Obtain authorization before overriding or disabling safety critical Equipment

An override is any time a mechanism is applied to prevent the executive action of a control or protection device. When associated with safeguarding systems the application of such a device must be strictly controlled.

To comply to this Rule always ensure that Safety System Overrides:

- Have been Risk Assessed and authorised by the correct level of authority
- Recorded in the Override Log when applied and removed
- Are managed and removed / normalised when they are no longer required
- Are only applied by competent personnel
- Are not used to keep a system or equipment operational when the conditions are outside of the ‘operating envelope’ or in an unsafe condition
- Are handed over to the next shift if left in place during a shift change
- Are inspected and the status verified by supervision at a regular frequency
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Internal:

External:
When undertaking routine maintenance / testing of system / equipment in the live operational condition

2. During Start-up of system and equipment. **IMPORTANT:** Bypass of safeguarding overrides should not normally be used during the start-up of plant.

3. To undertake critical repairs on operational systems / equipment

4. To maintain ‘healthy’ systems / equipment operational when there is a fault condition being investigated

5. To allow continued operation of associated systems / equipment when key components are isolated for repair, modification etc.
Safeguarding Overrides used in PDO:

1. **Maintenance Override Switch (MOS)** - Maintenance override switches are used to override safeguarding initiators to enable maintenance or on-line functional testing.

2. **IPS-PLC Software Overrides (Forces in PLC systems)** - Software overrides can be provided on input and output channels of IPS-PLCs to override trip commands for repairs, equipment calibration and functional testing.

3. **Jumpers** - Jumpers shall be used only when MOS or IPS-PLC Software Overrides are not available. Their use shall be strictly controlled, logged and monitored as they entail the physical bridging (frigging) of trip contacts.

4. **Mechanical Overrides** - Usually associated with automatic valves. These are temporary mechanical means of holding the valve in a certain position during repair or tests i.e. Minimum stop. Use of this type of override should be avoided, as they are overrides on IPF final (output) elements and by nature more hazardous than overrides on IPF initiators (inputs).
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Validity of Safeguarding Overrides:

When used in conjunction with a Permit to Work it shall be tied to the validity period of the Permit and be removed / normalised at the end of the working day.

Safeguarding Override that are not removed / normalised when the Permit is closed-out will require a further Risk Assessment and approval to be left in place.

Safeguarding Override Recording:

Safeguarding Overrides when applied or removed shall be entered in the Station Override log. If the safeguarding instrument has been configured in the DCS / SCADA it will also be recorded and can have its status / recorded displayed in PI or Shurooq.

Safeguarding Override Status Report:

Details of all Safeguarding Override in place shall be entered on the Override Status Report Form which shall be compiled monthly. Overrides that have been in place for one month shall require justification to be maintained.

NOTE: Long term overrides should be engineered to remove them via the Facilities Change Proposal Process
High True Vapour Pressure in Main Oil Line Exports to MAF Tank Farm

In late August / early September 2010 an uncontrolled release of gas from the storage tanks at MAF resulted in considerable spillage of crude oil on to the tank roofs. The condition continued for a number of days, until the TPV of the crude oil returned to normal.

The investigation into this potentially serious condition identified a number of causes, one of which was the uncontrolled operation of ‘Safeguarding Overrides’ which resulted in unstabilised condensate being allowed to enter the Main Oil Line.
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Supervisor Tips

- Pose Question to your group
- Allow 5 minutes for discussion on each Question
- Summarize what you have heard before moving to the next Question
- Split big groups up into smaller discussion teams
- Take your time
- Encourage everyone to take part
- Look for real examples from your own workplace
- Find and use real examples of incidents related to this rule from your site
- Link the discussion to real work on site involving the people in the tool box talk
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Question
As the Area Authority at an oil gathering station what type of safeguarding override would you expect to be used to enable routine maintenance to be carried out on Separator High Level Switch?

a) Maintenance Override Switch
b) Jumper
c) Mechanical

correct answer
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Question

With regard to the above work what other documents would be required?

a) Permit to Work  [correct answer]

b) Approved procedure and valid Risk Assessment  [correct answer]

c) None, this is a Routine Maintenance job.
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Question
Where can the details (time applied / time removed) of a Safeguarding Override be found?

a) On Live Link
b) On PI or Shurooq  
c) In the Station Override Log

correct answer