Equitable Grid Principles

Guidance for Electric Grid Infrastructure Decisionmakers and Stakeholders in the MISO Region

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For more guidance on advancing equity with impacted communities, read the Jemez Principles for Democratic Organizing.

Preamble

The United States electric grid needs to be modernized to integrate wind, solar, and other renewable power to reduce climate pollution, support growth in electricity demand from buildings and transportation, address aging and inadequate infrastructure, stabilize costs, and bolster grid resilience. Our current electricity transmission infrastructure was built for a centralized power generation system, where electricity is generated at large, polluting power plants, and distributed over a wide geographic area. As the United States transitions to 100 percent renewable electricity, deploying large amounts of wind and solar, the landscape of power generation is changing dramatically to accommodate the characteristics of these new technologies. These investments have the potential to drive benefits to communities that have been most harmed by our current electricity system or to create new burdens, depending on the choices made. Similarly, the move to 100 percent renewable power will greatly affect the electricity transmission and distribution system, with corresponding impacts on communities that host the new grid infrastructure.

Decisions about electricity generation and electricity transmission are interrelated, each affecting the other. For instance, building new transmission infrastructure can enable new wind generation to come online in the Great Plains states and serve demand in the Great Lakes area. Likewise, the build-out of transmission along this corridor can affect future electricity generation decisions in the Great Lakes area, possibly disincentivizing local power generation. Also, where and how transmission is built can help close polluting power generation facilities sooner or extend their lifespans.

The potential repercussions from transmission build-out are a complex issue. More efficient transmission can lower electricity prices for many communities, including those affected by transmission infrastructure. However, it can also bring little value to electricity customers, or even added costs. Even if a transmission project has a great beneficial impact by making the grid more resistant to extreme weather events, improving reliability, lowering prices, or supporting renewable power generation, its siting—and the associated negative fallout—must be addressed head-on to avoid replicating the failures of our current power system. Impacted and historically harmed communities need to be part of the conversation and, ultimately, need to have agency in the decisionmaking process. That is what these principles are about.

Currently, the federal government has made more funding available for electric transmission system updates in the United States than ever before through new investment programs, grant funding, and lending administered by the US Department of Energy and the US Department of Agriculture's Rural Utilities Service. The transition to clean energy will require a significant increase in transmission investments over the coming decades. These changes to the grid will have profound implications for communities. This document proposes a set of Equitable Grid Principles focused on electricity transmission and distribution decisionmaking. When implemented, these principles will improve health, create good local jobs, provide financial benefits, avoid placing additional burdens on communities already vulnerable to environmental health hazards, and secure a reliable, clean, and renewable electricity system for generations to come.

The Equitable Grid Principles are intended to guide grid infrastructure decisionmaking. The principles were developed by 25 community and environmental justice leaders, electric grid analysts, and labor representatives who met in New Orleans, Louisiana, in October 2022. Below are the agreed-upon definitions important for understanding the pathway to an equitable grid.

Definitions

- **Equity** is the acknowledgment and reparation of past harms that creates a redistribution of decisionmaking power and resources toward a reality where communities thrive, no matter our race, wealth, gender, or other identities. The impacts of discrimination and injustice must be addressed at their root causes and not just at their manifestations. This includes the creation and adoption of new policies, practices, attitudes, and cultural messages that affirm race, class, and gender justice.

- **Grid infrastructure** refers to the wires, technologies, facilities, and systems that connect electricity generation to the people, buildings, and places where electricity is used. Grid infrastructure includes electric transmission, distribution, and non-wire alternatives, such as renewable-powered microgrids and demand response systems.

- The **Midcontinent Independent System Operator (MISO)** is an independent nonprofit entity created in 2001 and was the first regional transmission organization in the country approved by the Federal Energy Regulatory Commission (FERC), which also oversees MISO. MISO is governed by a board of directors elected by its membership, which is composed of transmission-owning utilities and companies in all or parts of 15 states. MISO manages the reliable flow of electricity across its territory, facilitates the buying and selling of electricity within its region, and plans the future of the electricity grid. MISO is an independent system operator (ISO); ISOs are a subset of the types of regional transmission organizations (RTOs) that are eligible for FERC approval.

