

TR 19-45 – GM – Qualification of Welders

2022 – March 24 – Editorial Section

Approved revisions to §§192.227, 192.605, 192.709 and G-192-17. **Ready to Recirculate for 4th LB.**

PRIMARY: 192.227

PURPOSE: Review existing GM and revise as appropriate in light of Amendment 192-125.

ORIGIN/RATIONALE: 2nd Vice Chair

RESPONSIBLE GROUP: O&M/OQ Task Group

1st Letter Ballot in LB1-2020 Results: 25 approved, 3 approved with comment, 3 disapproved. Disapproved votes by Friend, Oleksa, and Quezada.

2nd Letter Ballot in LB1-2021 Results: 28 approved, 5 approved with comment. Friend voted approved with comment and Quezada voted approved, but Oleksa did not vote so his disapproved vote in LB1-2020 was not resolved and was recirculated with 3rd letter ballot in LB4-2021.

3rd Letter Ballot in LB4-2021 Results: 28 Approved, 2 disapproved. 2 Disapproved votes are copied at end of the document for MB voter review.

4th Letter Ballot Notes: Changes to address votes from LB4-2021 are shown in **yellow highlight**.

Section 192.227

This guide material under review following Amendment 192-125.

- (1) It is the operator's responsibility to ensure that all welding is performed by qualified welders and welding operators.
- (2) The ability of welders and welding operators to make sound welds should be determined by test welds using previously qualified welding procedures. The evaluation of test welds may be conducted by qualified operator personnel or testing laboratories.
- (3) For steel transmission, offshore and onshore Type A and regulated gathering pipe installed after July 1, 2021, records of the qualification of each individual welder should include the following.
 - (a) Welder's identity.
 - (b) Welding procedure to which the welder is qualified.
- (4) The operator should consider identifying the specific welds produced by each individual welder and the locations of those welds in the construction records using methods such as the following.
 - (a) Measurements from known landmarks.
 - (b) GPS coordinates.
 - (c) Station number.
 - (d) Other methods.

Section 192.605

1 GENERAL

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2 MAINTENANCE AND NORMAL OPERATIONS

In addition to those items required to be in the manual under Subparts L and M as they apply to the operator's facilities, other Subparts (e.g., E, F, I, J, and K) may also require written procedures. Additional guide material can be found under individual sections.

2.1 Control of corrosion.

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2.2 *Availability of construction records, maps, and operating history.*

- (a) Construction records, maps, and operating history should be comprehensive and current. The construction records, maps, and operating history will depend upon the individual operator, its size and locale, and the types of equipment in use. [See guide material under §192.227 for records demonstrating the qualification of each individual welder at the time of construction.](#)
- (b) The construction records, maps, and operating history should be made available to operating personnel, especially supervisors or those called on to safely operate pipeline facilities or respond to emergencies, or both. Dispatch or gas control personnel should have maps and operating history available.
- (c) For transmission [and regulated gathering](#) facilities, the types of records and data that **should could** be made available are as follows.
 - (1) Pipeline system maps, including abandoned and out-of-service facilities.
 - (2) Compressor station and other piping drawings (mechanical and major gas piping).
 - (3) Maximum allowable operating pressures.
 - (4) Inventories of pipe and equipment.
 - (5) Pressure and temperature histories.
 - (6) Maintenance history.
 - (7) Emergency shutdown systems drawings.
 - (8) Isolation drawings.
 - (9) Purging information.
 - (10) Applicable bolt torquing information.
 - (11) Operating parameters for engines and equipment.
 - (12) Leak history.
- (d) For distribution systems, the types of records and data that **should could** be made available are as follows.
 - (1) Maps showing location of pipe, valves, and other system components.
 - (2) Maps and records showing pipe specifications, valve type, and operating pressure.
 - (3) Auxiliary maps and records showing other useful information, including abandoned and out-of-service facilities.
- (e) Communications with knowledgeable personnel should be maintained to respond to questions concerning the records, maps, or history if the need arises.
- (f) Field identification of valves.
 - (1) Valve identification criteria should be established.
 - (2) Each operator should have available sufficiently accurate records (including field location measurements) to readily locate valves and valve covers.
 - (3) Where valves are located in
 - (i) A valve identification system....
 - (ii) For above ground and vault applications....
 - (iii) For remotely operated and underground valves....

2.3 *Data gathering for incidents.*

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Section 192.709

- (1) See Guide Material Appendix G-192-17 for the explicit requirements of each patrol, survey, inspection, or test required by Subparts L and M.
- (2) ~~See Also, see~~ [See guide material under §192.947 for records required under Subparts I, L, and M to be used as part of the operator's Integrity Management Program for transmission lines.](#)
- (3) [See guide material under §192.227 for records demonstrating the qualification of each individual welder at the time of construction of steel transmission and regulated gathering lines.](#)

GUIDE MATERIAL APPENDIX G-192-17

Welding of Steel in Pipelines	E	192.225	Welding procedures	Written procedures, tests, records
		192.227(b)	Qualification of welders and welding operators	Test
		<u>192.227(c)</u>	<u>Individual welder qualification at time of construction of steel transmission line, and offshore and onshore Type A and regulated gathering line</u>	<u>Records</u>
		192.229(c)	Limitations on welders and welding operators	Test
		192.241	Inspection and test of welds	Visual inspection, test
		192.243	Nondestructive testing	Written procedures, test, records
		192.285	Repair or removal of defects	Inspection, written procedures

{End of 4th LB Version of GM proposals}

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Disapproved Votes from LB4-2021

LB4-2021: 28 Approved, 2 disapproved

Disapproved Votes:

Paul Oleska

Under 192.605, Sections 2.2(c) and (d), the word "could" has been changed to "should". This is a mistake. The word should be changed back to "could". Rationale: "Could" indicates that something is possible -- the operator could include the following items on the list if they wish. The word "should" indicates that GPTC is saying that the operator should, or ought to, include all those items on the list. It's like saying "Even though it isn't specifically required by Code, we think you ought to do it."

We should provide a list, then let the operator decide whether a particular item should be made available or not. Some of the list items don't apply to all operators. For example item (c)(5) requires temperature history to be made available, but that doesn't apply if the operator does not have compressors.

DeWitt Burdeaux

The inclusion of Type B gathering in 192.227(C) for recordkeeping contradicts code language as follows: 192.9(d)(1) If a line is new, replaced, relocated, or otherwise changed, the design, installation, construction, initial inspection, and initial testing must be in accordance with requirements of this part applicable to transmission lines except the requirements in §§ 192.67, 192.127, 192.205, 192.227(c), 192.285(e), and 192.506.