THE ENERGY DEMOCRACY PROJECT

A PEOPLE'S HISTORY OF UTILITIES

The Energy Democracy Project developed this Playbook with the support of many of its affiliated organizations.

The Energy Democracy Project is a collaboration of more than 30 diverse, local, frontline organizations across the U.S. to strengthen their collective efforts to democratize energy and advance the emerging energy democracy movement in the United States.

The Project serves as a collective resource to advance the efforts of organizations working to democratize energy in the United States.

For more information visit energydemocracy.us

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WHO IS IN CHARGE?

Right now, the United States largely gets its energy from extractive fossil fuels that have harmed communities here and around the globe. During COVID-19, thousands if not millions of families had their energy shut off because they couldn't pay their bills, showing just how many households are on the edge of losing access to a basic service before the pandemic.

But who is in charge of our energy system? And why? The answers to these questions are crucial for us to understand if we want to transform the energy system to be resilient, renewable, and affordable to all. It is critical to informing our analysis of power so that our communities can effectively organize.

Electric utilities have expanded into almost every aspect of our lives to become one of the most powerful and concentrated industries on Earth.

That is why we created the People's History of Utilities. This brief timeline tries to put the different institutions and infrastructure that makes up our energy system today within the context of political and power struggles. How our energy system runs or is governed is not a given. It is the product of over one hundred years of political struggle.

The initial purpose of a utility was to invest in a public service that was difficult for individuals to provide on their own, distribute that public service in a coordinated way to a large number of users, and recoup the investment (often with corporate profits) by selling access to that service.

Electric utilities have expanded into almost every aspect of our lives to become one of the most powerful and concentrated industries on Earth. Not only that, but many of the most powerful ones are now privately owned, holding the needs of shareholders above communities.

Electric utilities are at the heart of the climate crisis, and the heart of the inequitable concentration of wealth and power that leads to a deeply unjust society.

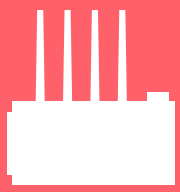
Electric utilities are at the heart of the climate crisis, and the heart of the inequitable concentration of wealth and power that leads to a deeply unjust society. Electric utility associations, like the Edison Electric Institute, spend much of their time developing coordinated strategies to defeat any threat to their power. As a result, communities have become beholden to these utilities and their associations and are forced to depend on them to meet nearly all of the communities' basic needs.

The People's History of Utilities is not a comprehensive history—that would take many more pages and time. And due to legacies of racism, gender violence, colonialism, and corporatism, marginalized communities' voices have often been left out of history telling. The authors have done their best to highlight crucial moments of change in the energy system, and recognize the work of organizers, particularly Black, Indigenous and people of color, who came before us.

A HISTORY OF ENERGY UTILITIES

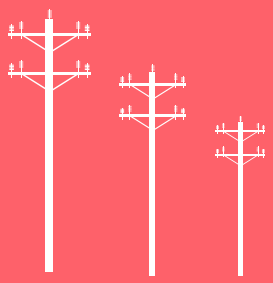
THE BEGINNING OF WIDESPREAD ELECTRICITY

While electricity has been around us all along (in our neurons, in the sky, and generated by every living thing in small quantities), harnessing it as a usable force for lighting, industry, and manufacturing was an invention of the late 19th century. During that time, it was cheaper to build massive power plants—usually coal or hydroelectric dams—that served a large number of people over a service area. By the start of the 20th Century, the electricity system contained three distinct parts:



Generation:
the power plants (largely coal and hydroelectric power at the time)

Transmission:
big, high-voltage lines that take the energy created in the generation stage across long distances to substations located in communities



Distribution:
smaller lines that take the energy from local substations to houses, factories, or buildings

THE RISE OF CORPORATE UTILITY COMPANIES

With the rise of electricity came the opportunity to profit from it. Thomas Edison (one of the early electricity developers) converted his inventions into a for-profit, shareholder-owned business that provided power to Chicago—the Commonwealth Edison Company in Chicago. A student of his, Samuel Insull, took the process of building electric empires to the next level when he took over the company in 1892 and began forming and acquiring other utilities across the country. By the 1920's Insull **controlled utilities** in 5,000 towns in 32 states. Electricity began its transition from a luxury item in wealthy homes to an integral part of everyday life in most homes.

