The Rundown

By: CLEARPATH ACTION

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ClearPath Action Rundown
April 10th, 2026

Happy Friday!

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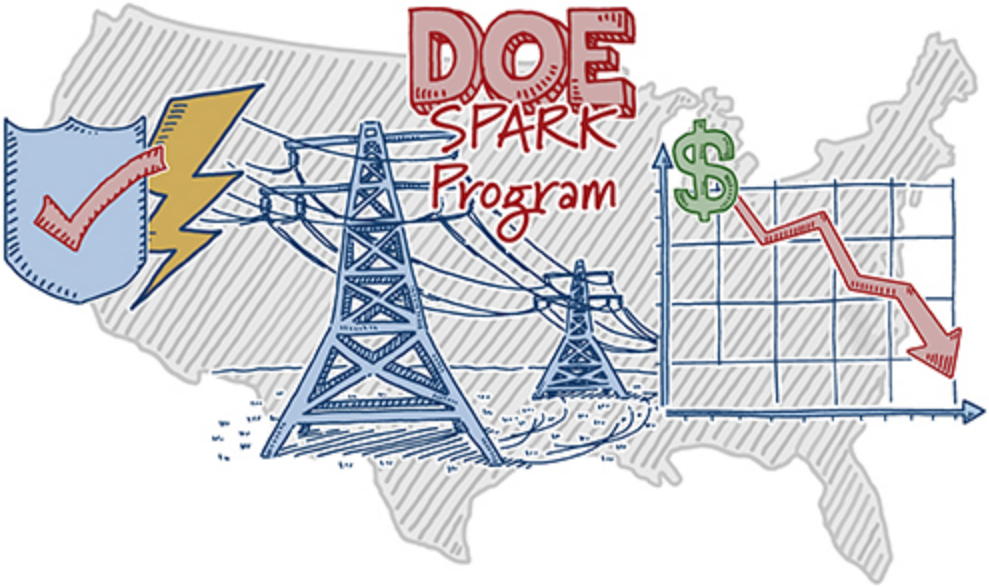
1. DOE lights the SPARK for getting more out of our grid



Meeting surging electricity demand isn't just about building more transmission. It's also about optimizing the transmission we already have.

ClearPath's latest blog breaks down the technologies that can unlock existing grid capacity and how DOE's SPARK initiative will accelerate their deployment. With DOE's leadership, American innovations will help modernize the grid in ways that enhance reliability and lower costs.

Four key technologies SPARK supports:

- **High-performance conductors** carry more power at higher efficiency and reduce wildfire risks;
- **Dynamic line ratings** use real-time data to maximize the use of transmission lines;
- **Topology optimization tools** find cheaper and safer routes for power flow; and
- **Advanced power flow controllers** redirect power flows away from congestion or outages.

What's clear: The U.S. needs to build new infrastructure and better utilize the grid we already have. Advanced Transmission Technologies (ATT) offer a cost-effective, near-term way to do both. Unlocking more energy from the existing grid isn't just an efficiency gain. It's a strategic advantage.

Plug in: Read ClearPath's latest **blog** by **Casey Kelly**, which breaks down how DOE's new SPARK program is doing exactly that through ATT.

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2. DOE launches $69 million push for critical minerals supply chain

Energy dominance starts with mineral security. The DOE's Office of Critical Minerals and Energy Innovation and the Hydrocarbons and Geothermal Energy Office **announced** a Critical Minerals and Materials Accelerator funding opportunity of up to $69 million.

The opportunity will help:

- Strengthen supply chains essential to energy, national security and industrial competitiveness;
- Move technologies from early-stage research to commercial deployment; and
- Address key technical barriers to scaling domestic production of critical materials.

What's clear: America holds the keys to its own mineral future. Strategic federal investment is unlocking domestic production, reducing supply chain vulnerabilities and positioning the U.S. to lead in energy, national security and competitiveness.

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3. SPP expands footprint into the Western Interconnection

The U.S. grid just got more connected. Southwest Power Pool (SPP) **became** the first regional transmission organization to span both the Western and Eastern Interconnections. Nine utilities across seven states joined, expanding SPP's footprint to 17 states and 20 million customers. The two interconnections have historically operated as essentially separate grids with limited ties between them.

