

Testimony of Lynette Dowler before the U.S. House Higher Education & Workforce Training Subcommittee Field Hearing, Tuesday, April 9, 2013, at Monroe County Community College

Good morning, Congresswoman Virginia Foxx, Congressman Tim Walberg, Mayor Robert Clark, Monroe County Community College President Dr. David Nixon, distinguished guests, ladies and gentlemen. My name is Lynette Dowler. I have been employed at DTE Energy for 30 years. I am currently the plant director for our Trenton Channel and River Rouge Power Plants, two of our base-load coal-fired power plants, delivering 730 and 540 MW respectively. Prior to this position I was plant director at our Fermi 2 Nuclear Power Plant, which produces 1,139 MW of electricity.

I am also a board member of the Foundation at Monroe Community College, and one of many DTE Energy employees who continue to enjoy a long and fruitful relationship with the college. I would like to thank you for this opportunity to discuss those relationships and interconnections with you today.

As you know, energy is vital to modern society; at DTE Energy we call the electricity and natural gas we provide “the lifeblood of our communities.” DTE Energy is a Detroit-based diversified energy company involved in the development and management of energy-related businesses and services nationwide. Our operating units include an electric utility serving 2.1 million customers in Southeastern Michigan and a natural gas utility serving 1.2 million customers throughout Michigan. We are committed to providing safe, affordable, reliable and environmentally responsible energy to our customers now and into the future. There are many things that we need to ensure that we are able to fulfill our commitment, but above all else, we need a well-educated, well-trained local workforce.

Energy is a “just in time” product – it has to be available to the customer precisely when they need it, with no effort on their part other than flipping a switch or turning on their stove or furnace. All the work “behind the scenes” is invisible to the customer, but

(except for the mining operations), that work is all done locally by skilled DTE Energy employees.

Like many Michigan companies, DTE Energy has an aging workforce. We realized years ago that we would need to replace our retiring workers with new people who can step into those positions and hit the ground running, without years of on-the-job training. That is a luxury that employers can no longer afford.

Our Human Resources Department began building a workforce planning program in 2008, beginning with our Nuclear Generation Department. Implementation has continued across the enterprise, including Fossil Generation, Electrical Distribution Operations, DTE Gas Operations, Corporate Services, Controllers Organization and Information Technology.

A first step was to identify “enterprise critical positions” or “pipelines” that require greater than 18 months of initial training time, are hard to fill, contain more than ten individuals, and have an attrition rate of 33 percent or greater over the next five years. Fourteen critical job pipelines, in addition to our entry level professional positions, were identified as areas where we need to place our focus given the potential for skill set shortages.

The pipelines include: Apprentice Splicer, Apprentice Lineman, Assistant Substation Operator, System Supervisor, Apprentice Electrical Maintenance Journeyman, Power Plant Operator, Fuel Supply Operator, Maintenance Journeyman, Instrument and Control Technician, Nuclear Maintenance Journeyman, Nuclear Operator, Radiation Protection Technician, Sr. Gas Technician Controls, and Gas Distribution General Fitter.

Despite the high unemployment rate in Michigan and the nation, talent is becoming more difficult to find in these highly technical positions. For example, in 2010 and 2011, it took some 18 months to fill six Instrument and Control positions in our Nuclear Generation Department.

We realized early on that this unemployment imbalance affects more than just DTE Energy and we could not solve it on our own. One of the strategies we are employing to

address these talent gaps includes collaborating with our local utility partners and industry organizations to build regional consortiums and a standard utility curriculum. Developing a standard curriculum model was first introduced by the Nuclear Energy Institute (NEI); and this approach, or a similar variation of this approach, has become the direction within the overall utility industry.

This standard utility curriculum is being embedded into community colleges' curriculums and yields a 2-year associate degree as well as an industry certification. Variations of the training have been developed for specific targeted groups including low income adults, women, youth, military, and transitioning adults.

We started looking for partners – other utilities and companies outside of our industry, unions, higher educational institutions, and government entities – to help us tackle this societal problem. We have made significant progress but much more needs to be done. I am happy to be able to share with you some of our recent successes, and ask for your help as we move forward.

One of our first endeavors was to identify educational institutions that could serve as pipelines to supply us with the new workers we need now and in the future. Fortunately, Monroe County Community College is right in our backyard, close to our Fermi 2 Nuclear Power Plant, as well as the Monroe Power Plant, our flagship 3,000 MW coal-fired generating station.

DTE Energy employees started working with Monroe County Community College to develop educational programs to serve DTE Energy's needs and those of other Michigan companies. These programs include Construction Management Technology Certificate, Nuclear Engineering Technology, Non-destructive Testing, Information Assurance Technology, Boiler and Power Plant Fundamentals, Alternative Energy Certificate, Green Building, and others.

