Production Safety Systems Flag/Tag, Bypass and Monitor Procedure

Purpose

This guidance is provided to ensure that all field personnel comply with the regulations as found at 30 CFR 250.803(c) (1) and 30 CFR 250.1004 (c). These procedures will provide a guideline and a process to prevent an accidental Bypass of safety equipment after Startup, Testing and/or Maintenance is completed.

Note: This procedure is not intended to replace the Fieldwood Energy Lock Out / Tag Out (LOTO) Procedure. However, it may be used in conjunction with LOTO.

Scope

This procedure will be used to properly Flag or Tag production safety systems/devices placed in Bypass, Temporarily or Permanently Out of Service. Instructions will also be provided on how safety devices and/or components shall be monitored during Bypass. Therefore, these procedures will provide a guideline and a process to prevent an accidental bypass of safety equipment after start-up, testing or maintenance are complete.

Requirements

Safety systems are designed to, and should initiate shut-in when an abnormal condition occurs to prevent an undesirable event.

- Flagging, Bypassing and Monitoring of safety systems is "Only Allowed" during start-up, testing or maintenance of equipment.
- Any equipment placed in bypass "must be returned to service immediately following Start-Up, Testing or Maintenance.
- Facility production safety systems are not to be bypassed during process upset events.
- If safety devices can’t be returned to service according to their designed function, the facility must be shut in, no exceptions.

Definitions

Flagging – A hanging, removable red “Flag” that identifies the “Bypass” status of a safety device/component.

Tagging – A hanging, removable yellow “Tag” that identifies the “Out of Service” status of a safety device/component.

Maintenance – Adjustments or repairs, typically of short duration, that can be performed without compromising effective monitoring (leaving the area for parts, supplies, or tools). For clarification, discuss with your supervisor.

Qualified Person – A person that has completed production safety system training in accordance 30 CFR 250 Subpart O.

In-Service – The device or component is performing its designed function.

Bypass – To block-out or disable a safety device so that it will not perform its designed function.

Temporarily Out of Service – A component is considered Temporarily Out of Service when it is in standby, not in use (i.e. test separators, intermediate pressure vessels, etc.), but can easily be placed in service. These components are NOT isolated from production facilities as per 30 CFR 250.803(c), it shall have a closed inlet valve. In this situation, safety devices that have been bypassed must be flagged with Out of Service Yellow Tags. The safety device functions do not have to be monitored but must be tested and maintained in accordance with API RP 14C.

Permanently Out of Service – A component is Permanently Out of Service (OOS) when it is not being used as part of the production process and it is properly isolated from all other production equipment or energy sources on
the facility. Safety devices for an Out of Service component must be labeled "Out of Service". It is not necessary
to monitor the bypassed safety device function. However, the PSV on any Out of Service component must be left
In-Service, maintained and tested. Additionally, a permanently out of service pressure vessel must be bled down
to zero psi and remain at zero psi.

Properly Isolated as per 30 CFR 250.803(c) (2), (3)

When wells are disconnected from producing facilities and blind flanged, equipped with a tubing plug, or the
master valves have been locked closed, compliance is not required with the provisions of API RP 14C or this
regulation concerning the following:

(i) Automatic fail-close SSV’s on wellhead assemblies, and

(ii) The PSH and PSL shut-in sensors in flowlines from wells.

When pressure or atmospheric vessels are isolated from production facilities (e.g., inlet valve locked closed or
inlet blind-flanged) and are to remain isolated for an extended period of time (i.e. permanently out of service
vessel), safety device compliance with API RP 14C or this subpart is not required, with the exception of PSVs as
stated in definitions above.

Wireline Operations

During wireline or well work operations it is the operator’s responsibility to ensure that a “bypass flag” is placed on
the SCSSV isolation valve. The SCSSV isolation valve must be opened and back in service when the work is
completed.

Bypass Flagging Procedures

Bypass Flagging

Any surface or subsurface safety device which is bypassed shall be “Flagged” utilizing a red flag identifying the
“Bypass” status. The purpose is:

- To be in compliance with the regulations.
- To be a visual reminder / alert to all personnel that a safety device is in "Bypass".
- Notify all affected personnel.

Bypassing safety systems is “only allowed” during start up, testing or maintenance.

- Only the minimum number of safety devices that can be adequately monitored shall be bypassed.
- As soon as the task is completed, the safety device or devices must be placed back in service and the
flag removed.

Note: Bypass flags shall also be placed on isolation valves (such as the bridle valve for a LSH, LSL, PSV or the
hydraulic control line needle valve for a SCSSV) when they are closed and prevent a safety device from
performing its designed function.

Secondary Flagging

Safety devices not clearly visible (such as isolation valves inside control panels, slave panels, plugged relay ports,
boat landing ESD, etc.) shall also be flagged using the red Bypass flags and removed/accounted for when
devices are returned to service.
Bypass Monitoring Procedures

Operator Monitoring of Bypassed Safety Devices or Components

Personnel shall monitor the bypassed or blocked-out functions until the safety devices are placed back in service. An operator is responsible for and must ensure:

- Any operating parameter that is monitored by a safety device must be continuously monitored at all times while the safety device(s) are in bypass and not performing other duties.
- The bypassed safety devices (indicators) are flagged using the red "Bypass" flags while in bypass and reset as they come in-service.
- Monitoring activity occurs on the same platform, same deck level of either the component, device or panel of the bypassed or blocked out function. Additional personnel may be needed to monitor.
- Monitoring is not interrupted for reasons such as breaks, lunch or to greet personnel arriving on the facility including BSEE, company personnel, third party personnel, supervisors, etc.
- Monitoring of any abnormal conditions and taking corrective action(s) to prevent an undesirable event.
- Manual shut-in action is initiated in the event of an abnormal operating condition.
- If BSEE arrives while a safety device(s) is bypassed, the BSEE representative is immediately notified of all device(s) that are flagged and bypassed, why they are bypassed and how they are being monitored.

Remote Monitoring of Bypassed Safety Devices (SCADA Systems)

Testing

- While performing safety device testing operator must bypass at local panel.
- Personnel involved in monitoring bypassed device or component must be qualified.
- Communication of personnel at the component and control panel must be maintained.

Startup/Reset

- The remote operator can place the device in bypass only for reset or start up activity.
- The remote operator can only monitor a minimum number of devices. If multiple devices are monitored, the remote operator shall be able to view the appropriate data on one SCADA screen.
- After the bypass device has cleared, it must be returned to service immediately after the process has stabilized.
- Other site-specific guidelines may be required. These should be documented and maintained in the platform operating procedure manual.
- This operation will comply with NTL 2005-G01 and NTL 2009-G24.

Fieldwood Energy Bypass Flag and Out of Service Tag System

Bypass Flags – 5 (five) tags will be issued to each qualified person and kept in their possession at all times while on duty

At the end of each shift, each individual must conduct a collective review and inventory of issued flags to ensure a surface or subsurface safety device has not been inadvertently left in bypass.
Bypass Flag Specifications

Shape: Rectangle  
Size: 1” x 8”  
Background Color: Red  
Lettering: White – "BYPASS"  
Material: Nylon material with rubber O-ring fastener

Out of Service Tags – Out of Service Tags will be available at each manned location. Out-of-Service Tags are to be used only when component is temporarily or permanently out of service.

Out of Service Tag Specifications

Shape: Round  
Size: 2 ½”  
Background Color: Yellow  
Lettering: Black – "Out of Service"  
Material: Hard plastic with metal lanyard

Note: Bypass Flags or Out of Service Tags may be ordered through the Fieldwood purchasing department.