
The Aging And Retiring Work Force: New Challenges For Public Power



American Public Power Association

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The Aging And Retiring Work Force: New Challenges For Public Power

Executive Summary

The work force is aging. With retirements, critical skills, expertise, and knowledge may dissipate. Qualified replacements may be increasingly difficult to recruit and retain. American employers are rapidly approaching what experts predict will be a major staffing crisis, triggered by two demographic trends:

- the growing number of older workers, driven by Baby Boomer retirements;
- the shrinking pool of younger workers who can replace them.

This combination of factors creates the “Age Bubble,” a ballooning population of workers at one end of the age continuum, followed by a deep dip in the next generation and a modest rise in the work force’s youngest members. Together, these trends present a critical human resource issue and a strategic business challenge.¹

This paper discusses the effects the aging work force could have on public power and shares key findings from the Center for Organizational Research (CFOR)/APPA survey on this topic:

- A significant portion of the public power work force will be eligible to retire during the next five years.
- The positions that will experience the most retirements during the next five years are also those that will be the most difficult to replace - first line supervisors, senior managers, and general managers/CEOs.
- Loss of critical knowledge and the inability to find replacements with utility-specific skills are the two biggest challenges that public power utilities face as a result of the aging work force.
- Public power utilities need to do more to project and plan for their future work force needs.

The purpose of this report is to educate public power utility boards and staff about the possible effects the aging work force may have on their utility, what public power utilities are currently doing to prepare for the challenges they may face, and steps they should take to prepare for their future work force needs.

The Aging U.S. Work Force

The Baby Boom generation includes people born between 1946 and 1965. During those 19 years, 76 million people were born in the United States. The sheer magnitude of the number of births during this period has had a major impact on many aspects of the U.S. economy over the last 50 years. It also has largely determined the size and age composition of the labor force for the past 30 years. In 1978, when Baby Boomers were aged 15-32, they made up approximately 45 percent of the labor force. Now, in large part reflecting the aging of the Baby Boomers, the percentage of workers aged 45 and older will increase from 33 percent of the labor force in 1998 to 40 percent in 2008, adding nearly 17 million workers to this age group. Over the same period, those aged 35 to 44 will decline as a percentage of the labor force – from 51 percent to 44 percent, resulting in three million fewer workers in this age bracket. Consequently, the median age of the labor force will rise from 38.7 in 1998 to 40.7 in 2008.

As the age of the labor force increases, a greater number of people will leave it due to retirement, disability, or death. Of the 25 million people projected by the Bureau of Labor Statistics to leave the labor force between 1998 and 2008, 22 million will be aged 45 years or older and thus will be leaving mostly to retire. The total number of people who left the labor force the previous decade was 19 million. Over the 1998-2008 period, the oldest Baby Boomers will be aged 52 to 62. After 2008, as more Baby Boomers reach retirement age, the impact of their retirements will continue to grow.²

How The Aging Work Force Is Impacting The Electric Utility Industry

As the electric utility work force ages, will there be enough workers to fill the vacancies that their retirements create? An article on the shortage of talent in the Sept. 1, 2002 issue of *Transmission & Distribution World* pointed out that during the past 15 years, colleges and universities reported a 50 percent drop in the number of graduating engineers and every year the labor pool sees a decreasing number of personnel to build and maintain the facilities necessary to deliver electrical energy to customers.³

According to a recent study by Sen. Maria Cantell's (D-WA) office, both industry and academia are bracing for a critical shortage of engineers in the energy work force. More than half the nation's science and engineering work force will reach retirement age in the next 20 years. Currently, the IEEE reports 360,000 electrical and 23,000 registered power engineers. Yet, today there are only about 500 undergraduate degrees awarded annually in power engineering (compared to nearly 2,000 in the 1980s), fewer than 200 master's degrees, and about 20 PhDs.

To address these challenges, Senator Cantwell's report recommends that Congress pass and consider expanding important provisions included in the pending Senate energy bill, which provide \$60 million annually for grants, traineeships, and fellowships in energy-

related fields where there is a critical shortage of qualified workers. Similarly, the report suggests, that ensuring an adequate work force in electrical and power engineering should become a part of the mission for the Department of Energy's new Office of Electricity Transmission and Distribution.⁴

According to an article on the aging work force in the January-February 2003 issue of *TVPPA News*, a study of 60,000 National Rural Electric Cooperative Association member employees showed that:

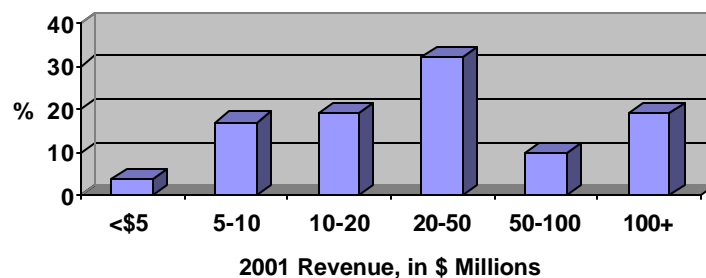
- 62 percent of rural electric co-op general managers are age 50 or older
- 50 percent of other executives are 50 or order
- 61 percent of line superintendents are 50 or older
- 43 percent of line foremen are 50 or older
- 23 percent of lineworkers are 50 or older
- 30 percent of all co-op employees are in this age range⁵

The APPA Survey Results

In September 2002, the Center for Organizational Research, an independent research firm affiliated with Linkage, Inc., conducted a survey in partnership with the American Public Power Association. The survey was designed to learn more about the challenges public power utilities are facing with regard to the aging and retiring work force and what measures, if any, they have implemented to address those challenges. The APPA survey was part of a larger study CFOR conducted across three sectors: government, health care, and utilities. All told, 103 public power utilities completed the survey—approximately 20 percent of the 524 contacted.

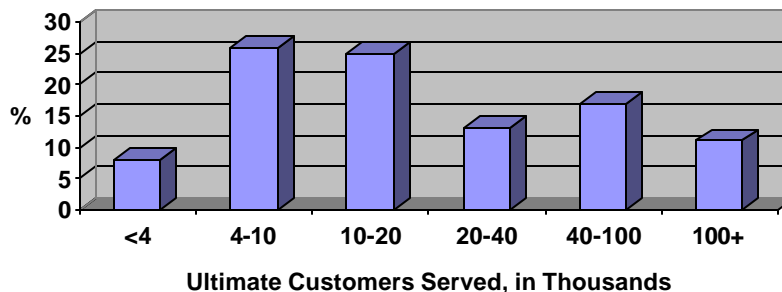
Public power utilities that responded to the survey ranged in size based on annual revenues from less than \$5 million to more than \$100 million.

Respondents, by Revenue Class



Participating utilities varied significantly in terms of the number of ultimate customers they serve, from less than 4,000 to more than 100,000.

Respondents, by Customer Class



How Old Is The Public Power Work Force?

According to APPA staff, it has become increasingly common for public power utilities to raise concerns about the impacts of their aging work force and approaching retirements. Nevertheless, the survey found that fewer than half (48.5 percent) of the utilities that completed the survey track the age composition of their work force. Of the 50 utilities that do track age distribution, 48 provided the average age of their employees. The overall average was 44 years and ranged from a low of 40 years to a high of 48 years. Due to sample size, one cannot generalize from this survey that all public power utilities have a similar age composition. The findings only tell about those utilities that completed the survey, but one can compare the APPA survey results to data for the average age for other organizations. According to a recent analysis by the Rockefeller Institute of Government:

- 46.3 percent of all government workers are age 45 or older, compared to 31.2 percent in the private sector,;
- within the federal government, 50.3 percent are age 45 or older;
- in state government, 44.6 percent are age 45 or older.

