

## **Capturing Labor Costs in the Total Project Costs**

DOE line item construction projects and Major Items of Equipment with a Total Project Cost (TPC) of \$5 million or more are governed by DOE Order 413.3A on project management. This note is intended to clarify the rules when applied to projects sponsored by the Office of High Energy Physics.

One of the goals of model project management practices is to capture all costs associated with the construction of the project. The purpose of capturing the costs of all labor used by the project is to ensure that project management has a firm understanding of the resources needed to complete the project and to have the ability to replace any individuals who leave the project.

### **Scientists**

**The only scientists whose salaries may be charged to projects are physicists who are high-level (e.g., WBS Level 1 or Level 2) managers on a particular project, in which case his or her time may be billed as part of project management costs. Any such arrangement is subject to approval by the federal project manager and the DOE Office of High Energy Physics.**

It has been the practice in the high energy physics program, particularly for detector fabrication projects, to utilize members of the scientific research collaboration to carry out some of the tasks in the fabrication project. This is done to exploit their expertise in the relevant detector technology and their knowledge of the ultimate use of the detectors. In general, these scientists are supported by a variety of different funding sources including DOE funds, NSF funds, and university funds. It is not possible to capture the labor costs that are not funded by DOE. In order to select scientists for project-related tasks based on their skills and expertise that they bring to the project, rather than their cost to the project, it is desirable to **not** capture the costs of any scientists who are members of the associated scientific collaboration in the project costs. The only exception this rule is when a physicist is working as a high-level (e.g., WBS Level 1 or Level 2) manager on a particular project, in which case his or her time may be billed as part of project management costs. Any such arrangement is subject to approval by the federal project manager and the DOE Office of High Energy Physics.

The goals of project management can still be met under the assumption that scientist labor costs are not in the TPC, by careful and explicit risk analysis of how the work assumed to be done by “off -project” scientists will be carried out if any of these scientists leave the project, or otherwise cannot deliver on their commitments.

### **Engineers, technicians, and computer professionals**

**Support of engineers, technicians, and computer professionals at universities and national laboratories who are essential for the design, fabrication and commissioning of the project should be properly costed to the project.**

Engineers, technicians, and computer professionals at universities and national laboratories should *always* be paid by the project, **with funds under the control of the project manager and included in the TPC.** If such a person is already supported by DOE funds not under the control of the project manager, then the project manager should contact OHEP to make arrangements to see that the labor costs are properly understood and included in the TPC. Contributions from other funding agencies or in-kind contributions from collaborators using other sources of funding should be outside the formal DOE project scope.

## **Graduate and Undergraduate Students**

**Graduate and undergraduate students are not costed as part of the project except when they contribute thru paid labor on the project and in this case it is as a procurement for services performed.**

Graduate students can receive an educational benefit from participating in some tasks in a project. Their participation should be limited to what is needed for their educational benefit and should not be used as substitute for paid labor. Graduate student salaries are therefore not included in the TPC. From time to time, undergraduate students are employed as paid term labor on projects, and included in the TPC. This is acceptable, subject to agreement of the federal project manager.