Transitioning to a 21st Century Energy System

A Moment of Great Peril, and Possibility, for New York State’s Energy Sector Workers

BY:
Ross Gould, Esq., Workforce Development Institute (WDI)
Lois Johnson, Workforce Development Institute (WDI)
Ellen Redmond, International Brotherhood of Electrical Workers (IBEW)
Lara Skinner, PhD, ILR Cornell University

A Workforce – Focused White Paper on Just Transition from the International Brotherhood of Electrical Workers of New York State

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Introduction
Since 1890, the International Brotherhood of Electrical Workers (IBEW) has responded to the U.S. and Canada’s electricity needs, striving to provide high-quality power generation and electrical service under safe and fair working conditions. Established at a time when 1 out of 2 “line” workers were killed on the job, members of the IBEW helped string the nation’s first telegraph and telephone lines, construct and operate power plants that provide electricity for our homes, businesses and factories, develop and maintain the nation's electricity transmission grid, and manufacture a wide variety of products that include electric motors and generators, light fixtures, all types of household appliances, broadcasting and entertainment equipment, telecommunications equipment, and scientific and medical equipment. The IBEW has played a leading role in developing safety standards for the electrical industry and developing a world-class four to six-year training apprenticeship program that produces highly-skilled tradespeople to meet the nation’s current and future energy needs.

Climate change presents a number of major challenges and opportunities for the electrical industry and its workers. According to the world’s leading scientists, avoiding the worst impacts of climate change – droughts, fires, floods, superstorms, food shortages and more, all catastrophes that hurt working people first and worst – requires a drastic reduction in greenhouse gas pollution and a major transformation of our electrical system to low-carbon, renewables-based energy sources.

The IBEW is committed to meeting the nation’s current and future energy needs and has developed leading training programs on solar, wind, energy efficiency, electric vehicles and battery storage to prepare its members for a 21st century electrical system that addresses climate change. The National Joint Electrical Training ALLIANCE, a partnership between the IBEW and its industry partner NECA, has created a nationwide network of hundreds of privately-funded state-of-the-art training facilities that produce thousands of highly-skilled workers who are ready to meet the nation’s solar, wind, energy efficiency, storage and other future electrical needs. Many of these renewable energy programs have been around for more than three decades. In the 2019 State of the State Address, in response to the climate crisis, NYS Governor Cuomo announced that NYS would accelerate its transition to a renewables-based energy economy by procuring 100% carbon-free power by 2040, 70% renewable electricity by 2030, 9 GW of offshore wind by 2035, 6 GW of solar by 2025, and 3 GW of energy storage by 2030. As NYS moves forward with these efforts to respond to climate change, it is imperative that New York State implement and fund a proactive, comprehensive and bold “just transition” plan that protects and supports the workers and the communities that will be significantly impacted by this shift. In addition, the New York legislature recently passed, and Governor Cuomo is expected to sign legislation aimed to reduce greenhouse gases 85% by 2030, as well as codifying the Governor's goal of 70% renewable energy by 2030 and 100% carbon free by 2040.

Currently, there are approximately 14,000 workers directly employed in New York State’s power plants and oil and gas construction, distribution and operations infrastructure. These workers are employed at NYS utilities and plants in occupations such as; linemen, groundmen, equipment operators, boiler operators, I & C techs, maintenance mechanics, electricians, welders, control room operators, and dispatchers, meter installers, meter readers, field reps, clerical workers, cable splicers, substation electricians, warehousemen, communications techs, fleet servicemen, and relay technicians. In reality, there are over 130 natural gas, coal and oil power plants spread across New York. As of 2017, 9/10’s of NYS’s net electricity generation came from natural gas, nuclear power and hydroelectricity, and 88% of NYS’s greenhouse gas emissions from the electrical sector come from natural gas. In short, it will be a major feat - with many labor, employment and community impacts - to transition NY from its current energy composition to a carbon free electrical grid.

Too often, plants shut down with short-notice, leaving workers without their jobs and communities with far less tax revenue for their local budget. The closure of one plant can devastate a local economy, negatively impacting teachers, schools, firefighters, police officers, sanitation and other public sector works who depend on the tax
income of these power plants. For example, the closure of Indian Point will reduce the Hendrick Hudson School District tax revenue by 30%.

