WISE Pathways Women in Sustainable Employment

Building awareness of careers in construction, energy, and manufacturing for women.

INSTRUCTOR GUIDE













MODULE 1: WELCOMING SESSION

SESSION GOALS

The Welcoming Session is the participants' general welcome and orientation to the workshop, and is a chance to review workshop timelines, expectations, attendance policies, and facilitator expectations. Participants meet and mingle with each other and have the chance to discuss their career and life goals. There is also a review of the industries, core skills, and hands-on skills that will be covered in the program.

Goals for the session include:

- 1. Begin building a culture of motivation, accountability, support
- 2. Make sure participants are absolutely clear about
 - a. what WISE Pathways entails
 - b. what comes after, including tangible goals for the remainder of the workshop
 - c. reasonable expectations
 - d. the responsibilities of participation in the workshop
- 3. Start building group dynamics, make sure participants are comfortable with each other and the staff
- 4. Understand topics to be covered in the program
- 5. Begin to understand their strengths and how they prepare the participants for the workforce.
- 6. Understand an overview of the industries stressed in this program and the types of jobs employed in the industries
- 7. Recognize the significance of WorkKeys and the National Career Readiness Certification

PREPARATION

Before this session, the facilitators should refer to the Welcome PowerPoint presentation for the session, adapt and shift it as desired, and determine who will cover each section of the presentation.

In addition, follow the preparation directions in the *Ice Breaker* activity sheet.

A greeter should take position a half an hour before the program starts at the entrance to the building, and another staff should take position at the sign-in sheet to answer questions as needed. The session should begin promptly at the time planned, to model the no-lateness policy.

SCHEDULE

Before Class Refreshments, Sign-In, Mingling

Make sure everyone signs in and has a binder and a name tag. Facilitator should personally welcome everyone who enters the room, creating an atmosphere of excitement, energy, and interest.

10 minutes Facilitator and Staff Introduction and Welcome

Facilitators introduce what they do for the sponsoring organizations, some basic background, and their roles in the program. This should both serve to build relationships and also create clarity around process, so women know who to go to for different requests and interests.

30 minutes Getting to Know You + Developing a Group Contract

Getting to Know You: Use the ice breaker activity (advance preparation needed). See "Preparation."

Group Contract: All that is needed for this exercise is a white board, easel, or dry erase board. Facilitator should remind everyone that in order to have sessions that are fulfilling to all participants the group needs certain rules. Note that instead of the facilitator making up rules and the group passively agreeing, it would be better for everyone if the class and facilitator collaborate to brainstorm some things to keep in mind for all sessions. These norms will keep the group accountable to each other and make sure that the group has decided for itself how it wants to work. Make sure to create a norm for what the response is when norms are broken, otherwise breaking norms becomes the norm.

The facilitator should then begin to field suggestions and writing them on the board. Remember to write down everyone's suggestion, if someone's comment is confused or unclear guide them to develop a more concise or clearer version of their thoughts. If conversation dies down and comments seem to lessen give examples of group contract items, like "don't talk while others are speaking" or "share responsibilities in keeping the space clean." When everyone has finished discussing group contract items translate all the suggestions into a contract all participants can sign the following session. It may be necessary to compile or compress certain comments into one overarching concept like "respect."

10 minutes Explanation of WISE Pathways Overview

Go over the topics for each session.

Introduce the Kuder Journey and WISE Pathways Action Plan, emphasizing these are working documents that will be completed as the program unfolds.

15 minutes Break

55 minutes Core Skills: Strengths, Values and Interests

This session introduces participants to the concept of core skills as those skills that will carry into any industry and career field, and also gets participants to begin thinking about their strengths, values and interests. The purpose of this is two-fold: 1) to begin identifying the elements that will form the foundation of their action plans and 2) to re-emphasize the partnership model of drawing out women's existing strengths and helping them better articulate and frame themselves to gain employment.

Over the course of the exercise, participants answer the following questions (in their action

planning template), then share in pairs, small groups, or the whole-group:

- What I like best about myself is...
- I am helpful to others when I...
- People respect me when I...
- I feel proud when...
- What are your three greatest strengths?
- I am happiest when...

It is recommended that, following a couple minutes' reflection, this exercise feature small group discussion (groups of 3-4) to make sure that everyone is engaged.

40 minutes Industry Overviews

Go through the *Industries Overview* presentation, and ensure this part of the presentation is in Slide Show view to see the videos.

20 minutes WorkKeys National Career Readiness Certification

Go through the *WorkKeys General Overview* presentation. Stress the usefulness of this certification.

MATERIALS

Ice Breaker activity (prepare in advance—not in participant guides)
WISE Pathways Action Plan
Welcome Session PowerPoint

Ice Breaker—Wild Card Questions

Directions:

Before the training session, print out this sheet. Cut out the questions so that they are on individual sheets. Place the questions in a container, and instruct the participants to select one question from the container and answer.

If you knew you couldn't fail and money was no object, what would you like to achieve in your career, education or community in the next five years?

Tell us about a family member you are really proud of?

What do you think the secret to a good life is?

What is the best perk that you have ever had at a job?

What is the hardest thing you have ever done professionally or academically?

What is the kindest thing a coworker or boss has ever done for you?

What is the one thing for which you would most like to be remembered for during your lifetime?

What is your favorite work tool? Or work task?

What is your greatest achievement?

In your career, did you ever want to quit and do something else? What makes you stay? In your career, did you face any stereotypes that you had to overcome? How did you handle it? In your career, did you have to do anything differently to get people to take you seriously? Do you feel pressure to balance both a career and a family? Do you have any mentor(s)? What advice have you received from your mentor(s)? Tell us about the women who have inspired you. What career advice would you give to a young woman who aspires to do what you do? What do you do for fun? What do you like best about your work? What do you like least about your work? What other kinds of work have you done?

WISE Pathways Pilot Program

Action Plan

Please complete the action plan questions at the end of each WISE Pathways session. Session 1: Welcome Session Core Skills: Strengths, Values and Interests What I like most about myself is: I am helpful to others when I: People respect me when: What are your three greatest strengths? I am happiest when: Session 2: Work Habits/Safety Awareness Is there a work habit you want to improve upon before entering the energy or construction industry? If yes, how? What are two new safety standards you learned about today? Session 3: Construction Industry Were there any construction jobs you heard about today that are of interest to you? If yes, which one(s)?

Do you have questions for the companies hiring for these positions?

Session 4: Energy Industry
Were there any energy jobs you heard about today that are of interest to you? If yes, which one(s)?
Do you have questions for the companies hiring for these positions?
Session 5: Resume Writing
Is there any information you didn't have today that you want to bring to the next class?
Would you like a construction or energy industry representative to review your resume next class?
Session 6: Resume Coaching
Do you feel your resume is finalized and ready to distribute to companies? If not, what still needs to be done?
Session 7: Team Building

Session 8: Sexual Harassment & Conflict Management

Did you learn anything new about yourself today?

What are your strengths and weaknesses as a team member?

What is one new thing you learned today about sexual harassment?

What one new technique would you like to try in resolving a conflict that may come up in the future for you?
Session 9: Applications Process
If you completed an online application, record information below, such as your log-in and password:
If you did not complete an application today, do you have plans to complete one outside of class?
Session 10: Interviewing & Networking
What was your biggest strength in the mock interview?
What area(s) of improvement do you want to work on for a job interview?
Session 11: Technical Skills & Pre-employment Testing
After today's session, do you want to pursue further practice in any of the skill areas covered? If yes, which one(s)?
Do you know where to find these resources? If yes, where? If no, who can you ask?

MODULE 2: WORK HABITS AND SAFETY AWARENESS SESSION

SESSION OVERVIEW AND LEARNING OBJECTIVES

The Work Habits and Safety session covers a number of essential work habits such as dependability, professionalism, and safety awareness.

The learning objectives for the session include:

- Explain the importance of first impressions
- Select characteristics of a positive image
- Identify behavior desired in the workplace (habits supervisors and co-workers like)
- Identify safety requirements in the workplace
- Know the importance of compliance with standards, regulations, and established procedures to ensure a safe and healthy work environment.
- Know basic regulatory requirements that promote safe and effective operations for the protection of people, data, property, and institutions.
- Know the roles and responsibilities of employers and employees in creating and maintaining a workplace safety culture.
- Identify knowledge and skill areas covered in the Applied Mathematics WorkKeys Assessment and answer sample questions.

Preparation

No advance preparation needed.

Schedule

10 Minutes Introduction

Recap what was learned during the Welcome Session. Ask a few participants to share what they included in their action plans at the end of that session. Answer any questions. State the learning objectives for the session.

25 Minutes Work Habits Presentation

Go through the *Work Habits* section of the presentation, using an interactive approach where participants can share their experiences, stories, and ask questions about the careers. Participants have a set of notes on Work Habits as well the case study below in their Participant Guides.

30 Minutes Killing Time Case Study

Divide the class into groups of 3-5 students to discuss the case. When possible, make sure each group has members who can lead the group, present their findings, and keep the discussion moving.

Direct them to the case with questions to consider in the participant guide. Have each group pick a spokesperson to present their ideas to the class after their discussions.

After their presentations, ask questions to bring out any information not covered in their presentations to make sure the following points are covered:

- By not getting back to the boss, they might have missed an opportunity to learn a new task and become a more valued employee.
- This might have been a test by the boss of their integrity and dependability.
- You are not being paid to take an extended break.

15 Minutes Break

30 Minutes Safety Awareness

Go through the *Safety Awareness* section of the presentation, using an interactive approach where participants can share their experiences, stories, and ask questions about the careers. Participants have a set of notes on Safety Awareness in their Participant Guides.

60 minutes WorkKeys Assessment: Applied Mathematics

Use the WorkKeys Applied Mathematics handout to discuss, in detail, the knowledge and skill sets being assessed. As you discuss each level, you may want to provide verbal examples of the types of questions one may encounter. Once each level is covered, have participants complete the sample questions, one at a time, discussing the rationale for the answers.

10 Minutes Wrap-up/Action Planning

Materials/Handouts

- WISE Pathways Work Habits and Safety Awareness PowerPoint
- WISE Pathways Work Habits and Safety Awareness handouts
- WorkKeys Applied Mathematics handout
- WorkKeys Mathematics Formula handout

Work Habits of Successful Employees

Many employers today are placing more emphasis on personal responsibility, ethics, integrity, and other quality characteristics. Employers need to be able to depend on employees to be responsible for their actions and make the right decisions to maintain a safe and healthful workplace.

First Impressions

As you prepare for your first day of work you might be thinking, "What will my co-workers be like? Will I understand everything I'm supposed to do? Am I wearing the right clothes? Will I make it through the first day?"

These are good concerns and we'll provide you a few insights to help you get ready. Ask the person who schedules your interview what to wear to the interview. When in doubt, wear a nice outfit to show you're serious about the interview and to show respect for the company and the interviewer. Ask the interviewer what people wear on the job. You need to learn about the job and how people dress and act. Look at the videos at www.getintoenergy.com to learn what clothes you will be expected to wear when you show up on the job. Ask the person who hires you what to wear on the first day. Wearing the right clothes will make your first day much more comfortable. You want to make sure you stand out for the right reasons. Starting off on the right foot makes the adjustment much easier.

First impressions last. Sometimes the first impression is the only impression, because you will not get a second chance if the first impression is not a good impression. Do your research and come to class or work prepared to make the right impression. Here are some tips:

- Remember the basics of good grooming comb your hair, brush your teeth, and wear clean clothes. Good personal habits pay off for you and the company.
- What if you showed up for the first day of work in business clothes when work clothes were needed? You might ruin a good set of clothes. You might get sent home with no pay. Would this make a good first impression?
- What else might you need on the first day at work? Lunch money? Boxed lunch? Personal protective equipment? Work boots? Eye protection? Water?

Fortunately most companies have an orientation day and many have a training program for you to learn what's expected on the first work day, but these are things to think about to make sure you are ready.

On your first day, assume your cell phone and any other personal communication device are off all day except during breaks and lunch. Even at those times only deal with urgent messages. You are expected to focus on the job. Yes, your breaks are your own time, but you will also need to use that time to build relationships with your co-workers. Once you are on the job you will see how your co-workers handle cell phones and learn how lenient your boss will be. However, don't push the limits or get complacent. You might get assigned to a different supervisor for a day or so who might have more stringent rules.

First impressions aren't limited to the first day on the job. You must always be on your toes and look like an eager employee. You won't be assigned to the same crew your entire career. Teams change and supervisors come and go. You don't really know who will be selecting you for your next assignment or promotion. You need to make sure all potential supervisors know you are a dependable worker who will do a job correctly and on time.

Be at Work and on Time

Your employer is expecting you to be at work every day and on time. You don't get to skip work just because you aren't in the mood one day. You will always have somebody depending on you to be at work every day. Even if you work for yourself, you have customers dependent on you to be there when they need you. Almost everyone is part of a team and the team cannot function effectively with a member absent.

Yes, every company has some plan for dealing with the workload when a team is short a person, but that is an extra headache for someone like the dispatcher and it frequently means some customer goes without electricity for a few extra hours or a construction project is delayed. Delays cost the company money. If you are the cause of too much cost overruns, the company may decide the best way to save money is to stop wasting it on you. Your continued employment is in jeopardy. Important points:

- What would happen if everybody was late or absent frequently?
- How does your lateness or absence affect your team?
- Know and follow the company policy for reporting absences or lateness.
- Keep your supervisor informed of planned absences.
- Give yourself enough time to get to work.
- Return from lunch or breaks on time.
- Cut absenteeism by maintaining good health.

Early is on time.

On time is late.

Late means trouble.

Dependability

Co-workers and supervisors need team members who are dependable. Dependable workers do the job correctly and on time. Dependable workers pull their own weight (do their share and more), take responsibility seriously, and look after each others' safety. Dependable workers do what they say they will.

Professionalism

Professionals keep their tools and work areas clean and organized. Craft workers are judged by their tools and keep them in good working order. You also need to follow the procedures and the schedule of work. Make sure you are technically qualified to do your work. When in doubt, talk to your supervisor. Take advantage of all opportunities to learn more about your job.

- Read books and trade publications, take classes and get experienced workers to teach you new skills.
- Volunteer for additional assignments outside your normal work when the opportunity is available.
- Always take advantage of opportunities to increase your skills and value to the company. Supervisors will notice the extra effort. Be careful that you don't take on too much and fail to deliver on your commitments.

Ethics and Integrity

Employees with good ethics and integrity are committed to conducting themselves in a professional and safe manner. Employees should be committed to working within the highest standards of legal and ethical conduct to ensure their personal safety and the safety of others.

Personal Responsibility and Personal Management

Here are some important considerations for personal responsibility and management:

- Employees should work in accordance with applicable safety and health laws and embrace safety and health as a way of life, on and off the job.
- Employees should be self-motivated to make safe choices for their own benefit and the benefit of others.
- Employees must take personal ownership of being safety conscious.
- Employees should acknowledge when their abilities or alertness are impaired by fatigue, illness, or other causes that might expose the individual or others to injury and act accordingly by reporting to a supervisor that they are unfit to safely perform their duties.
- Live within your budget and don't take on debt you can't handle. Know what you are earning and what you can afford. Make a budget and save for the nice-to-have items after you have acquired what you really need to survive. Learn the investment in education, training, and time on the job needed to earn more.
- Employees who get in debt they can't handle have failed to show the professionalism needed for the job. Employees with too much debt are distracted by debt worries and debt collectors and cannot pay full attention to the job while on the job. Supervisors and colleagues will notice and your continued employment could be in jeopardy. If you lose your job, your debt worries will become worse.

Teamwork

The energy and construction businesses are composed of teams, many of them dependent on other teams. This interrelated network means that each member must do his or her job correctly to avoid unexpected problems for other teams. Electricity customer requests are handled by a customer service team, which hands off the request to the dispatcher team to assign the work to a specific work team. The customer service team informs the customer of the expected completion of the request. If the work team wastes time and does not finish when expected all the other teams are saddled with additional work to reschedule the request and keep the customer updated (and not upset) with changes. The same situation exists in construction where different trades are scheduled on site to avoid conflict with each other. If you team doesn't work well together and work can't be completed on time the entire schedule is disrupted and must be adjusted to catch up to the project plan.

All members of a team are committed to helping each other achieve team success. You must watch out for each other and offer your help to the supervisor when you can. If you need help, you must speak up. The team is more willing to spend a few extra minutes helping you than spending hours redoing work you could not complete correctly.

Cooperation

Cooperation is key to teamwork. Sure one person can do the job, but two working together can make it go faster. For example, one person can gather all the tools from the work site while the other prepares and stows them on the truck. They aren't bumping into each other and walking back and forth over the same ground. Look for ways to cooperate and do the job more efficiently. You might be tempted to say it's

Companies are not democracies.
The CEO, the board, or the owner has made the rules and you follow them.

not your job, but it is your job, it is everybody's job. Telling the supervisor you are available to help with the remaining tasks after finishing your assigned work will be noticed and rewarded.

Like life, work is not fair. Things don't always make sense to inexperienced employees. Despite the best efforts of management, the playing field is not level. Randomness, chaos, and irrationality yank the rug out from under you over and over. You have to find the inner strength to endure the slights and criticism and continue to cooperate to get the work done. A rough day when you can't seem to do anything right is not an excuse to sulk and let others do the work.