Key benefits:

- **Stronger reliability:** Access to a larger grid, more diverse energy resources and enhanced 24/7 monitoring reduces outage risks;
- **Lower costs:** Coordinated dispatch across the region helps prioritize the lowest-cost power, extending efficiencies that have saved members over **$10 billion** in SPP's first decade;
- **State authority preserved:** SPP is a not-for-profit operator that does not own assets or set retail policy, respecting state and local authority; and
- **Interregional potential:** SPP's presence on both sides of the East-West seam makes it easier to plan transmission links to share power during heat waves or winter storms, improving reliability in ways that attract industry and investment.

What's clear: Expanding regional coordination unlocks cost savings and reliability gains. SPP's move brings market-driven dispatch to parts of the West that have long operated in silos, setting the stage for broader interregional coordination as Western power demand grows.

Plug in: Watch ClearPath's **whiteboard video** on why transmission is a bottleneck as power demand rises and what it will take to modernize the grid.

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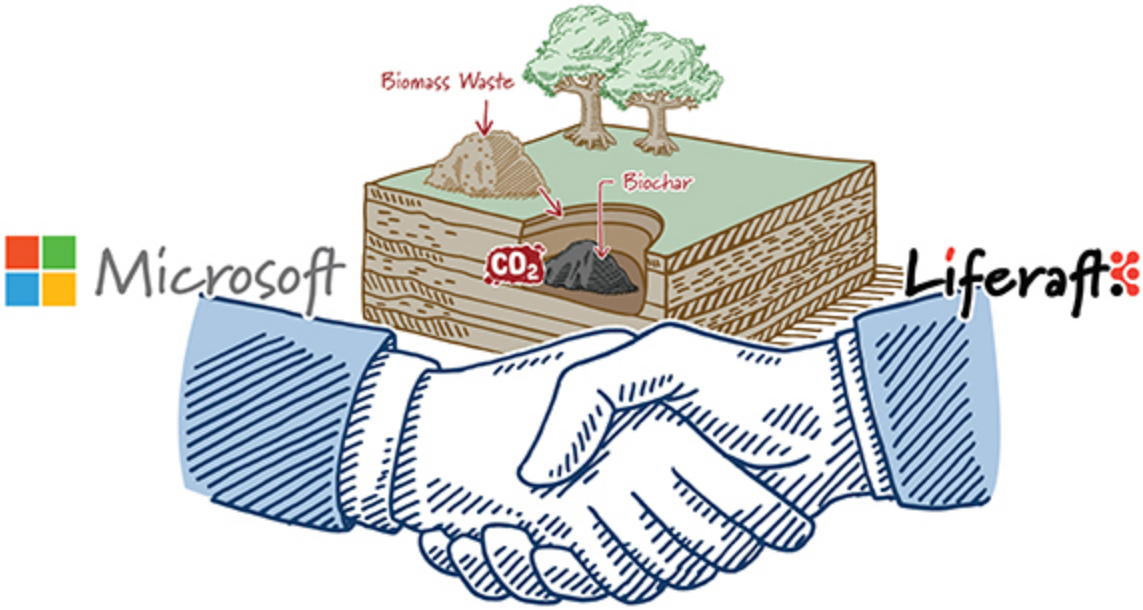
4. Microsoft taps U.S. biochar firm for carbon removal project



Private sector demand for carbon removal is growing. Liferaft, a U.S.-based biochar company, **finalized** a 10-year agreement to supply Microsoft with one million carbon removal units.

Key details:

- Carbon removal units will be delivered through large-scale biochar facilities in Iowa and Illinois, sourcing agricultural and municipal biomass from the surrounding region;
- Biomass will be processed using pyrolysis to produce durable biochar, which will be blended with compost for agricultural applications; and
- When applied to soils, biochar improves soil health and crop yields while durably sequestering carbon for hundreds of years.

What's clear: Carbon removal can deliver both climate impact and economic growth. Liferaft pairs durable carbon removal with rural job creation and local investment, showing how market-driven solutions can strengthen communities and domestic supply chains.

Plug in: Explore ClearPath's **Biochar 101** to learn how it works and why it matters.