Unlike some European countries that have social safety nets, workers in the U.S. depend on their employment for health care, retirement and other benefits. For unionized workers, who have fought hard to secure good working conditions, including fair wages, excellent health care coverage for their families, retirement pensions, and career-long training opportunities, job loss is particularly painful. When union workers lose their jobs, it also jeopardizes the health and pension benefit fund for all members of the union, including retired members, because currently employed members fund those programs.

While the U.S. has tried to implement “just transition” programs in the past, none of these programs have sufficiently addressed the breadth and depth of the devastation that workers and communities experience when their jobs and industries disappear. The GI Bill, Trade Adjustment Assistance (for the steel and other manufacturing industries), and the Redwood Forest Assistance program (for loggers and logging communities) are the main examples of federal programs that have been created in the past to protect and support workers and communities during times of major economic decline and upheaval. Numerous reviews of these programs have shown that these programs did not reach all or even a vast majority of the workers who were displaced; provide an adequate level of long-term support for displaced workers; or proactively or comprehensively address communities need for a coordinated, well-funded and long-term alternative economic development plan and model. Insufficient inclusion of and engagement with the workers and community members who are most affected by the transition underlies the deficiency of many of these programs.

The shortcomings of past “just transition” programs center around three main issues. One, there must be new, well-paid jobs in the local region for displaced workers to transition to for “just transition” to work. For example, when trade liberalization and automation caused a significant decline in the U.S. steel industry, the U.S. federal government set up the Trade Adjustment Assistance program. While this program provided training support for displaced workers, most workers reported that they were not able to find jobs that paid as well as the jobs they had lost in the steel industry.

It’s also important to keep in mind that the local economy of a region is often based around a particular plant or industry, so when the plant or industry shutdown, it has major negative economic and social impacts on the whole region. This means that not only are the workers who are directly employed in the impacted plant or industry displaced, other workers in the region may be displaced, too, resulting in an expanded number of workers looking for new jobs. For example, when the Huntley coal plant closed in western NY, the loss of tax revenue from the plant caused three local schools to close. These closures harmed the local education system and caused job loss for the many community members who worked in the schools.
What is Just Transition?

“Just Transition” is a broad concept that encompasses the idea that if society enacts laws that result in lost jobs and closed facilities, those workers and the host communities should be held harmless. Just Transition recognizes that support for environmental policies is conditioned on a fair distribution of the costs and benefits of those policies across the economy. Just Transition is not a prescriptive set of rigid policies to be applied rotely in every situation. Instead there are some generally agreed principles that must be followed in seeking to implement a Just Transition. Those principles include:

1. No economic harm to workers or communities.
2. Create jobs that have family sustaining wages and benefits. Renewable energy jobs and jobs in other emerging sectors must be good jobs. The transition cannot be a race to the bottom.
3. Incorporate local economic development
4. Authentic training for jobs in good paying fields that will actually be in the community in which displaced workers live
5. Knowledge sharing
6. Labor standards and collective bargaining
7. Social dialogue
8. A sector approach customized to regions and work process. Just transition differs regionally different regions have different economic opportunities and resources and community character and composition. So, it looks a little different in Western New York then it does on Long Island.
9. The process must be equitable and inclusive. Just Transition needs to have an equity framework where all of society equally shares the benefits and burdens.

The types of policies that translate the principles into action should include, wage and benefits protections, labor standards, funding for training programs, among others. To have a just transition, you must enact and implement measures in each of the following categories:

i. Wages, benefits and bonuses
ii. Labor Standards for the new jobs being created in emerging technologies
iii. Skills development
iv. Social protections
v. Funding
vi. Active labor market
vii. Equity and inclusion. All members of the impacted workforce and communities must be protected from harm as well as have a seat at the table in developing and implementing a Just Transition plan.