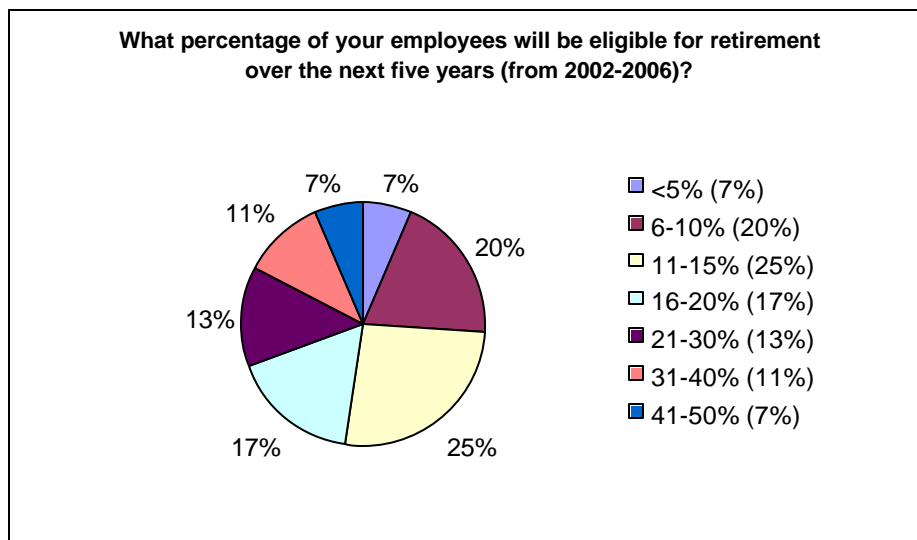
Another recent study, this one jointly sponsored by the Council of State Governments and the National Association of State Personnel Executives (NASPE), found the average age of state workers to be 44.5 years.

By state, the oldest state work forces are in Ohio and Rhode Island (48 years), Idaho and Washington (47 years), and Iowa, Minnesota, and Pennsylvania (46 years). The youngest are in Utah, Missouri, Mississippi, and New Mexico (42 years).

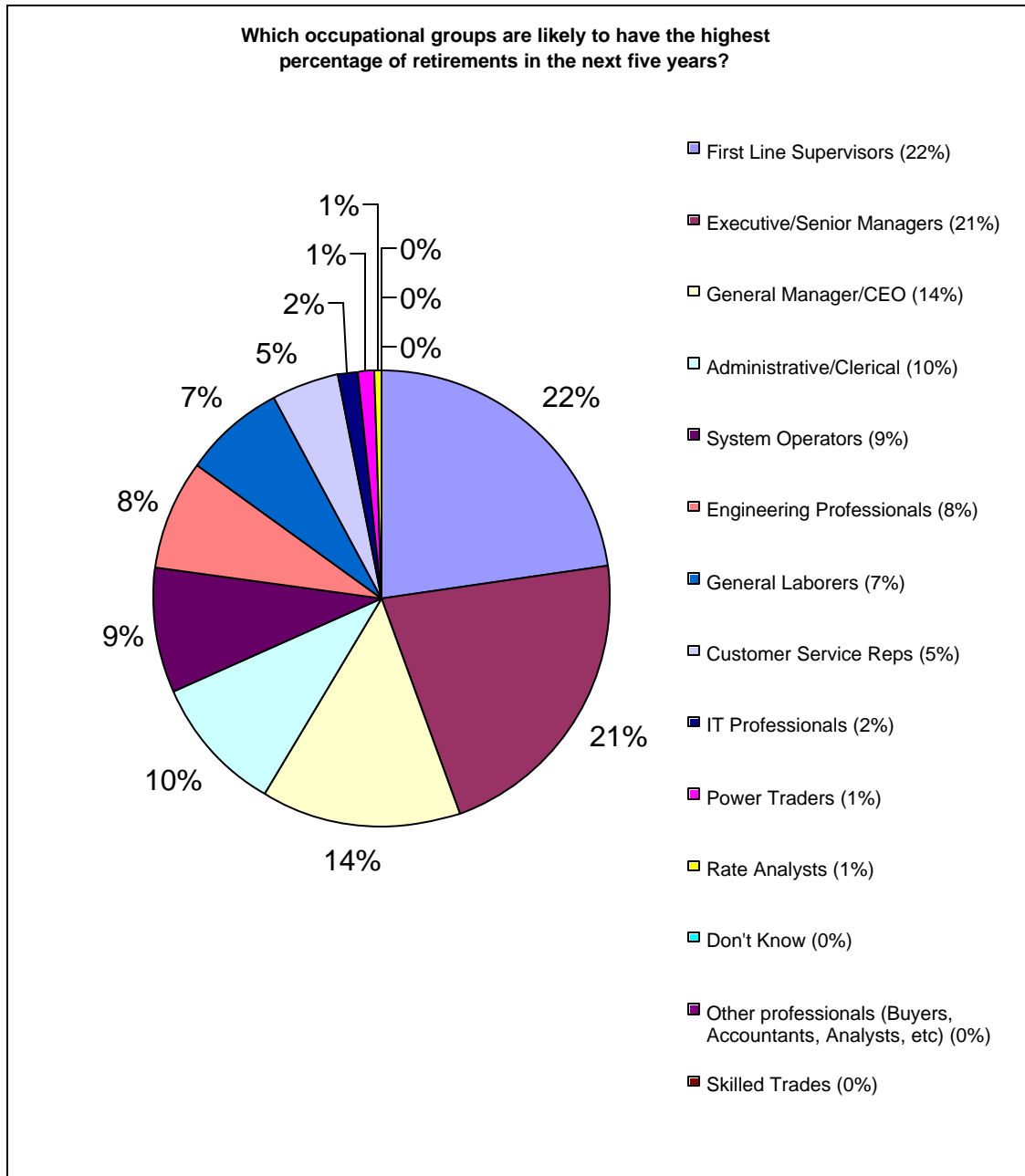
The average age for APPA member utilities that track such data is similar to the average age for other government organizations. However, it is considerably older than the private sector work force, as reflected in the age distribution identified by the Rockefeller Institute of Government analysis.

Public Power Faces Large Number Of Potential Retirements In Critical Positions

In addition to having an older work force than the private sector, public power utilities have a significant percentage of employees who will be eligible for retirement during the next five years. Of those survey respondents who do retirement projections, 20 percent reported that six to 10 percent of their work force will be eligible for retirement through 2006. Twenty-five percent said up to 15 percent of their employees could retire, while 17 percent said that up to 20 percent of their staff will be eligible to do so.