Case Study – Killing Time

You have been employed as a line worker for the Energy Power Company for several months and have been learning more about the job each day. The crew you work with has been helping you learn the ropes and is starting to depend on you and another new worker. One day the boss sends just the two of you to a nearby site to inventory equipment adding that it should take about two hours to finish and get back before quitting time. When you get there, the job is not as difficult as expected and you are finished within an hour. Your partner suggests stopping on the way back to play video games.

- What do you do?
- What are the possible options?
- What would be the benefits of each option?
- What are some possible consequences of each option?
- Which would you choose and why?
- Why not choose other options?

NOTES:		

Safety Overview

A safe work environment is essential to providing efficient, reliable, and safe energy services to the public. Electricity and gas have become an integral part of our everyday lives. We take for granted the vital presence of energy in our daily lives until there is some type of interruption in service that makes our modern-day conveniences not so convenient.

It is the obligation of the government and the utility companies to provide efficient, reliable, and safe service to the public, and to maintain a safe workplace for their employees as well. Effective local, state, and national regulations promote and enforce safe and secure operations for the protection of people, data, the environment, property, and institutions.

The Importance of Safety Awareness

- Electrical hazards cause more than 300 deaths and 4,000 injuries in the workplace each year.
- Electrical accidents rank sixth among all causes of work-related deaths in the United States.
- The nonfatal workplace incidents that cause the highest number of days away from work include:
 - Contact with an electrical current or a machine, tool, appliance, or light fixture (38 percent).
 - Contact with wiring, transformers, or other electrical components (33 percent).
- Nonfatal electrical injury occurs most often to those who work with machines or tools and around electrical wiring other than power lines.
- Over the last 10 years, more than 46,000 workers were injured from on-the-job electrical hazards.
- During the work day, a worker is hurt every 30 minutes so severely from electricity that it requires time off the job.
- —Electrical Safety Foundation International (ESFI)

Effects of Electrical Current

Current	Item/Tool	Reaction to Current
One ma (milliamp)	Watch battery	Tingling sensation
More than 3 ma	9-volt battery	Disturbing shock
More than 10 ma	Christmas tree light bulb	Sustained muscle contraction "no-let-go"
		danger
More than 50 ma	Small radio	Lung paralysis—usually temporary
		Possible ventricular fibrillation (heart
		dysfunction, respiratory arrest, usually
		fatal)
One hundred ma to 4	Jig saw	Certain ventricular fibrillation, nerve
amps		damage, fatal
Over 4 amps	Circular saw	Heart paralysis, severe burns, fatal

Safety Regulation

In 1903, the U.S. Bureau of Labor began publishing studies of occupational fatalities and illnesses in certain trades, as well as other safety and health topics. During the 1960s, occupational injuries and illnesses were increasing in both number and severity. Disabling injuries increased 20 percent during the decade, and 14,000 workers were dying on the job each year.

After nearly a century of attempts by local and federal government to make the workplace safer, The Occupational Safety and Health Act (OSHA) was signed into law on December 29, 1970. Since the inception of OSHA, overall workplace fatalities have been cut by more than 60 percent, and incidence rates of occupational injury and illness have declined by 40 percent.

An Effective Workplace Safety and Health Program:

- Improves employee morale and performance
- Enhances company profitability
- Reduces employee turnover
- Reduces the extent of work injuries
- Reduces workers' compensation costs

Training

Training should be provided:

- To all new employees before they begin working
- To all existing employees at least once a year
- When new equipment, materials, or processes are integrated
- When procedures have been updated or revised

Key Components of Employee Safety Training:

- Mandatory attendance for all employees
- Addresses the safety and health responsibilities of all personnel
- Comprehensive to ensure coverage of all pertinent material
- Hands-on, pragmatic exercises to replicate authentic tasks and environments
- Ensure that all employees understand the hazards to which they may be exposed
- Ensure that all employees know how to prevent harm to themselves and others
- Training should include prevention, recognition, and correction of:
 - Housekeeping issues
 - Fall hazards
 - o Electrical hazards
 - Chemical hazards
 - Mechanical hazards
 - Fire hazards
 - o Duty-specific hazards
 - Additional health hazards

Forty percent of workers injured have been on the job less than one year.

The Bureau of Labor Statistics

Employer Responsibilities

Examples of standard employer responsibilities include:

- Ensure compliance with occupational safety and health standards and regulations
- Ensure that employees have the training, tools, and equipment needed to perform tasks safely
- Develop safety and health programs, policies, and procedures
- Conduct regular work observations and analysis
- Keep records of all monitoring data
- Ensure effective and timely resolution of safety and health issues
- Inform workers of their rights and responsibilities related to occupational safety and health
- Investigate and resolve all allegations of unsafe conduct or violations of policies and procedures
- Maintain confidentiality and privacy of employees
- Establish a company culture of safety by encouraging all employees to be safety specialists

Employee Responsibilities

Examples of standard employee responsibilities include:

- Follow safety rules, policies, and procedures to create a safe work environment
- Ask questions about any rules, policies, and procedures you do not understand
- Report any hazards, unsafe actions, or violations of safety policies or procedures
- Help co-workers recognize unsafe actions or conditions
- Stop the unsafe behavior of others
- If instructed to perform an unsafe act, notify a supervisor immediately
- Report all injuries and illnesses to your supervisor

As mandated by federal law, employees must comply with OSHA. In accordance with OSHA, employees who knowingly commit unsafe acts or create unsafe conditions, disregard the safety policy, or are repeat offenders **will be discharged**.

Grounds for Termination

Grounds for immediate termination at most companies include:

- Drinking alcohol and/or drug abuse prior to or during working hours
- Fighting
- Theft
- Willful damage to property
- Failure to wear eye/hearing protection, safety helmets, other required personal protective equipment (PPE)
- Failure to comply with appropriate tool and equipment operation policies
- Inappropriately altering safety guards, barriers, and/or guardrails
- Failure to follow recognized industry practices
- Engaging in dangerous horseplay
- Failure to notify the company of a hazardous situation
- Failure to notify the company of injuries at the time of occurrence
- Deliberately providing inaccurate information in safety/incident investigations

Drug-Free Lifestyle

Substance abuse places a major burden on the workplace. However, employers can work to protect their businesses from the negative impact of substance abuse by educating employees about its dangers and encouraging individuals with substance abuse problems to seek help. The effects of employee substance abuse extend beyond the individual employee. Drugs and alcohol can impair a worker's judgment and coordination, which can lead to an increased risk of accidents and injuries.

Co-workers can often be a powerful influence on those who are abusing drugs and/or alcohol. By knowing what to do and what not to do, co-workers can make the workplace safer and help their co-workers get the help they need. It is the responsibility of all workers, supervisors, and employers to be aware of their surroundings and to do what they can to make the work environments safe for everyone.

Workplace substance abuse is a serious problem, especially in environments where co-workers rely on each other for safety. All workers should take action and be willing to show concern for fellow employees, the workplace, and themselves. All employees should help co-workers get the assistance they need.

Safety Rights

- Right to a safe workplace free from recognized hazards
- Right to request information on safety and health hazards in the workplace, safety precautions to take and procedures to be followed if injury or exposure occurs
- Right to refuse a task that requires you to disobey safety rules standards
- Right to refuse a task that puts you or someone else in unnecessary danger
- Right to refuse a task for which you have not been trained to safely perform
- Right of freedom from retaliation for using safety rights

Safe Practices

All employees should be committed to working in compliance with all applicable environmental, health, and safety rules and established operating procedures. All workers should have the knowledge, skills, and abilities to carry out their work safely and efficiently. Employees should discuss safety and health questions or concerns with their employers, other workers, or union representatives (if available). Hazard assessments provide employers with the information they need to address and correct unsafe conditions and in turn provide employees with the information, training, and support they need to safely perform their jobs.

Personal Protective Equipment (PPE)

The following is a list of PPE commonly used in energy and utilities jobs:

- Safety glasses/face shields
- Hard hats
- Safety footwear
- Insulating gloves
- Insulating sleeve covers
- Flame-resistant clothing
- Fall protection equipment
- Respirators
- Cut-resistant chaps

WorkKeys Assessments:

Applied Mathematics

Number of Items

33

Test Length

45 (paper/pencil)
55 minutes (internet version)

The *Applied Mathematics* test is one of three WorkKeys assessments used with the National Career Readiness Certificate program. This assessment measures the skill people use when they apply mathematical reasoning, critical thinking, and problem-solving techniques to work-related problems. The test questions require the examinee to set up and solve the types of problems and do the types of calculations that actually occur in the workplace.

This test is designed to be taken with a calculator. A formula sheet that includes all formulas required for the assessment is provided. While individuals may use calculators and conversion tables to help with the problems, they still need to use math skills to think them through.

What the WorkKeys Applied Mathematics Test Measures

There are five levels of difficulty. Level 3 is the least complex, and Level 7 is the most complex. The levels build on each other, each incorporating the skills assessed at the previous levels. For example, at Level 5, individuals need the skills from Levels 3, 4, and 5. Examples are included with each level description.

Level

3

Characteristics of Items

- Translate easily from a word problem to a math equation
- All needed information is presented in

Skills

 Solve problems that require a single type of mathematics operation (addition, subtraction, multiplication,

- logical order
- No extra information

- and division) using whole numbers
- Add or subtract negative numbers
- Change numbers from one form to another using whole numbers, fractions, decimals, or percentages
- Convert simple money and time units (e.g., hours to minutes)

Level

Characteristics of Items

4

- Information may be presented out of order
- May include extra, unnecessary information
- May include a simple chart, diagram, or graph

Skills

- Solve problems that require one or two operations
- Multiply negative numbers
- Calculate averages, simple ratios, simple proportions, or rates using whole numbers and decimals
- Add commonly known fractions, decimals, or percentages (e.g., 1/2, .75, 25%)
- Add up to three fractions that share a common denominator
- Multiply a mixed number by a whole number or decimal
- Put the information in the right order before performing calculations

Level

Characteristics of Items

5

 Problems require several steps of logic and calculation (e.g., problem may involve completing an order form by totaling the order and then computing tax)

Skills

- Decide what information, calculations, or unit conversions to use to solve the problem
- Look up a formula and perform singlestep conversions within or between systems of measurement
- Calculate using mixed units (e.g., 3.5 hours and 4 hours 30 minutes)
- Divide negative numbers
- Find the best deal using one- and twostep calculations and then compare results
- Calculate perimeters and areas of basic shapes (rectangles and circles)
- Calculate percent discounts or markups

Level

Characteristics of Items



- May require considerable translation from verbal form to mathematical expression
- Generally require considerable setup and involve multiple-step calculations

Skills

- Use fractions, negative numbers, ratios, percentages, or mixed numbers
- Rearrange a formula before solving a problem
- Use two formulas to change from one unit to another within the same system of measurement
- Use two formulas to change from one

- unit in one system of measurement to a unit in another system of measurement
- Find mistakes in questions that belong at Levels 3, 4, and 5
- Find the best deal and use the result for another calculation
- Find areas of basic shapes when it may be necessary to rearrange the formula, convert units of measurement in the calculations, or use the result in further calculations
- Find the volume of rectangular solids
- Calculate multiple rates

Level

Characteristics of Items

7

- Content or format may be unusual
- Information may be incomplete or implicit
- Problems often involve multiple steps of logic and calculation

Skills

- Solve problems that include nonlinear functions and/or that involve more than one unknown
- Find mistakes in Level 6 questions
- Convert between systems of measurement that involve fractions, mixed numbers, decimals, and/or percentages
- Calculate multiple areas and volumes of spheres, cylinders, or cones
- Set up and manipulate complex ratios or proportions
- Find the best deal when there are several choices
- Apply basic statistical concepts

Level 3 Applied Mathematics Sample Item

In your job as a cashier, a customer gives you a \$20 bill to pay for a can of coffee that costs \$3.84. How much change should you give back?

- 1. \$15.26
- 2. \$16.16
- 3. \$16.26
- 4. \$16.84
- 5. \$17.16

Level 4 Applied Mathematics Sample Item

Over the last 5 days, you made the following numbers of sales calls: 8, 7, 9, 5, and 7. On the average, how many calls did you make each day?

- 1. 5.8
- 2. 7.0
- 3. 7.2
- 4. 9.0
- 5. 36.0

Level 5 Applied Mathematics Sample Item

Quik Call charges 18¢ per minute for long-distance calls. Econo Phone totals your phone usage each month and rounds the number of minutes up to the nearest 15 minutes. It then charges \$7.90 per hour of phone usage, dividing this charge into 15-minute segments if you used less than a full hour. If your office makes 5 hours 3 minutes worth of calls this month using the company with the lower price, how much will these calls cost?

- 1. \$39.50
- 2. \$41.48
- 3. \$41.87
- 4. \$54.00
- 5. \$54.54

Level 6 Applied Mathematics Sample Item

You are preparing to tile the floor of a rectangular room that is 15½ feet by 18½ feet in size. The tiles you plan to use are square, measuring 12 inches on each side, and are sold in boxes that contain enough tile to cover 25 square feet. How many boxes of tiles must you order to complete the job?

- 1. 11
- 2. 12
- 3. 34
- 4. 59
- 5. 287

Level 7 Applied Mathematics Sample Item

The farm where you just started working has a vertical cylindrical oil tank that is 2.5 feet across on the inside. The depth of the oil in the tank is 2 feet. If 1 cubic foot of space holds 7.48 gallons, about how many gallons of oil are left in the tank?

- 1. 37
- 2. 59
- 3. 73
- 4. 230
- 5. 294

There is coursework to prepare for the WorkKeys assessments. There are two products: KeyTrain and WIN. Materials on each of the online training courses are in your learner materials. These courses must be taken through an organization that has purchased either of both systems. Most likely you can take these at a low cost or free of charge. Check with your local workforce center. A directory can be found at http://www.servicelocator.org/.

Or check with local community college.

WorkKeys Applied Mathematics Formula Sheet

Distance

1 foot = 12 inches

1 yard = 3 feet

1 mile = 5,280 feet

1 mile ≈ 1.61 kilometers

1 inch = 2.54 centimeters

1 foot = 0.3048 meters

1 meter = 1,000 millimeters

1 meter = 100 centimeters

1 kilometer = 1,000 meters

1 kilometer ≈ 0.62 miles

<u>Area</u>

1 square foot = 144 square inches

1 square yard = 9 square feet

1 acre = 43,560 square feet

Volume

1 cup = 8 fluid ounces

1 quart = 4 cups

1 gallon = 4 quarts

1 gallon = 231 cubic inches

1 liter ≈ 0.264 gallons

1 cubic foot = 1,728 cubic inches

1 cubic yard = 27 cubic feet

1 board foot = 1 inch by 12 inches by 12 inches

Weight

1 ounce ≈ 28.350 grams

1 pound = 16 ounces

1 pound ≈ 453.592 grams

1 milligram = 0.001 grams

1 kilogram = 1,000 grams

1 kilogram ≈ 2.2 pounds

1 ton = 2,000 pounds

Rectangle

perimeter = 2(length + width)

 $area = length \times width$

Rectangular Solid (Box)

volume = *length* x *width* x *height*

Cube

volume = $(length \ of \ side)^3$

Triangle
sum of angles =
$$180^{\circ}$$

area = $\frac{1}{2}$ (base x height)

Circle

number of degrees in a circle = 360° circumference $\approx 3.14 \text{ x diameter}$ area $\approx 3.14 \text{ x } (radius)^2$

Cylinder

volume $\approx 3.14 \text{ x } (radius)^2 \text{ x } height$

Cone

volume
$$\approx \frac{3.14 \times (radius)^2 \times height}{3}$$

Sphere (Ball)

volume
$$\approx \frac{4}{3}$$
x 3.14 x (radius)³

Electricity

Temperature
°C = 0.56(°F - 32) or
$$\frac{5}{9}$$
(°F - 32)
°F = 1.8(°C) + 32 or $\frac{9}{5}$ (°C) + 32

Module 3: Construction Industry Session

SESSION OVERVIEW AND LEARNING OBJECTIVES

The session focuses on the "Top Construction Careers," the top in-demand industry jobs that are the focus of the pilot. Salaries and detailed information on the "what do you do?" is included in the PowerPoint presentation titled *Construction Careers Presentation*. In addition to learning about careers in the construction industry, participants will spend about 45 minutes learning about one of the three WorkKeys assessments and try out some sample test questions. The Construction Industry Session will focus on the Reading for Information Assessment.

The learning objectives for the session include:

- 1. Share what makes the construction industry a desirable industry for women
- 2. Examine the top construction careers that are the focus of the pilot program and the knowledge and skill sets required for each
- 3. Discuss on-the-job conditions in the construction industry (provided by role model speakers)
- 4. Identify knowledge and skill areas covered in WorkKeys Reading for Information Assessment and answer sample questions.

PREPARATION AND SPEAKER RECRUITMENT

The main item that must be prepared for the Construction Industry Session is the recruitment of the speakers for the construction industry panel.

Ideally, speakers should be a mix of trained tradeswomen, role-model speakers, employers, and trainers offering concrete, accessible opportunities, and robust career pathways. For role model speakers, the workshop planner should reach out to employer partners in order to find one, as it is critical that there be a role model speaker present. Ideally, these potential speakers will be able to speak to the top jobs being discussed within the sector. All speakers should be contacted a month and a half before the program start, so that if the planners need to move on to second or third choices, they can still do so with adequate time. Speakers should be informed of their role before the workshop convenes, and the facilitator should ask questions in preparation, before the session, to understand the context and background from which speakers will be presenting. Reminders should be sent one week, and one day before their session.

