The Clean Cloud Act

The Problem

Surging power demand from cryptominers and data centers is outpacing the growth of carbon-free electricity. According to LBNL, data centers use 4% of all electricity in the US and are projected to account for up to 12% of total US power demand by 2028. Utilities are raising consumer electricity rates and relying increasingly on gas and coal generation to meet this load growth. In some instances, retired coal plants have even been brought back online to power cryptomining facilities. Even in markets with solar or wind, data centers often run 24/7 and require either long-duration storage or clean firm generation to be truly carbon neutral.

The Solution

Impose an emissions standard on the electricity used by cryptominers and data centers. Reinvest the revenues generated from this in energy affordability programs, long-duration storage, and clean firm generation. The Clean Cloud Act would operate as follows:

- ***Conduct an annual survey of cryptominers and data centers:*** EPA working with EIA shall conduct an annual survey of the electricity consumption of U.S. data centers and cryptominers ("covered facilities") that have more than 100 kW of installed IT nameplate power.
- ***Publish survey data:*** Information about amounts of power consumption shall be treated as confidential business information, but the aggregate power consumption across all covered facilities owned by a company shall be reported, alongside the rest of the survey information.
- ***Establish emissions intensity baseline:*** The baseline begins at the emissions intensity (tons CO2e / kWh) of the regional power grid in 2026 and drops 11% every year, reaching 0 in 2035.

- ***Account for all emissions with the "3 Pillars":*** PPAs or other instruments representing clean power shall only be considered in this survey if they can demonstrate:
    1. Incrementality, avoided retirement, or curtailment of resources
    2. By 2028, hourly matching
    3. Deliverability
- ***Create emissions standard:*** Based on the information collected the EPA shall determine the greenhouse gas emissions associated with the electricity consumed by each covered facility and levy a fee for all emissions above the baseline. The fee begins at $20 per ton CO2e, increasing annually by inflation plus $10.
- ***Incentivize new clean power:*** To incentivize utilities to invest in clean generation, the fee for power purchased from the grid is levied on utilities and may only be recouped from covered facilities. For power generated behind-the-meter, the fee is levied directly on covered facilities.
- ***Support energy affordability and invest in clean firm:*** 25% of all revenues raised will be used to keep residential electricity rates affordable and prevent rate increases from data center loads; 70% will fund long-duration storage and clean firm generation; 5% for administration.