



# Updates to the Seismic Hazard Reevaluations

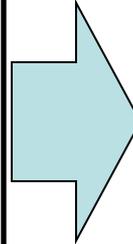
May 1, 2014





## Japan 2011

- 9.0 Earthquake
- Fukushima Daiichi Plant Response
  - Reactors shut down as expected
  - Emergency generators supplied power as expected
  - Plant conditions stabilized and were controlled



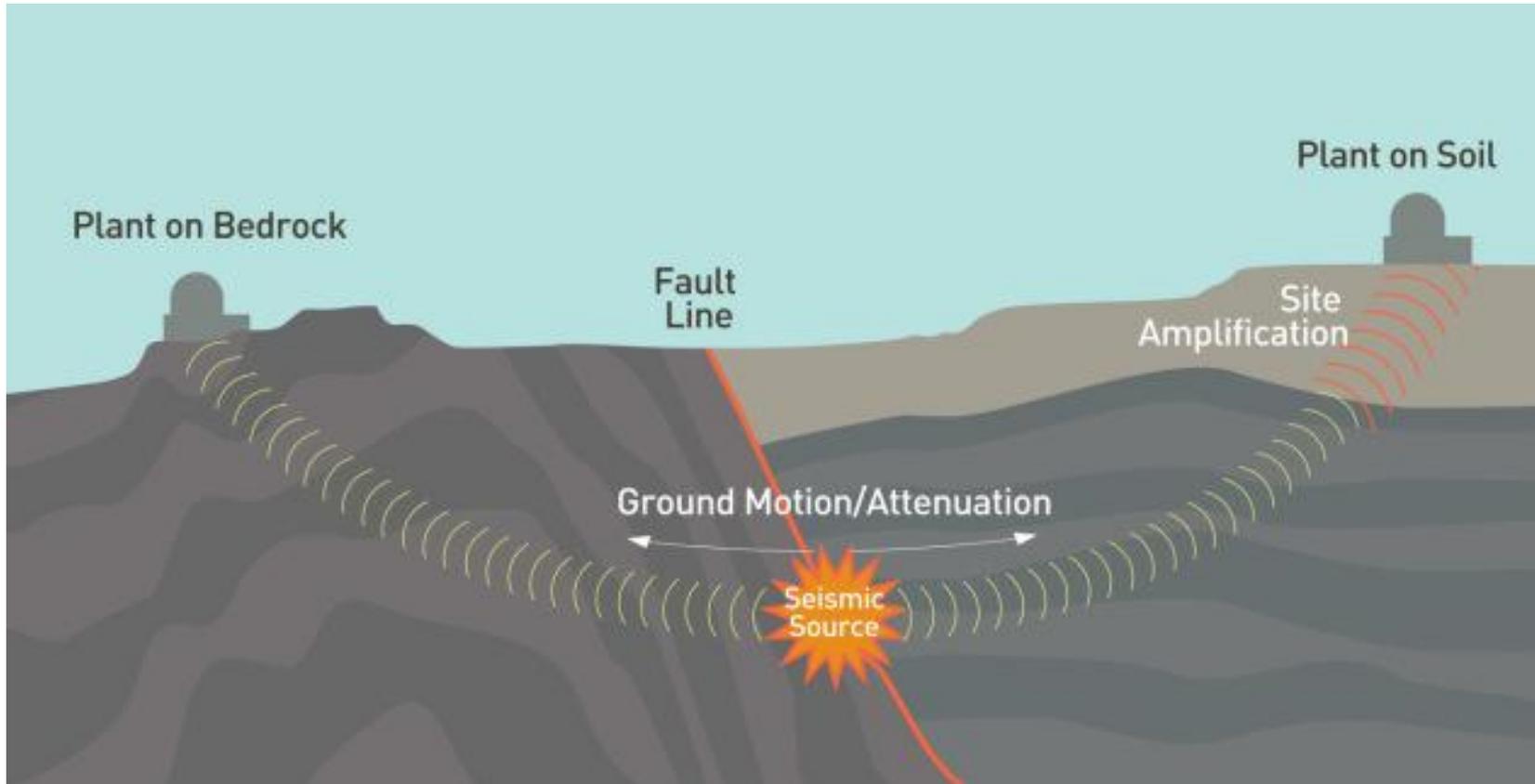
## Virginia 2012

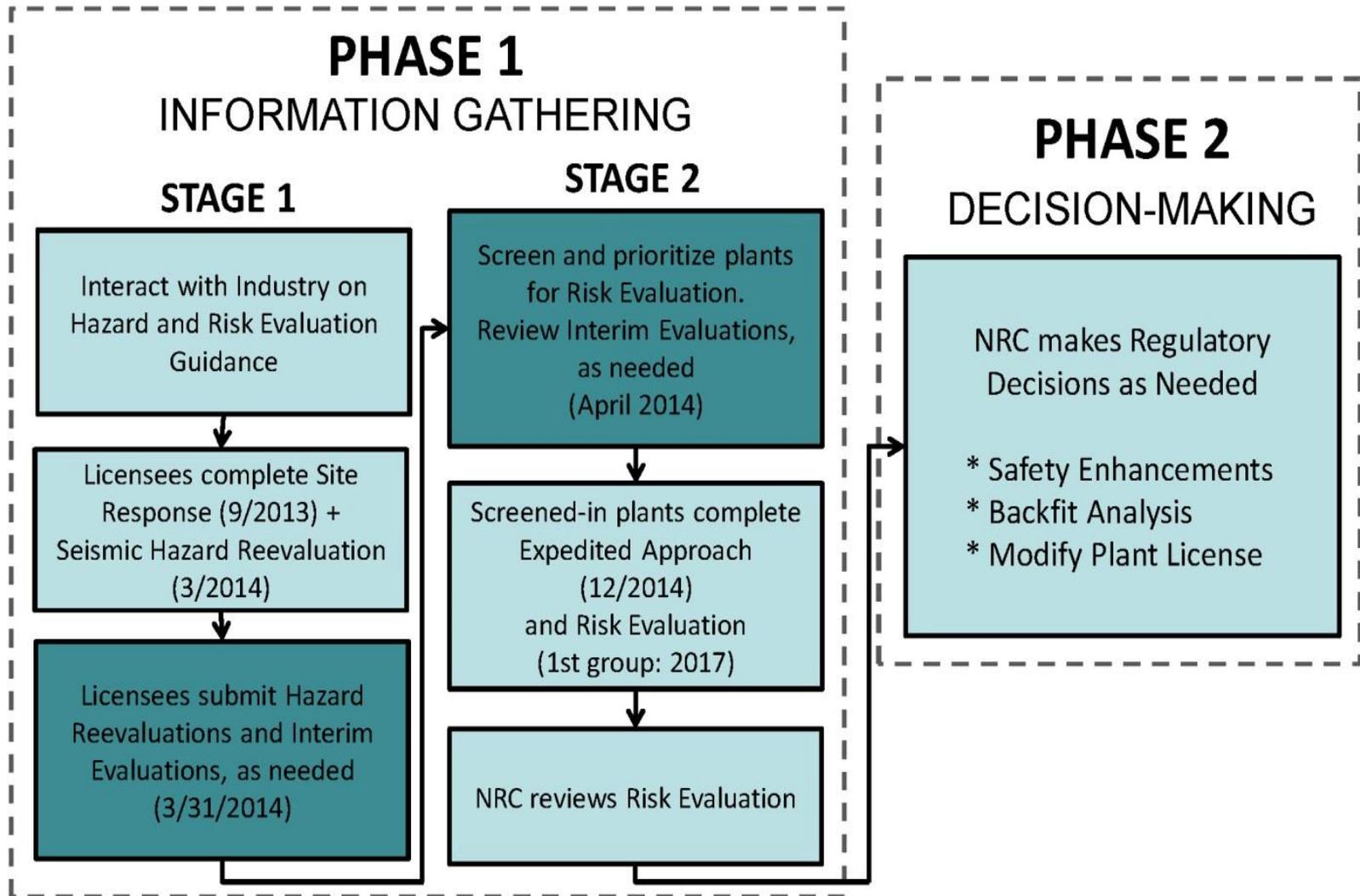
- 5.8 Earthquake
- Above the Design Basis for North Anna
- North Anna shut down safely
- No significant plant damage