SCHEDULE

15 minutes Introduction

Recap what was learned during the Work Habits and Safety Overview Session. Ask participants if anyone would like to share an aspect of their action plan.

State the learning objectives for the session.

Ask participants:

What careers do you think of when you think of the construction industry?

- What percentage of employees in the industry are women? (Answer: 8.9%)
- Do you know any women who work in the construction industry?

40 minutes Construction Industry Presentation

Go through the *Construction Careers Presentation*, using an interactive approach where participants can share their experiences, stories, and ask questions about the careers. Participants have a copy of the presentation and room to take notes in their Learner Guides.

60 minutes Construction Industry Panel

The panel should be composed of at least one employer, one trainer, and one tradeswoman, role-model speaker, so as to provide a comprehensive view of the industry from different perspectives. Each role has a clear and defined purpose. The tradeswomen, role-model speaker can speak to her specific and powerful experiences in the industry, and through her stories, translate the technical information from the session into *sustainable emotional impact*. The employer speaker can speak to the long-term career paths available and the expectations of employers, and through their position as assessors of candidates, give *frank and realistic information* on how women can best plan for the long-term and present themselves as strong candidates. With the emotional buy-in and sense for long-term trajectory established, the trainer speaker can address the immediate question and need that is usually present for most women: *What do I do now*? Trainers should describe a *clear*, *actionable point of entry* that is directly related to a longer term career path.

The panel begins with a brief introduction by each speaker, followed by a Q&A guided by the facilitator. The women should be asking most of the questions, but the facilitator can jump in and re-direct as necessary.

15 minutes Break

40 minutes WorkKeys Assessment: Reading for Information

Use the WorkKeys Reading for Information handout to discuss, in detail, the knowledge and skill sets being assessed. As you discuss each level, you may want to provide verbal examples of the types of questions one may encounter. Once each level is covered, have participants complete the sample questions, one at a time, discussing the rationale for the answers.

10 minutes Wrap-up/Action Planning

MATERIALS/HANDOUTS

- Construction Careers Presentation PowerPoint
- WorkKeys Reading for Information handout

WorkKeys

Reading for Information

Number of Items	33
Test Length	55 minutes (internet version) 45 minutes (Paper-and-pencil)

The Reading for Information test is one of three WorkKeys assessments used with the National Career Readiness Certificate. It measures the skill people use when they read and use written text in order to do a job. The written texts include memos, letters, directions, signs, notices, bulletins, policies, and regulations. It is often the case that workplace communications are not necessarily well-written or targeted to the appropriate audience. Reading for Information materials do not include information that is presented graphically, such as in charts, forms, or blueprints.

What the WorkKeys Reading for Information Test Measures

There are five levels of difficulty. Level 3 is the least complex, and Level 7 is the most complex. The levels build on each other, each incorporating the skills assessed at the preceding levels. For example, at Level 5, individuals need the skills from Levels 3, 4, and 5. The reading materials at Level 3 are short and direct. The material becomes longer, denser, and more difficult to use as readers move toward Level 7. The tasks also become more complex as readers move from Level 3 to Level 7. At Level 3, readers begin by finding very obvious details and following short instructions. At the more complex levels, tasks can also involve more application and interpretation.

Level	Characteristics of Items	
3	 Reading materials include basic company policies, procedures, and announcements 	•
	 Reading materials are short and simple, with no extra information 	•
	 Reading materials tell readers what they should do 	•
	 All needed information is stated clearly and directly 	•
	 Items focus on the main points of the passages 	•
	 Wording of the questions and answers is 	

similar or identical to the wording used in

Skills

- Identify main ideas and clearly stated details
- Choose the correct meaning of a word that is clearly defined in the reading
- Choose the correct meaning of common, everyday workplace words
- Choose when to perform each step in a short series of steps
- Apply instructions to a situation that is the same as the one in the reading materials

Level

Characteristics of Items

- 4
- Reading materials include company policies, procedures, and notices
- Reading materials are straightforward but have longer sentences and contain a number of details
- Reading materials use common words but do have some harder words, too
- Reading materials describe procedures that include several steps
- When following the procedures, individuals must think about changing conditions that affect what they should do
- Questions and answers are often paraphrased from the passage

Level

Characteristics of Items

- 5
- Policies, procedures, and announcements include all of the information needed to finish a task
- Information is stated clearly and directly, but the materials have many details
- Materials also include jargon, technical terms, acronyms, or words that have several meanings
- Application of information given in the passage to a situation that is not specifically described in the passage
- There are several considerations to be taken into account in order to choose the correct actions

Level

Characteristics of Items

- 6
- Reading materials include elaborate procedures, complicated information, and legal regulations found in all kinds of workplace documents
- Complicated sentences with difficult words, jargon, and technical terms
- Most of the information needed to answer the items is not clearly stated

Skills

- Identify important details that may not be clearly stated
- Use the reading material to figure out the meaning of words that are not defined
- Apply instructions with several steps to a situation that is the same as the situation in the reading materials
- Choose what to do when changing conditions call for a different action (follow directions that include "ifthen" statements)

Skills

- Figure out the correct meaning of a word based on how the word is used
- Identify the correct meaning of an acronym that is defined in the document
- Identify the paraphrased definition of a technical term or jargon that is defined in the document
- Apply technical terms and jargon and relate them to stated situations
- Apply straightforward instructions to a new situation that is similar to the one described in the material
- Apply complex instructions that include conditionals to situations described in the materials

Skills

- Identify implied details
- Use technical terms and jargon in new situations
- Figure out the less common meaning of a word based on the context
- Apply complicated instructions to new situations
- Figure out the principles behind policies, rules, and procedures
- Apply general principles from the materials to similar and new situations
- Explain the rationale behind a

Level **Characteristics of Items** 7 Complicated concepts Difficult vocabulary

- Very complex reading materials
- Information includes a lot of details
- Unusual jargon and technical terms are used but not defined
- Writing often lacks clarity and direction
- Readers must draw conclusions from some parts of the reading and apply them to other parts

Skills

- Figure out the definitions of difficult, uncommon words based on how they are used
- Figure out the meaning of jargon or technical terms based on how they are used
- Figure out the general principles behind policies and apply them to situations that are quite different from any described in the materials

Level 3 Locating Information Sample Item

ATTENTION CASHIERS:

All store employees will now get 20% off the price of clothes they buy here. Please follow the new directions listed below.

Selling clothes to employees

- Ask to see the employee's store identification card.
- Enter the employee's department code number into the cash register.
- Use the cash register to take 20% off the price. Then push the sales tax button.
- Write your initials on the sales receipt.
- Sell clothes to employees during store hours only.

Accepting clothing returns from employees

- Employees receive a store credit certificate for clothes they return to the store.
- Store credit certificates are next to the gift certificates.
- Employees may not get a cash refund for clothes they return to the store.

You are a cashier. According to the notice shown, what should you write on a store employee's receipt?

- A. The employee's identification number
- B. The employee's department number
- C. The amount of sales tax
- D. The 20% discount price
- F. Your initials

Level 4 Locating Information Sample Item

INSTRUCTIONS TO SORTING DEPARTMENT: SPECIAL PROJECT TO FIX ORDER #888

Five long, blue plastic bins have been placed over by the overhead door. Piled on the other side of this room, near the time clock, are several thousand steel rods of varying lengths. All of those rods must be sorted by length and placed in the bins.

Bin "1" is for rods that are four to five meters long.

Bin "2" is for rods that have a length of over five meters, up to six meters.

Bin "3" is for rods that have a length of over six meters, up to eight meters.

Bin "4" is for rods that have a length of over eight meters, up to ten meters.

Bin "5" is for warped or unsmoothed rods. These will not be accepted.

If these rods are not all sorted correctly, the customer will reject the order. We cannot afford to let that happen again. Work as quickly as you can because Friday is the deadline for delivery of the order.

According to the instructions shown, what is a condition for project success other than delivery on time?

- A. All rods must be sorted by both length and diameter.
- B. Rods eleven meters long must be leaned against the overhead door.
- C. The customer does not want rods that are warped.
- D. The five-meter-long rods must go in Bin 2.
- E. The ten-meter-long rods must arrive at the customer in Bin 4.

Level 5 Locating Information Sample Item

Goldberg's Auto Parts is served by more than fifty different accounts, each with its own sales representative, company name, corporate address, and shipping address. As a shipping and receiving clerk at Goldberg's, you are required to return defective merchandise to the manufacturer.

Standard procedure for returning an item begins with your written request to the company for authorization. Always send the request to the corporate address, not to the shipping address. Unless the company file folder contains a form for this procedure, write a business letter to the manufacturer supplying the item's stock number, cost, and invoice number; the date it was received; and the reason for its return. The manufacturer's reply will include an authorization number from the sales representative, a sticker for you to place on the outside of the box to identify it as an authorized return, and a closing date for the company's acceptance of the returned item. If you do not attach the provided sticker, your returned box will be refused by the manufacturer as unauthorized, and you will need to obtain a new letter, authorization, sticker, and closing date. Always send a returned box to the shipping address, not to the company's corporate address.

According to the policy shown, what should you do if you lose an authorization sticker?

- 1. Send a request for a return authorization along with the rejected part directly to the manufacturer's shipping address.
- 2. Send a request for return authorization along with the rejected part directly to the manufacturer's corporate address.
- 3. Repeat the standard procedure to obtain a new letter, authorization, sticker, and closing date.
- 4. Use a sticker from another company's folder.
- 5. Send the rejected part to your sales representative.

Level 5 Locating Information Sample Item

MEMORANDUM

From: J. Kimura, Senior Vice President of Molten Metals, Inc.

To: All e-mail users at Molten Metals, Inc.

To permit our employees to communicate directly with one another as well as with vendors and customers, Molten Metals, Inc. provides a network of e-mail accounts. Access to e-mail is at the sole discretion of Molten Metals, Inc., and we will determine

who is to be so empowered. Under President Duarte's leadership, all messages sent and received (even those intended as personal) are treated as business messages. Molten Metals, Inc. has the capability to and reserves the right to access, review, copy, and delete any messages sent, received, or stored on the company e-mail server.

Molten Metals, Inc. will disclose these messages to any party (inside or outside the company) it deems appropriate. Employees should treat this server as a constantly reviewed, shared file stored in the system.

Due to the reduced human effort required to redistribute electronic information, a greater degree of caution must be exercised by employees transmitting MM, Inc. confidential information using company e-mail accounts. Confidential information belonging to MM, Inc. is important to our independence and should never be

transmitted or forwarded to persons or companies not authorized to receive that information. Likewise, it should not be sent or forwarded to other employees inside the company who do not need to know that information.

MM, Inc. strongly discourages the storage of large numbers of e-mail messages for a number of reasons. First, because e-mail messages frequently contain company confidential information, it is good to limit the number of such messages to protect the company's information. Second, retention of messages fills up large amounts of storage space on the e-mail server and personal hard disks, and can slow down the performance of both the network and individual personal computers. Finally, in the event that the company needs to search the network server, backup tapes, or individual hard disks for genuinely important documents, the fewer documents it has to search through, the more economical the search will be. Therefore, employees are to deleteas soon as possible any e-mail messages they send or receive.

Based on the memo shown, personal messages transmitted or received using Molten Metals, Inc., e-mail accounts will be:

- A. automatically deleted upon detection.
- B. avoided by server staff to save company time.
- C. forwarded to private, personal accounts.
- D. grounds for personnel action.
- E. treated no differently from other messages.

Level 7 Locating Information Sample Item

Confidentiality

Client and Consultant agree to maintain the confidentiality of each other's trade secrets and any confidential business information disclosed during the term of this agreement, except as authorized by the party that disclosed the information. When the consulting services have been completed, the parties will return all confidential materials and equipment provided during the term of this agreement, unless keeping the materials is authorized by the party that provided them. Each party is

responsible for identifying all trade secrets, confidential business information, and confidential materials.

Nothing in this or in any other agreement will prevent any party from using or disclosing confidential information to the extent necessary to carry out the responsibilities in this agreement; or will restrict any party's use or disclosure of information that is or becomes publicly known through lawful means, that was rightfully in that party's possession or part of that party's general knowledge prior to the term of this agreement, or that is disclosed to that party without confidential or proprietary restrictions by a person who rightfully possesses the information; or will prevent any party from responding to a lawful subpoena or court order.

Client agrees that Consultant will neither use nor disclose the trade secrets, confidential information, or confidential materials of third parties, and Client will neither ask nor require Consultant to do so.

Miscellaneous Provisions

All agreements and understandings between the parties concerning the subject matter of this agreement are embodied in this agreement and any proposal to which the parties agreed. It is understood and agreed by both parties that there are no oral or other agreements or understanding between the parties affecting this agreement.

This agreement shall supersede all prior and contemporaneous agreements and understandings between the parties, with respect to any subject covered by this agreement, except as otherwise provided in this agreement.

This agreement may not be amended except in writing by an instrument, signed by each of the parties. No failure or delay in exercising any right under this agreement shall operate as a waiver thereof.

Neither party shall assign or otherwise transfer any rights or obligations under this agreement without the written consent of the other party. Subject to the foregoing agreement, this agreement shall be binding upon and shall inure to the benefit of the parties' respective heirs, successors, attorneys, and permitted assignees.

If any provision of this agreement, or its application to any person, place, or circumstance, is held by an arbitrator or a court of competent jurisdiction to be invalid, unenforceable, or void, such provision shall be enforced to the greatest extent permitted by law, and the remainder of this agreement and such provision as applied to the other persons, places, and circumstances shall remain in full force and effect.

This agreement shall not become binding on either party until both parties execute it.

You have hired a consultant to work with your firm. Based on the agreement shown, what will happen if the consultant's business is taken over by a major competitor?

- A. The agreement will confidentially go into arbitration.
- B. The agreement will not be enforceable and is void.
- C. The consultant is bound by the agreement.
- D. The obligations will pass to the new owner.
- E. You must renegotiate the agreement with the new owner.

There is coursework to prepare for the WorkKeys assessments. There are two products: KeyTrain and WIN. Materials on each of the online training courses are in your learner materials. These courses must be taken through an organization that has purchased either of both systems. Most likely you can take these at a low cost or free of charge.

Check with your local workforce center. A directory can be found at http://www.servicelocator.org/.

Or check with local community college.

Module 4: Energy Industry Session

SESSION OVERVIEW AND LEARNING OBJECTIVES

The Energy Industry Session focuses on career pathways for women in the industry as well as a panel of employer, trainer, and role model speakers from the industry. The session focuses on the "Top Energy Careers," the top indemand energy industry jobs that are the focus of the pilot. Salaries and detailed information on the "what do you do?" is included in the PowerPoint presentation titled *Energy Careers Presentation*.

In addition to learning about careers in the energy industry, participants will spend about 30 minutes learning about the Locating Information WorkKeys assessment.

The learning objectives for the session include:

- 1. Share what makes the energy industry a desirable industry for women
- 2. Examine the top energy careers that are the focus of the pilot program and the knowledge and skill sets required for each
- 3. Discuss on-the-job conditions in the energy industry (provided by role model speakers)
- 4. Identify knowledge and skill areas covered in the Locating Information WorkKeys Assessment and answer sample questions.

PREPARATION AND SPEAKER RECRUITMENT

The main item that must be prepared for the energy industry session is the recruitment of the speakers for the energy industry panel.

Ideally, speakers should be a mix of trained tradeswoman role model speakers and employers and trainers offering concrete, accessible opportunities and robust career pathways. For role model speakers, the workshop planner should reach out to employer partners in order to find one, as it is critical that there be a role model speaker present. Ideally, these potential speakers will be able to speak to the top jobs being discussed within the sector. All speakers should be contacted a month and a half before the program start, so that if the planners need to move on to second or third choices, they can still do so with adequate time. Speakers should be informed of their role before the workshop convenes, and the facilitator should ask questions in preparation, before the session, to understand the context and background from which speakers will be presenting. Reminders should be sent one week, and one day before their session.

SCHEDULE

15	minutes	Introduction	
LJ	IIIIIIutes	III Caaction	

Recap what was learned during the Construction Industry Session. Ask a few participants to share what they included in their action plans at the end of that session. Answer any questions.

State the learning objectives for the session.

Ask participants:

- What careers do you think of when you think of the energy industry?
- Did you know that with overtime, lineworkers in the energy industry can make nearly \$100,000 a year? Energy industry careers are well-paying jobs with excellent benefits. We will discuss some of these benefits at today's session.
- Do you know any women who work in the energy industry?

60 minutes Energy Industry Presentation

Spend a few minutes discussing what can make the transition to the energy industry desirable for women using the slides and the handout titled *Why the Energy Industry*. Ask the participants what they think about this total compensation package.

Go through the *Energy Careers Presentation*, using an interactive approach where participants can share their experiences, stories and ask questions about the careers. Some of the slides have links to videos interviewing individuals in those jobs. This adds variety to the presentation and gives the participant an insider's perspective.

There are some handouts that should be used during the presentation, including the *Energy Industry Competency Model, Career Pathways Natural Gas Service Technician,* and *Career Pathways Lineworker*. It is important to go through each of the handouts and make sure the participants understand the competencies for the industry and are able to see how each job category has room for advancement making these true "careers."

