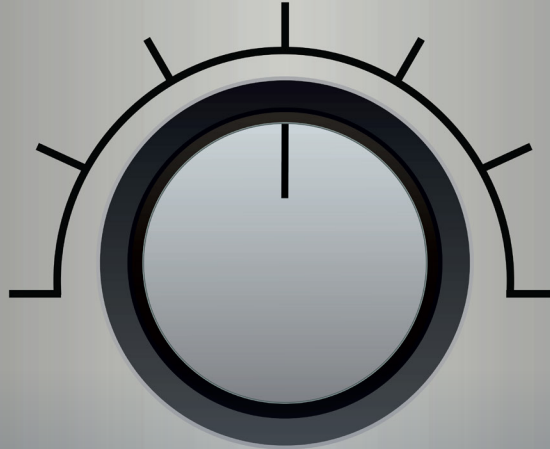




JUST RIGHT

TOO LITTLE

TOO MUCH



U.S. PERMITTING PROCESS



Bipartisan Policy Center

Finding the Goldilocks Zone for Permitting Reform

**A SYNTHESIS REPORT BASED ON
SEVEN ROUNDTABLE DISCUSSIONS**

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Introduction

A more efficient permitting system for energy infrastructure would reduce energy costs, increase energy reliability, increase quality of life, and reduce emissions. It should be no surprise that there is bipartisan interest in achieving these goals. Last year, Congress passed, and President Joe Biden signed, [the Fiscal Responsibility Act](#).^a This law includes several reforms to the federal permitting and environmental review process recommended by [BPC's Smarter, Cleaner, Faster Infrastructure Task Force](#).^b But more can, and should, be done.

THERE IS BOTH THE NEED AND
POLITICAL APPETITE FOR MORE
SIGNIFICANT IMPROVEMENTS TO THE
ENERGY PERMITTING PROCESS.

This synthesis report on permitting reform is based on six previous issue briefs, which were informed by a series of stakeholder roundtables aimed at exploring legislative options for a more efficient permitting system. This latest report ranks each of the previously discussed policy options across two dimensions: **Effectiveness** and **Controversy**. Following this analysis, each of the six previously published issue briefs are reproduced below for more detail on each policy option and insight into the roundtable discussions that informed the rankings.

The purpose of this roundtable series was to bring together a diverse set of permitting experts to evaluate different options for permitting, explore the nuances of policy options, discuss the effectiveness of different policies, and consider the potential political controversies each option might elicit. These discussions were intended to inform educational products and further discussions between stakeholders and policymakers in the energy permitting space.

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- a Fishman, X., Jacobs, J., & Minott, O. (2023, June 02). How Does the Fiscal Responsibility Act Reform Permitting and Environmental Review? Bipartisan Policy Center. Available at: <https://bipartisanpolicy.org/blog/fiscal-responsibility-act-permit-reform/>
- b Bipartisan Policy Center. (n.d.). Smarter, Cleaner, Faster Infrastructure Task Force. Retrieved from <https://bipartisanpolicy.org/cleaner-smarter-faster-task-force/>

Our north star was trying to identify policy options that satisfy the following:

Permit reform options should improve the permitting process while simultaneously increasing efficiency, protecting the environment, and protecting the public.

Historically, this has been a policy area where environmental priorities and energy development priorities were often in opposition. But that has changed. There is growing understanding that an unnecessarily slow environmental review process produces worse environmental outcomes, rather than better. America's current permitting process helps to lock-in the status quo of energy infrastructure by hamstringing new development and improvements. With drastic scaleup of clean energy technologies needed, reforming the permitting process can align both the desire for improved environmental outcomes and energy sector growth by unlocking a wave of more sustainable project development. This approach requires recognizing that some historical arguments against permitting reform need to be reconsidered, while also acknowledging the importance of a clear, transparent review process for projects to ensure safety.

In short, our goal is to find the "Goldilocks Zone" of Permitting Reform: striking a balance where review is neither too extensive such that it causes undue delays, nor too minimal such that it risks public and environmental harm, but is just right to ensure safety while facilitating efficient energy infrastructure development.

The rankings below are intended to aid stakeholders in finding the Goldilocks Zone of an effective and politically viable package of reforms for energy infrastructure permitting system.

EXPLAINING THE RANKINGS

We ranked each of the options along two dimensions: Effectiveness and Controversy

Effectiveness

The likelihood of each policy option achieving the stated goal of increasing permitting efficiency. This metric also incorporates environmental and public protection, as those are core tenants of an efficient permitting process. However, because reasonable people may disagree on aspects of environmental and public protection, some of those considerations are also reflected in the Controversy ranking.

Controversy

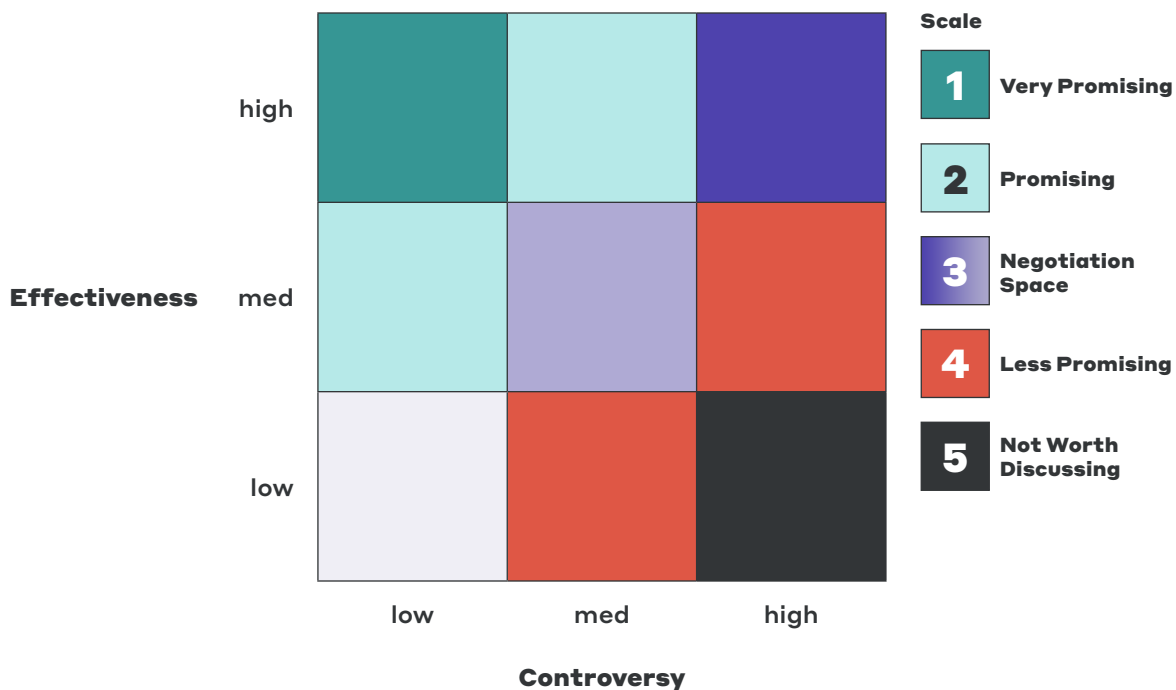
The degree and the intensity to which a particular policy option is likely to face opposition from stakeholders, including policymakers, developers, and the public. Factors that could drive opposition: litigation risk, risk of environmental harm, potential to harm specific communities, increasing the federal deficit, authority of the federal government over state or local governments, or deployment of certain types of energy technology over others. Some of these are more likely to face opposition from Democrats, some from Republicans, and some opposition may be more regional in nature.

HOW TO THINK ABOUT THE RANKINGS

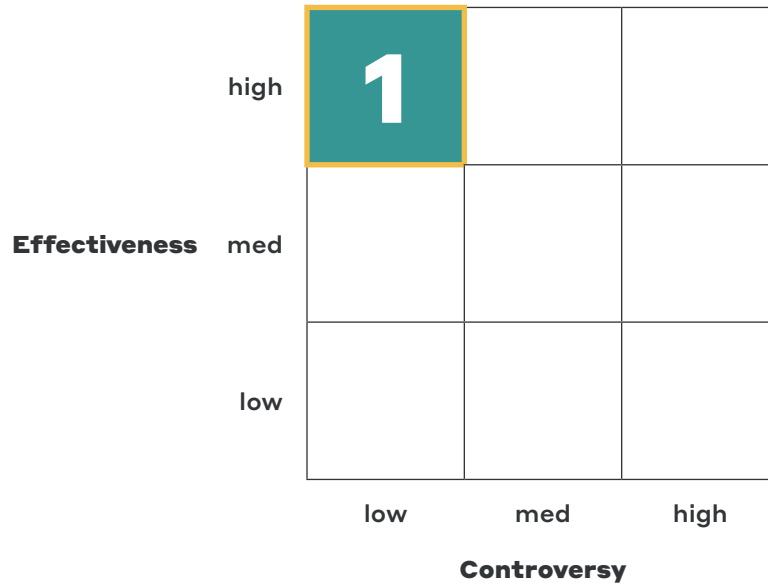
For purposes of deciding which policy options are worth spending the most time on, we divide them into five categories based on their Effectiveness and Controversy rankings:

1. **Very Promising** | High Effectiveness - Low Controversy
2. **Promising** | Effectiveness higher than Controversy
3. **Negotiation Space** | Effectiveness equal to Controversy
4. **Less Promising** | Effectiveness lower than Controversy
5. **Not Worth Discussing** | Low Effectiveness - High Controversy

The following section describes how we suggest thinking about these 5 categories and the options that fall within each.

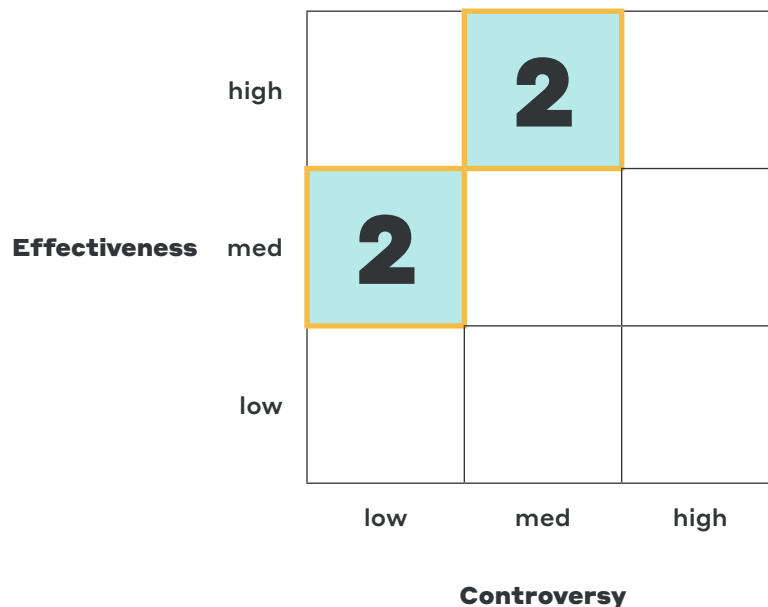


1. Very Promising | High Effectiveness — Low Controversy



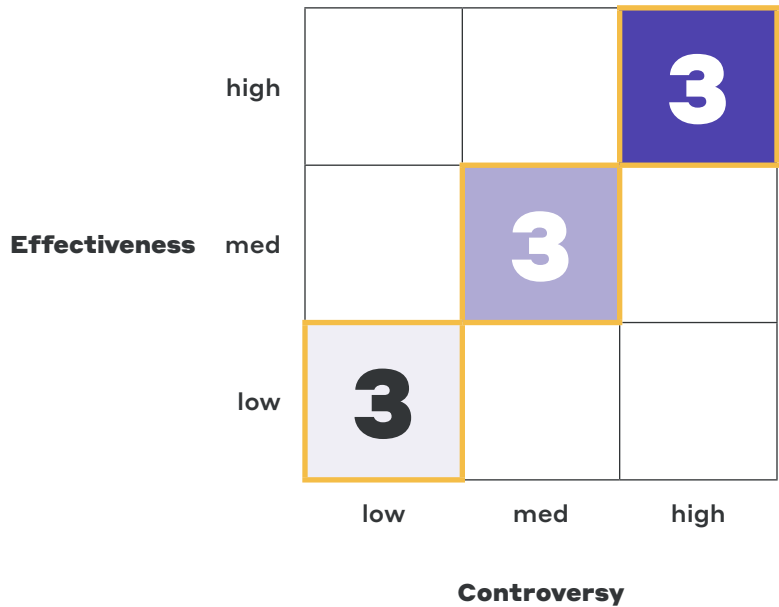
The “no brainer” rank. If a policy option would be highly effective and uncontroversial, it should be a top-tier candidate for inclusion in any permitting package. It should be noted that simply pulling from options in this rank is unlikely to lead to a major bipartisan permitting package. A major bipartisan permitting package is more likely to be anchored by policies that deal with transmission and judicial review which have equal rankings in the Effectiveness and Controversy categories, placing them in the “negotiation zone” as described in section 3 below.

2. Promising | Effectiveness higher than Controversy



Options in this category are more effective than they are controversial, making them good candidates for inclusion in a bipartisan permitting package. While not a true “no brainer,” these options are worthy of further discussion and should be on the table for negotiators.

3. Negotiation Space | Effectiveness equal to Controversy

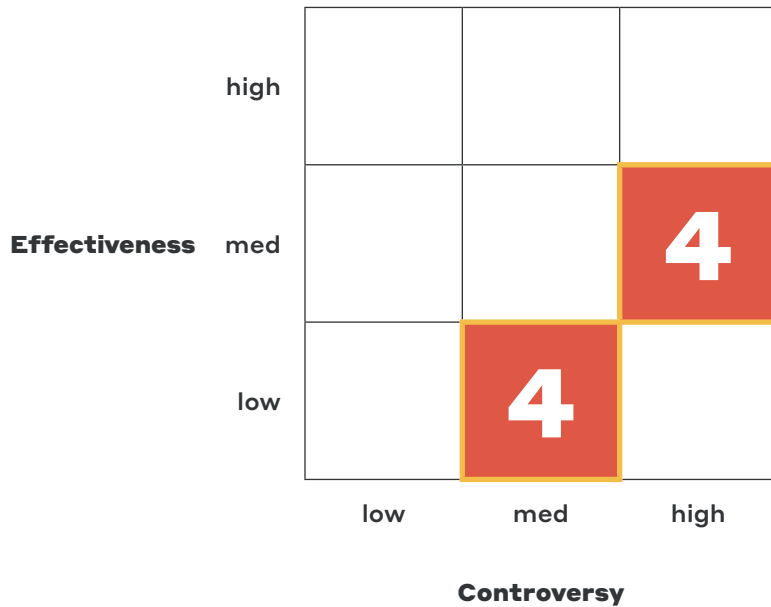


Options in this category are likely to form the core deal around which a bipartisan permitting package is made, making this perhaps the most interesting category. Specifically, we expect certain policy options around transmission and judicial review reforms to be the major negotiating points.

It’s important to note that ranking many options in this category was challenging due to the variability in policy design, where effectiveness and controversy often scale together. For example, a policy option rated as Medium Effectiveness—Medium Controversy could potentially be classified as High Effectiveness—High Controversy or Low Effectiveness - Low Controversy, depending on the details of its design.

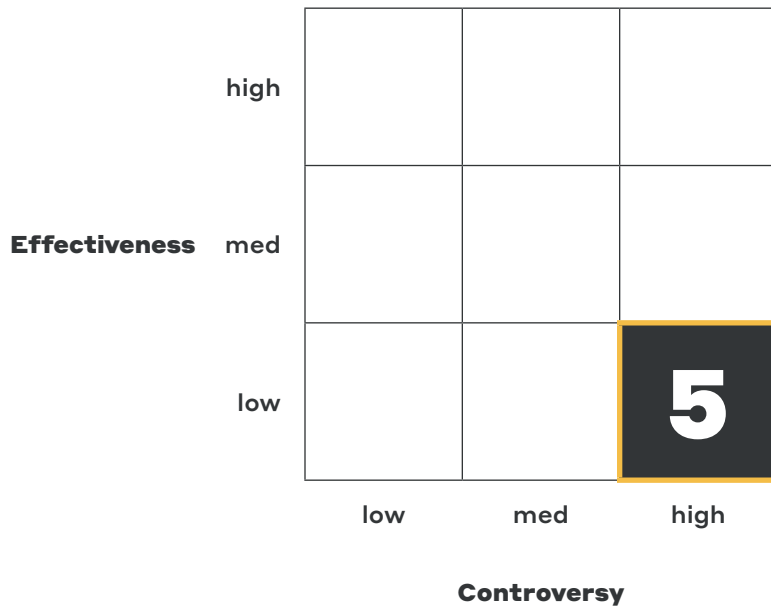
The key elements of the deal are likely to be in the High - High or Medium - Medium category. The Low - Low category may also contribute to policy options that may only move the needle a small amount but do so in a way that is non-controversial.