- **Impacted communities** are communities that bear a disproportionate burden of negative outcomes from our electricity system and have access to fewer of its benefits. This includes communities closest to polluting power plants or other electricity and industrial infrastructure, communities further away that bear high health costs from power production and transmission, rural communities who play host to large-scale infrastructure they see little benefit from, communities who pay disproportionately higher costs around health and environmental risks as well as financial costs for electricity, and communities with poor or unreliable access to electricity. Impacted communities also include Black, Brown, and Indigenous communities who bear disproportionate burdens due to environmental and systemic racism.

- **Resilience** is the quality of electricity infrastructure to withstand or quickly recover from potentially high-impact events, such as extreme weather and other natural disasters. The term *resilience* should be used only in the context of the system or infrastructure that needs to be resilient. It should never be used in the context of communities to justify disproportionate risks and burdens placed on them by the electricity system.

The Equitable Grid Cohort met to address the issue of unprecedented new transmission investments being made within MISO, with impacted communities having little ability to exert influence. Our goals were to make grid decisionmaking processes more equitable, build trust, and listen to and learn from impacted communities.

Grid infrastructure stakeholders should use the Equitable Grid Principles in transmission planning, public utility commission processes, and other grid infrastructure decisionmaking processes. These principles should not replace engaging impacted communities directly. Impacted community members must be provided the opportunity to represent themselves in discussions about these principles. All members of the Equitable Grid Cohort should be recognized for their contributions to this document.

Lastly, the Equitable Grid Cohort recommends that stakeholders introduce these principles via a popular education model or participatory design approach. Popular education is a technique designed to raise the consciousness of its participants and allow them to become more aware of how an individual's personal experiences are connected to larger societal problems. Participatory design gives all stakeholders a sense of ownership over the ideas generated in response to a problem and helps ensure that the ideas and outcomes meet their needs.

Equitable Grid Principles

1. Indigenous Rights

All equitable grid planning processes must engage with affected Indigenous Peoples and communities from the earliest stages. This includes *all* members and groups within the communities, not only governing bodies and leaders. Indigenous communities with or without federal recognition must be part of decisionmaking. All decisionmaking entities should recognize tribal sovereignty, abide by treaty-protected rights, and support tribal energy governance objectives. Federal, regional, and state utility planning bodies should adopt the Free, Prior and Informed Consent (FPIC) standard as a framework for transmission development and decisionmaking—as guaranteed under the United Nations Declaration on the Rights of Indigenous Peoples and adopted by the United States. This includes a formal process for conducting consultations that engage all members of the affected community, not only selected representatives or leaders. Any process must also be flexible, recognizing the unique needs, cultural practices, and internal decisionmaking of each tribe and community. Rigid permitting time lines must be varied and extended as appropriate to respect Indigenous communities and to properly account for their views.

THE ISSUE

Indigenous and tribal communities have disproportionately borne the burden of our energy system, including electric grid development and siting of grid infrastructure. However, these communities are rarely considered in the decisionmaking. Entities engaged in electricity infrastructure planning at all levels regularly fail to respect the sovereign status of tribes or recognize the unique political relationship of Native people to the US state. The historic and ongoing dispossession of tribes and Native peoples from their land must be addressed. Decisions about transmission siting and other land use must acknowledge and address this injustice.

2. Accountable Decisionmaking

Grid infrastructure decisionmaking should establish and utilize a robust accountability system. This accountability system must prioritize the interests of people over profit and effectively reflect the perspectives of impacted communities, addressing their concerns from the beginning of the decisionmaking process to the end. Decisionmakers must avoid conflicts of interest regarding parties that financially benefit from the degradation of the welfare of communities considered for grid infrastructure siting. Decisionmakers must be prohibited from catering to parties that financially benefit from this harmful neglect. Grid infrastructure decisionmaking should include geographically, racially, and economically diverse representation. Grid decisionmakers such as the MISO Board should not be selected by or only accountable to electric industry insiders. Grid decisionmakers should protect against outsize influence by utilities and private actors. One way to implement accountable grid decisionmaking would be for MISO to establish a shared accountability committee empowered to oversee decisions. The shared accountability committee would be made up of a democratically elected set of impacted community members and workers. The committee

would have a democratic and equitable meeting process designed to ensure all members have equal influence and respect.

