviewed by FERC, and FERC is basing its decision not to act under the NGA and NEPA on the assumption that DOE's basis for a categorical exclusion is sound, then both agencies have committed an error and completely evaded their duties under both the NGA and NEPA.

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<sup>20</sup> 15 U.S.C. §§ 717-717z.

<sup>21</sup> National Environmental Policy Act Implementing Procedures, 85 Fed. Reg. 78,197 (Dec. 4, 2020).

<sup>22</sup> See Attachment.

<sup>23</sup> As explained in DRN's previous comments submitted to FERC, FERC has jurisdiction over "the construction and operation of particular facilities, the site at which such facilities shall be located, and with respect to natural gas that involves the construction of new domestic facilities, the place of entry for imports or exist for exports" via DOE Delegation Order No. 00-004.00. If neither FERC nor DOE exercises this authority, then the NGA is not implemented or enforced with regard to that particular facility.

<sup>24</sup> *Nopetro LNG, LLC*, 178 FERC ¶ 61,168 P 1 (2022).

<sup>25</sup> *Id.* at P 18.

<sup>26</sup> 85 Fed. Reg. at 78,199.

DRN accordingly encourages DOE to take this opportunity to rescind categorical exclusion B5.7 and return to its prior practice of evaluating Section 3 export authorizations on a case-by-case basis to determine the appropriate level of environmental review under NEPA.

Respectfully submitted,

/s/ Kacy C. Manahan

Kacy C. Manahan

Senior Attorney

Enclosure (*without attachments*)

**Attachment**



June 1, 2020

**VIA FEDERAL RULEMAKING PORTAL**

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1000 Independence Avenue SW  
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**Re: DOE NEPA/NG Procedures, RIN 1990-AA49**

To Whom it May Concern:

The United States Department of Energy (“DOE”) proposes to update its National Environmental Policy Act (“NEPA”),<sup>1</sup> implementing procedures regarding authorizations issued under Section 3 of the Natural Gas Act (“NGA”).<sup>2</sup> This update would categorically exclude all approvals and disapprovals of new authorizations or amendments of existing authorizations to export natural gas as well as any associated transportation of natural gas by marine vessel.

DOE invited public comments on the proposed changes on May 1, 2020, with a commenting deadline of June 1, 2020.<sup>3</sup> The Delaware Riverkeeper Network and Maya van Rossum, the Delaware Riverkeeper (collectively, “DRN”), submit the following comments for DOE’s consideration.

As an initial matter, DRN requests that DOE extend the public comment period an addition sixty (60) days, to close on Friday, July 31, 2020. DOE should take into account the devastating effects of the coronavirus pandemic on the public’s ability to fully and fairly engage in the rulemaking process. Hardships endured by members of the public affect their access to time and resources that had been previously freely available. This rulemaking must not be rushed without adequate input from the public, which can only be provided if accommodations are made during this unprecedented global pandemic.

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<sup>1</sup> 42 U.S.C. §§ 4321–4370h.

<sup>2</sup> 15 U.S.C. § 717b.

<sup>3</sup> National Environmental Policy Act Implementing Procedures, 85 Fed. Reg. 25,340 (proposed May 1, 2020) (to be codified at 10 C.F.R. Part 1021).

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## I. DOE's NGA Authority

The NGA provides that DOE “shall” authorize exports to non-Free Trade Agreement countries “unless . . . it finds that the proposed exportation . . . will not be consistent with the public interest.”<sup>4</sup> The NGA thus charges DOE with “assur[ing] the public a reliable supply of gas at reasonable prices,”<sup>5</sup> while simultaneously granting DOE the “authority to consider conservation, environmental, and antitrust questions.”<sup>6</sup>

At the same time, the Federal Energy Regulatory Commission (“FERC”) has the “exclusive authority to approve or deny an application for the siting, construction, expansion, or operation of an LNG terminal.”<sup>7</sup> An LNG terminal “includes all natural gas facilities located onshore or in State waters that are used to receive, unload, load, store, transport, gasify, liquefy, or process natural gas that is . . . exported to a foreign country from the United States . . . .”<sup>8</sup> Based on its interpretation of Supreme Court precedent regarding the purposes of the NGA, FERC has exercised its Section 3 authority only as to LNG facilities that “have pipelines connecting the facility with either the interstate or an intrastate grid.”<sup>9</sup>

