Before the
OFFICE OF SCIENCE AND TECHNOLOGY POLICY
Washington, D.C. 20504

In the Matter of	)	Docket No. OSTP-TECH-2025-0067
Regulatory Reform on Artificial Intelligence	)	90 Fed. Reg. 46,422

COMMENTS OF REASON FOUNDATION

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Introduction

On behalf of Reason Foundation, we respectfully submit these comments in response to the Office of Science and Technology Policy's (OSTP's) request for information on "Regulatory Reform on Artificial Intelligence."[1]

Reason Foundation is a national 501(c)(3) public policy research and education organization with expertise across a range of policy areas, including technology and communications policy.

There are numerous activities, innovations, and deployments currently inhibited, delayed, or constrained by federal statute, regulation, or policy. For this reason, we recommend a formal audit or review to identify areas of regulatory conflict with innovation—including the effect of state laws where federal regulation is silent. However, we offer the following specific examples in response to Question (i) for OSTP's review:

1. Legacy NEPA Rules and Expansion Create Major Delays in Energy Production
2. Regulatory Barriers Limit the Expansion of Automated Track Inspection

Response to Question (i)

I. Legacy NEPA Rules and Expansion Create Major Delays in Energy Production

In order to maintain global technological superiority, the United States must focus squarely on reforms that increase energy capacity through streamlined permitting reforms in order to facilitate the development of artificial intelligence (AI) across industries. As of now, multi-year permitting delays are the status quo in any energy project. These delays set back the construction of new power plants, but also lead to the downstream effects of a restricted energy grid. As the United States competes with foreign adversaries for dominance in AI, energy capacity will either be a force multiplier in the country's success or lead to failure on the global stage.

Congress passed the National Environmental Policy Act (NEPA) in 1969,[2] directing federal agencies to evaluate the environmental impact of their decision-making prior to a major federal action.[3] As part of this directive, agencies were required to produce an Environmental

1. Regulatory Reform on Artificial Intelligence, *Request for Information*, Office of Science and Technology Policy, Docket No. OSTP-TECH-2025-0067, 90 Fed. Reg. 46,422 (Sept. 26, 2025).
2. National Environmental Policy Act, Pub. L. 91–190, 83 Stat. 852 (Jan. 1, 1970).
3. "What is the National Environmental Policy Act?" U.S. Environmental Protection Agency, https://www.epa.gov/nepa/what-national-environmental-policy-act (last accessed Oct. 16, 2025).

Impact Statement (EIS) when a federal action would significantly alter the environment, which is to include a comprehensive analysis of environmental effects, alternatives to the proposed action, and proposed mitigation measures.[4]

For federal actions that would impose smaller effects on the environment or where the size of the effect is uncertain, agencies must complete an Environmental Assessment (EA). An EA is a shorter-form document that aims to determine whether a proposed federal action warrants a full EIS or if the effects are small enough to render a Finding of No Significant Impact (FONSI). These mandated reviews were meant to inform both decision-makers and the public of potential significant environmental impacts and potential mitigations, but have evolved into increasingly lengthy and complex processes. Further, despite their extensive documentation, these reviews generate a substantial amount of litigation. As a result, the environmental review process that was designed to increase public transparency increasingly serves to delay and add costs to worthy projects.

For instance, the Nuclear Regulatory Commission (NRC) promulgated licensing rules that incorporate NEPA's environmental review framework into nuclear power project approvals.[5] These NRC licensing processes have traditionally entailed lengthy reviews and administrative hurdles, delaying and often derailing reliable energy projects that could support AI infrastructure. Similarly, power grid interconnection regulations governed by the Federal Energy Regulatory Commission (FERC) under 16 U.S.C. § 824a *et. seq.* impose restrictive control over how new loads such as AI data centers connect to the grid. Lengthy wait times and cost allocation disputes in FERC's interconnection queues compound delays to reliable, scalable power delivery essential to AI model performance.[6]

The Supreme Court's decision in *Seven County Infrastructure Coalition v. Eagle County* curtailed this expansion of agency review.[7] Moreover, recent reforms, such as the expansion of categorical exclusions,[8] recent executive orders on permit streamlining,[9] and the U.S. Court of Appeals for the D.C. Circuit's *Marin Audubon Society* ruling,[10] may remove some of the chokepoints.

4. 42 U.S.C. § 4332.
5. 10 C.F.R. Part 51.
6. *Explainer on the Interconnection Final Rule*, Federal Energy Regulatory Commission, https://www.ferc.gov/explainer-interconnection-final-rule (last accessed Oct. 20, 2025).
7. *Seven County Infrastructure Coalition v. Eagle County., Colo.*, 145 S. Ct. 1497 (2025); and *see* Sam Rutzick, "Supreme Court Ends the Abuse of NEPA—and Encourages the Abundance Agenda," Pacific Legal Foundation (June 2, 2025), https://pacificlegal.org/supreme-court-ends-the-abuse-of-nepa-and-encourages-the-abundance-agenda/.
8. "National Environmental Policy Act (NEPA) Implementing Procedures," Department of Energy (Jun 30, 2025), https://www.energy.gov/sites/default/files/2025-06/2025-06-30-DOE-NEPA-Procedures.pdf.
9. Executive Order 14318 (July 23, 2025).
10. *Marin Audubon Society v. Federal Aviation Administration*, 121 F.4th 902 (D.C. Cir. 2024).

