



# Michigan Energy Workforce Development Consortium

# Energizing Career Pathways in Michigan

2016 Michigan Career Education Conference  
February 2, 2016

# Workshop Agenda

- **Welcome & Introductions** Tracy DiSanto, DTE Energy
- **Career Options in Energy** Deborah Majeski, DTE Energy  
Todd Marsh, Consumers Energy
- **Energizing Activities** Amber Fogarty, Consumers Energy
- **MI Energy Workforce Development Consortium** Tracy DiSanto, DTE Energy
- **Questions & Answers**



# What do you know about the energy industry?

1. How many people were hired into Consumers Energy and DTE Energy alone in 2015?  
A. 850      B. 1,150      C. 1,500
2. True or false: The utility industry only has entry level job opportunities for people who hold 4 year degrees?
3. True or false: Utilities most frequently seek electrical engineers when recruiting on campus?
4. True or false: Only white collar jobs pay well.
5. True or false: Anyone is qualified to work at a utility company.



# Energy Industry Career Opportunities

**Deborah Majeski, DTE Energy**  
**Todd Marsh, Consumers Energy**



# A Short Quiz

True or False?

Utilities most frequently seek electrical engineers when recruiting on campus.

- The answer is **False**. We look for civil, mechanical, electrical, nuclear, computer and chemical engineers. We also hire accountants, business majors, foresters, construction managers and many more.

# A Short Quiz

True or False?

The utility industry only has entry level job opportunities for people who hold 4 year degrees.

- The answer is **False**. When hiring meter readers, call center representatives, gas construction workers, auxiliary operators, schedulers, etc, a degree is not required.

# A Short Quiz

True or False?

Only white collar utility jobs pay well.

- The answer is **False**.
  - The meter readers at Consumer's Energy start at \$21.56/hour.
  - DTE & Consumer's have gas lines construction positions at \$25 plus/hr.
  - With overtime, many electric line workers can make over \$100,000/year.

# A Short Quiz

Which utility job is a training position with minimal qualifications?

- A. Journeymen
- B. Apprentices
- C. Customer Service Specialists
- D. None of the above
- E. All of the above

The answer is **B. Apprentices**. The apprentice position is an on the job training position





# A Short Quiz

Which of the jobs have these qualifications; HS diploma or GED, pass an aptitude or skills test, (and maybe a driver's license)?

- A. Maintenance Fitter Apprenticeship
- B. Service Tech Apprenticeship
- C. Apprentice Lineman
- D. None of the above
- E. All of the above

The answer is **E. All of the above**. Many of the apprenticeship positions require only a high school diploma or GED. Some will require completion of a skills test, perhaps a physical test, and maybe a driver's license, depending on the position.



# A Short Quiz

Which industry is less vulnerable to a poor economy?

- A. Manufacturing
- B. Construction
- C. Utilities
- D. Telecommunications

- The answer is **C. Utilities**

# A Short Quiz

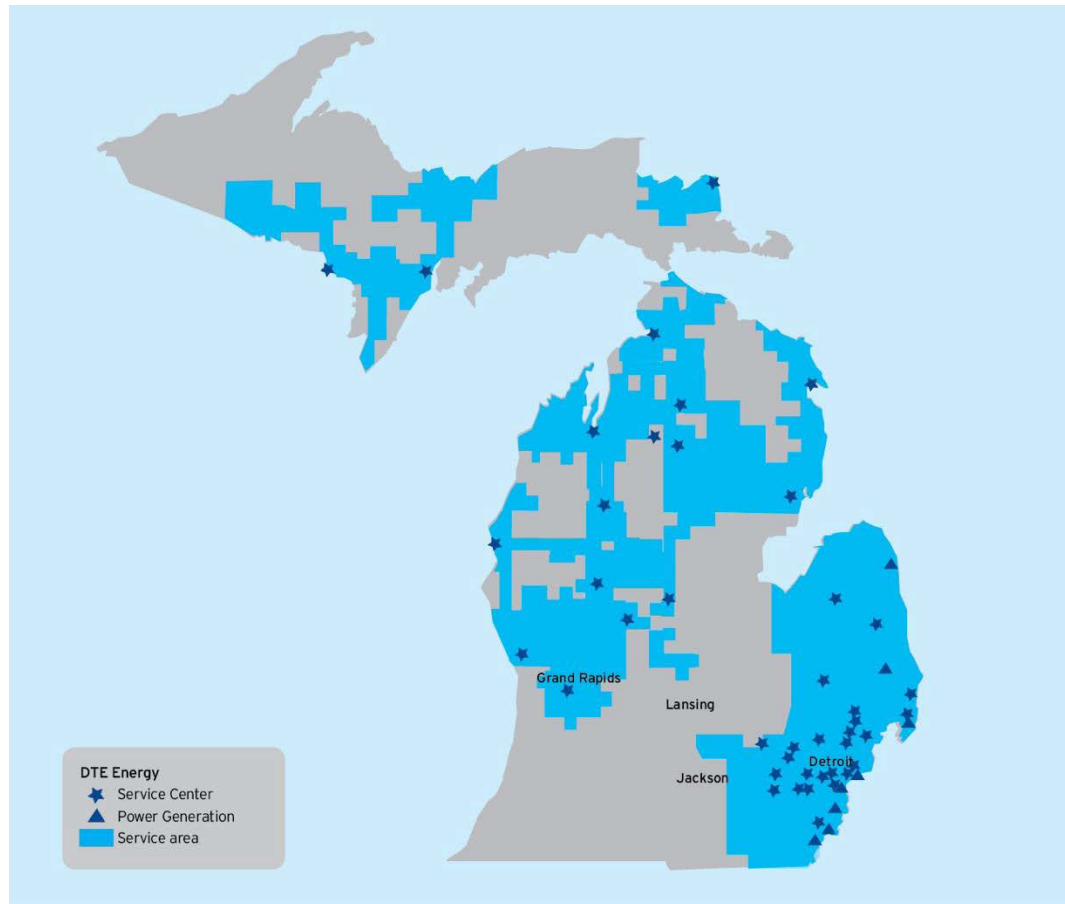
How many utility companies are there that distribute gas and/or electricity in Michigan?