## II. NEPA's Requirements

NEPA has two primary aims: (1) it obligates an agency to “consider every significant aspect of the environmental impact of a proposed action”; and (2) it “ensures that the agency will inform the public that it has indeed considered environmental concerns in its decisionmaking process.”<sup>10</sup> The “action-forcing” portion of NEPA relevant to this proposed rulemaking is Section 102:

The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter, and (2) all agencies of the Federal Government shall—

....

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on—

(i) the environmental impact of the proposed action,

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<sup>4</sup> 15 U.S.C. § 717b(a).

<sup>5</sup> *United Gas Pipe Line Co. v. McCombs*, 442 U.S. 529 (1979).

<sup>6</sup> *NAACP v. Fed. Power Comm'n*, 425 U.S. 662, 670 n.4, n.6 (1976); see also *Sierra Club v. U.S. Dep't of Energy (Freeport II)*, 867 F.3d 189, 202–03 (D.C. Cir. 2017).

<sup>7</sup> 15 U.S.C. § 717b(e)(1).

<sup>8</sup> 15 U.S.C. § 717a(11).

<sup>9</sup> *Shell U.S. Gas & Power, LLC*, 148 FERC ¶ 61,163 (Sept. 4, 2014), *Emera CNG, LLC*, 148 FERC ¶ 61,219 (Sept. 19, 2014); see also *FPC v. Hope Nat. Gas Co.*, 320 U.S. 591, 610 (1944), and *Phillips Petroleum Co. v. Fed. Power Comm'n*, 347 U.S. 672 (1954).

<sup>10</sup> *Baltimore Gas & Elec. Co. v. Nat. Res. Def. Council, Inc.*, 462 U.S. 87, 97 (1983) (first quoting *Vermont Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, Inc.*, 465 U.S. 519, 553 (1978), and then citing *Weinberger v. Catholic Action of Haw.*, 454 U.S. 139, 143 (1981)).

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.<sup>11</sup>

"[B]y focusing the agency's attention on the environmental consequences of a proposed project, NEPA ensures that important effects will not be overlooked or underestimated, only to be discovered after resources have been committed or the die otherwise cast."<sup>12</sup>

"Major Federal actions" requiring preparation of an EIS include projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by Federal agencies.<sup>13</sup> The Council on Environmental Quality ("CEQ") is an agency within the Executive Office of the President and has promulgated regulations implementing NEPA.<sup>14</sup> CEQ regulations direct Federal agencies to adopt their own regulatory procedures to supplement CEQ regulations.<sup>15</sup> DOE's NEPA regulations are found at 10 C.F.R. Part 1021. CEQ regulations describe the process by which a Federal agency must decide whether to prepare an EIS.<sup>16</sup> First, a Federal agency must determine whether the proposed action is one which normally requires an EIS or whether the proposed action is categorically excluded by the Federal agency's supplemental NEPA regulations.<sup>17</sup> If the proposed action does not belong in either category, CEQ regulations direct the Federal agency to "prepare an environmental assessment [{"EA"}]" and to "involve environmental agencies, applicants, and the public, to the extent practicable, in preparing" the EA.<sup>18</sup> CEQ regulations direct the Federal agency to "make its determination whether to prepare an [EIS]" based on the EA.<sup>19</sup> If the Federal agency "determines on the basis of the environmental assessment not to prepare an [EIS]," then it should "[p]repare a finding of no significant impact," also known as a FONSI.<sup>20</sup>

In this proposed rulemaking, DOE seeks to categorically exclude all "[a]pprovals or disapprovals of new authorizations or amendments of existing authorizations to export natural gas under section 3 of the Natural Gas Act and any associated transportation of natural gas by marine vessel" from the requirement to prepare an EA or EIS.<sup>21</sup> A categorical exclusion ("CE") is a "category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency in implementation of these regulations...and for which, therefore, neither an environmental assessment nor an

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<sup>11</sup> 42 U.S.C. § 4332. See also *Robertson v. Methow Valley Citizens*, 490 U.S. 332, 348-49 (1989).