60 minutes Energy Industry Panel

The Panel should be composed of at least one employer, one trainer, and one tradeswoman role model speaker, so as to provide a comprehensive view of the industry from different perspectives. Each role has a clear and defined purpose. The tradeswomen role model speaker can speak to her specific and powerful experiences in the industry, and through her stories, translate the technical information from the session into *sustainable emotional impact*. The employer speaker can speak to the long-term career paths available and expectations of employers, and through their position as assessors of candidates, give *frank and realistic information* on how women can best plan for the long term and present themselves as strong candidates. With the emotional buy-in and sense for long term trajectory established, the trainer speaker can address the immediate question and need that is usually present for most women: *what do I do now*? Trainers should describe a *clear, actionable point of entry* that is directly related to a longer term career path.

The panel begins with a brief introduction by each speaker, followed by a Q&A guided by the facilitator. The women should be asking most of the questions, but the facilitator can jump in and re-direct as necessary.

15 minutes **Break**

30 minutes WorkKeys Assessment: Locating Information

Using the PPT slides and the WorkKeys Locating Information handout to discuss, in detail, the knowledge and skill sets being assessed for this element of the WorkKeys assessment. As you discuss each level, you may want to provide verbal examples of the types of questions one may encounter. Once each level is covered, have participants complete the sample questions, one at a time, discussing the rationale for the answers.

10 minutes

Wrap-up/Action Plan

MATERIALS

- Why the Energy Industry handout
- Energy Careers Presentation PowerPoint
- Energy Industry Competency Model handout
- Career Pathways Natural Gas Service Technician handout
- Career Pathways Lineworker handout
- WorkKeys Locating Information handout



Why the Energy Industry for Women?

As many women are discovering, careers in energy are excellent careers. They pay well, offer extensive benefits, and provide opportunities for growth. As they say in the industry, "You can be anything at an energy company." You'll hear many stories of senior managers and even CEOs who started off in positions such as lineworkers. Find out what all-the-buzz is about with today's utilities.

Salaries

Did you know that median salaries in the energy industry are over \$60,000? With overtime, some positions even pay close to \$100,000. These are "middle skill" positions that require a post-secondary credential, but less than a bachelor's degree. Check out the average salaries on each of the career page links at http://www.getintoenergy.com/careers.php.

Benefits

Energy companies offer some of the best benefits available in the business world. See below the types of benefits you can expect if you are employed by an energy company.

- Healthcare & Insurance
 - Medical
 - Dental
 - Vision
 - Group Life
 - Short and Long-term Disability Insurance
 - Flexible Spending Accounts
 - Comprehensive Wellness Programs
 - Employee Assistance Program (mental health)
- Financial
 - Pension
 - Employee Savings Plan 401(k)



Opportunity for Advancement

Energy companies support the "grown your own" philosophy. Not only do they prefer hiring within their own communities, but they support advancement of their employees. Energy companies offer tuition reimbursement should a position require an advanced credential or degree.

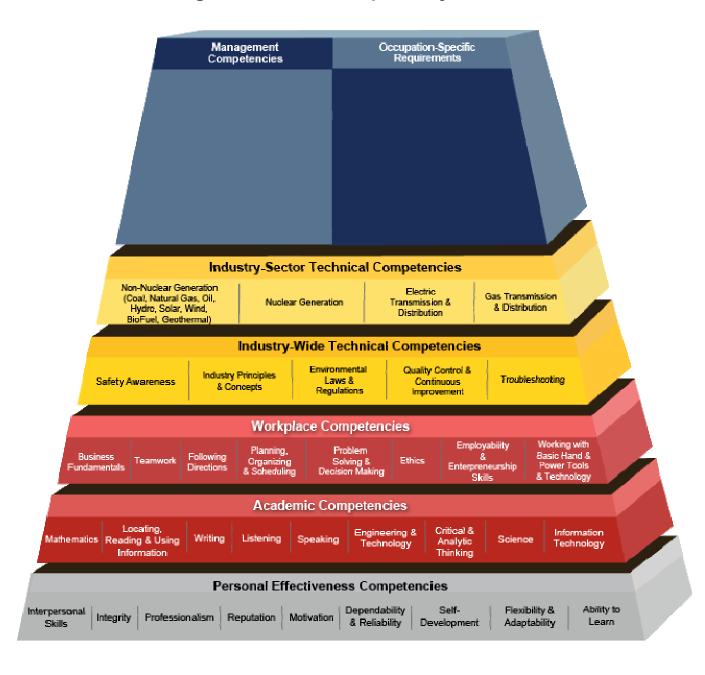
Teamwork

Teamwork is essential at energy companies. Think about it—without teamwork, how would an outage be managed? With a culture of safety, teamwork is essential. However, go beyond, and you will see teamwork everywhere in an energy company, from customer service through senior management everyone works together to advance the company's mission of providing safe and reliable energy to their communities.



Framework of Competencies for the Energy Generation, Transmission and Distribution Industry

Building Blocks for Competency Model



Tier 1: Personal Effectiveness

Personal Effectiveness

1. Interpersonal Skills: Displaying skills to work with people

- Demonstrates concern for others by being sensitive to their needs and feelings
- Shows understanding of others behavior by demonstrating appropriate responses
- Demonstrates respect for the opinions, perspectives, customs and individual differences of others by including others in problem solving and decision making
- Maintains open communication with others
- Recognizes and accurately interprets the verbal and nonverbal behaviors of others
- Demonstrates flexibility and open mindedness when dealing with a wide range of people
- Listens to and considers others' viewpoints and alters own opinion when it is appropriate

2. <u>Integrity</u>: Displaying accepted social and work behaviors

- Treats all in a fair and equitable manner
- Behaves ethically through responsible use of company time and property
- Reports unethical behavior demonstrated by others to supervision

3. <u>Professionalism</u>: Maintaining a professional presence and adhering to ethical standards

- Demonstrates self-control by maintaining composure and keeping emotions in check even in difficult situations
- Maintains a professional appearance by dressing appropriately for the job and maintaining personal hygiene
- Uses professional language when speaking with supervisor, co-workers and customers
- Is free from substance abuse
- Maintains a positive attitude
- Takes pride in one's work and the work of the organization

4. Motivation: Demonstrating a commitment to effective job performance

- Ensures that job is done safely, accurately and completely.
- Identifies new and better processes or procedures
- Follows instructions and direction from supervisor and co-workers
- Takes responsibility for completing one's own work assignment

5. <u>Dependability/Reliability</u>: Displaying responsible behaviors at work

- Comes to work when scheduled and on time
- Complies with company policies
- Does not attend to personal business while on the job
- Manages stressful situations effectively
- Fulfills obligations of the job

6. <u>Self-Development</u>: Demonstrating a commitment to self development and improvement

- Identifies goals and career interests
- Demonstrates an interest in learning
- Seeks opportunities to learn new skills and tasks
- Participates in training to learn new skills and to refine current skills
- Adapts quickly to changes in process or technology
- Accepts help from supervisors and co-workers

7. Flexibility & Adaptability: Adjusting to changing work requirements

- Adjusts to changing priorities
- Identifies logical stopping points in work
- Refocuses attention to new assignment quickly
- Quickly learns new assignments
- Shifts gears and changes direction when working on multiple projects
- Anticipates and accepts changes in work

8. <u>Ability to Learn:</u> Incorporating classroom and on the job training into work performance

- Uses material taught in classroom and on the job training in work situations
- Applies information provided in training to work tasks
- Desires, shows willingness to learn new assignments, procedures and technologies

Tier 2: Academic Competencies

Academic Competencies

1. <u>Mathematics</u>: Using mathematics to solve problems

- Adds, subtracts, multiplies and divides with whole numbers, fractions, decimals and percents; calculates averages, ratios, proportions and rates
- Takes measurement of time, temperature, distance, length, width, height, perimeter, etc
- Correctly converts from one measurement to another
- Translates practical problems into useful mathematical expressions and uses appropriate mathematical formulas and techniques
- Solves simple algebraic equations
- Is able to determine slope, midpoint, and distance
- Calculates perimeters, areas and volumes of basic shapes and solids
- Reads, tracks, and calculates gauge measurements

2. <u>Locating, Reading and Using Information</u>: Knowing how to find information and identifying essential information

- Sorts through distracting information
- Scans written material for subject of interest
- Is able to identify main ideas in written material
- Correctly interprets written material
- Integrates what is learned from written materials with prior knowledge
- Applies what is learned from the written material to complete specific tasks

3. <u>Writing</u>: Using standard business English to write messages to co-workers and reports to managers and associates

- Creates documents such as work orders or memos
- Uses standard syntax and sentence structure, correct spelling, punctuation and capitalization and appropriate grammar
- Writes clearly and concisely in a professional and courteous manner
- Writes effective for a variety of audiences
- Communicates thoughts, ideas, information which may contain technical material in a logical, organized and coherent manner
- Clearly develops ideas and elaborates on them with relevant supporting examples and specific details
- Shows insight, perception and depth in writing

4. <u>Listening</u>: Listening carefully in order to incorporate information into work activities

- Listens carefully to others
- Correctly interprets information provided by others
- Is able to incorporate information into actions

5. <u>Speaking</u>: Communicating in spoken English well enough to be understood by supervisors, co-workers and customers

- Uses standard sentence structure and appropriate grammar
- Speaks clearly, in precise language and in a logical organized and coherent manner
- Keeps language simple and appropriate for the audience's level of knowledge of the subject

6. <u>Engineering and Technology</u>: Possessing an appropriate mastery of knowledge, techniques, skills, modern tools and advanced technology

- Applies basic engineering principles
- Applies the appropriate technical solution
- Applies principles of engineering science and technology, techniques, procedures and equipment to the design and production of various goods and services
- Applies the basics of electricity
- Identifies and selects the appropriate hand or small electric tools or diagnostic equipment for the work
- Solves problems where a variety of mechanical, electrical, thermal or fluid faults could be the reason for the problem

7. <u>Critical and Analytical Thinking</u>: Using logical thought processes to analyze information and draw conclusions

- Identifies inconsistent or missing information
- Critically reviews, analyzes, synthesizes, compares and interprets information;
- Draws conclusions from relevant and/or missing information
- Tests possible hypotheses to ensure the problem is correctly diagnosed and the best solution is found

Tier 3: Workplace Competencies

Workplace Competencies

- 1. <u>Business Fundamentals</u>: Knowledge of business and management principles. The knowledge and skills that enable individuals to understand the relationship between own job and goals and operations of company and industry
 - Is able to articulate the organization's mission and functions and its position in the marketplace
 - Recognizes one's role in the functioning of the company
 - Applies interpersonal skills to work environment
 - Complies with applicable laws and rules governing work and reports loss, waste or theft of company property to appropriate personnel
 - Acts in the best interest of the company, community and environment

2. Teamwork: Developed capacities used to work with others

- Accepts membership in the team
- Identifies with the goals, norms, values and customers of the team
- Uses a group approach to identify problems and develop solutions based on group consensus
- Effectively communicates with all members of the team to achieve goals
- Develops constructive and cooperative working relationships with others
- Shows sensitivity to the thoughts and opinions of others
- Responds appropriately to positive and negative feedback
- Encourages others to express their ideas and opinions
- Learns from other team members
- Applies interpersonal skills to help team achieve goals
- Gives full attention to what others are saying, taking time to understand the points being made, asking questions as appropriate and not interrupting at inappropriate times
- Keeps all parties informed of progress and all relevant changes to project timelines
- Demonstrates loyalty to the team

3. <u>Following Directions:</u> Receiving, understanding and carrying out assignments with minimal supervision

- Receives, interprets, understands and responds to verbal messages and other cues
- Picks out important information in verbal messages
- Interprets complex instructions and their relevance to the work assignment
- Asks questions to clarify unclear directions
- Acts upon the instruction to complete an assignment

4. <u>Planning/Organizing/Scheduling</u>: Demonstrating the ability to work within a schedule using prescribed procedures

 Prioritizes various competing tasks and performs them quickly and efficiently according to their urgency

- Finds new ways of organizing work area or planning work to accomplish work more efficiently
- Estimates resources needed for project completion; allocates time and resources effectively
- Anticipates obstacles to project completion and develops contingency plans to address them; takes necessary corrective action when projects go off-track
- Plans and schedules tasks so that work is completed on time
- Makes arrangements that fulfill all requirements as efficiently and economically as possible
- Responds to the schedules of others affected by arrangements; informs others of arrangements, giving them complete, accurate and timely information
- Keeps track of details to ensure work is performed accurately and completely
- Takes steps to verify all arrangements; recognizes problems, generates effective alternatives and takes corrective action
- Effectively coordinates the transition of employees at the beginning and end of each work shift; disseminates crucial information in an organized manner to rapidly bring employees up to speed at the start of their shifts

5. <u>Problem Solving/Decision-making</u>: Applying problem-solving and critical-thinking skills to help grow the business and/or to resolve workplace conflict

- Anticipates or recognizes the existence of a problem
- Identifies the true nature of the problem by analyzing its component parts
- Effectively uses both internal and external resources to locate and gather information; examines information obtained for relevance and completeness; recognizes important gaps in existing information and takes steps to eliminate those gaps; recalls previously learned information that is relevant to the problem; organizes information as appropriate to gain a better understanding of the problem
- Integrates previously learned and externally obtained information to generate a
 variety of high quality alternative approaches to the problem; skillfully uses logic
 and analysis to identify the strengths and weaknesses, the costs and benefits and the
 short and long-term consequences of different approaches
- Skillfully uses logic and analysis to identify the strengths and weaknesses, the costs and benefits and the short and long-term consequences of different approaches
- Decisively chooses the best solution after contemplating available approaches to the problem; makes difficult decisions even in highly ambiguous or ill-defined situations; quickly chooses an effective solution without assistance when appropriate
- Commits to a solution in a timely manner and develops a realistic approach for implementing the chosen solution; observes and evaluates the outcomes of implementing the solution to assess the need for alternative approaches and to identify lessons learned
- Uses scientific rules and methods to solve problems

6. Working with Basic Hand and Power Tools and Technology: Having capability to operate and troubleshoot electric and electronic equipment, mechanical and electrical

products

- Selects and applies appropriate tools or technological solutions to frequently encountered problems
- Carefully considers which tools or technological solutions are appropriate for a given job and consistently chooses the best tool or technological solution for the problem at hand
- Demonstrates an interest in learning about new and emerging tools and technologies; seeks out opportunities to improve knowledge of tools and technologies that may assist in streamlining work and improving productivity
- Knows how to maintain and troubleshoot tools and technologies
- Uses basic computer technology to receive work orders, report progress and maintain records.

Tier 4 – Industry-wide Technical Competencies

Industry-wide Technical Competencies

1. <u>Safety Awareness</u>: Compliance with the procedures necessary to ensure a safe and healthy work environment

- Is cognizant of the environment and potential hazards
- Follows established safety procedures
- Evaluates changes in the environment with respect to their impact on safety of self and others
- Promotes effective local, state or national security operations for the protection of people, data, property and institutions
- Complies with safety procedures and proper ways to perform work
- Understands potential threats created by deviation from safety procedures and improper use of tools and equipment
- Follows safety procedures and uses safety equipment as specified by user manuals and safety training
- Uses personal protection equipment including safety glasses, work boots, hard hats
- Keeps personal safety equipment in good working order
- Uses tools and equipment in compliance with user manuals and training
- Calls attention to potential and actual hazardous conditions as they arise
- Alerts co-workers and supervisory personnel to hazardous conditions and deviations from safety procedures in a timely manner
- Maintains appropriate certification and is knowledgeable in first aid or first response procedures
- Demonstrates knowledge of lock/tag out practices
- Notifies person in charge and/or co-workers of unsafe work conditions
- Stops the job if there are unsafe working conditions

2. <u>Industry Principles and Concepts</u>: Knowledge of the basic and emerging principles and concepts that impact the energy industry, including: energy production, energy transmission and alternative energy technologies

- Is able to explain the flow of energy from generation through distribution to the customer
- Is able to explain the role of regulators and unions in the industry
- Demonstrates an awareness of alternative and renewable energy technologies, including geothermal energy, solar energy, wind energy, water energy and biofuel

3. <u>Environmental Laws and Regulations</u>: Compliance with relevant local, state, and federal environmental laws and regulations that impact the energy industry

- Demonstrates professional responsibility for maintaining all policies and standards for health, safety and the environment
- Complies with all relevant environmental laws issued by federal agencies, including EPA
- Follows energy standards produced by industry organizations, such as ANSI, API, NACE, and NFPA
- Identifies appropriate jurisdiction for local, state, and federal regulatory agencies as they pertain to the energy industry.
- Maintains current knowledge of regulatory procedures governing operations

- 4. <u>Quality Control/ Continuous Improvement</u>: Demonstrates the ability to design, analyze and effectively use systems, components and methods with a framework of quality and continuous improvement
 - Conducts tests and inspections of products, services or processes to evaluate quality or performance
 - Incorporates new information into both current and future problem solving and decision making
 - Monitors/assesses performance of self, other individuals or organizations to make improvements or take corrective action
 - Determines how a system should work and how changes in conditions, operations and the environment will affect outcomes
 - Uses logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems
- 5. Troubleshooting: Diagnoses and corrects abnormalities and malfunctions in equipment and production processes
 - Monitors equipment to ensure maintenance schedules are adhered to
 - Demonstrates knowledge of normal equipment operation (how the individual pieces of equipment relate to each other) in order to spot potential equipment problems before they occur
 - Determines causes of operating errors, decides what to do about them and knows when to notify more senior personnel