- A. 3
- B. 13
- C. 23
- D. 33
- E. 43

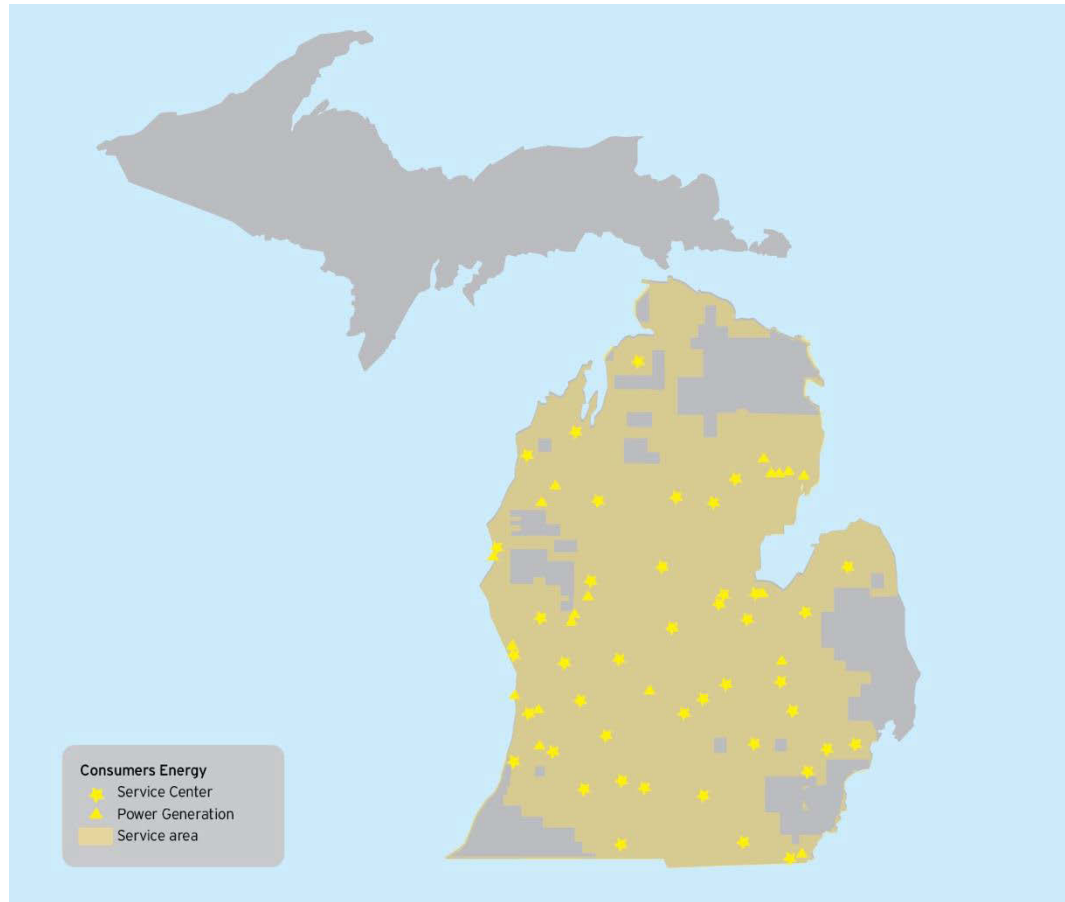
- The answer is **C. 23**. Although the representatives today are from Consumer's Energy and DTE Energy, there are many utilities throughout Michigan who hire personnel in similar positions. Many are also members of the MEWDC and/or CEWD.