<sup>12</sup> *Id.* at 349.

<sup>13</sup> 40 C.F.R. § 1508.18(a).

<sup>14</sup> 40 C.F.R. §§ 1500-1508.

<sup>15</sup> 40 C.F.R. § 1507.3.

<sup>16</sup> 40 C.F.R. § 1501.4.

<sup>17</sup> 40 C.F.R. § 1501.4(a).

<sup>18</sup> 40 C.F.R. § 1501.4(b).

<sup>19</sup> 40 C.F.R. § 1501.4(c).

<sup>20</sup> 40 C.F.R. § 1501.4(e).

<sup>21</sup> *Tracked Proposed Revisions*, DOE-HQ-2020-0017, RIN 1990-AA49.

environmental impact statement is required.”<sup>22</sup> “Categorical exclusions, by definition, are limited to situations where there is an insignificant or minor effect on the environment.”<sup>23</sup> In deciding whether an action meets this definition, an agency should consider “the unique characteristics of the applicable geographic areas, the degree to which effects on the quality of the environment [are] controversial or the risks were unknown, the degree to which the CEs might establish a precedent for future actions with significant effects or represent[] a decision in principle about future considerations, the degree to which the actions might affect endangered species, and whether there exist[] cumulative impacts from other related actions.”<sup>24</sup>

DOE justifies this proposed CE by improperly narrowing the scope of approvals and disapprovals of new authorizations and amendments of existing authorizations to export natural gas under section 3 of the Natural Gas Act. It does this by relying on the Supreme Court’s decision in *Department of Transportation v. Public Citizen*,<sup>25</sup> and the D.C. Circuit’s decision in *Sierra Club v. Federal Energy Regulatory Commission (Freeport I)*.<sup>26</sup> In *Public Citizen*, the Supreme Court held that “where an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant ‘cause’ of the effect.”<sup>27</sup> In *Freeport I*, the D.C. Circuit held that FERC’s NEPA analysis of the redesign of a liquefied natural gas (“LNG”) facility did not need to include an evaluation of the environmental consequences of exporting natural gas because “the Department of Energy, not the Commission, has sole authority to license the export of any natural gas going through” the facility.<sup>28</sup>

Based on these cases, DOE asserts that it “need not review potential environmental impacts associated with the construction or operation of natural gas export facilities because DOE lacks authority to approve the construction or operation of those facilities.”<sup>29</sup> DOE also states that the only potential environmental impacts resulting from the exercise of its NGA Section 3 authority “occur at or after the point of export.”<sup>30</sup> DOE’s conclusions are wrong for two reasons: (1) DOE is required to consider the direct and indirect effects of natural gas export authorizations because it has the statutory authority to deny such authorizations on the basis that the authorization would pose too great a harm to the environment; and (2) DOE’s view of the environmental impacts of natural gas export is too narrow and excludes the indirect effects of such action.

#### *A. DOE Section 3 Authority and its Effect on the Scope of DOE’s NEPA Analysis*

The environmental effects of increased production of natural gas due to a NGA Section 3 authorization to export a specified amount of natural gas from a specified location fall within the scope of the required NEPA analysis. Because these effects are typically significant and vary from application to application, DOE’s proposal to categorically exclude authorizations to export natural gas under NGA Section 3 is improper.

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<sup>22</sup> 40 C.F.R. § 1508.4.

<sup>23</sup> *Sierra Club v. Bosworth*, 510 F.3d 1016, 1027 (9th Cir. 2007) (quoting *Alaska Ctr. For Env’t v. U.S. Forest Serv.*, 189 F.3d 851, 859 (9th Cir. 1999)).

<sup>24</sup> *Id.* (citing 40 C.F.R. § 1508.27(b)).

<sup>25</sup> 541 U.S. 752 (2004).

<sup>26</sup> 827 F.3d 36 (D.C. Cir. 2016).

<sup>27</sup> 541 U.S. at 770.

<sup>28</sup> 827 F.3d at 47.