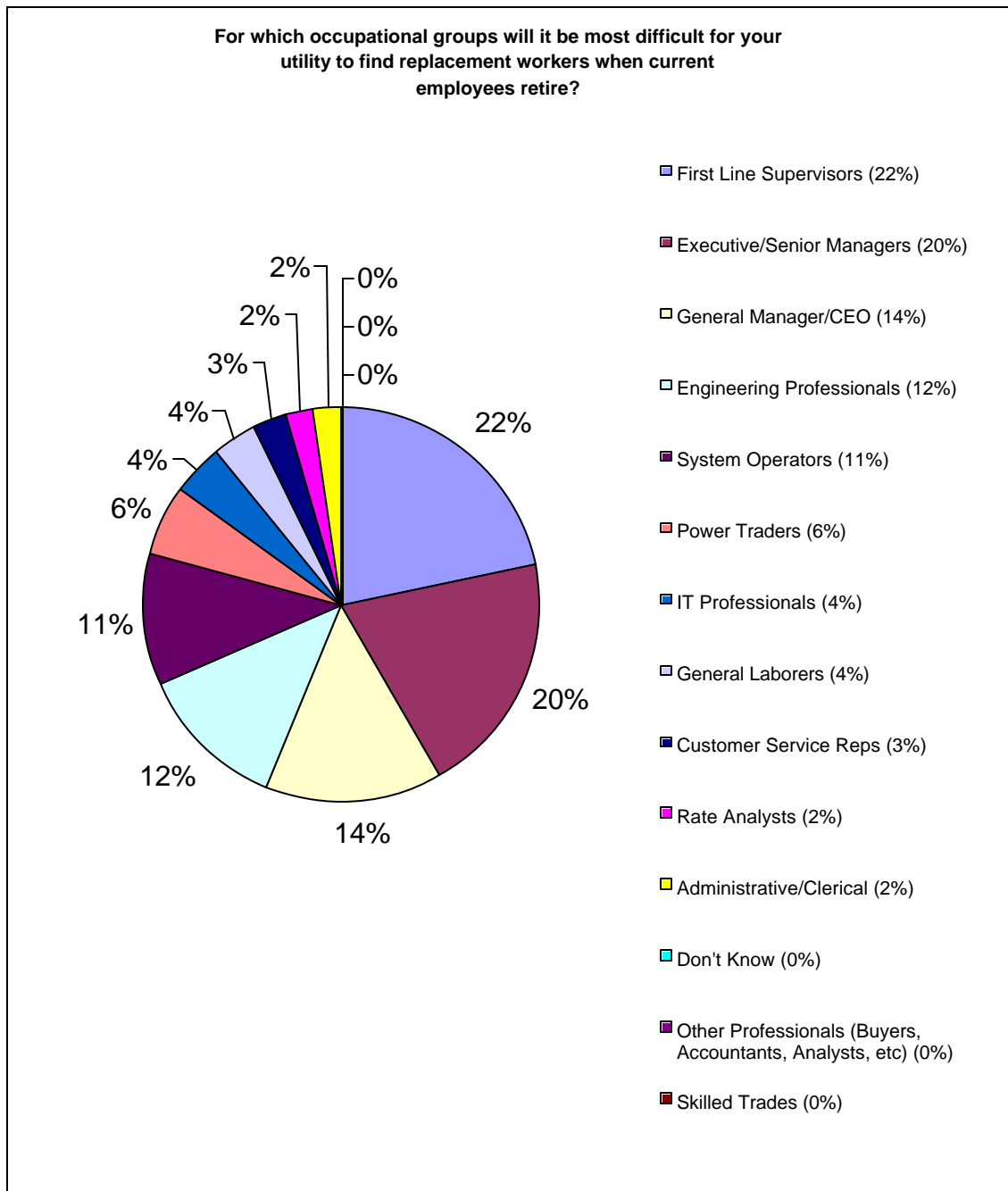


Survey participants reported that first line supervisors, executive/senior managers, and general managers/CEOs are the three positions where the most retirements will occur through 2006, with 22 percent, 21 percent, and 14 percent retiring, respectively.



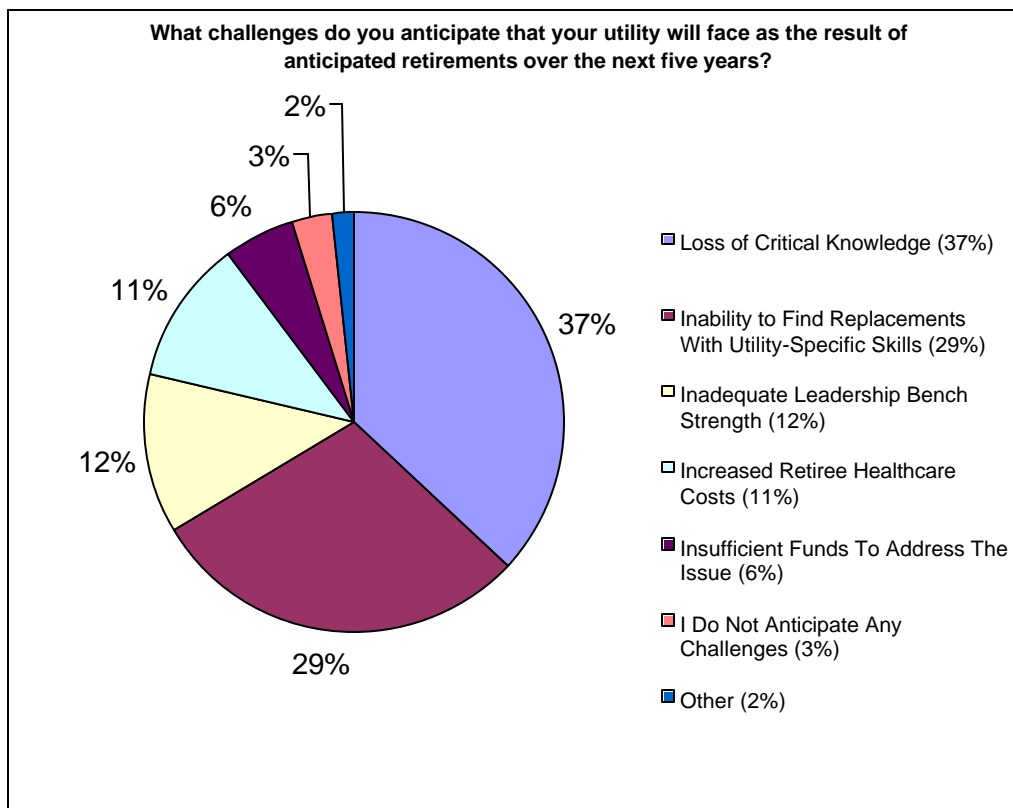
When asked which occupational groups will present the most difficulty in finding replacement workers, these same three positions were named, with 22 percent reporting that first line supervisors will be the hardest to replace, 20 percent saying executive/senior managers will be the most difficult, and 14 percent naming the general managers/CEOs, followed by engineering professionals (12 percent), and system operators (11 percent).

What Challenges Does The Aging Work Force Present To Public Power?