A Just Transition is achieved when dislocated workers and host communities are left unharmed by the closure of a power plant. This means that workforce transition plans are developed and implemented and that workers receive wages and benefits while looking for a new job or training for a new career in an emerging sector. That new opportunity for work keeps the worker within the community that he or she resided in when their job at the power plant ended. That new job has the same labor standards, collective bargaining rights, and upward career mobility as the one that preceded it.

For the host community, similarly a Just Transition is one in which the community does not unfairly suffer from society’s necessary shift from fossil fuels. In a Just Transition, the host communities receive payments for the lost tax revenues, they receive support to develop local economic development plans and for plans to refurbish and reuse the facility. Private and public funding is used to invest in implementing the plans and repurposing the facility. The community’s schools are compensated and unharmed for loss of tax revenue. In addition, members of the community are not unfairly faced with increased taxes as a result of closing the facility.
The concept of “Just Transition” arose out of the labor movement. Tony Mazzochi of the Oil, Chemical and Atomic Workers Union realized that enacting environmental protections would result in his fellow union members losing their jobs.\(^1\) To ensure that workers were not harmed by these policy changes he proposed that since “[t]here is a Superfund for dirt there should be a Superfund for workers.” The Superfund for workers, modelled on the GI Bill, would provide financial support and funds for higher education and other supports for displaced workers. The GI Bill sought to help soldiers returning from WWII transition into peace-time careers by providing unemployment compensation for one year, education tuition assistance, living assistance for education and vocational training, and low-cost loans for those seeking to start businesses. The GI Bill is widely credited with being the foundation upon which the most prosperous middle class in our history was built.

Over time, the idea of a “Superfund for Workers” became known as “Just Transition” and spread into environmental, environmental justice and social justice communities, as well as moved into the international climate dialogue. The preamble of the Paris Climate Agreement states that the signatories are “[t]aking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities.”

Recently, we are starting to see the elements of Just Transition find their way into plant closure agreements. In 2016, it was announced that Diablo Canyon, the last nuclear power plant in California would close in 2025. An agreement was reached between the utility, environmental groups, and labor unions that provided $350 million for retention bonuses, retraining funds, and community investment funds. The agreement also included a plan to replace the power with 100% renewable power.\(^2\) As a result of this agreement, workers near retirement can get a bonus for staying on at the facility and earn extra income going into retirement and for younger workers the deal provides funding for training in other careers. In addition, the community received $85 million to help it plan for and cover the lost revenues from taxes. This allows the community to keep critical services.

In Australia when the Hazelwood Power Station closed with 5 months’ notice, a deal was negotiated between labor unions, the owner of the power plant and government that provided a smoother transition for the dislocated workers. The agreement resulted in a fund of $15.3 million dollars that assisted 150 workers in their transition. The money was used to provide payouts for early retirements, for incentives for employers that hired dislocated workers and skills training.

While the measures are important, how you implement the measures and a Just Transition is equally important. To implement effectively you must: 1) understand your particular local context; 2) focus on generating new jobs and creating new sectors; 3) plan ahead and give yourself a transition runway; 4) convene a dialogue with workers and communities to gather and share information and make decisions about local economic development and workforce planning; 5) develop workforce and community transition agreements; 6) make the case for just transition; 7) and implement measures collaboratively developed in the planning process.

**Recommendations**

We make the following recommendations, to ensure that workers and communities are held harmless, while New York continues to push forward with its climate goals:

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\(^1\) See [https://www.labor4sustainability.org/uncategorized/just-transition-just-what-is-it/](https://www.labor4sustainability.org/uncategorized/just-transition-just-what-is-it/)

\(^2\) Despite an agreement between workers, the utility, community and others, the process for concluding the agreement has not been so simple. The settlement required the approval of the California Public Utility Commission. The Commission while voting to approve the closure the Commission gutted the Just Transition portions of the agreement. The parties then had to seek legislative approval to overturn the PUC. The parties worked to have SB 1090 introduced and in September of 2018 it was signed into law by Governor Jerry Brown of California. The bill reinstated the $350 million worker transition funds for retention bonuses and training, as well as the community funds.
1. **Just Transition Taskforce and Just Transition Plan**

Identify a lead state agency, create a Just Transition Taskforce and initiate an inclusive regionally based planning processes to mitigate potential transition losses for workers and communities as a result of climate policy. The Task force should consist of representatives of the workforce and community. The task force must regularly seek input and feedback from community and create a comprehensive long term just transition plan for New York State. The Task force would be required to have open public meetings that allow for meaningful input and allow all those affected the opportunity to be a part of the dialogue.

