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Comparison of Various Response Spectrum of Nuclear Power Plant at Chashma Site

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Abstract : UBC-97, USNRC, chines origin code GB50011-2011 and site response spectrum was used to make comparison between them for Chashma site and most conservative one was selected and the USNRC was the most conservative one. The dynamic analysis of CHASNUPP-2 containment building was performed using SAP-2000 for dead load, live load (crane), pre stressed loads, wind load, temperature load, accidental pressure during LOCA, earthquake loads and the conservative response spectrum. After applying selected response spectrum on model, detail comparison was made against area of steal calculated from the analysis and the actually provided. Then prepared curve of area of steal vs. g value which shows that if the particular site was design on that spectrum that much steel needed for structural integrity.

Keywords: response spectrum, USNRC, LOCA, area of steel, structure integrity

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