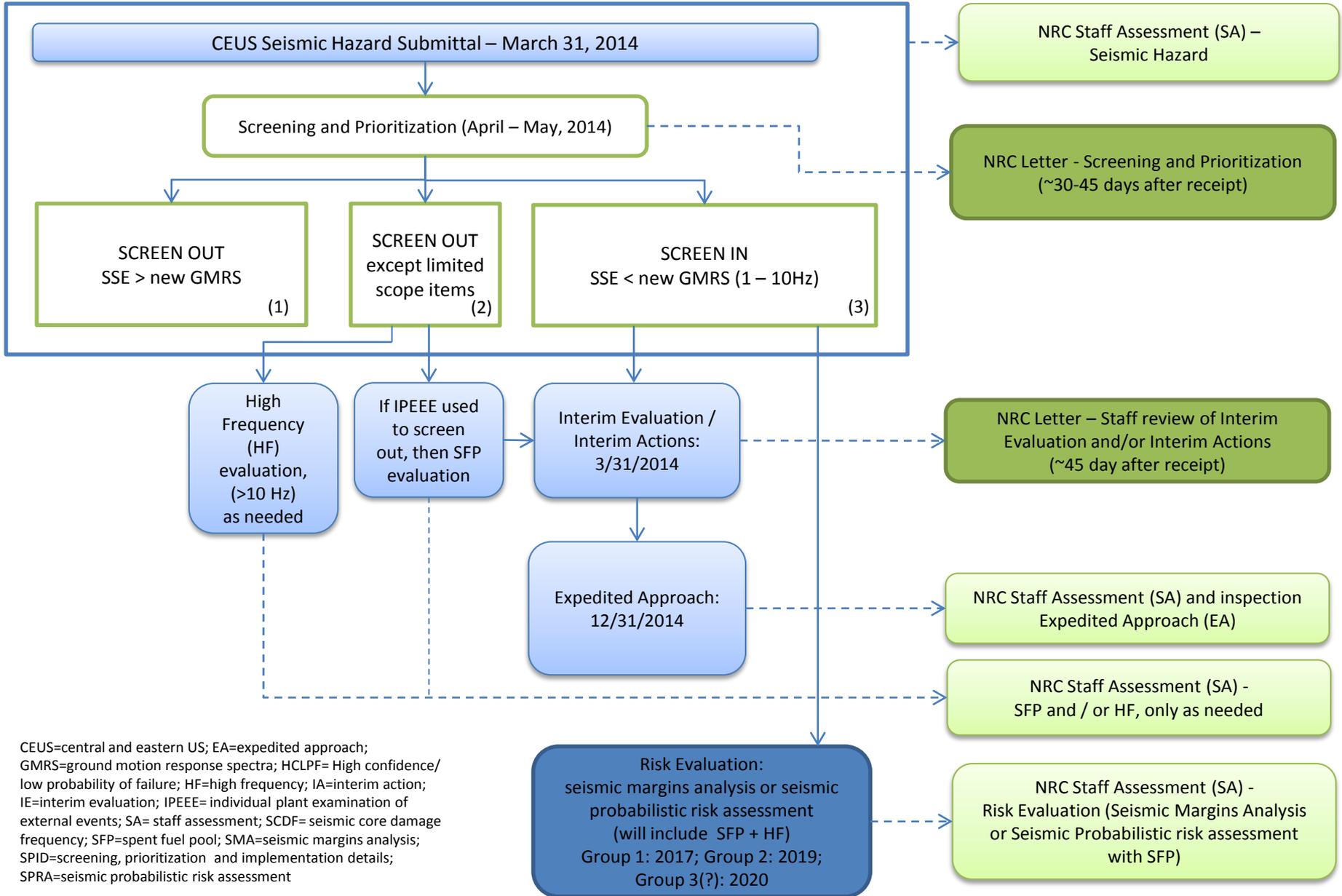
## NRC Response

- Near Term Task Force Report concluded that there was no imminent risk to continued operation.
- However, to ensure adequate protection, it would be appropriate for licensees to reevaluate their seismic hazards given that the state of knowledge has evolved since original licensing.
- Request for Information (10 CFR 50.54(f)) Letter issued March 12, 2012.
- Licensees to reevaluate their seismic hazards using present-day requirements and guidance

# Concepts of Seismic Hazard Evaluation







CEUS=central and eastern US; EA=expedited approach; GMRS=ground motion response spectra; HCLPF= High confidence/ low probability of failure; HF=high frequency; IA=interim action; IE=interim evaluation; IPEEE= individual plant examination of external events; SA= staff assessment; SCDF= seismic core damage frequency; SFP=spent fuel pool; SMA=seismic margins analysis; SPID=screening, prioritization and implementation details; SPRA=seismic probabilistic risk assessment

# Key Messages



- The Near Term Task Force concluded that there are no imminent risks of continued operation and licensing activity.
- The NRC requested that licensees reevaluate their hazards in order to ensure adequate protection consistent with the current state of knowledge and methods.
- The NRC is working through our established regulatory processes.

