

Director's Discretionary (DD) Allocation Review Form

Version 3.2
01/02/2024

Reviewer: _____

Proposal Title: _____

Principal Investigator: _____

1. Project Classification

a. Does one of the OLCF project roles coincide with the proposed project objectives and goals? If not, why?

OLCF Project Roles:

- Leadership Computing Preparation (6-12 month duration) is reserved for exploratory pilot projects and potential next-generation INCITE or ALCC projects.
- Application Software Development" category that includes development, porting and benchmarking of applications for modeling and simulation, data analytics, and workflows. This should also be able to run for 12 months.
- Scaling studies for INCITE or ALCC submissions (1-6 month duration) is reserved for projects needing to complete application performance benchmarking, analysis, modeling, and/or scaling studies for an in-cycle INCITE or ALCC proposal under development.
- Strategic Partnerships (6-12 month duration) is reserved for projects aligned with strategic and programmatic directions in the DOE and ORNL. Motivation is program development, science output, or new partnerships.

After completing the form, please fax or email it to the OLCF Accounts Team at
865-241-4011 or accounts@ccs.ornl.gov

2. Application Readiness and/or Development

- a. Is this a proposal for a) a scientific campaign, or b) scientific software development, porting, benchmarking?
- b. For scientific campaign focused projects: Discuss the technical readiness of the project, e.g. are the codes ready to run, have they been optimized for the requested resources, do the computation and I/O scale well, has the applicant presented evidence that they can effectively perform single simulations using a major fraction of the system requested?
Specifically, please review for evidence presented of the following two criteria: (a) single job or many-task scaling beyond 20 percent of Frontier, (b) effective use of GPU accelerators, and (c) the availability and utilization of automation in workload management capabilities.
- c. For scientific software porting/development focused projects: Discuss the proposed software development strategy of the project, e.g. are the profiling and compiler tools available on Frontier, will the development depend on available scientific libraries, and is the development focusing on both scalability and GPU acceleration?

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|---|-------|-----------|
| d. What best describes the computational readiness and/or development strategy of this project? | Ready | Not Ready |
|---|-------|-----------|

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3. Scientific Merit of the Project (Answer only if qualified)

(Give an overall rating: 1 = lowest 5 = highest)

1 2 3 4 5

- a. What important problem does this application address and what is the likelihood that it can make high-impact scientific or technical advances in its field using a large allocation of high-end computing resources? How does the proposed research compare with other research in its field and related disciplines in terms of scientific merit and originality? Comment on the qualifications of the principal investigator and other key personnel to successfully execute this project.

4. Reasonableness and Appropriateness of the Requested Allocation

(Give an overall rating: 1 = lowest 5 = highest)

1 2 3 4 5

- a. Assess the reasonableness of requested allocation, both regarding size and duration of allocation. If requesting multiple resources, comment on merit of multiple resources. Where appropriate, suggest revised allocation amounts.
- b. Is the team sufficiently staffed with appropriate expertise?

5. Recommendation

Allocations of computing resources are issued via a competitive process designed to ensure maximum impact of the research conducted at the center. The LCF model is to limit the number of accepted applications, thereby working closely with a select group of projects.

a.	What best describes this application?	NOT ACCEPTABLE	GOOD	OUTSTANDING
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6. Feedback to the Principal Investigator

Please provide constructive feedback to the PI of the proposal. This is particularly important if the proposal was rated unacceptable. These comments and suggestions will be provided to the PI without identifying the identity of the reviewer.

7. Additional comments and recommendations to the RUC

Please provide any additional comments that will inform the Resource Utilization Council in making the decision regarding this proposal. These comments and suggestions will NOT be provided to the PI of the proposal.