4. Less Promising | Effectiveness lower than Controversy



The options in this category are more controversial than they are effective. For that reason, these options are not the most likely to end up in a final agreement. That does not mean, however, that they are necessarily dead-upon-arrival. If policy options in this category are priorities for specific members of Congress who are central to the deal-making, they may still need to be considered.

5. Not Worth Discussing | Low Effectiveness — High Controversy



These options incite much greater controversy than the degree to which they might help, and in some cases may not help at all. For this reason, options in this category are not likely to make it into a compromise package and may not be worth spending time on.

RANKING THE OPTIONS

Below you will find each option discussed in the roundtables, grouped by topic type. Each policy option is ranked according to the two previously explained dimensions. Importantly, you will find a page number next to each option corresponding to the section of the previously published issue brief that explained each option in detail. We recommend reading the full explanation of an option, rather than relying solely on the one-sentence summary of the policy option.

Public Engagement

Policy Description		Effectiveness	Controversy
Establish and fund non-biased third parties to perform community education and engagement on energy technologies (not projects) [Pg. 18]	3 Negotiation Space	Med	Med
Establish a monitoring committee for individual projects, comprised of local stakeholders, that ensures standards are met and provides an avenue for continued public engagement for the life of the project [Pg. 21]	4 Less Promising	Med	High
Require or incentivize agencies to engage stakeholders before developing a public notice of intent to prepare an Environmental Impact Statement [Pg. 23]	3 Negotiation Space	Med	Med
Conduct and provide resources for extensive community information hearings that address public comments and concerns of the community [Pg. 23]	2 Promising	Med	Low
Establish a clearinghouse for information on environmental justice, best practices, and opportunities for community engagement [Pg. 24]	4 Less Promising	Low	Med
Establish commissions to advise agencies on the design, implementation, and evaluation of public participation processes [Pg. 24]	5 Not Worth Discussing	Low	High

Linear Infrastructure

Policy Description		Effectiveness	Controversy
Bolster FERC's backstop siting authority for transmission [Pg. 27]	3 Negotiation Space	Med	Med
Provide FERC with primary siting authority for interstate transmission [Pg. 28]	3 Negotiation Space	High	High
Provide FERC with cost allocation authority for transmission [Pg. 29]	3 Negotiation Space	High	High
Minimum transfer requirement for transmission [Pg. 30]	2 Promising	High	Med
Compensation for delays in interconnection queue [Pg. 32]	5 Not Worth Discussing	Low	High
Create a new federal regime for siting hydrogen pipelines [Pg. 32]	2 Promising	High	Med
Provide federal siting for hydrogen pipelines under the natural gas act [Pg. 33]	2 Promising	High	Med
Provide FERC with backstop authority for CO ₂ pipelines [Pg. 33]	3 Negotiation Space	Med	Med
Provide FERC with primary siting authority for CO ₂ pipelines [Pg. 33]	3 Negotiation Space	High	High
Expand the definition of "energy corridors" to include CO ₂ pipelines [Pg. 34]	3 Negotiation Space	Low	Low
Clarify the definition of "discharge" in the Clean Water Act [Pg. 34]	3 Negotiation Space	High	High
Improve the eminent domain process [Pg. 35]	3 Negotiation Space	Med	Med

Judicial Review

Policy Description		Effectiveness	Controversy
Reduce the statute of limitations to 2 years (parity with transportation projects and FAST-41) [Pg. 38]	2 Promising	Med	Low
Reduce the statute of limitations to 1 year [Pg. 38]	2 Promising	High	Med
Reduce the statute of limitations to 6 months [Pg. 38]	3 Negotiation Space	High	High
Reduce standing [Pg. 38]	3 Negotiation Space	High	High
Eliminate judicial review for categorical exclusion designations [Pg. 39]	3 Negotiation Space	Med	Med
Elevate litigation filed after final agency actions directly to U.S. Courts of Appeals [Pg. 39]	2 Promising	Med	Low
Establish a technical court with jurisdiction over federal permitting decisions [Pg. 39]	1 Very Promising	High	Low
Establish a permitting review board for energy projects [Pg. 40]	1 Very Promising	High	Low
Setting court deadlines [Pg. 40]	5 Not Worth Discussing	Low	High
Setting deadlines on agency remand [Pg. 40]	2 Promising	Med	Low
Narrowing the scope of decisions [Pg. 40]	2 Promising	Med	Low
Direct CEQ or the Permitting Council to develop a public database of NEPA lawsuits [Pg. 41]	2 Promising	Med	Low

Remaining NEPA Reform

Policy Description		Effectiveness	Controversy
Clarify actions that trigger NEPA review [Pg. 44]	3 Negotiation Space	Med	Med
Further clarify and narrow the definition of “effects” [Pg. 46]	4 Less Promising	Low	Med
Expand utilization of programmatic reviews [Pg. 47]	2 Promising	Med	Low
Expand utilization of categorical exclusions [Pg. 48]	2 Promising	High	Med
Eliminate requirement for agencies to publish full environmental assessment document [Pg. 48]	5 Not Worth Discussing	Low	High
NEPA delegation to states [Pg. 49]	3 Negotiation Space	Med	Med
Competitive Grant Program for states to improve state-level permitting (carrot) [Pg. 49]	2 Promising	Med	Low
Restrict federal funding from states if they don’t have efficient state-level permitting (stick) [Pg. 50]	4 Less Promising	Med	High
Enforcement mechanism for agency deadlines: agency pays fee to project sponsor for every day past deadline [Pg. 50]	5 Not Worth Discussing	Low	High
Enforcement mechanism for agency deadlines: automatic approval if deadline is missed [Pg. 50]	4 Less Promising	Med	High
Enforcement mechanism for agency deadlines: increased transparency [Pg. 50]	2 Promising	Med	Low
Provide agencies with additional resources and funding [Pg. 51]	2 Promising	High	Med

Nuclear Energy Licensing and Permitting

Policy Description		Effectiveness	Controversy
Change the NRC environmental review process so that advanced reactors do not automatically require an Environmental Impact Statement (EIS) [Pg. 55]	1 Very Promising	High	Low
Require the NRC to create and utilize a generic EIS for the construction and operation of advanced nuclear reactors [Pg. 57]	2 Promising	Med	Low
Require the NRC to develop a process for timely environmental review of nuclear projects that reuse brownfield sites (e.g., coal-to-nuclear projects) [Pg. 58]	1 Very Promising	High	Low
Increase the NRC off-fee funding and make agency funding for infrastructure, technology upgrades, and training activities non-fee-dependent [Pg. 59]	2 Promising	High	Med
Eliminate license review fees for new advanced nuclear reactors [Pg. 60]	3 Negotiation Space	Med	Med
Establish and enforce timelines for each stage of the licensing and permitting process [Pg. 61]	1 Very Promising	High	Low
Eliminate uncontested mandatory hearings from the licensing process for new reactors [Pg. 62]	2 Promising	Med	Low
Replace court-like hearings on contested environmental issues in license applications with a public comment process like that conducted by other federal agencies [Pg. 62]	4 Less Promising	Low	Med
Require the NRC's Advisory Committee on Reactor Safeguards to review only novel or safety-significant issues rather than all applications [Pg. 64]	2 Promising	Med	Low

Technology Specific Reforms

Policy Description		Effectiveness	Controversy
Critical Minerals			
Expand the 2015 Fixing America's Surface Transportation Act (FAST-41) to include all federally regulated mining, processing, and refining projects for critical minerals [Pg. 71]	4 Less Promising	Low	Med
Allow the Environmental Protection Agency to temporarily waive Clean Air Act and Solid Waste Disposal Act requirements for the processing of critical minerals if a shortage causes national security concerns [Pg. 72]	5 Not Worth Discussing	Low	High
Require mining companies to provide financial assurance in their reclamation plans [Pg. 72]	3 Negotiation Space	Med	Med
Create incentives for third parties to clean up abandoned mines, including by limiting liability for organizations that undertake cleanup efforts [Pg. 73]	1 Very Promising	High	Low
Provide enhanced guidance to mine operators by organizing pre-consultation meetings, designating cross-agency case workers, and improving reference materials [Pg. 74]	3 Negotiation Space	Low	Low
Establish royalties for critical minerals extracted from federal lands [Pg. 74]	5 Not Worth Discussing	Low	High
Carbon Capture and Storage			
Establish enforceable timeline for EPA to process state Class VI primacy applications [Pg. 75]	2 Promising	High	Med
Allow EPA to issue aquifer exemptions for Class VI wells as is allowed for other well types [Pg. 76]	3 Negotiation Space	Low	Low
Establish a categorical exclusion for adding carbon capture, utilization, and storage (CCUS) to an existing power plant or industrial facility [Pg. 77]	3 Negotiation Space	High	High
Establish a categorical exclusion for adding additional direct air capture (DAC) facilities to an operational DAC hub [Pg. 77]	1 Very Promising	High	Low

Policy Description		Effectiveness	Controversy
Geothermal			
Establish categorical exclusions for geothermal test wells [Pg. 78]	1 Very Promising	High	Low
Clarify that geothermal lease reinstatement is not a 'major federal action' under NEPA [Pg. 79]	2 Promising	Med	Low
Require annual federal lease sales for geothermal energy [Pg. 79]	1 Very Promising	High	Low
Establish a 30-day timeline for reviewing geothermal drilling permits (GDPs) [Pg. 79]	3 Negotiation Space	Med	Med
Clarify that geothermal projects on state or private lands in which the federal ownership interest is less than 50% are not subject to federal permitting requirements [Pg. 80]	1 Very Promising	High	Low
Hydropower			
Affirm a 2-year licensing process for next-generation hydropower resources [Pg. 80]	3 Negotiation Space	Med	Med
Exempt small hydropower projects that do not have significant environmental impacts from FERC licensing requirements [Pg. 81]	3 Negotiation Space	Med	Med
Exempt closed-loop pumped storage projects that do not utilize federal land or impound navigable waters from FERC licensing requirements [Pg. 81]	2 Promising	Med	Low



Bipartisan Policy Center

Empowering Communities while Streamlining Clean Infrastructure Permitting

Xan Fishman, John Jacobs, Owen Minott, Meron Tesfaye, Ph.D., Andy Winkler

Accelerating our permitting process for clean energy and other infrastructure projects is critical to lowering emissions, reducing energy costs, increasing energy reliability, and enhancing both our energy and supply chain security. At the same time, robust public engagement with local communities is crucial to ensure transparency and provide timely, comprehensive, and understandable information to those who are potentially impacted. An effective process will help to foster a trusted environment that in turn enhances the opportunity to develop “buy-in” and even potential partnerships. A fulsome and transparent community process will also result in better final project planning and reduce potential opposition

In April 2023, the Bipartisan Policy Center convened a private workshop that brought together experts from across the political spectrum to explore the pros and cons of specific reforms to improve public engagement and increase the efficiency of the permitting process. The goal of the workshop was not to identify a set of consensus recommendations. Rather, it was to solicit feedback on a menu of policy options. There was one point of consensus: community engagement reforms must be included in any politically viable legislative permitting reform package.

The workshop explored a set of specific policy options that were considered by participants, with a significant amount of the discussion focused on third-party involvement.

Option: Establish and fund non-biased third parties to perform community education and engagement on energy technologies (not projects)

Because the onus for community engagement activities currently falls on project sponsors, it is natural for local communities to have at least some level of apprehension, even distrust, with developers who have a profit motive associated with the project. Workshop participants discussed having a third-party entity perform community engagement on technology types, rather than specific projects, to educate the community on the specifics of the technology, infrastructure needs, science, likely generic local impacts, and safety considerations. Funding a non-biased third-party with technology expertise to perform upfront community engagement and technical education could unlock early project efficiency gains. Utilizing an organization with repeated experience and expertise in the technology and process should give local communities a trusted resource and partner while serving to reduce delays associated with the permitting process. Participants noted that information sharing could be reciprocal, with the third-party gaining knowledge on community concerns so they can be addressed in project planning and environmental reviews.

Participants discussed whether the use of a third-party should be optional or mandatory. A mandatory approach would create a new baseline for community engagement but would, unfortunately, add to the already cumbersome permitting process. For that reason, most participants preferred not requiring this step for specific projects, but rather developing the capacity to provide this service for large projects where it may be more useful.

Some participants argued that the third-party approach may help educate communities, but would not solve the issue of disadvantaged stakeholders having neither the time or resources to engage in the process. This was acknowledged and BPC moderators reiterated that these policy options are not mutually exclusive—no single option discussed would solve each and every problem, and that some combination of these options could be included in final legislation—with the ultimate goal being an early, comprehensive and trusted community engagement and education process that would lead to reduced delays for worthy projects.

Participants identified two major policy design choices that would impact the effectiveness of the policy:

WHO IS THE THIRD PARTY?

There are numerous options for who the third party is, each bringing their own advantages and disadvantages. Participants identified that the third party must be trusted by the community, as well as the developers, to be neutral experts not advancing any ideological or profit-driven perspective. Participants also noted that this may require using different entities in different parts of the country depending on which local or regional entity can maintain that position of trust. Participants generally agreed that the third party would be less trustworthy if it were politically appointed. If the third party has a government affiliation, the steps would be needed to ensure confidence with both the community and project sponsor that the entity is without political or technology bias.

The following entities were proposed as possibly filling the third-party role:

USDA Cooperative Extension System

- **Pros:** The Department of Agriculture's Cooperative Extension System (CES) is a nationwide network, with an office in nearly all 3,000 U.S. counties, of educators and researchers that aims to provide mostly rural communities and farmers with practical, research-based information on best practices and has experience facilitating community engagement.
- **Cons:** CES is already resource constrained and is not currently equipped to take on such a large role in the permitting process. Additionally, permitting is not just a rural issue, and the program may need to become better equipped to work with urban and suburban communities.

DOE Foundation for Energy Security and Innovation

- **Pros:** The recently established Foundation for Energy Security and Innovation (FESI) is a private non-profit organization designed to involve the private sector in DOE's effort of commercializing and deploying energy technologies. FESI's unique structure with an insulated board of directors and the ability to mix philanthropic donations with public funding makes them well suited for a third-party role.
- **Cons:** FESI is not a well-established institution with roots in communities across the country, making it difficult to establish trust or build administrative capacity. FESI might be better equipped for a high-level role in aggregating funding and providing technology specific expertise that can be matched and disbursed to other third-party entities performing community engagement.

Community Colleges or Universities

- **Pros:** Community colleges and universities are spread across the country in diverse regions and would be well equipped to play an educational role when it comes to describing the benefits, impacts, and needs of specific energy technologies. Additionally, universities sometimes house federal entities, such as the EPA Environmental Finance Centers, which may prove a valuable resource and increase coordination between the universities and federal agencies.
- **Cons:** Community colleges and universities often have little to no experience with community engagement and may not have the expertise to discuss site-specific or regulatory issues. If the university does house a federal entity, it will also need to ensure that it maintains trust as a non-biased third party.

The Permitting Council

- **Pros:** Permanently reauthorized as part of the Bipartisan Infrastructure Law, the [Permitting Council](#) is an existing government agency with expertise both in the permitting process and in interacting with all of the other federal agencies that are involved in environmental reviews.
- **Cons:** Their current expertise is in permitting and intergovernmental coordination, not community engagement or education on technologies.

It is worth noting that each of these ideas above can be combined into one model where FESI and/or the Permitting Council pools resources, best practices, and educational materials which they then distribute in a partnership model to more local entities such as the CES or local academic institutions who act as the face of public engagement.

HOW IS THE THIRD-PARTY FUNDED?

A key policy design and concern of the third-party model is how the entity will be funded. Participants quickly pointed out that this model could be very expensive. Proposals on how to fund the entity are sorted into four buckets: project developers, trade associations, philanthropy, and the government.

Project Developers

- Developers benefit from third-party engagement as it can lead to more informed communities regarding their technology or project and help to minimize public opposition. It could therefore make sense for developers to contribute funding to this public education and

engagement effort, which would save them time and resources in the long run. One concern with this approach is maintaining the level of trust between the local community and third party and avoiding the appearance or actual conflicts of interest.

Trade Associations

- Trade associations could pool funding to support community engagement on specific technology types. Trade associations' members would benefit from more community education on their specific technology. Spreading the funding across members also keeps funding for community engagement one more step removed from individual projects.

Philanthropy

- Particularly if FESI is involved, philanthropic dollars could be leveraged to supplement other funding sources. There are many philanthropies focusing both on deploying clean energy technologies and on community engagement and environmental justice that may be interested in supporting this effort.

Government

- Agencies already have funding for environmental review and community engagement, which could be utilized here or leveraged through FESI. Participants noted that current funding levels are not enough to take on this new task and also implement an efficient permitting system. They also noted that the [Permitting Council's Environmental Review Improvement Fund](#) is an already existing source of potential funding for project developers to contribute to permitting expenses.

While there was no true consensus surrounding Option 1, an overwhelming majority of participants recognized the value and supported the concept assuming implementation details were designed well.

Option 2: Establish a monitoring committee for individual projects comprised of local stakeholders that ensures standards are met and provides an avenue for continued public engagement for the life of the project.