# Energy in Michigan - DTE

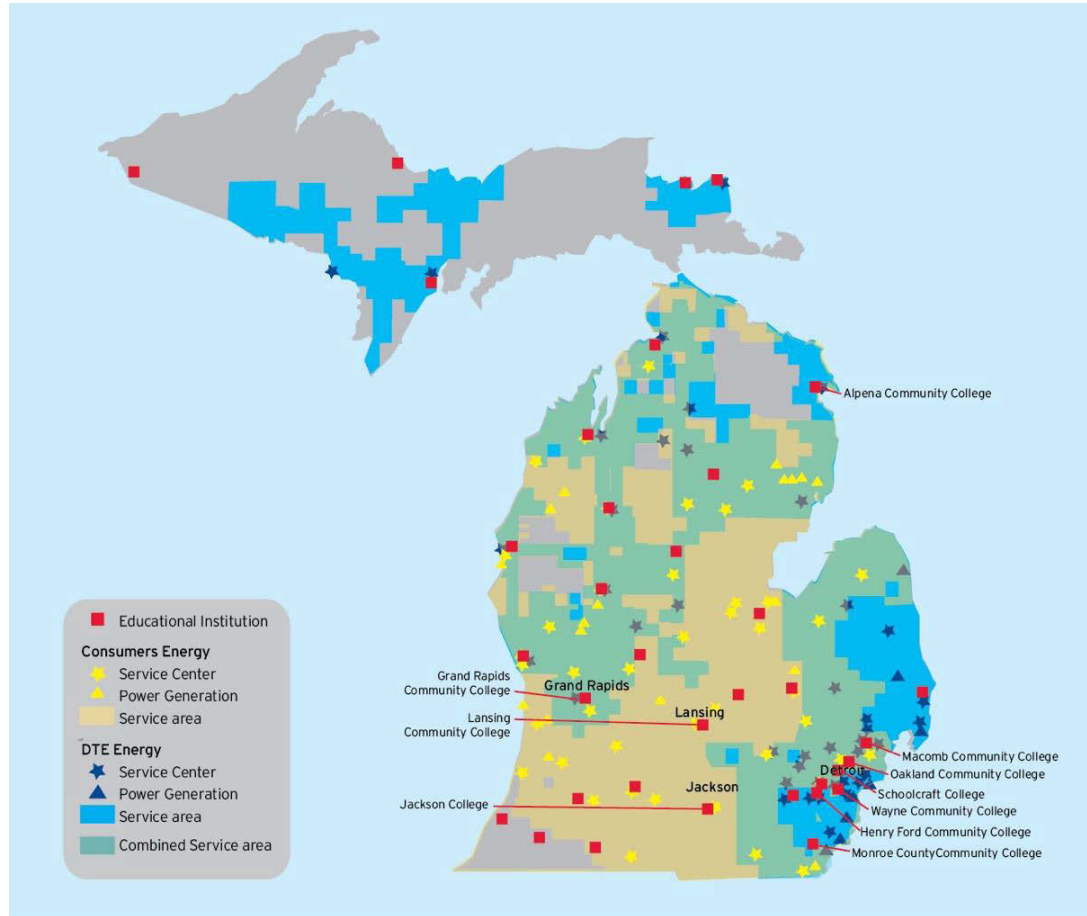


# Energy in Michigan Consumers Energy



# Energy in Michigan

## A Partnership



# Careers in Energy

Let's look at  
some  
technical jobs!



# Qualifications on Service Tech Apprentice positions

## JOB POSTING EXAMPLE

**POSITION:** Service Technician Apprentice

**LOCATION:** Various

### KEY ACCOUNTABILITIES

The Service Technician Apprentice classification requires that an employee shall perform the following described duties: cutting, threading and connecting piping and tubing; installation or relocation of all appliances and meters; altering meter manifolds; repairing all residential and commercial appliances having hourly inputs of less than 400,000 BTU for heating; adjusting, converting and repairing all residential and commercial appliances having hourly inputs of less than 400,000 BTU, except air conditioning; install parts when necessary; remove, set off, setting and removing all meters; installation and repairs on any Hex or future A/C units; changing dial glass or indexes where necessary on the job site and no soldering required; respond to gas leak orders; taking gas pressures to locate cause of no gas or poor supply; clearing service lines; installing, changing, repairing and adjusting service regulators; and shall demonstrate a thorough knowledge of the rules and procedures of the Field Operations.

All Field Service-based employees, including Service Technician Apprentices (STA) and Field Operator Apprentices (FOA) will be expected to do both gas and electric turn ons and disconnects.

### QUALIFICATIONS

- Must have a High School Diploma or GED.
- Subject to random drug testing.
- Must receive a "recommended" on the Field Service Test.
- The employee must complete the prescribed course of instruction and pass a subsequent examination on the duties within this classification, and perform the duties assigned under this classification for a total of one hundred eighty (180) days to qualify.

An employee who has qualified as a Service Technician Apprentice and, thereafter, has performed the duties of such classification for sixty (60) months, (including the three hundred sixty-five (365) day qualification period) and has been rated as qualified at the semi-annual rating next preceding the expiration date of such sixty (60) month period, shall have the opportunity for advanced assignment to the Service Technician classification. When an employee has been rated as not qualified at such semi-annual rating preceding such expiration date, he/she will have the opportunity for advanced assignment to the Service Technician classification at the expiration of the next semi-annual period at which the employee has been rated as qualified.

