



Regional Meeting Presentation: Midwest Region

Date TBD, 2024

Developed in
partnership with:



CEWD WORKFORCE DEVELOPMENT SUMMIT

November 14 - 16, 2023 | National Harbor, MD

DIVERSITY, EQUITY & INCLUSION FORUM

November 16 - 17, 2023 | National Harbor, MD

Presented By  **CEWD**
Center for Energy
Workforce Development

Executive Summary

Recent survey results show the workforce has stabilized, with Millennials representing the largest portion of the workforce (38%).

The focus turns to building more diverse labor pools to change the composition of the workforce, build skills needed for the energy transition, and hold onto existing staff by offering solutions to improve retention.

Key Findings

01 New Challenge of Developing a Younger Workforce

The aging workforce “gap” of years past has largely been addressed and replaced with a new challenge of developing a younger workforce.

02 Emerging Technology Jobs Show Significant Growth

While still a relatively small portion of the overall workforce, emerging technology jobs show significant growth, potentially requiring recruitment and retraining.

03 Non-retirement Attrition is Higher Post-COVID

Most recent data suggests a “new normal” post-COVID in which non-retirement attrition is higher.

04 Relatively High Adoption of DE&I Practices

Participants showed relatively high adoption of DE&I practices. This year’s survey provides a baseline of diversity data.



01

Aging Workforce and Retirements

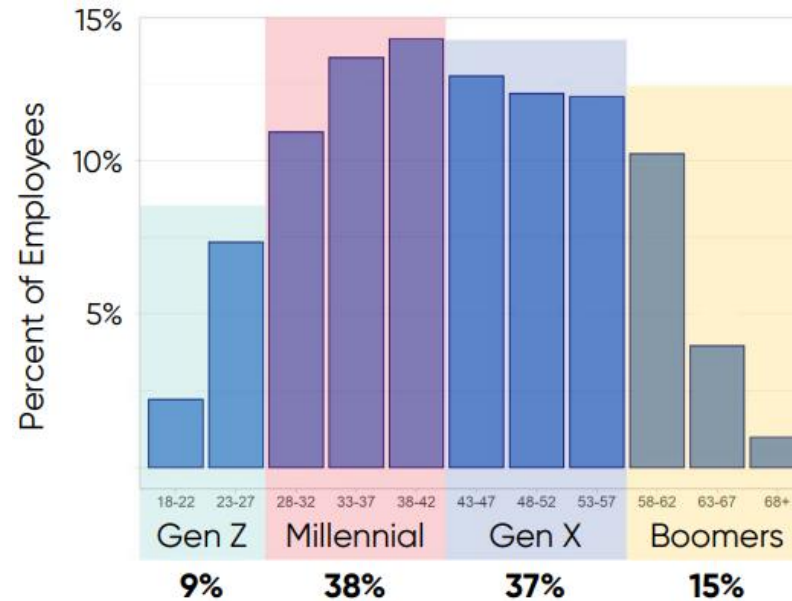
Industry efforts related to energy education pathways in high schools, community colleges and universities, appear to have had an impact on increasing the talent pool for these high-skill positions.

The “gap” in the workforce that was once the namesake of this report (i.e., the lack of younger employees prepared to backfill retirees) has largely been filled.