Tier 5 Industry-Specific Technical Competencies

Energy Generation, Transmission and Distribution

Industry-Sector Technical Competencies

Energy Generation, Transmission and Distribution

1. <u>Non-Nuclear Generation</u>: Technical skills and knowledge necessary for gas, oil, coal or hydro power plant personnel and other alternative energy technologies including solar, wind, biofuel and geothermal

Electrical Science:

- Explains and uses the fundamental concepts associated with electricity (e.g., electric charge, electric current).
- Explains the components of electrical systems including switchyard construction, transformers, relays, circuit breakers, motors
- Explains the differences and similarities of power generation, including use of different fuel types, different plant uses (i.e., peaking, load following)
- Explains the role of alternative energy technologies in the production of energy, including solar, wind, biofuel and geothermal

Equipment Operation, Maintenance and Repair:

- Complies with the procedures necessary to ensure a safe and healthy work environment
- Operates, repairs and tests machines, devices and equipment based on electrical or mechanical principles in order to diagnose machine malfunctions
- Operates basic hand and small electric tools and equipment
- Conducts tests and inspections of products, services or processes to evaluate quality or performance
- Determines the kind of tools and equipment needed to do a job
- Watches gauges, dials or other indicators to make sure a machine is working properly
- Is able to read, interpret and create basic prints used in the design, operation and maintenance of electrical including engineering drawings, diagrams and schematics - documentation diagrams, single line diagrams

Problem Solving and Decision Making:

- Observes, obtains and analyzes information to identify and solve problems
- Diagnoses malfunctioning systems apparatus and components using test equipment and hand tools to locate the cause of a breakdown and correct the problem
- Uses computers to enter and analyze data and provide reports to supervision

Teamwork:

- Displays a good natured cooperative attitude with crew members on the job
- Maintains composure controlling anger and avoiding aggressive behavior

2. <u>Nuclear Generation</u>: Technical skills and knowledge necessary for nuclear power plant personnel

Electrical Science:

- Explains and uses the fundamental concepts associated with electricity (e.g., electric charge, electric current).
- Understands the components of electrical systems including switchyard construction, transformers, relays, circuit breakers, motors

Reactor Theory and Operations:

- Explains the general design overview of the basic reactor types
- Demonstrates understanding of reactor startup and shutdown procedures
- Explains the fission process including the construction of fission product barriers

Operations and Repair:

- Complies with the procedures necessary to ensure a safe and healthy work environment
- Operates, repairs and tests machines, devices and equipment based on electrical or mechanical principles in order to diagnose machine malfunctions
- Operates basic hand and small electric tools and equipment
- Conducts tests and inspections of products, services or processes to evaluate quality or performance
- Determines the kind of tools and equipment needed to do a job
- Watches gauges, dials or other indicators to make sure a machine is working properly
- Is able to read, interpret and create basic prints used in the design, operation and maintenance of electrical including engineering drawings, diagrams and schematics - documentation diagrams, single line diagrams

Additional Academic Requirements:

- <u>Physics Explains and uses physics terms, units, definitions and basic concepts including mechanical principles (laws of motion, energy, conditions of equilibrium) and units (pressure, temperature, flow, volume)</u>
- Basic Atomic & Nuclear Physics Explains the basic atomic and nuclear physics terms, unit, definitions and basic concepts including atomic structure, nuclear interactions and reactions, sources of residual heat/decay heat and reactor operation
- <u>Chemistry -</u> Explains the chemistry terms, units, definitions and basic concepts and applies the concepts successfully on the job, including fundamentals of chemistry (molecules, mixtures, solutions and compounds, corrosion control), water chemistry control, reactor water chemistry and the corrosion process
- <u>Mathematics</u> Has experience and knowledge in scientific notation, dimensional analysis, geometry, trigonometry, graphs and control charts, relational charts, exponents and logarithms and basic statistics

3. <u>Electric Transmission and Distribution</u>: Knowledge and skills necessary for the transmission and distribution of electricity from the power plant to the end customer Electrical Science:

- Explains and uses the fundamental concepts associated with electricity (e.g., electric charge, electric current).
- Understands the components of electrical systems including but not limited to substations, transformers, relays, circuit breakers, motors, transmission facilities, and distribution facilities (i.e. regulators, capacitors, reclosers).

Operations and Repair:

- Complies with the procedures necessary to ensure a safe and healthy work environment
- Is able to climb poles and towers
- Constructs new electrical distribution and transmission systems including setting poles, installing conduit, cable, wire and related equipment such as transformers, circuit breakers and switches
- Maintains and repairs electrical distribution and transmission systems, including conduits, cables, wires and related equipment such as transformers, circuit breakers and switches
- Inspects and tests power lines and auxiliary equipment to locate and identify problems, using reading and testing instruments
- Is able to read, interpret and create basic prints used in the design, operation and maintenance of electrical networks including engineering drawings, diagrams and schematics documentation diagrams, single line diagrams.

Teamwork:

- Displays a good natured cooperative attitude with crew members on the job
- Maintains composure controlling anger and avoiding aggressive behavior

Customer Focus:

- Interacts directly with the public listening to and understanding customer needs and concerns
- Knows when to contact the person in charge to resolve a customer issue
- Keeps the public informed of work and disruptions
- 4. <u>Gas Transmission and Distribution:</u> Knowledge and skills necessary for the transmission and distribution of natural gas from the refinery to the end customer

Fundamentals of Natural Gas:

- Understands and applies the fundamental concepts of natural gas
- Understands the components and workings of the gas transmission and distribution network, including metering and regulating stations

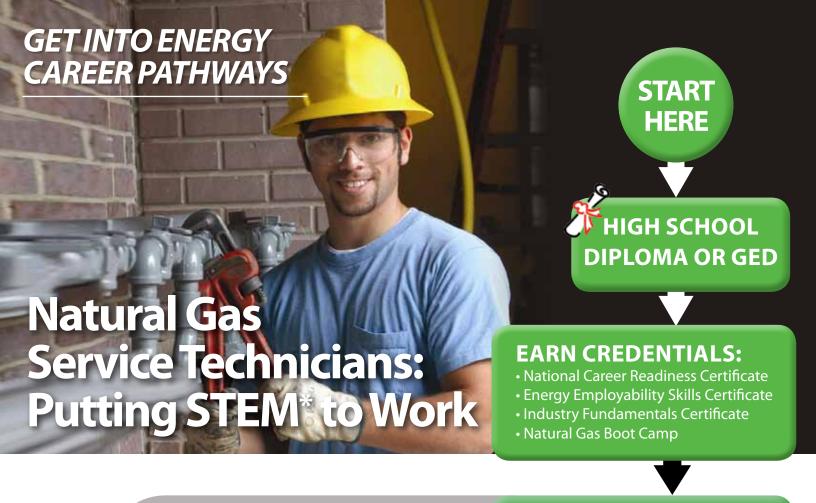
Operations and Repair:

- Complies with the procedures necessary to ensure a safe and healthy work environment
- Lays out, assembles, installs and maintains pipe systems and pipe supports for use in the transmission and distribution of natural gas
- Reads, understands and creates basic prints used in the design, operation and maintenance of gas networks including engineering drawings, diagrams and schematics
- Selects pipe sizes and types and related materials, such as supports, hangers and hydraulic cylinders according to specification

- Assembles and secures pipes, tubes, fittings and related equipment according to specification by welding, brazing cementing, soldering or threading joints
- Inspects, examines and tests installed systems and pipe lines using pressure gauges, hydrostatic testing, observation and other methods
- Digs trenches to desired or required depths by hand or using trenching tools
- Grades and levels trench bases using tamping machines or hand tools

Customer Focus:

- Interacts directly with the public listening to and understanding customer needs and determining how to address them
- Keeps the public informed of work and disruptions



LEARN MORE / EARN MORE

Pass Pre-Employment Tests and Become a **HELPER/MECHANIC**

EDUCATIONAL OPPORTUNITIES FOR ADVANCEMENT

- Apprenticeship (for College Credit)**
- Experience in Position

6 MONTHS**

SERVICE ASSISTANT (\$26,000)

- Associate's Degree
- Long-Term On-the-Job Training

3 YEARS**

SERVICE MECHANIC (\$43,000)

- Long-Term On-the-Job Training
- Experience in Position

4 YEARS**

SERVICE TECHNICIAN (\$51,000)

Long-Term On-the-Job Training

6 YEARS**

CONSTRUCTION TECHNICIAN
(\$54,000)

- Bachelor's Degree
- Long-Term On-the-Job Training

7 YEARS**

SPECIALIST/SUPERVISOR (\$56,000-\$69,000)

^{**} Dependent on company requirements





^{*} Science, Technology, Engineering, and Math

NATURAL GAS SERVICE TECHNICIAN: What will you do?

What competencies will you need? (built on energy foundational competencies—incremental as career advances)

Note: Most utilities use a pre-employment test—to pass you will need math, communications, problem solving, and mechanical reasoning skills.

STARTING OFF AS A SERVICE ASSISTANT:

- Provide assistance by providing tools and equipment
- · Make work area safe
- Enter job data into online system

- Teamwork
- Drive heavy commercial vehicles
- Lift 75 lbs
- Listen and follow directions, come to work on time and prepared
- Be able to stand for long periods of time
- Math skills including algebra, trig, and geometry

APPRENTICESHIP TRAINING COMPONENTS:

- Understand fundamentals of Alternating Current / Direct Current
- Safely activate and inactivate gas and electric services
- Investigate code and/or venting conditions and take appropriate actions
- Troubleshoot burners and make the proper adjustments to obtain complete combustion at the rated input
- Using standard test equipment, investigate gas leaks and take appropriate actions to make job safe
- Work with a Service Technician or Specialist to apply apprentice training concepts to the job

SERVICE MECHANIC/TECHNICIAN:

- · Prepare trenches for laying pipes
- Lay pipes for gas lines
- Fuse plastic pipe together
- Install and repair both high- and low-pressure pipe systems
- Install automatic controls used to regulate gas systems
- Ability to inspect service lines and house lines, investigate leak fume complaints, restore and terminate gas service and perform pressure checks at customer's premises
- Use equipment such as CGI gas scope leak machine and Gas Ranger to detect leaks in a customer's premises or outdoors
- Locate and mark out underground gas and electric facilities in conjunction with work assignment
- Repair and install gas appliances and equipment such as ovens, dryers and hot water heaters
- Measure, cut and thread pipe and connect it to feeder lines and equipment or appliance using ruler and hand tools

SERVICE SPECIALIST:

- Manage own work schedules and report to supervisor on progress and/or problems
- Check for unsafe work conditions
- Communicate effectively with others including customers, crew members and supervisors
- · Deal with potentially stressful situations

- Communications skills
- Assign priority or sequence to the steps for completing a job
- Coordinate several, competing activities for efficient use of time and material
- Adapt work procedures or priorities in response to changing or unforeseen requirements or conditions

SUPERVISOR:

- Schedule and oversee work of line crews
- Review crew member performance and provide feedback
- Prepare and manage budgets
- Report to management

- Financial management
- Computer skills for report preparation
- People management



ENERGY INDUSTRY COMPETENCY MODEL

Tier 6-8 — Occupation Specific

Tier 5 — Industry-Specific Technical

Tier 4 — Industry-Wide Technical Competencies

Tier 3 — Workplace Competencies

Tier 2 — Academic Competencies

Tier 1 — Personal Effectiveness

Energy industry careers offer:

- Excellent salaries
- Job growth & stability
- Great benefits
- Opportunities for advancement
- Community service

Where can I find training?

Go to the Get Into Energy web site at www.getintoenergy.com/careers.php and check "Training Programs and Work-Based Training."

Where can I find a job?

Go to the Get Into Energy web site at www.getintoenergy.com/careers.php and check "Featured Employers."



LEARN MORE / EARN MORE

Pass Pre-Employment Tests and Become a LINE HELPER

EDUCATIONAL OPPORTUNITIES FOR ADVANCEMENT

- Apprenticeship (for College Credit)**
- Experience in Position

1-5 YEARS**

APPRENTICE (\$33,000)

- Associate's Degree
- Long-Term On-the-Job Training

3-6 YEARS**

LINEWORKER (\$57,000)

- Long-Term On-the-Job Training
- Experience in Position

6-8 YEARS**

SENIOR-LEVEL CREW LEADER (\$79,000)

- Bachelor's Degree
- Long-Term On-the-Job Training

8+ YEARS**

SUPERVISOR (\$85,000)

^{**} Dependent on company requirements





^{*} Science, Technology, Engineering, and Math

LINE WORKER: What will you do?

What competencies will you need? (built on energy foundational competencies—incremental as career advances)

Note: Most utilities use a pre-employment test—to pass you will need math, communications, problem solving, and mechanical reasoning skills.

STARTING OFF AS A LINE HELPER:

- Provide assistance to line crew by providing tools and equipment
- Make work area safe
- Drive equipment to job site

- Teamwork
- Be comfortable with heights
- · Able to drive heavy commercial vehicles
- Able to lift 75 lbs
- Listen and follow directions
- Come to work on time

APPRENTICESHIP TRAINING COMPONENTS:

- Alternating Current / Direct Current
- Pole climbing
- Stringing cable
- Installing transformers and other pole top equipment
- Apply knowledge learned during training to work environment

LINEWORKER:

- Install equipment on poles
- Climb poles
- Identify defective devices such as fuses, switches, and wires
- Lay underground cable
- Inspect and test power lines

- Define how the various parts of systems interact (e.g., parts of the distribution systems) and diagnose the effect on the system of changes or malfunctions in its parts
- Solve problems involving limited options by applying common sense understandings such as selecting the correct cutting tool or proper gauge of wire for a job
- Listen to and understand customer needs
- Be able to stand for long periods of time
- Understand mechanical relationships in practical situations such as understanding leverage, how pulleys work, and the direction gear arrangements turn
- Visualize length, width, thickness, height, or depth and the differences among shapes, widths, or lengths

SENIOR-LEVEL CREW LEADERS:

- Supervise crew members
- Determine schedules and work activities
- Check for unsafe work conditions
- Communicate with customers
- Install equipment on poles
- Climb poles
- Identify defective devices such as fuses, switches, & wires
- Lay underground cable
- Inspect and test power lines

- Handle customer concerns and issues
- Assign priority or sequence to the steps for completing a job
- Coordinate several competing activities for efficient use of time and material
- Adapt work procedures or priorities in response to changing or unforeseen requirements or conditions

SUPERVISOR:

- Schedule and oversee work of line crews
- Review crew member performance and provide feedback
- Financial management
- Computer skills for report preparation
- People management



ENERGY INDUSTRY COMPETENCY MODEL

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Where can I find a job?

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WorkKeys: Locating Information

*from http://www.act.org/workkeys/assess/locate/

Number of Items

38

Test Length

55 minutes (Internet version)
45 minutes (Paper-pencil)

What the Locating Information Assessment Measures

There are four levels of difficulty. Level 3 is the least complex, and Level 6 is the most complex. The levels build on each other, each incorporating the skills assessed at the preceding levels. For example, Level 5 includes the skills used at Levels 3, 4, and 5. At Level 3, examinees look for information in simple graphics and fill in information that is missing from simple graphics. At Level 6, examinees may use the information in one or more complex graphics to draw conclusions and make decisions. The complexity can also increase as the quantity and/or density of the information increases.

Level Characteristics of Items

3

- Elementary
 workplace graphics
 such as simple
 order forms, bar
 graphs, tables,
 flowcharts, maps,
 instrument gauges,
 or floor plans
- One graphic used at a time

Skills

- Find one or two pieces of information in a graphic
- Fill in one or two pieces of information that are missing from a graphic

Level Characteristics of Items

4

 Straightforward workplace graphics such as basic order forms, diagrams, line graphs, tables,

Skills

- Find several pieces of information in one or two graphics
- Understand how graphics are related to each other
- Summarize information from one or two straightforward graphics
- Identify trends shown in one or two straightforward

- flowcharts, instrument gauges, or maps
- One or two graphics are used at a time

graphics

 Compare information and trends shown in one or two straightforward graphics

Level Characteristics of Items

5

- Complicated workplace graphics, such as detailed forms, tables, graphs, diagrams, maps, or instrument gauges
- Graphics may have less common formats
- One or more graphics are used at a time

Skills

- Sort through distracting information
- Summarize information from one or more detailed graphics
- Identify trends shown in one or more detailed or complicated graphics
- Compare information and trends from one or more complicated graphics

Level Characteristics of Items

6

- Very complicated and detailed graphs, charts, tables, forms, maps, and diagrams
- Graphics contain large amounts of information and may have challenging formats
- One or more graphics are used at a time
- Connections between graphics may be subtle

Skills

- Draw conclusions based on one complicated graphic or several related graphics
- Apply information from one or more complicated graphics to specific situations
- Use the information to make decisions

Sample Questions

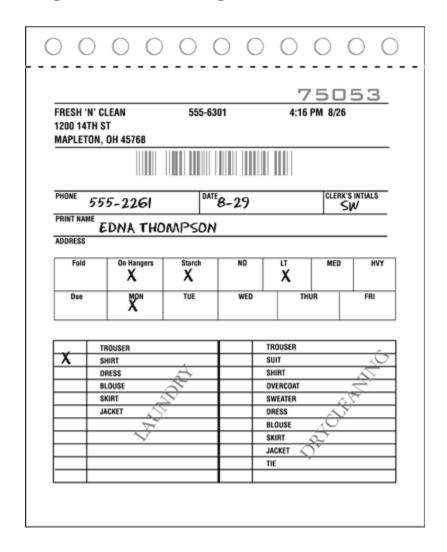
Level 3 Locating Information Sample Item



You regularly check the pressure gauge on a large tank. According to the gauge shown, what is the current pressure (in PSI)?