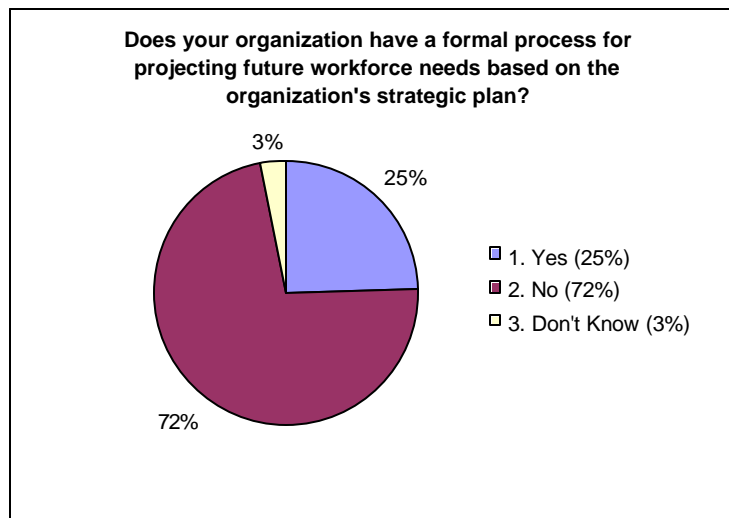
The possibility of a large number of retirements in critical utility positions during the next five years will undoubtedly bring many challenges to public power utilities. Fifty-six percent of survey respondents said this issue poses at least a moderate challenge to their utility’s ability to fulfill its mission. However, 68 percent of respondents felt that their utility governing board views the issue as, at most, a slight challenge to the utility’s ability to fulfill its mission, suggesting more information and education are needed in this area.

When asked about the specific issues their utilities will face as a result of the anticipated retirements over the next five years, 37 percent said that the loss of critical knowledge will be the biggest problem, followed by 29 percent who reported that it will be the most difficult to find replacements with utility-specific skills.

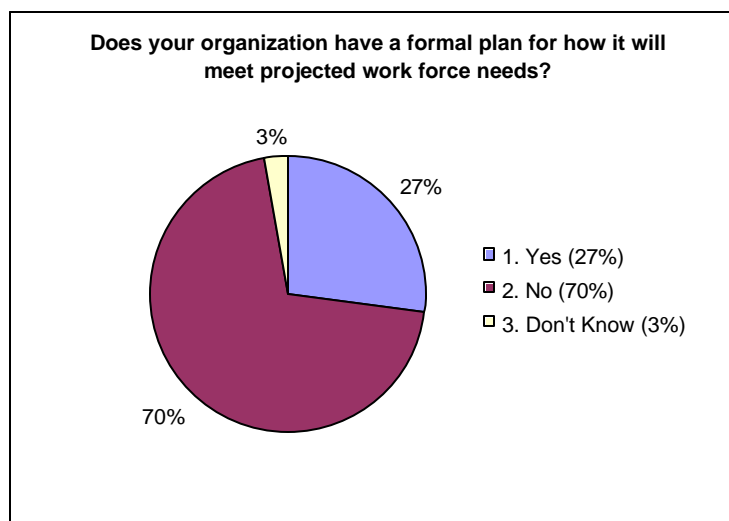


What Are Public Power Utilities Doing To Prepare For Their Future Work Force Needs?

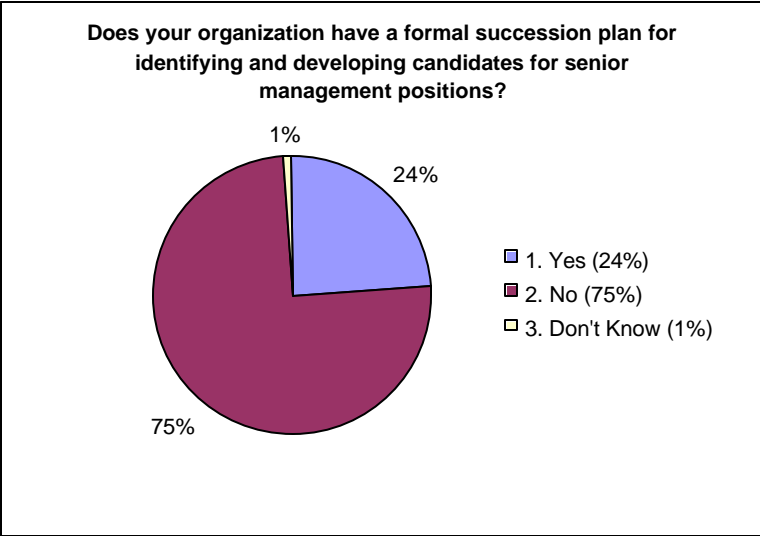
Although 56 percent of survey respondents view the aging work force as at least a moderate challenge, few of their utilities have processes in place to groom their next generation of leaders. Seventy-two percent reported that they do not have a formal process for projecting their future work force needs based on their organization's strategic plan. Of the 25 percent who do, only 11 percent view their projected work force needs as accurate.



Seventy percent of respondents report that their utility does not have a formal plan for meeting projected work force needs through recruitment, hiring, retention, succession planning, training, or development. Of those who do, only 4 percent are confident in the plan's ability to meet those projected needs.



Although the survey results indicate a large number of senior managers may retire during the next five years and senior managers will be among the most difficult to replace, only 24 percent of survey participants have a formal succession plan for identifying and developing candidates for these positions.



What Should Public Power Utilities Do To Prepare For Their Future Work Force Needs?

Every public power utility is unique, as are the talents and resources available in their communities and regions. There are a number of steps public power utilities can take to prepare for their work force needs. While not all of these ideas are applicable to each utility, the following suggestions and case examples may be used to help mitigate the impact of the aging work force.

1. Track Pertinent Work Force Statistics, Average Age, Age Distribution, Years Of Service

Based on its three work force sector studies, the Center for Organizational Research recommends that public power utilities track their age distribution (that is, the breakdown by age group). This is important since it's not only the percentage of older employees that could affect future work force, it is also the percentage of younger employees already in line to replace them.

Utilities should break down those numbers by relevant levels (or pay bands), locations, job classifications, and occupational groups. Organizations that have a firm handle on the challenges of an aging and retiring work force can identify specific areas or categories where aging and retirement pose the greatest risk. Then they can target selective efforts aimed at selected problems, rather than "trying to do everything." Even when many employees are close to retirement age, CFOR's research suggests, organizations that can isolate the most serious trouble spots are able to respond more strategically. That makes the aging and retirement issue far more manageable, even when the numbers seem overwhelming.

Case Study – Western Area Power Administration (Colorado)

Like many other organizations, the Western Area Power Administration in Lakewood, Colorado, will face significant and challenging human capital issues in the next decade. Its work force is aging, and a significant number of baby boomers, who are the bulk of its work force, will be drawing nearer to retirement.

The average age of Western's work force is approaching 48. Almost one-third of its work force is between 50 and 54 years of age, and most of these employees will be eligible to

retire in five years. Western has almost twice as many employees who are 55 and older as it has who are 35 and younger.

Western employees who will be retiring include highly skilled workers in fields such as information technology, engineering, and the craft occupations. The number of employees eligible for retirement varies among occupational disciplines, but it will be particularly acute in the engineering, program management, computer, electrician, and meter and relay fields.

Deregulation of the electric utility industry and establishment of regional transmission organizations and independent system operators are creating demand for new skill sets.

In September 2001, the senior management in Western approved a plan to address the agency's most critical human capital challenges. The plan outlines seven initiatives:

- Develop a human capital plan linked to Western's strategic goals.
- Develop and implement a Western-wide work force planning program.
- Establish a succession planning program.
- Create and foster a workplace environment that will attract and retain talented employees.
- Establish a Western-wide recruitment program.
- Develop a training program for managers, supervisors, and team leaders.
- Develop pay options for improving the link between pay and performance.

