

HCVS Guidance Inquiry Form

A. TOPIC: HCVS Alternate Control Operating Mechanisms

Inq. No.: HCVS-03

Source document: NEI 13-02
1.2.5, 1.2.6, NEI 13-02 Section 4.2.3

Sections: Order EA-13-109, Element

B. DESCRIPTION:

What means of alternate manual operation is allowable for use in the HCVS system?

Order Element 1.2.5 states, "The HCVS shall, in addition to meeting the requirements of 1.2.4, be capable of manual operation (e.g., reach-rod with hand wheel or manual operation of pneumatic supply valves from a shielded location), which is accessible to plant operators during sustained operations."

C. PROPOSED ANSWER (Include additional pages if necessary. Total pages: 1)

The examples of alternate operating mechanisms provided in Order element 1.2.5 (e.g., reach-rod with hand wheel or manual operation of pneumatic supply valves from a shielded location) are only intended to be examples. Other means of alternate manual operation are acceptable including but not limited to:

- Separate electrical components with diverse and flexible power supplies (such as the normal valve operators with FLEX power)*
- Solenoid valves with manual overrides that may be used to manually operate vent valves without electrical power
- Manual valves in pneumatic supply and vent lines that may be used to manually operate vent valves independent of solenoid valves or electrical power
- Hydraulic operators

The inclusion of direct operation capability for valves is an enhancement but is not mandatory.

* NEI 13-02 Section 6.1 – “...At least one method of operation of the HCVS should be capable of operating with permanently installed equipment for at least 24 hours during the extended loss of AC power. The system should be designed to function in this mode with permanently installed equipment providing electrical power (e.g., DC power batteries or electrical or pneumatic operation) valve motive force (e.g., N₂/air cylinders)” A method (primary or alternate) of HCVS operation may use an alternative method to that described by the 1.2.5 requirement.

D. RESOLUTION: (Include additional pages if necessary. Total pages: 1)

Revision: 0 Date: _____

E. NRC Review:

Not Necessary_____ Interpretation__X_____ Agency Position_____

Explanation: _____

F. Industry Approval:

Documentation Method: FAQ Date: _____