- 30 35 1.
- 2.
- 3. 40
- 45
- 5. 100

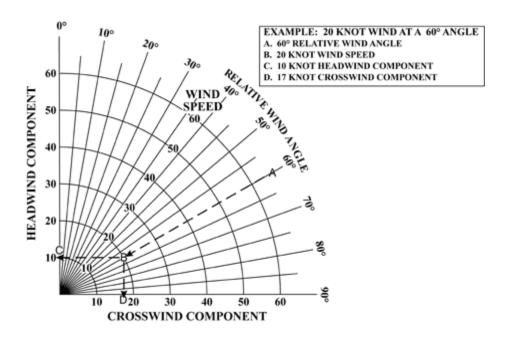
Level 4 Locating Information Sample Item



You must sort clothes in a dry cleaning establishment according to the customer's instructions. According to the form shown, how should this customer's shirt be treated?

- 1. Dryclean it, add light starch, and fold it.
- 2. Dryclean it, add light starch, and place it on a hanger.
- 3. Launder it with no starch and place it on a hanger.
- 4. Launder it with light starch and place it on a hanger.
- 5. Launder it with medium starch and fold it.

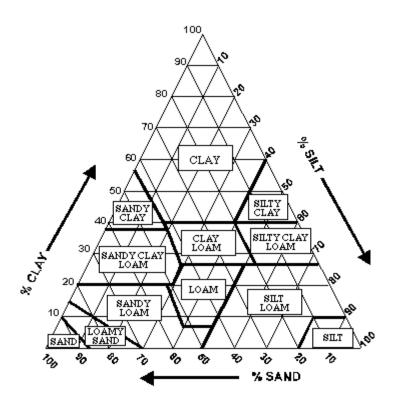
Level 5 Locating Information Sample Item



As an airplane pilot, you need to determine the crosswind component of the wind speed to ensure safe takeoffs and landings. According to the graph shown, if the reported wind speed is 45 knots at a 20° angle, what is the crosswind component, in knots?

- A. 15
- B. 25
- C. 43
- D. 45
- E. 65

Level 6 Locating Information Sample Item



Soil name	Texture class	Depth (inches)	Shrink-swell potential
Sarpy	sandy loam	0–7 7–60	low low to moderate
Kennebec	silt loam	0-38 38-60	moderate low to moderate
Colo	silty clay loam	0-31 31-60	high high
Blend	silty clay	0–17 17–29 29–60	high moderate to high high
Nevin	clay loam	0–28 28–48 48–60	moderate to high moderate moderate
Kenmoor	loamy sand	0-24 24-60	low high

You are a road contractor and you have analyzed a soil that you want to use for road fill. Your analysis shows that the soil contains 15% sand, 65% silt, and 20% clay. You need to know what the shrink-swell potential is for the soil because it will affect the durability of the road. Based on the diagram and table shown, what is the shrink-swell potential at a 30-inch depth for this soil?

- 1. Low
- 2. Low to moderate
- 3. Moderate
- 4. Moderate to high
- 5. High

MODULE 5: THE RÉSUMÉ WRITING SESSION

SESSION OVERVIEW AND LEARNING OBJECTIVES

Participants will bring draft résumés or descriptions of work histories and skills to be the start of their work in this session. This requirement will be described in the introduction session with reminders in subsequent sessions to bring this information for the résumé writing session.

The learning objectives for the session include:

- 1. Identify content to include for work experience and skills
- 2. Locate sources of information for content of résumés
- 3. Understand the difference between types of résumés
- 4. Select the best type for a given set of work experiences
- 5. Prepare and print a résumé

Preparation

This session should take place in a computer lab where each student has access to a computer.

In advance, gather sample resumes—both good and bad ones to put on the screen for class discussion, depending on which industries are the focus of the program.

In addition, bring a jump drive for each student with the resume writing templates to use when they create their own resumes.

Schedule

15 Minutes Introduction

Review the information covered in the previous session on the energy industry. Highlight the different jobs covered, the education and training needed and the job opportunities, including current job openings and training available in the local area. Ask a few participants to share what they included in their action plans at the end of that session. Answer any questions.

State the learning objectives for the session.

45 Minutes **Résumé Presentation**

Use the WISE Pathways Resume Writing Presentation and refer to the Resume Writing Overview. In addition, point to the Action Verbs handout to give them some ideas to help them write their resumes.

30 Minutes **Résumé Samples**

Go over sample resumes.

Lead a discussion on what makes the sample resumes effective or not effective.

15 Minutes Break

75 Minutes Résumé Writing

Students should select either the Resume 1 or Resume 2 template to create their own resumes. Circle the room and provide assistance, as needed.

20 Minutes **Résumé Discussion**

Have one or two student volunteer to have their resumes projected on the screen and highlight how the information is written.

- Emphasize the use of action verbs and precise presentation of experience and skills.
- Note any information that needs to be added later such as exact dates of name of business.
- Provide positive feedback on good examples and offer constructive comments that will improve the entries.
- Involve participants by asking for them to identify items they really like on the projected résumé or ideas they can incorporate into their résumés.
- Ask for suggestions for improvement.

Wrap up by summarizing some of the comments and improvements mentioned during the discussion. Students will also have a chance to get feedback from the company partners in the afternoon for the "Resume Feedback" session.

Materials/Handouts

- Resume Writing Overview
- Action Verbs for Resumes and Applications

^{*}Jump Drive for each student with Resume Writing Template 1 and Resume Writing Template 2 documents.

Resume Writing Overview

What is a resume?

A resume describes where you have been, what you have done, and where you are currently directing your career. Most employers ask for a resume-many will not even consider inviting you for an interview without it. It is the quickest way for a potential employer to get a picture of your qualifications. Unlike a job application, where you have little choice as to what information to provide the company, resumes give you the opportunity to select only your strongest qualifications and skills.

What should you include in your resume?

A resume is not just a list of past jobs, but a reflection of how your past experiences are related to your desired career or the job you are applying for. The order of information is variable depending on your strengths-you should always list your strongest suit (or the information most relevant to the specific job opportunity) first. Finally, you want to customize your resume to include search terms relevant to the company or job-posting, particularly if you are applying on lines. These words can be key words right from the job description and qualifications.

Your resume is well worth your time and effort-it creates a lasting impression of your ability to meet employment requirements.

Types of resumes:1

Chronological Resume:

A chronological resume starts by listing your work history, with the most recent position listed first. Your jobs are listed in reverse chronological order with your current, or most recent job, first. Employers typically prefer this type of resume because it's easy to see what jobs you have held and when you have worked at them. *This type of resume works well for job seekers with a strong, solid work history.*

Functional Resume:

A functional resume focuses on your skills and experience, rather than on your chronological work history. It is used most often by people who are changing careers or who have gaps in their employment history.

¹ http://jobsearch.about.com/od/resumes/p/resumetypes.htm

Combination Resume:

A combination resume lists your skills and experience first. Your employment history is listed next. With this type of resume you can highlight the skills you have that are relevant to the job you are applying for, and also provide the chronological work history that employers prefer.

Targeted Resume:

A targeted resume is a resume that is customized so that it specifically highlights the experience and skills you have that are relevant to the job you are applying for. It definitely takes more work to write a targeted resume than to just click to apply with your existing resume. However, it's well worth the effort, especially when applying for jobs that are a perfect match for your qualifications and experience.

Developing Your Resume

Self-reflective questions can help you to think about your best qualities and what you can bring to an employer that will help them achieve their goals as a company.

This process requires that you take a few moments to yourself and consider your work history, your likes and dislikes in a job, and the reality you face in balancing your personal and professional lives.

Sit for a few moments and consider the following questions and record your responses on a sheet of paper:

- 1. What did I do well during my last job?
- 2. What did I enjoy doing at my last job?
- 3. Have I received any training specific to the job I am seeking to attain?
- 4. What do I believe is the best skill I can bring to a company?
- 5. What do I want out of my next job?

Consider the types of skills you can bring to an employer or for the job you are seeking and record them on a sheet of paper:

Job Content Skills²:

 Directly related to a specific job and a skill you have received either through education or training such as welder for a welding position, CNC machinist certification for a CNC Machinist position, Registered Nurse for a nursing position, etc.

² http://www.slideshare.net/luv2hoop/dol-resume-workshop-v2

Transferrable Skills:

- Skills that can be used across a variety of positions such as budget management, organizational skills, analytical thinking, etc.
- Many skills you use at home can be translated into a job duty such as set-up of a family budget could be used as a descriptor for "analyze information," plan family events could be experience for "organizing events," handle family disagreements could be experience for "negotiate and problem solving"

Soft Skills:

• Skills that are reflective of your personal qualities and characteristics such as leadership, communication, ability to work with others, problem solving, etc.

Career History Template:

Begin with your last job and develop a list of the last three jobs you have held including the month you were hired and the month you left and record this on a sheet of paper:

- Title of Position
- Date Hired-Date Left
- Company

Take each position you have held and consider the following for each position and record your answers next to each position:

- Title of Position
- What were my responsibilities in this position?
- What were goals I achieved in this position as an individual?
- What were goals achieved by the company while I was in this position?

Educational History Template:

Record your educational history beginning with your high school, year of graduation and/or grades completed, (or school you obtained your GED and date of achievement), College courses (2-year or 4-year taken), graduation date (if applicable), and any other training courses you may have taken and record that on a sheet of paper:

Special Skills:

You may possess a skill that will enhance your capability on-the-job such as typing speed, ability to work with computers and the internet, bi-lingual, etc.

These skills can be very valuable to an employer and should be included on your resume. It may push your resume ahead of others and gain you an interview.

Community Involvement/Volunteerism

Organizations you participate with and/or are involved in are important to show you contribute your talents personally in your community. Your community involvement/volunteerism may be your time at your Church/Synagogue or other Religious Institution, your child's school, in your neighborhood, etc.

These experiences also have built your skills and knowledge and can help you when seeking a new job.

Think about your special skills and/or your community involvement/volunteerism and record them on a sheet of paper for your resume

Resume "Must-Have" Before Submission To An Employer

- Clean and Error Free.
- Formatted Consistently
- Concise and Easy to Read
- Correct Grammar

Always have someone proof-read your resume before you submit it to an employer

How To Make Your Resume Stand-Out:

- Ensure you include in your resume and cover letter how you will be an asset to the employer:
 - Employers want to hire individuals who understand their role to the company and how their role impacts the ability for the company to make money
 - Your resume needs to communicate your ability to help the company succeed
- Soft skills are a key ingredient to employers
 - Many employers today complain about the lack of soft skills in individuals they
 hire today-individuals who are unable to show up to work on-time, talk on their
 cell phones at work, dress inappropriately, etc.
 - Ensure your resume includes your soft-skills and how you are "ready to work"
- Emphasize the use of action verbs and precise presentation of experience and skills
- Make sure your resume includes specific language included in the job description and how your experience matches those job needs
- Review other resumes or use any of the following online tools to review, these are only a sample, but can give you another place to compare your resume to:

- http://jobsearch.about.com/od/resumes/p/resumetypes.htm
- <u>http://www.exampleresumes.org/</u>
- o http://www.labor.ny.gov/careerservices/findajob/res_fun.shtm
- Include a cover letter that speaks specifically to your skills and how you can advance the company:³
 - Salutation: Use the employer's name and title
 - o First Paragraph:
 - Tell them how you learned about the position
 - Express your interest in the job and the company
 - Tell them a resume is enclosed
 - Second and Third Paragraph:
 - Outline your qualifications
 - Show your knowledge of the company
 - Be concise and professional
 - Fourth Paragraph:
 - Express your interest in the job
 - Request an interview
 - Thank them for their time
 - o Closing and Signature: Close with Sincerely, Cordially, or other formal phrase

³ http://www.slideshare.net/luv2hoop/dol-resume-workshop-v2

Action Verbs for Résumés and Applications

accomplished, achieved, acquired, activated, adhered, adjusted, administered, admitted, advanced, advertised, advised, advocated, allocated, amplified, analyzed, anticipated, appointed, appraised, approved, arranged, arbitrated, assembled, assigned, assessed, attained, attracted, audited, authored, authorized, automated, awarded

balanced, borrowed, bought, budgeted, built

captured, catalogued, centralized, chaired, changed, channeled, charted, checked, circulated, classified, cleared, closed, co-authored, collected, combined, communicated, compared, compiled, completed, composed, conceived, conducted, consolidated, consulted, contracted, controlled, convinced, coordinated, corrected, counted, created, conserved, constructed

debugged, decided, defined, delegated, delivered, demonstrated, depreciated, described, designed, detailed, detected, determined, developed, devised, directed, disclosed, discounted, discovered, dispatched, displayed, distributed, divested, documented, doubled, drafted, drew, drove

earned, edited, eliminated, employed, endorsed, enforced, engaged, engineered, enhanced, enlarged, established, estimated, evaluated, examined, exceeded, executed, exercised, expanded, expedited, explained, exposed

facilitated, figured, filed, financed, fit, fixed, followed, forecasted, formalized, formed, formulated, found, fulfilled

gathered, gauged, gave, generated, governed, graded, granted, guided

handled, held, headed, helped, hired, hosted

identified, illustrated, implemented, improved, improvised, increased, influenced, informed, initiated, innovated, inspected, inspired, installed, instituted, instructed, insured, integrated, interviewed, introduced, invented, inventoried, invested, investigated

joined, judged

kept

launched, learned, lectured, led, lifted, liquidated, listened, litigated, located logged

maintained, made, managed, manipulated, marketed, maximized, measured, mediated, merchandised, memorized, merged, minimized, modeled, moderated, modernized, monitored, motivated, multiplied

named, narrated, negotiated

observed, obtained, offered, opened, operated, orchestrated, ordered, organized, originated, overcame, overhauled, oversaw

painted, participated, passed, patterned, penalized, performed, persuaded, photographed, pioneered, placed, planned, played, predicted, prepared, presented, preserved, presided, prevented, printed, processed, procured, produced, programmed, projected, promoted, proof-read, proposed, proved, provided, publicized, published, purchased, pursued

qualified, quoted, quickened

raised, read, reasoned, received, recommended, reconciled, recorded, recovered, recruited, redesigned, reduced, referred, regained, related, remedied, remodeled, rendered, renegotiated, reorganized, repaired, reported, represented, researched, responded, resolved, restored, restructured, retained, retrieved, revealed, reviewed, revised saved, scheduled, screened, secured, selected, separated, served, serviced, sewed, shaped, shared, shortened, showed, simplified, sketched, solved, sorted, spread, stabilized, staffed, staged, standardized, steered, streamlined, stressed, submitted, substituted, summarized, supervised, supplied, supported, surpassed, synchronized

talked, targeted, taught, tended, terminated, tested, tightened, traded, trained, transcribed, transferred, transformed, translated, transported, traveled, treated, tripled, troubleshot; tutored, typed

uncovered, unified, united, updated, upgraded, used, utilized

validated, verbalized, verified

warned, washed weighed, welcomed, widened, wired, won, worked, wrote

Action Verbs for Résumés and Applications

accomplished, achieved, acquired, activated, adhered, adjusted, administered, admitted, advanced, advertised, advised, advocated, allocated, amplified, analyzed, anticipated, appointed, appraised, approved, arranged, arbitrated, assembled, assigned, assessed, attained, attracted, audited, authored, authorized, automated, awarded

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validated, verbalized, verified

warned, washed weighed, welcomed, widened, wired, won, worked, wrote

MODULE 6: THE RÉSUME FEEDBACK SESSION

SESSION OVERVIEW AND LEARNING OBJECTIVES

This session provides the participants the opportunity to meet with pilot company representatives to review their résumés to get pointers for improvement and strengthening them. Participants will update their resumes based on the feedback they receive and information gathered since résumés were first written

The learning objectives for the session include:

- 1. Identify strengths and weaknesses of their resumes
- 2. Revise resume based on feedback

Preparation

Review the contents of the lesson to make sure you can demonstrate the preparation of a résumé, such as selecting a type, selecting a format, entering work history, completing skills descriptions, locating similar occupations for reminders of own experience to document, printing the résumé, and showing résumés on the screen for all to see.

Have a résumé on hand to use in the demonstration or obtain access to a demonstration record with at least one completed résumé.

This demonstration and practice take place in the computer-equipped classroom.

Schedule

Schedule	
15 Minutes	Introduction
	Review the information covered in the previous session on writing the résumé. Highlight the how to locate résumés and update them, where to get sources of information to make the résumé more complete. Ask a few participants to share what they included in their action plans at the end of that session. Answer any questions.
	State the learning objectives for the session.
60 Minutes	Meet with Companies
	Participants have company representatives review of résumés and take notes on changes and improvements needed.
15 Minutes	Break
55 Minutes	Update Résumés

Remind participants how to log into Kuder Journey and demonstrate how to start working on their résumés.

Demonstrate the updating of a resume (see Preparation).

If they don't have a lot of updates and finish early, they can explore some of the other features of Kuder Journey.

25 Minutes Final Resume Review

Participants should get together with the employee representative she met with earlier and have that person do a final resume review.

10 Minutes Wrap-up/Action Plan

Materials/Handouts

None

MODULE 7: TEAM BUILDING SESSION

SESSION GOALS

The Team Building Session helps facilitate the growth of the class as a learning community and a community of support. It is a chance to grow closer, build relationships, and think deliberately about communication skills that will be essential in every career field. Teamwork is an essential skill on the worksite. Participants will discuss the importance of communication skills and teamwork, and the application in both life and on the job, *particularly with team-mates and co-workers*.