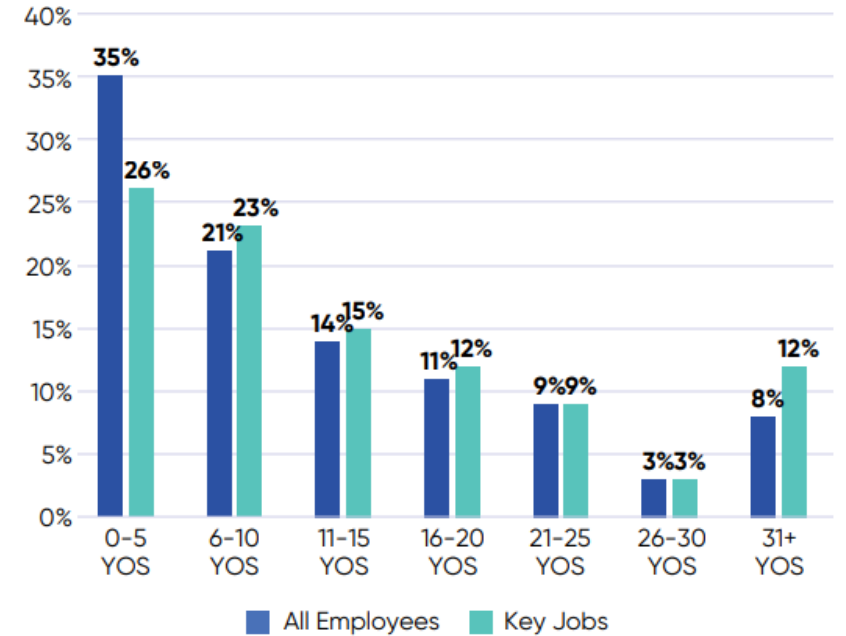
Today, “Millennials” represent the largest category of current industry employment by generation

The industry will need to redirect some of its focus from recruitment to training, mentorship, and other programs to develop its younger “Millennial” workforce.

Percent of All Employees by Age Group



Percent of Employees by Years of Service



Implications for Workforce Development

56% of workers have fewer than 10 years of service, suggesting that many aging workers with lengthy experience have already been replaced by newer workers



Workforce planning efforts may need to include recruitment, as well as training and mentorship going forward



02

Growth in Emerging Technology Jobs

The 2023 Survey is the second cycle where we collected data on Emerging Technology jobs and early trends suggest it is a significant growth area.

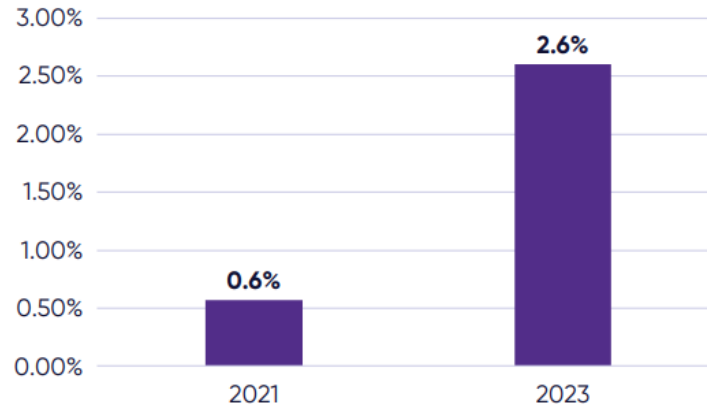
Emerging Technology jobs include data scientists, as well as solar, wind, storage, and EV engineers and technicians.

The overall number of these jobs is still a relatively small percentage of the total (2.6%), a ~4x increase was observed from 2021 to 2023.

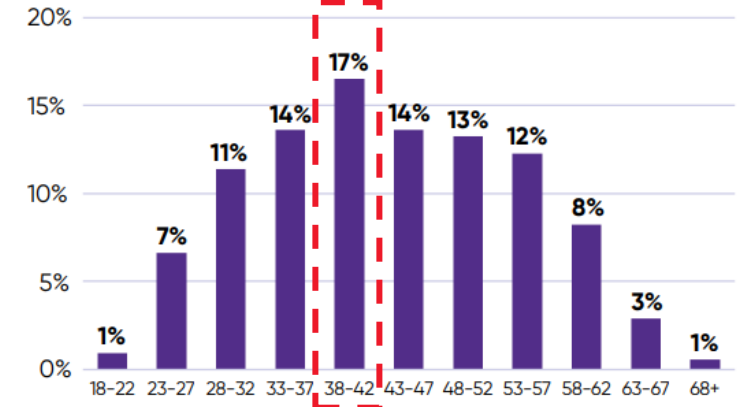
Indicating reskilling and retraining may be needed to fill these jobs as the energy transition continues.