As sectors and workforce varies across the state Just Transition will vary regionally as well. Therefore, the task force should create regional working groups to develop regional plans. This process should not be incorporated into and must remain separate and distinct from the Regional Economic Development Councils as the subject is much broader than laser focus of the REDC process.

2. **Commence a Social Dialogue**

Just Transition cannot be successful without input from the community, workers, businesses and others who are impacted by climate policies. Through dialogue you can uncover the best local economic development and workforce plans and set the stage for diverse investments into community rebirth. This dialogue needs to be a dedicated institutional process. A dialogue would consist of discussions where participants can discuss, be provided with resources and make decisions about how to respond to the challenges of the transition. Dialogue has led to development of successful, albeit limited plans used in places like Diablo Canyon.

The state should take immediate steps to begin a dialogue in every community across New York, that is likely to lose power generating facilities as result of climate policies. Begin by convening the workers and members of the impacted communities to begin a discussion about climate change’s impacts on the workforce and host communities. Provide them with information about climate change, its impacts and causes; the impact climate change has on the communities and the workforce, and regional economy; and information about emerging jobs and sectors. Such a dialogue is meant to help workers and communities own and engage policies and strategies that affect their jobs and income and communities.

3. **Comprehensive Workforce Plan**

Employment dislocation plans often pay cursory attention to the specifics of how to transition a workforce into emerging jobs, with the predictable result of poor outcomes for many workers. Sufficient resources, expertise and supports should be allocated for the development of an effective workforce plan, which includes:

- Detailed competency and skills maps for each impacted position, current and emerging new energy jobs and regional employment opportunities with similar requirements.

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Education and training options for workers that allows them to rapidly re-skill for jobs in demand that recognizes their current and transferable skills, provides competency-based training, learn and earn, and credit for prior learning opportunities.

4. **Workforce Impact Statements**

Just as the government is required to perform environmental assessment and environmental impact statements, it should also be required to assess the workforce impacts of its actions. A workforce impact assessment would be used to understand the workforce impact of any executive, agency or legislative action as part of the plan to transition to 100% carbon free electricity. The statement would shed light on the occupations and job titles that are at risk of loss, as well as the jobs and required skills for the jobs created. Questions to be addressed include but are not limited to, a review of the jobs that will be impacted, an assessment of the wages of the impacted jobs, how many new jobs will be created and the wages for those new jobs, benefits, safety standards and working conditions of the new jobs.

5. **Assess and Designate Potential Funding Sources and Create a Just Transition Fund**

To ensure that workers and communities are not harmed in this transition, we need ample funding to ensure that displaced workers receive the appropriate level of social protections such as wages, benefits, training and/or funds for a dignified retirement during the transition. In addition, communities will also require funding to hold them harmless for the loss of the tax revenues for schools, infrastructure and government services.

Experience has shown that inadequate funding is a major reason why dislocated worker and community investment programs fail to fully support the communities and workers. With the transition we are discussing it’s not just one plant and one community, we are talking about a majority of the approximate 130 fossil fueled power plants in New York. These plants are in municipalities and school districts across the state with some jurisdictions containing multiple power plants. An assessment of the amount of funds required to support workers and the communities is critical.

We recommend that New York State and other stakeholders begin to explore funding amounts and sources for use in creating a Just Transition Fund. There are many sources of funds. The money can come from existing sources, such as the Clean Energy Fund, the Regional Greenhouse Gas Initiative, the Green Bank or new sources of revenue can be created, such as a price on carbon, a fee on stock transfers or a millionaires tax.  

