How to Solve America's Electricity Crisis

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America is in an electricity crisis. Shortages are now routine throughout the U.S.—and if we don't start increasing reliable generation very quickly, our grid will get crushed by the exploding electricity demands of AI.

The first step in solving the crisis is to understand it. At root, our electricity crisis is very simple: government is artificially restricting the supply of reliable electricity—then artificially increasing the demand for reliable electricity.

Government artificially restricts the supply of reliable electricity by destroying, delaying, and defunding reliable power plants. Here are 5 of the most damaging restrictions on reliable power that need to be reversed.

1. The near-criminalization of nuclear

In the '70s, clean, safe nuclear power became affordable and quickly grew to 20% of American power, with potential to get far more affordable and plentiful[1]. But crushing, irrational regulation made nuclear expensive or impossible to build.

Congress and the Administration should work to unleash nuclear energy from irrational, pseudoscientific regulations. For example:

- **The NRC should reject the unscientific "Linear No Threshold" (LNT) model** that falsely assumes there is no safe dose of radiation—and replace it with a scientific threshold-based model. This will remove the number one barrier to safe and affordable nuclear energy in America.
- **The NRC should rescind the "As Low As Reasonably Achievable" (ALARA) standard**, which effectively criminalizes cheap nuclear by mandating never-ending pseudo-safety spending. This will allow plant developers to offer ultra-safe nuclear to Americans at a competitive price.
- **The NRC should establish regulatory pathways for safe nuclear fuel recycling and reuse** as an alternative to costly "permanent storage." This will facilitate perfectly safe commercial recycling of used nuclear fuel if and when it becomes cost-effective.
- **The NRC should expand dry-cask storage capacity for used nuclear fuel** and establish regulatory pathways for industry ownership. This will empower industry to safely manage the storage of its own waste products—and do so increasingly cost-effectively.
- **The DOE should formally establish Nuclear Testing Zones on DOE land**, including National Laboratory sites, for performance-based testing of advanced nuclear reactor

[1] https://www.eia.gov/todayinenergy/detail.php?id=30972&utm_source=chatgpt.com

designs. This will make it far easier for developers to get new safe reactor designs tested and approved.

- **The NRC should conduct a formal assessment to explore whether microreactors (≤20 MWe) fall outside NRC's regulatory purview** under the Atomic Energy Act. This will pave the way for innovation on microreactors without introducing new safety risks.

Unleashing nuclear is crucial for our medium and long-term electricity future. But it's not a quick fix. To fix our grid problems as quickly as possible we need to address the policies destroying, delaying, and defunding the fossil fuel power plants.

2. Forced shutdowns of fossil fuel plants

Given the near-criminalization of nuclear, fossil fuels have been the only way to provide most of the cheap, reliable electricity we need. Yet EPA keeps passing rules that shut down coal plants and prevent new natural gas plants.

Congress and the Administration should work to set environmental standards based on proper cost-benefit analysis—including the near-infinite cost of an unreliable grid. For example:

- **The EPA should immediately rescind its GHG emissions standards for power plants**, which would effectively ban existing coal plants and new gas plants. This will prevent an unmitigated grid reliability disaster at a time that we need far more electricity.
- **The EPA should objectively calculate environmental benefits**. EPA justifies grid-destroying policies via absurdly inflated benefit calculations, e.g., claiming to save households $15,000 a year in health costs. Real benefit calculations will prevent it from imposing huge costs.
- **The EPA also needs to rigorously consider the full cost of policies**. EPA claims that shutting down reliable power plants is virtually costless! If EPA looks at the full cost of policies it will quickly see that power plant shutdowns fail the cost-benefit test.
- **The EPA should account for all the potential public health harms of its regulations**, e.g., increased mortality linked to higher energy costs. This will expose and prevent many instances where EPA policies would do more harm than good for human health, let alone in general.
- **The EPA should ensure that its regulations are achievable using commercially available technologies**. This will prevent the absurd practice of mandating unachievable emissions reductions (e.g., 90% CO_2 capture) based on speculative and economically infeasible technologies.
- **The EPA should publish all models, data, and analytical procedures used in regulatory impact analyses** to the extent permitted by law. This will allow independent verification of analyses and push EPA to give genuine science-backed justification for its policies.