People with mid- to late-career age ranges (38-42) are moving into emerging tech roles.

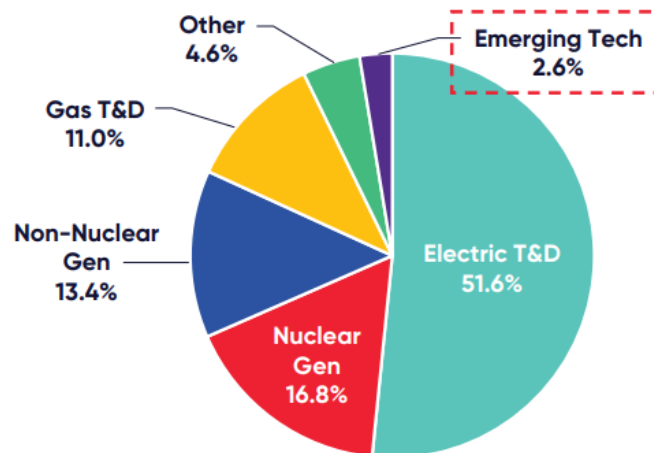
Emerging Tech Jobs 2021 vs. 2023



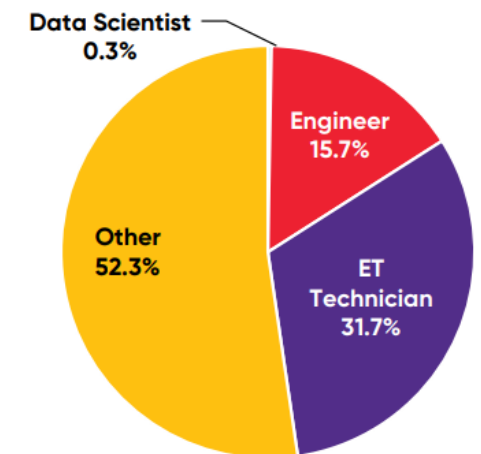
Percent of Emerging Technology Employees by Age



Emerging Tech vs. Other Areas



Emerging Tech vs. Other Areas



03

New Normal Post-COVID

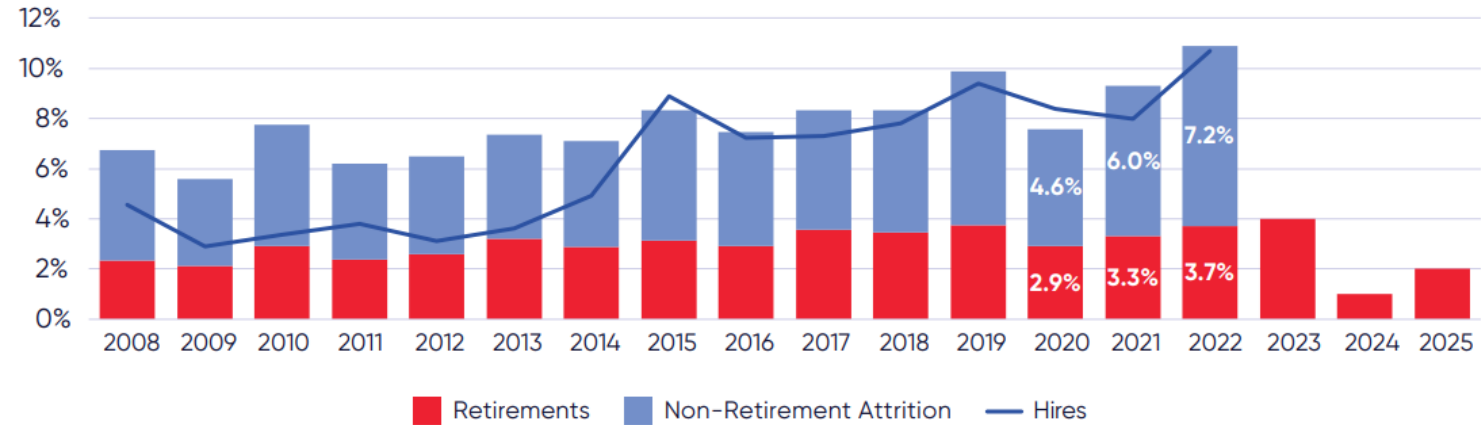
Non-retirement attrition and total attrition have increased significantly the last two years, 2022 marked the highest level since the survey began.