This recommendation is based off Quebec's community engagement model used for mining projects. The recommendation drew strong support from some participants who view it as a solution that places community members at the center of project development and delivery, and skepticism from other participants who thought the scale would be

too resource intensive and the authority of committees would need to be carefully defined to ensure the committees do not become an additional de facto approver/negotiator of projects. Participants also noted that the monitoring committees could interact as community representatives with the third-party in the recommendation above.

Participants supporting the recommendation highlighted that establishing a monitoring committee comprised of local stakeholders would provide a means for continued public engagement throughout the life of a project, which may reassure communities that standards will be adhered to years down the line. Committees could also help filter more legitimate community concerns from less legitimate, sometimes aesthetic concerns. By filtering and communicating concerns to agencies, the committees would be a valuable resource to agencies to identify and address the most pressing concerns.

Participants skeptical of the idea noted the sheer scale of the recommendation. Providing the committees with resources and their members with compensation could prove expensive. Participants also highlighted the importance of getting the committees' authority right. There was general consensus that the committees should not have jurisdiction to approve or deny projects—or even the perceived authority to do so—which could add an extra veto point. Instead, the committee should act as a forum for aggregating and communicating community concerns to agencies.

HOW IS COMMITTEE PARTICIPATION DECIDED?

There was consensus that the committee should consist of local stakeholders and not be decided by the federal government, but participants proposed different options for how to choose members.

Decided by local government

- The local government might be well informed on which community members are most knowledgeable of the technology or specific site location. This design also allows voters to have some oversight on the process by keeping local government representatives accountable.

Jury duty model

- Another proposal would use the jury duty model where members of the community are selected at random and compensated for their participation. This design would help mitigate the concern that these types of committees only represent individuals who have the time and resources to engage and ensure a more representative sample of the local population is involved.

Option 3: Require or incentivize agencies to engage stakeholders before developing a public notice of intent to prepare an Environmental Impact Statement.

In its [2021 report](#), BPC's Smarter, Cleaner, Faster Task Force recommended that Congress should codify the National Environmental Policy Act (NEPA) 2020 regulations' expansion of scoping and directing all agencies to prioritize early engagement and consensus building. Specifically, NEPA 2020 regulations would require agencies to engage stakeholders before developing a public notice of intent to prepare an Environmental Impact Statement (EIS) and to include specific information for, and to solicit information from, the public regarding proposed actions. Codifying this regulation could facilitate early public buy-in with the public and other stakeholders.

Participants agreed with the potential benefits of early engagement, noting that it helps developers, as well as communities, when residents provide feedback on a project at an earlier stage in development. Early engagement may also reduce the risk of litigation by community members that feel their concerns were not addressed through the standard process.

However, some voiced concern that this may also open up a new avenue for litigation if agencies do not conduct early engagement, which could slow projects down and disincentivize development. Therefore, participants questioned whether early engagement should be a requirement or whether there should be incentives to encourage early engagement. For example, one participant suggested that there could be a federal incentive to fast-track permitting for projects with early engagement.

Option 4: Conduct and provide resources for extensive community information hearings that address public comments and concerns of the community.

In Québec, the Bureau d'audiences publiques sur l'environnement ([BAPE](#)) serves as an independent government entity providing citizens with a platform to publicly express their views on proposed infrastructure and energy projects. BAPE posts information online and hosts hearings with community members, sharing their findings with the Québec government. The United States could facilitate a similar process by providing resources for such community information hearings.

Some participants supported the idea of better equipping impacted communities to represent themselves, as opposed to having other entities represent impacted communities. For example, the [Impact Assessment Agency of Canada provides funding](#) to reduce financial barriers for

members of the public to participate in the assessment process. Participants noted that this model could allow communities to hire representatives and experts they trust in order to feel that their interests are protected diligently. Other participants felt that hearings are less important, but providing resources for participation, such as technical assistance, would be more effective.

Option 5: Establish a clearinghouse for information on environmental justice, best practices, and opportunities for community engagement.

The [Environmental Justice for All Act](#), introduced in the 117th Congress, included a measure to establish a web-based Environmental Justice (EJ) Clearinghouse, including:

- Information describing the EPA's efforts to advance EJ
- Providing EPA training materials to help individuals and employees carry out EJ activities
- Links to web pages that describe EJ activities of other Federal agencies
- A directory of individuals who possess technical expertise in issues relating to EJ
- A directory of nonprofit and community-based organizations that address EJ issues

While participants noted that a hub of standards and best practices could be a useful tool, some expressed a concern that any guidance provided in the Clearinghouse would become de facto standards for other agencies to promote with little oversight and create increased litigation risk. Other participants noted that CEQ already provides resources and guidance on EJ activities, and thus there could be significant redundancy in creating a new platform.

Option 6: Establish commissions to advise agencies on the design, implementation, and evaluation of public participation processes

Commissions to advise agencies on public participation processes can provide a structured approach to developing and implementing effective public participation policies. These commissions can help agencies identify best practices, evaluate the effectiveness of their existing policies, and develop new strategies for engaging the public in decision-making processes.

However, workshop participants showed a general consensus of disapproval for this recommendation. Participants argued that commissions would add another layer of bureaucracy without addressing the contention between communities and developers. As with the

previous option, participants noted that the “best practices” established by the commission may become de facto standards with little oversight and that these commissions may be redundant of CEQ’s role in the process.

REMAINING OPTIONS THAT WERE NOT DISCUSSED IN-DEPTH

The options listed below were also part of the conversation, but time constraints prevented a more detailed discussion on their pros and cons.

- Establish an accessible online central hub for information on individual projects, public comments, and information about community hearings.
- Develop simple, intuitive agency formats for public involvement in project permitting, public hearings, and notice and comment stages.
- For projects involving multiple states, provide incentives and resources for coordinating community engagement.
- Incentivize developers to submit community benefit plans, where developers outline how they plan to serve communities through jobs and other economic benefits.

Conclusion

While this roundtable was not designed to forge consensus, it did highlight the significant areas of bipartisan interest and the need for more creative problem solving. There was broad agreement that early and trusted community engagement is an effective tool in reducing permitting delays. The third-party and monitoring committee options specifically garnered significant interest and debate over program design decisions. Additionally, requiring or incentivizing agencies to conduct stakeholder engagement efforts prior to the EIS also received general support by participants.

This workshop was the first of a series that BPC will be convening over the coming months to facilitate across the aisle conversations on specific permitting reform considerations, including technology specific needs, administrative bureaucracy, and judicial review. Each workshop will be followed by a similar takeaways document highlighting areas with bipartisan interest that can be built upon.



Bipartisan Policy Center

Linear Infrastructure: Options for Efficient Permitting of Transmission and Pipeline Infrastructure

Accelerating the federal permitting process for clean energy and other infrastructure projects is critical to lowering emissions, reducing energy costs, increasing energy reliability, and enhancing U.S. energy and supply chain security. Building linear infrastructure—transmission lines and pipelines for hydrogen, carbon dioxide (CO₂), and natural gas—is essential to meeting these goals. Linear infrastructure transports energy, fuels, and CO₂ from the point of creation to where they are needed, an enormous and often underrecognized task that requires substantial investment and planning. The permitting process for interstate linear infrastructure projects introduces especially unique and complex challenges. In May 2023, the Bipartisan Policy Center convened a private roundtable under the Chatham House Rule that brought together experts from across the political spectrum to explore a menu of options for improving the permitting system for linear infrastructure and achieving the shared goals of energy reliability and affordability, environmental responsibility, public participation, and decarbonization.

Xan Fishman, Marty Hall, John Jacobs, and Lori Pickford

This roundtable was the second in a series on permitting. The first roundtable focused on public engagement, with the takeaways published in the issue brief titled *Empowering Communities While Streamlining Clean Infrastructure Permitting*¹. The goal of this roundtable was to have robust discussions on a range of policy options, weighing the pros and cons of each.

ENERGY PROGRAM
July 2023

INTERSTATE TRANSMISSION

Electric transmission is the means to move large amounts of electricity from generation sources (such as wind, solar, nuclear, natural gas, and coal) to the point of distribution, and eventually to consumers. The transmission network is like an interstate highway system for electricity, and the electric distribution system is like the network of state and local roads. As electricity demand grows and the economy becomes more electrified, the need for new transmission increases and will continue to rise rapidly. New transmission infrastructure is necessary to ensure that the U.S. energy system is secure, reliable, resilient, and efficient, while also allowing regions with untapped energy generation potential to capitalize on the economic opportunity.

Issuing permits for interstate transmission infrastructure often requires action by multiple levels of government (federal, state, local, tribal, etc.) across multiple states—each with its own processes and rules. This labyrinth can make the permitting process cumbersome, contentious, and time-consuming, particularly for geographically extensive interstate transmission projects crossing multiple states. Obtaining permits for a complex interstate transmission line can take upward of 10 years. Meeting expected power demand, particularly from low-carbon emission sources, in an increasingly electrified economy cannot be achieved if the permitting process takes more than a decade to connect new energy projects to the grid.

Roundtable participants discussed several ideas on how the federal government could speed up the permitting and deployment of interstate transmission. Participants generally agreed that any political consensus or legislative deal on comprehensive permitting reform would have to include meaningful changes that accelerated and increased transmission build-out.

Option: Bolster FERC's Backstop Siting Authority for Transmission

Roundtable participants discussed bolstering the Federal Energy Regulatory Commission's (FERC) existing backstop siting authority, which was included in the Bipartisan Infrastructure Law (BIL) but is still being implemented. The BIL directs the U.S. Department of Energy (DOE) to designate [National Interest Electric Transmission Corridors](#)² through the issuance of a study and a report within three years. BIL includes language authorizing FERC to issue a permit where a state authority "has denied an application seeking approval" for the siting of electric transmission facilities located within a DOE-designated National Interest Corridor. Transmission advocates have argued that this two-step procedure of first requiring DOE corridor designation and only then allowing FERC to step in is too cumbersome of a process.

Recent legislative proposals have embraced expanding FERC's backstop authority to issue permits for the construction of transmission infrastructure without requiring a DOE corridor designation. For example, the [Building American Energy](#)

[Security Act of 2023](#)³ (S. 1399), introduced by Sen. Joe Manchin (D-WV), would give FERC backstop authority to permit transmission for lines of “national interest,” if a state fails to permit the project after one year from application. The bill defines an interstate or interregional line as being in the national interest when the line is needed to reduce transmission congestion in interstate commerce, protect or benefit consumers, and enhance energy independence.

Although some roundtable participants voiced concern that FERC could overrule states and issue permits for a transmission line that had been explicitly denied, most participants generally supported both the commission’s backstop siting authority and bolstering it to improve FERC’s effectiveness. Some participants were reluctant to back legislation that would supersede FERC’s current efforts to implement its recently provided backstop authority under the Bipartisan Infrastructure Law. They preferred, instead, to wait for DOE to issue its report on National Interest Corridors and to see how FERC’s implementation proceeds. Additionally, some participants felt that support for siting authority would be broader if it was limited to interregional transmission instead of interstate. Interregional transmission can be higher voltage (which allows electricity to be transported more efficiently across longer distances), can cross a region or numerous states, and can open up significant opportunities to move power long distances to where it is needed (load centers).

Option: Provide FERC with Primary Siting Authority for Interstate Transmission

During the discussion, roundtable participants explored granting FERC primary siting authority for interstate transmission lines. Such a step would resemble the authority FERC currently possesses for siting natural gas pipelines, in which the agency has the primary permitting responsibility. By having primary siting authority, FERC would take the lead in approving the location of and issuing permits for interstate transmission lines, rather than the current process which relies on multiple state and local jurisdictions.

Under this proposal, FERC would have the authority to grant permits for transmission lines, independent of state actions, while still undergoing the necessary environmental review process. This would effectively circumvent potential delays caused by state procedures, including instances of inaction. The result would be a more streamlined and predictable process by reducing jurisdictional overlap. Many participants in the roundtable supported this proposal, believing that expanding FERC’s authority to expedite transmission lines’ permitting process was logical and necessary.

However, some participants raised concerns about FERC potentially overriding state and utility decisions, particularly in “regulated states” where state utility commissions have the ultimate authority to ensure reliability and approve electric

system plans, including transmission. Others noted that FERC already regulates wholesale markets, including in regulated states, so expanding the commission's permitting authority would not be entirely new in those jurisdictions. Participants agreed that such an expansion would accelerate the transmission permitting process. But they believed that the most favorable outcome would be a cooperative interregional planning approach over one that creates adversarial relationships with the states. Most participants felt that expanding FERC's authority should not diminish the goal of a cooperative approach to planning projects before permitting.

Option: Provide FERC with Cost Allocation Authority for Transmission

How stakeholders share the costs of building a transmission project affects the timeline and ability to permit the project. Ratepayers (the customers actually using the electricity) generally bear the cost of new transmission lines based on the principle that the "beneficiary pays" as determined by the state or regional transmission authorities. These authorities, in turn, rely on formulas to assign the costs to beneficiaries.

Current cost allocation methods differ by region and state, each having its own formulaic approach to distributing transmission costs to beneficiaries. For example, some states calculate "benefits" specific to the economic and reliability effects of the project, while other states' formulas include the "benefits" of greenhouse gas reductions. This approach generally works for short and intrastate or intraregional transmission. However, allocating costs associated with lines that cross several state jurisdictions or multiple transmission organizations that employ different formulas can become complicated and uncertain, making planning for long transmission lines more complex and contentious. In addition, new transmission often needs subscribers to show benefits to get permits, but new subscribers are more challenging to attract without permits and a clear understanding of the cost allocation. It is the classic chicken-and-egg situation. Simply put, cost allocation is vital in determining whether and how fast new transmission is built.

A reform that many roundtable participants felt is necessary to accelerate the deployment of transmission is granting FERC the authority to determine the cost allocation formula. Similar to expanding FERC's authority to permit new transmission, such clear authority regarding the cost allocation formula could help to expedite the building of interstate transmission by significantly streamlining the process. Participants said such a reform is especially important for renewable energy, which often must travel long distances from generation to consumer (e.g., utility-scale solar, onshore and offshore wind energy projects). Participants also discussed refinements to cost allocation, including a clear understanding of what constitutes "benefits" and ensuring the FERC process was closely aligned with cooperative planning with states and regional transmission authorities.

Some were concerned that if reform is done incorrectly, stakeholders could view expanded FERC authority as undermining the current planning processes utilized

by states, Regional Transmission Organizations (RTOs), and Independent System Operators (ISOs). Some participants noted that FERC is already working on cost allocation rules and that expediting that process might be better than creating a new authority in statute. Even so, many participants advocated for the certainty of having the authority enshrined in statute, thereby reducing the inevitable pendulum swings that come with new federal administrations and FERC majorities.

As with expanding FERC authority to permit transmission, some participants were concerned about providing FERC authority over cost allocation. Again, the questions were particularly acute concerning “regulated” states. Concerns centered on broadly constructed authorities that left much to FERC’s determination, such as the definitions of “national interest” and “beneficiaries,” and little to bind its action. These problems could result in ratepayers in one state being required to pay for transmission that the state rejected and from which the ratepayer would receive little to no traditional benefit. Some participants noted that many ratepayers would benefit if issues such as grid reliability and resiliency and overall energy system efficiency were considered as benefits. However, including these benefits, as well as environmental benefits or lower costs to achieve policy goals, remains controversial.

In regulated states where the state commission caps utility rates, cost allocation by FERC could result in ratepayers paying more than approved or tolerated by the state commission and ratepayers, thus reducing the ability to make other necessary reliability or clean energy investments in the state. Participants who raised these concerns recognized this might be an unlikely scenario, but they noted the importance of cooperation with states and of clearly defining “benefit.” Most participants agreed that cost allocation is an essential tool for accelerating the build-out of new transmission—if allocation is properly utilized geographically and with recognition of consensus planning.

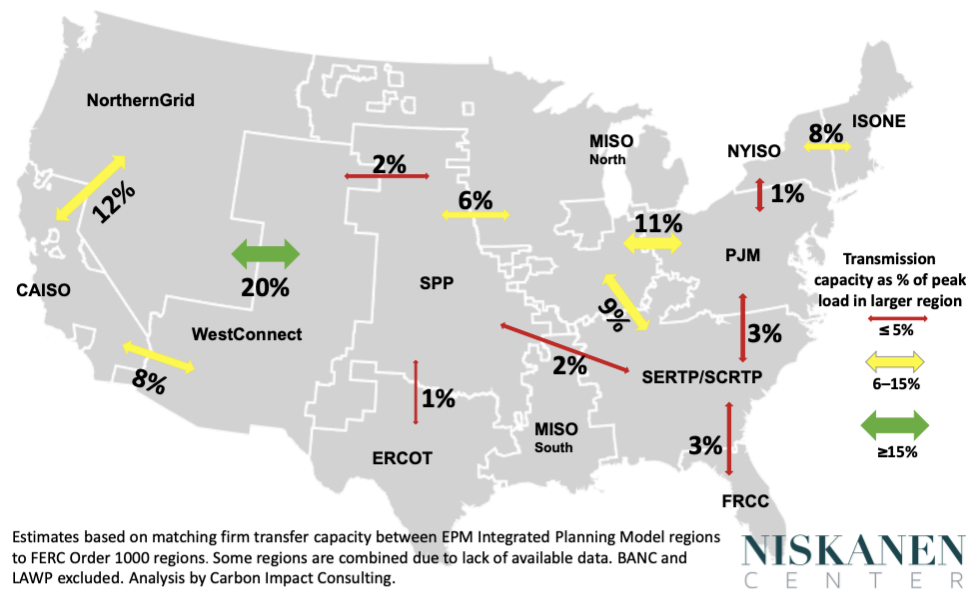
Additionally, participants broadly supported creating incentives for states and local communities to site interstate transmission through communities that otherwise would receive little to no benefit from the transmission. When moving electricity to end consumers from generation that is hundreds of miles away, the transmission will inevitably go through communities that will not receive any power or any tangible benefit. Participants agreed that developing a package of incentives for these communities would create a win-win scenario for the deployment of new transmission by reducing opposition to permitting.