THE ISSUE

MISO and other RTOs are too heavily influenced by the interests of incumbent electricity industry players. Impacted communities and the general public are often marginalized in grid infrastructure decisionmaking at the RTO level. While state regulatory bodies can exert influence over RTO decisionmaking, these entities also suffer from an outsize influence of corporate and industry players. Once MISO or another RTO approves grid investments, challenging those projects at the state level becomes an uphill battle. Ultimately, decisions about the purpose and siting of billions of dollars in grid infrastructure are made with little public accountability.

Transmission organizations have outsize influence over member selections for the MISO Board of Directors. The requirements for sitting on the board do not readily allow for inclusive representation of a diversity of perspectives. MISO and other grid operators can and should be accountable to impacted communities. Although the context is different, California ISO takes a step toward public accountability by having board members appointed by the governor. A Massachusetts siting reform bill (H.3187) would require the Energy Facilities Siting Board to include representatives from environmental justice and Indigenous communities. These models reduce the authority of private actors and the utilities over grid infrastructure decisions. Impacted community members should be directly represented in grid decisionmaking and have clear opportunities to influence decisions from the beginning of each process. Currently, impacted communities have no formal power within MISO or state electricity regulatory bodies.

3. Accessibility and Procedural Justice

Electric grid decisionmaking bodies such as MISO and state utility commissions must be accessible to impacted communities and the public. Grid decisionmakers should prioritize using nontechnical language and maintaining a welcoming and equitable environment. Grid processes should feature culturally competent facilitation focused on accommodating diverse community members. Information should be transparent and provided with clear and accessible documentation. Grid infrastructure decisionmaking bodies should maintain a frequently updated grid transparency website. The website should use only accessible language and include meeting transcripts, key information about grid decisionmaking, and accessible opportunities for public comment, all in one place. Decisionmakers should provide robust opportunities for public input, including open-door or webcast meetings. Decisionmaking meetings should always allow sufficient time for direct public input or offer an opportunity for public comment to be submitted beforehand and registered into the record. Grid infrastructure decisionmaking meetings should be scheduled to accommodate impacted community members and be accessibly located. These meetings should include translation services, flexible times, and childcare options. Means for remote engagement that allow for public commenting and viewing of meetings should be provided.

Utility funds should be set aside in a dedicated account from which impacted communities engaging in grid infrastructure decisionmaking can draw to hire experts and representation to inform their members and represent their interests in technical matters requiring expertise.

This funding should be sufficient to cover communities' entire costs of participation, and utilities should have no influence over whether or how the funding is provided. State-level public utility commissions should routinely provide venues for public meetings about grid planning that integrates the work of MISO with state priorities. The degree of public accessibility of each grid decisionmaking body should be regularly evaluated and improved upon through a transparent, accountable, and equitable process.

THE ISSUE

MISO and state utility commissions are generally inaccessible to the public and to impacted communities. There is little transparency about transmission planning. Many decisionmaking and planning sessions are closed or have restricted access. Insider language and acronyms are widespread. Information is available in English only. Decisionmaking processes are often fragmented, complex, and catered to utility industry insiders.

4. Community Control and Governance

Grid infrastructure must be planned and implemented in collaboration with Black, Indigenous, and people of color communities; frontline communities; low-income communities; and impacted communities, using processes that support and encourage meaningful, broad-based, and community-based public participation as well as community-driven development. Planning must be respectful of community priorities, local cultures, customs, and ecosystems. Host communities should be given the opportunity to approve or deny contracts for companies suggested for infrastructure work. Contracts for the work should include a community benefits agreement designed to guarantee the benefits a community receives upon development. Decisionmakers leading the direction of this process should also provide financial mechanisms for community investment in grid infrastructure projects. Grid infrastructure decisionmakers must prioritize enabling equitable access to energy efficiency and renewable energy while providing a reliable and resilient electricity supply. Decisionmakers must provide opportunities for communities to share revenue and retain community control of grid infrastructure.