<sup>29</sup> National Environmental Policy Act Implementing Procedures, 85 Fed. Reg. 25,340, 25,341–42 (proposed May 1, 2020) (to be codified at 10 C.F.R. Part 1021).

<sup>30</sup> *Id.* at 25,342.

In a companion case to *Freeport I*, the D.C. Circuit rejected petitioners' argument that FERC should have considered the increased production of gas for export and the increased cost of domestic gas that could prompt greater reliance on coal in its NEPA analysis of a liquefied natural gas terminal.<sup>31</sup> The court reasoned that these effects could not occur "unless a greater volume of liquefied natural gas is shipped from the Terminal and enters the international marketplace" which "the Department of Energy alone has the legal authority to authorize."<sup>32</sup> Accordingly, petitioner "remain[ed] free to raise these issues in a challenge to the Energy Department's NEPA review of its export decision."<sup>33</sup> Later, the petitioner in that case *did* challenge DOE's NEPA review of its export decision.<sup>34</sup> In *Freeport II*, the D.C. Circuit considered DOE's Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States ("Addendum")<sup>35</sup> and its Life Cycle Greenhouse Gas Perspective on Exporting Liquefied Natural Gas from the United States ("Life Cycle Report")<sup>36</sup> as a part of DOE's "hard look" NEPA analysis of its Section 3 export authorization for the Freeport LNG Terminal in Texas.<sup>37</sup>

In a third D.C. Circuit case, *Sierra Club v. Federal Energy Regulatory Commission (Sabal Trail)*,<sup>38</sup> the court clarified that "the fact that a second agency's approval was necessary before the environmental effect at issue could occur" was not sufficient to break the causal chain between an agency action and an environmental effect, but rather an agency must have "no legal authority to prevent the adverse environmental effects . . ."<sup>39</sup> This means that, for an environmental effect to be outside the scope of DOE's NEPA analysis, DOE must be "forbidden to rely on" the potential harm of those effects "as a justification for denying" an export authorization.<sup>40</sup> The question is not "What activities does [DOE] regulate?" but rather "What factors can [DOE] consider when regulating in its proper sphere?"<sup>41</sup> In evaluating FERC's NGA Section 7 authority to approve applications to construct and operate interstate pipelines, the D.C. Circuit held that "[b]ecause FERC could deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment, the agency is a 'legally relevant cause' of the direct and indirect environmental effects of pipelines it approves."<sup>42</sup> Similarly, here, because DOE can deny an export authorization on the ground that the export of a certain amount of natural gas would be too harmful to the environment, it is a legally relevant cause of the direct and indirect environmental effects of pipelines it approves.

### *B. Environmental Effects of Natural Gas Export*

Direct effects of natural gas export include the environmental impacts at or after the point of export. With regard to an LNG terminal, FERC typically evaluates the upland operations in its own NEPA analysis, which it completes as the "lead agency" for a natural gas export operation.<sup>43</sup> However, FERC has made clear that not all points of export will be subject to its Section 3 jurisdiction, specifically when

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<sup>31</sup> *Sierra Club v. Fed. Energy Regulatory Comm'n*, 827 F.3d 59, 68 (D.C. Cir. 2016).

<sup>32</sup> *Id.*

<sup>33</sup> *Id.* at 68–69.

<sup>34</sup> *See Sierra Club v. U.S. Dep't of Energy (Freeport II)*, 867 F.3d 189 (D.C. Cir. 2007).

<sup>35</sup> 79 Fed. Reg. 48,132 (Aug. 15, 2014).

<sup>36</sup> 79 Fed. Reg. 32,260 (June 4, 2014).

<sup>37</sup> *Id.* at 197.

<sup>38</sup> 867 F.3d 1357 (D.C. Cir. 2017).

<sup>39</sup> *Id.* at 1373.

<sup>40</sup> *Id.*

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

<sup>42</sup> *Id.*

<sup>43</sup> 15 U.S.C. § 717n(b)(1); *see also Freeport I*, 827 F.3d at 41.

those facilities do not connect to a pipeline.<sup>44</sup> Accordingly, when an export facility does not meet FERC's interpretation of an "LNG terminal," DOE must evaluate the direct environmental impacts of that facility, as it is located "at" the point of export. Each of these facilities will be unique and may have a substantial effect on the environment. A failure to analyze the impacts of such a facility in the absence of FERC jurisdiction will result in a regulatory gap. Thus, a categorical exclusion for all NGA Section 3 export authorizations is inappropriate.