Scheduled crews in the Field Service Division on the midnight shift will consist of two (2) employee crews.

Piping and tubing repair, residential and commercial appliances, air conditioning, evaluating for gas leakage, meter maintenance.



# Qualifications on Maintenance Fitter Apprentice Positions

## JOB POSTING EXAMPLE

Position: **Maintenance Fitter Apprentice**

Location: **Various**

### KEY ACCOUNTABILITIES

This classification requires that the employee shall be able to perform some or all of the described duties under the direction of an employee of a higher classification.

- Performing all fitting and mechanical work, including the fusing of plastic piping and
- Maintaining and making minor repairs and adjustment to all types of Distribution D construction or maintenance equipment.
- Performing paving and resurfacing operations.
- Making detector tests and performing all other work incidental to prospecting and leak surveys, including locating and repairs.
- Fabricating, assembling, installing and repairing pipe bends, meter manifolds, valve and regulator assemblies.
- Setting meters and relighting all residential appliances and equipment in the course of the work on the premises and restoring gas service in the course of his or her work on service repairs, renewals, relocations and reconnects.
- Installing gas main stoppers and bags,
- Working in confined spaces above or below grade.
- Hand digging excavation(s).
- Working outdoors majority of the day, year round.
- Using jack hammer on hard surfaces such as; concrete and asphalt.
- Use of pneumatic tools such as; rock drill, air spade, soil tamper.

### QUALIFICATIONS

- Must have a **High School Diploma or GED.**
- Must meet Company driving standards. **Must possess or obtain prior to transfer date, a Group A Commercial Drivers License** with air brake or a Classified Endorsement Temporary Instruction Permit to operate a Group A vehicle with air brakes. Canadian citizens must obtain an Ontario Class A license with a Z endorsement for air brakes. Drivers with the Classified Endorsement Temporary Instruction Permit must obtain a Group A Commercial Drivers License as soon as they are certified by Employee Training.
- Must have ability to **communicate both verbally and in writing.**
- Must be physically able to **lift and handle approximately 95 pounds (i.e., jackhammer)**
- Must **complete DOT Drug Test, respirator fit test and satisfactory physical examination.**
- Subject to **random drug testing.**
- Working in all types of weather.

Maintenance, repairs and mechanical work, piping and fittings, installing and exchanging residential and commercial meters, maintenance and repairs construction equipment, leak surveys, installing, residential appliances,

# Qualifications of Apprentice Linemen Positions

installation, operation, repair, and maintenance of overhead and/or underground distribution systems, transmission facilities, and street light systems to provide continuous and dependable electric service to customers

## JOB POSTING EXAMPLE

Position: [Apprentice Lineman](#)

Location: **Various**

### KEY ACCOUNTABILITIES

Under the direct and intermittent supervision of Supervisor Field Overhead Lineman Instructor and work direction of a Journeyman Lineman in the field, training center to become a Journeyman Lineman, following an established apprenticeship course. Performs Groundman and other work as assigned. Subject to work during off hours for efficient progress on the job or in case of emergency.

### QUALIFICATIONS

- [High School Diploma or GED.](#)
- Physically [able to lift and handle 90 pounds.](#)
- Must obtain an evaluation of "[Recommended](#)" on the [Construction Aptitude Skills Test \(CAST\)](#). (Exception: if you have previously taken and passed the CAST test.) A PRACTICE TEST CAN BE FOUND ON THE DTE WEBSITE @ [WWW.DTEENERGY.COM](http://WWW.DTEENERGY.COM)., CLICK ON CAREERS LINK, CLICK HIRING PROCESS LINK; CLICK SKILL TESTING LINK.
- Satisfactorily [complete Pole Climbing Orientation.](#)
- Must meet Company driving standards. Must possess or obtain prior to transfer date, a Group A Commercial Drivers License with air brake or a Classified Endorsement Temporary Instruction Permit to operate a Group A vehicle with air brakes. Canadian citizens must obtain an Ontario Class A license with a Z endorsement for air brakes. Drivers with the Classified Endorsement Temporary Instruction Permit must obtain a Group A Commercial Drivers License as soon as they are certified by Employee Training.
- [Satisfactory complete physical examination.](#)

# DTE Energy Careers page ([dteenergy.com/careers](http://dteenergy.com/careers))

## DTE Energy Careers page

- Jobs Tour
- Skills Testing
- Interview Tips
- When jobs are posted
- Applying to jobs



