A recent Craft Skills Gap survey conducted by the Utility Workforce Planning Network indicates that electric and natural gas utility companies across the county are struggling to fill skilled technical and craft positions, and that without strong action, the shortage is likely to continue over the next five years and beyond.

The survey was conducted in the summer 2005 and analyzed by the John J. Heldrich Center for Workforce Development at Rutgers University. The report identifies four major areas where utilities face the greatest hiring needs in 2006, from 2007-2009, and 2010 and beyond. These areas include:

- Maintenance and repair workers
- Electrical power line installers and repairers
- First-line supervisors and managers
- Power plant operators.

More distressing, utilities who responded to the Network survey indicated that current applicants lacked critical skills necessary to fill the company’s greatest employment needs. More than half of companies said that prospective employees showed deficiencies in technical knowledge, mathematical ability and communications skills. Significant concern was also demonstrated about lack of mechanical ability, reasoning ability, interpersonal skills and reading comprehension.

The results of this survey reinforce earlier findings, which led to the creation of the Network in 2004 as a nationwide partnership dedicated to attracting more youth to the industry’s skilled and craft labor jobs, ensuring opportunities for technical training, and recruiting a diverse new generation of employees.

The Craft Skills Gap survey results mirror additional data which indicates the utility industry and power producers face a deepening shortage of qualified, skilled workers over the next five years. With more than half of today’s utility workforce eligible for retirement over the next decade, companies are finding a lack of adequately-trained entry-level employees a growing issue.

### Occupations with the Greatest Hiring Need in 2005

(Percentage of Companies Listing the Occupation in the Top Three Hiring Needs)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plumbers, pipefitters, and steamfitters</td>
<td>13%</td>
</tr>
<tr>
<td>Electrician and electronics repair</td>
<td>16%</td>
</tr>
<tr>
<td>Electricians</td>
<td>25%</td>
</tr>
<tr>
<td>Maintenance and repair workers</td>
<td>31%</td>
</tr>
<tr>
<td>Electrical power line installers and repairers</td>
<td>41%</td>
</tr>
<tr>
<td>Power plant operators</td>
<td>41%</td>
</tr>
<tr>
<td>First Line supervisors and managers</td>
<td>44%</td>
</tr>
</tbody>
</table>

### Occupations with the Greatest Projected Hiring Need in 2007-2009 and 2010+

(Percentage of Companies Listing the Occupation in the Top Three Hiring Needs)

<table>
<thead>
<tr>
<th>Occupation</th>
<th>2007-2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance and repair workers</td>
<td>45%</td>
<td>38%</td>
</tr>
<tr>
<td>Electrical power line installers and repairers</td>
<td>42%</td>
<td>34%</td>
</tr>
<tr>
<td>First line supervisors and managers</td>
<td>36%</td>
<td>47%</td>
</tr>
<tr>
<td>Power plant operators</td>
<td>30%</td>
<td>28%</td>
</tr>
<tr>
<td>Electric meter installers and repairers</td>
<td>18%</td>
<td>13%</td>
</tr>
<tr>
<td>Electricians</td>
<td>15%</td>
<td>19%</td>
</tr>
<tr>
<td>Electrician and electronics repair</td>
<td>15%</td>
<td>9%</td>
</tr>
<tr>
<td>Industrial machinery mechanics</td>
<td>15%</td>
<td>6%</td>
</tr>
<tr>
<td>Power distributors and dispatchers</td>
<td>15%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Network Survey Highlights Critical Workforce Issues

The Craft Skills Gap survey conducted by the Utility Workforce Planning Network reinforces the need for the utility industry to take immediate steps in addressing its critical future workforce issues. Highlights of the survey include:

• While two-thirds of utility companies who responded have conducted an analysis of current and future workforce retirements, less than 40 percent have a workplace planning process in place.

• Forty-five percent of companies indicated that maintenance and repair workers would be a priority hiring need in 2007-2009, while 42 percent identified electrical power line installers and repairers. More than one-third said first-line supervisors and managers would be a key need during the same time period. These same three job categories were listed as the top needs in 2010 and beyond.

• A significant correlation exists between jobs with the greatest hiring needs and the skill deficiencies of current applicants. A number of companies indicated that applicants for positions such as power plant operators, electrical power line installers and repairers, electricians and maintenance and repair workers often lack technical knowledge, mathematical ability, communications skills and mechanical ability.

• Utilities believe that government workforce agencies such as One-Stop Career Centers and Workforce Investment Boards are only moderately effective in helping meet recruitment goals.

<table>
<thead>
<tr>
<th>Skill Area</th>
<th>Percentage</th>
<th>Selected Occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Knowledge</td>
<td>56%</td>
<td>Power Plant Operators, Electrical Power Line Installers and Repairers</td>
</tr>
<tr>
<td>Mathematical Ability</td>
<td>54%</td>
<td>Electricians</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>54%</td>
<td>First Line Supervisors</td>
</tr>
<tr>
<td>Mechanical Ability</td>
<td>46%</td>
<td>Maintenance and Repair Workers</td>
</tr>
<tr>
<td>Reasoning Ability</td>
<td>46%</td>
<td>—</td>
</tr>
<tr>
<td>Interpersonal Skills</td>
<td>46%</td>
<td>First Line Supervisors</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>41%</td>
<td>Electricians</td>
</tr>
<tr>
<td>Spatial Ability</td>
<td>33%</td>
<td>—</td>
</tr>
<tr>
<td>Physical Ability</td>
<td>33%</td>
<td>—</td>
</tr>
<tr>
<td>Perceptual Skills</td>
<td>28%</td>
<td>—</td>
</tr>
</tbody>
</table>