

The paper studied the tensile strain capacity equations published in CSA Z662.11 and the final report of a DOT/PRCI co-sponsored (ABD1) project. The major difference between the two equations was mentioned. The strains predicted by the two equations with similar input parameters were compared and the cause of the difference was explained. The effect of different input parameters on the strain capacities predicted by the CSA equations was also investigated and ranked.

The paper was written OK and easy to understand. The following issues need to be fixed:

- (1) The format of the paper is not consistent with the IPC template. Please download the IPC template from IPC website and correct the format.
- (2) On page 2, the Nomenclature box was inserted in the middle of the 1st paragraph of the Introduction section. The Nomenclature box should be before the Introduction section.
- (3) On page 5, the description about Figure 5 given in the last sentence of the 1st paragraph seems to be incorrect. The predicted strain, CTOD, and Y/T were not shown as percent change.
- (4) On page 7, the caption of Figure 4 seems to be incorrect. The plots were not for a variation of material properties by constant defect geometry.
- (5) The CSA Z662.11 was mentioned at the beginning of the paper and Eqs. (1) and (3) are believed to be taken from CSA Z662.11. However, the CSA Z662.11 was first referenced in the Results section as [8]. It is not very clear what is the relation among the CSA Z662.11 mentioned before the Results section, the Eqs. (1) and (3), and the reference [8].
- (6) The reference [6] was first given in Abstract section before the references [1-5] were given.
- (7) In the Conclusion section, the comments regarding the effect of wall thickness (i.e., the wall thickness has the least effect on strains) can be misleading.
- (8) On page 3, the statement regarding the equations given in [6], i.e., for a default pipe wall thickness of 15.9 mm and pressure factor of 0.72.., was not precise. In fact, although the main equations in [6] were based on FEA under those conditions, the effects of wall thickness and pressure were investigated with separate FEA. The effects of wall thickness and pressure obtained from those separate FEA were incorporated into the equations as wall thickness and pressure functions.

The following recommended changes are optional:

- (1) A detailed comparison of the two equations such as the input parameters, applicable range of the input parameters, etc should be given at the beginning of the paper.
- (2) On Page 8, most contents in the 1st paragraph was redundant and can be removed.
- (3) The value of the other input parameters used in Figure 4 should be given in the Figure.