# DTE Energy Careers page (dteenergy.com/careers)

**Lots of  
information  
under  
HIRING  
PROCESS  
on the left  
navigation**

The screenshot displays the DTE Energy Careers page. The browser address bar shows the URL <https://www2.dteenergy.com/wps/portal/dte/about>. The page features the DTE Energy logo at the top left and navigation links for Residential, Business, and About Us. A search bar is located at the top right. The main navigation menu includes About DTE Energy, Careers, Community, Economic Development, Environment, Investors, and News Room. The left navigation menu is expanded to show the Hiring Process section, which includes links for Search - Apply for Jobs, Student Programs, MBA Candidates, Why DTE Energy, Compensation and Benefits, Calendar, Hiring Process, The Hiring Process, Interview Tips, Skills Testing, How to Apply Online, and Jobs Tour. The main content area features a large image of a smiling woman, a 'Browse a listing of all job postings' button, and several featured articles including 'EEO is the law', 'Job fairs and recruiting events', 'Veterans put your skills and experience to work at DTE Energy', and 'Winner, 2013 Gallup Great Workplace Award'. The footer contains links for Customer Support, DTE Energy Company, Subsidiaries, and Special Topics, along with social media icons and a copyright notice for 2014 DTE Energy Company.



# Consumers Energy Careers Page ([consumersenergy.com/careers](http://consumersenergy.com/careers))

## Consumers Energy Careers Page

- Current Openings
- Internships
- Development Opportunities
- Work-Life Balance
- Testing/Assessments



# Consumers Energy Careers Page (consumersenergy.com/careers)

**Lots of  
information  
under  
Browse  
Current Job  
Openings  
On the center  
of page**



## Browse Current Job Openings

- Engineers
- Customer Service
- Information Technology
- Internships
- And more...



## New and Returning Applicants

- Already have a profile? Click here to [login](#)
- New user? [Click here](#) to create a candidate profile

# Hiring Assessments

## Physical and Written



[https://youtu.be/ObP7ai9\\_5Cl](https://youtu.be/ObP7ai9_5Cl)

# Hiring Assessments

## Physical and Written

Practice Tests  
(located under  
Search and  
Apply for  
Jobs)  
**IMPORTANT**

### Search and Apply for Jobs

Consumers Energy has a variety of jobs that require varying levels of education, training and experience. We offer [career opportunities](#) to match your choice in a job and career.

You can grow professionally alongside one of our nearly 8,000 employees and have an opportunity to change careers or work in different parts of the state while remaining employed by the same company.

Your first job with Consumers Energy may lead to great opportunities. A number of entry-level employees and former [interns](#) have made their way through the ranks to top-level management positions with the company.

Some positions require that you successfully complete various tests, which are certified through the [Edison Electric Institute \(EEI\)](#) and other publishing companies.

- On either of the sites below, enter base in the Name field and ball in the Password field to gain access to the information. This information will help prepare you for pre-employment tests for jobs in the meter reading, plant operations and construction fields.
- [EEI Testing Brochures](#)
- [Plant Operator/Maintenance practice test](#)

[Click here](#) for a list of supported browsers and operating systems that are compatible with the Consumers Energy careers section.

If you experience any problems creating a profile or applying for one of our jobs, please reach out and let us assist you in applying by [sending us an email](#).



[Careers in Energy Week Oct. 12 - 18](#)



[Browse Current Job Openings](#)



[New and Returning Applicants](#)



[Employee Log In](#)





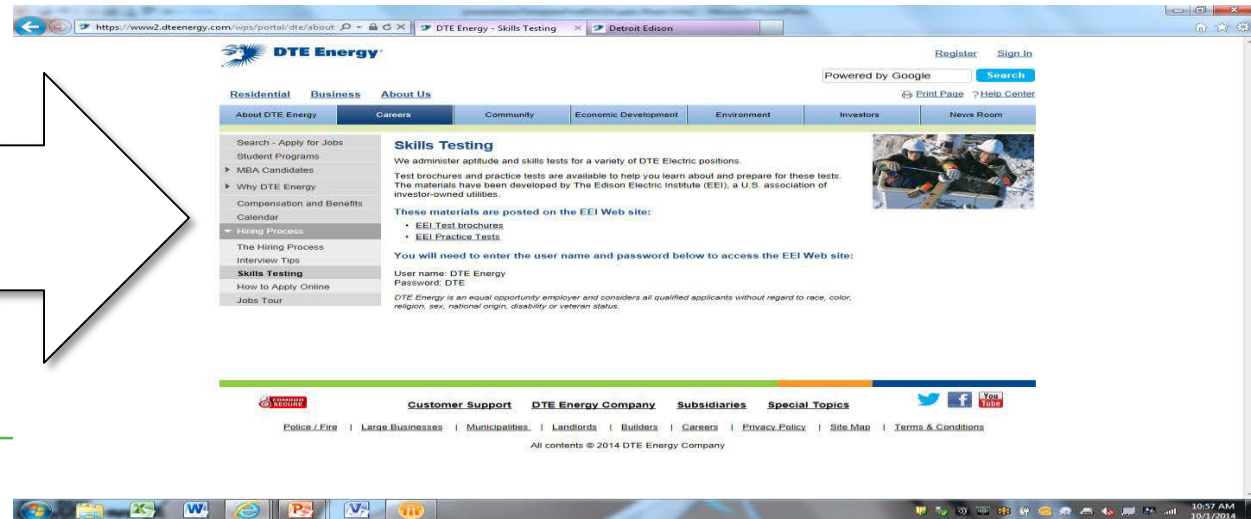
# Hiring Assessments

## Physical and Written

- We administer aptitude and skills tests for a variety of DTE Electric positions.
- Test brochures and practice tests are available to help you learn about and prepare for these tests. The materials have been developed by The Edison Electric Institute (EEI), a U.S. association of investor-owned utilities.
  - **These materials are posted on the EEI Web site:**
    - [EEI Test brochures](#)
    - [EEI Practice Tests](#)