The Heavy Industrial Construction Certificate was launched in 2009, designed for more experienced construction personnel who wish to upgrade their skills and gain entry into management positions with large industrial employers, as well as new entrants into the

field. This is an active and ongoing partnership that was started in cooperation with a now-retired DTE Energy employee, the former manager of environmental projects. Current DTE Energy employees continue to evaluate the viability and value of this certificate program through its advisory committee.

As you may be aware, DTE Energy is in the home stretch of a nearly \$2 billion state-of-the-art emissions control project at the Monroe Power Plant. This project involves the installation of flue gas desulfurization systems and selective catalytic reduction systems on all four generating units, and the removal of the two original 800-foot-tall stacks and their replacement with two 580-foot tall stacks specially designed to accommodate the new equipment.

The complexity and breadth of this and other DTE Energy construction projects, including the potential construction of the Fermi 3 Nuclear Power Plant, inspired the development of the Heavy Industrial Construction Certificate program, whose graduates are already working on-site at Monroe Power Plant and other locations.

Recently developed programs at the college include the MCCC Nuclear Engineering Technology Program which was created through a partnership with DTE Energy and a \$200,000 Congressionally directed grant award. Through this program, MCCC offers – in conjunction with DTE Energy -- an Associate of Applied Science Degree in Nuclear Engineering Technology that enables graduates to seek employment as nuclear engineering technicians in various sectors of the nuclear industry. The partnership aligned MCCC's new nuclear energy technology program with the initial training programs offered by DTE Energy and accredited by the National Nuclear Accrediting Board. It facilitates the transitioning of graduates into the nuclear energy industry utility training programs in accordance with the requirements of the Uniform Curriculum Guide for Nuclear Power Plant Technician, Maintenance and Non-licensed Operations Personnel Associate Degree Programs, as developed by the Nuclear Energy Institute. MCCC also supports broader state and national interests through the distribution of developed curriculum to other community colleges through educational consortiums.

The U.S. Department of Energy estimates the U.S. will need 44 percent more electricity by 2020. To help meet this demand, the nuclear energy industry has calculated that 60,000 megawatts of new nuclear power plant capacity will be required by 2020. However, many of today's nuclear experts are part of the generation that pioneered nuclear energy's peacetime use in the 1960s. These professionals are now retiring, and qualified applicants are needed to take their place. According to the Nuclear Energy Institute, about 30 percent of the nuclear energy workforce will retire within five years. DTE Energy is looking to Monroe County Community College to supply its new employees.

Last month, the DTE Energy Foundation announced a \$1 million contribution to support the capital campaign for the new Career Technology Center at Monroe County Community College. The \$17-million, 60,000-square foot Career Technology Center is scheduled to open this fall. The State of Michigan is providing half of the funding (\$8.5 million) in a demonstration of support for this public/private partnership that will provide untold benefits for the region. The Career Technology Center will provide infrastructure to support state-of-the-art classrooms and lab space required to deliver instruction and skills necessary to secure high-growth, high-demand and high-paying jobs.

In addition to the Nuclear Engineering Technology and Heavy Industrial Construction classes, the program areas to be taught in the Career Technology Center include welding, computer-aided drafting and manufacturing, electronics, mechanical engineering and automation, quality assurance, and automotive engineering and service with an emphasis on hybrid and battery technology. In addition, the Career Technology Center will provide facilities and equipment necessary for the development of programs in the emerging areas of advanced manufacturing; renewable energies such as wind, solar and fuel cell technology, and sustainable and green technologies.

MCCC received a \$1.7 million U.S. Department of Labor Community Based Job Training Grant to establish a Welding Center of Expertise that will be housed in the new Career Technology Center. The Welding Center will deliver accelerated training in two ten-week modules resulting in industry-recognized American Welding Society

certifications to help fill the void in skilled welders across the energy, advanced manufacturing, and heavy construction industries. Many of these graduates will find employment at DTE Energy.

The college has recently launched a new program with specialization in product and process technology – designed to prepare students for careers in the high-performance manufacturing of consumer goods. The college has also added a program track in non-destructive testing which involves the inspection, testing or evaluation of materials, components and assemblies for materials' discontinuities, properties and machine problems without further impairing or destroying the parts' serviceability. Included among the variety of non-credit courses, certificates and customized training offered through MCCC's Corporate and Community Services Division is the Boiler and Power Plant Fundamentals class and an ongoing partnership with Pearson VUE Testing to offer advanced, computer-based CompTIA testing for certification in 14 information technology specializations.

