

*MEMORANDUM*

DATE: November 3, 1992

SUBJ: INFORMATION: Welding Requirements

FROM: Cesar De Leon  
Director, Pipeline Safety Regulatory Programs, DPS-10

TO: Richard Sanders  
Manager, Pipeline Safety Division, DTI-60

This responds to your memo of August 25, 1992, asking if Part 192 permits a gas pipeline to be uprated above 20% of SMYS when it was welded in accordance with Appendix C of Part 192. You also asked if a pipeline on which none of the girth welds was nondestructively tested may be uprated above 20% of SMYS.

Section 192.227 establishes Appendix C as an alternative method of welder qualification. Welders who qualify under Appendix C and not under *API 1104* or the *Boiler and Pressure Vessel Code* may not weld on steel pipelines to be operated at 20% or more of SMYS. Hence, a low stress level steel pipeline whose welders were qualified only under Appendix C may not be operated at 20% or more of SMYS. Because of this limitation on operating pressure, it follows that such a pipeline may not be uprated to 20% or more of SMYS.

Section 192.241(b) provides that certain welds or percentages of welds on steel pipelines to be operated at 20% or more of SMYS must be nondestructively tested, unless the welds are visually inspected, approved by a qualified welding inspector, and the pipeline (1) is less than 6 inches in nominal diameter; or (2) is to be operated at less than 40% of SMYS and certain conditions are satisfied. Hence, a low stress level steel pipeline whose welds were subject to §192.241 but were not nondestructively tested may not be operated at 20% or more of SMYS unless the welds were excepted from nondestructive testing under §192.241(b). Furthermore, this limitation on operating pressure precludes uprating to 20% or more of SMYS unless the welds were excepted from nondestructive testing. If the welds were excepted but the pipeline is 6 inches or more in nominal diameter, operation and uprating would be limited to a pressure of less than 40% of SMYS.

Because of §192.553(d), the uprating of a steel pipeline whose welds were not subject to §192.241 and were not nondestructively tested would still be affected by §192.241(b). Section 192.553(d) limits uprating to the maximum pressure Part 192 would allow if the pipeline were new, unless the line is grandfathered under §192.555(c). So, unless §192.555(c) applies, a pipeline whose welds were not nondestructively tested may not be uprated above the operating pressure limitations of §192.241(b), because these limits apply to the uprating of new pipelines. If §192.55(c) applies, the lack of nondestructive testing would not affect uprating to the level permitted by §192.555(c).

#