

# The Utility Workers Union of America, AFL-CIO

Shaping Michigan's energy Future:

**A REPORT BY THE UTILITY WORKERS UNION OF AMERICA**

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To the Michigan Senate Energy and Technology Committee



## SHAPING MICHIGAN'S ENERGY FUTURE: A REPORT BY THE UTILITY WORKERS UNION OF AMERICA, AFL-CIO

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The Utility Workers Union of America is a national labor organization whose 50,000 members work in the electric, gas, and water industries. The UWUA has nearly 9,000 members in Michigan alone, the vast majority of whom are employed in the energy industry. Our members work for publicly and privately-owned utilities of varying sizes across the State, including: Alpena Power Company, Bay City Light and Power, Cherry Land Electric, Consumers Energy Company, City of Croswell Public Lighting, The Detroit Edison Company, Grand Haven Light and Power, Midland Cogen Venture, Traverse City Light and Power, Utility Lines Construction Company, (the contract firm that operates and maintains the International Transmission Company's infrastructure), and Zeeland Power and Light. Collectively, these highly skilled women and men work in generation, distribution, transmission, field service, customer service, and design and planning. They are on the job, 24/7, working to ensure that Michigan consumers receive safe and reliable energy to power their homes, businesses, and communities. The importance of the utility services they provide cannot be overstated. They are the backbone of the quality of life afforded Michigan families and the engine for the State's economic growth.

In the past few months, and in conjunction with the Commission's examination of the State's energy future, we have sought input from our Michigan members on their experiences in operating and maintaining Michigan's essential utility infrastructure. In conducting our membership survey, we have focused on two sets of concerns: (1) the current status of each utility's physical and "human" infrastructure; and (2) the issues that Michigan utility workers believe must be addressed going forward if the State's utilities are to be able to continue to meet their obligations to provide safe and reliable utility services in a reasonable manner for decades to come. The results we report here constitute a highly-informed perspective on where our utilities are today, and what we need to be doing to ensure that they have a bright tomorrow.

Following the presentation of our findings, we offer our recommendations on near-term actions that the UWUA asserts are critical to shaping Michigan's energy future. We believe these recommendations are key to ensuring that Michigan continues to have energy supplies that are reliable, efficient and safe.

### *The UWUA Findings*

Overall, Michigan's utilities are understaffed. The absence of sufficient trained and experienced employees has adverse, ripple effects on physical utility assets, the provision of essential utility services, business development in Michigan, and the quality of the lives of both Michigan customers and utility workers. Moreover, the aging of the utility workforce in Michigan and elsewhere is exacerbating this problem.

As aging workers and their years of institutional knowledge and experience retire, the failure to plan properly will leave an inadequate pipeline of new replacements.

If the current and forward-looking staffing concerns raised here are not addressed promptly, the safety, quality, and reliability of the services that the State's residents and businesses demand and deserve may be compromised. We urge that actions be taken now to ensure that the State's utilities are staffed—today and into the future—with experienced and sufficiently trained personnel.

The specific survey findings that underlie these concerns include:

*Staffing Cuts and Related Impacts on Service Quality.* Almost universally, our members cited concerns over the very substantial staffing cuts that have been implemented by Michigan's utilities. While the precise levels vary by employer, the general direction is unmistakable: the in-house workforce of the State's utilities has been slashed. Some of our locals report as much as a 50% reduction in the size of the workforce as compared with levels in the 1970s and 1980s.

During this same multi-decade time period, the workload facing our State's utilities has not diminished. As this Commission well understands, system loads, related customer demands, and the complexities of providing utility services are increasing, not decreasing. While the Great Recession has had an adverse impact on Michigan's economy, the demand for reliable and high quality utility service remains an essential and ever-increasing driver of economic development. The growth of the

digital economy and high-tech businesses, the increased automation of industrial processes, and the proliferation of electronic equipment in homes, heightens the importance of ensuring that the State's utility services are highly reliable.

