(e) In the event where any of the requirements given in **(a)** through **(d)** above is not satisfied, all design stages shall be repeated with a modified structural system.

6.3.3. Design Stage (II): Design Verification with Linear Analysis for Minimum Damage/ Immediate Occupancy Performance Objective under (E1) Level Earthquake

6.3.3.1 – The tall building structural system, which is preliminarily designed in Design Stage (I – A) and subsequently designed in Design Stage (I – B), shall be verified for *Immediate Occupancy / Minimum Damage* performance objective.

6.3.3.2 – A linear analysis shall be performed according to requirements given in **6.2** under (E1) level earthquake for *Normal Occupancy Buildings* and under (E2) level earthquake for *Special Occupancy Buildings* (see **Table 6.1**). Accidental eccentricity effects need not to be considered in this analysis.

6.3.3.3 – Verification-basis internal forces shall be obtained as those calculated from linear elastic analysis (i.e., $q_R = 1.0$), irrespective of the type of the structural system. Those forces shall be shown not to exceed the strength capacities of cross sections calculated with expected material strengths given in **6.2.5**.

6.3.3.4 – Interstory drift ratio of each vertical structural element obtained according to **2.7.1** shall not exceed 0.01 at each story in each direction.

6.3.3.5 – In the event where **6.3.3.3** and/or **6.3.3.4** is not satisfied, all design stages shall be repeated with a modified structural system.

6.3.4. Design Stage (III): Design Verification with Nonlinear Analysis for Extensive Damage/ Collapse Prevention Performance Objective under (E3) Level Earthquake

6.3.4.1 – The tall building structural system, which is preliminarily designed in Design Stage (I – A) and subsequently designed in Design Stage (I – B), shall be verified for *Extensive Damage / Collapse Prevention* performance objective.

6.3.4.2 – A nonlinear analysis shall be performed under (E3) level earthquake according to requirements given in **6.2** (see **Table 6.1**). Accidental eccentricity effects need not to be considered in this analysis.

6.3.4.3 – The seismic demands obtained according to **6.1.3** as the average of the results of minimum 2*7=14 analysis shall be compared with the following capacities:

(a) Interstory drift ratio of each vertical structural element shall not exceed 0.035 at each story in each direction.

(b) Upper limits of concrete compressive strain at the extreme fiber inside the confinement reinforcement and the reinforcing steel strain are given in the following for reinforced concrete sections satisfying the confinement requirements:

$$\varepsilon_{cg} = 0.018 \qquad ; \qquad \varepsilon_s = 0.06 \qquad\qquad (6.4)$$