The learning objectives for the session include:

- 1. Engage in a team building activity
- 2. Discuss how effective communications skills are essential in leading and being a member of a team
- 3. Determine one's strengths and weaknesses in listening and set goals on how to improve one's skills

PREPARATION

Before this session, the facilitator should make copies of the shape pictures for the team building activity at the end of this section. These documents are not included in the participant guide.

SCHEDULE

1 Г	minutes	Introductio

Allow 10 minutes for participants to share their final resumes.

Summarize the purpose of the team building session and go over the learning objectives.

25 minutes Team Building Activity

Back-to-back drawing – Divide your group into pairs, and have each pair sit on the floor back to back. Give one person in each pair a picture of a shape, and give the other person a pencil and pad of paper.

Ask the people holding the pictures to give verbal instructions to their partners on how to draw the shape – without actually telling the partners what the shape is. After they've finished, ask each pair to compare their original shape with the actual drawing, and consider the following questions:

- How well did the first person describe the shape?
- How well did the second person interpret the instructions?
- Were there problems with both the sending and receiving parts of the communication process?
- How can you improve communication?
- Stress the importance of strong, positive communication!

Go over the Teamwork Presentation.

20 minutes The Importance of Communication Skills in Teams

Review the *Teamwork Presentation* focusing on communication and listening skills. This presentation has ideas in the notes section you can use throughout the discussion.

Refer participants to the *Communication* handout in their participant guides for tips on effective communication.

30 minutes Listening Skills Activity

Direct students to the *Listening Skills Assessment* in their participant guides, allow enough time for them to complete the assessment. After they have completed the assessment, have them study the Analysis of Results. Ask questions to get discussions started about any surprises discovered and any areas identified that need work.

10 minutes Break

40 minutes Coded Communications Exercise

This game can be played by one group or between two or more teams competitively.

The activity is more dynamic if played in competitive teams, minimum three players per team, ideally 5-10 players per team.

The exercise involves devising and using a simple coded non-verbal (unspoken) communications system. Instructions are in the learner guide.

Equipment: A pen/pencil and paper for each team member.

- Give teams between 5-10 minutes to devise and test their codes. Large teams may require more time.
- Begin the game by showing a number (a single digit between 0-9) to the team leaders.
- You can have several rounds of the game if desired to allow students to learn from the experience.
- After each round each team member secretly writes the number on the paper for verification.

After finishing, ask questions to prompt discussion about the process and increase learning about communication and teamwork, such as the following:

- How did you decide on the method to use?
- Did one person dominate the discussion?
- Did that person appear open to different ideas?
- Were several solutions proposed?

- How did you pick the method to use?
- Did you devise means to signal lack of understanding or confirmation of message received?
- How did you make sure each person correctly received and understood the signal before communicating to the next person?
- What have you learned about teamwork and communication in this exercise?

Review points:

- It's one thing to devise a communications system or set of communications rules it's quite another challenge to ensure everyone understands it and uses it properly.
- Vital parts of communications systems/rules work best when people can remember them, without having to refer to complicated instructions.
- Complex communications systems/rules are often very good in theory, but difficult to apply in practice because they entail an additional dimension represented in this game by the code key equating to a reference or instruction manual, which in real work situations people often fail to use, understand, keep updated, etc.
- Written instructions and reference guides are obviously important for quality management, but the fundamental rules of communications are best kept as simple, intuitive and memorable as possible, so that core performance is not hindered or made unnecessarily complicated.
- In terms of this exercise, conveying the communication is only half the communications process the other half is checking the communication has been received and understood.

30 minutes Case Study Exercise

Divide the class into groups of 3-5 students to discuss the case. When possible, make sure each group has members who can lead the group, present their findings, and keep the discussion moving.

Direct them to the case with questions to consider in the learner guide.

Have each group pick a spokesperson to present their ideas to the class after their discussions.

After their presentations, ask questions to bring out any information not covered in their presentations to make sure the following points are covered:

- Safety violation is grounds for immediate dismissal.
- More time will be lost if somebody is injured first aid, emergency room visit, completing paperwork, and lecture from the boss.
- Even if not fired, they will have to re-establish credibility, dependability, and trust.
- The boss will not be happy with you, because he is required to report the safety

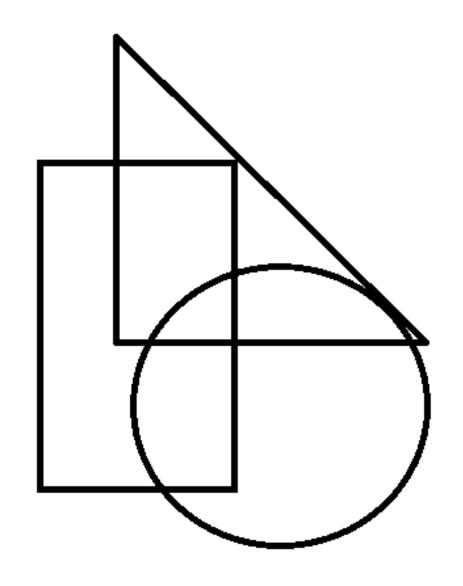
violation.

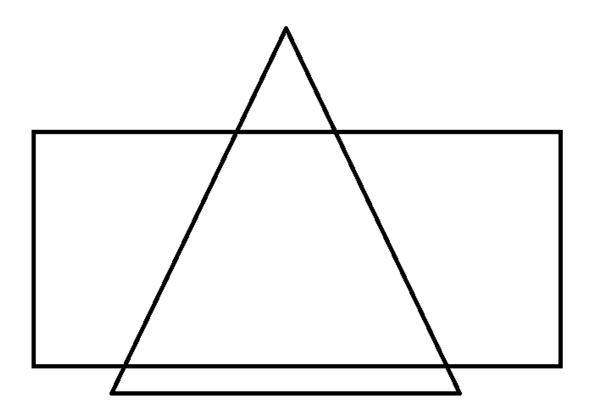
• We have all dug a hole by hand without safety goggles without injury, but it is a safety violation and you can't predict when a rock chip will strike you in the eye.

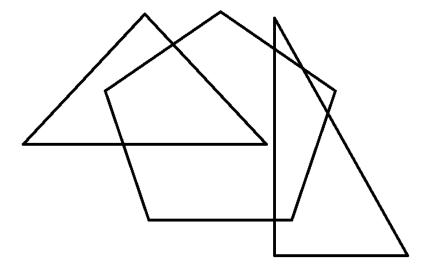
10 minutes Wrap-up/Action Planning

MATERIALS

- Teamwork Presentation PowerPoint
- Copies of Shapes handouts (See below: Not in participant guides.)
- Team Building Handouts









Communication

Employees should strive to be good communicators who are skilled in listening and speaking. Good communication fosters knowledge and awareness that help to prevent accidents and maintain safe workplaces. All employees must treat each other with respect and maintain a collaborative work environment. A true cooperative workplace is one that is without unlawful discrimination or harassment of any kind and provides equal opportunities for all.

As a new worker you will spend a lot of time listening to instructors, supervisors, co-workers, and mentors. It is important that you learn to listen carefully and not just hear what they are saying. Listening requires concentration and blocking out distracters, such as cell phones, nearby conversations, people walking by, and any thoughts about anything other than the conversation.

Listening is a communication process and, to be successful, it is an active process. You must be an *active participant* in this communication process. Listening requires concentration and energy. Your brain is actively working while the speaker is talking. Our thought speed is much faster than our speech speed, allowing us to work on the message being sent to us. You will be putting the message into your own words so you can tell the speaker what you have heard to make sure you have understood the real meaning. This may seem to take more time, but being certain of the message before taking action actually saves time when re-work is avoided

Good Listening Skills Make Workers More Productive

The ability to listen carefully will allow you to:

- Understand what the boss expects
- Understand what your co-workers need
- Get along better with your boss, co-workers, and company customers
- Show commitment to the goals of the boss and the team
- Work better in a team environment
- Resolve problems with your boss, co-workers, and company customers
- Provide information needed by your boss, co-workers, and company customers

The better you are at listening, the more people will listen to you. Co-workers will have more confidence in someone who is a good listener. They feel confident that you are getting the right message and will do the job right.

Listen Well

Using the following tips will show the speaker you are paying attention. While you may in fact be able to listen while looking out the window, it looks like you are not listening.

- Look the speaker in the eye
- Don't interrupt the speaker
- · Don't move around
- Nod your head to show you understand
- Concentrate on what you need to get from the conversation or instructions
- Repeat instructions and ask clarifying questions when the speaker has finished

Work on the Barriers to Listening

Make sure the following things don't get in the way of your listening.

- Negative thoughts or attitudes about the speaker
- Language differences or accents
- Noise
- Worry, fear, or anger
- · Watching other activity in the area
- Thinking of something else instead of the message

It's hard work to keep these barriers from interfering with the listening task. Concentrate on the message and repeat or paraphrase the message in your mind to help your concentration.

Sending Messages

When you have something to say or instructions to provide, state your message as briefly and succinctly as possible. Listening to a rambling, unorganized speaker is tedious and discouraging. Rambling explanations are confusing to the listener and the message loses its meaning, relevance, and impact. Use this opportunity to help the listener understand your perspective and point of view. Choose words to make your message as clear as possible, avoiding jargon and unnecessary, tangential information. Rehearse to get it right before you start talking. Don't use words that can be interpreted as critical or demeaning.

All information in this handout taken by permission from <u>Workplace Skills Workshop</u>, Center for Energy Workforce Development, August 2011

Listening Assessment

Read each statement and decide how that statement describes your behavior and place a check mark in the appropriate column.

STATEMENT	Always	Sometimes	Never
1. I think about why I'm listening.			
2. I maintain eye contact with speaker.			
3. I concentrate on the message.			
4. I listen without judging or criticizing.			
5. I try to summarize the information.			
6. I give verbal and nonverbal indications that I am			
listening.			
7. I set a purpose for listening.			
8. I block out thoughts of personal problems.			
9. I try to predict what will come next.			
10. I take notes when needed to help remember.			
11. I ignore external distractions such as loud noises and other workers.			
12. I try to determine the speaker's purpose.			
13. I think about questions I may need to ask for			
clarification.			
14. I restate (paraphrase) messages to confirm my			
understanding.			
15. I let the speaker finish and do not interrupt.			
TOTAL CHECK MARKS			

Listening Assessment Analysis of Results

Tally the three columns. Then refer to the interpretations below.

14-15 Checks for Always

You are probably a fantastic listener, both at work and among your friends. Keep up the good work.

12-13 Checks for Always

You are a good listener but you need to fine tune a few of your listening skills. Choose behaviors to modify that you feel will easily improve your listening.

10-11 Checks for Always

You need to change some behaviors so that you will get more out of instructions at work. To improve your listening behaviors, you should start with any item that you checked as Never. Then move to the Sometimes column.

9 or Less Checks for Always OR 7 or More Checks for Never

You need to master listening skills for work success. It will be difficult to find a situation in which you will not need to use listening skills. Check with your local library for information on improving listening skills. An internet search on "listening skills" yields a number of articles, such as these at www.about.com and www.livestrong.com:

http://careerplanning.about.com/cs/miscskills/a/listening_skill.htm http://www.livestrong.com/article/14657-improving-listening-skills/

Adapted from:

http://www.elmhurst.edu/library/learningcenter/Listening_listening_behaviors_survey.htm

Coded Communication Exercise

Instructions to Teams:

- Devise a secret coded (non-spoken, non-written) communication system for your team which enables a very simple piece of information a single digit number between 0-9 to be passed throughout the whole group/team person to person ideally so that everyone knows the number.
- The winning team is the first to successfully convey the number to all team members.
- The number must be conveyed using non-verbal and secret signals it cannot be spoken, mouthed, written, signaled by holding up a number of fingers, or "tapped" using fingers or feet, etc.
- Facial expressions and eye contact are likely to be significant in non-verbal code systems developed, although teams will devise other methods.
- Whether to allow or mention touching for example secret hand-squeezing, which teams might think to try is at the discretion of the facilitator.
- The secret code aspect is important, if the game is played competitively and teams are given the same number to convey.
- Instruct people to write down the number after all teams have completed the round, as proof of successful communication.
- The team leader must raise his/her hand to signal to the facilitator when group/team members have received the number correctly. This potentially requires another team coded signal to confirm successful understanding which is a matter for the teams to decide.
- No speaking is allowed while the game is in progress.
- After devising and practicing the code the team leaders then return to their starting
 positions and await the facilitator's signal to start the game, at which the number must be
 communicated to all team members using the non-verbal secret code person to
 person.
- Teams stand in a line facing the back of the room and the back of the person in front of them. At the start signal the team lead taps the first person on the shoulder who turns and receives the communication. Once the communication is understood, the receiver turns around and taps the next person to turn around and receive the communication. This process is repeated until the last person receives the communication and signals the team lead that all team members have received the number.
- The team lead signals the instructor once assured all team members have the correct number.

Case Study – Digging a Hole

You are working with a crew to repair the underground service to a rural customer. A hole must be dug by hand in the middle of a field a distance form the road. It must be dug by hand to avoid damage to other nearby utility lines. Of course the boss picks the youngest, newest employees for this arduous task. You and your partner spend half an hour lugging all of the equipment from the truck to the site to get ready. After you start digging, you notice your partner is not wearing required safety goggles. He doesn't want to take the time to go back to get the goggles and wants to continue digging.

- What do you do?
- What are the possible options?
- What would be the benefits of each option?
- What are some possible consequences of each option?
- Which would you choose and why?
- Why not choose other options?

NOTES:		

MODULE 8: THE SEXUAL HARASSMENT AND CONFLICT MANAGEMENT SESSION

SESSION OVERVIEW AND LEARNING OBJECTIVES

This session includes the topics of Sexual Harassment and Conflict Management and focuses on the information and skills women need for dealing with these situation on the job where most of the workers and supervisors are men. The sexual harassment portion is presented with the PowerPoint presentation which includes points to stress and proposed discussion questions in the notes pages. The information is taken from the handout located in the participant binder.

The Conflict Management portion of the session includes a PowerPoint presentation on recognizing and dealing with conflict in with fellow workers and supervisors.

The learning objectives for the session include:

- 1. Understand the basics of the laws about sexual harassment
- 2. Understand the definition of sexual harassment
- 3. Identify examples of sexual harassment behaviors
- 4. Identify facts about sexual harassment
- 5. Understand the roles and responsibilities of the employer, managers, supervisors, and employees in preventing and reporting sexual harassment
- 6. Know how to deal with conflicts that arise in the workplace
- 7. Recognize good communication techniques
- 8. Identify cooperative behaviors

Preparation

Review the contents of the lesson to understand the content and the timing. Study the content to develop questions for discussion and add anecdotes and examples to illustrate the content being presented. Look over the handouts to refer to them when needed during the presentation. Tell learners to keep these materials handy and review them when they are working as reminders of their rights and responsibilities.

Schedule

15 Minutes	Introduction
	Review the information covered in the last class. Ask a few participants to share what they included in their action plans at the end of that session. Answer any questions.
70 Minutes	Sexual Harassment
	Cover the information in the PowerPoint presentation adding examples and discussion questions that fit the audience to facilitate learning.

15 Minutes Break

70 Minutes Conflict Resolution

Cover the information in the PowerPoint presentation adding examples and discussion

questions that fit the audience to facilitate learning.

10 Minutes Wrap-up/Action Planning

Materials/Handouts

- Sexual Harassment and Conflict Management PowerPoint
- Sexual Harassment in the Workplace handout
- Conflict Resolution handout





Sexual Harassment in the Workplace

One major reason women quit nontraditional occupations is sexual harassment and discrimination.¹ Sexual harassment isn't just a problem for those targeted by it; it also costs employers and unions through lower morale, absenteeism, turnover, reduced productivity and lawsuits.² But employers can reduce the incidence of harassment in your program by taking a proactive approach.

The following is from the U.S. Equal Employment Opportunity Commission³

Sexual harassment is a form of sex discrimination that violates Title VII of the Civil Rights Act of 1964. Title VII applies to employers with 15 or more employees, including state and local governments. It also applies to employment agencies and to labor organizations, as well as to the federal government. Unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature constitute sexual harassment when this conduct explicitly or implicitly affects an individual's employment, unreasonably interferes with an individual's work performance or creates an intimidating, hostile or offensive work environment.

Sexual harassment can occur in a variety of circumstances, including but not limited to the following:

- The victim as well as the harasser may be a woman or a man. The victim does not have to be of the opposite sex.
- The harasser can be the victim's supervisor, an agent of the employer, a supervisor in another area, a coworker or a nonemployee.
- The victim does not have to be the person harassed but could be anyone affected by the offensive conduct.
- Unlawful sexual harassment may occur without economic injury to or discharge of the victim.
- The harasser's conduct must be unwelcome.

It is helpful for the victim to inform the harasser directly that the conduct is unwelcome and must stop. The victim should use any employer complaint mechanism or grievance system available.

When investigating allegations of sexual harassment, EEOC looks at the whole record: the circumstances, such as the nature of the sexual advances and the context in which the alleged incidents occurred. A determination on the allegations is made from the facts on a case-by-case basis.

Prevention is the best tool to eliminate sexual harassment in the workplace. Employers are encouraged to take steps necessary to prevent sexual harassment from occurring. They should clearly communicate

to employees that sexual harassment will not be tolerated. They can do so by providing sexual harassment training to their employees and by establishing an effective complaint or grievance process and taking immediate and appropriate action when an employee complains.

