UNITED STATES DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE GULF OF MEXICO OCS REGION

NTL No. 2007-G14

Effective Date: May 7, 2007

NOTICE TO LESSEES AND OPERATORS OF FEDERAL OIL AND GAS LEASES AND PIPELINE RIGHT-OF-WAY HOLDERS ON THE OUTER CONTINENTAL SHELF, GULF OF MEXICO OCS REGION

Pipeline Risers Subject to the Platform Verification Program

This Notice to Lessees and Operators and Pipeline Right-of-way Holders (NTL) is issued pursuant to 30 CFR 250.103 to provide clarification and guidance for pipeline riser design, fabrication, and installation under the platform verification program specified in 30 CFR 250.909 through 918.

Background

Under 30 CFR 250.910(b)(1)(i) and (2)(i), pipeline risers connected to floating platforms are subject to the platform verification program as associated structures. The Minerals Management Service (MMS) Gulf of Mexico OCS Region (GOMR) has determined that new pipeline risers are subject to a separate verification process that necessitates the use of an independent Certified Verification Agent (CVA) specifically for the pipeline riser. These pipeline risers are a critical component of any floating platform proposal and must meet stringent requirements for design, fabrication, and installation. Accordingly, the MMS GOMR has developed the following guidelines for the pipeline riser verification process as part of the platform verification program.

Verification Requirements

1. Pursuant to 30 CFR 250.916(b)(2)(i), a proposed pipeline riser for a floating facility must undergo design verification.

2. Pursuant to 30 CFR 250.917(b)(2)(i), a proposed pipeline riser for a floating facility must undergo fabrication verification for the initial fabrication of a riser. However, fabrication verification is not required if

a. The proposed riser is identical in design to an existing riser on the same facility;

b. The fabrication verification plan for the existing riser has been approved by the MMS GOMR;

c. The proposed riser will be designed, fabricated, and installed by the same lessee, lease operator, or pipeline right-of-way (ROW) holder as the existing riser; and

d. The outside diameter of the proposed riser is 8 ⁵/₈ inches or less.

3. Pursuant to 30 CFR 250.918(b)(3)(ii), a proposed pipeline riser for a floating facility must undergo installation verification for the initial installation of a riser. However, installation verification is not required if

a. The proposed riser is identical in design to an existing riser on the same facility;

b. The installation verification plan for the existing riser has approved by the MMS GOMR;

c. The proposed riser will be designed, fabricated, and installed by the same lessee, lease operator, or pipeline ROW holder as the existing riser; <u>and</u>

d. The outside diameter of the proposed riser is 8 ⁵/₈ inches or less.

CVA Qualifications

Qualifications for the individuals and organizations that act as design, fabrication, and installation pipeline riser CVA's are provided in 30 CFR 250.912(a) and 914(b).

Verification Plans

1. Submit riser design verification plans required by 30 CFR 250.912(a) to the MMS GOMR before you complete the design work, before you start fabrication and installation, and at least 60 days before you submit the associated pipeline application. However, the MMS GOMR encourages you to submit your design verification plan before you start your design work. In your plan, include the number, diameter, service, type, and the designer(s) of each riser covered by the design verification plan. For each ROW pipeline riser, submit a separate design verification plan. For lease term pipeline risers, you may submit one design verification plan that covers those risers that will be installed on the same floating facility.

2. Submit riser fabrication verification plans required by 30 CFR 250.912(b) to the MMS GOMR before you start fabrication and at least 30 days before you submit the associated pipeline application. In your plan, include the number, diameter, service, and type of each riser covered by the fabrication verification plan. For each ROW pipeline riser, submit a separate fabrication verification plan. For lease term pipeline risers, you may submit one fabrication verification plan that covers those risers that will be installed on the same floating facility.

3. Submit riser installation verification plans required by 30 CFR 250.912(c) to the MMS GOMR before you start fabrication and at least 30 days before you submit the associated pipeline application. In your plan, include the number, diameter, service, and type of each riser covered by the installation verification plan. For each ROW pipeline riser, submit a separate installation verification plan. For lease term pipeline risers, you may submit one installation verification plan that covers those risers that will be installed on the same floating facility.

4. In your verification plans, include the information required by 30 CFR 250.912(a), (b), and (c), and provide

a. A schedule of all phases of design, fabrication, and installation of the pipeline riser;

b. A project management timeline (Gantt Chart) that depicts when the CVA will submit the interim and final reports required by 30 CFR 250.916(c), 917(c), and 918(c) to the MMS GOMR for each phase; and

c. Your CVA nominations, as required by 30 CFR 250.911(d), including resumes of key personnel and their responsibilities.

5. Submit modifications to your verification plans, including changes in the CVA and key personnel, to the MMS GOMR for approval.