To finance this rapid expansion, Insull, and soon other competing companies, turned to wealthy investors by offering stock in emerging utility companies, based on the promise that customers paying for electricity would pay off these investments over the long run, resulting in a steady profit for shareholders. Thus began the era of the investor-owned utilities (IOU).

An **Investor-Owned Utility** is an energy utility that provides energy to customers for a profit, in service ultimately to its shareholders.

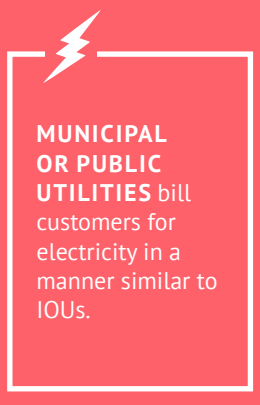
INVESTOR-OWNED UTILITY: An energy utility that provides energy to customers for a profit, in service ultimately to its shareholders.

PUBLIC POWER ENTERS THE SCENE

As corporate investor-owned utilities began to set up power plants in some of America's largest cities, other cities decided that they wanted electricity too. Hundreds of communities formed publicly owned municipal utilities to provide electricity between the 1890s and 1910s; over 3,000 communities **formed municipal utilities** by 1923.

Municipal or Public Utilities bill customers for electricity in a manner similar to IOUs. They use customer revenues to pay for power lines and power plants, purchase electricity from other utilities, and operate and maintain utility systems. However, unlike IOUs, municipal utilities don't generate profit for private investors—net revenue is, at least in theory, either reinvested in the municipal utility or in other public services at the local level.

By the 1920s, most US cities were served by either corporate or municipal electric utilities, and competition between the two models had already led to major power struggles regarding how utilities would be regulated. Rural communities, meanwhile, were left figuratively and literally in the dark.



MUNICIPAL OR PUBLIC UTILITIES bill customers for electricity in a manner similar to IOUs.

THE TRANSITION TO "NATURAL MONOPOLIES"

As generating and selling electricity became increasingly profitable, multiple private power companies—sometimes competing with local municipal utilities—began trying to serve the same communities. Each utility would own and operate one or more power plants and route powerlines from its plants to its customers. Because of a lack of regulation, companies would string up their own wires across cities as they fought over customers, creating a mess of electric distribution lines that were both eyesores and fire hazards.

Thus, came the idea of **Natural Monopolies:** Given the high fixed costs of building plants and power grids, it made more sense for one entity to do it all for a geographic area — build the power plants, generate the power, and deliver it to customers. Public power advocates in the early 1900s saw this as an opportunity to promote public control, as a **larger play** to stop corporate control over other critical infrastructure like the railroads.

In response, investor-owned utilities fought to become "**regulated monopolies**" to beat back the growing movement for public control over energy. This means that the state would allow a private utility to be a monopoly, and in exchange, the utility would be subject to more government oversight. While this reflects an unusual instance of capitalists proactively seeking government regulation, it also powerfully represents how the electric industry was largely successfully in getting state and federal governments to treat protecting shareholder profits and upholding corporate monopolies as central to the public interest.

NATURAL MONOPOLIES
One entity to do it all for a geographic area — build the power plants, generate the power, and deliver it to customers.

REGULATED MONOPOLIES
The state would allow a private utility to be a monopoly, and in exchange, the utility would be subject to more government oversight.