In our members' experience, staffing reductions have largely been accomplished by attrition. Our members have referred to the continued trend of attrition of staff due to the following; age, employees moving on, and people being terminated without replacement. After decades of such depletion, the State's utility workforce consists of overworked employees who are finding it difficult to keep up with essential day-to-day operation and maintenance activities and system emergencies. Crew sizes have been reduced, and preventive maintenance activities are being curtailed. We have heard that maintenance is no longer included at certain locations in some utilities' daily schedules, and such activities are undertaken only where equipment has failed. Others report that facilities are no longer being maintained as they once were. For example, "squirrel protections" are no longer being installed at one employer's substations, resulting in increased outages. Others report that some utility infrastructure is "crumbling," and that certain facilities are in "shambles," while others report cutbacks in disconnect lubrications and battery maintenance for reclosures.

In the face of inadequate staffing, our members (especially those working in power plants) report that their utilities have adopted a troubling approach to the maintenance of physical utility infrastructure: "run it until it breaks." Our members

report that repairs are initially done in a "triage" fashion, with crews being assigned later to complete the repair. This method, necessary due to the absence of adequate staff, takes time to accomplish and can result in multiple customer interruptions. On the distribution side, we have been told that even where systems have utility poles in place that are beyond their service lives, they will be replaced only when they fall down. And, when that happens, it may be typical for two or three more rotted poles to fall down with them, along with multiple cross-arms. Our members report that some utilities are ten years behind on tree trimming and pole replacements, and 20-30 years behind on re-conductoring work. In general, they indicated that the employers have moved into a "fire department" mentality as opposed to engaging in appropriate long-term planning for the future. This concern appears to apply both to physical and human utility infrastructure.

Our members' perception is that the only time most of the utilities will make a substantial repair or a necessary upgrade to a piece of equipment is if there is money to be made in doing so. They support this point by indicating that during the past few years, some employers have been looking more and more at finding ways to capitalize the cost of a repair instead of conducting maintenance (the cost of which is expensed). They point to instances in which there have been repeated underground cable failures due to age in certain circuits, but no relief is provided until the entire circuit is replaced. Similarly, our members note that at some utilities, tree trimming has taken a back

burner to other activities because trimming trees does not make money for the company or its shareholders. Our members note that preventative maintenance procedures, particularly on equipment that is not used regularly (except for emergencies or circuit interruption) has been lacking, and they express concern that this failure will result in safety issues and potential injuries in operating utility equipment. (We should also note that, so far as we can tell, this perception exists with respect to shareholder-owned companies, and not at their cooperatively or municipally-owned counterparts.)

As employees retire, our members report that positions remain unfilled, and that utility employers are increasingly imposing stand-by or on-call requirements upon their distribution workforces, as well as demanding a significant increase in overtime. Workers refer to increasing "windshield time," which describes the amount of driving crews must do to respond to customer issues as service centers are closed and combined and the corresponding customer service territory is increased. Morale is low, as the increase in required overtime has put a strain on the workforce and on the family lives of utility workers. Our members referred to concerns about marital problems as a result of being overburdened at work. The stress they experience because of their absence from home is matched by the stress they are feeling due to inadequate support at work. Some members characterize their situation simply: "work never ends." And as decreased preventive maintenance is often accompanied by system breakdowns, increased fatigue is often accompanied by increased injuries. Workers are fearful of

rejecting overtime because the employer may respond with threats of discipline (or discharge), or suggest that contractors can be brought in if the workforce "doesn't want to work". To be clear, the issue is not that the State's utility workers are unwilling to "do more with less." The problem is that Michigan's utilities are understaffed and their employees are overworked.

Michigan's utilities have in fact turned to contract labor in the place of maintaining, in-house, an adequate supply of well-trained and system-experienced utility workers. Our members point to instances in which there are more contractors on a particular job than in-house utility workers. At one particular power plant, contractors are on site so often and in such significant numbers that permanent trailers are used to house them. Far from a solution, increased reliance on contractors creates far more problems than it ever will solve.

Contractors are not subject to the same standards and protocols that are followed by in-house personnel. While contractors are required to conduct their work in accordance with federal and state law, utility-specific standards may often be far more stringent. While it is obviously imperative that contractors conduct their operations in accordance with Company-specific standards, the reality is that when this occurs, it is only by happenstance. As contractors and permanent staff do not receive the same training concerning in-house protocols, there is little reason to believe that they will follow those protocols.