However, legacy NEPA implementation and statutes built upon decades of overexpansion continue to impose substantial procedural burdens on AI-related infrastructure—particularly energy.[11]

As the need for abundant energy production grows more vital, this regulatory barrier to energy production is particularly relevant in light of small modular nuclear reactors (SMRs), which have emerged as a promising source of clean, abundant energy to power the energy-intensive AI data centers at the heart of U.S. technological superiority.[12]

II. Regulatory Barriers Limit the Expansion of Automated Track Inspection

Automated track inspection (ATI) technologies have been tested in recent years to improve railway track defect detection and have the potential to improve rail safety while also increasing operational efficiency of the network. Instead of shutting down tracks for human inspectors to walk, or using specialized rail vehicles to inspect track visually, ATI sensors are mounted to trains as they are in service to collect track component data as part of normal rail operations. These robust sensor data are then fed to AI-powered models to better plan maintenance activities.

Through pilot programs established by railroads, which obtained waivers from the Federal Railroad Administration (FRA), ATI was demonstrated to more reliably detect defects than traditional inspections—and improve maintenance forecasting and planning over time. Pilot program data submitted to FRA show that defects per 100 miles of inspected track declined from 3.08 before the use of ATI to 0.24 during the ATI pilots, or a 92.2% reduction.[13] Reportable track-caused train derailments on main track per year during that same period declined from eleven to three, or a 72.7% reduction.[14] None of those three derailments was attributable to ATI-targeted defects, with two occurring while manual visual inspections were still taking place twice weekly and one while pilot testing was inactive.[15]

These results are in line with successful ATI performance expectations, with a shift in maintenance practices from being guided by a "find and fix" approach to a "predict and

11. James Broughel and Paige Lambermont, "Powering Intelligence: Meeting AI's Energy Needs in a Changing Electricity Landscape," Competitive Enterprise Institute (March 2025), https://cei.org/wp-content/uploads/2025/03/AI-Energy-Use-for-Trello.pdf.
12. Nancy Stauffer, "The Multi-Faceted Challenge of Powering," MIT Energy Initiative (Jan. 7, 2025), https://energy.mit.edu/news/the-multi-faceted-challenge-of-powering-ai/ (last accessed Oct. 20, 2025).
13. Yin Yao, "Track Inspection Technology," *28th Annual Association of American Railroads Research Review*, Association of American Railroads and MxV Rail (June 26-28, 2023) at 196, https://www.mxvrail.com/wp-content/uploads/2023/10/28th-Annual-AAR-Research-Review-2023-All-Slides.pdf.
14. *Id.* at 198.
15. *Id.*

prevent" approach.[16] Better and earlier detection of geometry defects allows track maintenance to be performed in a more preventative manner. Further, the higher-quality data collected by ATI over time allows for AI-powered improvements to maintenance forecasting and strategy. As such, as ATI use is expanded and repeated over time, defect detection rates—and defect-related hazards—should decline.

Realizing the benefits of ATI requires changes to manual inspection practices. ATI cannot inspect turnouts (i.e., the point where trains switch from one track to another), turnout components (e.g., "frogs"), and other special trackwork. By focusing ATI on track geometry defects, human inspectors can be redeployed to infrastructure where they are best positioned to inspect. If legacy visual inspection requirements are not modernized, railroads will have less incentive to invest in ATI and improve their inspection practices.

Analysis of the ATI pilot program data found that visual inspectors identified far more non-geometry defects than track geometry defects. Prior to ATI testing on the pilot corridors, visual inspectors identified 10,645 non-geometry defects and 422 geometry defects.[17] In 2021, during the ATI pilots, visual inspectors identified 14,831 non-geometry defects (a 39.3% increase) and 238 geometry defects (a 43.6% decrease).[18] Of the non-geometry defects identified by visual inspectors, 60-80% were in turnouts and special trackwork that ATI cannot inspect.[19]

Another important benefit of ATI is reducing visual inspectors' exposure to on-track hazards. Substituting ATI for routine geometry defect inspection, coupled with a corresponding reduction in visual inspections, will remove inspectors from harm's way. Data from the ATI pilot program indicate that inspector track occupancy duration declined by approximately one-quarter after visual inspections were reduced to once per week as part of the ATI pilots,[20] suggesting substantial inspector workforce safety risk reductions are likely to occur if ATI is widely deployed.

The Association of American Railroads recently petitioned for an industry-wide waiver to enable significantly expanded ATI deployments.[21] The necessity of a waiver is indicative of the inflexibility of legacy rail safety regulations, which mandate rigid manual visual inspection frequencies.[22] Importantly, these long-standing inspection frequency rules are based on

16. Megan France-Peterson et al., "Human-Automation Teaming in Track Inspection," Volpe National Transportation Systems Center (Aug. 6, 2021) at 12, https://rosap.ntl.bts.gov/view/dot/66915.
17. Yao, *supra* note 13, at 197.
18. *Id.*
19. *Id.*
20. *Id.* at 200.
21. Petition for Waiver of Compliance, *Notice*, Federal Railroad Administration, Docket No. FRA-2025-0059, 90 Fed. Reg. 19,782 (May 9, 2025).
22. 49 C.F.R. § 213.233.

questionable assumptions about accumulated tonnage loads and lack the scientific rigor that ought to guide safety policy. FRA has yet to act on the pending ATI waiver petition, thereby preventing rail carriers, rail workers, shippers, and consumers from realizing the safety and efficiency benefits of ATI.

Conclusion

We greatly appreciate OSTP's attention to regulatory barriers to the development and deployment of AI technologies. Realizing the full benefits of these various technologies and applications will require a sustained, concerted effort on the part of policymakers.

Thank you for the opportunity to provide these comments to OSTP. We look forward to further participation and stand by to assist as requested.

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