Office of High Energy Physics (HEP)

Response to the Report of the High Energy Physics Advisory Panel (HEPAP) Committee of Visitors (COV) Review of HEP

Dates of COV: Sep 27-29, 2016

Dates of COV Report: Dec 12, 2016

Dates of HEP Response: Feb 2, 2017

Program POC: Dr. Glen Crawford

	COV Recommendation	**HEP Response**
1	Continue the comparative reviews of university and laboratory research proposals and activities.	Agreed. We appreciate HEPAP's continuing support of the comparative review process.
2	Adopt, in consultation with HEPAP, an annual mechanism to determine the best plan of action to implement the P5 vision. In such cases where HEP deviates from the strategic advice, the case should be clearly explained to the community through discussion with HEPAP.	HEP appreciates the community's desire to have more regular discussions that focus on implementation of the P5 plan. We are considering options that will allow discussion of program plans with the research community within the context of annual budget execution.
3	Work closely with the Laboratories and with Project Management and Program Management teams to develop a comprehensive strategic plan, consistent with P5 guidance, that anticipates the needs for future operating funds that will arise from improvement, upgrade and MIE projects. The plan should account for the funding needs not only of accelerator and experimental operations, but also of software, computing, and technical support for the new experimental programs. Develop a similar comprehensive plan for future research program needs, once again taking into account the need for research efforts to maximize the scientific return on improved, upgraded, and new facilities and experiments.	HEP, working with all of the relevant stakeholders in the community, will develop plans for operations and research to provide a detailed implementation strategy for the P5 plan.

4	Augment discussion with HEPAP of budgets by annually presenting the disposition of reserves and explaining how the final HEP allocations to the research programs of the frontiers are consistent with P5 recommendations.	HEP will develop and present to HEPAP an annual assessment of the final budget allocations for recently completed Fiscal Years.
5	HEP should work to reduce barriers to migration of researchers from one frontier to another.	Program managers and grant monitors frequently work with PIs to answer questions concerning possible new proposals that cross-cut HEP research frontiers, and will continue to do so. HEP will work with review panels to provide information to ensure a fair assessment of PIs who propose work in frontiers that were not part of their previous research program.
6	Deliver laboratory comparative review reports no later than six months after the review is held.	Agreed.
7	Appoint members of recent university panels to the laboratory comparative review panels in each program area in order to help gauge the uniformity of quality between laboratory and university research.	HEP will endeavor to appoint a few members from recent university review panels to future laboratory comparative review panels.
8	Encourage HEPAP to form a study group to consider whether the agencies should convene a subpanel to evaluate different roles and responsibilities in university and laboratory research and the ways in which this research is evaluated.	While the question of optimizing roles for laboratories and universities is important, we are concerned that such a possible subpanel lacks a clear charge and constructive outcomes, and would face challenging conflict of interest issues.
9	Ensure an adequate number (at least 3) of reviewers for each PI.	A minimum of three reviewers per proposal is the current requirement (per SC merit review criteria). To minimize the overall burden of reviews on the community we often look for reviewers who can cover more than one research area so the total number or reviewers is typically less than (3 x number of PIs). Occasionally some mail reviewers drop out of the process after initially committing to reviews, which can result in fewer than 3 expert reviews for some PIs. In those cases we endeavor to find additional reviewers, but this can be difficult in certain highly specialized topics.

