CEWD Update
January, 2018
Cross Functional Collaboration

**Essential Elements of Workforce Planning**

1. **Identify the goals**
   - **BUSINESS PLANNING**: Link Workforce Needs to Corporate Business Strategies

2. **Use data to identify gaps**
   - **WORKFORCE ANALYTICS**: Forecast Talent Needs

3. **Measure progress**
   - **EXECUTION & METRICS**: Measure Results

4. **Align strategies to gaps**
   - **WORKFORCE DEVELOPMENT**: Build Internal & External Talent Pipeline
Percent of Employee Population by Company Type

<table>
<thead>
<tr>
<th>Company Type</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investor Owned Utilities</td>
<td>427,431</td>
</tr>
<tr>
<td>Electric Cooperatives</td>
<td>77,758</td>
</tr>
<tr>
<td>Munis/Gov't, 16%</td>
<td></td>
</tr>
<tr>
<td>Electric Co-ops, 13%</td>
<td></td>
</tr>
<tr>
<td>IOU's, 72%</td>
<td></td>
</tr>
<tr>
<td>Munis/Gov't, 16%</td>
<td></td>
</tr>
<tr>
<td>Electric Co-ops, 13%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>598,189</td>
</tr>
</tbody>
</table>

Includes Nuclear
# Percent of Employee Population
(including Nuclear)

<table>
<thead>
<tr>
<th>Job Category</th>
<th>Investor Owned Utilities</th>
<th>Rural Electric Cooperatives</th>
<th>Public Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Worker</td>
<td>12.9%</td>
<td>24.0%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Technicians</td>
<td>16.3%</td>
<td>7.7%</td>
<td>18.4%</td>
</tr>
<tr>
<td>Plant Operators</td>
<td>9.6%</td>
<td>0.4%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Engineers</td>
<td>7.9%</td>
<td>7.5%</td>
<td>6.6%</td>
</tr>
<tr>
<td>All Other</td>
<td>53.3%</td>
<td>60.4%</td>
<td>63.4%</td>
</tr>
</tbody>
</table>
Preliminary Findings
Represents steady state without input on Game Changers

**Size**
Total number of jobs down 2.7%

**Age**
- 19% under age 32
- 49% under age 52
- 33% over age 53

**Composition**
- 44% Key Jobs
- 11% Veterans
- 22.5% Veterans in Nuclear
- 9% Female Minorities
- 17% Male Minorities

Preliminary – Not for Distribution
Workforce size
Changes from previous surveys

2015 Gaps Survey: 519,263
Down 2.7%

2017 Gaps Survey: 505,189 + 93,000 = 598,189

Public Power
The big bubble of employees becoming eligible to retire has flattened out.
**Age Distribution by Company Type (2016)**

![Graph showing age distribution by company type with age ranges from 18-22 to 67+ and percentage of employees for IOU's, Co-ops, and Muni's.]

- **IOU's**
- **Co-ops**
- **Muni's**

**Respondents only**

Includes Nuclear
Age Distribution by Company Type (2016)

Respondents only
Includes Nuclear
2016 Years of Service Distribution

- **Investor Owned Utilities**
- **Rural Electric Cooperatives**
- **Public Power**

[Graph showing the distribution of years of service across different utility types]
Preliminary Findings

- Represents steady state without input on Game Changers

**Retirements**

- **Total Company**
  - 12% Ready now
  - 2.3% Per year forecast for next 10 years

- **Key Jobs**
  - 10% Ready now
  - 2.2% Per year forecast for next 10 years

**Non Retirement Attrition**

- **5 year Forecast**
  - 16% Total Company
  - 14% Key Jobs

- **Leave in first five years**
  - 4 in 10 of Total Company
  - 7 in 10 of Gas T & D
  - 2 in 10 Lineworkers
  - 4 in 10 Engineers