These trends suggest the following implications for Workforce Planning:

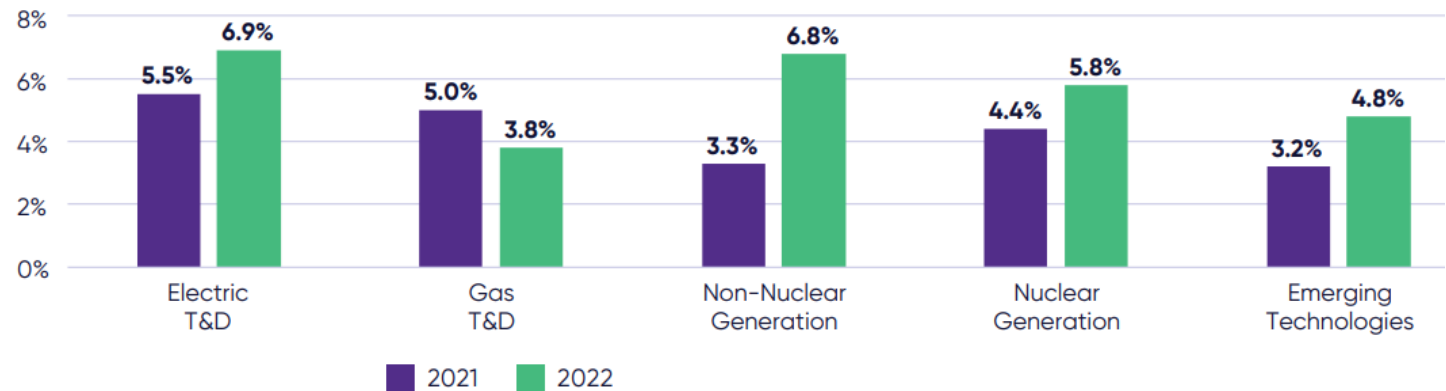
- Training focus to fill skills gaps
- New ways of working may enable recruiting talent outside of geographical market
- Some degree of flexibility may need to be offered to attract and retain talent
- Employee expectations may require that utilities place more emphasis on health and wellness

The industry will need to continue its focus on or improve retention efforts and programs to encourage workers to build long-term careers in energy.

Total Attrition vs. Total Hires – All Companies



Non-Retirement Attrition by Function



04


Trends in Diversity, Equity & Inclusion

Participating companies were asked to report their adoption of 13 different DE&I practices with four choices ranging from “currently in place” to “no plans to implement.”

We saw favorable adoption with nine of these practices currently in place at 75% or more of participating organizations


Diverse hiring practices seem to be making an impact, **this data highlights the potential need for programs and concerted organizational effort focused on retention**

Adoption of DE&I practices is highest when associated with established strategies and goals, including programs designed to attract diverse talent.




Favorable Adoption Overall

9 of 13 practices have been adopted by 75% or more of the participants




Highest Adoption

Relates to having DE&I strategies and goals and programs for attracting diverse talent