- **The EPA should only use scientific studies with data available for full third-party replication**—no more "secret science." This will finally hold EPA accountable for its poorly justified regulations and enable an honest public reckoning.
- **The EPA should require expert advisors and researchers to disclose all external affiliations**, including funding sources, memberships, and employment history. This will reveal when the EPA employs activists masquerading as impartial scientists—which happens all too often.

3. Onerous permitting processes

In addition to outright shutting down and preventing fossil fuel power plants, government also delays them by adding numerous requirements to our already onerous permitting processes—such as quantifying globally trivial GHG impacts.

Congress and the Administration should work to put an end to onerous permitting processes for power plants. For example:

- **Congress should limit federal agencies' environmental review of projects under the National Environmental Policy Act** to direct and reasonably foreseeable effects of the projects. This will alleviate the leading cause of delays for critical infrastructure development.
- **Congress should reduce the scope of EPA's New Source Review permitting process to the construction of new emission sources and the expansion of existing ones**. This will allow reliable power plants to make upgrades faster in order to stay competitive.
- **BLM and USACE should create NEPA categorical exclusions for pipeline projects on federal lands and waters**, given that modern pipelines very rarely cause negative impacts. This will expedite approvals of desperately-needed pipelines without harming humans or wildlife.
- **The EPA should maximize its use of New Source Review's flexible permitting**, which simplifies the review process for new facilities and modifications to old facilities. This will encourage innovation and reduce costs for industrial facilities requiring frequent updates.
- **The EPA should model emissions from new facilities using probabilistic analysis of historical data**, rather than absurdly assuming that all sources emit at maximum levels simultaneously. This will prevent inflated estimates of air impacts that delay new projects.
- **The EPA should exempt new facility operators with pending applications from redoing air quality modeling when a new standard is adopted**. This will reduce costs and increase regulatory certainty for new facilities as well as incentivize investments in new infrastructure.

4. Market rules that devalue reliability

Not only does government destroy and delay reliable fossil fuel power plants, it defunds them by creating “markets” that have no price penalty for unreliability! This allows unreliable solar/wind to take money away from reliable plants.

Congress and the Administration should work to require grid regulators to reward reliability and punish unreliability—rather than absurdly doing the opposite. For example:

- **FERC should establish tech-neutral federal reliability standards** requiring grid operators to assign capacity value to electricity sources based on past dispatchability performance, not rosy hopes. This will improve grid reliability without unfairly preferring any energy source.
- **EPA should calculate the firm capacity of solar and wind as the available backup or storage capacity** in its regulatory benefit calculations. This will get unreliable power off the grid and drive innovation in backup and storage solutions that could make intermittent electricity truly reliable.

5. Subsidies for unreliable power

It’s bad enough that government-controlled electricity “markets” have no price penalty for unreliability, but it’s made far worse by subsidies that pay utilities *extra* for unreliable solar/wind—driving them to defund reliable power even more.

Congress and the Administration should work to remove or reduce subsidies for intermittent energy whenever possible. For example:

Congress should repeal all the IRA energy subsidies, but above all the “Clean Electricity” subsidies that favor unreliable solar and wind.

- **The DOE should refocus its National Transmission Needs Study on identifying grid vulnerabilities**, not catering to solar and wind expansion. This will enable the efficient direction of resources towards strengthening the grid instead of socializing solar and wind’s costs.
- **The DOE should limit special federal support for transmission corridors to those genuinely critical for grid reliability**—no more abusing designations to prop up solar and wind. This will fortify the grid against blackouts without unfairly preferring any particular technology.
- **The FTC should update its Green Guides to ban deceptive “100% renewable” claims** by corporations that buy “Renewable Energy Credits” to falsely attribute their fossil fuel use to others. This will dispel the deadly myth that businesses can run on solely solar and wind.
- **The DOE should investigate and disclose federal agencies’ purchases of Renewable Energy Credits (RECs)** to falsely claim emissions-free operations. This will

expose a gross misuse of taxpayer dollars that defrauds the public into thinking government can run without fossil fuels.

