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Comments: 2026 NEWBERRY GEOTHERMAL CONSENT TO LEASE PROJECT #387325

INDUCED SEISMICITY AND ADEQUACY OF ENVIRONMENTAL REVIEW

I support development of lower-carbon energy sources and do not oppose geothermal energy categorically. My concern is whether the Draft EA provides an adequate current analysis of induced seismicity before additional National Forest lands around Newberry Volcano are made available for geothermal leasing.

The 2026 Draft EA relies in substantial part on the 2014 Newberry Geothermal Consent to Lease Final EA. That 2014 analysis specifically recognized that Enhanced Geothermal Systems may involve injecting water under pressure to hydroshear existing fractures, that hydroshearing induces microseismic events, and that the intensity and number of induced seismic events at Newberry could not then be predicted without additional information about subsurface seismicity, stratigraphy, and rock strength. (2014 Final EA, p. 42.)

The 2014 EA also documents the 2012 AltaRock Newberry EGS stimulation. More than 200 seismic events were recorded, including 28 magnitude 1 or greater events and a largest event of magnitude 2.39, after which injection ceased and the well was shut in. (2014 Final EA, pp. 59-60.) The EA further acknowledges that high-pressure reinjection could increase seismic activity and potentially induce localized landslides. (2014 Final EA, p. 107.)

The 2026 Determination of Analysis Reliance nevertheless concludes that there are "no substantial differences" between the 2014 and 2026 projects and that anticipated environmental effects remain substantially the same. (DAR, pp. 2-3.)

There is relevant information developed since 2014. On December 18, 2024, the USGS Cascades Volcano Observatory reported that renewed geothermal work at Newberry had already generated minor seismic activity and that continued geothermal work was expected to produce many small, non-volcanic earthquakes. USGS also noted that geothermal work at Newberry in 2012 and 2014 produced hundreds of earthquakes of magnitude 2.5 or less.

The 2026 Draft EA itself recognizes that Newberry lava tubes and caves are sensitive to vibration and structural collapse. (2026 Draft EA, p. 5.)

Before consenting to these leases, I ask the Forest Service to address:

1. Whether post-2014 induced-seismicity observations constitute new information requiring updated analysis rather than reliance on the 2014 analysis.
2. Current baseline seismicity, mapped or suspected faults, injection pressures and volumes, thermal stresses, and a reasonable range of possible induced-seismicity outcomes.
3. Cumulative effects of stimulation and reinjection from multiple geothermal projects around Newberry, rather than considering each future permit in isolation.
4. Potential consequences for caves and lava tubes, steep slopes and landslides, groundwater, infrastructure, visitors, workers, and nearby communities.
5. Enforceable lease conditions for baseline seismic monitoring, traffic-light thresholds, injection limits, shut-in

criteria, and agency authority to suspend operations.

Finally, please explain why an EA remains sufficient in light of this information. If reasonably foreseeable effects may be significant, I request preparation of an Environmental Impact Statement. At minimum, the final analysis should contain a current, project-specific significance analysis of induced seismicity rather than deferring the issue primarily to future site-specific permits.