It is also unlawful to retaliate against an individual for opposing employment practices that discriminate based on sex or for filing a discrimination charge, testifying or participating in any way in an investigation, proceeding or litigation under Title VII.

Statistics

In Fiscal Year 2008, EEOC received 13,867 charges of sexual harassment, 15.9% of those charges were filed by males. EEOC resolved 11,731 sexual harassment charges in FY 2008 and recovered \$47.4 million in monetary benefits for charging parties and other aggrieved individuals (not including monetary benefits obtained through litigation).

You can learn more about Title VII and EEOC policy by calling them at 1-800-669-4000.

If you have a TTY device for hearing impaired: TTY number is 1-800-669-6820. On the Internet go to: http://www.eeoc.gov/types/sexual harassment.html

Examples of Sexually Harassing Behaviors

The behaviors listed below are examples of some of the behaviors that can constitute sexual harassment. Sexual harassment occurs if the behavior is sexual and unwanted, if an individual's employment position is dependent on submitting to or accepting the behavior or if it contributes to an offensive, hostile or uncomfortable work environment. These behaviors are unacceptable, and should not be present in the formal, informal, onsite or offsite work environment:

- Sexual jokes, innuendos and gestures
- Unsolicited and unwelcome flirtations, advances or propositions, however subtle
- Graphic or degrading comments about someone's appearance, dress or body
- Staring at an individual or focusing upon a particular area of the body
- Elevator eyes; looking someone up and down
- Whistling, cat calls and leering
- Terms of address such as "honey," "baby," "chick," "hunk," or "dear"
- Regularly offering personal gifts such as flowers, candy, etc.
- Display of sexually suggestive objects or pictures
- Sexual or intrusive questions about an individual's personal life
- Explicit descriptions of the harasser's own sexual experiences
- Neck or shoulder massages
- Pressure (however subtle) for sexual activity
- Explicit offers of sex for grades, money or other rewards
- Any unnecessary, unwanted physical contact such as touching, rubbing, hugging, pinching,
- patting or kissing

Physical or sexual assault, including rape

Facts About Sexual Harassment

Sexual harassment can occur in a variety of circumstances, which include but are not limited to the following:

- The victim as well as the harasser may be a woman or a man. The victim does not have to be of the opposite sex.
- The harasser can be the victim's supervisor, an agent of the employer, a supervisor in another area, a coworker or a nonemployee.
- The victim does not have to be the person harassed but could be anyone affected by the offensive conduct.
- Unlawful sexual harassment may occur without economic injury to or discharge of the victim. The harasser's conduct must be unwelcome.

Employees' Role in the Prevention of Sexual Harassment in the Workplace

Copies company/agency sexual harassment policy should be posted and made available within the Human Resources Division or EEO Division. Agencies should have the name and number of someone you can contact in case you are being sexually harassed. Follow the guidelines of your employer's sexual harassment policy.

- Tell the person firmly, you find their behavior objectionable.
- Tell your supervisor. If your supervisor is the harasser, don't fear losing your job, tell his manager. Remember, the law states that your employer is liable.
- Keep a detailed log of the offensive behavior.

Supervisors'/Managers' Role in the Prevention of Sexual Harassment in the Workplace

- Notify all subordinates of the sexual harassment policy.
- Establish and maintain a work atmosphere which is free of such harassment.
- Conduct sexual harassment training for all managers, supervisors and employees.
- Cooperate with the Equal Opportunity Division (EOD) to eliminate sexual harassment.
- Inform the aggrieved persons of the right to contact their EEO Officer and / or the EOD for assistance.
- Participate in the investigation and resolution of sexual harassment by:
 - Maintaining adequate documentation on each investigation
 - Providing timely and complete notification to appropriate persons on the disposition of each investigation.

Liability

Agency/Employer

Employers are always potentially liable for supervisor's sexual misconduct toward an employee. An employer is subject to vicarious liability to a victimized employee for an actionable hostile environment created by a supervisor with immediate (or successively higher) authority over the employee. When no tangible employment action is taken, a defending employer may raise an affirmative defense to liability or damages, subject to proof by a preponderance of the evidence. To succeed in such a defense, employers would have to show they "exercised reasonable care to prevent or correct promptly any sexually harassing behavior" and that the employee unreasonably failed to take advantage of any preventive or corrective opportunities provided by the employer or to avoid harm otherwise.

Non-Employees

Sexual harassment can also come from outside of the organization. Paragraph (e) of the federal guidelines establishes the right of employees to be protected from harassment by nonemployees. Employers are responsible for any acts of sexual harassment perpetrated by nonemployee while conducting business in the employer's work environment if the employer is aware of the harassment and does not take measures to correct the conduct.

Discrimination Complaint Procedure

The first step of any effort to prevent sexual harassment is to make sure that all apprentices and instructors, both men and women, understand what sexual harassment is. Sexual harassment is particularly serious in the trades because the workplaces are often dangerous.⁴

It must also be clear that sexual harassment will not be tolerated. Every workplace is wise to have a written policy on sexual harassment. This policy should outline what constitutes sexual harassment, how and to whom sexual harassment should be reported, and the procedure that will be used to investigate grievances. The policy should also explain the disciplinary action that may be taken against anyone who is found to have committed sexual harassment.⁵

Training in Sexual Harassment Prevention

However, merely having a policy is not enough. A survey of tradeswomen in California found that more than 40% did not understand how to file a sexual harassment grievance. Of the women who did understand the process and who had used it, many felt that their grievances were not handled properly.⁶

Employers must make sure that everyone who participates in the program, supervisory personnel, instructors, and apprentices, understands the sexual harassment policy and what is expected of them. Employers should post the information on the company/agency website and make sure everyone is regularly trained on the sexual harassment policy.⁷

Because the responsibility to create a harassment-free workplace rests on them, supervisors should receive additional training. This training should include reviewing sexual harassment law, the particular organization's policy, and exercises to build problem-solving skills.⁸

Finally, to see if the organization needs to take additional steps to prevent sexual harassment, employers should conduct anonymous surveys of apprentices and instructors about sexual harassment.⁹

Discrimination

Apprenticeship programs should also train all instructors and coordinators on discrimination. Unequal treatment of certain apprentices can lead to costly lawsuits. Female apprentices often report that they are disproportionately assigned the "dirtiest and heaviest assignments," while skilled work is assigned to male apprentices.¹⁰

Instructors should be made aware of any unconscious stereotypes they hold and should call on apprentices in an equitable manner, both in quantity and tone.¹¹

References

- 1, 6, 10, California Apprenticeship Council, http://www.dir.ca.gov/cac/cac.html
- 11 Pennsylvania Department of Education
- 2, 5, 7, 8, 9 Wider Opportunities for Women, Workplace Solutions
- 3 U.S. EEOC, accessed at http://www.eeoc.gov/types/sexual_harassment.html
- 4 Ohio Civil Rights Commission, accessed at http://das.ohio.gov/eod/AAEEOWhatIs.htm

All information in this handout taken by permission from <u>A Toolkit for Recruiting and Retaining Women in NonTraditional Positions</u>, Hard Hatted Women and Center for Energy Workforce Development, July 2009



Conflict Resolution

Disagreements are inevitable. Sometimes they turn into conflict. Its best to talk about the disagreement before it becomes a conflict. Often the disagreement is a misunderstanding and restating the other person's position can resolve the disagreement. Speak up. Politely, but firmly, say that you don't want to do your co-worker's extra work, or tell whatever else is on your mind. You may not get a positive response at first, but you may. And you'll also get the benefit of speaking your mind, and will at least get the message out there for everyone's consideration.

If the problems don't affect you too strongly, you may choose to get better at ignoring them. This may seem difficult at first, but there's something to be said for choosing your battles. Not everything can be ignored, but by focusing on positives of the job, some problems can bother you much less than you would think.

When you do discuss the issue, you need to stay focused on the present during this talk and not bring up other disagreements or behavior. Bringing up too many topics clouds the issue. The goal is to achieve a more positive outcome for the immediate situation. You should make sure you:

- Listen carefully.
- Are able to restate the other person's statements in your own words.
- Focus on understanding instead of thinking about what you are going to say next.
- Don't interrupt.
- Don't get defensive.

It's vital to understand the other person's perspective, rather than just our own, if you are to resolve the situation. Good listening helps you to be able to bridge the gap between the two of you and understand where the disconnect lies. Just listen and restate the other view so he knows you've heard his position. You will understand better and your co-worker will be more willing to listen to you.

Effective communication involves admitting when you're wrong. Realize that personal responsibility is strength, not a weakness. You both share some responsibility in a conflict. Look for and admit to what's yours. It diffuses the situation, sets a good example, and shows you're willing to work for a compromise. It also often inspires the other person to accept some responsibility, leading you both closer to a better understanding and potential solution.

Use "I" Messages: Instead of saying, "You really need to be more careful," begin statements with "I", and make them about yourself and your feelings, like, "I can't finish my work on time when this

happens." It's less likely to make the other person feel defensive, and helps the other person understand your point of view instead of feeling attacked.

Look for Compromise: Don't just try to win the argument, look for solutions that satisfy everybody. Compromise or find a new solution that gives you both what you want most. You might not get everything you want, but the situation will be better. This approach works better than one person getting what they want when the other gets nothing.

Take a Time-Out: Don't wait for tempers to get heated to the point the discussion becomes an argument or a fight. If you find yourself or your co-worker starting to get too angry to be constructive, take a break to cool off. Sometimes good communication means knowing when to take a break. Even when you take a break come back to the discussion. You can't just let the situation simmer because you don't communicate.

Ask For Help If You Need It: If you can't resolve the situation, you might need to get your supervisor involved. Remember to stick to the facts, avoiding criticism and accusations. Use all the above guidance when talking with the boss about a conflict with your co-worker. Remember that the goal of conflict resolution should be mutual understanding and finding a solution that pleases both parties, not "winning" the argument or "being right."

Resolving Conflict with the Boss

When resolving conflict with your boss, you need to take a few extra steps to prepare for the discussion. Your supervisor is not your equal and must be approached with more respect.

Organize your thoughts, focusing on facts and behaviors and your perception. Practice what you will say to make sure you will be tactful and avoid words that can be interpreted as attacking, defensive, or critical.

Your boss is busy. Wait for a free moment and ask if you could arrange a time to talk about an important issue. The boss might not have time available during the day and you might need to meet before or after work. Remember to be willing to meet at a time convenient for the boss.

When you meet with your boss calmly and clearly use the carefully chosen words you have rehearsed. Don't be angry, sarcastic, accusatory or critical and stick to the facts you can prove. Don't mention names unless the co-worker is directly involved in the issue. If you have suggestions for change, make sure your arguments include benefits to the crew and the company, not just benefits for yourself.

Once you've presented your case, answer any questions the boss may have and give him or her the time to consider your points. The boss will make a decision and it will be the right one for the team and the company. It might not be what you want, but the boss must take into account the effect on the crew and the company. The boss did not get that position by making wrong decisions and you must respect and carry out the boss' decision.

Assertiveness

Tell the person what is bothering you. The other person may not realize the behavior offends you. You

need to state your position as the first step in finding a mutual way of working together in a productive environment. Focus on the behavior, not the person.

Change what you can. Accept what you can't. Have the wisdom to know the difference.

Assertiveness is the ability to express your feelings and while

respecting the feelings and rights of others. Assertive communication is appropriately direct, open and honest, and clarifies your needs to the other person. Assertiveness comes naturally to some, but is a skill that can be learned. Assertive people are able to greatly reduce the level of conflict in their lives.

The difference between aggressiveness and assertiveness is that individuals behaving assertively will express themselves in ways do not offend the other person. They assume the best about people, respect themselves, and try to compromise. In contrast, individuals behaving aggressively will tend to use words that are disrespectful, manipulative, demeaning, or abusive. They win at the expense of others, and create unnecessary conflict.

Passive individuals, on the other hand, are unable to state how they feel. They often fear conflict so much that they don't share their feelings in order to "keep the peace." They let others win while they lose out. This often leads to resentment and reduced cooperation, negatively affecting the workplace. Passive people need to learn to be assertive to improve the effectiveness of the team.

Here's a scenario to illustrate the differences.

Someone cuts in front of you at the supermarket. An aggressive response would be to assume they did it on purpose and angrily say, "Hey, jerk, no cuts!" A passive response would be to just let the person stay in front of you and say nothing.

An assertive response would be to assume that they may not have seen you in line, and politely say, "Excuse me, but I was in line."

Learn where you are on the assertiveness spectrum, know where you want to be, read more on assertiveness training, and develop a win-win mentality to become more assertive.

All information in this handout taken by permission from <u>Workplace Skills Workshop</u>, Center for Energy Workforce Development, August 2011

MODULE 10: THE INTERVIEWING SESSION

SESSION OVERVIEW AND LEARNING OBJECTIVES

The Interviewing and Networking session uses the PowerPoint presentation to present information and exercises for the participants. Much information is also included in their binders and the facilitator will make sure participants can locate these materials to study outside class and reference later each time they prepare for an interview.

By the end of the session, participants will know how to prepare for interviews and will have some great ideas for networking.

The learning objectives for the session include:

- 1. Identify how to prepare for an interview
- 2. Know how to present oneself during an interview
- 3. Define qualities of Performance Based Interviews
- 4. Recognize how to respond to questions
- 5. Know how to respond to tricky questions
- 6. Know how to ask question during the interview

Preparation

Review the contents of the lesson and prepare examples appropriate for the participant in this class and prepare questions to generate and control discussion. Information and suggested questions are included in the Notes pages of the presentation. Two of the networking slides must be viewed in Slide Show mode to reveal problems as each is considered.

Schedule

15 Minutes Introduction

Review the information covered in the resume writing session. Ask whether anyone has used the information provided to complete an application. Answer any questions from participants about the previous session.

State the learning objectives for the session.

75 Minutes Interviewing Presentation

Getting an interview is the end result of a lot of hard work. You have searched, sent out uncounted résumés, networked endlessly and finally landed an interview. It's very important to prepare carefully so all that effort is not wasted. This session will provide

you lots of information about preparing for the interview. Your binders contain even more information for you to review each time you go to an interview.

15 Minutes Break

65 Minutes Practice Interviews

Volunteers from the pilot companies have offered to do practice interviews.

10 Minutes Wrap-up/Action Planning

Materials/Handouts

• *Interviewing* presentation

MODULE 11: TECHNICAL SKILLS SESSION

SESSION OVERVIEW AND LEARNING OBJECTIVES

The technical skills portion of this session will present information on mechanical and spatial reasoning. After the introduction, participants will take two assessments and then discuss their results and strategies for completing the assessments successfully. Participants will also be given the opportunity to assess whether they might want to pursue further practice and coaching sessions before the need to complete the assessments as part of a hiring process.

The session begins using the PowerPoint presentation to cover a description of the assessments and the kind of questions to expect. Next, participants will complete two assessments, discuss their approach to finding the correct answers and discuss whether they will need further practice.

Also covered as part of this session is the EEI pre-employment testing. This will be required for most positions.

The learning objectives for the session include:

- 1. Define mechanical and spatial reasoning
- 2. Recognize how these reasoning skills are used on the job
- 3. Identify the knowledge and skill sets required for EEI pre-employment testing.

Preparation

No advance preparation needed.

Schedule

15 Minutes Mechanical and Spatial Reasoning

Use the *Technical Skills & EEI Testing* presentation (*mechanical and spatial reasoning* section) to describe the abilities and the test questions used to assess them.

45 Minutes Mechanical Reasoning Assessment

Give participants the Mechanical Reasoning Assessment to answer the questions and determine their scores.

Ask about difficult questions and project them on the screen to discuss the reasoning used to answer them successfully

15 Minutes Break

45 Minutes Spatial Reasoning Assessment

Give participants the Spatial Reasoning Assessment to answer the questions and determine their scores.

Ask about difficult questions and project them on the screen to discuss the reasoning used to answer them successfully.

50 Minutes **EEI Pre-employment Testing**

Use the *Technical Skills & EEI Testing* presentation (*EEI testing section*) to describe the tests that will be required for specific jobs. Go to a practice test web site and show the practice tests and tutorials.

10 Minutes Wrap-up/Action Planning

Materials/Handouts

- Technical Skills and EEI Pre-Employment Testing PowerPoint
- Mechanical Reasoning Assessment
- Spatial Reasoning Assessment

MODULE 12: Wrap-Up and Job Fair

The final session is a time of celebration, to recognize the accomplishments of each participant, and the group as a whole. In addition, the group will have the opportunity to meet with company recruiters and potentially participate in job interviews.

SCHEDULE

15 minutes	Review
	Review the information covered in the technical skills and pre-employment testing session. Address any questions that arise.
	Set the stage for this special day.
45 minutes	Sharing of Action Plans
	Give participants about 15 minutes to complete the last part of their action plans. Then ask participants, as they feel comfortable, to share any aspect of their action plans with the group as a whole.
30 minutes	Next Steps Overview, Evaluation, and Questions
	WISE Pathways participants are given an evaluation for the program as a whole to fill out. This is also the time to answer any final questions about the class and congratulate the women for completing the course.
90 minutes	Job Fair/On-site Interviews
	The last part of the program will provide the opportunity for the participants to meet recruiters from the companies that part of the pilot and potentially interview.

MATERIALS

WISE Pathways evaluation form (to be distributed the last day of class)