The training differences are reflected in substantive outcomes. Our members point out that contractors come with varied work backgrounds. We have been told that even those who are familiar with the utility system on which they are working will make errors, and all such mistakes must be corrected by in-house crews. On the distribution side, our members report that they usually discover the result of poor work performed by a contractor when they are sent out to troubleshoot or work on a piece of equipment. This could be months or years after the work has been done. In the power plants, rework by in-house crews becomes necessary before a generating unit can be brought on-line. By contrast, contractors do not have to repair their mistakes years later, as they have moved on to the next job. Our members also express concern that because of the double standard that is applied with regard to following prescribed safety standards, the in-house workforce may appear to be not as productive in the field when compared to contractors.

More broadly, the motivations of contractors and in-house staff are diametrically different. Contractors bid low to get jobs, and then work hard to cut corners in order to turn a profit. In-house personnel are salaried employees, who have invested professional lifetimes in the utility and its customers. They have a "duty to serve" approach that is not part of the contractor business model. In short, contractors "don't have the same work ethic and do not follow the same work procedures."

The same kinds of issues arise when there are weather-related emergencies, and "mutual aid" workers from other utilities are brought in to assist in service restoration. Our members point to an increasing use of mutual aid, presumably because of an absence of adequate in-house staff to perform service restoration. While cooperation and resource sharing among utilities is of course a good thing, our experience is that over-reliance on out-of-state utility workers who are not familiar with the specifics of our State's utility systems can be very inefficient. Our members express concern as to the quality of work done by mutual aid workers who lack familiarity with the utility systems on which they are called to work. Worse, our members point out that on some occasions mutual aid assistance has fallen apart because when a weather event strikes the service territory of the mutual aid crew, they pull-out and go home.

In general, and in the absence of any assessment or cost-benefit study to the contrary, the UWUA's sense is that reliance on mutual aid should be kept to a minimum. We believe that this objective can be achieved if the utility's day-to-day field staff is properly trained and sufficient in size to perform ongoing maintenance (including preemptive maintenance) in an efficient manner. The best way to ensure system resiliency is to have sufficient in-house staff on-hand to operate and maintain the system efficiently.

*Future Staffing Issues.* Our members almost universally have expressed concern that they are part of an aging and older workforce, and bemoan the absence of efforts to

“fill the pipeline” with younger workers. While our State’s utility workforces are aging, we see little evidence that that utility management is up to the task of ensuring that we will have a sufficient supply of new workers into the future. Our members report instances in which management has acknowledged that it has done a poor job of preparing for future retirements. Others profess that they are unaware of programs to hire new employees. Even where such programs are in place, concerns have not been mitigated. Some members expressed frustration over employers who go through the motions of holding community college and school-to-work programs, yet do not hire the majority of participants, or fail to commit to providing a job at the end of the program to successful participants. Even where there is hiring, it is insufficient to keep up with attrition.

This situation only adds to the stress facing Michigan’s utility workers. The workforce experiences an increase in daily work demands as their co-workers retire and no-one replaces them, or the replacements that are hired are slow to arrive. The training needed to become a productive utility worker is lengthy: our members point out that an apprenticeship alone can be four years, which does not equate to proficiency in the field. It can take upwards of ten years to become fully competent. From the (informed) perspective of our members, the efforts being made to address these concerns are not up to the task.

The failure to address "graying" workforce issues is particularly troubling in that the State's utilities have no basis on which to claim that they were unaware of aging workforce issues, and therefore no excuse for failing to take action to address them. Concerns over utility worker retirement is a well-documented and a nationally-recognized concern. Nationally, the average age of an electric or natural gas utility worker in 2010 was 46.1 years old. By contrast, the U.S. Bureau of Labor Statistics has determined that as of 2011, the median age of an American worker was 42.1 years old. Looking at 2011 data from one major Michigan utility, 87% of the workforce is over 40, while an astonishing 67% are over 50 and 50% of the workforce are age 55 and older, with 13% of the workforce being 60 year of age or older. Unfortunately, these data are typical of what we are seeing across the state.<sup>1</sup>