**SKILLS TESTING**  
**(located under**  
**Hiring Process)**

**IMPORTANT**



The screenshot shows a web browser window displaying the DTE Energy website. The page is titled "Skills Testing" and contains the following text:

**Skills Testing**  
We administer aptitude and skills tests for a variety of DTE Electric positions. Test brochures and practice tests are available to help you learn about and prepare for these tests. The materials have been developed by The Edison Electric Institute (EEI), a U.S. association of investor-owned utilities.

These materials are posted on the EEI Web site:

- [EEI Test brochures](#)
- [EEI Practice Tests](#)

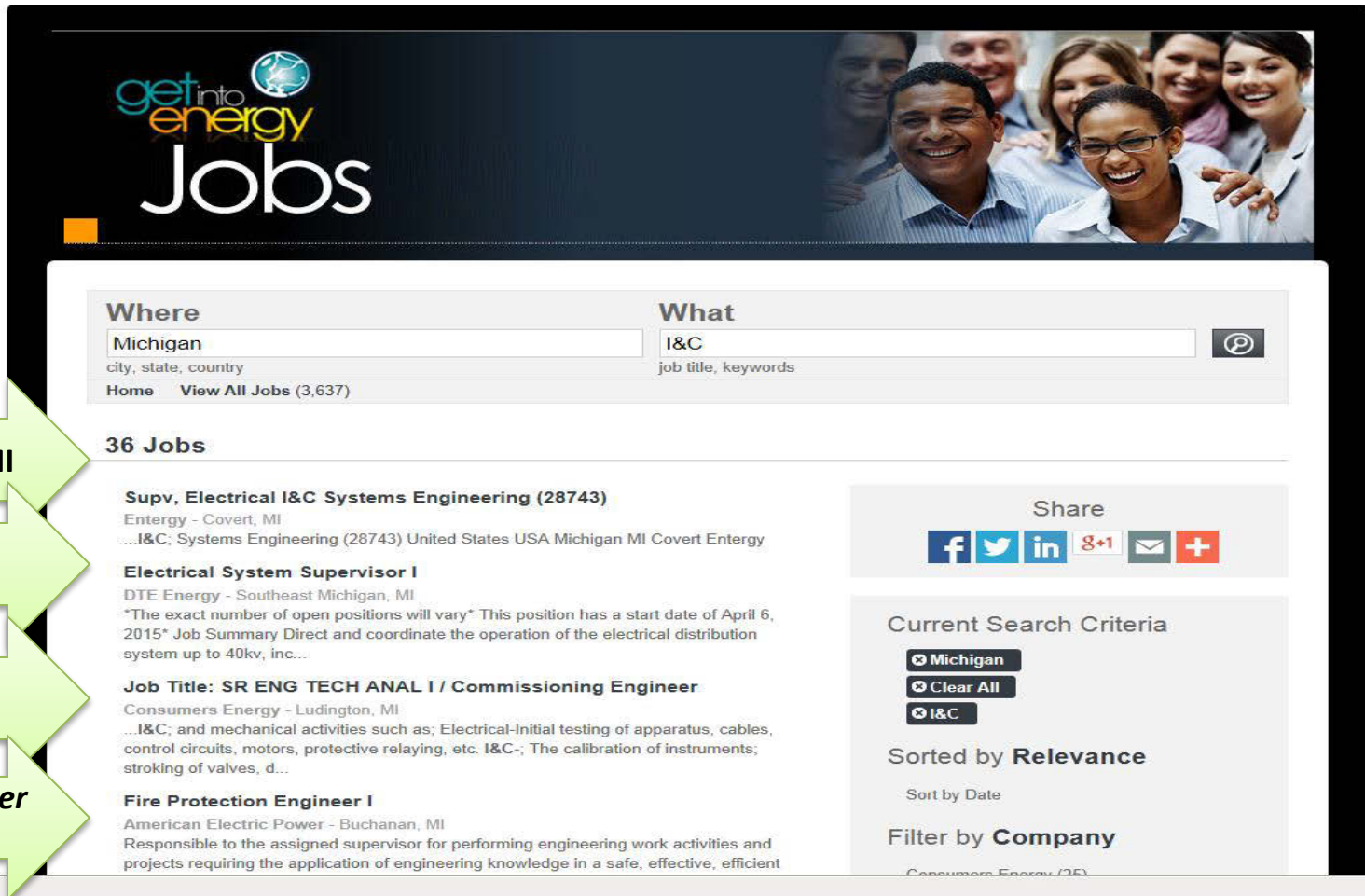
You will need to enter the user name and password below to access the EEI Web site:

User name: DTE Energy  
Password: DTE

DTE Energy is an equal opportunity employer and considers all qualified applicants without regard to race, color, religion, sex, national origin, disability or veteran status.