Option: Minimum Transfer Requirement

Requiring regions to have a minimum capacity transfer capability is one potential option to increase the entire grid’s reliability, as this ability could enhance the capability of one region to supplement the power needs of a neighboring region in times of high demand or reduced supply. As seen in the map (Figure 1, below) created by the Niskanen Center, the United States is divided into multiple power grid regions, and sometimes a region does not have enough capability to transfer power to a neighboring region in times of need.

Figure 1

Lack of transfer capacity leaves some regions more vulnerable



The Big Wires Act, proposed by Sen. John Hickenlooper (D-CO) and Rep. Scott Peters (D-CA) would require a minimum percentage of transfer capacity between each region. Increasing transfer capacity would entail having each pair of regions build additional transmission capacity that would be available during a severe weather event or times of critical grid instability such as the 2021 Texas power crisis. Some participants noted that Europe already does this and its system, by all accounts, is working without major problems.

Although participants generally agreed that providing power to neighboring grids is a legitimate goal, many differed on how to achieve it. All participants agreed that there are situations when requiring transfer capacity could be beneficial, but some warned that the policy should not be a “one size fits all” approach, and any such requirement should come through consensus with the regions. Participants also had questions about how ratemaking would work in those cases: who determines when and how much power to transfer, particularly between regulated states and unregulated states; what if both regions are experiencing similar situations; and who determines transfer routing.

One additional concern raised by participants was that a mandated transfer capacity could penalize states and regions that have already made the necessary investment to de-risk their own grid by requiring them to pay for additional transfer capacity to help de-risk adjacent grids.

Support for the value of minimum transfer was broad, but participants were keen to ensure that details were properly and transparently vetted and that any such requirement was tailored fairly to a region’s specific needs.

Option: Compensation for Delays in Interconnection Queue

A final transmission issue discussed at the roundtable was requiring grid operators to compensate the owners of an energy generation project for costs related to unreasonable delays in winning approval to join the grid, known as interconnection queue delays. Currently, projects totaling [2,000 gigawatts](#)⁴ of generation capacity have requested a connection to the grid, which is more than 150% of current U.S. generation. Roundtable participants recognized that, too often, generation projects experience unreasonable delays in the queue, but there was an overwhelming consensus that Congress should not attempt to fix this problem and that FERC should take responsibility for addressing queue concerns. Participants noted that FERC is currently considering ways to reduce time in queues and expects to issue a final rule soon.

HYDROGEN PIPELINES

Due to significant federal investment, including private-sector incentives, in the Bipartisan Infrastructure Law, the Inflation Reduction Act, and other recently passed legislation, hydrogen is expected to play an essential role in the nation's clean energy future. Advancing hydrogen has enjoyed strong bipartisan support and significant private-sector interest. Efficiently transporting the anticipated mass quantities of hydrogen will require a significant build-out of pipelines dedicated to hydrogen transport. Today, no federal regulatory regime exists for the siting of interstate hydrogen pipelines, and all roundtable participants agreed that siting authority was necessary.

Participants discussed different options for federal authorities to site and permit this linear infrastructure. Much discussion concerned creating a regime specifically for hydrogen or expanding an existing regulatory system to include hydrogen pipelines. Regardless of the favored solution—creating a new statute or incorporating hydrogen into an existing law—participants agreed that FERC was the preferred jurisdictional agency for the authority.

Option: Create a New Federal Regime for Siting Hydrogen Pipelines

Most participants agreed that in a perfect world, a new statute would be developed for siting hydrogen pipelines. Participants recognized that hydrogen is unique. As such, it is preferable to design a new regime specifically for hydrogen pipelines as opposed to utilizing an existing structure, such as the Natural Gas Act (NGA), which is designed for a commodity with different features. For example, natural gas is ultimately delivered to residential households, while hydrogen pipelines are unlikely to do so. A hydrogen-specific regime would be better suited for the industry; however, establishing and designing the regime could be difficult and time-consuming in the short run. This challenge could be addressed by leveraging the portions of existing NGA legislative text that would be appropriate for hydrogen pipelines.

Option: Provide Federal Siting for Hydrogen Pipelines Under the Natural Gas Act

Many participants felt it is more politically feasible and expeditious to expand the NGA to include hydrogen rather than Congress starting from scratch to develop a new statute. In addition, participants noted that the NGA provides FERC with a substantial amount of discretion that could be utilized to accommodate the uniqueness of hydrogen without significantly amending the NGA. NGA is also flexible to handle the blending of hydrogen and natural gas.

In sum, participants recognized the NGA's utility to meet the needs of hydrogen given the time it would take for Congress to develop a new hydrogen-specific law—and the potential risks that come with Congress writing a new law. In this case, some participants argued that politics and expedience make expanding the NGA to include hydrogen the preferred option over a new statute.

CARBON DIOXIDE PIPELINES

Carbon capture technology is widely recognized as necessary to reduce global emissions. Whether the technology is direct air capture or carbon capture in the industrial or power sectors, large investment by the government and private sector is expected to spur and significantly expand the use of carbon capture. Once captured, the CO₂ must be transported via pipeline for sequestration or utilization. However, like hydrogen, no federal regulatory regime has jurisdiction over siting CO₂ pipelines.

Option: Provide FERC with Backstop Authority for CO₂ Pipelines

There was a general consensus among participants that FERC should receive backstop authority for siting interstate CO₂ pipelines. Using this authority, a project sponsor would be able to request that the Commission take over the permitting of a pipeline if states delayed or denied permits. This is similar to the previous discussion on bolstering FERC's backstop for interstate transmission projects, although the process would not overlap with utility operations which is a complication for transmission projects. Concerns remain, however, regarding the potential for overriding state and local decisions. Participants preferred a collaborative process involving all relevant stakeholders to ensure that decisions are made collectively and with careful consideration.

Participants also noted that while CO₂ is not an energy commodity—which is noteworthy because FERC traditionally regulates only energy commodities—the commission has a long history of and expertise in siting similar types of pipelines, making the agency well suited for regulating the infrastructure. Participants added that FERC authority should come with a federal regulatory structure specific to the properties and use of CO₂.

Option: Provide FERC with Primary Siting Authority for CO₂ Pipelines

As with transmission, participants discussed providing FERC with primary siting authority for CO₂ pipelines in the same manner it has for natural gas pipelines. This policy would come with many of the same benefits that we have discussed previously in the context of transmission and natural gas pipelines, such as allowing FERC to act as the lead on the siting and permitting process without waiting for state or local action; this would streamline the process and prevent delays.

Option: Expand the Definition of “Energy Corridors” to Include CO₂ Pipelines

Another policy broadly supported by participants involved updating the DOE definition of Energy Corridors to include CO₂ pipelines. Even so, roundtable participants were skeptical about whether this change would accelerate deployment, partly because existing Energy Corridors do not necessarily align with routes and destinations most likely needed for CO₂ pipelines. Nevertheless, participants felt that there was no harm in the expansion and could, in limited cases, potentially provide a benefit.

NATURAL GAS PIPELINES

Roundtable participants considered reforms that could expedite permitting for natural gas pipelines. As previously discussed, FERC already has primary siting authority for natural gas pipelines. However, these pipelines often face challenges during the state certification process under the Clean Water Act, often by states that are seeking to block the pipelines for reasons unrelated to local water quality.

Option: Clarify the Definition of “Discharge” in the Clean Water Act

Participants discussed the merits of existing legislative proposals to clarify the Clean Water Act “discharge,” which would apply only to the impact on water quality and not on other impacts such as air quality. Participants’ views were generally mixed on this issue, with many reluctant to change the current regime for natural gas pipelines.

However, participants generally agreed that for Congress to reach agreement on broad and meaningful permitting reforms, the package might need to include reforms to the natural gas pipeline permitting process, and that a balance of reforms to enable the build-out of both transmission and natural gas pipelines was likely a political trade that stakeholders on the left and right could back.

ALL OF THE ABOVE

Although each type of linear infrastructure has unique needs, overarching permitting reforms can be applied to each to expedite the process and ensure all parties receive consideration.

Option: Improve Eminent Domain Process

Participants discussed and generally agreed on the need to improve the eminent domain process, including providing landowners with adequate opportunity to intervene and instructions on how to do so; reasonable timelines for remuneration; and rights to reclaim land if the permitting process fails. Additionally, the roundtable discussed rights of way, including notification to applicants and timelines for completion, as well as water rights of way to be granted, issued, or renewed for up to 50 years or in perpetuity if appropriate.

CONCLUSION

It is clear that there is bipartisan interest in further permitting reform legislation this year, and that transmission and pipeline reforms are likely to form much of the core of that bipartisan deal. There is a logic to treating different forms of linear infrastructure with rough parity regarding the regulatory approach to siting, acknowledging that each has a unique set of siting-related considerations (economic, environmental, land use, etc.) that are important to consider. BPC will continue this permitting roundtable series and publishing takeaway documents. The next one will focus on Judicial Review.

Endnotes

1. Available at: <https://bipartisanpolicy.org/blog/clean-infrastructure-permitting/>
2. Available at: <https://www.energy.gov/gdo/articles/does-proposes-national-interest-electric-transmission-corridor-designation-process>
3. Available at: <https://www.energy.senate.gov/services/files/3B223C58-3777-4371-B680-49619A88059D>
4. Available at: <https://www.canarymedia.com/articles/transmission/us-clean-energy-rollout-continues-to-be-hamstrung-by-grid-challenges#:~:text=Speeding%20up%20interconnection%20is%20a%20must&text=The%20lengthy%20process%20is%20producing,connect%20with%20the%20electric%20grid.>



Bipartisan Policy Center

Reforming Judicial Review for Clean Infrastructure: A Bipartisan Approach

For the United States to drastically cut greenhouse gas emissions, reduce energy costs, and bolster its supply chains, the nation needs to undertake clean energy and infrastructure projects at a historic pace. Meeting this challenge requires re-evaluating the litigation process for these projects. Current law provides opponents of a project continuous opportunities to sue. Regardless of how many cases the project developer might win, another lawsuit to stall development is always hanging over their head.

Judicial review is the means by which the federal government's actions are subject to legal challenges under the courts' authority: The judiciary can confirm, alter, or invalidate the action of agencies, including those related to permitting or siting under a federal statute. Currently, there are few restrictions on who can initiate legal action against a project, why the legal action can be initiated, or how many times legal action can be taken against a project.

According to a [forthcoming study](#) of 355 of the largest energy and transportation projects between 2010 and 2018, solar energy projects experienced the highest litigation rate, with nearly two-thirds facing a claimed National Environmental Policy Act (NEPA) violation.¹ Transmission and wind energy projects similarly face higher-than-average rates of litigation, as well as light-rail transit projects. Maintaining opportunities for people to file meritorious lawsuits against projects that have the potential to unduly harm the environment or communities is vital. Nevertheless, the status quo prevents the accelerated build-out of desperately needed infrastructure, all while increasing costs and discouraging investment.

Xan Fishman, Marty Hall, John Jacobs, and Owen Minott

ENERGY PROGRAM
September 2023

In June 2023, the Bipartisan Policy Center convened a private roundtable under the Chatham House Rule with experts from across the political spectrum to explore ways to streamline the judicial review process while maintaining individual rights and providing certainty that the process would conclude in a reasonable amount of time.

This roundtable was the third in a series on permitting. The [first roundtable focused on public engagement](#),² and the [second focused on permitting linear infrastructure](#) (i.e., transmission and pipelines).³ The goal of this roundtable was to foster robust discussions on reforming the judicial review process related to permitting, with participants weighing the pros and cons of a variety of policy proposals from across the political spectrum.

Option: Reduce the Statute of Limitations

Under current law, initial lawsuits can be filed for up to six years after final permitting decisions. Participants generally agreed on the value of reducing that time frame. Once the specified time frame has passed, parties could no longer bring lawsuits against the permitting decision. There is precedent for such limitations: The Fixing America’s Surface Transportation Act of 2015 reduced the statute of limitations for projects using the “FAST-41” process to two years, and the bipartisan Infrastructure Investment and Jobs Act (IIJA) reduced the statute of limitations for transportation projects to two years.

Providing specific time limitations will add a level of certainty for projects. This change will not only expedite projects but also reduce project costs associated with delays. One participant noted that uncertainty can increase costs by forcing the renegotiation of labor contracts or potentially losing seasonal construction opportunities. An additional risk, others pointed out, is facing higher interest rates on loans due to delays, increasing the cost and making some projects unviable.

Current proposals in Congress vary for placing time restrictions on legal challenges, ranging from 60 days up to three years. Some participants advocated shorter time limits, while others wanted to ensure that affected communities would have a longer period to file lawsuits. Although no consensus on a specific time frame was reached, the majority felt that a deadline of two years or less to file suit was acceptable, and most were comfortable with a statute of limitations under one year.

Option: Reduce Standing

Legal standing is the requirement that a person or group must be sufficiently impacted or connected to an action to file a lawsuit. Before litigation related to a project can move forward on the merits, standing must first be determined. Reducing standing ultimately limits parties not directly impacted by a project from filing lawsuits while preserving opportunities for litigation in cases involving potentially harmed communities. Some participants argued that this change would result in fewer frivolous lawsuits being filed against projects.

One proposal raised by participants, similar to a provision in [H.R. 1](#) passed by the House of Representatives earlier this year, is to limit eligibility to those who raised concerns during the public comment period in the administrative process:⁴ If a person or group did not express their concern during the process designed to receive such comment, then they would not be able to petition the courts after the administrative process ended. Some participants expressed concern that such limitations could shut persons out directly affected by a project but were not aware or able to participate in the administrative process. Participants also noted that if this change were adopted, agencies would need to do a better job advertising and make the public comment process accessible.

Option: Eliminate Judicial Review for Categorical Exclusion Designations

A categorical exclusion (CE) is a form of NEPA compliance for certain actions that a federal agency has determined do not have a significant impact on the environment. Those actions are therefore excluded from requiring further review in the form of an Environmental Assessment or Environmental Impact Statement. Participants discussed not allowing litigation for actions that receive a CE, providing these projects with certainty but eliminating the public's ability to sue. Participants were generally lukewarm about this proposal and did not think it should be prioritized, given the fact that projects that receive a CE are already less likely to face challenges. Some participants commented that the proposal's impact might grow if agencies create more CEs. However, others expressed concerns about granting excessive power to agencies to create CEs and shield projects from litigation.

Option: Elevate Litigation Filed after Final Agency Actions Directly to U.S. Courts of Appeals

One proposal that received near unanimous support at the roundtable was to elevate litigation directly to an appeals court following the administrative process. This option would speed up the entire litigation process by bypassing district courts and eliminating a step in the judicial process. Because litigation under NEPA is essentially an appeal of a government agency decision, participants agreed that moving directly to a court of appeals would streamline the process without undermining the rigor or thoroughness of judicial review.

Option: Establish a Technical Court with Jurisdiction Over Federal Permitting Decisions

Another proposal that received general backing is the establishment of a single technical federal court with jurisdiction over American Procedure Act reviews and NEPA decisions. This court would have the expertise to address these cases in an effective and timely manner. Participants noted that the U.S. Court of Appeals for the D.C. Circuit already has environmental

review expertise and could play this role well. Participants also noted that sending appeals directly to a single technical court would solve the issue of court shopping. Overall, participants agreed that this would be an effective solution that would provide certainty to project developers and appropriate judicial review.

Option: Establish a Permitting Review Board for Energy Projects

Similar to the Environmental Protection Agency's [Environmental Appeals Board](#), an independent technical appeals board consisting of judges would act as a forum for parties to appeal permitting decisions for energy projects.⁵ After a final permitting decision is issued, rather than filing an appeal with district courts, litigants could appeal to a review board that attempts to resolve disputes between the parties. If the board is unable to resolve a dispute, the appealing party can raise their concerns to U.S. Circuit Courts of Appeals. The review board could help concentrate permitting expertise in a single independent body and expeditiously resolve disputes. However, some roundtable participants added that appointments to this board would need to be handled with care to avoid it becoming politicized.