In 2011, the Center for Energy Workforce Development, a national group of utility companies, their trade associations, and unions, including the UWUA, predicted that by 2015, a staggering 36 percent of the current electric and natural gas industry skilled workforce may need to be replaced due to retirement or attrition. Between 2009 and 2011 alone, the number of line workers decreased by 0.5%, the number of transmission and distribution technicians decreased by 1.1%, and the number of plant operators dropped by 5.6%. These data demonstrate the need for the State's energy

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<sup>1</sup> These data are from materials filed with the Commission in *The Detroit Edison Company*, Case Nos. U-16472 and U-16489. 2013 data we reviewed from another major Michigan utility show that 48% of the overall workforce at that utility is age 50 and older; 25% are age 55 and older, and 12% of the workforce is age 58 and over.

decision makers to get a handle on how Michigan's utilities are addressing workforce demographic issues, and whether their efforts are adequate and timely.

We note that these national studies are in line with findings here in Michigan. A March 5, 2012 report by the Commission's Staff, entitled "Consensus Report on Technical Conferences Conducted on May 17, 2010 and February 9, 2011 – Training Needs for Electric and Gas Utility Workers" concludes:

The urgent need for the development of a trained skilled and experienced utility workforce is clear. The aging utility workforce together with the aging utility infrastructure will threaten reliable delivery of natural gas and electricity, as well as public safety, unless a comprehensive strategy for training a new generation of skilled utility workers is developed and implemented. The question is how Michigan is going to address the problem and accomplish the task of ensuring that trained skilled experienced workers are available to ensure public safety and provide reliable and efficient energy to the State of Michigan in the near future and the future.

Michigan is not the only state to identify the need to investigate workforce graying issues. In September 2012, a Task Force established by Maryland Governor Martin O'Malley issued a report on grid resiliency issues in that State. Entitled, "Weathering the Storm: Report of the Grid Resiliency Task Force," the report notes a concern about utility worker retirements, and urges that the subject be evaluated:

The Task Force recommends the PSC commence a proceeding or proceedings aimed at studying and addressing various issues relating to the utilities' human infrastructure, including the so-called "graying" utility workforce. First, the Task Force is concerned that the data

reveals a significant downturn in personnel per circuit mile over the past decade. While there was not sufficient time during this process to investigate this issue in great detail, it would be an appropriate line of inquiry for the PSC to determine whether there are sufficient personnel on the ground to make the repairs necessary. The concerns raised during the Human Infrastructure roundtable about the adequacy of current staffing levels deserve a substantive vetting that is beyond the scope of this Task Force.

Report at 87-88.<sup>2</sup> The Maryland Public Service Commission has acted on this recommendation, and opened an investigation into staffing practices at Maryland's electric distribution utilities.<sup>3</sup>

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<sup>2</sup> The full report of Governor O'Malley's Task Force is available at [www.governor.maryland.gov/.../GridResiliencyTaskForceReport.pdf](http://www.governor.maryland.gov/.../GridResiliencyTaskForceReport.pdf)

<sup>3</sup> *In the Matter of the Electric Service Interruptions in the State of Maryland Due to the June 29, 2012 Derecho Storm*, Case No. 9298, Order No. 85385 (Feb. 27, 2013).

### *Recommendations*

We share the State's interest in identifying data needed to make sound choices regarding Michigan's energy future. Our membership survey has been an effort to compile such data and to support the Commission's important effort. Based on the results of our investigation, we present the following recommendations that we believe the Commission should pursue. The UWUA stand ready to assist in efforts to do so.

Specifically:

- *The Commission should direct each regulated utility to propose and support a baseline staffing level for in-house personnel, and should monitor the extent to which those baseline levels are being met.*

Our survey makes clear that Michigan utilities face significant human infrastructure challenges, and that many (if not all) of the State's utilities will need to increase their numbers of full-time, in-house personnel. There is simply too much work and too many issues for too few utility workers. The utilities must be sufficiently staffed to be able to be proactive in terms of maintenance practices. Preventative maintenance must once again become the norm, rather than the exception. Our State's utilities can and must do better.

