1. Please clarify the limit on the curvature which is proposed, the white paper suggest the limit to be (refer to Eq. 22 in white paper)

$$\mathrm{D2}_{\max} = \frac{11\mathrm{Y}}{EH}$$

And the ballot suggest limit to be:

$$\mathrm{D2}_{\max} = \frac{22\mathrm{Y}}{EH}$$

If the equation in the ballot is used, please justify why is the factor of safety of 2 removed which is used in the current API 653 edition.

2. What is the failure criteria that Pemy's method is based on, is it yield of tank or tank rapture or strain of 0.03%?

3. The supplement presentation points out that Marr's method is based on beam theory which is a poor proxy for a cylindrical shell and the method is not experimentally calibrated. How is Pemy's proposed method any different? The curvature limit is based on beam theory and there is no experimental validation.

4. Based on the current proposal if we do a typical settlement evaluation with only 16 points, Andreani's method is recommended to be used. However, the supplemental presentation points out that the Andreani's method is only validated on simple folds and not on multi modal, based on this if we have multi modal settlement profile what should the tank owner do?

5. The proposal approximate the curvature to be equal to second derivative, this approximation holds true if the first derivative is significantly smaller than 1. Can you illustrate that this holds true even for smaller tank diameter like 40 ft. Also, please quantify the error in the approximation if possible.

6. Pemy's method limits the number of Fourier terms so that the shortest half wavelength is 20 ft. This limits the number of terms for smaller diameter as shown below:

| Diameter [ft] | K max* |
|---|---|
| 30 | 2 |
| 50 | 3 |
| 80 | 6 |
| 100 | 7 |
| 120 | 9 |
| 160 | 12 |
| *Based on Eq. 19 in the white paper | |

It seems unlikely that with limited number of Fourier terms the settlement profile can we approximated correctly for smaller diameter tank. Do you agree with this? If you do what is your proposed solution to resolve this issue.