DOE in its proposed rule also neglects to consider the indirect effects of authorizing natural gas exports. Indirect impacts caused by "reasonably foreseeable" future actions are recognizable under NEPA and must be considered throughout the NEPA process. Natural gas exports will increase U.S. gas production.<sup>45</sup> Thus, an approval for export of a specified amount of natural gas has a measurable impact on production, and is a legally-relevant cause of that increased production. As the D.C. Circuit explained in the context of a Section 7 pipeline approval, "[b]ecause FERC could deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment, the agency is a 'legally relevant cause' of the direct and indirect environmental effects of pipelines it approves."<sup>46</sup> Here, too, because DOE could deny an application for authorization to export natural gas based on environmental concerns, DOE's approval is a legally-relevant cause of upstream gas production. In this respect, the approval for export from a specific site is similar to the construction of a logging road in *Thomas v. Peterson*,<sup>47</sup> a case that discussed the appropriate scope of a NEPA analysis. In that case, the Ninth Circuit reasoned:

The location, the timing, or other aspects of the timber sales, or even the decision whether to sell any timber at all affects the location, routing, construction techniques, and other aspects of the road, or even the need for construction.

....

The Forest Service argues that the sales are too uncertain and too far in the future for their impacts to be analyzed along with that of the road. This comes close to saying that building the road now is itself irrational. We decline to accept that conclusion. Rather, we believe that if the sales are sufficiently certain to justify construction of the road, then they are sufficiently certain for their environmental impacts to be analyzed along with those of the road.<sup>48</sup>

In sum, if the production of natural gas is sufficiently certain to justify an export authorization, then it is sufficiently certain for DOE to analyze its environmental impacts, as required by NEPA.

That an export authorization for an increased amount of natural gas will necessarily lead to additional demand for natural gas, with consequences for its price, production, and use, is eminently

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<sup>44</sup> See *Shell U.S. Gas & Power, LLC*, 148 FERC ¶ 61,163 (Sept. 4, 2014), *Emera CNG, LLC*, 148 FERC ¶ 61,219 (Sept. 19, 2014); see also Congressional Research Service, *Liquefied Natural Gas by Rail: Policy Issues* (Nov. 18, 2019) (describing "virtual pipelines" created by transporting LNG via trucks and rail cars) (attached).

<sup>45</sup> See NERA Economic Consulting, *Macroeconomic Impacts of LNG Exports from the United States* ("NERA Study") 51–52, fig. 30 (2012).

<sup>46</sup> *Sabal Trail*, 867 F.3d at 1373.

<sup>47</sup> 753 F.2d 754 (9th Cir. 1985).

<sup>48</sup> *Id.* at 760.

foreseeable. The D.C. Circuit has recently held that such “generally applicable economic principles,” as the relationship between the price of a good and its production and consumption, are “sufficiently ‘self-evident’” to “require ‘no evidence outside the administrative record.’”<sup>49</sup> The results of generally applicable economics are all the more foreseeable here, as DOE performed an export study in 2012.<sup>50</sup>

The Council on Environmental Quality’s (“CEQ’s”) regulations implementing NEPA provide illustrations of indirect effects that are closely analogous to those at issue here: “growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate[.]”<sup>51</sup> Like impacts on gas production and use, growth-inducing effects and induced changes in the pattern of land use reflect responses—generally market-based—to changes in the supply of, and demand for, various resources. Further reflecting the need to consider such impacts, the regulations include economic as well as environmental impacts among those that an agency must consider.<sup>52</sup>

For that reason, courts have consistently required that agencies extend the ambit of their analysis to include effects akin to upstream production and downstream consumption. The Eighth Circuit has addressed circumstances that closely parallel those here, holding that when an agency approves a rail-line extension that would result in “an increase in availability and a decrease in price” of coal, NEPA demands that the agency examine the environmental “effects that may occur as a result of the reasonably foreseeable increase in coal consumption.”<sup>53</sup> In *Mid-States*, the agency’s decision enabled an increase in the supply of coal to the domestic market; here, as described below, DOE’s Section 3 authorizations will cause an increase in demand for natural gas. In *Mid-States*, that decision had foreseeable effects on the price of coal, its production, and its use.

