

IT6-5 MO Ballot 25% Rule

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Proposal IT6-5 (25% Rule)

- Proposal passed MO Ballot with only 2 Yes with Reservation
- Ballot responses are as follows.



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- Comments Kosmatka (PCA):
- "While I agree that the proposed change is warranted, and that the number is approximately correct, I am concerned that the issue of potential resonance is not included. The attached paper explores the use of two isolation systems for equipment, but the conclusions shed some light on the problem of relatively large non-building structures attached to buildings. The authors conclude that both the relative mass, and relative frequencies of the two systems are important in determining the effect on overall response. While this is not directly applicable, since it involves two vibration isolation systems, it does raise the question of how it incorporate frequencies properly into the consideration of the coupled analysis requirements. I suggest that this be considered as a topic for either ASCE 7 or the next round of BSSC provision updates."



FEMA



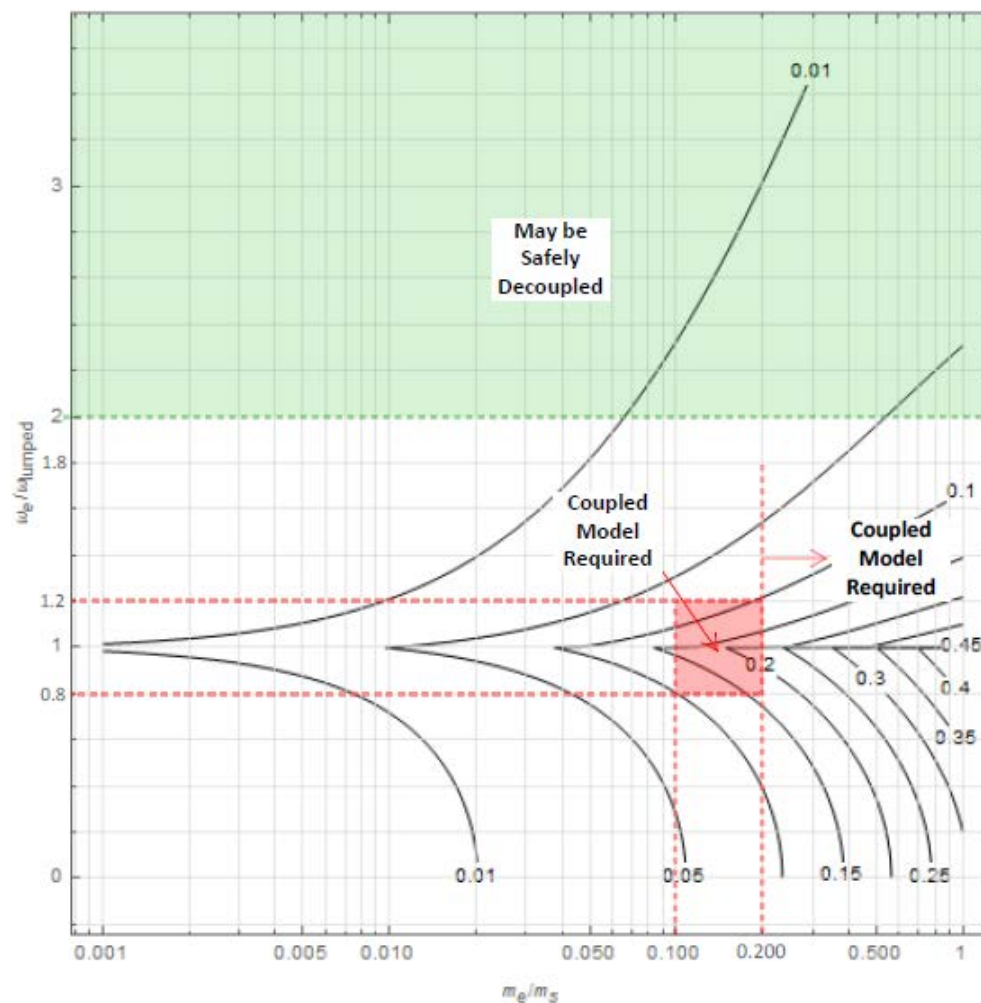
Building Seismic Safety Council
a council of the National Institute of Building Sciences

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- Proposed responses to Kosmatka (PCA): – Nonresponsive
- "As stated in the commentary resonance/interaction is considered once the mass ratio exceeds 20%. Only a very small range, based on frequency and mass ratio would be of concern. Because we expect the supporting structure to go inelastic, the previous SEAOC committee and our current IT 6 committee do not believe there is a concern.
- Another study we are undertaking and will develop a proposal for is the effect of interconnecting large bore piping between two structures. In this case, both the mass ratio and frequency ratio play an important role."



Model B vs. Coupled Structure
 Error Contours, $\omega_{lumped} = \sqrt{k_S / (m_S + m_E)}$



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- Comments from Xia (SEAW) :
- "Please see attached file for proposed edits."



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- Proposed response to Xia (SEAW) – Persuasive Editorial
- All 3 proposed changes are very minor editorial changes.

