

Geothermal Technologies Program

U.S. Department of Energy

2012 Peer Review

Evaluation and scoring criteria explanation
document

U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy

Relevance/Impact of Research

Projects will be assessed on the importance of achieving the project's objectives relative to the broader geothermal program's mission and goals. Projects will be evaluated on the extent to which the project addresses known, anticipated, and significant technical knowledge gaps or market barriers. Projects will be assessed on the impact the activities and results have on costs, performance, applications, markets, and other factors in geothermal energy development.

Scoring

4 – Outstanding.

The project has made substantial progress and impact on the DOE's Geothermal Technologies Program missions and goals. Project has demonstrated outstanding advancement in addressing knowledge gaps and barriers. The project has exceptional impact on factors in geothermal energy development.

3 – Good.

The project has made notable progress and impact on the DOE's Geothermal Technologies Program missions and goals. Project has demonstrated significant advancement in addressing knowledge gaps and barriers. The project has considerable impact on factors in geothermal energy development.

2 – Fair.

The project has made modest progress and impact on the DOE's Geothermal Technologies Program missions and goals. Project has demonstrated some advancement in addressing knowledge gaps and barriers; impact is below what could be expected. The project has moderate impact on factors in geothermal energy development.

1 – Poor.

The project has made little or no progress and impact on the DOE's Geothermal Technologies Program missions and goals. Project has demonstrated little to no advancement in addressing knowledge gaps and barriers; impact is below what could be expected. The project has marginal impact on factors in geothermal energy development.

Scientific/Technical Approach

Projects will be assessed on the quality of the technical approach, rated for the rigor and appropriateness of the employed technical approach (work elements, procedures and methods, instrumentation, equipment, staffing, etc.) to achieving the project's objectives with the available resources. This criterion covers both the design of the scientific/technical approach and how well the approach has been executed in the project tasks.

Scoring

4 – Outstanding.

The approach is sharply focused, excellent in design and centered on one or more key technical barriers to achieving the project's objectives. The execution of the approach is outstanding and has little to no room for improvement.

3 – Good.

The approach is well thought out and effective in achieving the project's objectives. The project has good focus, with most aspects of the project contributing to significant progress in overcoming barriers/knowledge gaps. The execution of the approach is good and has minor room for improvement.

2 – Fair.

Some aspects of the project may lead to progress in achieving project objective and overcoming barriers/knowledge gaps but the approach has significant weaknesses and noteworthy areas for improvement.

1 – Poor.

The approach is unlikely to make significant contributions to the objectives and barriers/knowledge gaps. Significant flaws in the approach are identifiable with major areas of improvement.

Accomplishments, Results and Progress

Projects will be assessed on the technical accomplishments, results, and progress of the tasks. Projects will be scored on the significance of these results in relation to project objectives and their technical targets/goals. Factors within this criterion will center around two areas:

1. Quality – the quality of accomplishments, results, and progress made towards technical goals/targets and project objectives.
2. Productivity – the level of productivity in work underway considering accomplishments and the value of the accomplishments compared to the costs. This includes achievements against planned goals and objectives, technical targets, awards, or other success measures presented.

Scoring

4 – Outstanding.

The accomplishments, results, and outcomes have been outstanding in relation to the resources expended and progress towards project objectives and technical targets/goals.

3 – Good.

The accomplishments, results, and outcomes have been good in relation to the resources expended and progress towards project objectives and technical targets/goals. There is room for slight improvement.

2 – Fair.

The accomplishments, results, and outcomes have been adequate in relation to the resources expended and progress towards project objectives and technical targets/goals. There is room for improvement.

1 – Poor.

The accomplishments, results, and outcomes have been marginal in relation to the resources expended and progress towards project objectives and technical targets/goals. There is significant room for improvement.

Project Management/Coordination

Projects will be assessed on how well technical, policy, schedule, business and staffing plans, and spend plans are carried out and on the quality of prospective future plans. Projects will be assessed on the inclusion of appropriate and logically placed decision points that effect the future direction of the work. Projects will be assessed on the coordination of activities with collaborators, stakeholders, and other entities (e.g. permitting officials).

Scoring

4 – Outstanding.

Management of this project has been exceptionally effective and/or plans for future management are well-structured and include all the appropriate and logically placed management checks and controls. Any variance from original plans/schedule were corrected early and resulted in little to no impact on the overall project.

3 – Good.

Management of this project has been very effective and/or plans for future management are well-structured and include all the appropriate and logically placed management checks and controls, however minor improvements are desirable. Any variance from original plans/schedule were corrected early and resulted in minor impact on the overall project.

2 – Fair.

Management of this project has been weak and/or plans for future management are not well-structured and lack the appropriate and logically placed management checks and controls, numerous improvements are required. Any variance from original plans/schedule were delayed in correction and resulted in moderate impact on the overall project.

1 – Poor.

Management of this project has been ineffective and has impaired the success of the project and/or future plans are poorly structured and missing the appropriate and logically placed management checks and controls; significant improvements are essential. Any variance from original plans/schedule were delayed in correction or not addressed and resulted in significant impact on the overall project.

Overall

In addition to the above 4 criterion, peer reviewers will be asked to provide an overall assessment of the project in a written narrative. Reviewers will be asked to comment on overall strengths and weaknesses, that may include suggestions for ways to improve the projects. This collective opinion of the reviewers will not have a numerical score but will be made public.

After the review

After the completion of the 2012 peer review and compilation of all reviewers' scores and assessments, Principal Investigators will be provided an opportunity to give written comments in response to their results/score. The Geothermal Technologies Program plans to publish these responses along with the peer review evaluation and scores in the 2012 Peer Review Report.