

**Cullen College of Engineering**Office of the Dean

July 15, 2015

Associate for the Advancement of Sustainability in Higher Education

**RE: STARS Assessment** 

To Whom It May Concern:

The Subsea Engineering Graduate Program at the University of Houston is the nation's first university program dedicated to offshore oil and gas production engineering. The college received approval to offer the subsea M.S. degree from the Texas Higher Education Coordinating Board in September 2013 and is the most recent program created under the UH energy umbrella. The program educates over 300 students per semester including students enrolled in traditional engineering graduate programs, full-time industry professionals and recent engineering graduates. The curriculum uniquely provides a broad education focusing on the design, operation and management of ultra-safe subsea systems for oil and gas production in extreme deepwater environments (defined as 10,000 or more feet below sea level). Our ultra-safe subsea systems theme is a game-changer in offshore oil and gas engineering that simultaneously addresses these needs of developing human capital for securing energy to meet the worldwide demands while protecting the environment.

Founded on a synergistic collaboration among the College of Engineering faculty and industry experts, the subsea engineering program delivers a relevant 21<sup>st</sup> century energy engineering education that is continually evolving based on technical challenges in the design of reliable subsea oil producing systems and governmental regulations. The Subsea Engineering Graduate Program is advancing sustainability in higher education by (1) developing the nation's first curriculum that formalizes an engineering science based education to subsea engineering, (2) incorporating mathematical model based systems engineering throughout the curriculum to support the design, operation and integrity management of subsea systems, (3) creating the Global Subsea University Alliance comprised of the University of Houston, National University of Singapore, University of Aberdeen, Federal University in Rio de Janeiro, Bergen College and Curtain University, and (4) offering multi-disciplinary courses covering flow assurance, pipeline design, riser design, materials and corrosion, subsea processing and artificial lift, and subsea controls and systems engineering.

Sincerely,

Joseph W. Tedesco

Elizabeth D. Rockwell Dean & Professor

Joseph W. Tedesco

JWT:ra