Charge Questions for OSG Review on Jan 14/15

1. **Scientific and/or technical merit of the project**
    a. Does the OSG address important and relevant problems of the science application communities that it serves? (OSG Consortium) Is the OSG being leveraged towards breakthrough advances in the DOE Office of High Energy Physics (HEP) Proton Program, the Nuclear Physics (NP) Heavy Ion program, LIGO and the NSF Elementary Particle Physics (EPP) Program?
    b. What is the potential of the project to advance the state-of-the-art for distributed computing infrastructure associated with the programs identified above? For other science of interest to DOE and NSF?
    c. What is the scientific and/or technical merit, originality and likelihood of this project to enable and/or make fundamental advances in the field?
    d. Does the project demonstrate a functional partnership among the indicated science application scientists, computational scientists, and other members of the OSG consortium?

2. **Appropriateness of the methods or approach**
    a. Is the conceptual framework of the Open Science Grid adequately developed and appropriate? Assess the progress in realizing the framework.
    b. Does the framework make use of appropriate and best available mathematical algorithms and/or computer science methods along with the organizational, operational and technical methods associated with scientific computing software infrastructure?
    c. Is the OSG leveraging relevant computing resources at DOE labs as well as resources associated with OSG consortium members?
    d. Are there significant current/potential problems in the proposed method or approach? If so, is the project adequately addressing these problems?

3. **Competency of the key personnel and adequacy of the proposed resources**
    a. How well qualified are the key personnel to organize, construct and operate the OSG facility?
    b. Is there a management plan for fostering coordination and collaboration? Is the plan being implemented? Consider the plan's adequacy for
        - managing internal OSG activities
        - OSG sites, other partner grids, and virtual organizations and software contributions.
    c. Is the balance between computational scientists and application scientists appropriate to make advances that include:
        - reliance on the OSG by scientists in the NP, HEP, LIGO, and EPP programs
        - innovations in data-intensive, distributed and federated scientific discovery infrastructures
    d. Has the project interacted with the SciDAC Centers and Institutes, European Grid efforts, and other representatives of scientific computing software

infrastructures? If so, have the interactions had an impact on the OSG and these other organizations?

4. **Performance under existing award**
    a. Assess the progress made thus far towards the project's research goals. Is the level of use of the OSG by the HEP, NP, EPP, and LIGO and other science areas optimal?
    b. Have the PI and team(s) disseminated the results of their research through publications in peer-reviewed journals, meetings, conferences presentations and/or other appropriate means?
    c. Is the information on the OSG website accurate, timely, and substantive?
    d. How well does the OSG integrate skills and expertise into the overall project? Are the multi-disciplinary scientists integrated into the project?
    e. Has the OSG demonstrated that it effectively advances and enables use of distributed computing resources for Office of Science's and NSF's science programs?

5. **Reasonableness and appropriateness of the budget**
    a. Are the staffing levels and budget appropriate for carrying out the proposed research for the remaining project term?

6. **How well does the OSG project advance the SciDAC goals? (see background information above, including** SciDAC call**)**

7. **Additional Comments** (including overall strengths and weaknesses of OSG)