

Conclusion

The still-developing *Millenium* case history reveals a pattern that unfolded in the *Myrick* case and will unfold in future cases arising from unsatisfactory high-rise performance during foreseeable earthquakes: before unacceptable performance, the developer/owner becomes aware of a troublesome mechanism in structural components and before that flaw is corrected, others are harmed by it, leading to litigation which requires uncovering evidence of performance targets implicitly or explicitly adopted by the facility stakeholder. In the case of the Millennium Tower, the parties will delve into what the selling entities knew about the depth of settlement upon completion of construction and whether that information, along with projections of additional settlement, was shared with prospective purchasers, among others. In future litigation arising from unacceptable high-rise performance during foreseeable earthquakes, the developer/owner will be required to testify whether he or she was aware of the failure mechanism(s) at issue when construction was completed, and what tangible steps were taken to control those vulnerabilities and thereby avoid foreseeable harm to third parties. Among other things, what performance targets were selected in order to address potential harm inherent in the structural design? It is better practice to know the answer to that question, and related questions, before the earthquake than to reveal it for the first time afterward.

References

- [1] City and County of San Francisco, Department of Building Inspection, 2014, Administrative Bulletin 083, *Requirements and Guidelines for the Seismic Design of New Tall Buildings using Non-Prescriptive Seismic-Design Procedures*, 7 pages
- [2] American Society of Civil Engineers and Structural Engineering Institute, 2013 and 2017, ASCE/SEI 7-10 and 7-16, *Minimum Design Loads for Buildings and Other Structures*
- [3] City and County of San Francisco, Department of Building Inspection, 2016, Administrative Bulletin 082, *Guidelines and Procedures for Structural Design Review*, 3 pages. *See also*, City and County of San Francisco, Department of Building Inspection, 2017, Information Sheet 18, *Interim Guidelines and Procdures for Structural, Geotechnical, and Seismic Hazard Engineering Design Review for new Tall Buildings*, 2 pages
- [4] Deierlein, Gregory G. *et al.*, 2017, *Structural Safety Review of the Millennium Tower* 14 pages (delivered to Naomi N. Kelly, City Administrator, City and County of San Francisco on July 28, 2017)