5. USDA launches National Proving Grounds Network for AgTech

American farmers need confidence that new technologies will deliver value. The USDA's Research, Education and Economics **launched** the National Proving Grounds Network for AgTech (NPG-Ag), a coordinated nationwide initiative to validate cutting-edge agricultural technologies under real-world U.S. farming and ranching conditions.

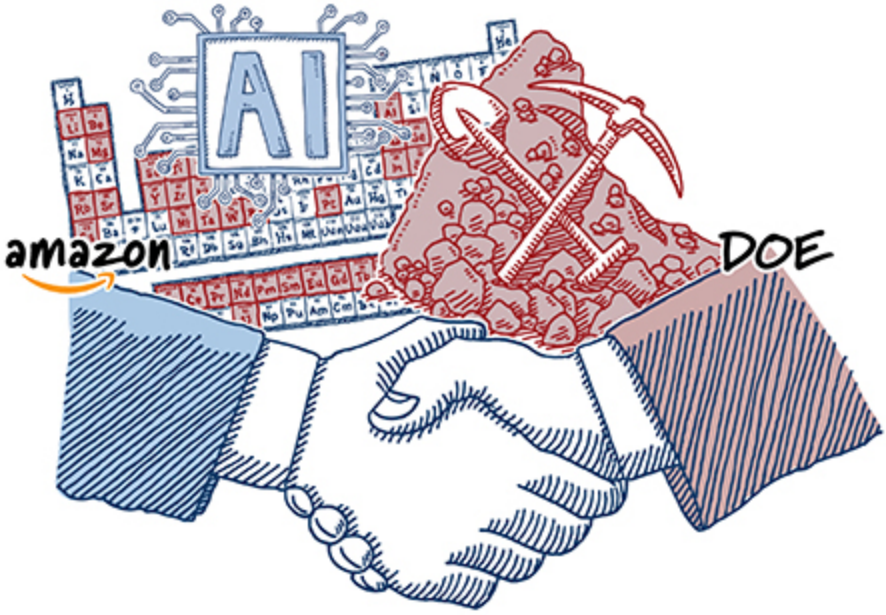
The NPG-Ag will:

- Be spearheaded by the USDA's Agricultural Research Service;
- Provide farmers and ranchers with trusted, data-driven information on technology performance and economic return; and
- Support the collaborative development of emerging technologies so that U.S. farmers and ranchers are the first to benefit.

What's clear: American agriculture's competitive edge has always been innovation. Coordinated AgTech research efforts can accelerate U.S. farmer confidence to adopt innovations that improve profitability and strengthen long-term resilience and competitiveness.

Plug in: Check out ClearPath's **blog** on how America can reclaim its edge in agricultural innovation.

6. Amazon and DOE partner to recover critical materials with AI



Strengthening U.S. leadership in critical minerals requires innovating at every step of the supply chain. DOE's Ames National Laboratory and the Critical Materials Innovation (CMI) Hub **announced** a new collaboration with Amazon to recover and recycle critical materials using AI capabilities, combining Amazon's technology with world-class materials science expertise.

Two initiatives:

- Converting post-consumer textiles, including discarded clothing, into battery-grade graphite, to advance DOE's Genesis Mission goal of securing critical materials from waste; and
- Recovering critical minerals like gallium from end-of-life IT hardware, leveraging Amazon Web Services' expertise in physical AI and supply chain management alongside CMI's materials science capabilities.

What's clear: Resilient supply chains for minerals are needed for clean energy and defense technologies. Recovering critical materials from waste streams can complement domestic production, reducing reliance on imports and building supply chain resilience.

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7. Fueling the future of American agriculture

The **2027 Farm Bureau Ag Innovation Challenge** is looking for entrepreneurs developing solutions to help U.S. farmers, ranchers and rural communities thrive. The national competition is backed by ClearPath, Farm Credit, Bayer, John Deere, Farm Bureau Bank and T-Mobile.

Key details:

- The Challenge seeks entrepreneurs tackling the greatest agricultural challenges, ranging from technologies that optimize on-farm yields, to enhancing crop and animal resilience to disease and pests; and
- The 2025 winner was FarmMind, from Louisiana, an AI-powered agricultural intelligence platform that brings agricultural workflows together in one place.

What's clear: Supporting AgTech entrepreneurs strengthens U.S. agriculture, rural economies and the domestic innovation ecosystem that keeps American agriculture competitive.