THE ISSUE

Communities that do not have control in transmission planning and implementation face challenges ranging from reliability, affordability, increased noise, air pollution, environmental degradation, and other problems resulting from shareholder and profit-driven regulatory control. Meanwhile, "local" concerns are often conflated with wealthy landowner concerns, giving private property owners weighted influence and access to the benefits from projects, even when a broader spectrum of community members are affected. In the Northeast and California, the Citizens Transmission model imparts ownership of a portion of the transmission to create electricity affordability and other opportunities for low-income families in the communities affected by the construction.

5. Local Control and Value

Prioritize locally controlled clean energy resources. Grid planning processes and their resulting grid investment decisions should seek to maximize the value of locally controlled

clean electricity, energy efficiency, and demand response resources, such as mini-grids and energy storage systems. These locally controlled solutions build community wealth, increase system resiliency, create jobs, reduce the risk of volatile fuel prices, and avoid extractive practices. When assessing the benefits of infrastructure projects, grid decisionmakers should use social welfare metrics aligned with the eight policy priorities for disadvantaged communities (DACs), as identified by the US Department of Energy's Office of Impact and Diversity:

1. Decrease energy burden in DACs.
2. Decrease environmental exposure and burdens for DACs.
3. Increase parity in clean energy technology (e.g., solar, storage) access and adoption in DACs.
4. Increase access to low-cost capital in DACs.
5. Increase clean energy enterprise creation and contracting (minority business enterprises and disadvantaged business enterprises) in DACs.
6. Increase clean energy jobs, job pipelines, and job training for individuals from DACs.
7. Increase energy resiliency in DACs.
8. Increase energy democracy in DACs.

Grid decisionmakers should use an "all-source procurement" approach that allows renewable and alternative technologies to compete with traditional fossil-based sources for transmission capacity and congestion relief projects. Decisionmakers should give priority to local distributed power solutions.

THE ISSUE

Current grid planning processes and investment decisions favor large, centralized, and often polluting power systems that marginalize the role of local resources and benefit for-profit utilities at the expense of community health and wealth. Grid infrastructure decisionmakers systematically discount and devalue local electricity solutions, such as energy efficiency, demand response, and distributed generation and storage, because they do not account for the value of these solutions in providing grid resilience, emissions reductions, cost savings, and community control benefits.

6. Prioritized Renewables and Energy Efficiency

Prioritize grid infrastructure that enables the retirement of coal, gas, and other polluting electricity facilities and supports clean, renewable power—including wind and solar—and energy efficiency. All forms of natural gas and coal, including "clean gas," "clean coal," coal with carbon capture and sequestration, fossil gas–based hydrogen, and blended (renewable and fossil gas–based) hydrogen, pollute and harm communities and should be avoided. Utility regulatory agencies and grid operator boards should direct transmission planners to enable the retirement of fossil fuel plants and support new, local, and clean electricity supplies when evaluating grid needs and future capabilities. Where public policy or private commitments regarding fossil fuel transition indicate the intention for shifting electricity sources, grid planners should be required to describe to the public alternative sources that meet the transition requirements.

THE ISSUE

Traditionally, transmission and other grid infrastructure was often planned and built to maximize accessibility to coal, gas, and nuclear power generation facilities. Allowing this practice to persist extends the life of polluting facilities and limits the production of clean, renewable power. Grid planners who do not consider fossil fuel transition and utility and who state clean energy and climate goals together with grid infrastructure decisionmaking are planning for a grid of the past, not the future.

7. Just Sourcing

Sourcing of materials and development of grid infrastructure must be done in a manner that mitigates long-term destructive environmental and social impacts. Grid infrastructure development should eventually eliminate the harm caused to communities from extraction and prioritize alternatives that benefit impacted communities. Special attention should be given to the Indigenous and rural communities and to workers that have historically borne the disproportionate burden of mineral extraction. Policy and regulations must protect the health and safety of communities and the environment in all phases of grid infrastructure development and deployment. This includes decreasing the demand for more resource extraction, ensuring a just and equitable supply chain, activating robust reuse and recycling programs that reduce overall resource demands, and enacting systems planning that reduces overall electricity demand.

