

LEGAL UPDATES

PUBLISHED: MARCH 31, 2026

## Services

Data Centers  
Energy Regulation  
Energy Storage

## Industry

Energy & Natural  
Resources

## Professionals

JOHN MYER  
MADISON:  
608.234.6147  
JOHN.MYER@  
HUSCHBLACKWELL.COM

MICHAEL BLACKWELL  
WASHINGTON:  
202.378.2300  
MICHAEL.BLACKWELL@  
HUSCHBLACKWELL.COM

# The DOE "Genesis Mission" \$293 Million Funding Opportunity: Accelerating AI Deployment Across Energy and Infrastructure

The U.S. Department of Energy (DOE) is moving quickly to operationalize its “Genesis Mission: Transforming Science and Energy with AI,” translating a broad policy initiative into concrete funding opportunities, partnership structures, and an emerging procurement pipeline.

Most notably, DOE has released a \$293 million Request for Applications (RFA) under the Genesis Mission, focused on applying artificial intelligence to more than two dozen national science and technology challenges. These span energy systems, advanced manufacturing, materials, microelectronics, biotechnology, and related sectors. The structure and timing of this RFA signal a clear shift: DOE is prioritizing near-term implementation and system-level performance gains over exploratory research.

For companies operating in energy, infrastructure, and advanced technology markets, the takeaway is straightforward. This is a deployment-oriented funding opportunity, designed to accelerate how complex systems are designed, permitted, constructed, and operated.

### From Research to Execution

A defining feature of the Genesis Mission—and the associated RFA—is DOE’s focus on system-level constraints, particularly those affecting the U.S. electric grid.

Rather than organizing funding around discrete scientific questions, DOE has framed its challenge areas around execution bottlenecks: scaling the grid to meet rising demand, managing the energy intensity of data centers, improving

industrial productivity, and reducing timelines for large infrastructure projects.

Artificial intelligence is positioned as an enabling layer across these domains. In practice, that may include:

Accelerating grid planning, forecasting, and system optimization.

Automating portions of design, engineering, and compliance workflows.

Improving construction sequencing and project delivery.

Enhancing operational decision-making in complex environments.

Nuclear energy provides one clear example. DOE continues to emphasize the need to deliver projects more quickly and predictably, with AI supporting design iteration, licensing processes, and construction management. At the same time, similar priorities are emerging in other sectors. Data center developers are increasingly focused on AI-enabled cooling and energy optimization, while grid operators are seeking tools that can materially improve responsiveness and reliability.

Across sectors, the common thread is execution: DOE is funding technologies that improve how systems perform in practice.

## **A Broad, Team-Based Approach**

The Genesis Mission is notable for both its scope and its structure. DOE has identified more than 20 challenge areas that extend well beyond traditional energy categories, reflecting an assumption that meaningful gains will come from coordination across interconnected industries. As a result, the eligible participant base is broad, including:

Utilities and energy developers.

Data center operators and technology companies.

Industrial and manufacturing firms.

Engineering, procurement, and construction (EPC) providers.

Software and AI developers.

Importantly, the RFA is structured around team-based participation. DOE expects proposals to bring together industry, academia, and national laboratories, with an emphasis on integrating capabilities across disciplines.

For companies that have not historically engaged with DOE funding, this model may create more accessible entry points through partnerships rather than standalone applications.

## **A Phased Funding Model and Compressed Timeline**

The \$293 million RFA (DE-FOA-0003612) is structured as a two-phase process, with initial awards supporting concept development and larger follow-on funding tied to more advanced, deployment-oriented efforts.

The timeline is compressed:

Phase I applications and Phase II letters of intent are due April 28, 2026.

Phase II full applications are due May 19, 2026.

Taken together, the structure and timing suggest that DOE is prioritizing teams that are already positioned to define use cases and move quickly toward implementation.

## **Informational Webinars**

The DOE is hosting a series of topical webinars to provide more information on individual lines of inquiry. Participating programs from the Office of Science will discuss their participation in this Request for Applications. Each program's webinar will include a short summary of its scientific scope, along with details about the National Science and Technology Challenges and the particular focus areas that proposals should address. A limited number of questions will be addressed live. The webinar will be recorded and posted on the funding opportunities website listed below a few days after the event. More information about these webinars can be found [here](#).

## **Legal and Regulatory Considerations**

Participation in the Genesis Mission will raise several legal and regulatory issues that warrant timely attention:

**Intellectual property:** Multi-party collaboration involving AI models and shared datasets will require clear allocation of ownership and commercialization rights.

**Data governance:** The use of large-scale scientific and operational data will require defined protocols around access, confidentiality, and permitted use.

**Procurement structures:** The mix of grants, cooperative agreements, and consortium-style participation may present complexities for organizations less familiar with DOE processes.

Compliance and security: Certain projects may implicate export controls, cybersecurity requirements, or other federal restrictions.

Addressing these considerations early in the process may help avoid delays as projects move from proposal to execution.

## **What to Watch**

The Genesis Mission represents a meaningful federal effort to integrate artificial intelligence into the physical economy—particularly in sectors where timelines, cost overruns, and execution risk have historically constrained deployment.

In the near term, companies should focus on:

Monitoring developments tied to specific challenge areas.

Identifying potential partners across industry, academia, and national laboratories.

Assessing internal capabilities related to AI integration and data management.

Aligning participation with long-term business and regulatory strategy.

More broadly, the initiative signals a shift in federal funding priorities toward speed, integration, and measurable outcomes.

For organizations positioned to engage, the opportunity extends beyond access to funding. It includes the ability to shape how next-generation energy and industrial systems are designed, delivered, and operated.

Key Resources DOE Genesis Mission announcement:

<https://www.energy.gov/articles/energy-department-launches-genesis-mission-transform-american-science-and-innovation>

DOE \$293M funding announcement:

<https://www.energy.gov/articles/energy-department-announces-293-million-funding-support-genesis-mission-national-science>

Funding Opportunity (DE-FOA-0003612) via Grants.gov:

<https://www.grants.gov>

Genesis Mission challenge areas overview:

<https://www.energy.gov/articles/energy-department-announces-26-genesis-mission-science-and-technology-challenges>

Stakeholders may wish to review these materials and begin forming teams given the short application window.

## **Contact us**

If you have questions about how the Genesis Mission funding may affect your organization's strategy, please contact John Myer, Michael Blackwell, or your Husch Blackwell attorney.