- **The DOE and GAO should investigate federal agencies' use of energy storage batteries** and publish a report comparing their cost-effectiveness to alternatives such as diesel generators. This will hold agencies publicly accountable for a huge source of wasteful spending.
- **The DOE and OSTP should stop using "Levelized Cost of Energy" to compare energy costs**, as it ignores huge intermittent energy costs like storage, backup, and transmission. This will help dispel the myth perpetuated by LCOE that solar and wind are cheaper than fossil fuels.
- **The Treasury should attach firming requirements as a condition for solar and wind operators to qualify for IRA tax credits**. This would force solar and wind to bear their own grid costs and minimize the damage of the IRA to our grid.
- **FERC should require solar and wind generators to bear the full costs of the backup, storage, and transmission they need to provide reliable electricity**. This will end the unfair practice of socializing the costs of intermittent generation across ratepayers or the grid.
- **FERC should investigate whether intermittent resources have a "capacity value" of zero** and are therefore ineligible to offer into capacity markets. This will, if successful, end undeserved capacity payments for solar and wind and redirect investment toward reliable energy.

Forced electrification

Destroying, delaying, and defunding reliable power artificially restricts the supply of reliable electricity, something we can't afford with increasing AI demand. And yet government artificially creates even more demand through forced EVs[2] and heat pumps.

Congress and the Administration should work to end forced electrification in its many forms. For example:

Congress should end all the EV subsidies in the Inflation Reduction Act. This will save hundreds of billions of dollars and remove dangerous artificial demand for our grid.

- **The EPA should rescind its deliberately unachievable emission standards for internal combustion engine (ICE) cars** and replace them with achievable standards. This will stop EPA's illegal partial ban on ICE cars and save consumers and automakers 100s of billions through 2055.
- **The EPA should rescind its onerous GHG standards for heavy-duty vehicles**, which would require 45% electric trucks by 2032—and replace them with achievable standards.

[2] https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-multi-pollutant-emissions-standards-model?utm_source=chatgpt.com

This will prevent EPA's illegal partial ban on ICE trucks and save automakers 100s of billions through 2055.

- **The EPA should reject or revoke approvals for state implementation plans for its latest PM2.5 standards** that unlawfully contain EV mandates or fuel economy standards. This will prevent states from embedding destructive EV mandates into air quality plans.
- **The NHTSA should rescind its overly stringent CAFE fuel economy standards for cars and light trucks**, and replace them with cost-effective standards. This will prevent excessive costs for internal-combustion vehicle buyers and safeguard customer choice in the automotive market.
- **The NHTSA should rescind its unachievable fuel economy standards for heavy-duty pickup trucks and vans**, and replace them with achievable standards. This will prevent a de facto partial ban on internal combustion vehicles by 2030.
- **The DOE should correct its fuel economy assumptions for EV battery performance**, which significantly inflate the fuel efficiency of EVs. This will eliminate 10s of billions in unfair cross-subsidies from ICE car buyers to EV buyers.
- **The DOE should revamp its Federal Energy Management Program (FEMP) program** to prioritize procuring reliable, low-cost energy solutions over "green" energy. This will reduce costs and strengthen the resilience of federal operations.
- **The FTC should rescind its proposed EV labeling rules, which guide manufacturers to label battery EVs as zero-emissions vehicles** despite their significant lifecycle emissions. This will reduce government's participation in the myth that EVs can exist and operate without fossil fuels.
- **The GSA should rescind all federal procurement of cost-adding EVs and EV charging stations on federal property**, as these violate the law by knowingly increasing costs to taxpayers. This will cut wasteful spending and raise public awareness of how their money is being misused.

Conclusion

As I said at the outset, our electricity crisis is simple: government is artificially restricting reliable electricity supply, then artificially increasing demand. The solution, then, is also fundamentally simple: unleash electricity supply and end forced electrification.

In practice, unleashing supply and ending forced electrification requires very specific policy solutions—which is why I included dozens of such solutions in this written testimony.

Now is the moment to go from electricity crisis to abundance, and I am ready to help in any way I can. [redacted]