Option: Setting Court Deadlines

A proposal that participants found appealing was to set deadlines for court actions, such as requiring court decisions on federal permitting challenges within a time frame designated in statute. However, there was skepticism as to whether the legislative branch's decision to place time restrictions on the judiciary would withstand constitutional scrutiny, or whether the deadline would be enforceable.

Option: Setting Deadlines on Agency Remand

Some participants proposed requiring courts to set deadlines for agency action when the judges remanded a decision. (A remand is when the courts send the decision back to the agency for further consideration, or when a judge vacates a permit, which means the courts invalidated or canceled the permit.) In these cases, deadlines for agency action would provide needed certainty on the timeline for next steps for developers. However, as with the previous option, participants questioned whether requiring courts to set agency deadlines would withstand constitutional scrutiny. Congress could, however, set agency deadlines for agency action following remand, though a deadline set in statute would have less flexibility than one set by a court for a specific action under review.

Option: Narrowing the Scope of Decisions

Participants broadly supported narrowing judicial outcomes by directing the courts to specify aspects of review requiring additional analysis, revision, or remand. By specifying the particular aspects requiring attention, agencies

can focus their efforts on rectifying specific deficiencies without the need to entirely vacate permits. This would streamline the process and promote more efficient decision-making. The familiarity of this procedure to the D.C. Circuit also garnered support, as it builds upon existing practices that have proven to be effective in addressing complex regulatory challenges.

Option: Direct CEQ or the Permitting Council to Develop a Public Database of NEPA Lawsuits

Roundtable support was strong for the Council on Environmental Quality (CEQ) or the [Permitting Council](#) to establish a public database of NEPA lawsuits that would include information about timelines for both filing of initial claims and total length of the judicial review process.⁶ [CEQ previously tracked such data](#), but it stopped doing so in 2013.⁷ One participant stressed that transparency is critical for accountability.

CONCLUSION

Among participants, there was broad, bipartisan recognition that unfettered judicial review can, and does, delay permitting and construction of clean energy projects and associated infrastructure. These delays harm efforts to rapidly lower emissions, reduce reliance on foreign adversaries, and accelerate the transition to cleaner energy. Participants also expressed a clear desire to preserve access to courts for those directly affected by projects where legitimate issues require judiciary involvement.

Although the [Fiscal Responsibility Act](#) included important permitting reforms, it did not address judicial review—which will be a necessary component of a more comprehensive bipartisan deal to help the nation meet its climate goals.⁸ A comprehensive bipartisan permitting deal should include reforms to appropriately balance affected stakeholders' rights to sue with the need for a predictable timeline over which the process can come to a timely conclusion. BPC will continue to play a constructive role in bringing all sides together to meet this challenge. Our next roundtable in this series focuses on additional reforms to NEPA or general administrative bureaucracy that were not included in the Fiscal Responsibility Act.

Endnotes

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Bipartisan Policy Center

Exploring NEPA Reforms Needed to Unlock Clean Energy Infrastructure

Recent years have seen increased recognition of the importance of permitting reform to accelerate the implementation of clean energy and infrastructure projects. The Fiscal Responsibility Act of 2023 (FRA) makes meaningful progress toward reform in several areas, including by establishing timelines for federal permits, encouraging agencies to coordinate their reviews, clarifying which projects are not subject to the National Environmental Policy Act (NEPA), and promoting expanded use of programmatic reviews and categorical exclusions.¹

These provisions are an important step in the right direction but additional changes to the federal permitting process are needed to enable more rapid deployment of clean energy technologies and advance critical national goals in terms of cutting emissions of carbon dioxide and other pollutants, reducing energy costs, improving grid reliability, and enhancing energy and supply chain security.

In July 2023, the Bipartisan Policy Center convened the fourth in a series of private roundtables on the topic of permitting reforms. The roundtable brought together experts from across the political spectrum to explore a menu of policy options that build on reforms in the FRA with the aim of further streamlining NEPA reviews and federal permitting processes. Roundtable participants sought to identify specific additional reforms that are still needed to accelerate deployment and to weigh the pros and cons of a variety of specific policy proposals.

By Xan Fishman and
John Jacobs

ENERGY PROGRAM
November 2023

BPC’s previous permitting roundtables covered the following topics; each roundtable generated a policy brief that captures highlights from the discussion:

1. [Public Engagement Roundtable](#)ⁱⁱ
2. [Permitting Linear Infrastructure Roundtable](#) (i.e., transmission and pipelines)ⁱⁱⁱ
3. [Judicial Review Roundtable](#)^{iv}

The remainder of this brief summarizes perspectives and insights from the July 2023 roundtable about NEPA reform options that were not included in the FRA but that merit further policy consideration.

OPTION: CLARIFY ACTIONS THAT TRIGGER NEPA REVIEW

Under current law, the determination that a project constitutes or requires a “major federal action” automatically triggers NEPA review. However, it is not always clear what types of projects or actions should be considered “major federal action.” The FRA amended NEPA to list, for the first time, categories of federal actions that are specifically *not* considered major federal actions. But there is no language in the law to clarify what types of projects definitely *are* considered major federal actions. Clarifying and refining the definition of a major federal action could reduce the number of projects that are subject to NEPA review, while freeing up resources so that projects that do fall under NEPA are reviewed in a more timely fashion.

In general, roundtable participants felt that there was value in fine-tuning the criteria used to trigger NEPA review. They also discussed various metrics that could be considered in developing these criteria.

Cost trigger

In setting [federal regulations](#), a “major rule” is one that, among other criteria, has “an annual effect on the economy of \$100 million or more.”^v Applying the same threshold to “major actions” in the context of NEPA review, one option would be use \$100 million of economic impact as a trigger. While there was some support for this approach, however, many participants felt that a monetary trigger would be arbitrary and might not reflect the potential environmental impact of a project or federal action. Yet, projects with a price tag significantly less than \$100 million could have greater environmental risks than many more expensive projects, if they are located in environmentally sensitive areas. Further, roundtable participants who were particularly interested in expediting transmission projects noted that few projects of this type would fall below a \$100-million threshold and would not benefit from this reform regardless of the risks they present. Some participants favored a threshold based on percentage of federal funding

(as opposed to an absolute dollar figure). But this idea met with similar objections in terms of making the “major action” designation dependent on a single, arbitrary figure.

Federal permit trigger

Some participants proposed that projects that require a federal permit should automatically be defined as major actions. Projects that did not require a federal permit would thus be exempted from NEPA review, including those projects that currently trigger NEPA simply because they receive federal funding. This proposal had broad support from roundtable participants, who recognize the value of distinguishing federal “action” within the broader context of a project. Because most projects require some form of federal permit, however, this approach may have limited impact.

Interstate (cross-border) trigger

Recognizing that a federal role is inevitable when multiple states are involved, or when an international boundary is crossed, another option is to consider whether a project crosses borders, not necessarily as the sole criterion for making a “major federal action” determination, but as one of several criteria to be considered. Most participants agreed that in the context of efforts to narrow the number of projects subject to NEPA review, considering whether a project crosses borders is a reasonable trigger for inclusion under NEPA, with the caveat that this criterion would be part of a larger list of considerations.

Multiple federal action trigger

Instead of NEPA being triggered by a single action or federal investment, a project could be considered major federal action if (and only if) it is legally required to complete multiple authorizations, reviews, or studies by federal law. The idea in this approach is to ensure that projects with relatively minimal federal involvement will be excluded from the major federal action designation. Participants felt that this type of trigger would reduce the number of projects subject to NEPA, while also remaining consistent with the original intent of NEPA, which was to consider the environmental impacts of federal action. Other participants, however, were quick to point out that many environmental and environmental justice advocates would see this as a weakening of NEPA, and warned that the policy could face headwinds in Congress.

OPTION: FURTHER CLARIFY AND NARROW THE DEFINITION OF “EFFECTS”

Participants also discussed current legislative proposals that go beyond changes in the FRA to further clarify and narrow what is meant by “effects” in the context of a NEPA review. Language in the FRA aims to limit the effects an agency is required to consider to those that are “reasonably foreseeable.”

Participants discussed current legislative proposals that would further narrow what effects could trigger NEPA review, including limiting consideration to effects that are:

- *not speculative, and not remote in time or geographically remote;*
- *have a reasonably close causal relationship to the action or alternative;*
- *are able to be prevented by a federal agency;*
- *would not occur absent the proposed action or alternative action.*

Advocates for these changes felt they could be implemented in a way that is consistent with the intent of NEPA, which is to establish a clear, common sense understanding of the environmental impacts of a potential action and limit agency discretion to ignore those impacts. In their view, greater clarity about which effects an agency can consider will make the permitting process more certain and more efficient, and promote more effective use of public resources. Other participants agreed that narrowing the definition of “effects” would be beneficial to project developers, increase certainty in the permitting process, and accelerate NEPA review. However, some participants also expressed concern that narrowing language could specifically prohibit agencies from considering greenhouse gas emissions. In addition, many participants felt that this proposal was politically fraught and would be strongly opposed by environmental groups.

Many roundtable participants particularly objected to limiting the definition of “effects” in a way that would not include greenhouse gas emissions. In their view, failure to consider such emissions would be inconsistent with assessing actual climate impact. Others noted that NEPA was intended to provide an understanding of the environmental impact of a project and noted that no single project would likely have a measurable impact on global temperatures. Some suggested that other non-NEPA policies were better suited for considering greenhouse gas emissions. All participants agreed that there is strong disagreement between Democrats and Republicans about whether climate change impacts should be included in NEPA reviews, making this a contentious policy change.

OPTION: EXPAND UTILIZATION OF PROGRAMMATIC REVIEWS

Roundtable participants strongly supported expanding the use of programmatic reviews to eliminate repetitive analyses and allow for more efficient preparation of Environmental Impact Statements (EISs) or Environmental Assessments (EAs). In a programmatic review, the NEPA process would be used to evaluate the environmental impacts of a broad-scale action or a class of routine, repetitive actions within a specific large region, thereby eliminating the need to individually analyze each repeated action.

Require agencies to expand the use of programmatic reviews

Most participants agreed that federal agencies should increase their use of programmatic reviews to increase efficiency and better use staff resources. But some participants cautioned against *requiring* agencies to take this step, out of concern that conducting programmatic reviews without any specific projects in mind could consume a lot of time and agency resources and end up being unnecessary or moot. Their view was that programmatic reviews should be tied to specific projects, which would then benefit from expedited review or limited judicial review.

Conduct programmatic reviews to pre-approve uses of federal land for particular types of projects

Another idea that received strong support was using programmatic reviews to pre-approve federal lands for clean infrastructure projects that would then be eligible for categorical exclusions. Participants discussed which regions should be considered for review. Some worried that the federal government may prefer specific regions for certain types of development, but these preferences may not align with the needs of project developers and fail to attract proposals. These participants stressed the need to ensure that pre-approved regions will be economically and geographically attractive for project developers. Many favored establishing an advisory group that includes public and private sector perspectives to help guide decisions and recognize what is needed to deliver value to project investors. The idea of an advisory group prompted a related concern that outsized industry input could outweigh community input, which might mean that additional measures are needed to ensure that community engagement receives strong consideration when deciding which regions to review.

An alternative approach for specially designated federal regions would be to establish a process wherein states and local communities identify and pre-approve sites for projects that would enjoy streamlined and expedited approval. This bottom-up approach appealed to many participants, both in terms of ensuring project desirability as well as guaranteeing community involvement.

OPTION: EXPAND UTILIZATION OF CATEGORICAL EXCLUSIONS

Expanded use of categorical exclusions (CEs) would help expedite permitting and ensure that staff resources are focused on projects of significant impact. There was broad consensus among roundtable participants that agencies should be required to seek ways to establish new CEs, including by issuing requests for information (RFIs) to solicit ideas for new CEs and by reviewing CEs on a periodic basis. There was also agreement about the need to update CEs to keep pace with new developments, such as expanding existing CEs for oil and gas projects so that they can be applied to geothermal projects. Participants noted that there is more of an appetite in Congress for legislating targeted CEs than there is for making broader definitional changes in the NEPA statute.

OPTION: REFORM ENVIRONMENTAL ASSESSMENT REQUIREMENTS

For a project to be approved without undergoing a full EIS, it must receive a “Finding of No Significant Impact” (FONSI). However, an EA must first be conducted to make a FONSI determination. EAs are a significant procedural undertaking, yet they produce a FONSI determination in [more than 99% of cases](#).^{vi}

One proposal discussed at the roundtable was to allow agencies to issue a FONSI determination without preparing a formal EA document. This would give agencies the option to base FONSI determinations on internal deliberations while avoiding the public process requirements of a formal EA. Roundtable participants were generally open to reforms that reduce paperwork delays in permitting. However, some pointed out that the EA itself is what allows an agency to avoid a full EIS and helps agency decisions withstand legal challenges. Additionally, participants questioned whether this proposal would have a significant impact. Even if a FONSI determination is made as an internal agency decision rather than on the basis of an EA, agencies may still need to utilize an internal process similar to an EA so that their determinations stand up to legal scrutiny. Ultimately, many participants felt that this proposal needed to be refined further.

OPTION: NEPA DELEGATION TO STATES

Another idea discussed at the roundtable was to broaden NEPA assignments to states, similar to the mechanism that is already available for highway projects under federal statute. Generally speaking, the Secretary of Transportation, at a state’s request, can assign the NEPA responsibilities of

the Federal Highway Administration (FHWA) to the requesting state. The state then assumes responsibility for project review in exchange for a faster federal review. These agreements are executed through a renewable five-year Memorandum of Understanding and the FHWA conducts audits to ensure that states are in compliance with the MOU. This option could be expanded beyond transportation projects to energy and other infrastructure projects. Participants largely agreed that the idea has potential and expressed support for state delegation if it comes with appropriate criteria and oversight. But participants also questioned whether states would be interested in assuming responsibility for NEPA review. Currently, only a small handful of states have a NEPA Assignment from FHWA, so there may not be significant interest in broadening the use of this delegation. One example of such delegation in the energy space is state primacy for Class VI well review for underground carbon dioxide sequestration. Two states currently have primacy for Class VI well review and others have applied. Funding to help more states set up and apply for Class VI primacy was authorized in the Bipartisan Infrastructure Law.

OPTION: COMPETITIVE GRANT PROGRAM FOR STATES (CARROT)

Roundtable participants discussed the merits of a carrot approach to permitting reform – in this case, using federal grants to incentivize states to increase the efficiency of their permitting systems and align more closely with the federal system. If grants were tied to outcomes, then states would benefit from improving permitting processes and performance, likely leading to accelerated deployment of projects. Financial incentives could also be designed to require alignment of state and federal processes and timelines, reductions in redundant permitting requirements, and a sustained pace of review. While there was strong support for this concept in principle, participants expressed concern that it would require significant funding to ensure that grants are sizable enough to motivate states to rework their own permitting procedures.

OPTION: RESTRICT FEDERAL FUNDING FROM STATES (STICK)

As an alternative to competitive grants to create positive incentives for permitting reform, the federal government could take a punitive approach by denying resources to states that fail to act. Roundtable participants conceded that a “stick” approach could be effective but were broadly skeptical of this idea. Most noted that it was unlikely to be politically viable in Congress. Participants also pointed out that developers often try to avoid states with difficult permitting processes anyway, so additional federal disincentives might not prompt these states to change in any case.

OPTION: DEADLINE ENFORCEMENT

Participants also discussed options for better enforcing statutory or administrative timelines for completing permitting processes. The new enforcement mechanism, which was newly created along with such timelines as part of the FRA relies on a “right of action” by project developers to take federal agencies to court to compel compliance with permitting deadlines. Some suggested this mechanism might have limited impact, especially if developers are reluctant to sue the agencies that they rely on to issue permits.

Fee paid to project sponsor

Another option discussed at the roundtable would be to set a fine, of a specified amount, that would be paid to the project sponsor by the permitting agency for every day that elapses post-deadline without an agency action/decision. While some participants saw the logic of compensating project sponsors for delays, which are often costly, there was also recognition that fines might not have much of an impact on agency decisions unless the fines are taken directly from the permitting budget. That, however, would have the effect of reducing the resources available for permitting, which could further slow the process.

Automatic approval

Another idea that some participants endorsed was to deem a project approved if an agency misses a permitting deadline. This option carries obvious risks and would require significant safeguards so that applicants, and agencies who want to avoid conflict, do not game the system or deliberately slow-walk the process. While some felt this idea was worth vetting, most participants felt its risks outweighed its potential benefits. Even supporters recognized that automatic permitting is probably impractical and very unlikely to garner enough congressional support to become law.

Increased transparency

The FRA now requires that agencies submit a report to Congress if they miss a deadline, detailing why the deadline was not met. Recognizing that deadlines are difficult to enforce, participants agreed that increased transparency and further reforms could be effective in reducing delays. One idea was to require agencies to provide frequent reports to Congress on their performance in meeting deadlines. This would shine a light on poor performers and give legislators an opportunity, through the appropriations process for example, to take action to address continued poor performance. There was broad support among participants for increased transparency and reporting as initial steps to encourage improved performance.