The concerns we raised should not be left for Michigan's utilities to address. They have not been willing to acknowledge the need to staff operations adequately. Worse, and as noted above, the financial objectives of regulated Company management

are to the contrary. In these circumstances, we ask that the Commission open a proceeding (or proceedings) to establish baseline staffing levels for each of the regulated utilities. Once the baselines are established, each Company should be required to hire to that level, and to fill promptly vacancies that may occur from time-to-time. The Commission should also establish requirements for the utilities to submit periodic reports assessing actual staffing levels against baseline levels, so that utility compliance with staffing commitments can be monitored.

As part of these proceeding, we suggest that the Commission review annual utility staffing levels since the advent of deregulation. This action is needed because, as our members have made abundantly clear, the number of skilled workers is dropping, while the number of customers and the demands they place on utility infrastructure are increasing.

We noted earlier that this investigation would be similar to the proceeding initiated by the Maryland PSC following its experience with the June 2012 "Derecho" storm experienced by States in the Mid-Atlantic region. Our proposal is also similar to an initiative being undertaken by the New Jersey Board of Public Utilities. On January 23, 2013, and acting in response to the State's experience with Hurricane Sandy, the New Jersey BPU announced 103 separate measures to be implemented to improve distribution preparedness and responsiveness to major storms. The activities to be undertaken include requiring each regulated distribution utility in the State to submit to



the BPU a detailed staffing review that explains any decreases, in the last five years, in headcount and the impact on the company's ability to provide adequate resources for restoration purposes. As no state is excluded from the increase of severe weather events or the disruptions to the grid,<sup>4</sup> Michigan should learn from others' experiences, and strive to get ahead of the curve on the important question of utility staffing and its relationship to service reliability.

Any claim by the Company that its staffing needs are met more efficiently through contract labor should be rejected. In years past, contractors were relied upon during system peak periods, where it was cost effective to bring in extra help to deal with high work levels, and to release those persons when the levels receded. That is clearly no longer the practice among the majority of Michigan's utilities. Instead, contractors have now become a permanent part of the workforce. This is not healthy for the Company or its customers. As noted, there are concerns as to whether contractors are adequately trained, and our experience is that the work and safety standards employed by contract labor are not equal to those utilized by the Company's in-house workforce. Even if contractor training/standards are not an issue, the fact remains that contractors owe no allegiance to the Company or its customers. Michigan utilities should be seeking and developing a workforce that wants to be here for the long-term, and to grow and develop over the years.

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<sup>4</sup> See: <http://evanmills.lbl.gov/presentations/Mils-Grid-Disruptions-NCDC-3may2012.pdf>

We urge that utility human infrastructure needs be accorded a high priority. As our survey results demonstrate, morale among Michigan utility workers is very low, and the stresses they are facing are spilling over from their working lives to their family lives.

- *The staffing evaluation conducted by the Commission should include a review of potential workforce "graying" concerns at each company, and should identify the measures being undertaken to address such concerns.*

Based on the results of our survey, the UWUA urges that the staffing evaluations undertaken by the Commission include (1) a review of potential workforce "graying" concerns at each company, and (2) identification of the measures being undertaken to address such concerns. As noted, the Commission's own staff has already identified workforce graying as a matter of significant concern, and highlighted the link among aging utility physical and human infrastructure, and threats to service reliability and public safety. Our survey results confirm and validate this concern.

In any such staffing investigation, the Commission will need to obtain and evaluate detailed data directly from the Utilities. At a minimum, we urge that the Commission seek the following types of information:

- Current staffing levels;
- Recruitment and hiring plans;
- Anticipated retirements;
- Anticipated skill set needs;

- Retention plans;
- Succession plans; and
- Efforts to capture knowledge from retiring personnel.

Depending on the outcome of the investigation, the Commission can consider any number of methods for ensuring the adoption of adequate solutions, including:

- Directing the State's utilities to review and respond to information about approaches taken by other utilities (or companies in other industries);
- Instructing the utility to make a compliance filing explaining whether taking similar steps would be sensible, whether the utility plans to pursue them, or detailing other measures that the utility intends to implement;
- Directing the utility to retain an independent expert to conduct a staffing audit, following which the utility can be given a period of time to review the results and prepare and submit action recommendations; and
- Establishing a working group to review the audit results and provide input on appropriate solutions.