The screenshot also shows a navigation menu with "Careers" selected, and a sidebar with "Hiring Process" expanded to show "Skills Testing".

# A single source for Energy Career Opportunities - getintoenergy.jobs



The screenshot shows the 'get into energy Jobs' website interface. At the top, there is a header with the logo and a photo of a diverse group of smiling people. Below the header, there are search filters for 'Where' (Michigan) and 'What' (I&C). The search results show 36 jobs. The first job listing is for 'Supv, Electrical I&C Systems Engineering (28743)' at Entergy - Covert, MI. The second job listing is for 'Electrical System Supervisor I' at DTE Energy - Southeast Michigan, MI. The third job listing is for 'Job Title: SR ENG TECH ANAL I / Commissioning Engineer' at Consumers Energy - Ludington, MI. The fourth job listing is for 'Fire Protection Engineer I' at American Electric Power - Buchanan, MI. On the right side, there are social media sharing options (Facebook, Twitter, LinkedIn, Email, Print) and a 'Current Search Criteria' section showing filters for Michigan, Clear All, and I&C. The search results are sorted by Relevance.

Entergy Co. Covert, MI

DTE Energy Southeast, MI

Consumers Energy Ludington, MI

American Electric Power Buchanan, MI





# Energizing Activities

**Amber Fogarty, Consumers Energy**



# National Energy Foundation

- Consumers Energy and DTE Energy collaborate together with NEF
- Think Energy! program
  - FREE energy efficiency kits students can bring home
  - Aligns with Michigan Dept. of Education standards
  - 50,000 upper elementary students in Michigan



# Completing a Circuit

- Conductor vs. Insulator? Using Energy Sticks

\_\_\_\_\_ Penny

\_\_\_\_\_ Rubber band

\_\_\_\_\_ Paper Clip

\_\_\_\_\_ Paper

What else?

# Do you smell gas?

- Would you recognize the smell of natural gas?
- Why does it smell so bad?
- What should you do when you smell gas?

# Engaging HS Students

- **Careers in Energy Week** (October 2015)
- **High School Career Tech Education FOCUS** (late 2015 target areas, 2016 lower peninsula)
  - Career Fairs, Mock Interviews, etc.
  - Some CTE programs are piloting EIF curriculum





# Michigan Energy Workforce Development Consortium

Tracy DiSanto, DTE Energy





# The Energy industry is addressing its workforce needs through collaboration

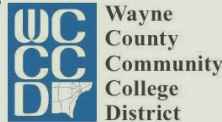
## National Partners



National non-profit organization supporting 100 plus utility members and 28 state and regional energy consortia ; includes electric, natural gas, and nuclear utilities and their associations



Industry-led partnership of more than 30 representatives that include: industry, labor, education veterans affairs, and workforce development organizations



## State Partners



Michigan Energy Workforce Development Consortium (MEWDC)




# MEWDC: Vision and Priorities

- Vision: The Michigan energy industry is adequately staffed with a qualified and diverse workforce to provide safe and efficient energy
- We have 4 strategic priorities
  - Career Awareness
  - Education
  - Workforce planning
  - Structure and support



# Get Into Energy (GIE) Website



**get into energy**  
GREAT LAKES  
STATE CONSORTIA

## There is a career for you in the energy industry!

Challenging and rewarding careers in an exciting and dynamic industry. Work and live in America's heartland, where a strong work ethic and friendly atmosphere await. With more than 50% of energy workers retiring in the next decade, now is the time to join the thousands of men and women who power the Great Lakes with safe and reliable energy. Find the career that is right for you today.

Wonder what is like to be a lineworker or engineer? Hear from the people who work every day to keep the energy flowing and learn what kind of training and education they have.

- Lineworker
- Technician
- Power Plant Operator
- Pipefitter
- Engineer

Do you like to work with your hands? Or work outdoors? Like to operate heavy equipment? Take our skills assessment and find the perfect job for you! [Skills Assessment](#)


Get the right training and education from some of the nation's best schools located in Great Lakes region. [Education Map](#)


Want to be a team leader or supervisor some day? Wonder how much more money you could make? Learn more about the career paths for some of our most in-demand jobs. [Career Pathway](#)

### Great Lakes Careers Projections


	Projected # of openings 2012-2022	Average Salary
Lineworker	8,869	\$ 64,402
Technician	9,487	\$ 57,036
Power Plant Operator	6,341	\$ 67,308
Engineer	3,540	\$ 86,423


### Other Consortium Sites


Illinois Energy Workforce Consortium  



Indiana Energy Workforce Consortium  


Coming soon

Michigan Energy Workforce Development Consortium  


Minnesota Energy Consortium  


Ohio Energy Workforce Consortium  


Wisconsin Energy Workforce Consortium  


### Resources

For educators:  
[Resources](#)  
[Lesson Plans](#)