Lowest Adoption

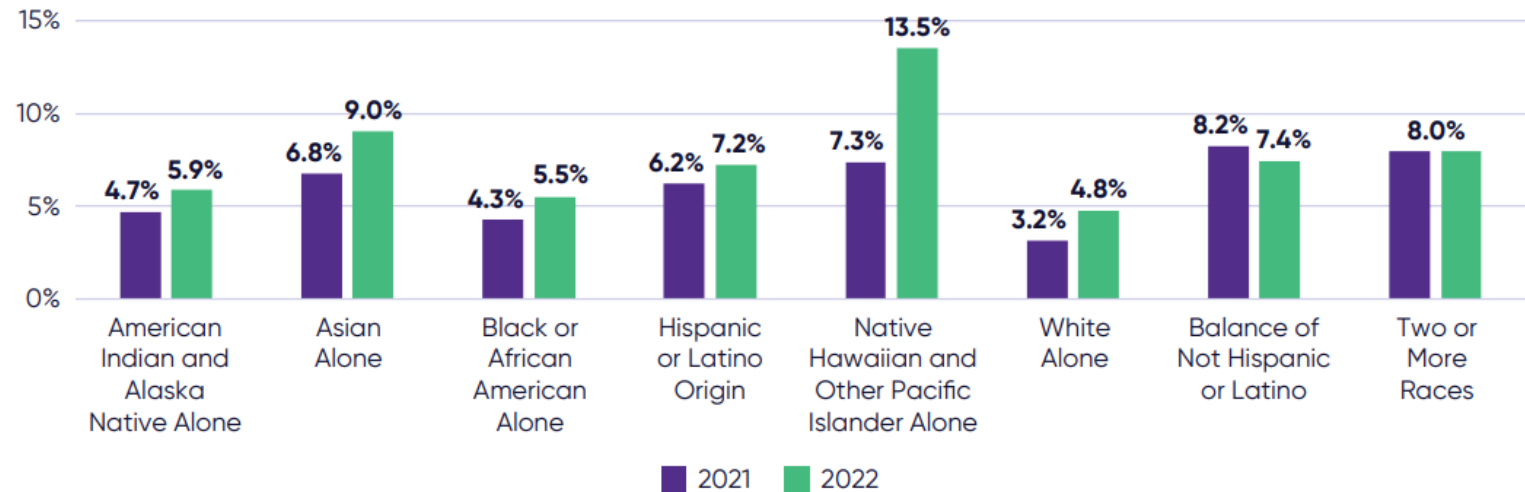
Ties to board training and incorporating goals into performance evaluations and executive pay



Variances

Adoption of practices is generally higher among larger companies, those with nuclear, and those with dedicated DE&I leader

Non-Retirement Attrition by Function



Note: The 2023 Survey represents the first effort to collect and analyze demographic data and information on DE&I policy adoption, this data provides a baseline for future measurement.



Midwest Region

2023 CEWD Energy Workforce Survey



Please note that additional regional information and state-specific data is provided in the CEWD Demand Reports. Those can be found behind the member login on the CEWD website.

Midwest Region Overview

Introduction

This report is designed to exhibit data on the present and future demand for specific energy occupations within private sector electric and natural gas utility industries for all CEWD regions in the United States.

The goal of this report is to provide stakeholders with critical information on energy workforce characteristics, which can be used for planning efforts and as a benchmark for future studies on the region, as well as a comparison against other regions.

This report contains data on utility companies that are publicly owned or operated. The report provides an overview of employment for select energy industries, broken out by CEWD regions, considering historic, current, and future circumstances.

It is important to note that for this workforce demand report cycle, the available government sourced economic data is not as stable as it once was, which can affect the accuracy of the expected employment forecasted in the upcoming years. This instability comes from the global health crisis the world experienced in 2020 and 2021. Energy occupations by field were identified by the Center for Energy Workforce Development.



Region Definition: Midwest

- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Michigan
- Minnesota
- Missouri
- Nebraska
- North Dakota
- Ohio
- South Dakota
- Wisconsin

Data Sources

- Quarterly Census of Employment and Wages (QCEW)
- Occupational Employment and Wage Statistics (OEWS)
- Job Openings and Labor Turnover Survey (JOLTS)
- Regional Economic Information System (REIS)
- State data compiled from various State agencies