OPTION: PROVIDE AGENCIES WITH ADDITIONAL RESOURCES AND FUNDING

Participants discussed the need to ensure that agencies have adequate funding, resources, staff, and technology to efficiently review all projects that require permitting. There was strong agreement that agencies must have sufficient resources to keep up with growing demands on the permitting process. However, some participants felt that resources should be contingent on reform and performance. These participants had concerns about simply throwing more funding at the current federal permitting system. But they could support the provision of resources in conjunction with the implementation of permitting reforms, recognizing that support for an effective permitting system is a worthwhile investment.

Conclusion

Momentum for improving the federal permitting system is undeniably strong, with bipartisan support for reforms that would reduce delays and costs without compromising protections for the environment or communities. Looking ahead, the importance of building on reforms introduced in the Fiscal Responsibility Act of 2023 to address urgent infrastructure needs and meet ever-growing demand for clean energy is clear.

BPC remains dedicated to fostering meaningful discussions and collaborations in the area of permitting reform. Our ongoing roundtable series will continue to provide a forum for vigorous debate and dialogue on the best steps forward. The next issue brief in this series will focus on permitting reforms that specifically target certain types of technologies, rather than reforms that are generalizable across a wide variety of energy infrastructure projects.

Endnotes

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Bipartisan Policy Center

Licensing and Permitting Reforms to Accelerate Nuclear Energy Deployment

By John Jacobs, Lesley Jantarasami and Xan Fishman

The permitting and licensing process for nuclear power plants in the United States has long been under scrutiny for hampering the deployment of nuclear energy technologies. When [Vogtle 3 came online](#) in July 2023,¹ it was the first time in the nearly 50-year history of the U.S. Nuclear Regulatory Commission (NRC) that a new commercial reactor design [had been licensed](#) and subsequently entered into operation.² Numerous stakeholders from across the political spectrum have made recommendations for accelerating the NRC's regulatory process, but reforms so far have not been adopted or have not proved impactful.

Developers of advanced nuclear technologies are working to push the envelope on speeding reactor deployment, with some companies promising to reduce licensing and permitting hurdles by implementing conveyor-belt-like manufacturing and siting microreactors at existing industrial facilities. These efforts are finding support on Capitol Hill: in July 2023, the bipartisan [ADVANCE Act](#),³ which aims to restore U.S. leadership in nuclear technology, passed the Senate as part of the National Defense Authorization Act (NDAA) by a vote of 86-11; more recently, the House Committee on Energy and Commerce passed [H.R. 6544, The Atomic Energy Advancement Act](#),⁴ which contains similar provisions.

While these developments signal new opportunities for progress, more is needed to transform the landscape for nuclear technology investment and deployment in the United States. This brief identifies additional policies and reforms, beyond those included in the ADVANCE Act and similar legislation, that could increase the efficiency of the regulatory process and support an expanded role for safe, reliable, and cost-effective nuclear technologies in meeting the critical environmental and energy security challenges of this century.

The ideas and perspectives presented here were generated in a private roundtable discussion convened by the Bipartisan Policy Center in October 2023. The roundtable included stakeholders from across the political spectrum, including nuclear industry representatives, permitting and legal experts, environmental organizations, and other think tanks and NGOs. Its goal was to explore the pros and cons of specific policy options for reforming the nuclear permitting and licensing process.

This roundtable was part of a series that BPC has hosted on the broader topic of permitting reforms to accelerate the deployment of energy projects.

Issue briefs from previous permitting roundtables may be accessed through the [BPC website](#);⁵ they include:

1. [Public Engagement Roundtable](#)⁶
2. [Permitting Linear Infrastructure Roundtable](#) (i.e., transmission and pipelines)⁷
3. [Judicial Review Roundtable](#)⁸
4. [Remaining NEPA Reforms Issue Brief](#)⁹

The remainder of this brief summarizes perspectives and insights specific to the deployment of nuclear technologies from the October 2023 roundtable.

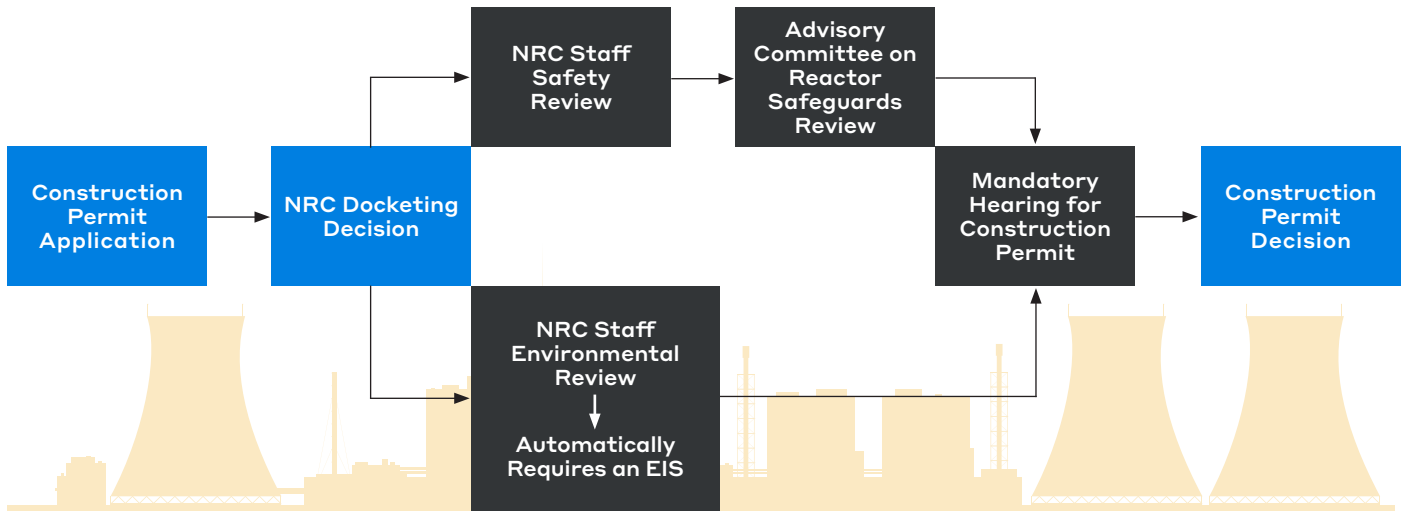
Environmental Permitting Reform for Advanced Nuclear Reactors

Option: Change the NRC environmental review process so that advanced reactors do not automatically require an Environmental Impact Statement

Consistent with the National Environmental Policy Act (NEPA), the NRC requires an environmental review to be completed before approving a construction permit for any new nuclear reactor. Under the agency's current administrative process (Figure 1), this review automatically takes the form of an Environmental Impact Statement (EIS). This is different than the federal environmental review process for non-nuclear projects, where federal agencies can choose to first conduct an Environmental Assessment (EA) to decide whether a comprehensive EIS is necessary. The EA is a more concise public document; its aim is to develop evidence and analysis sufficient to make a simpler determination: whether a project is likely to have a significant environmental impact, in which case an EIS is required, or to reach a "finding of no significant impact" (FONSI), in which case an EIS is not required and a project can proceed. The vast majority [\(99%\) of EAs result in a FONSI](#).¹⁰

EISs typically take much longer to complete than EAs. [A 2020 study](#) by the Council on Environmental Quality (CEQ) found that the median time to complete an EIS across all federal agencies is 3.5 years, while the average completion time is even longer at 4.5 years.¹¹ Meanwhile, [estimates](#) of time to complete a typical EA are much shorter: six to nine months, on average.¹² The recently passed Fiscal Responsibility Act attempts to place time limits on environmental reviews—it requires that EISs be completed within two years and EAs be completed within one year.

Figure 1: Current Process for the NRC to Approve a Construction Permit (10 CFR Part 50)¹³



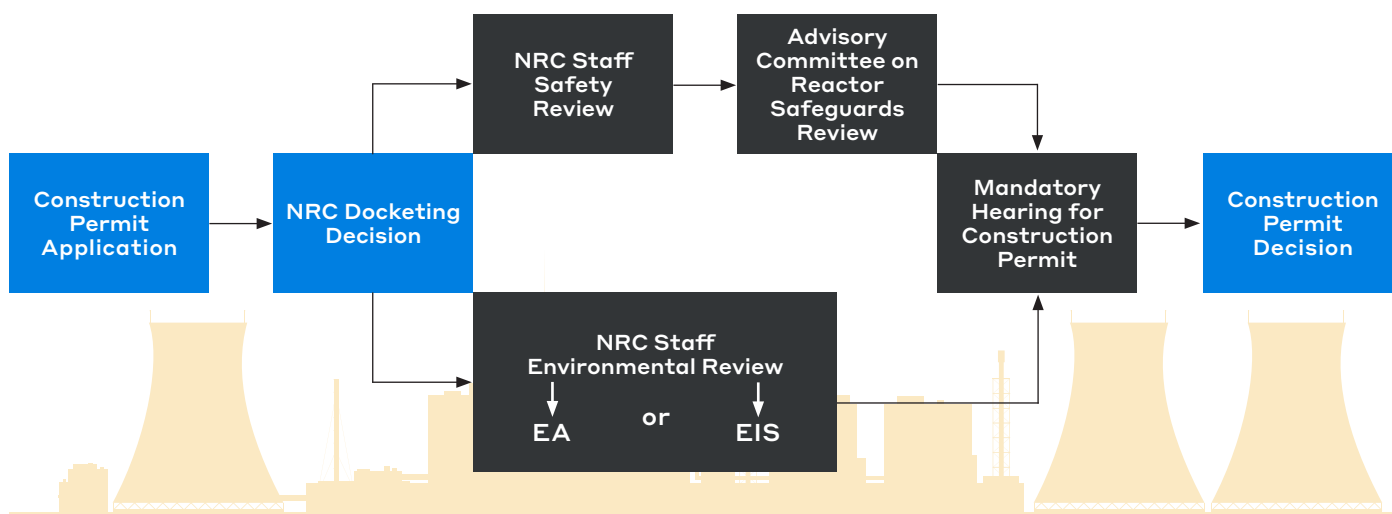
Source: [Idaho National Laboratory](#)

Roundtable participants broadly supported reforming the NRC’s environmental review process for advanced reactors so that NRC staff have the option of utilizing an EA when possible (Figure 2). This reform is included in the [House Atomic Energy Advancement Act](#).¹⁴ Participants stressed that all reactors and nuclear projects do not have the same characteristics and therefore should not be required to go through the same environmental review process. In general, advanced reactors—especially new microreactors and small modular reactors—have [smaller land use](#)¹⁵ and [water requirements](#)¹⁶ than traditional nuclear reactors.

For example, the U.S. Air Force has announced a [program](#) to pilot a microreactor at Eielson Air Force Base in Alaska.¹⁷ The plan is for the base to enter into a power purchase agreement with a private company that builds and operates the microreactor. Siting this project at an existing military base has different environmental impacts than constructing a large-scale nuclear power plant at a greenfield site. As one roundtable participant observed, environmental impacts for some large light water reactor projects may likewise be considered insignificant, enabling them to benefit from this policy as well.

Allowing an EA when appropriate would not *prevent* the NRC from requiring an EIS for a specific project. Rather, it allows NRC staff the option of preparing an EA depending on the environmental considerations associated with that particular project.

Figure 2: Proposed NRC Construction Permit Process with Environmental Assessment (10 CFR Part 50)¹⁸



Source: [Idaho National Laboratory](#)

Roundtable participants also discussed whether the recently passed Fiscal Responsibility Act (FRA), which requires agencies to consider whether an EA or EIS is the appropriate level of review for a project, applies to the NRC. The [NRC has stated](#) that it considers itself to be subject to the FRA and is working to analyze and implement the FRA's permitting reform provisions.¹⁹ As participants pointed out, however, the NRC could still determine that an EIS is the appropriate level of review for all nuclear energy projects, which would leave the status quo essentially unchanged. Overall, participants were generally skeptical that the FRA will alter the NRC's current processes in significant ways; rather, they believed that statutory changes specific to nuclear energy regulation, including EIS requirements, will likely be needed.

Option: Require the NRC to create and utilize a generic EIS for the construction and operation of advanced nuclear reactors

Roundtable participants also discussed the idea of requiring the agency to create and utilize a generic EIS (GEIS) for advanced nuclear reactors. For reactor designs that will be deployed many times over, a GEIS can avoid the redundant work of analyzing environmental impacts for each individual project. The information and analysis needed to develop a GEIS for an advanced reactor design could be utilized for multiple subsequent installations, allowing the NRC to focus its resources on the unique characteristics of each project.

Participants generally supported the GEIS concept so that NRC staff can utilize analysis that has already been conducted, accelerating the environmental review process for advanced reactors. One participant noted the [NRC is already working on a GEIS](#) for constructing, operating, and

decommissioning advanced reactors, but the effort has been dormant for two years.²⁰ There was broad agreement that this effort should be completed and the NRC should vote to finalize the GEIS.

Option: Require the NRC to develop a process for timely environmental review of nuclear projects that reuse brownfield sites (e.g., coal-to-nuclear projects)

The bipartisan ADVANCE Act would require the NRC to develop a pathway to enable the timely licensing of nuclear facilities at brownfield sites. Specifically, the NRC would identify issues and develop a standard application for reutilizing brownfield sites, develop early site permits, and consider how retiring coal power plant infrastructure could be relicensed. There was broad support for this approach as a necessary first step to utilizing previously developed sites, especially retiring coal-fired power plants.

Roundtable participants emphasized the value of early site permits (ESPs) and discussed various policies that would further leverage this tool for reutilizing brownfield sites. With an ESP, the NRC could approve a site for a nuclear power plant for up to 20 years, independent of the construction or operating licensing process. The ESP process would address issues of site safety, environmental protection, and emergency planning. It would give nuclear project developers certainty that a specific site can be utilized, provided necessary licenses for construction and operation are also approved. Given the considerable potential liabilities of remediating a brownfield site, including concerns about subsurface instability and environmental radiation caused by coal ash disposal in the case of former coal plant sites, an ESP might be necessary to attract support from investors who would otherwise deem the project too risky.

Some participants proposed creating a Department of Energy program to remediate appropriate brownfield sites to a standard acceptable by the NRC for issuing an ESP. The idea would be to create a set of ready-to-build and pre-permitted sites for nuclear power plant construction, thereby mitigating the risks developers would otherwise face when attempting to reutilize a brownfield site. There were questions about whether a DOE-led remediation program would be faster than private-sector efforts. While the time required for remediation at different sites was unclear, participants generally agreed that a federal program should develop a streamlined and coordinated approach that can accelerate the process.

With certainty around site permitting, advanced nuclear project developers could capitalize on the [estimated](#) 17%–35% cost savings that could come from reutilizing retiring coal plant infrastructure.²¹ Reutilizing transmission infrastructure and avoiding some of the permitting barriers associated with new transmission projects would enable further significant time and cost

savings. As one roundtable participant pointed out, the ability to leverage existing transmission infrastructure, water rights, and workforce assets would likely be among the most valuable aspects of coal-to-nuclear projects.

Another participant noted that this approach would be similar to pre-approving land for energy projects, as some [states have done for solar projects](#)²² and as has been [proposed at a federal level](#).²³ A preclearance process means that the environmental review is conducted prior to a project application, providing developers with certainty that their project will not be delayed by NEPA requirements or other state siting and environmental review policies. An important consideration for pre-approval programs and ESPs is ensuring that the brownfield location makes business sense for investment. As a participant pointed out, to successfully catalyze investment, any DOE-led remediation program will have to focus on sites that developers are also interested in utilizing.

NRC Fee Structure Reform

A common critique of the NRC's funding structure is that it relies on annual fees charged to license holders, as well as hourly fees paid for license application reviews and other regulatory services provided by the commission. This structure places the cost of regulatory licensing and oversight on applicants and creates a disincentive for the NRC to accelerate its licensing review process. The NRC [recently increased](#) its hourly rate to \$300 for fiscal year 2023.²⁴ In 2021, the agency [estimated](#) that 18,000 NRC staff hours would be required to complete the safety and environmental review process for a construction permit for an advanced test reactor.²⁵ Workshop participants noted these costs can be prohibitive for early-stage advanced reactor companies on one hand, while also being too low to ensure that the NRC has the human resources and institutional infrastructure needed to accelerate the review process on the other hand. The ADVANCE Act includes provisions to reduce the NRC's hourly rate for reviewing challenges associated with new advanced reactors, but it does not reform the NRC's overall fee structure.

Option: Increase the NRC off-fee funding and make agency funding for infrastructure, technology upgrades, and training activities non-fee-dependent

Roundtable participants were broadly supportive of providing the NRC with more off-fee funding so that it can invest in infrastructure, develop new technologies, automate to streamline the review process, and train staff. This would mean increasing appropriations from Congress for some activities that are currently funded by hourly fees for NRC services,

consultation, and license reviews. Participants generally agreed that reducing the NRC's reliance on fees is crucial to enable the investments needed to increase permitting and licensing efficiency.