Preliminary – Not for Distribution
## Retirement Assumptions

<table>
<thead>
<tr>
<th>Non-Nuclear Assumptions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ready Now (2015)</strong></td>
<td></td>
</tr>
<tr>
<td>• Over age 58 with 25 years of service</td>
<td></td>
</tr>
<tr>
<td>• Over age 63</td>
<td></td>
</tr>
<tr>
<td><strong>Ready in 1-5 Years (2016 – 2020)</strong></td>
<td></td>
</tr>
<tr>
<td>• Over age 53 and 21 years of service</td>
<td></td>
</tr>
<tr>
<td>• Over age 58</td>
<td></td>
</tr>
<tr>
<td><strong>Ready in 6-10 Years (2021 – 2025)</strong></td>
<td></td>
</tr>
<tr>
<td>• Over age 48 and 16 years of service</td>
<td></td>
</tr>
<tr>
<td>• Over age 53</td>
<td></td>
</tr>
</tbody>
</table>

Retirement forecasts are reduced for attrition.
Total Company Retirement Potential
(Includes Nuclear)

- Investor Owned Utilities
  - Ready Now: 13%
  - Ready 1-5 Years: 13%
  - Ready 6-10 Years: 11%

- Rural Electric Cooperatives
  - Ready Now: 10%
  - Ready 1-5 Years: 12%
  - Ready 6-10 Years: 8%

- Public Power
  - Ready Now: 13%
  - Ready 1-5 Years: 13%
  - Ready 6-10 Years: 11%
Preliminary Findings

Represents steady state without input on Game Changers

**Hires - Total Company**
- Projected to replace more than attrition
- 70% of new hires are projected to be in all other category

**Hires - Key Jobs**
- The number of Key Job hires is projected to be stable
- 30% of new hires are projected to be Key Jobs
- 10% of new hires are projected to be lineworkers
Attrition versus Hires by Job Category
(including Nuclear)

- Investor Owned Utility Attrition
- Investor Owned Utility Hires
- Rural Electric Coop Attrition
- Rural Electric Coop Hires
- Public Power Attrition
- Public Power Hires

- 2016 Non-retirement Attrition
- 2016 Retirement Attrition
- 2016 Hires

Respondents only
Building the Talent Pipeline

CEWD has identified the three most common gaps in the process.

Preparation to enter education

Education

Preparation to enter job market

Qualified Diverse Applicant

Recruiting

Hiring

Retention
CEWD’s Career Awareness Brand

With the right education and training, you can begin a rewarding, well-paying energy career that benefits millions of people every day. Explore the many career opportunities in energy today.

Youth

Find out how you can make a difference with a rewarding, well-paying and exciting career in the energy industry.

EXPLORE

www.getintoenergy.com
CEWD’s Veterans Website

What is TROOPS TO ENERGY JOBS?

Troops to Energy Jobs is designed to help veterans make a successful transition to a rewarding career in the energy industry. This website will guide you step by step in transforming your military training to a new energy job, identifying any additional education and credentials you may need, and supporting you in your job search by utilizing an interactive Troops to Energy Jobs ROADMAP.

Click Here to Start Your ROADMAP to a Career in Energy

How Does Troops to Energy Jobs Work?

Get Support from a VIRTUAL CAREER COACH

FIND ENERGY JOBS: Troopstoenergy.jobs

www.troopstoenergyjobs.com
New Diversity and Inclusion Resources

Making the Connection to a Diverse, Qualified Workforce

CEWD Member Showcase
State Energy Workforce Consortia
Where are the NEEN Schools?

- **Northwest Region**: 25
- **Midwest Region**: 62
- **Mid-Atlantic/Northeast Region**: 42
- **West Region**: 24
- **South/Southeast Region**: 54
Communication Channels

- **FACE TO FACE**
- **COMMUNITIES of PRACTICE**
- **NEWSLETTERS and UPDATES**
- **WEBSITES**
- **SOCIAL MEDIA**
- **WEBINAR**
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