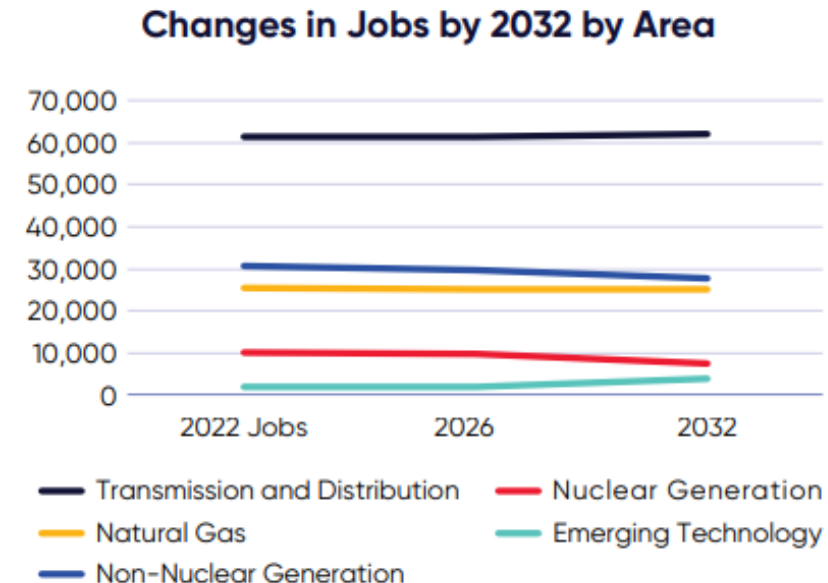
ENERGY FIELD REGIONAL GROWTH PROJECTIONS

Our analysis of the energy sector across the Midwest shows a total of 129,761 jobs for 2022. **During 2022-2026 , the industry is projected to lose approximately 1,648 jobs, a decrease of 1.3%.**

During the 2026-2032 timeframe, the private and public sector energy industries are projected to continue losing an additional 1,705 jobs (-1%). This decline is attributed to the Non-nuclear Generation (-6%) and Nuclear Generation sectors (-22%)

Midwest Electrical and Natural Gas Utilities, All Jobs by Energy Field

Title	2022 Jobs	2026 Jobs	2022-2026 Change
Transmission and Distribution	61,304	61,550	245
Non-Nuclear Generation	30,652	29,624	(1,029)
Nuclear Generation	10,217	9,742	(476)
Emerging Technology	2,043	2,014	(30)
Natural Gas	25,544	25,184	(359)
Total	129,761	128,113	(1,648)