We note that when raised in other states facing similar concerns, Commissions have either addressed workforce graying concerns in the context of rate proceedings or, in at least one instance, have opened graying-specific investigations. For example, in 2011 the Public Utilities Commission of Nevada, acting in response to a petition filed by Local 1245 of the International Brotherhood of Electrical Workers, opened an investigation into whether there were reliability-related aging workforce issues at Sierra

Pacific Power Company and, if so, whether the Company was addressing them adequately. That investigation is still ongoing.<sup>5</sup>

- *The Commission can better understand emerging issues at the State's Utilities through the establishment of new oversight mechanisms.*

The UWUA proposes that its members continue to be involved in assisting the Commission in ongoing efforts to improve utility performance. In our view, confirmed by the results of our survey initiative, the State's utility workers can be a key resource for the Commission by providing the workforce's perspective on both human and physical infrastructure issues.

The UWUA suggests that the Commission create "workforce committees" for each regulated utility. Under this structure, company employees would meet with Commission Staff on an at least quarterly basis to discuss current issues with respect to utility operations and maintenance. Staff would be responsible for briefing the Commission, when and as necessary. This mechanism would provide the Commission with both a direct line to the workforce's perspective on emerging system issues, and access to a wider knowledge base. A committee of this nature will work best if its workforce members are permitted to be heard and not filtered (or obstructed) by utility management personnel. We believe that the information that can be provided to the PSC through this committee arrangement will be invaluable to bolstering oversight.

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<sup>5</sup> *Investigation Regarding Whether the Workforce of Sierra Pacific Power Company d/b/a NV Energy ("SPPC") Is, or In the Future Will Be, Experiencing a Significant Amount of Aging, and the Potential Impact, if any, That Such Aging May Have on the Reliability of SPPC's Service, Docket No. 11-02015 (Nevada PUC).*

The reason is simple: the utility workforce knows and can relay to regulators the key “facts on the ground” regarding system operations. However, in order to ensure that workers who raise concerns are not subject to retaliation, participation on or involvement on these committees should come with stringent whistleblower protections.

There is precedent elsewhere in the United States both for taking action to ensure that utilities are adequately staffed and for “institutionalizing” the role of utility workers in state utility commission oversight activities. Following the 2010 catastrophic explosion of gas pipeline facilities in San Bruno, California, the State enacted legislation requiring each of the state’s gas corporations to develop plans for the safe and reliable operation of their respective, state commission-regulated gas pipelines. Cal. Pub. Util. Code sections 961 and 963, added by 2011 Stats. Chapter 522, Senate Bill 705 (Leno). Among other things, each of the “plan” is required to “[e]nsure an adequately sized, qualified, and properly trained gas corporation workforce to carry out the plan.” Section 961(d)(10). In addition, Section 961(e) obligates the California PUC to “provide opportunities for meaningful, substantial, and ongoing participation by the gas corporation workforce in the development and implementation of the plan, with the objective of developing an industry-wide culture of safety that will minimize accidents, explosions, fires, and dangerous conditions for the protection of the public and the gas corporation workforce.”

- *The Commission should track maintenance budgets and expenditures.*

To the extent not already provided, each regulated utility should be required to report annually to the Commission both their maintenance plans and budgets, and the amount of money actually spent on maintenance. This comparison will provide a useful indicator of whether each regulated company is in fact implementing maintenance activities in accordance with its own stated plans, and whether ratepayers are receiving the services for which they are paying.

*Conclusion*

The UWUA appreciates the opportunity to present its findings to the Commission. Our members not only supply this State the vital energy resources that power its economy, but they are utility consumers as well. We are committed to helping to ensure that Michigan makes sound energy policy decisions, and is well-positioned to implement them. An energy policy that fails to confront effectively the utility service safety and reliability issues raised here will be incomplete and will not ensure a bright energy future for Michigan. We look forward to discussing these important issues with you, and to working with the Commission to implement actions that will make our State's utilities stronger—both now and in the future.