Public Utilities Commissions or Public Service Commissions (they go by other names as well) are usually appointed by the Governor of the state, though they are elected in some states. They regulate the rates that utilities charge customers and approve locations of power plants, among other things. PUCs and PSCs have also become a key element of the institutional framework protecting the utility business model and ensuring profitability of energy utilities—and a core forum for regulatory capture by the monopoly utility. Public utility commissions across all 50 states, D.C., Puerto Rico, and the Virgin Islands, exchange information and regulatory strategies via the National Association of Regulatory Utility Commissioners (NARUC). Municipal utilities and rural electric cooperatives are often not regularly or lightly regulated by PUCs, since they are supposedly "member/customer regulated." However, in practice, many of these coops allow only limited engagement of member-owners/customer-owners when electing board members, as seen by low voting rates.

By the 1930's, ten massive utility "holding" companies held 75% of the energy utility companies, owned largely by either **JP Morgan or Samuel Insull.** A **Utility Holding Company** is a central utility company that owns a partial or complete interest in many other utilities, consolidating the operations of several smaller companies.

As private utilities consolidated their power, they formed the **Edison Electric Institute (EEI)** in 1933, a trade group for investor-owned utilities that has operated for over a century. It has used its political power to protect corporate utilities, fight against renewable energy (in modern times), and advance state and federal regulatory environments favorable to corporate utilities.

PUBLIC UTILITIES COMMISSIONS OR PUBLIC SERVICE COMMISSIONS
Regulate the rates that utilities charge customers and approve locations of power plants, among other things.

UTILITY HOLDING COMPANY
A central utility company that owns a partial or complete interest in many other utilities, consolidating the operations of several smaller companies.

THE FIGHT TO TAKE BACK THE UTILITIES

UTILITY INDUSTRY ABUSE & THE NEW DEAL

While PUCs and PSCs were supposed to regulate electricity partners, IOUs used their power to get decisions that were favorable for their profits. A wave of campaigns to fight the massive price gouging and political co-optation by electric utilities took place in the 1920s and 1930's. Cities across the country fought to kick out the investor-owned utilities.

After a monumental legislative battle, the **Public Utility Holding Company Act (PUHCA)** was passed in 1935. As part of the New Deal (a package of progressive policies during the Great Depression), this law worked to break up the big utility holding companies, weakening the power of utilities to manage regulation and policy in their favor. PUHCA served as a major force against concentrated utility power until it was repealed by the Bush administration's Energy Policy Act of 2005.

The federal government wasn't alone in pushing back on corporate utility power. A large number of local communities fought to retain their municipal utilities or form new ones. There are still almost 2,000 municipal utilities operating in the United States. In fact, the state of Nebraska is exclusively served by public power and rural electric coops. Publicly owned utilities provide electricity to around **25-30%** of all energy users in the US today.

ELECTRIFYING RURAL AMERICA

While most urban communities had electricity by 1932, very few rural homes did. Advocates for rural power succeeded in persuading Franklin Delano Roosevelt's administration to create the Rural Electrification Administration in 1935. Grassroots networks of rural people formed the co-ops with financing from the federal government. A **Rural Electric Cooperative** (REC) is a member-owned utility that exists to provide electricity for its members. Today, the US has over 800 Rural Electric Co-ops, serving about 14% of Americans over 80% of the physical area of the US.

Unfortunately, most Rural Electric Co-ops ultimately drifted away from their **democratic roots,** and from the onset were not built to support a thriving multiracial rural community. Board elections in many co-ops became rubber stamp affairs, with current Board members controlling nominations for future candidates and lucrative Board positions being passed around within (largely white) families. In hundreds of rural electric co-ops, many members are not even aware that they are member-owners of a democratically controlled utility. In rural communities across America, local groups have begun to organize to take back democratic power over their rural electric co-ops and lead the transition back to community-controlled energy through renewable power.

RURAL ELECTRIC COOPERATIVE (REC)
A member-owned utility that exists to provide electricity for its members.