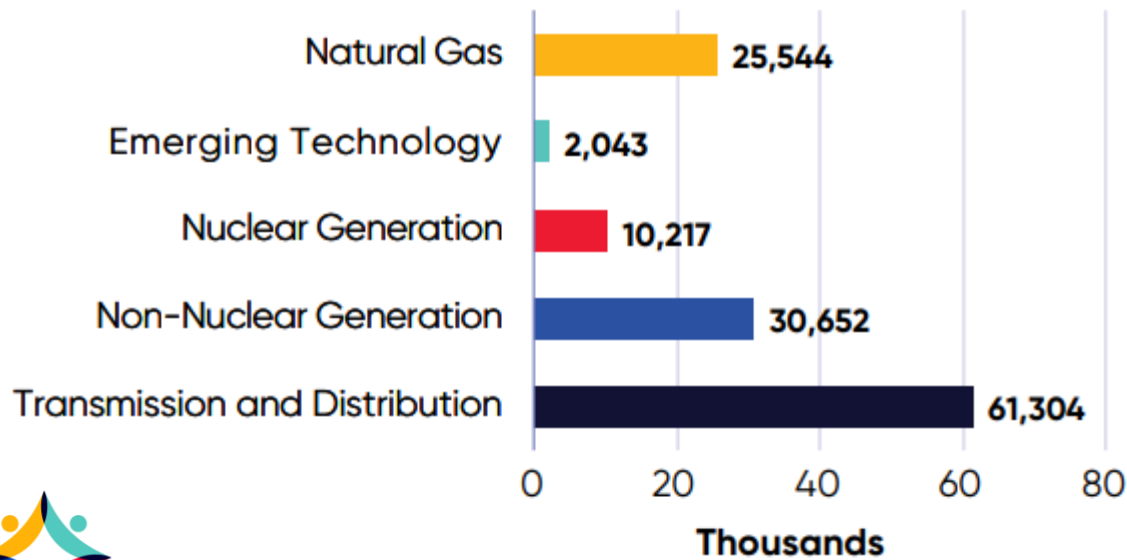


Historical Industry Overview

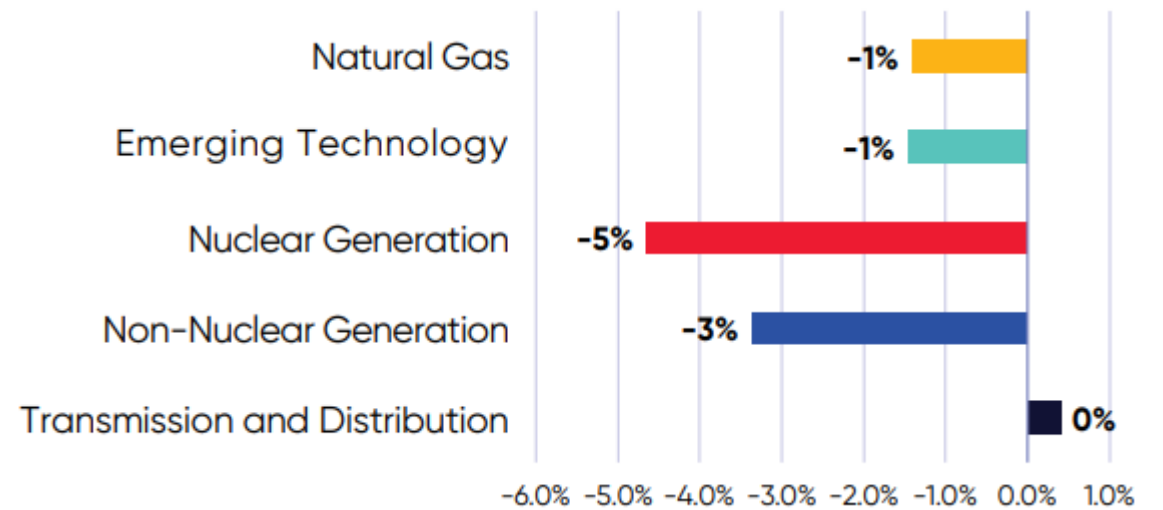
The following graphs display current energy sector jobs in 2022 and the forecasted rate of change from 2022 to 2026.

Transmission and Distribution is the largest function by count of jobs in 2022, followed by Non-Nuclear Generation and Natural Gas, and the areas expected to see the largest decrease in jobs over the next five years are Nuclear Generation (-5%) and Non-Nuclear Generation (-3%). Transmission and Distribution is the only function expected to increase the number of jobs over that timeframe.

Energy Jobs, 2022



Percent Change in Jobs, 2022-2026



ENERGY FIELD REGIONAL GROWTH PROJECTIONS

The following table shows the projected employment change across all five energy sectors for the Midwest region. While the overall number of jobs in this analysis is declining slightly, these estimates may not yet reflect the current policy environment.

Other recent studies have suggested that the number of utility jobs may increase substantively compared to the number of jobs in 2022.

Midwest Electrical and Natural Gas Utilities, All Jobs by Energy Field

Sector	2022 Jobs	2022-2026 Change	2022-2026% Job Change	2022-2026 Average Annual Net Job Change	2022-2024 Projected Attrition and Retirements
Transmission and Distribution	61,304	245	0.4%	61	6,367
Non-Nuclear Generation	30,652	(1,029)	-3.4%	(257)	3,184
Nuclear Generation	10,217	(476)	-4.7%	(119)	1,061
Emerging Technology	2,043	(30)	-1.5%	(7)	212
Natural Gas	25,544	(359)	-1.4%	(90)	2,653
Total	129,761	(1,648)	-1.3%	(412)	13,477



State-Specific Discussion

2023 CEWD Energy Workforce Survey