The plan is intended to position Western as an employer that will attract and retain employees by enabling them to maximize their talents. The strategy will provide the cornerstone for improving government performance and accountability to its customers.

2. Make Retirement Projections

According to CFOR, such forecasts can serve internal purposes like work force planning and succession management. They also can enable public power utilities to benchmark against peers (for example, other APPA members, investor-owned utilities, rural cooperatives, other employers in their region, and other public- and private-sector organizations). CFOR's cross-industry research found that organizations committed to meeting the challenges of an aging and retiring work force distinguish between retirement eligibility and retirement timing.

Many factors influence an employee's decision to retire. Some organizations can make sophisticated forecasts about exactly when retirement-eligible employees will exercise the option. They can then break down their analysis by job classification or region.

Such forecasts may be beyond the capabilities of most employers. Yet, CFOR suggests all organizations can benefit from:

- Tracking both actual retirement patterns and eligibility.
- Segmenting the retirement projections for the total work force; for example, by job classifications, pay band, location.
- Analyzing more than the numbers. It's not enough simply to project headcount. To effectively meet the challenges of an aging and retiring work force, organizations must also identify the skills and competencies that will be needed in the future, analyze the gap between future work force supply --who will we have and what skills and competencies do they currently have--and future work force demand.
- Developing a plan for closing the gap. Such a plan may include coordinated efforts, such as recruitment, retention, training and development, and knowledge and performance management.

3. Educate Public Power Boards And Political Leaders About The Issue

Most survey respondents said the aging work force poses at least a moderate challenge to their utility's ability to fulfill its mission. However, 68 percent feel their utility governing bodies (utility boards or city councils) do not view it the same way. It is important for public power employees to inform and educate their elected and appointed leaders about the aging work force issue so they can make informed decisions about the steps they need to take to address it.

It is also important for governing bodies to understand the competitiveness of compensation levels for key jobs that may be impacted by a higher-than-usual number of retirements. If compensation levels for critical positions do not reflect the market for those jobs, recruiting talented staff from a smaller labor pool will be even more challenging.

4. Implement Work Force And Succession Planning

In the November 2002 edition of *Workforce*, John Sullivan defined work force planning as a systematic, integrated organizational process that involves planning ahead to avoid talent surpluses or shortages. It is based on the premise that a company can be staffed more efficiently if it forecasts its talent needs and the actual supply of talent that is or will be available. With proper planning, organizations can avoid the need for layoffs or panic hiring. Human resource professionals can provide managers with the right number of people, with the right skills, in the right place, and at the right time.

According to Sullivan, the following are the most common components of a work force plan:

- *Forecasting and assessment*-estimates of the internal/external supply and demand, labor costs, company growth rates, and company revenue;
- *Succession planning*-designating the progression plan for key positions;
- *Leadership development*-designating high-potential employees, coaching, mentoring, and rotating people into different positions;
- *Recruiting*-estimating needs for head count, positions, location, and timing;
- *Retention*-forecasting turnover rates; identifying who is at risk and how to keep them;
- *Potential retirements*-determining who is eligible, when they are eligible, who will replace them, and what alternative work arrangements are available that could prevent a retirement problem;
- *Performance management*-instituting "forced ranking" or identifying who should be "managed out;"
- *Career path*-career counseling for employees to help them advance;
- *Backfill*-designating key-position backups;
- *Internal placement*-developing job-posting systems for internal employees to be informed of vacancies;
- *Environmental forecast*-projecting industry and environmental trends, as well as a competitor assessment;
- *Identifying job and competency needs*-doing a skills-and-interest inventory; and
- *Metrics*-identifying numerical measures to determine the effectiveness of work force planning.⁶

Case Study – Gainesville Regional Utilities (Florida)

Like so many companies in the United States today, Gainesville Regional Utilities in Gainesville, Florida, is facing a potential staffing crisis. GRU is a municipally owned utility in north central Florida providing five utility services with 750 employees. Many GRU staff are in highly skilled, technical job classifications that are critical to GRU's objectives and strategies. GRU's organizational development department needed get a handle on maintaining adequate numbers of trained staff in critical jobs. GRU wanted a credible and standardized way to determine:

- How many people should be hired into what jobs;
- When those people should be hired; and
- When training should occur, in order to maintain an adequate number of skilled individuals.

To meet its objectives, GRU purchased a strategic work force staffing analysis tool developed by Bechet Consulting LLC. The Bechet model enabled GRU to consider all the major factors that affect staffing and provided a more strategic approach to analyzing its staffing and development needs over a five-year period.

The staffing analysis model assesses the composition of the current work force and where it needs to be in each of the next five years. It illustrates the impact of business and workload changes on required staffing, through an analysis of the following elements:

- Turnover,
- Retirements,
- Changes in demand,
- Promotions/training,
- Outsourcing, and
- Required hires.

The GRU electric transmission and distribution department needed to determine how to maintain adequate numbers of trained lineworkers. The final analysis yielded the following information relative to the lineworker job category (47 incumbents):

- Turnover: 10.5 percent of GRU's lineworkers could be expected to leave the utility each year to work elsewhere.
- Retirements: 23 percent of lineworkers and other technical staff were expected to retire during the five-year planning period.

Next the model identified where and how many new hires would be required to address identified gaps. To maintain adequate numbers of skilled workers, the following actions were needed:

- Four journey-level lineworkers needed to be hired during the first three years of the planning period.
- Six new apprentices would be required in the last year of the period.
- Fourteen new electric utility trainees would be needed over the five-year period.

After assessing the T&D Department, GRU proceeded to apply the model to all departments.

Case Study – Salt River Project (Arizona)

Salt River Project in Phoenix, Arizona, is the third largest public power utility in the United States and provides electricity and water to the Phoenix metropolitan area.

SRP's engineering and construction division, which employs 558 people involved in engineering, design, electrical, and line work, faced the prospect of losing one third of its leadership team to retirement. As a result, it needed to:

- Identify and develop future leaders,
- Upgrade skill levels throughout the organization,
- Gather data to support decisions about reorganizing the work force,

SRP implemented a program to develop leaders throughout the organization. The program has six modules based on competencies selected by engineering and construction services. Each of the six modules runs for an entire year and includes:

- a half-day instructor-led course, taught by managers in the organization,
- job-related assignments that focus on current issues in the organization,
- a mentoring program that involves feedback and support on class assignments,
- e-learning classes, and
- a final presentation to managers at the end of each module focusing on the topic of that module and lessons learned.

SRP then developed a list of future leaders by using work force planning and leadership development tools and resources from Lominger Limited, Inc. The utility held talent

assessment discussions throughout the organization to identify employees who demonstrated these competencies, then created development plans for each of them that included rotational assignments, leadership on task forces, and other development experiences. Many received 360° feedback and coaching from mentors. Leadership classes were part of the development plan. Individuals not identified as future leaders were offered training and feedback to help them reach their potential.

The program, now in its second year, has been extremely successful in providing participants an opportunity to take on leadership challenges and learn more about leadership roles, as well as allowing managers to observe the extent to which class participants deal with leadership issues. Eleven candidates graduated from the program last year and 17 are expected to graduate in 2003.

