



Earthquake Seismic Reports

Guidelines and Procedures

March 2023

Seismic Report Ordering Criteria

- All properties lying within UBC Seismic Zone 3 or 4 will require a Level 1 Seismic Assessment.
- For Fannie Mae or Freddie Mac deals, or where the property location is too close to the lines delineated on the UBC map to determine the exact seismic zone in which the property lies, the USGS Geological Survey *Unified Hazard Tool* should be utilized in order to determine if a Level I Seismic Assessment is required.

Seismic Report Results

The Level 1 Seismic Assessment report will be required to provide the 475-year estimates for 90% loss (Scenario Upper Loss or SUL) and mean loss (Scenario Expected Loss or SEL) resulting from earthquake ground motions with a 10% probability of being exceeded within a 50-year period (475-year return average period.) For rehabilitation projects, the report should include the SEL/SUL numbers for the existing structures and anticipated SEL/SUL numbers following any seismic retrofit included in the scope of the rehab.

Ordering Process and Procedures

The Managing Director-Construction Risk Management (or their designee) will be responsible for engaging an approved Seismic Consultant to perform all Level 1 Seismic Assessments. Certain proprietary investors require that specific Seismic Consultants be engaged to perform Level 1 Seismic Assessments on their investments.

In order for a seismic assessment to be initiated, the consultants will need to be provided with plans (including structural engineering drawings) that are at least 80% complete. For new construction, a copy of the Geotechnical Engineering Report will also be required. For rehab projects, the rehab drawings (including

structural retrofit plans) will need to be provided, as well as original project drawings and geotechnical report, if available.

It is not necessary for the Seismic Consultant to perform a site visit for new construction projects. **The Seismic Consultant is required to make a site visit to all rehab projects.**

Seismic Report Results

A Level I Seismic Assessment is required to determine if the project's earthquake insurance is within investor guidelines and if earthquake insurance is required. Generally, an SEL calculation of less than 20% is acceptable to investors (and NEF) in order to not require earthquake insurance. If the SEL calculation is approaching an estimated 20% loss (e.g., 18%-19%) some investors may require additional investigation by the Seismic Consultant to determine whether they will require earthquake insurance.

For rehab projects that have an SEL of 20% or greater prior to rehab/retrofit, earthquake insurance will be required until the retrofit is complete and the post-rehab SEL is determined to fall below 20%.

Fees for Seismic Assessments will be invoiced to and paid by NEF. If additional investigative work is required at the property (e.g., soil liquefaction analysis) a determination will be made prior to engaging a consultant/contractor to perform the work as to whether the Sponsor or NEF will pay for the additional work.

Seismic Assessment Report Distribution

Copies of the Level 1 Seismic Assessment reports will be sent to the MD-Construction Risk Management (or their designee) for review. Once the report has been reviewed by the MD-Construction Risk Management, copies of the report will be provided to NEF Project Management and NEF Insurance Risk Management. The report will also be uploaded to Box under Project Name/Working Files/ Construction/Seismic Reports.