POWER MANAGEMENT AUTHORITIES

A final key piece of the New Deal's efforts to reform the utility system came in the form of Power Management Authorities which were established by the federal government to use electricity development, often through major hydroelectric dam projects, to spur regional development. The most prominent of these, the **Tennessee Valley Authority (TVA),** coordinated regional economic development in the southeast through the construction of hydroelectric dams in the Tennessee River watershed. The TVA began with a broad development and conservation mandate and a range of projects beyond dams from canning collectives to erosion control, but the focus eventually became cheap electricity.

At the same time, the dams that the TVA and other Power Management Authorities developed flooded many small rural communities. These rural communities disproportionately consisted of Black farmers in the South and Indigenous cultural and residential sites, and are examples of a growing range of federal projects displacing local people. The Bonneville Power Administration, a similar organization developing hydropower in the Columbia River Basin, has led to many parts of the Pacific Northwest having some of the cheapest electricity in the country while also devastating salmon fisheries essential to both Indigenous communities and commercial fisheries alike.

THE ENERGY REGULATORY SHAKE-UP

REGULATION EXPANDS TO DETERMINE WHAT UTILITIES ARE ALLOWED TO BUILD

Electric power use grew exponentially. Most utilities' rates were regulated so that they made a given profit margin (a set rate of return, e.g. 8%) on the amount of infrastructure (power plants, powerlines, etc.) they built. This meant that the more they built, the more money they made. In the 1960s and 1970s, environmentalists began to question the health and environmental impacts of all the power plant construction, while economic justice organizers began to sound alarm bells about the massive economic burden it was adding to society.

Organizers argued that utilities should be forced to demonstrate why their estimates of energy demand were accurate and why power plants were cheaper for the public than investing in energy efficiency and later, supporting local energy generation projects. Through these efforts, by the 1980s, a new process—called an **Integrated Resource Plan,** in which utilities have to defend their estimates for future electricity use and evaluate and propose the best option for meeting that need—was born. **Integrated Resource Plans** are now required of major utilities in most US states and have helped slow the rush to build infrastructure.

INTEGRATED RESOURCE PLAN
A process in which utilities have to defend their estimates for future electricity use and evaluate and propose the best option for meeting that need

"DEREGULATION" AND OPENING ELECTRICAL MARKETS TO CORPORATE COMPETITION

In the 1970s, high prices of fossil fuels during the OPEC oil embargo and rising public distrust of nuclear energy led communities to start seeking alternative energy sources. But even when cleaner technology became available, the investor-owned utilities generally would not agree to buy energy from these facilities because it competed with their own power plants and threatened the source of their profit.

Over the late 1970s and through the 1990s, many states "deregulated" their electricity markets, (a slightly misleading term since many aspects of the utility system continued to be regulated in these states). **Deregulated electricity markets** broke up energy utilities into monopoly transmission and distribution utilities that managed and maintained the grid, and generation companies that sold power on a competitive basis. Deregulation was supported by a combination of environmentalists interested in using competition as a lever to get less carbon-intensive energy and believed competition could drive down prices.

While most customers in deregulated states have a choice over their energy provider, many are unaware of this option and default to getting their energy from the old monopoly anyway. In some areas, predatory power marketers have taken advantage of low-income communities and communities of color, offering cheaper energy but including contract clauses that allow them to increase energy rates later. However, deregulation of the energy supply has enabled 100% clean energy suppliers, often with little or no cost premium, to emerge in many of these states in recent decades.

DEREGULATED ELECTRICITY MARKETS
Breaking up energy utilities into monopoly transmission and distribution utilities that managed and maintained the grid, and generation companies that sold power on a competitive basis.

DEREGULATION CRISIS FROM ENRON TO TODAY

As trading of energy between power suppliers and distribution utilities became easier following deregulation, abuses became easier as well, the most famous of which being the Enron scandal in California in 2001. By strategically coordinating power purchases across the California region, Enron and its affiliates were able to create severe energy shortages that sent the prices of electricity through the roof in certain areas, allowing Enron to make billions by selling their hoarded energy supply contracts back to strained local distribution utilities. In addition to costing California energy users billions, these practices also triggered rolling blackouts across the state as energy traders withheld energy generation until prices got high enough for them to make huge profits.