6. **Brownfield and Dormant Power Plants**

Reimagining the sites of retired power plants, such as the Huntley Plant in Tonawanda, NY is another way that facilitate the Just Transition of fossil fuel workers, while growing good local jobs and spurring sustainable economic development. One example would be to establish a New York State Renewable Reclamation Projects Program. Such program would encourage reclamation of dormant electric generating sites, certain brownfield sites and other eligible properties, by private

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4 We take no position on any of these sources of funding or on the appropriate amount of revenue required to fully fund the Just Transition Fund. The revenue sources listed here are merely for illustrative purposes and should be assessed as part of the process we outline in our recommendation.
entities or energy corporations, and stimulate the development of these sites into viable renewable electric generation and/or electric energy storage facilities with minimal impact to the New York State energy markets. The reclaimed sites would generate electricity from either wind, solar, hydroelectric and/or storage sources and would have to be strategically located to allow for a more optimized, secure and flexible renewable electric power system.

The program should include an “on the ground” team comprised of members with experience in regulatory and legislative policy and have strong relations with State agencies and Legislators; who have experience in consensus building and community engagement, understand utility policies, environmental concerns and protocols. The team would serve as a network for community support efforts and evaluate existing transmission, substation and load profiling. The state should establish an interagency task force for the Huntley plant that could be a model for other communities in the state, and potentially the nation.

In addition, proactive engagement from NY’s State Agencies should be encouraged to take advantage of properties already environmentally comprised versus degradation of rural and agricultural space. This would be both economic and environmentally prudent.

7. Pilot Program

This is not a policy exercise; it is happening in real time. New York is on a path to close the last remaining coal plants—and others have already closed over the last decade. In several New York communities we need to get boots on the ground to implement a program to provide a Just Transition for those workers and communities. We therefore recommend that while the advanced planning to look regionally at each facility is ongoing the state commence pilot programs to help those most at risk workers and communities.

For a pilot we must:

1. Choose a facility or several facilities.
2. Assess the situation at the facility and in the surrounding region
   a. What is happening at plant? What are the job titles, skills, demographics, career pathways of workers at plant?
   b. What is happening in the community? Are there other similar jobs? No jobs? Other closures nearby? Or other at-risk facilities?
3. Convene the workers and community for a dialogue.
4. Develop a task force comprised of worker, community, industry and government representatives to develop and implement workforce and economic development plans, hold public convening and meetings.
5. Focus on creating new local good jobs:
   a. Create a local economic development plan
   b. Invest public and private dollars in economic development
6. Develop and implement a workforce plan that includes a negotiated workforce transition plan.
7. Set up and staff local workforce resource centers with resources to allow for one on one meetings with dislocated workers.
8. Gather public and private funding to allocate and implement funding.
8. Inclusion of Labor and Environmental Justice Voices in State Bodies Responsible for Implementing Climate Policy

Whether positive or negative climate actions (and climate inaction) impacts the workforce and communities. Labor and environmental justice input, and dialogue allow for the crafting of policies that take the workers and communities viewpoints, needs and values into consideration from the start. This is the most likely way to have a Just Transition for workers and communities in which they live.

CONCLUSION

With rightfully bold climate goals, New York must take immediate action to implement a Just Transition for those workers and communities that are impacted by those policies. That is what justice requires. No one should be unfairly burdened in efforts to correct environmental degradation. The best way to ensure justice for workers and communities is to plan for it. The IBEW has offered several recommendations in this paper; some of which will require robust investments in workforce retraining, building community and finding viable alternative revenue sources for local governments. We should not shy away from new ideas or bold ideas that will provide for the workforce of today and tomorrow.

We need to find common ground on how we move forward without unrealistic goals that foster extreme postures, such as the vilification of all fossil fuels in New York recognizing that power generation emissions have dropped significantly in recent years. We know all too well that a plant closure can have significant ripple effects for local businesses that have received the indirect benefit of the workers who use their businesses while working at the power plant. When these closures happen as a result of a societal choice to close, then we must put in place social protections, replacement jobs, training programs, funding to cover the lost wages and taxes, and economic development plans to create new opportunities for the community in replace of what was lost at the facility.

The IBEW hopes that the recommendations contained in this white paper contribute to a mutual understanding and respect regarding how we move forward recognizing the contributions of the fossil fuel workforce. With that, we think we will find a common vision around a shared definition of what a “just transition” actually can be.