Through the series of talent discussions in the organization, SRP received feedback not only on the identified competencies, but also on important examples of employee performance and adaptability. This gave the utility data to consider possible reorganization and rotation of assignments to give future leaders experience in positions where current leaders may retire.

5. Capture Undocumented Knowledge And Facilitate Its Transfer From Older Employees To Their Successors

The loss or departure of undocumented knowledge associated with the aging work force can be particularly problematic with complex systems that have been in place for many years. Younger, incoming staff are unlikely to have had training or experience that is directly applicable to older technical systems. The loss of institutional knowledge can have negative operational, environmental, safety, and economic consequences. For information on practical guidelines for capturing undocumented knowledge in energy industry settings, contact the Electric Power Research Institute about its project, "Capturing Undocumented Worker Job-Knowledge." EPRI suggests employers:

- Identify the experts whose knowledge they want to capture;
- Develop a plan to elicit, store, and retrieve valuable, undocumented knowledge from each person selected;
- Select the method to draw out the information they want to capture;
- Consider how to store, present and share this knowledge with others.⁷

Case Study – Tennessee Valley Authority

The Tennessee Valley Authority is America's largest public power utility. Today, TVA's 13,000 employees serve a seven-state region and operate and maintain 11 coal-fired plants, 29 hydroelectric dams, three nuclear plants, four combustion-turbine plants, a pumped storage facility, and 17,000 miles of transmission lines.

TVA is facing the imminent retirement of up to 40 percent of its work force over the next five years. These experienced employees possess much unique, undocumented knowledge. Many of these employees literally built the plants and facilities that they now operate and maintain.

To respond to this challenge, TVA has developed and refined a process to identify at-risk knowledge, assess the risk, and mitigate the impact of critical knowledge loss. The process has been deployed in several divisions and plants with excellent results and is being implemented more widely in 2003. Supported by various aids and tools, the process allows line managers to answer three fundamental questions:

- Specifically, what knowledge is being lost? (“What?”)
- What are the business consequences of losing each item of knowledge? (“So what?”)
- What can we do about each item? (“Now what?”)

Two factors --time until retirement and criticality of position--are considered in identifying those experts where potential knowledge loss is greatest and most imminent. Yearly (since 1999), TVA surveys employees to ask when they plan to retire. Employees increasingly understand that this information is driving planning and the labor “pipeline” and is not used to make individual personnel decisions. About 80 percent complete the voluntary questionnaire. Coupled with an overall estimate of the position's criticality (provided by the employee's manager), this retirement estimate drives a “knowledge risk factor” that identifies areas where immediate knowledge retention action is required.

Incumbents and their supervisors are interviewed to assess the job's specific knowledge content. Since it's important to identify both explicit and implicit (undocumented) knowledge, the interviews include four kinds of questions:

- *General questions* like, “What knowledge will the TVA miss most when you leave?” The answers pointed to higher-order kinds of knowledge such as problem analysis and trouble shooting or deep understanding of the idiosyncrasies of a piece of equipment.
- *Task questions*, such as how to conduct specific tests or operate certain pieces of equipment.
- *Fact or information questions* focus on what the employee knows and generate lists of contacts, maps, manuals, and other information.

- *Pattern recognition questions* ask about lessons learned and insights about what’s likely to go wrong and how to fix it.

Based on these interviews, TVA compiles a list of potential “knowledge loss items” for each job. These items are analyzed to determine their importance. For the knowledge and skills that are truly critical, specific plans are established to retain the knowledge/skill or to lessen the impact of losing it. In some cases, this might mean assigning a new employee to shadow the prospective retiree or cross-training someone who’s currently in a different job. Sometimes, it means documenting a procedure or process. Or perhaps it requires setting up a brown bag lunch twice a week where systems engineers can get together to discuss their work and problem-solve together. Some pieces of knowledge can be eliminated by engineering them out. If “Lee” is the only one left who knows how to fix some ancient piece of equipment, it may make more sense to replace that equipment than to try to replace Lee’s arcane know-how. TVA’s process considers a host of possible responses:

- Codification and documentation (procedures, checklists, inventories, etc.)
- Engineer it out (change processes, update equipment, use “smart” tools and technology, eliminate task, etc.)
- Education and training (including classroom, simulator, one-to-one coaching/mentoring, etc.)
- Establish alternative resources (outside contractors, retirees as consultants, “find and buy” hires, shared expertise with other plant or divisions, communities of practice or other professional networks, etc.)

6. Recruit, Develop, And Retain Younger Workers, Despite Increased Competition For A Smaller Labor Pool

Finding qualified employees will undoubtedly be more difficult in a tighter labor market. Therefore, it’s important for public power utilities to have a comprehensive recruiting plan that includes these elements:

- *Needs assessment*--Layout the numbers (monthly, quarterly, annually) of anticipated hires for each service line, job category, or division.
- *Job requisition system*--Have a process that identifies and prioritizes job openings.
- *Qualifications profile*--Draw profiles from job descriptions that identify responsibilities and required key skills, abilities, knowledge, and experience.

- *Internal job posting*-Make it easy for current employees to compete for promotions and transfers.
- *External job posting*-Develop the image you want to convey to the marketplace about the positive aspects of your organization and its jobs.
- *Recruiting staff*-Decide recruiter selection, training, and evaluation.
- *External market sourcing*-Select the appropriate sources to be used such as ads, job fairs, Internet, etc.
- *Creative sourcing*-Consider alternatives such as temp-to-hire, part-time, outsourcing, offshore, school-to-work, job sharing, telecommuting, and training programs.
- *Budget*-Estimate your needs in terms of funding and resources.
- *Applicant tracking*- Set up a system to track candidates that can be used to monitor progress and for reporting requirements.
- *Applicant screening*-Work out how you will qualify good candidates and get them into your processes quickly.
- *Testing*-Determine if testing (skills, psychological, or drug) will be required.
- *Interviewing and selection*-Ensure that the selection and decision-making activities are valid, streamlined, and documented.
- *Credentials*-Ensure that references and credentials are verified.
- *Offers and acceptances*-Orchestrate offers in a positive way that helps to close the deal.⁸

As soon as an individual joins the utility staff, the job of developing him or her into a valuable, long-term employee should begin. Education and training play a vital role not only in employee retention, but also in increasing organizational performance. Through its study of training practices and outcomes of 575 U.S.-based, publicly traded firms from 1996 to 1998, the American Society for Training and Development found that companies that invested \$680 more in training per employee than the average company in the study improved their total shareholder return the next year by six percentage points.⁹

In addition to competitive compensation, attractive benefit plans are important in attracting and retaining skilled employees in a smaller labor pool. Tuition reimbursement, flexible work arrangements (job sharing, part-time positions, flexible hours, telecommuting), and family-friendly work environments (family leave programs, well-baby programs, lactation rooms, daycare centers, eldercare referral programs, financial

counseling, wellness programs) are just some of the benefits that can make a public power utility an “employer-of-choice.”¹⁰

Case Study – Florida Municipal Power Agency

Florida Municipal Power Agency in Orlando, has developed the nation’s first Joint Action Recruiting Program (JARP) to assist municipal utilities in recruiting top-quality candidates and maximizing their recruiting resources.

JARP functions like an executive search firm--minus the costs. All 29 member utilities can enjoy the benefits of timely advertising in industry-wide publications, state-of-the-art Internet technology, and the agency’s specialized recruiting expertise.

