Scope of Work:
The contractor was tasked to take PINCs developed for the two standards (API Spec. 14A, API Spec. 17D) and from these develop broad, but focused training themes designed to provide BSEE engineers and inspectors with key issues to consider when reviewing permits/plans or encountering such equipment during a field inspection. Such training themes will be used to develop a training course for BSEE; course will add in the 17N audit protocols developed by ICF.

Goals and Objective:
The objective of this task is to provide new PINCs, checklists and training on the three API standards. This course provides BSEE Field Inspectors and Auditors with foundational knowledge on the key elements of scope for API Specification 14A, API Specification 17D and API Recommended Practice 17N. This course also provides BSEE Field Inspectors and Auditors with foundational knowledge on the scope and application of PINCs and associated checklists for API Specification 14A and API Specification 17D for offshore field inspections and audits, and provides an overview of the scope and application of the draft inspection checklist for API Recommended Practice 17N.

Findings:
The API Spec 14A and API Spec 17D PINCs and checklists explicitly identify the specific critical equipment to which the requirements identified in each PINC and in each checklist apply. In some cases the API Specification requirements included in the PINCs and checklists apply only to specific types of critical equipment (e.g., required design of tube hangers etc.) and in other cases the API Specification requirements apply to multiple types of critical equipment (e.g., required operator-specification of materials of construction).

Operators would be responsible to identify the specific critical equipment to which the requirements of API Spec 14A and API Spec 17D identified in the PINCs and inspection checklists apply. API RP 17N, as a Recommended Practice, is not amenable to development of PINCs and equipment-based inspection checklists or audit protocols. API RP 17N does not specify use of any specific types of equipment or contain any required practices and procedures.

Project Recommendations:

Recommendation 1:
ICF/OTC recommends that BSEE implement API Spec 14A and API Spec 17D requirements through a formal rulemaking process, similar to the process by which BSEE developed the proposed Well Control Rule rather than incorporating the API Specifications into existing BSEE regulations as reference documents or implementing the API Specifications through the approval process without developing new regulations. Implementation could potentially also be via NTLs or within mandatory permit application and plan approval processes. Implementation will need to address whether or not BSEE wishes adjust mandatory versus optional items within each specification.

Recommendation 2:
ICF/OTC recommends that BSEE establish requirements for operators to implement Reliability Management Systems (RMS) that would be applicable to critical equipment. ICF/OTC believes that the RMS approach would be more effective and more flexible for both BSEE and operators than using a checklist approach.

Recommendation 3:
ICF/OTC recommends that BSEE adopts the new training guidelines that have been developed in this program when conducting an inspection under API Spec 14A or 17D. The training scenario for the PINCs and checklists are based on the assumption that BSEE would conduct audits and inspections during facility operations of manufacturer-generated compliance documentation that is submitted to operators by the manufacturers and that is maintained on site by the operators.