UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT

NATIONAL NOTICE TO LESSEES AND OPERATORS OF FEDERAL OIL, GAS, AND SULPHUR LEASES, OUTER CONTINENTAL SHELF

NTL No. 2012-N05

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Monitoring Bypassed Safety Devices

Purpose

This Notice to Lessees and Operators (NTL) supersedes NTL No. 2005-G01, effective January 6, 2005, on this subject. In addition to providing clarification and guidance for monitoring bypassed production and pipeline safety devices, this NTL addresses related questions that have arisen since the 2005 NTL was issued. Specifically, this NTL explains the meaning of ***minimum number of safety devices,*** provides policy regarding Emergency Support Systems and other support systems, and updates contact information.

Authority

In accordance with 30 CFR.250.803(c)(1), you may bypass safety devices for production safety systems only if:

1. The safety devices are temporarily out of service for startup, maintenance, or testing;
2. The minimum number of safety devices is out of service at any one time;
3. Personnel monitor the bypassed functions until the safety devices are placed back in service; and
4. The temporarily out-of-service safety devices are flagged so that they may be readily identified.

In accordance with 30 CFR 250.1004(c), you may continue to operate a pipeline when required safety equipment has been rendered ineffective or removed from service only if:

1. An equivalent degree of safety is provided; and
2. The safety equipment is identified by a sign placed on the equipment stating that the equipment has been rendered ineffective or removed from service.

Background

The cited regulations impose several requirements that must be met before you can continue production or operation of a pipeline while a required safety device is bypassed. The production safety system regulation at 30 CFR 250.803(c)(1) requires you to monitor bypassed functions if a safety device for a production safety system is bypassed. While the regulation for safety equipment requirements for pipelines at 30 CFR 250.1004(c) does not specifically mention monitoring, monitoring is one way to comply with that regulation's requirement that you provide

"an equivalent degree of safety" if you wish to operate a pipeline when safety equipment is removed from service.

This NTL addresses acceptable monitoring procedures during start up, maintenance, and testing for non-computer-based systems (NCBS) and monitoring procedures during maintenance and testing only for computer-based technology systems (CBTS). Monitoring procedures for bypassed electronic safety devices (*e.g.*, CBTS) during startup operations are addressed in NTL No. 2009-G-24, Supervisory Control and Data Acquisition (SCADA) Systems, effective August 14, 2009.

In addition to monitoring, this NTL addresses two related matters: 1) Section 250.803(c)(1) permits only the minimum number of safety devices to be out of service at any one time. Because this requirement has been misconstrued by some lessees and operators, this NTL clarifies what it means. 2) This NTL explains the limitations on bypassing any safety device that is part of the emergency support system (ESS).

Definitions

Terms used in this NTL have the following meanings:

Bypassed safety device means a safety device installed as part of the production safety system and rendered inoperable by a person's action that prevents the safety device from performing its design function.

Computer-based technology system (CBTS) means a computer-controlled electronic safety system such as supervisory control and data acquisition (SCADA) and remote terminal units (RTUs).

Control station means a location at which an operator is capable of monitoring and controlling the production process equipment and production safety system.

Emergency support systems (ESS) are essential systems that provide a level of protection to the facility by initiating shut-in functions or reacting to minimize the consequences of released hydrocarbons.

Essential operating conditions means pressures, status of safety devices, liquid levels, and temperature.

Non-computer-based system (NCBS) means a safety system that operates primarily with pneumatic supply or non-programmable electrical systems.

Remote site means a satellite or subordinate platform that is not connected to the parent facility.

Minimum Number of Safety Devices

One of the conditions for bypassing safety devices for production safety systems in 30 CFR.250.803(c)(1) is that only the minimum number of safety devices may be out of service at any one time. This means that *only* those devices that are *required* to be offline in order to accomplish startup, maintenance, or testing may be out of service at the same time.

Monitoring Procedures for NCBS Bypassed Safety Devices

The acceptable procedures for monitoring bypassed safety devices in an NCBS are:

1. Positioning monitoring personnel at either the control panel for the bypassed safety device, at the bypassed safety device, or at the component that the bypassed safety device would be monitoring when in service; and
2. Ensuring that monitoring personnel are able to view all relevant essential operating conditions until all bypassed safety devices are placed back in service and be able to initiate shut-in action in the event of an abnormal condition.

Monitoring Procedures for CBTS Bypassed Safety Devices

The acceptable procedures for monitoring bypassed safety devices in a CBTS at either a remote site or a parent facility are:

1. Positioning monitoring personnel at a designated control station (until all bypassed safety devices are placed back in service) that is capable of:
    a. Displaying the status of the bypassed safety device and all relevant essential operating conditions that affect the bypassed safety device, well, pipeline, and process component;
    b. Controlling the production process equipment and the entire safety system;
    c. Displaying a visual indicator when safety devices are placed in the bypassed mode; and
    d. Upon command, overriding the bypassed safety device and initiating shut-in action in the event of an abnormal condition; and
2. Maintaining instantaneous communications at all times between remote monitoring personnel and the personnel performing maintenance, testing, or startup.

Emergency Support Systems

The Emergency Support System (ESS) is required by 30 CFR 250.803 and other regulations that incorporate by reference API RP 14C, Recommended Practice for Analysis, Design, Installation, and Testing of Basic Surface Safety Systems for Offshore Production Platforms, Appendix C (Support Systems). Do not bypass for maintenance or startup any element of the ESS or other support system without first receiving approval of a departure request from the appropriate BSEE District Manager under 30 CFR 250.142. The ESS includes the following systems:

1. The emergency shutdown (ESD) system, which provides a method to manually initiate platform shutdown by personnel observing abnormal conditions or undesirable events;
2. The fire loop system, which senses the heat of a fire and initiates platform shutdown, and other fire detection devices (flame, thermal, and smoke) that are used to enhance fire detection capability;
3. The combustible gas detection system, which senses the presence of hydrocarbons and initiate alarms and platform shutdown before gas concentrations reach the lower explosive limit;
4. The adequate ventilation system;
5. The containment system, which collects escaped liquid hydrocarbons and initiates platform shutdown;
6. Subsurface safety valves, including those that are self-actuated (SSCSV) or those that are activated by an ESD system and/or a fire loop (SCSSV);

7. The pneumatic supply system; and
8. The system for discharging gas to the atmosphere.

Guidance Document Statement

The BSEE issues NTLs as guidance documents in accordance with 30 CFR 250.103 to clarify and provide more detail about certain BSEE regulatory requirements and to outline the information you must provide in your various submittals. Under that authority, this NTL sets forth a policy on and an interpretation of a regulatory requirement that provides a clear and consistent approach to complying with that requirement. However, if you wish to use an alternative approach for compliance, you may do so, after you receive approval from the appropriate BSEE office under 30 CFR 250.141.

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 Subparts H and J. The Office of Management and Budget (OMB) approved the information collection requirements for Subparts A, H, and J and assigned OMB control numbers 1010-0114, 1014-0003, and 1014-0016, respectively. This NTL does not impose additional information collection requirements subject to the Paperwork Reduction Act of 1995.

Contacts

If you have any questions regarding this NTL, you may contact:

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