JARP saves member utilities’ time and money by advertising, screening resumes, and delivering to them the most qualified, specialized candidates available.

When a position becomes available at a member utility, JARP focuses timely ads in leading industry publications both in print and online. All advertisements are designed to draw potential candidates onto JARP’s employment page on the FMPA Web site (www.fmpa.com). Once they hit the Web site, job seekers can view a statewide listing of employment opportunities and quickly learn more about Florida’s municipal utilities.

Although many visitors to the JARP home page apply directly to member utilities, hundreds of resumes are submitted to the JARP program, where they are screened and forwarded to utilities. Since the program’s inception in 2001, FMPA has listed more than 70 positions for member utilities and produced thousands of qualified referrals. The international reach of online advertising has enabled the program to attract applicants from 41 states and five countries.

Case Study – Colorado Springs Utilities (Colorado)

Annually, Colorado Springs Utilities compiles and disseminates to upper management a retirement eligibility report that details the number of employees eligible for retirement for each of the next five years and at 10 years. Currently, a third of the utility’s employees are eligible for retirement over the next five years. CSU’s turnover rate in 2000-2002 averaged 8.3 percent annually.

To address this issue, Colorado Springs Utilities implemented a formal internship program in March 2001. Although it had a number of interns employed at the time, the formulation of the program made the utility an attractive place for students pursuing an undergraduate degree to gain valuable work experience in the utility industry.

The program's goal is to create an opportunity for an intern to develop the skills, knowledge, and competencies for regular employment upon graduation. Hiring managers can either designate a vacant, budgeted full-time-equivalent position and post it as an internship announcement open only to students enrolled on a full-time basis in an accredited undergraduate degree program or hire a student as an hourly employee. In either case, the intern may be appointed to a regular position without a competitive process upon completion of the undergraduate degree and two school years as an intern.

Colorado Springs Utilities uses the INROADS internship program to attract and recruit a diverse work force. A national program, INROADS was founded in 1970 with more than 900 corporations, professional firms and organizations sponsoring interns through 51 affiliates serving 36 states. The program's mission is to develop and place talented minority youth in business and industry and prepare them for corporate and community leadership.

Since the inception of the formal internship program, Colorado Springs Utilities has appointed five graduating interns into regular positions, including four through the INROADS program. Colorado Springs Utilities has yet to have a job offer rejected by an intern who participated in the internship program.

An internship program affords an employer the opportunity to "grow their own" as one of the strategies in succession planning. It's a great opportunity to train, mentor, and coach future employees.

Case Study – Imperial Irrigation District (California)

Most supervisors at Imperial Irrigation District in California are promoted through the ranks. Although they are offered excellent safety and technical skills training and other tools of the trade, no supervisory training was ever offered. After a number of early retirements, IID realized it had promoted a number of employees who lacked supervisory experience.

To fill this void, IID developed an annual Leadership Academy for all new foremen, lead people, supervisors and managers. In the program, a 54-hour course, spanning 18 weeks, employees learn basic supervisory theory, problem solving, coaching skills, customer service, team building, and interpersonal communication, and discuss legal updates and case studies. Attendees are recommended by department managers and supervisors or volunteer for this annual academy. The first year, 54 employees completed the program. By January 2002, 88 employees had finished it.

Many of IID's new supervisors appear to be handling issues with more diplomacy, with more back-up (i.e. paper trail), and there seems to be more communication between supervisors and their employees. The supervisors are better educated in the "soft" skills

(communication, customer service, coaching, etc.) Overall the program has been one of IID's most successful endeavors.

7. Consider Rehiring Selected Retirees

According to a 2002 American Association of Retired Persons study, 69 percent of those surveyed intend to work into their retirement years, not just for money and health benefits, but for the fulfillment they get from working.¹¹

Seventy-one percent of APPA's survey participants indicated that their organization can rehire a former employee who is retired from the organization. Fifty-five percent said retired employees can continue to collect retirement benefits if their organization rehires them.

Case Study – Jamestown BPU (New York)

The city of Jamestown, New York, like many in the Northeast, has a declining population. In New York state, cities are required to have a plumbing inspector. This position, along with a plumbing board, regulates both plumbing practices and the licenses for apprentice, journey, and master plumbers. Both the inspector and board members must be city residents. However, most of the licensed plumbers live in the suburbs and are not qualified for the position because of the residency rule. Further, most plumbers in business for themselves earn more than an inspector. These problems were all cause for concern when Jamestown's plumbing inspector retired in 1997. Jamestown looked at some alternatives then discussed the issue with its former employee. Although he was very active and healthy, he no longer wanted to work full-time. When the utility approached him about coming back to work part-time, he was willing to do so for a day and a half each week and for a salary that would not impact his pension or Social Security benefits.

The arrangement has worked well. The utility's needs were met and the knowledge the inspector acquired during his years of full-time employment has not been lost, as he is available to share his expertise with the full-time staff while on the job.

8. Slow The Departure Of Selected Older Workers Due To Retirement

In 1998, the University of Michigan Health and Retirement Study, an ongoing study of 20,000 Americans over the age of 50, found that most respondents would prefer to retire gradually, working fewer hours with less responsibility. However, the same study found that the most common pattern was a complete switch from full-time work to full-time retirement.¹²

Other studies reveal that many employers have not taken steps to retain or attract older workers. A 2001 William M. Mercer, Inc. survey of 232 large U.S. employers found that 55 percent have no specific goals for employing older workers. Thirty percent try to retain workers with special expertise or key relationships, and 29 percent attempt to keep workers with hard-to-replace skills. Only 16 percent encourage older workers to stay on.¹³

According to "Exit Stage, Rightfully," a 2001 article in *World at Work Journal*, if an organization thinks it will be difficult to replace the knowledge, skills, and relationships that will be lost when older workers retire, then it should consider making phased retirement available to all or selected employees. Phased retirement may include flexible work arrangements, like telecommuting, part-time work, and job-sharing, reduced responsibilities, or special projects.¹⁴

9. Create a Supportive Workplace Culture That Promotes Respect Toward All Employees, Regardless Of Age, Gender, Race, Ethnicity, or Religion

As the U.S. population becomes more diverse, so must public power. As current employees leave the work force, public power utilities must ensure that they are attractive to the next generation of employees and that they promote and develop a supportive workplace that uses everyone's strengths and abilities to the fullest. Failing to recruit from a diverse population means an organization will miss out on a huge talent pool and could increase its recruiting costs as it "fights" over the increasingly smaller pool of non-diversity candidates. Eventually, as the diversity population grows, excellence in diversity recruiting will no longer be "optional."¹⁵

Public power utilities with a diverse work force will benefit from:

- *Increased customer satisfaction*--As the diversity of the customer service work force increases, the likelihood that a customer will get someone who understands his or her unique needs, language, or culture also increases. Individual one-on-one interactions between diverse and non-diverse workers may also result in a better understanding of individual and cultural differences.
- *Increased knowledge about the products and services that meet their customers' needs*--Public power utilities with diverse employee backgrounds are more likely to understand the variations in their customers' needs and usage.
- *The ability to avoid major blunders*--A diverse team with a broad range of experiences can more easily question and spot those things that can potentially offend or turn off a significant portion of the customer base.