Monroe County Community College and DTE Energy enjoy a long-standing and close relationship in Monroe County. The college serves DTE Energy as a highly visible and respected community partner. The MCCC campus serves as the Joint Information Center for DTE Energy's Fermi 2 Nuclear Power Plant, and hosted the Nuclear Regulatory Commission during the public comment period for the Fermi 3 Combined Operating License Application (COLA).

In return, DTE Energy has been a generous supporter of the college. In addition to the \$1 million contribution to the Career Technology Center, other support from the DTE Energy Foundation, DTE Energy and DTE Energy Corporate Services includes funding for Campus/Community Events cultural arts programming, scholarships, Volunteer Leadership Grants, employee matching gift support, and the donation of solar panels for use by MCCC students.

Within the past two years, MCCC became the first educational institution to participate in the DTE Energy's SolarCurrents Program, leading to a \$3 million - 500mw solar

installation on its main campus. While this installation does not power the MCCC campus, it does provide learning opportunities for MCCC students and the community as well to become educated about the opportunity and impacts of renewable energy.

In addition to our successful partnerships with Monroe County Community College, DTE Energy has created other promising collaborations, including one in Distribution Operations to improve the quality and diversity of the applicant pool for DTE Electric lineman positions. In 2004, DTE Energy developed an electrical lines worker training program that is considered the best in the Midwest. Working with the National Utilities Training Fund, a partnership between the International Brotherhood of Electric Workers and three other utilities, we brought retired DTE Energy linemen to our technical training center to assist with apprentice training. The lineman program, including a 5 week pole climbing course, is used to support candidacy for both Underground and Overhead Apprentice jobs. To-date we have hired 39 individuals who have successfully completed this course over the past 18 months.

Another promising program, and one which has great potential to become a statewide and national model, is the “Natural Gas Boot Camp” program which DTE Energy has piloted in partnership with the Michigan National Guard. The idea for the Boot Camp emerged in early 2012 in meetings between DTE Energy and Brigadier General Michael Stone of the Michigan National Guard. While DTE has been trying to boost its veteran recruitment, the Michigan National Guard, with support from Governor Rick Snyder, has been looking for solutions to the state's veteran unemployment that could be applied nationwide.

DTE Energy was instrumental in developing the Boot Camp curriculum and bringing in key partners to build the project, including Local 223 of the Utility Workers Union of America, Consumers Energy, Alpena Community College, Schoolcraft Community College, the Center for Energy Workforce Development and the Michigan Workforce Intelligence Network.

Graduation day was December 7 for 20 veterans who successfully passed DTE Energy's Natural Gas Boot Camp at Camp Grayling, a Michigan National Guard training facility. They completed four weeks of classes taught by Alpena Community College instructors in Grayling, followed by three weeks of hands-on instruction at Camp Grayling. A second Boot Camp, sponsored by Consumers Energy, ran concurrently in the metro Detroit area.

The last step of the process was to conduct several After Action Reviews (AAR), gathering feedback from "the partnership", instructors, and students to determine what changes need to occur to make the next session even more successful. Union leadership from all four DTE Gas Company unions was informed of the program's progress and participated in those AARs. Improvements are being made to the Natural Gas Fundamentals program and will enable us to repeat our pilot success and increase the opportunity for union engagement.

In addition, since DTE Energy provided the majority of private funding (\$60,000) needed to make this first boot camp a reality, we are focused on reducing costs for future programs. Through the partnership approach and the work with General Stone, we hope to increase access to federal and/or state grants to support development and delivery of other boot camp programs.

Beyond these two programs, several areas of opportunity exist to support other hard-to-fill jobs identified in our workforce planning. Specifically, power plant operator and instrument and controls technician are on the "boot camp design board" for implementation in 2013. Additionally, an experiment will be conducted to create a "supervisor" boot camp for veterans with existing leadership and applicable technical experience. This boot camp would provide students with utility industry insight coupled with operational fundamentals to support placement in DTE Electric positions, including Power Plant Supervising Operator and Supervisor Reliability.

Congresswoman Foxx and Congressman Walberg, thank you for this opportunity to discuss how we have been working with our partners to address our employment needs

and the higher education needs of our customers in this region. We find that public/private partnerships achieve the greatest results in all aspects of our business, including workforce training. We hope this field hearing has been beneficial and that your future travels provide you with additional useful information. We appreciate your time and attention, and hope that you will agree that government can assist in these efforts by providing grants and scholarships that will enable more people to be trained in these critical skills.

DTE Energy is one of the largest employers and tax payers in the State of Michigan. We and our communities are inseparable. We regard our workforce planning program as both a challenge and an opportunity, for it allows us to fulfill our company's aspiration to be "a force for growth and prosperity in the communities where we live and serve."

Thank you.