For students and parents:  
[Resources](#)

<http://consortia.getintoenergy.com/Michigan/>  
<http://consortia.getintoenergy.com/greatlakes/>



# MEWDC received grant funding from the U.S. Chamber of Commerce Foundation to develop a Talent Pipeline Management (TPM) strategy

## Project Purpose

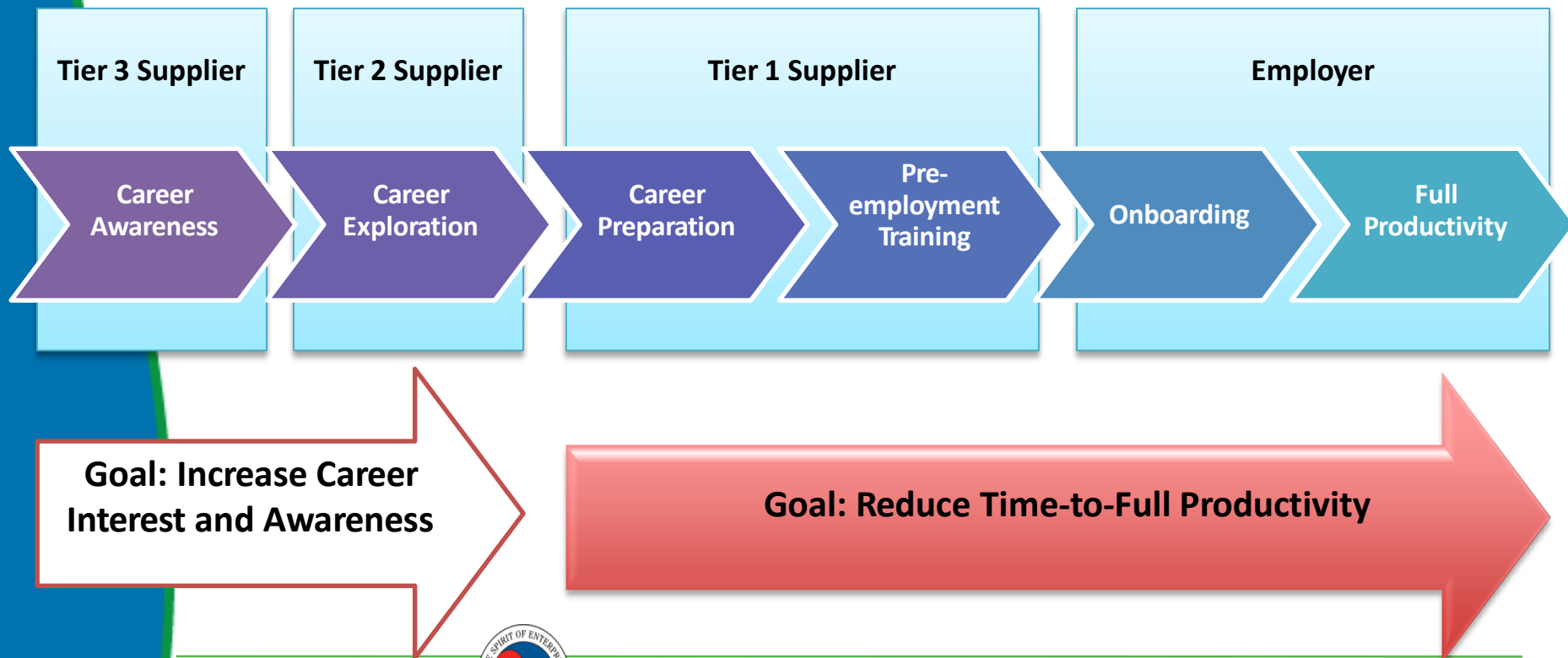
- Identify critical positions in energy sector
- Develop a common understanding of commonalities and differences
- Ensure education and training when delivered by the education system aligns to industry standards and company requirements

## Output

- Established Standards for Career and Technical education programs
- 17<sup>th</sup> Career Cluster in Energy
- Systematic process for selecting and working with community colleges
- Documentation of commonality and differences between utility companies for electric line and gas technician jobs
- Valid place to begin common objective development
- Objective-based construct for use with educational partners to determine existing course availability and additional requirements

# Building the partnerships, linking measures across the value chain and communicating Return on Investment

It is key to include partners from Industry, Education and Government up front.



**U.S. CHAMBER OF COMMERCE FOUNDATION**  
Education and Workforce

# US Chamber of Commerce Partnership

Energy Career Pathways  
**GREAT JOBS  
IN ENERGY!**

There are great reasons why you should consider a job in the Energy Industry.

**Consumers Energy**  
Count on Us®

**DTE Energy**

The advertisement features a central photograph of a woman in a dark jacket and safety harness, smiling. In the background, two men in yellow safety vests and hard hats are looking at a set of plans. The text is arranged in a clean, professional layout with a white background for the text and logos, and a blue background for the overall advertisement frame.



# Questions

