



# HOUSTON COMMUNITY COLLEGE

## **US House Committee on Natural Resources**

Testimony of Dr. Madeline Burillo, President

Houston Community College Southwest

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### **1. Overview**

Good morning Chairman Bishop and members of the US House Committee on Natural Resources. My name is Madeline Burillo, President of Houston Community College - Southwest located in Houston, Texas. Thank you for the opportunity to address the committee, particularly on matters relating to the proposed policy consideration that focuses on promoting offshore energy and STEM-related education to help meet the nation's workforce needs.

Houston Community College is an open admission public two-year college and designated Hispanic Serving Institution. The college offers high-quality, affordable education for academic advancement, workforce training, career development, and life-long learning for approximately 115,000 individuals annually. Additionally, more than 5,400 veterans attend the college annually.

Houston Community College currently leads Texas and ranks fifth in the nation in the number of students who complete associate degrees. The college is one of the most diverse community colleges in the nation with a student population that reflects the 2025 projected ethnic distribution for the U.S. Our daily efforts to help students, our community, our region, and ultimately the nation are led by Dr. Cesar Maldonado, Chancellor of Houston Community College

### **2. Houston, the Energy Capital of the World**

Situated in the Energy Capital of the World, Houston Community College serves more than 3,700 energy companies in the Houston geographic area. The college has been recognized as a leader in offering STEM and energy-related programs through its Global Energy Training Institute and its Centers of Excellence in response to workforce demands in both the upstream and downstream sides of the business. These programs include: Process Technology, Petroleum Engineering Technology, Instrumentation Technology, Pre-Engineering, Cyber Security, and our highly touted RigOne Roustabout Program.

### **3. History of the RigOne Program**

The RigOne Program is truly a visionary and innovative project. Its creation resulted from a 2012 meeting with Diamond Offshore Drilling. The company approached Houston Community College to discuss the industry's need for highly trained crew members who were technically sophisticated, safety conscious, and promotable. As the college partnered with industry members to help define and meet its workforce needs, it became readily apparent that other offshore drilling contractors also had similar training needs. Consequently, the college began working with the International Association of Drilling Contractors to provide a solution that connects workers to the industry through STEM-related training. The Houston Community College RigOne program demonstrates how community colleges can help meet our nation's workforce needs by aligning curriculum with relevant industry skills and competencies requirements to generate a pipeline of highly qualified workers.

#### 4. RigOne Safety and Technical Skills Outcomes

Safety and technical skills are critical pieces of the RigOne Program. Accordingly, drilling contractors insisted that there be a significant safety training component. In response, students learn rigging skills, forklift operations, confined space entry, fall protection, fire watch and firefighting techniques, stop work authority, Safety Environmental Management Systems, and aspects of well control during the program. Students also learn to conduct a job safety analysis, identify hazards, and isolate electrical energy sources.

To support safety and technical skills instruction, Houston Community College is constructing an outdoor Safety and Skills Training Laboratory. This two-tiered structure will simulate the essential components of the offshore and onshore drilling work environments and create the circumstances to obtain and demonstrate critical technical skills. We look forward to the opening of this laboratory in early 2016.

In total, the RigOne Program consists of two courses and 192 contact hours. It provides students the knowledge, skills, and abilities which have been defined by industry to be a roustabout in the offshore oil and gas industry. In the program, students earn certifications from the International Association of Drilling Contractors, the American Petroleum Institute, and other third party vendors.

#### 5. Transitioning Students to Work

From the beginning, our industry partners insisted that the program transition students to work. Thus, Houston Community College worked to mimic the work environment in a way that supported that objective.

The students' transition path includes pre-program acceptance drug screening, criminal background and driving record checks, a physical and fit-to-train assessment. Students must also attend class six days a week for 12 hours a day. During class, students wear uniforms and appropriate personal protective equipment. These activities mimic entry into the industry and provide the necessary training that sustains workers throughout their careers.

Importantly, at the conclusion of program and upon our students graduating, our industry partners collectively come to campus and interview our graduates who are ready to transition to work.

Incidentally, the typical entry-level salary for a roustabout working offshore is between \$50,000 and \$70,000 annually, plus benefits. It is noteworthy that some of our students have been hired after completing only one of the two courses.

#### 6. Scholarship Available to Students

Though limited, scholarships are available to help students enter the program. The Society of Petroleum Engineers Gulf Coast Section provides \$1,000 scholarships to student-applicants who seek funding assistance through the Houston Community College Foundation. The availability of these funds demonstrates the financial commitment and generosity of industry to help students train and transition to work.

As suggested, unfortunately the scholarship funding is insufficient to cover all program costs. Moreover, although the tuition to attend the program is moderate, the tuition is insurmountable for some of our community college students.

## 7. RigOne Success Story

David is a RigOne success story. His story is one that involves generosity, commitment, perseverance, and ultimately he triumphs, as he pursued his dream of completing the RigOne Program and having a career in the oil and gas industry.

David would arrive early to class in his quest to begin his career in the oil and gas industry. He, like other students in the program, had dedicated himself to meeting the requirements for program entry and approached his work with a strong commitment to succeed. Unfortunately, like life commonly unfolds, David experienced difficulties. He did not have the financial resources to pay his tuition and purchase his uniform so he borrowed money from his family, friends, and even the lead instructor. He had a challenge with his online exams because he did not have a laptop or internet access in his home. Notwithstanding all of his seemingly insurmountable obstacles, David ultimately triumphed over his adversities and now works for Transocean as a roustabout.

David personifies the type of worker needed on drilling rigs: formally trained, technically-skilled and safety conscious. Students like David may just need a little financial help to start their careers, and this proposed policy consideration could help meet the need

## 8. Future Growth of Offshore Operators and Drilling Contractors

Houston Community College is leading the effort to address the future growth of offshore oil and gas companies. In collaboration with the upstream oil and gas industry, industry associations and our higher education partners in Louisiana, Mississippi, and Texas, the college has been awarded an exploratory grant by the National Academy of Sciences' Gulf Research Program.

The consortium is working to identify the most critical middle skills positions impacting well operations safety. The identification task has not been completed for the Gulf of Mexico and this information is crucial to prioritizing the development of STEM-related training programs that positively impact the safety culture of the oil and gas industry.

Compared to the downstream oil and gas industry, the upstream and midstream industry sectors lag in resources to build nationally-standardized middle skills training programs targeting competencies required to perform specific jobs. Thus, the consortium is also working to develop the competencies required for the top three middle skills positions identified.

From our collective efforts, a model for an incumbent field training program will be created, one that combines on-the-job training with additional STEM technical training. This collaborative process between industry and education will define the competency gaps at each career level and facilitate curriculum development to address the gaps.

## 9. Conclusion

In conclusion, we support any efforts to promote and provide funding for offshore energy and STEM-related education programs that help meet the nation's workforce needs.

Like similarly situated higher education institutions across the nation, Houston Community College is rightly positioned, with its RigOne program, to partner with industry to help train and transition highly skilled workers into the workforce. Our collective efforts in this regard will ensure the vitality of a strong existing and future workforce for our nation in STEM-related fields.

Thank you for this opportunity and your consideration of my testimony. We also thank you for your public service to the nation.

See link below to learn more about the HCC Global Oil and Gas Training Center:  
<http://www.hccs.edu/district/departments/hcc-global-oil-and-gas-drilling-training-center/>