Enron's actions highlighted the dangers of competitive electric markets when energy traders collude to corner the market. However, once the scandal was revealed, the crackdown was swift. The nationwide rush toward deregulation slowed, though many states maintained their deregulated energy markets.

Throughout the deregulation era, the growing 'competition' that emerged and was encouraged was still largely between major corporate players who owned power plants worth tens or hundreds of millions (if not billions) of dollars. Ordinary people and their local communities were excluded from the opportunity to participate in generating and owning their own energy.

ENVIRONMENTAL CONCERNS TRANSFORM THE ENERGY SECTOR

CLEAN AIR AND CLIMATE CHANGE

In the 1960s and 1970s, the environmental movement went after energy utilities for their central role in air pollution, including acid rain caused by sulfur dioxide emissions and mercury contamination from coal-fired power plants. As part of the Clean Air Act of 1970, energy utilities were required to add new equipment to their power plants to remove much of the harmful air emissions.

However in the 1990s, the utilities were able to amend the law so it worked as an emissions trading scheme. Each utility was given a limit of the amount of sulfur dioxide it could emit and could achieve this limit either by directly reducing its sulfur dioxide emissions or by purchasing additional credits from other utilities that had reduced their emissions below the permitted amount. While it reduced some overall pollutants, this market mechanism created new ways for utilities to profit. Environmental justice communities fought against the trading program because it meant that their communities often saw no improvement as the utility simply bought credits and maintained existing emissions levels.

As climate change became more evident, energy utilities actively worked to suppress information and public concern on environmental issues and climate change in order to stop the energy transition. Advocates have mobilized across the country to stop fossil fuel expansion, invest in renewable energy, and facilitate other campaigns for energy transformation.

At the same time, utilities doubled down on their investments in fossil fuel energy and expansion. As recently as the early 2000s, energy utilities had plans to build as many as 150 new coal-fired power plants nationwide. Fortunately, nearly all were successfully opposed by the hard work of organizers and their legal teams. These utilities have also begun rapid waves of new construction on project like gas-fired power plants. Though a flourishing movement of environmental and climate justice advocates have united to stop their construction and end our reliance on gas, utilities have been able to leverage many strategies to thwart such progressive action.

THE RISE OF ENERGY DEMOCRACY

Environmental justice organizations nationwide have grown in power, stitching together national power for environmental and climate justice. The first two National People of Color Environmental Justice Summits in 1991 and 2002 helped align this growing movement. The platform of the 1991 summit was based on the notion that no one should have to endure the burdens and hazards that are inflicted upon frontline communities and, subsequently, created an agenda to dismantle environmental racism. Networks like the African American Environmental Justice Action Network (AAEJAN), Farmworkers Network for Economic and Environmental Justice (FNEEJ), the Asian Pacific Environmental Network (APEN) and others have helped to weave together many different local organizations and launch efforts such as The Just Transition Collaboration.

Over the past twenty years, the idea of energy democracy and energy justice has been building. In 2017, energy democracy activists put together a seminal storytelling book, "Energy Democracy: Advancing Equity in Clean Energy Solutions," highlighting the work of 10 different frontline energy democracy organizations from across the United States. They then started the Energy Democracy National Tour 2018, connecting stories of frontline organizations across the U.S engaged in a broad range of energy democracy efforts. Grown out of the tour, in 2019 the **Energy Democracy Project** held its first convening, bringing together allied groups, largely local and BIPOC-led organizations, to share knowledge and build collective action.

Energy democracy follows in the environmental justice tradition, with a focus on the fundamental need to restructure our energy system physically and procedurally, to put communities - particularly those most impacted - at the center. In the last fifteen years, a growing range of community-based clean energy initiatives have emerged that focus on bringing power over energy decisions back to communities and making the benefits of clean energy more equitably available. Energy democracy activists are generally aligned with these efforts to constrain the monopolistic and profit-seeking practices of energy utilities. Democratizing energy involves bringing more of our energy system under public control in service to public interest, creating deeply participatory processes guided by community needs, and ensuring the benefits of the energy system are structured equitably.