THE ISSUE

Transmission and grid infrastructure equipment is constructed with aluminum, steel, and other materials extracted and produced by means that cause pollution, harm to communities, and irreparable disturbances to ecosystems. Various alternatives can be adopted for resourcing materials that lessen extractive and destructive processes. Steel can be recycled at high rates and processed using renewable energy–produced hydrogen. Aluminum can be made from renewable electricity. And batteries from electric vehicles can be repurposed and reused for grid storage. As the grid changes, some level of mineral production is likely unavoidable, but steps can be taken to minimize its negative effects. The Initiative for Responsible Mining Assurance is one standard that aims to reduce the damage caused by resource extraction.

8. Worker Rights and Protections

Workers engaged in modernizing our grid infrastructure should have access to safe, high-quality, well-paying jobs. Workers should be protected with up-to-date, comprehensive safety protocols and labor standards developed through inclusive, worker-driven processes and responsive to local conditions and community priorities. Grid infrastructure jobs should be made available first to workers in impacted communities. Grid infrastructure decisionmakers should aim to rectify past harms and neglect toward workers in impacted communities, raise the quality of life for workers and communities, and steward the environment. As industry professionals with a vested interest in protecting their membership, workers should be permitted to negotiate and set safety standards. All workers should be provided rigorous education about the electric grid transition, ongoing job training, and technical assistance. This education and training should be prioritized for workers from impacted communities and businesses owned by women and people of color.

THE ISSUE

The clean energy transition and the technologies applied for transitioning are rapidly evolving. Workers must be properly trained on and operate under up-to-date, comprehensive safety protocols. The pace and scale of the clean energy transition only exacerbate these challenges. Members of impacted communities are rarely given opportunities for job training and hiring as grid infrastructure is built. Local workforce expertise is not always considered during the construction and build-out phases of grid infrastructure. The drive for economies of scale or other corporate efficiencies often overlooks the geographic diversity of our clean energy transition and the community-specific conditions and priorities that must be addressed for project success. Robust licensing, insurance, and training requirements that are broadly inclusive and available to host communities are critical but not guaranteed through typical procurement processes.

9. Climate Resilience

Grid planning processes and investment decisions pertaining to them must address overall system resilience under a broad range of plausible scenarios, including historic extreme weather case studies such as Hurricanes Ida and Laura and Winter Storms Uri and Elliott. Risk avoidance must be considered a major factor in resilience planning, not just the ability to withstand extreme events. Grid infrastructure decisionmakers should account for and prioritize the value of building and enabling local, reliable, and flexible emissions-free electricity solutions for grid resilience over fossil fuel infrastructure. Examples of emissions-free grid resilience solutions include microgrids, “virtual power plants,” community solar, energy storage, and other distributed generation technologies. Grid planning should prioritize strong connections between regions that enable the free flow of clean energy when and where it is needed as an important part of increasing grid resilience, powering critical infrastructure during blackouts, and reducing climate pollution.

THE ISSUE

Grid resilience planning often considers only a narrow range of moderate to severe weather scenarios that does not capture the growing risk of high-impact events, such as extreme weather or cyberattacks that can lead to cascading effects and overall system failure. Recent historic episodes such as Hurricanes Ida and Laura and Winter Storms Uri and Elliott show us that the centralized power system is inadequate. Fossil fuel power plants go offline during extreme weather, and the transmission system is not connected sufficiently to buffer these failures. Distributed energy resources, a modernized electric grid, and targeted solutions for the infrastructure and communities most vulnerable to power outages are all necessary to attain grid resilience. Investing in people and a system of transmission that prioritizes protecting critical infrastructure and impacted communities leads to thoughtful planning and a safer, healthier, longer-lasting, and more reliable grid.

The Equitable Grid Cohort, met in New Orleans, Louisiana, in October 2022 to address the issue of how unprecedented new transmission investments are being made, and what can be done to ensure these investments incorporate community voices and are equitable. PHOTO: Colin Byers/UCS

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