Title:	**Sloshing Seismic Freeboard (625)**		**Agenda Item # 625-1013**
Date:	08/31/2023		
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Purpose:	Correct and clarify seismic freeboard rules in API 625		
Source:	Email from Andy Wong 9/28/2022, Andrew Yearwood, PEMY Consulting, (918) 698-2110, andrew@pemyconsulting.com		
Revision:	1		
Impact:	Neutral		
Rationale:	API 625 states that there must be freeboard to not let sloshing waves touch the bottom of suspended decks or exceed the height of the primary containment shell (6.4.10.3), but then it is also implied that tanks without a suspended deck can have sloshing waves touch the roof (6.4.10.4). Touching the roof necessarily requires exceeding the height of the shell. The text does Proposed changes in red font.		
Proposed verbiage:	**API 625** **6.4.10.3** ~~The sloshing wave seismic freeboard defined by 6.6.8 shall remain below not extend above the lower of~~ a) ~~t~~The bottom of the suspended deck and b) the top of the primary liquid container shell shall remain above the seismic freeboard as defined by 6.6.8, except as allowed by 6.4.10.4. Free vapor flow to the tank venting shall be maintained. **6.4.10.4** If the sloshing wave is allowed to impinge on the roof (Figures 3, 5, and 14 without suspended deck), the pressure of the sloshing wave shall be considered in the design of the roof and tank shell. … **6.6.7 Seismic Design Liquid Level** The maximum normal operating level shall be applied to all SSE seismic design, including freeboard determination. The liquid level defined by API 620 L.4.3.1 (OBE basis operating level) shall be applied to all OBE seismic design, including freeboard determination. **6.6.8 Seismic Sloshing Wave Height and Freeboard** The seismic sloshing wave height shall be calculated in accordance with API 620, Annex L. The seismic freeboard height shall be determined based on the OBE sloshing height plus 300 mm (1 ft) allowance or the SSE sloshing height, whichever is larger.		