Design CVA Responsibilities

In accordance with 30 CFR 250.916(b)(2)(i), the responsibilities of the pipeline riser design CVA are to (when applicable):

- 1. Verification and analysis.
 - a. Verify the
 - i. Planning criteria, including design basis;
 - ii. Operational requirements;
 - iii. Environmental loading data;
 - iv. Soil conditions;
 - v. Safety factors;
 - vi. Material designations;
 - vii. Cathodic protection, including riser coating;
 - viii.Interference analysis;
 - ix. Input for the design of vendor components, such as specialty joints, and witness of factory acceptance testing;
 - x. Vortex-induced vibration (VIV) suppression system to ensure that specifications for installation and design meet required suppression efficiency;
 - xi. Welding specifications to ensure they are adequate for design and inspection requirements;
 - xii. Preliminary installation analysis;
 - xiii.Provisions to account for marine growth; and
 - xiv.Other pertinent parameters of the proposed design.
 - b. Perform an independent analysis of the
 - i. Design cases with appropriate load conditions, as specified in API RP 2RD, Design of Risers for Floating Production Systems (FPS's) and Tension-Leg Platforms (TLP's), First Edition, including but not limited to, operation, shut-in, and extreme;
 - ii. Stress analyses, including extreme storm response for critical design conditions; and
 - iii. Fatigue of selected cases, including, but not limited to, VIV, wave frequency, vortex-induced motion (VIM), thermal and pressure cycles, riser interaction with the seabed (touchdown zone), and, if sour service, fatigue due to internal corrosion.

2. <u>Interim reports</u>. The CVA is to submit the interim design reports required by 30 CFR 250.916(c) to the MMS GOMR at intervals approved in your verification plan. The CVA is to include the following in each interim design report:

a. Details of how, by whom, and when the verification and independent analyses were conducted to date;

- b. Description of the CVA's activities during the design verification process to date;
- c. Summary of the CVA's findings to date;
- d. Description of any outstanding or notable issues found on the riser design to date; and
- e. A Gantt chart showing project progress.

3. <u>Final report</u>. In accordance with 30 CFR 250.916(c), the CVA must submit a final design report. For each ROW pipeline riser, the CVA is to submit a separate design report. For lease term pipeline risers, the CVA may submit one design report that covers those risers that will be

installed on the same floating facility. The CVA is to include the following in the final design report:

a. The number, diameter, service, type, and designer(s) of each riser covered by the design report;

b. Details of how, by whom, and when the verification and independent analyses were conducted;

- c. Description of the CVA's activities during the design verification process;
- d. Summary of the CVA's findings;
- e. Confirmation of compliance with the design specifications;
- f. Recommendation to accept or reject the riser design; and

g. Any additional information and comments that the CVA deems necessary including, but not limited to

- i.. Design basis;
- ii. Summary of design CVA scope;
- iii. Key drawings;
- iv. Summary of input and output from the independent analyses performed;
- v. Comparison between results of the original design analyses and the CVA design analyses;
- vi. The inspection report from any factory testing;
- vii. In-service inspection frequency and method; and

viii.Cleaning recommendations.

Fabrication CVA Responsibilities

In accordance with 30 CFR 250.917(b)(2)(i), the responsibilities of the riser fabrication CVA are to

1. Inspections and verification.

a. Make periodic onsite inspections while fabrication is in progress and verify the following fabrication items, as appropriate:

- i. Quality assurance and quality control programs;
- ii. Adequacy of fabrication site facilities;
- iii. Material quality and identification methods;
- iv. Fabrication procedures specified in the approved plan, and adherence to such procedures;
- v. Welder and welding procedures qualification and identification;
- vi. Dimensional tolerances specified, and adherence to those tolerances;
- vii. Nondestructive examination (NDE) requirements, and evaluation results of the specific examinations;
- viii.Destructive testing requirements and results;
- ix. Repair procedures;
- x. Installation of corrosion protection systems and splash-zone protection; and
- xi. Status of quality assurance and quality control records at various stages of fabrication.
- b. Witness the
 - i. Acceptance testing of vendor components and
 - ii. Welding of specialty joint to riser material.

c. Perform spot checks as necessary to determine compliance with applicable regulations, codes, guides, standards, recommended practices, and approved plans.

2. <u>Interim reports</u>. The CVA is to submit the interim fabrication CVA reports required by 30 CFR 250.917(c) to the MMS GOMR at intervals approved in your verification plan. The CVA is to include the following in each interim fabrication report:

a. Details of how, by whom, and when the verification and independent analyses were conducted to date;

b. A description of the CVA's activities during the fabrication verification process to date;

c. A summary of the CVA's findings to date;

d. A description of any outstanding or notable issues found on the riser design to date;

e. A Gantt chart showing project progress.

and

3. <u>Final report</u>. In accordance with 30 CFR 250.917(c), the CVA must submit a final fabrication report. For each ROW pipeline riser, the CVA is to submit a separate fabrication report. For lease term pipeline risers, the CVA may submit one fabrication report that covers those risers that will be installed on the same floating facility. The CVA is to include the following in the final fabrication report:

a. The number, diameter, service, and type of each riser covered by the fabrication report;

b. Details of how, by whom, and when the independent monitoring activities were conducted;

c. A description of the CVA's activities during the fabrication verification process;

d. A summary of the CVA's findings;

e. Confirmation of compliance with the design specifications and the approved fabrication plan;

f. Recommendations to accept or reject the fabrication; and

- g. Any additional information and comments that the CVA deems necessary, including:
 - i. Key drawings;
 - ii. Summary of fabrication scope;
 - iii. Welding program details;
 - iv. NDE program details, including acceptance criteria and evaluation results;
 - v. Dimensional control adherence; and
 - vi. Quality assurance and quality control program details.