Although each is imperfect, here are examples of initiatives which have provided opportunities for activists to push energy democracy strategies, goals, and organizing:

Municipalization, the right of a local government to take over and operate the utilities within their local area, has been a clear right of many communities for decades. The challenge is not simply to create public utilities, but to make them publicly accountable. Some communities, like Boulder (CO), have sought to establish local energy utilities to secure 100% clean energy that is affordable for all and that spurs community-based clean energy development. In recent years grassroots efforts in Decorah, Iowa; Minneapolis, Minnesota, Chicago, Illinois; and New York, New York have begun to do the same. Cities, such as Winter Park, Florida, have shown that municipalizations can secure cheaper energy rates, better reliability, and higher customer service. Investor-owned utilities have fought these efforts at every turn as they see such consumer-based change as a fundamental threat to their market share.

MUNICIPALIZATION
The right of a local government to take over and operate the utilities within their local area,

A handful of states, many of them deregulated (so individuals already have competitive supplier choice), have authorized a new structure called **Community Choice Aggregation (CCA)**. The CCA structure allows cities, counties, or tribal governments to **procure energy supply** for energy users in their jurisdiction, while relying on the incumbent private utility to provide transmission and distribution services. Most Community Choice agencies offer cleaner and less expensive energy to their customers and some offer a 100% renewable power option. More significant, however, is the potential of Community Choice to be a vehicle for developing and deploying distributed energy resources for our communities—as an economic development platform for advancing energy equity and building sustainable and resilient energy systems.

In the last decade, a number of states have begun to pass **community solar programs** (also called community shared solar or virtual net metering), in which energy subscribers to a shared facility can receive benefits of the facility's clean energy production. While the model has the potential to be **deeply equitable** and has been implemented in this way in some cases, there are also many examples of these programs being used by private developers to create large solar projects whose main beneficiaries are corporations or large institutions adding little benefit for local communities.

Community-wide access to **energy efficiency** has been another area where some communities have made major progress toward equitable energy savings through the **Pay-As-You-Save®** model (PAYS). PAYS is a model by which a utility provides funding to cover the full upfront costs of home energy upgrades like insulation and efficient appliances. The utility then recovers those costs through monthly payments via the costumer's energy bill. The model also works for renters, because neither the landlord nor the renter must invest money upfront, and both the current renter, and all future renters, experience the benefits of more affordable, healthy, and safe home energy services.

COMMUNITY CHOICE AGGREGATION (CCA). Allows cities, counties, or tribal governments to procure energy supply for energy users in their jurisdiction, while relying on the incumbent private utility to provide transmission and distribution services.

Members of Rural Electric Co-ops too have been organizing across the country to **restore democratic accountability** to their cooperatives and facilitate a shift to community-owned clean energy and energy efficiency. Members have successfully organized to elect new board members who are supportive of greater member democracy (transparency and accountability) and who are willing to push for reforms in how rural electric co-ops compensate management and distribute profits to their members. Additionally, these newer community-accountable board members work to shift to energy purchasing that prioritizes member-driven community energy.

In all of these initiatives, energy democracy organizations and affiliated grassroots movements are pushing to return ownership of energy resources and local energy decision-making to their communities. They are working to ensure that the decision-making process, benefits, and ownership of our energy system are deeply accessible to low-income communities and communities of color.

These initiatives are meant to make energy utilities servants of communities and the public interest, as opposed to overlords making energy decisions that hurt our health, our wealth, and the planet. Fundamental to these successes is replacing the centralized, utility-driven energy model with a decentralized, community-driven model that prioritizes the development and deployment of distributed energy resources in our communities. In this way, we create real, equitable clean energy solutions and put power back into the hands of we, the people.