

CLIENT ALERT

Biden's Executive Order on Advancing United States Leadership in AI Infrastructure

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TAKEAWAY

President Biden's January 14, 2025 Order outlines measures to encourage the construction of secure AI data centers on U.S. federal lands, emphasizing they be powered by new, clean energy, and with adherence to certain labor and security standards. While the Order signals a substantial government-backed shift in AI for the private-sector, it also imposes security, domestic sourcing, clean energy, labor, and community-engagement obligations on private entities contracting with the government under this Order, to advance the Administration's goals of accelerating AI, while safeguarding national security.

However, the incoming Trump administration has already signaled its intent to reverse most of the Biden Administration's AI regulatory efforts, including repealing Biden's previous Executive Order on AI that was issued October 30, 2023^[1]—an Order which the White House states led to “more than one hundred” actions outlined in the Order being completed.^[2] As such, the future of Biden-era AI regulatory efforts remains uncertain, including whether the recent January 14 Order will be enforced, altered, or repealed under the new administration.

SUMMARY

In a nutshell, President Biden's Order states:

1. Purpose: Positions AI as a critical technology for national security and economic leadership and emphasizes the urgency of developing powerful AI systems on U.S. soil to prevent hostile actors from accessing them and to ensure robust domestic AI capabilities.

Note: The Order frames AI infrastructure as a “national security” asset, so while private companies will see new avenues for funding, they will also see heightened security and compliance requirements (e.g., Section 4(h)(iv) for how cyber, supply-chain, and physical security requirements are planned to be mandated).

2. Policy: Anchors the Order in five principles which guide all agency actions under the Order:

1. National security,
2. Economic competitiveness,

3. Clean energy,
4. No energy rate hikes for the public, and
5. Workforce and community benefits.

3. **Definitions:** Lays out key terms like “AI infrastructure,” “frontier AI data center,” and “clean energy.”

Key definitions include:

- **“AI data center”** – “a data center used *primarily* with respect to developing or operating AI.”

Note: Use of the term “primarily” suggests that if most of the servers or compute are dedicated to AI workloads, the facility may be subject to the Order’s provisions.

- **“Clean energy”** – “generation resources that produce few or no emissions of carbon dioxide during operation, including when paired with clean storage technologies. This term includes geothermal, nuclear fission, nuclear fusion, solar, wind, hydroelectric, hydrokinetic (including tidal, wave, and current), and marine energy; and carbon capture, utilization, and storage technologies ...”
- **“Frontier AI data center”** – “an AI data center capable of being used to develop, within a reasonable time frame, an AI model with characteristics related either to performance or to the computational resources used in its development that approximately match or surpass the state of the art at the time of the AI model’s development.”

Note: The significance of this definition is that frontier AI data centers trigger certain security and supply-chain compliance controls. The broader term, “frontier AI infrastructure,” captures “AI infrastructure for which the relevant data center is a frontier AI data center.”

- **“Non-Federal parties”** – “private-sector entities that enter into a contract with the Department of Defense or the Department of Energy pursuant to section 4(g) of this order.”

Note: The Order does *not* explicitly define “AI developers,” a term used throughout the Order for certain obligations (e.g., Sections 4(h)(x), 7(c)(i)–(iii))

4. **Establishing Federal Sites for AI Infrastructure:** Directs Secretary of Defense and Secretary of Energy to identify federal land for AI data centers by February 2025 and operation by the end of 2027, with detailed criteria for site suitability (e.g., topography, transmission access, minimized environmental impact, and robust security).

Note: This section generally contains the thrust of the Order.

Sections (a), (b), and (e) outline that the Department of Defense and Department of Energy must, by the end of February 2025, identify a minimum of three suitable sites for non-Federal entities to lease, and by the end of March 2025, run “competitive public solicitations” for proposals for non-Federal entities to lease Federal land to construct frontier AI infrastructure.

Section (g) states that winning proposals from section (e) shall be announced by the end of June 2025, and illustrates the Biden administration’s priority for smaller organizations, as it requires that the Secretaries “select at least one proposal developed and submitted jointly by a consortium of two or more small- or medium-sized organizations—as determined by those organizations’ market capitalization, revenues, or similar characteristics,” so long as at least one submitted proposal meets the qualifications.

Section (h) outlines a variety of conditions for winning applicants to adhere to. For example:

- Section (h)(iv) goes into detail on “technical standards and guidelines for cyber, supply-chain, and physical security,” such as adhering to those already present in the May 12, 2021 Executive Order on Improving the Nation’s Cybersecurity^[3] and the previously-mentioned October 30, 2023 Executive Order on AI.^[4]

- Section (h)(viii) further demonstrates support for smaller businesses, requiring that “non-Federal parties ... develop plans to make available computational resources that are not dedicated to supporting frontier AI training, or otherwise allocated under another provision, for commercial use by startups and small firms on nondiscriminatory terms.”
- Section (h)(x) emphasizes chip production, requiring “AI developers” (a term left undefined) “owning and operating frontier AI data centers on Federal sites either to procure ... leading-edge logic semiconductors fabricated in the United States to the maximum extent practicable; or to develop and implement a plan ... to qualify leading-edge logic semiconductors fabricated in the United States for use in the developer’s data centers ...”

5. Protecting American Consumers and Communities: Calls on the Department of Energy to evaluate how AI data centers will impact electricity prices and community engagement.

6. Facilitating Electric Grid Interconnections for Federal Sites: Requires the Department of Energy to gather and share information on unused grid capacity, grid congestion points, and unused interconnection facilities.

7. Expeditiously Processing Permits for Federal Sites: Fast-tracks environmental, air-quality, and other Federal approvals to enable AI infrastructure to start construction by the end of 2025 (or as applicable with existing law) wherever possible.

8. Ensuring Adequate Transmission Infrastructure for Federal Sites: Authorizes the Department of Energy to leverage financing, planning, and regulatory tools to implement transmission upgrades and domestic manufacturing of key grid components.

9. Additional Efforts to Improve Permitting and Power Procurement Nationwide: Sets up more efficient National Environmental Policy Act (NEPA) processes (e.g., requires agencies to dedicate staff for AI infrastructure permitting and to expand or adopt categorical exclusions in environmental reviews, speeding up project approvals), encourages nuclear energy expansion, and addresses supply chain risks.

10. Engagement Abroad: Tasks the Secretary of State and other agencies with promoting international collaboration on trusted AI infrastructure and advanced nuclear exports.

11. General Provisions: Ensures consistency with existing laws, budget constraints, and clarifies no new enforceable rights are created.

[1] <https://www.c-span.org/program/campaign-2024/former-president-trump-campaigns-in-cedar-rapids-iowa/635510> (“[W]hen I’m re-elected, I will cancel Biden’s artificial intelligence executive order ... on day one.”)

[2] <https://www.whitehouse.gov/briefing-room/statements-releases/2024/10/30/fact-sheet-key-ai-accomplishments-in-the-year-since-the-biden-harris-administrations-landmark-executive-order/> (“[T]he Biden-Harris Administration is announcing that Federal agencies have completed on schedule each action that the Executive Order tasked for this past year—more than one hundred in all.”)

[3] <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/05/12/executive-order-on-improving-the-nations-cybersecurity/>

[4] <https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/>

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