- *Better decision-making*--Team members from the same backgrounds and experiences generally make decisions within their range of experiences. By expanding the team to include more diversity of ideas and experiences, the chances of getting both a broader range of ideas and criticism increase.¹⁶

Case Study – Lansing Board Of Water And Light (Michigan)

The Lansing Board of Water and Light in Michigan recognizes the importance of diversity among its work force, suppliers, and in the communities that it serves. Its revenues come from the cross-section of ratepayers, representing its diverse community. The Board of Water and Light aggressively supports the growth and development of a diverse pool of suppliers, including minority and women-owned businesses. Further, it continues to establish a work force that is highly representative of its customers. BWL's goal, stated in its corporate diversity policy, is to create an environment that values multi-cultural, racial, and gender diversity as an enhancement to the products and services it offers. To achieve this goal, BWL's management is held accountable in carrying out initiatives that ensure diversity in its work force and a supplier pool that reflects its customer base.

The utility has implemented tracking mechanisms to gauge success and uses a variety of online tools and directories to identify and utilize diverse suppliers. It also has a training program through the Materials and Supplies Management Resource Center. As of January 30, 2002, five training sessions have been held with approximately 90 people trained.

BWL's utilization of minorities and females is measured and tracked for all job classifications (unskilled, semi-skilled, skilled trades, clerical, technical, supervisory, professional, and management). BWL's focus on diversity has led to tremendous success for the utility in this area. Minorities comprise 18.1 percent of BWL's work force, from an available area work force of 11.8 percent. Females make up 23.3 percent of its work force, from a local work force of 47.2 percent. The number of suppliers in its Supplier Diversity Directory has increased from 291 in 2000 to 1,283 in 2001.

How APPA Can Help

APPA offers a number of services to assist members with their work force needs. For more information on these and other APPA services, call 202/467-2900 or visit www.APPAnet.org.

1. Compensation And Benefits

- Annual Salary Survey
This survey, sent to all regular utility members, covers eight management job categories for smaller utilities and 21 for larger utilities. One labor category, journey electric lineworker, is also included. Results are reported by customer and revenue classes. APPA staff may also be able to provide customized reports by region.
- Joint Action Agency Salary Survey
This survey of joint action agencies covers 13 managerial job categories. Results are reported by revenue class and generation size.
- Listservs And Electronic Discussion Groups
Listservs and electronic discussion groups facilitate information exchange between public power utilities and help with day-to-day operational questions related to human resources, accounting and finance, broadband, economic development, generation and fuels, transmission, pricing and market analysis, and public communications.

2. Work Force Development

- Utility Education Courses And Annual Conferences
APPA offers more than 60 utility-specific educational courses and conferences annually.
- Lineworkers Schools
In conjunction with the Minnesota Municipal Utility Association, APPA conducts both an overhead and underground lineworkers school annually.
- Energy Providers Coalition For Education (EPCE)
APPA was involved in the creation of EPCE, an organization that in conjunction with Bismarck State College in North Dakota, developed a standardized training program in electric power technology that can be applied across the entire electric utility industry. Students who successfully complete their course of studies receive either an A.A.S. degree in Electric Power Technology, a certificate of completion and proficiency in electric power technology, or an essentials of electric power technology certificate.

- Key Accounts Certificate Program
Individuals who take the three APPA key accounts courses, pass written and oral exams, and submit customer business and marketing plans within three years will earn the Key Public Power Associates (KPPA) designation.
- e-Learning
APPA members can choose from 30 utility-specific online courses, at discounted prices.

3. APPA Publications

- *Public Power In The 21st Century*
This report provides utility managers, boards, and staff with a road map of common sense steps to prepare public power for the future and adapt to the changes it will bring. The report is accompanied by a helpful checklist on each subject area and a CD containing a series of case studies submitted by public power utilities around the country that illustrate their initiatives in each of the 10 sections.
- *APPA People-To-People* Newsletter
This newsletter summarizes developments in the fields of human resources and training. It reports on areas of particular significance to publicly owned electric utilities.
- *Handbook For Public Power Policymakers*
This handbook describes the duties and responsibilities of public power policymakers (board members, council members, commissioners, and trustees) and places them in a context of a changing industry. Topics include board and management relations, strategic planning, monitoring utility performance, governance trends, relationships with local governments, and federal issues impacting public power. The handbook is also a useful reference tool for utility staff.
- *Careers in Public Power: Light Your Future, Serve Your Utility*
As the retirement rate for baby boomers increases, public power utilities will need to recruit young workers into the electric utility industry. To assist utilities with this challenge, APPA offers an updated version of its popular brochure showcasing the wide array of exciting and diverse job opportunities in the electric utility industry. *Careers in Public Power: Light Your Future, Serve Your Utility* is designed to grab the attention of young people with a colorful and modern design, as well as simple yet compelling text.
- *The New Crusaders*
The New Crusaders contains a video, teacher's manual, and student worksheets full of fun science experiments about renewable energy resources for teachers or utility representatives to use with elementary and middle school students.

4. Other Services

- DEED Student Scholarships
DEED scholarships support college students in energy-related fields, increase awareness about career opportunities in public power, and provide assistance to DEED member utility sponsors. Scholarship recipients conduct research on an energy-related project and write a final report on the project describing activities, cost, bibliography, achievements, problems, recommendations, and a two-page summary abstract, outlining the basic process and results of the project.
- Classified Ads In *Public Power Weekly* And APPAnet.org
Web listing: \$150 for four weeks or \$300 for eight weeks. Ads submitted online to APPAnet.org are posted on APPAnet within 24 hours.
Public Power Weekly (print): \$.65 per word for one or two printings. The print ad will be submitted to the *Public Power Weekly* staff for placement in the next available issue. The deadline is every Monday, one week prior to the date of publication.

Now Is The Time For Public Power To Address The Aging Work Force Issue

To remain successful, public power utilities must step up their efforts at recruiting, developing, and retaining employees with the critical knowledge and skills the electric utility industry requires. If they don't adapt to the demands and realities of the changing work force, they face the possibility of losing current and prospective employees.

Tracking and understanding work force statistics and trends within your organization, as well as regionally and nationally, is an important first step. Paying competitively, implementing succession and work force planning, documenting institutional knowledge, promoting diversity, and other creative approaches are all important steps to take in facing the challenges that the aging work force may cause.

Endnotes

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About The American Public Power Association

The American Public Power Association is the national service organization representing the nation's more than 2,000 community- and state-owned public power utilities. It was created in 1940 as a nonprofit, non-partisan organization. Its purpose is to advance the public policy interests of its members and their consumers, and provide member services to ensure adequate, reliable electricity at a reasonable price with the proper protection of the environment.

For more information on APPA, please call 202/467-2900 or visit www.APPAnet.org.

About The Center For Organizational Research

The Center for Organizational Research (www.cfor.org) provides strategic research and best practices information to organizations worldwide. Its focus is on human resources, organizational development, and corporate strategy and management. By providing actionable research and benchmarking data, it helps customers address emerging challenges and elevate their thinking on critical strategic issues.

Recent CFOR studies have addressed topics such as action learning, diversity management, succession planning, performance management, work/life issues and leadership development. The results of these studies have been reported in a wide range of publications including *The New York Times*, *Across the Board*, *Workforce*, and *Training*.

For information on CFOR and its three-sector aging work force report, call 781/862-3157 or e-mail cfor@linkage-inc.com.