Option: Eliminate license review fees for new advanced nuclear reactors

Roundtable participants also considered the idea of eliminating NRC review fees for new advanced reactors. Most agreed that the agency's current hourly rate for license and permit reviews can be prohibitively expensive for advanced reactor companies. This is an especially important concern for microreactor companies that expect to produce numerous reactor units and face the prospect of going through the NRC review process for each one. However, many participants voiced concern about eliminating licensing fees altogether.

The most significant objection was that eliminating licensing fees could, absent increased congressional appropriations or other funding reforms, leave the NRC with less overall funding, which would decrease the agency's effectiveness as it tries to do more with less. Thus, participants were quick to emphasize that this policy should only be pursued in conjunction with increased off-fee appropriations. Provided the NRC can be made whole for any lost fee revenue, participants generally agreed that removing licensing fees would lower the barrier to entry for advanced reactor applicants. Even then, however, some participants noted there are still advantages to a fee structure that ensures applicants have "skin in the game."

In particular, a few participants were concerned that eliminating review fees could lead to frivolous applications that could consume the NRC's limited resources. Applicants would have no financial incentive to ensure that their design is mature enough to receive approval. One participant compared the potential for perverse incentives in this situation to the broadly scrutinized transmission interconnection queue, which is notoriously backlogged with electricity generation projects applying to get on the grid. Until recently, there was no cost for applying to join the interconnection queue, leading to concern that many projects in the queue are not feasible and would not be built even if approved. To address this concern, the Federal Energy Regulatory Commission ([FERC](#)) recently issued a new rule requiring applicants to submit a non-refundable \$5,000 fee and put down an initial study deposit of between \$55,000 and \$250,000 depending on the project's size.²⁶

One participant added that the [Nuclear Assistance for America's Small Businesses Act](#),²⁷ introduced by Rep. Byron Donalds (R-FL) in February 2023, offers another approach to mitigate fee burdens while discouraging premature applications. The bill allows eligible advanced reactor companies to defer a certain portion of their NRC application fees until the reactor is

operational. This would give project developers time to establish a revenue stream prior to having to pay review fees.

NRC Licensing and Permitting Process Reform

The NRC's standard Part 50 licensing pathway for new nuclear power plants is a two-step process. First, the applicant must go through the construction permit process as illustrated by Figure 1. Second, the applicant must obtain an operating license, which is similar to the process of applying for a construction permit but without the mandatory hearing phase. From initial application to receiving a final decision, applicants must go through a series of steps and sub-review processes for both the construction permit and operating license. Roundtable participants considered several options that would streamline and accelerate the current two-step process.

Option: Establish and enforce timelines for each stage of the licensing and permitting process

Participants broadly agreed that statutory timelines for each stage of the licensing and permitting process would increase efficiency and give applicants greater certainty regarding the cost and timeliness of the regulatory process. Currently, the NRC provides applicants with an estimated timeline on a case-by-case basis, but there is no requirement that the agency keep to this schedule. The [NRC has stated](#) that it considers itself subject to the FRA's two-year and one-year statutory deadlines for EIS and EA reviews, respectively.²⁸ But the [NRC has yet to implement](#) these deadlines for its environmental review process and there still are no deadlines for other steps in the NRC's regulatory process.²⁹

While participants were generally supportive of specific statutory timelines, some worried that these timelines would be difficult to enforce. One issue is how to set a sensible penalty when the agency misses a deadline. Financial penalties would also decrease the NRC's resources, potentially slowing the regulatory process even further. Instead, the FRA allows project developers to take agencies to court over missed deadlines and requires agencies to submit an annual report to Congress detailing the reasons that a deadline was missed. A participant noted that the NRC already submits similar types of reports to Congress under the Nuclear Energy Innovation and Modernization Act. But these reports receive little attention and have not incentivized the NRC to maintain or accelerate timelines.

Another concern was that the NRC could simply push more activities into the pre-application phase, therefore delaying the start of a timeline. Participants recognized that the pre-application phase is valuable and can take significant time to complete, especially for novel reactor designs. To preserve these benefits while avoiding incentives to game the timeline, one participant proposed specifically detailing what is and is not part of the pre-application phase. This would help set clear boundaries and establish a shared understanding of when the official application process and associated deadlines begin.

Lastly, another participant suggested that the most effective way to expedite the review process and ensure the NRC meets deadlines is to give the agency more resources to hire experienced staff and improve project management.

Option: Eliminate uncontested mandatory hearings from the licensing process for new reactors

Under a [1957 amendment](#)³⁰ to the Atomic Energy Act of 1954, the NRC is required to hold a mandatory hearing as part of the construction permit process (Figure 1). The mandatory hearing is only between the applicant and NRC staff and is required even if there are no challenges to the construction permit or a combined license. The [Efficient Nuclear Licensing Hearings Act](#) recently introduced by Rep. Morgan Griffith (R-VA) would allow the NRC to eliminate the hearing if the construction permit is uncontested.³¹

Some roundtable participants characterized the hearing requirement as an expensive formality considering that hearings do not include public input and that any issues with the permit would have been addressed during prior stages of the process. Further, the cost of holding the hearing is paid by the applicant at the NRC staff rate of \$300 per hour. The NRC recently [estimated](#) the cost of a mandatory hearing for an advanced reactor application at approximately 1,500 NRC staff hours, or a total of \$450,000 to be paid by the applicant.³²

Roundtable participants broadly agreed that mandatory hearings can be costly and burdensome to applicants, while providing little value in cases where a construction permit is uncontested. Opinions were divided about whether uncontested mandatory hearings should be eliminated altogether versus allowing the NRC to decide on a case-by-case basis.

Option: Replace court-like hearings on contested environmental issues in license applications with a public comment process like that conducted by other federal agencies

In NRC licensing and permitting processes, the public may submit comments challenging any portion of an application, including the findings of the EIS that the NRC prepares during the environmental review stage. The NRC is [statutorily required](#) (under provisions of the Atomic Energy Act

of 1954 as amended), to resolve these public challenges by conducting a court-like hearing process.³³ At these hearings, license applicants and NRC staff present oral testimony and written information on relevant public comments and technical questions before three administrative judges who then decide how disputed issues are to be resolved. The process requires extensive paperwork and preparation by both NRC staff and the applicant.

Roundtable participants agreed that the current process is not efficient. They discussed a reform proposal that would replace the NRC's current hearing process with the public comment process that is standard under the Administrative Procedures Act (APA) and used by other federal agencies when taking a regulatory action. Both approaches provide a public comment period to gather outside input, but other agencies are not required to conduct a formal, in-person hearing to adjudicate issues raised in public comments—rather, the agency can respond when it issues a final decision. Some participants supported extending this approach to the NRC's licensing process because it removes the hassle and delay of scheduling in-person meetings and preparing written testimony.

Some participants, however, viewed an APA-style public comment process as also flawed. They recommended instead that the entire process be modernized and made iterative. Public comments would still be invited, but issues would be resolved internally, between the applicant and NRC staff, using primarily digital communication.

One participant strongly disagreed with this proposal, citing a concern that this reform could result in *increased* legal challenges to future license applications. The participant worried that changes to remove environmental issues from the NRC's adjudicatory process could remove them from the scope of Hobbs Act review. [The Hobbs Administrative Orders Review Act](#)³⁴ and Atomic Energy Act provide that final decisions issued by the Commission go directly to the circuit court after adjudication at the NRC. If a party wants to challenge an NRC license, it must raise that challenge at the very beginning of a licensing proceeding. Removing environmental reviews as part of the adjudicatory process unsettles the status quo and potentially risks putting an appeal of an agency decision in the district court, with the obligations of traditional discovery, if courts determine that there is no "final decision" per the Hobbs Act. The participant stated that this situation could negatively impact nuclear licensing, leading to higher costs, increased uncertainty, and possibly broader regulatory issues that are difficult to anticipate.

Option: Require the NRC's Advisory Committee on Reactor Safeguards to review only novel or safety-significant issues rather than all applications

As seen in Figure 1, review by the [Advisory Committee on Reactor Safeguards](#) (ACRS) is a mandatory step in the process for approving a construction permit; it is also required before the NRC can issue a license to operate.³⁵ The ACRS was established by the 1957 amendments to the Atomic Energy Act of 1954 as a statutory committee under the U.S. Atomic Energy Commission. Its mandate is to independently review safety studies and facility license applications, and to advise the federal government on the hazards of proposed or existing reactor facilities as well as the adequacy of reactor safety standards. The role of an independent regulatory body was eventually transferred to the NRC, but all nuclear projects must still go through the independent ACRS as part of the licensing and permitting process.

ACRS review entails [hundreds of hours](#) of meetings between NRC staff and applicants to analyze specific technical design considerations and risk profiles for each project.³⁶ While there are no official timelines for these reviews, a workshop participant estimated that they typically take between three and six months to complete. Scheduling difficulties for NRC staff often extend the timeline. With the NRC already acting as an independent regulatory body, workshop participants considered whether the scope of ACRS review should be narrowed to focus only on novel or safety-significant issues rather than all aspects of every application.

Some roundtable participants strongly agreed with this recommendation, pointing to past recommendations, by both the [NRC](#)³⁷ and [ACRS](#),³⁸ to right-size ACRS's role in the process. They argued that ACRS review should not be required for all applications, especially those that use standard designs that have already been approved. Instead, ACRS review could be reserved for projects that present novel design aspects. These participants viewed ACRS review as a significant barrier to the approval of new reactors and especially burdensome for companies that want to deploy many smaller reactors. One participant noted that, if this reform were to be adopted, it would be important for the NRC to have the role of referring applications to the ACRS rather than giving the ACRS discretion over which applications to review (the concern was that ACRS discretion over this decision could result in most, if not all, applications still undergoing ACRS review).

Overall, there was agreement among roundtable participants who are knowledgeable on this topic that the ACRS plays an important role in analyzing technical aspects of reactor design. But the reactor licensing and permitting process can be made more efficient and the ACRS itself can be more effective if its scope is narrowed to focus only on unique design aspects.

Conclusion

Bipartisan support for the ADVANCE Act suggests that there is interest on both sides of the aisle for accelerating and streamlining the nuclear licensing and permitting process. As Congress continues to explore options for speeding nuclear energy deployment, it will be crucial to identify which policies would be most effective at improving the nuclear regulatory process. This workshop identified several recommendations that would accelerate the regulatory process and could draw support across the political spectrum.

BPC remains dedicated to fostering meaningful discussions and collaboration on nuclear energy policy and permitting reform more generally. Our roundtables have provided a forum for vigorous debate and dialogue regarding specific permitting issues. The next issue brief in this series will analyze options to improve the permitting for specific types of energy technologies beyond nuclear power that are not generalizable to energy projects broadly.

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Mitigating Unique Permitting Barriers to Specific Energy Technologies

By Daniel Elizalde, Xan Fishman and John Jacobs

Introduction

To meet energy and climate goals, the United States needs to accelerate the deployment of a wide variety of energy technologies in areas such as critical minerals, carbon capture and storage (CCS), geothermal energy, and hydrogen. While all energy projects face some similar permitting challenges, specific technologies also face their own unique permitting hurdles. For example, while oil and gas projects can receive a categorical exclusion from the requirement to prepare an environmental impact statement (EIS) for test well projects, no such categorical exclusion exists for geothermal projects.

In July 2023, the Bipartisan Policy Center convened a private roundtable to explore the pros and cons of specific permitting reforms that tackle challenges unique to individual energy technologies. The workshop was conducted under Chatham House Rule and brought together experts on permitting and technology-specific regulatory challenges from across the political spectrum. This brief does not provide a comprehensive list of permitting reform options, rather it focuses on proposals that have been introduced in legislation this Congress, supplemented by suggestions from roundtable participants.

This roundtable and a separate roundtable that focused on permitting for nuclear energy projects were the fifth and sixth in a series of BPC-convened roundtables on permitting reforms. Prior roundtables focused on public engagement, linear infrastructure (transmission and pipeline), additional National Environmental Policy Act (NEPA) reforms, and judicial review. Rather than seek consensus, the goal of these roundtables has been to identify policies that would drive impact and are also politically viable.

Issue briefs from previous permitting roundtables may be accessed through the [BPC website](#)¹; they include:

1. [Public Engagement Roundtable](#)²
2. [Permitting Linear Infrastructure Roundtable](#) (i.e., transmission and pipelines)³
3. [Judicial Review Roundtable](#)⁴
4. [Remaining NEPA Reform Roundtable](#)⁵
5. [Nuclear Energy Licensing and Permitting Roundtable](#)⁶

Critical Minerals

Option: Expand the 2015 Fixing America's Surface Transportation Act (FAST-41) to include all federally regulated mining, processing, and refining projects for critical minerals

FAST-41 establishes a process for the coordinated and timely review of covered infrastructure projects involving multiple federal agencies, with the goal of reducing regulatory delays and expediting project approvals. There was broad support for FAST-41 at BPC's July 2023 roundtable: As one participant explained, this legislation offers a good model because it does not cut environmental or regulatory corners. Rather, FAST-41 aims to promote a more efficient and effective federal permitting process by increasing agency coordination and providing increased transparency.

Mining projects were not originally included in FAST-41, but a [2020 rule](#) from the federal Permitting Council added mining to the program.⁷ That rule, however, left out mineral processing and refining projects. Thus, roundtable participants discussed the value of adding processing and refining projects. This step was taken in September 2023, when the Permitting Council introduced a [new rule](#) covering all critical mineral mining, processing, and recycling projects under FAST-41.⁸ While generally

supportive of the council's action, roundtable participants had some concerns about establishing this policy through regulation rather than by statute.

Specifically, one roundtable participant emphasized the importance of adding critical minerals projects by changing the statutory language of FAST-41. This would ensure that future administrations do not reverse course and provide greater certainty for project developers. Furthermore, the Permitting Council's recent action was not without controversy: while it expanded FAST-41 eligibility to critical mineral processing and recycling projects, eligibility was narrowed to projects that involve critical minerals, rather than all mining projects (as under the earlier, 2020 rule).

Option: Allow the Environmental Protection Agency (EPA) to temporarily waive Clean Air Act and Solid Waste Disposal Act requirements for the processing of critical minerals if a shortage causes national security concerns

Under this policy option, a temporary waiver of any requirement under the Clean Air Act or Solid Waste Disposal Act could be issued by the EPA Administrator and the Secretary of Energy to allow for the processing or refining of critical minerals at a critical energy resource facility. [The Lower Energy Costs Act of 2023 \(HRI\)](#) includes a policy that would allow domestic mineral processing projects to receive a 90-day waiver if needed for national security concerns.⁹

Roundtable participants were generally skeptical of the efficacy of this policy. They noted that its benefits are unclear as long as the United States lacks a robust critical mineral processing industry to begin with. Further, the ability to access temporary waivers, by itself, is unlikely to drive investment in capital intensive domestic mineral processing projects. The prospect that such waivers would be available in the event of a future national security crisis would not convince developers to build projects today. Other participants worried that a future administration could overuse the temporary waiver option by issuing waivers on a rolling basis.

Participants also strongly agreed that this option, because it involves waiving Clean Air Act requirements, is politically controversial. The general consensus at the roundtable was that the limitations of this policy, combined with its political controversy make it a policy to avoid.

Option: Require mining companies to provide financial assurance in their reclamation plans

This option would mandate that mining companies provide financial assurance in reclamation plans. Financial assurance can help ensure that reclamation costs do not fall on state or local communities if mining

companies abandon their operations. Such assurance could decrease local opposition to mining projects.

A roundtable participant began the discussion by noting that the inclusion of financial assurance in reclamation plans is already standard practice in the United States. But this assurance often takes the form of self-bonding or corporate guarantees, both of which are tied to the value of the company. If a company goes bankrupt, funding for reclamation efforts may also disappear. Financing mechanisms are needed that do not put reclamation efforts at risk if companies go bankrupt.

There was general consensus among roundtable participants that mining companies should be required to pay for reclamation. However, there was no consensus on more assured financial mechanisms or tools to replace the current reliance on self-bonds and corporate guarantees.

Option: Create incentives for third parties to clean up abandoned mines, including by limiting liability for organizations that undertake cleanup efforts

The United States has over 140,000 abandoned hardrock mines, of which 22,500 pose environmental hazards [according to the Government Accountability Office \(GAO\)](#).¹⁰ Companies that operate mines today are responsible for the cleanup and decommissioning of these mines. However, most of America's abandoned mines date back to the 19th and early 20th centuries, before modern laws on mining reclamation and sustainability were introduced. Many of these mines remain a source of local environmental pollution, particularly when they continue to contaminate nearby water sources with toxic metals. Because their original owners are no longer operating, however, nobody is responsible for the cleanup. And third-party organizations that might want to undertake cleanup efforts are often discouraged from doing so because getting involved might make them liable for the mines and associated environmental hazards.