Installation CVA Responsibilities

In accordance with 30 CFR 250.918(b)(3)(ii), the responsibilities of the riser installation CVA are to

- 1. Verification and inspections.
 - a. Verify the
 - i. Quality assurance and quality control program;
 - ii. Adequacy of installation vessel(s) and equipment;
 - iii. Material quality and identification methods;
 - iv. Installation procedures specified in the approved installation plan, and adherence to such procedures;
 - v. Welder and welding procedures qualification and identification;
 - vi. Dimensional tolerances specified, and adherence to those tolerances;

- vii. Nondestructive examination requirements, and evaluation results of the specified examinations;
- viii.Repair procedures;
- ix. Installation test data;
- x. Installation of corrosion protection systems and splash-zone protection;
- xi. Installation of VIV suppression devices as specified in the approved design, and adherence to such design; and
- xii. Status of quality assurance and quality control records at various stages of installation.

b. Perform spot checks as necessary to determine compliance with applicable

regulations, codes, guides, standards, recommended practices, and approved plans;

- c. Witness:
 - i. Pipe loadout at the shore base and
 - ii. Riser installation operations, including
 - (A)Pipe laying operations;
 - (B) The attachment of specialty joint, fittings, and appurtenances to the riser;
 - (C) Temporary subsea riser storage and pickup operations;
 - (D) Handover/handoff operations; and
 - (E) Pull-in/hangoff operations.

2. <u>Interim reports</u>. The CVA is to submit the interim installation reports required by 30 CFR 250.918(c) to the MMS GOMR at intervals approved in your verification plan. The CVA is to include the following in each interim installation report:

a. Details of how, by whom, and when the verification and independent analyses were conducted to date;

b. A description of the CVA's activities during the installation verification process to date;

- c. A summary of the CVA's findings to date;
- d. A description of any outstanding or notable issues found on the riser design to date;
- and

e. A Gantt chart showing project progress.

3. <u>Final report</u>. In accordance with 30 CFR 250.918(c), the CVA must submit a final installation report. For each ROW pipeline riser, the CVA is to submit a separate installation report. For lease term pipeline risers, the CVA may submit one installation report that covers those risers that will be installed on the same floating facility. The CVA is to include the following in the final installation report:

a. The number, diameter, service, and type of each riser covered by the installation report;

b. Details of how, by whom, and when the independent monitoring activities were conducted;

c. A description of the CVA's activities during the installation verification process;

- d. Summary of the CVA's findings;
- e. Confirmation of compliance with the design specifications and the approved fabrication plan;
 - f. A recommendation to accept or reject the installation; and
 - g. Any additional information and comments that the CVA deems necessary, including:
 - i. Key drawings;
 - ii. Summary of installation scope;

- iii. Welding program details, including a weld map;
- iv. NDE program details, including acceptance criteria and evaluation results;
- v. Dimensional control adherence;
- vi. Quality assurance and quality control program details;
- vii. Incidents that occurred during installation; and

viii.As-built drawings.

Submittals

Submit your pipeline riser design, fabrication, and installation verification plans (including CVA nominations) required by 30 CFR 250.912, and the interim and final reports required by 30 CFR 250.916(c), 917(c), and 918(c) to

Minerals Management Service Gulf of Mexico OCS Region Attention: Pipeline Section (MS 5232) 1201 Elmwood Park Blvd. New Orleans, Louisiana 70123

In accordance with 250.186(a)(3), you may submit one hard copy and one copy on CD-ROM of each of your verification plans (including CVA nominations) in lieu of the three hard copies required by 30 CFR 250.911(c). The CVA may submit each interim and final report on a CD-ROM in lieu submitting the hard copies required by 30 CFR 250.916(c), 917(c), and 918(c).

Paperwork Reduction Act of 1995 Statement

The collection of information referred to in this NTL provides clarification, description, or interpretation of requirements contained in 30 CFR 250, Subpart I. The Office of Management and Budget (OMB) approved the information collection requirements for Subpart I and assigned OMB Control Number 1010-0149.

Contacts

If you have any questions regarding this NTL, you may contact Mr. Alex Alvarado by telephone at (504) 736-2547 or by e-mail at <u>alex.alvarado@mms.gov</u>.

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Lars T. Herbst Acting Regional Director