DOE’s Section 3 authorizations have foreseeable impacts on natural gas’s price, production, and use. In *Mid-States*, the Eighth Circuit held that the agency could not responsibly or lawfully ignore those effects under NEPA.<sup>54</sup> Likewise, neither could DOE do so here. Other Circuits have reached similar conclusions. When authorizing a runway that would expand capacity and “spur demand,” the Ninth Circuit has held that the Department of Transportation must examine the increased usage that will result from that demand.<sup>55</sup> The First Circuit has refused to let an agency construct a causeway and port without examining the “industrial development” that would be enabled by that construction.<sup>56</sup> Those cases establish that when an agency takes an action that will increase demand for a resource, it cannot ignore the effects of that increased demand.

Additionally, DOE must consider the cumulative effects of actions similar to the proposed action, whether existing or reasonably foreseeable. Cumulative impacts include “impact[s] on the environment which result 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*

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<sup>49</sup> *Airlines for Am. v. Transp. Sec. Admin.*, 780 F.3d 409, 410-11 (D.C. Cir. 2015) (finding standing based on “basic proposition that ‘increasing the price of an activity . . . will decrease the quantity of that activity demanded in the market’” (alteration in original) (quoting *Branton v. FCC*, 993 F.2d 906 (D.C. Cir. 1993))).

<sup>50</sup> 2012 LNG Export Study, 77 Fed. Reg. 73,627 (Dec. 11, 2012).

<sup>51</sup> 40 C.F.R. § 1508.8(b) (2019).

<sup>52</sup> *Id.*

<sup>53</sup> *Mid-States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549-50 (8th Cir. 2003) (requiring that agency address air pollution resulting from increased coal use).

<sup>54</sup> *Id.*

<sup>55</sup> *Barnes v. U.S. Dep’t of Transp.*, 655 F.3d 1124, 1138-9 (9th Cir. 2011).

<sup>56</sup> *Sierra Club v. Marsh*, 769 F.2d 868, 877-79 (1st Cir. 1985). *See also Friends of the Earth v. U.S. Army Corps of Eng’rs*, 109 F. Supp. 2d 30, 39-40 (D.D.C. 2000) (invalidating agency decision approving casino, without considering economic development that would result).

*other actions.*<sup>57</sup> “Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”<sup>58</sup> Cumulative impacts include “coincident effects (adverse or beneficial) on specific resources, ecosystems, and human communities of all related activities, not just the proposed project or alternatives that initiate the assessment process.”<sup>59</sup> A cumulative effects analysis focuses on resource sustainability, and has expanded geographic and time boundaries. In the specific context of Section 3 natural gas export authorizations, DOE should consider all pending natural gas export authorization applications before it in order to appropriately assess the cumulative impacts of its actions.

While DOE created an Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States,<sup>60</sup> that document did not “specifically project where or to what extent the impacts of increased production might occur in response to any particular amount of exports.”<sup>61</sup> NEPA does not allow agencies to consider only those effects whose specifics are known and certain. As the Eighth Circuit held, “when the *nature* of the effect is reasonably foreseeable but its *extent* is not . . . [an] agency may not simply ignore the effect.”<sup>62</sup> Indeed, where an action’s effects are not precisely known, the Council on Environmental Quality’s regulations suggest that the action is more—not less—likely to warrant an environmental impact statement.<sup>63</sup>

NEPA’s implementing regulations provide detailed instructions as to how such uncertainty is to be addressed in an environmental impact statement.<sup>64</sup> That the precise location of natural gas production is unknown, therefore, does not render such production unforeseeable, or allow DOE to dismiss its effects as insignificant. “It is well recognized that a lack of certainty concerning prospective environmental impacts cannot relieve an agency of responsibility for considering reasonably foreseeable contingencies.”<sup>65</sup> Rather, “[a]t the threshold stage of the NEPA inquiry . . . an agency must determine, to the extent feasible, whether the sum of all reasonably foreseeable effects, discounted by the probability of their occurrence, represent a ‘significant’ effect on the environment.”<sup>66</sup> If so, the “agency must issue an EIS analyzing the probabilistic facets of the prospective environmental impact.”<sup>67</sup>

