Peer Review Summary Document

(04/10/2025)

Peer Review Plan

enhanced-geothermal-systems-EGS-asessment Great-Basin-USA [105 KB PDF]

Title and Authorship of Information Product to be Disseminated

Enhanced Geothermal Systems (EGS) Electric-Resource Assessment for the Great Basin, USA, By Erick R. Burns, Colin F. Williams, and Jacob DeAngelo.

Peer Reviewers Expertise and Credentials

Reviewer #1 has a PhD in hydrogeology and 38 years of experience as a geothermal scientist conducting and leading research. The reviewer is an internationally recognized expert on geothermal processes, including EGS technologies and has authored over 100 peer-reviewed publications on geothermal resources from a wide variety of geologic terranes across the United States (US) and the globe.

Reviewer #2 has a PhD in chemical engineering and over 15 years of experience conducting energy assessments across the US and related research and is an expert in subsurface petroleum resource assessments, including unconventional resources that require fracturing of geologic units for extraction. The reviewer has authored more than 125 publications on these topics and supporting concepts.

Charge Submitted to Peer Reviewers

The reviewers were asked to make an objective evaluation of the results, referring to supporting materials as necessary to provide assurance that computations and estimates followed sound scientific and engineering principles. Reviewers were chosen for their familiarity with past assessments, allowing for contextualization and evaluation of the new results.

Summary of Peer Reviewers Comments

Reviewer #1 provided several suggested changes to wording, aiding in the flow and readability of the manuscript and confirmed the adequacy of the manuscript with the following statement: "This is a challenging assignment, and you have taken a reasonable approach." Other comments included noting additional detail about one suggested change to the text and suggesting that some additional detail explaining the ranges of values in Table 1 would be appreciated.

Reviewer #2 confirmed that there were no technical concerns. The reviewer's suggested changes were editorial in nature.

Summary of USGS Response to Peer Reviewers Comments

In response to comments from Reviewer #1 the authors incorporated virtually all suggested text changes. In rare instances, the suggested changes were slightly revised to improve precision but still address the reviewer's concern. The authors addressed the suggested change related to the ranges for parameters and how the best estimate was selected by adding text on the selected values to Table 1 in the "Description" column.

In response to comments from Reviewer #2, the authors incorporated all changes as suggested, unless minor adjustments were needed for clarity.

The Dissemination

The published information product will be released as a USGS Fact Sheet publication series information product and will be available at https://pubs.usgs.gov/.