10	Inform review panels about special information obtained by DOE program managers concerning project operational or infrastructure responsibilities and experiment leadership roles.	**Done.** This information (where known) was shared with comparative review panels as part of the FY2017 grant review process.
11	Include more information about why proposals were declined in both the declination letters and the folders.	**Done.** For proposals which received peer review, additional information is contained in the reviews themselves and program manager comments, which are conveyed to the PI(s) and recorded in PAMS. For proposals declined without review as a result of the proposal being non-compliant per the FOA requirements, we have added (starting with FY2016 reviews) additional information to the PAMS record and communicated the specific reason for declination to the PI(s). Note that the PAMS module for the FY 2017 process now requires such additional information for these declination cases.
12	Seek ways to mitigate the load arising from repeated submissions of rejected proposals.	HEP will investigate mitigation strategies.
13	Form mini-panels to review Early Career proposals in related fields. At least one member from each mini-panel should be a member of the larger super-panel deciding Early Career Awards	**Done.** HEP adopted this process for Early Career selection starting in 2015 and is continuing to use mini-panels.
14	Ensure that the review process recognizes the potential contributions to the DOE mission from qualified applicants at a wide range of institutions, including non-Ph.D. granting colleges.	HEP will highlight such cases as part of its comparative review process, and solicit input from reviewers on the potential impacts of such proposals. We note such considerations are included in the program policy factors that are explicitly part of the DOE merit review process.
15	Change the organization of future CoVs to amalgamate the review of the three experimental frontiers into one subpanel that is smaller than the sum of the three current subpanels	HEP will seek to reorganize future COVs to create a more compact review structure.

16	Restore a balanced generic detector R&D program as soon as possible after the technical challenges of current high-priority P5 projects are met.	Agreed. HEP will endeavor to restore a balanced generic detector R&D program as soon as possible.
17	Work with the high energy physics community to generate a roadmap for investments in detector R&D based on future research needs of the field.	Agreed. We note that the community has generated an initial draft roadmap for detector R&D investments and we look forward to working with them on implementation.
18	Include planning for computing and software development into the planning for projects and new initiatives.	Agreed. We expect this to be part of the detailed implementation plan discussed above (Recommendation #3)
19	Develop a plan for increasing diversity in the programs HEP supports.	HEP will work with SC management to develop strategies for improving diversity in its research programs.
20	Continue and enlarge the effort by HEP staff to make presentations about program priorities and to have PI meetings at major conferences.	Agreed. We concur with the comment in the COV report that such activities will require increased travel funding.
21	Continue to require appendices describing the work of each university research scientist in proposals	Agreed.
22	Consider for support, through research and operations funding, research scientists making clear and critical contributions to cosmic frontier experiments and construction projects	**Done.** Such considerations were included as part of the FY 2017 comparative review process, and will be considered as part of the reviews of experimental operations plans.
23	Fill the Program Manager position for the Intensity Frontier as soon as possible.	Agreed.
24	Work to restore a thriving and intellectually diverse theory program mentioned as essential in the P5 report. Support for theory as a fraction of the research budget should not fall below the current level in order that the scientists ranked in tiers 1, 2, and 3 remain adequately supported.	Support for Theory as a fraction of Research has actually been going up in recent years as Technology R&D takes big cuts. HEP is examining the long-term balance of activities in its R&D portfolio to ensure long-term excellence.

25	The proportion of panelists should better reflect the balance of thrusts among the PIs being reviewed in order to provide more informed discussion and rankings.	HEP will continue to work to ensure good balance among its comparative review panels. We rely on the generosity of the community in giving their time to serve on these panels.
26	We reiterate this recommendation [2013 HEP COV Rec. #15: Hire an IPA for the Theory program]. Such a hire will assist with the heavy peak workload and should help provide a balanced perspective to program.	Agreed. A university IPA held this position in 2014 and a lab detailee in 2015-6. We are searching for a new IPA/detailee.
27	Develop the tools and capability within the reporting process to gather and collate field-appropriate metrics (e.g. publications, citations, patents, etc.) that would be useful to evaluate the productivity and impact of the GARD research programs.	Agreed. Much of this information is included in standard university progress reports and such 'products' are appended to renewing proposals submitted to the university comparative review process. It is also typically requested as input to the lab comparative review process.
28	Consider creating and implementing roadmaps to defining research priorities for the GARD research thrusts not yet mapped.	Agreed. HEP is planning additional technology roadmapping activities in 2017.
29	Work to address the accelerator R&D subpanel recommendations to ensure a healthy and vigorous basic accelerator R&D portfolio	Agreed.
30	Re-evaluate the staffing needed to successfully support the multiple larger projects on the horizon	Agreed. We are working on an updated staffing plan.