Analysts, experts, and modelers use the location of interstate transmission gas lines as a predictor of where gas production will take place. The reality of the industry is that there is a direct relationship between the siting and construction of well pads and the location of existing or proposed interstate pipelines. These pipelines then lead to natural gas liquefaction facilities, where the gas is

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<sup>57</sup> 40 C.F.R. § 1508.7 (emphasis added).

<sup>58</sup> 40 C.F.R. § 1508.7.

<sup>59</sup> COUNCIL ON ENVIRONMENTAL QUALITY, EXECUTIVE OFFICE OF THE PRESIDENT, CONSIDERING CUMULATIVE EFFECTS UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT at v (Jan. 1997).

<sup>60</sup> 79 Fed. Reg. 48,132 (Aug. 15, 2014).

<sup>61</sup> *Freeport II*, 867 F.3d at 195.

<sup>62</sup> *Mid-States Coal. for Progress*, 345 F.3d at 549-50 (when agency permits rail extension that will increase “availability of coal,” it may not ignore “the construction of additional [coal-fired] power plants” that may result merely because agency does not “know where those plants will be built, and how much coal these new unnamed power plants would use”).

<sup>63</sup> See 40 C.F.R. § 1508.27(b)(5) (intensity depends upon “[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks”); see also *Found. on Econ. Trends*, 756 F.2d at 154-55 (It is not “sufficient for the agency merely to state that the environmental effects are currently unknown,” because uncertainty is “one of the specific criteria for deciding whether an [environmental impact statement] is necessary”).

<sup>64</sup> 40 C.F.R. § 1502.22(b) (specifying how the agency should proceed when “the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known”).

<sup>65</sup> *Potomac Alliance v. U.S. Nuclear Reg. Comm’n*, 682 F.2d 1030, 1036-37 (D.C. Cir. 1982).

<sup>66</sup> *Id.*

<sup>67</sup> *Id.*

liquefied for export. DOE could use this information to determine the probable location of upstream environmental impacts. As an example, DRN attaches a region-wide analysis of the impacts of natural gas development in the Marcellus Shale formation, as well as a more specific watershed-based analysis of the potential impacts of natural gas development in the Delaware River Basin.<sup>68,69</sup>

Accordingly, the scope of environmental impacts caused by a DOE Section 3 approval includes existing and reasonably foreseeable shale development/production that would be advanced, induced and supported if a specific amount of natural gas was authorized for export. The reasonably foreseeable actions—the environmental and community impacts of which must be considered—include the construction, operation and maintenance of the shale gas wells that will be the source of the gas ultimately exported—both the new wells that would be constructed and the production that would be induced at pre-existing wells by the proposed export. The analysis of impact for these gas wells must include the associated access roads, gathering lines, compressor stations, water quality effects, water pipelines, water consumption and water disposal, truck traffic, and other supporting infrastructure which is necessary for the construction, development, and operation of these wells.

#### **IV. Conclusion**

DOE should not promulgate the proposed rule categorically excluding approvals or disapprovals of new authorizations or amendments of existing authorizations to export natural gas under Section 3 of the NGA. Not only is it contrary to NEPA and governing case law, it runs the risk of creating a void in the review of environmental harms of LNG export facilities where FERC does not exercise jurisdiction. Instead, it should continue to evaluate NGA Section 3 export authorizations on a case-by-case basis to determine whether an EIS or EA is appropriate in accordance with NEPA.

Maya K. van Rossum



the Delaware Riverkeeper

Delaware Riverkeeper Network

Enclosures

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<sup>68</sup> CNA Analysis & Solutions, Potential Environmental Impacts of Full-development of the Marcellus Shale in Pennsylvania (Sept. 2016).

<sup>69</sup> CNA Analysis & Solutions, The Potential Environmental Impact from Fracking in the Delaware River Basin (Aug. 2015).