Plug in: Apply for the 2027 Farm Bureau Ag Innovation Challenge **here**.

Dive deeper: Check out ClearPath's **video** on America's agricultural innovation story and why the U.S. wins when it innovates.

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8. From plow to precision: 250 years of American agricultural innovation

As America celebrates its 250th anniversary, ClearPath is **highlighting** America's innovation story. From the earliest discoveries in electricity and steam power to modern nuclear, natural gas, advanced grid technologies and agriculture, American innovators have consistently pushed the boundaries of what's possible.

America's agricultural story:

- **1892** – John Froelich built the first gasoline-powered tractor in Iowa with the first engine that could drive both forward and backward. This was a catalyst for the second American agricultural revolution.
- **1923** – Henry A. Wallace developed the first hybrid corn in Iowa, dramatically increasing crop yields and revolutionizing American agriculture and global food production.
- **1954** – Frank Zybach's center-pivot irrigation system, developed in Nebraska, turned drought-prone arid flatlands into highly productive farmland, expanding where and how America could grow food.
- **1994** – Calgene's FLAVR SAVR tomato became the first genetically modified food approved for sale by the FDA, opening the door to modern GMO agriculture.
- **2016** – Matthews Company's energy-efficient grain dryers cut costs and energy use for farmers while protecting grain quality and reducing environmental impact.

Plug in: To learn more about American agricultural innovation, read ClearPath's **Agriculture Innovation 101s**.

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9. Coming down the pipeline

April 15, 5:30-6:30 p.m. GMT, London – **Niko McMurray** will speak on a panel, "Climate deadlines: Can nuclear energy deliver by 2050?" at The Economist's **Nuclear Summit**.

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10. ICYMI

- **AI cuts nuclear licensing timelines** – DOE, Idaho National Laboratory, Argonne National Laboratory, Microsoft and Everstar **used AI** to generate sections of an NRC licensing application in one day, saving hundreds of hours in a process that typically takes four to six weeks.
- **Urenco USA expands domestic enrichment capacity** – Urenco USA **completed** installation and startup of its fourth new gas centrifuge cascade in New Mexico, marking the halfway point of its U.S. capacity expansion.
- **Kings Mountain lithium project completes federal permitting** – The Federal Permitting Improvement Steering Council **announced** that the Kings Mountain Lithium Material Processing Plant in North Carolina completed federal permitting under FAST-41. The project will resume open-pit mining at one of the few known hard-rock lithium deposits in the U.S.
- **DOE invests $9.5M to quantify geothermal's grid value –** DOE selected eight projects under its **GRID initiative** to analyze how geothermal power supports the U.S. electric grid, using advanced modeling across Texas, the Western U.S. and PJM. The effort will help support more accurate valuation and investment in geothermal development.
- **Perpetua Resources secures EXIM backing** – The Export-Import Bank of the United States unanimously **advanced** a proposed $2.7B loan for Perpetua Resources' Stibnite Gold Project, triggering a 25-day review ahead of a final board vote. If approved, the financing would fund construction of a major U.S. gold-antimony project.
- **Direct air capture, now on draft** – California brewery **Almanac Beer Company** is carbonating its beer with CO2 pulled directly from the air. Berkeley-based Aircapture's modular direct air capture system produces beverage-grade CO2 that is 15 to 20 percent cheaper than conventional sources.
- **Federal permitting delays slow clean energy buildout** – A Crux **survey** found that inefficient federal permitting is driving project costs up 6-10% on average and that 72% of developers would like to see reforms that increase predictability and transparency.
- **Fusion hiring is surging** – Fusion Energy Base tracked **600+ active job** postings across 49 organizations since January 2026. Engineering roles outnumber physics postings, signaling the industry is scaling up and building hardware for commercial deployment.
- **The Atlantic Council released a new report –** It is on building a durable U.S.–Argentina critical minerals partnership to strengthen supply chains, drive investment, and advance shared economic and security priorities, including a policy recommendation to utilize Energy Security Compacts (**ESCs**) to help coordinate financing for mining and related infrastructure.

ClearPath believes America must lead the world in innovation over regulation… markets over mandates…providing affordable, reliable, clean energy.

That's all from us. Thanks for reading and have a great weekend!

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