The 2021 Bipartisan Infrastructure Law (BIL) included [\\$725 million](#)¹¹ to help finance the mapping and cleanup of abandoned mines across America via grants to states and tribes. However, the BIL did not address liability concerns for third parties that voluntarily undertake to clean up these sites. The bipartisan would tackle this issue by limiting liability for such organizations.¹²

Participants broadly agreed that the cleanup of abandoned mines was important to gain public support for new mining projects; they also shared the view that addressing liability concerns and providing incentives for third-party cleanup efforts could make a significant difference. Overall, there was strong support for this policy.

Option: Provide enhanced guidance to mine operators by organizing pre-consultation meetings, designating cross-agency case workers, and improving reference materials

New mine projects are often subject to regulatory requirements set by multiple agencies, such as the U.S. Forest Service (USFS) and Bureau of Land Management (BLM). If a mine developer changes plans after submitting an application, there is generally little guidance available to help the developer avoid regulatory delays. This policy option aims to help companies navigate different circumstances so they have a better understanding of how project changes would impact the regulatory process. An additional objective is to increase agency coordination during reviews and pre-consultation efforts so that regulators and project developers alike have better information to navigate the regulatory process.

Roundtable participants strongly supported increased agency coordination, particularly better information sharing between the USFS and BLM. Participants also saw the value of clear guidance and pre-consultation meetings. However, some participants also noted that the USFS and BLM lack the technical expertise to address all issues with mining projects. Therefore, one participant suggested increased coordination with the U.S. Geological Survey (USGS), which specializes in subsurface geology and can provide helpful expertise on technical questions.

Option: Establish royalties for critical minerals extracted from federal lands

A controversial option is to transform the current lease-based policy for mining on public lands into a royalties-based policy. Hardrock mining is the [only extractive industry](#) that does not pay royalties for operating on public lands.¹³ According to a [recent report](#) by the Interagency Working Group on Mining Laws, Regulations, and Permitting, a 2% royalty on gross revenue from the sale of minerals extracted from public lands in 2019 would have generated \$98 million.¹⁴ A royalty rate of 8% would have generated \$392 million. Currently, mine operators are only [required to pay](#) a processing fee of \$20, a location fee of \$40, and a maintenance fee of \$165 for every 20 acres of public land they use.¹⁵

Roundtable participants discussed the idea of establishing royalty fees for minerals extraction and the potential impacts of this policy on the domestic mining industry. The discussion began with an acknowledgment that royalties would increase the financial burden for domestic mining projects on public land. Most participants agreed that a policy that increases costs and reduces incentives for domestic mining could be seen as counterproductive to current efforts by Congress and the White House to promote investment in U.S.-based mining and processing capacity and diversify away from Chinese mineral imports. Several participants pointed

out that domestic mineral producers already struggle to be cost-competitive with low-cost Chinese products.

In the context of an economically robust domestic minerals industry, by contrast, many participants agreed that a royalty system makes sense in concept. Royalties might be more palatable if they are tied to programs that benefit nearby communities, such as a remediation fund or watershed restoration fund. With the current effort to reshore supply chains and compete with cheaper Chinese imports in mind, however, there was general recognition that now is not the best time to introduce the new fees.

Additionally, there was broad concern about whether a royalties policy could attract political support in Congress. The current leasing scheme has been in place since 1872. Changing this long-standing structure would be difficult and would likely need to be paired with other policies designed to support the domestic mining industry, such as policies to enable more efficient permitting or reduce other barriers to investment.

Carbon Capture and Storage (CCS)

Option: Establish enforceable timeline for EPA to process State Class VI primacy applications

EPA recently designated a new category of wells, Class VI, for the geologic sequestration of carbon dioxide (CO₂). Such wells are needed to enable the deployment of carbon management projects, which are expected to play a critical role in achieving climate goals. [ClearPath estimates](#) that a minimum of 650 Class VI wells will be needed for geologic storage of CO₂ under a net-zero-by-2050 scenario.¹⁶ Permit applications for this class of wells are generally processed by the EPA; approval can take up to [six years](#).¹⁷ The idea of giving states primacy over the permitting of Class VI wells is gaining attention as a way to speed the deployment of carbon storage projects. A recent [BPC blog](#)¹⁸ discusses the role of state primacy:

State primary authority, or “primacy,” is the ability for a state to carry out EPA’s authority under the Safe Drinking Water Act in approving a specific type of permit. This [approach to processing permits](#) has been used for decades for other classes of permits and has the advantage of leveraging state geologic survey expertise on a state’s unique geology when evaluating a permit application. The UIC [Underground Injection Control] program has [granted primacy authority](#) for many different classes of wells in 31 states

and three territories, but only two* states have primacy for Class VI permits today—North Dakota and Wyoming.

As EPA expands staff expertise to process permits at the federal level, state primacy authority can play a complementary role to ensure project developers are not stuck waiting for permit approvals before continuing to develop a carbon management project.

Fortunately, several states: Louisiana, Texas, West Virginia, and Arizona have taken steps toward primacy approval. Louisiana is the furthest along in the process, with [EPA issuing a proposed rule](#) for primacy in April 2023. [*Update: Since publication of this blog, Louisiana’s Class VI primacy application was approved on December 28, 2023.]

With many states seeking Class VI primacy, roundtable participants discussed establishing a timeline for EPA to review these primacy applications. Currently, there is no enforceable timeline for EPA to issue final decisions on Class VI primacy applications. In the interim, Class VI projects must continue to go through the EPA permitting process. While participants broadly supported timelines, they were skeptical that a statutory timeline would be effective. Instead, there was general support for increasing transparency and better standardizing the primacy application process. Many participants agreed with the idea of establishing milestones for EPA action as part of the review process. This would give applicants greater clarity about their progress through the permitting process. Another participant suggested that the EPA could send a letter to the applicant after 180 days that outlines updates, challenges, progress, and an expected completion date.

Option: Allow EPA to issue aquifer exemptions for Class VI wells as is allowed for other well types

Currently, EPA aquifer exemptions are available for Class I, II, III, IV, and V wells, but not Class VI wells. [Aquifer exemptions](#) allow underground sources of water that do not and will not serve as a source of drinking water to be used by energy, mining, and other companies for oil or mineral extraction or disposal purposes in compliance with the Safe Drinking Water Act.¹⁹ According to EPA regulations, to inject fluids into an aquifer, the aquifer must have more than 10,000 parts per million (ppm) total dissolved solids (TDS). Drinking water sources typically have TDS below 3,000 ppm. For most types of wells, waivers are allowed on a case-by-case basis if TDS is between 3,000 and 10,000 ppm. This type of waiver is not allowed for Class VI wells. EPA can, however, issue an injection depth waiver for Class VI wells, which is a different waiver process than the aquifer exemptions that can be given to Class I, II, III, IV, and V wells. The option of allowing EPA to grant aquifer exemption waivers would provide parity among all six well classes.

Participants agreed that exemptions should be consistent across all well classes, noting that Class VI wells should not have to clear a higher bar. A participant added that if fracking fluid can be injected into an aquifer with an aquifer exemption, CO₂ should be allowed as well. Another participant noted that this policy option is worth pursuing, but might only be relevant to a handful of projects based in the Rocky Mountains. Overall, there was broad support for this policy, but also a recognition that its impact would be limited.

Option: Establish a categorical exclusion for adding carbon capture, utilization, and storage (CCUS) to an existing power plant or industrial facility

According to the Council on Environmental Quality (CEQ): “A categorical exclusion (CE) is a class of actions that a Federal agency has determined, after review by CEQ, do not individually or cumulatively have a significant effect on the human environment and for which, therefore, neither an environmental assessment nor an environmental impact statement is normally required. The use of categorical exclusions can reduce paperwork and save time and resources.”²⁰ Recently, the Department of Energy proposed a new categorical exclusion for certain battery storage systems.²¹ Roundtable participants discussed the value of establishing a new CE for the installation of CCUS technology at an existing power plant or industrial facility.

For CCUS projects that are required to go through the National Environmental Protection Act (NEPA) process, there was general agreement that a CE would accelerate the process and would be helpful. Participants noted that adding CCUS at an existing facility reduces other kinds of emissions, as well as greenhouse gas emissions, which provides health benefits in addition to climate benefits. But participants also noted that CCUS technology lacks support from some stakeholders, so this option may face political opposition.

Option: Establish a categorical exclusion for adding additional direct air capture (DAC) facilities to an operational DAC hub

As recommended in BPC’s 2022 report “[The Role of Categorical Exclusions in Achieving Net-Zero by 2050](#),”²² this policy would establish a new CE for adding additional DAC facilities at an existing DAC hub.

“The Infrastructure Investment and Jobs Act appropriated \$3.5 billion for four regional DAC hubs. These hubs will consist of several elements, including DAC facilities, carbon dioxide sequestration wells, carbon dioxide transportation infrastructure, power generation, and carbon dioxide utilization facilities. These hubs will have “room to grow” and it is expected that additional DAC facilities, including pilots, demonstration projects, and commercial scale facilities, will be added on to existing hubs over

time. As DOE is doing the initial permitting review for each hub, they should do a programmatic review that includes designating a categorical exclusion for adding additional DAC facilities to an operational DAC hub.”

Roundtable participants recognized that a CE could accelerate numerous future projects considering that DAC hubs are federally funded and therefore subject to the NEPA process. Participants also noted that because the initial DAC hub infrastructure will have already gone through the NEPA review process, adding additional facilities at the same site would likely have minimal environmental impact. Overall, there was strong support for this policy, with one participant declaring that it could be considered the “poster child” of what a categorical exclusion should be used for.

Geothermal

Option: Establish categorical exclusions for geothermal test wells

This policy would establish a new CE for geothermal test wells on federal land, creating parity with oil and gas test well projects that already have a CE. This policy was also recommended in BPC’s 2022 report [“The Role of Categorical Exclusions in Achieving Net-Zero by 2050.”](#)²³

“The vast majority of viable geothermal resources exist on federal land, meaning most geothermal exploration is subject to NEPA review. Creating a new categorical exclusion at DOI for geothermal exploration on federally managed lands would facilitate investment in geothermal energy and empower clean energy companies to develop geothermal energy by reducing the high up-front costs and uncertainty associated with lengthy environmental reviews for small-scale test drilling.”

As with other CE-related policy options, roundtable participants broadly supported a new CE for geothermal wells. The general view was that there is no reason oil and gas test wells should receive a CE but geothermal test wells should not. Since the nation’s geothermal resources are largely located on federal land, this policy could have a large impact on the geothermal industry.

Option: Clarify that geothermal lease reinstatement is not a ‘major federal action’ under NEPA

The Fiscal Responsibility Act [lists](#) specific actions that are not considered “major federal actions,” and therefore do not trigger the NEPA process.²⁴ This policy option would add geothermal lease reinstatement to the list of actions that are exempt from NEPA review. The initial construction of a new geothermal facility would still be subject to NEPA but subsequent reinstatements would be exempt.

Roundtable participants broadly supported this option. They saw no reason that a geothermal project that had already received approval would need to continue going back through the NEPA process for reinstatement.

Option: Require annual federal lease sales for geothermal energy

The Department of Interior (DOI) is currently required to hold lease sales for geothermal resources at least once every two years. These lease sales allow federal land to be developed for geothermal projects. Roundtable participants considered changing the current requirement so that geothermal lease sales must be conducted annually. This would put geothermal lease sales on par with lease sales for offshore wind and oil and gas projects, which benefited from recent BIL provisions that require federal agencies to conduct annual lease sales for those type of projects.

Participants had no objections to making this policy change and saw the value of accelerating the rate at which federal land is made available for geothermal development. There was broad consensus that it makes sense to standardize annual lease sale requirements across various clean energy technologies.

Option: Establish a 30-day timeline for reviewing geothermal drilling permits (GDPs)

Developers of geothermal projects on federal land must receive a GDP before they can break ground. [GDPs are typically issued](#) by the BLM based on an environmental assessment (EA) that results in a “finding of no significant impact” (FONSI) or a “determination of NEPA adequacy.”²⁵ A GDP issued on the basis of an EA can take about five months.²⁶ A provision that would require GDPs to be completed within 30 days of submission was included in [the Lower Energy Costs Act of 2023 \(HR1\)](#).²⁷

While roundtable participants generally approved of permitting timelines that help accelerate the decision-making process, there were questions about the feasibility of a 30-day timeline. Participants did not believe that BLM has the staff capacity or expertise needed to meet accelerated permitting deadlines. Some participants suggested that this policy could put the agency under pressure to increase administrative capacity. Others thought that it

would need to be paired with legislation that helps BLM staff up, whether through increased appropriations or staffing authorities. Overall, there was some skepticism that this policy change, pursued on its own, would work as intended. Timelines in general, however, were viewed as positive, so a timeline that is greater than 30 days but shorter than five months, could be productive, as long as agency staffing and resources are sufficient to achieve this goal.

Option: Clarify that geothermal projects on state or private lands in which the federal ownership interest is less than 50% are not subject to federal permitting requirements

Roundtable participants discussed another policy provision in [the Lower Energy Costs Act of 2023 \(HRI\)](#)²⁸ clarifying that geothermal projects are not subject to federal permitting requirements if the project is located on land in which the federal government does not own at least 50% of the subsurface mineral estate. This clarification would put geothermal projects in-line with oil and gas projects, which are already exempt from federal permitting requirements in these cases.

Participants broadly supported this policy on the basis that it would establish parity between geothermal and oil and gas projects in terms of federal permitting requirements. A participant noted that this change would help resolve complicated issues of intermingled land ownership. In the west, where federal land ownership is extensive, intermingled ownership and “checkerboarding” commonly result in situations where the federal government has a minority stake in the subsurface mineral estate of a property. This change would give developers greater clarity about which projects will and will not be subject to NEPA review.

Hydroelectric Power

Option: Affirm a 2-year licensing process for next-generation hydropower resources

The Federal Energy Regulatory Commission (FERC) has sole authority over licensing hydropower projects. A [2021 DOE report](#) found that, on average, FERC takes five years to review and issue a license for a new hydropower project and 7.6 years to relicense an existing hydropower project.²⁹ This policy, which was included in the bipartisan [Hydropower Clean Energy Future Act](#), would establish a mandatory 2-year timeline for FERC to complete a licensing review for next-generation hydropower projects.³⁰ The legislation defines “next generation” as a hydropower project “that utilizes

turbine and generation technology, an energy storage method, or a measure to protect, mitigate and enhance environmental resources, that is not in widespread, utility-scale use in the US as of the date of enactment.”

Roundtable participants saw the potential benefit of an accelerated timeline for licensing certain types of hydropower projects, including non-utility sized projects, such as projects in an irrigation, water supply, industrial, agricultural, or water conduit system. However, some participants did not believe two years is a reasonable timeline for more intensive projects. Projects that add infrastructure to existing dams raise significantly fewer licensing and environmental issues than projects that construct new dams. Participants emphasized the significant clean energy potential of powering existing dams that currently lack hydropower infrastructure.

Option: Exempt small hydropower projects that do not have significant environmental impacts from FERC licensing requirements

Under this policy option, small hydropower projects that do not have significant environmental impacts would be exempt from the FERC licensing process. The option was included in the [Hydropower Clean Energy Future Act](#)³¹, which defines “small hydropower projects” as projects with an installation capacity of less than 40 megawatts (MW). Relative to [DOE’s definition](#)³² of small hydropower projects, which is currently set at a much lower threshold of 10 MW, the 40-MW threshold would allow a larger number of projects to qualify for an exemption.

While roundtable participants did not take a position on specifically what size project should qualify as “small,” there was agreement that this policy option could be worthwhile, provided there is a reasonable process for assessing environmental impact, such as a programmatic review. If the conclusion is that a project will not have a significant impact, it should not be required to go through FERC’s lengthy licensing process.

Option: Exempt closed-loop pumped storage projects that do not utilize federal land or impound navigable waters from FERC licensing requirements

Closed-loop pumped storage projects involve two reservoirs that are entirely separated from other bodies of water. Energy is stored by moving water between the reservoirs, spinning a turbine in the process. This policy option would exempt such projects from FERC’s hydropower licensing process, provided they are not located on federal land and do not impound navigable waters.

There was consensus among roundtable participants that closed-loop pumped hydro projects should be exempt from the FERC hydropower licensing process because they are, by definition, completely contained and do not interact with other bodies of water. A few participants noted

that this policy change will have a relatively small impact in the near term because there are not many closed-loop pumped storage projects. However, as the need for energy storage increases with the expanded deployment of intermittent renewable generators, this policy may have greater impact.

Conclusion

It is clear that additional, technology-specific policy reforms could be useful, in combination with the more broad-based permitting changes discussed in previous briefs, to achieve a more efficient overall permitting system for energy projects. BPC remains committed to educating stakeholders about promising options for permitting reform that help advance the broadly shared goals in terms of energy reliability, affordability, and reduced emissions while maintaining protections for the environment and public health and safety. The next issue brief in this series will provide a comprehensive analysis of all the permitting reform policies discussed in our roundtable meetings to date in an effort to identify those options that are most likely to be impactful and attract bipartisan political support.

Endnotes

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