

**THE DEPARTMENT OF ENERGY (DOE)
RESEARCH AND TECHNICAL ASSISTANCE PROGRAM
FOR THE U.S. COMMERCIAL SECTOR AT OAK RIDGE, TENNESSEE¹**

Legal Authority

The Department of Energy (DOE) sponsors a research and technical assistance program, called the Work For Others (WFO) program, for commercial U.S. domestic sector companies. For the U.S. commercial sector, DOE is authorized and encouraged to provide technical assistance and to make arrangements (including contracts, agreements, and loans) for conducting research and development activities with private or public institutions or persons. This work activity includes participating in joint or cooperative research, developmental, or experimental projects. The authority for such activity comes from statutes such as the Energy Reorganization Act of 1974 (Public Law 93-438) and the Department of Energy Organization Act (Public Law 95-91).

Why come to DOE early in the research and development cycle?

The U.S. government's interest in furthering industrial competitiveness and scientific advances encourages innovative approaches and solutions to technical problems facing U.S. industry. This U.S. governmental concern provides various options in solving issues early in a product or systems developmental life cycle. The U.S. government's considerable investments in basic technology research and development have provided a substantive scientific foundation of knowledge in the National Laboratory system.

A normal commercial contract may not be suitable for these initial research efforts and prototype tests where product or scientific feasibility is being established. The use of Oak Ridge National Laboratory (ORNL) can establish the scientific parameters of achievement during this early research phase where subjective evaluations are the rule rather than the objective evaluation of criteria against business strategies. At this research stage, general performance specifications only cover the minimum essential requirements. A sponsor's performance specifications express the sponsor's technical requirements as output, function, or operation of items or equipment. This allows an unbiased technical approach in the details of design, fabrication, formulation, and initial production by the ORNL research team.

To reach the stage where design specifications are available for maximum commercial development, a model is developed. To assure adequacy of the performance specifications, the prototype is tested and deficiencies are corrected at minimal cost. Since performance specifications are not restrictive to any particular method or process, this approach permits an objective approach when the sponsor prototypes are finished, conserves sponsoring company's funds, and expedites the system or product when it is ready for final development, manufacturing, and/or marketing.

What Does ORNL Bring to the Table?

§ DOE's most diverse multi-program research and technical facilities for:
B Basic Research

¹ As of November 2, 2004

- B Applied Research
- B Applied Development
- B Ability to do National Security Classified Work
- B Extensive Knowledge of National Security or Homeland Security Technology Needs
- \$ Access to rest of DOE National Laboratory System
- \$ Access to the Y-12 National Security Complex's National Prototype Center with its Manufacturing Technology Expertise
- \$ Access to the National Transportation Research Center, Inc. (NTRC)

DOE Administrative Processing

The DOE accepts taskings from the commercial sector to meet a research or technological requirement. DOE performs work that is consistent with its overall mission and is relevant to the DOE unique capabilities, specialized expertise, singular facilities, or derived competencies. Prior to work beginning, ORNL researchers will prepare for DOE approval a Proposal Information Form (PIF) and a research proposal describing the work to be performed. Upon approval, DOE will formally notify the ORNL performance-based DOE Contractor that contract negotiations can begin.

Research or technical efforts on a project can be done under a Material and Services Order Form (MSOF) which is a one page abbreviated contract between the DOE Contractor and the requesting firm if there are no intellectual property (patents, trademarks, copyrights) concerns involved. If the commercial sponsor has proprietary information involved that needs to be protected, then a Proprietary Information Agreement disclaimer can be signed and attached to the MSOF. The sponsor's proprietary information associated with the research or technical development will be protected and safeguarded from disclosure at all times.

If there are special requirements for intellectual property information that need to be addressed, a Work For Others standard agreement will normally be used. This is a DOE previously-agreed-to set of uniform contractual clauses for research and development agreements that will expedite arranging the legal commitment between the commercial company and the DOE contractor. However, if the DOE standard language is not acceptable to the commercial company, a negotiated contract may be done.

Payment of Costs

Advance funding of a project is mandated by Federal Law (for example, the Anti-Deficiency Act) and is included in the basic contract between DOE and their contractor. The U.S. Congress has directed that a federal agency will not cover a private company's cost obligations for research and development with U.S. appropriated funds. This means that a private sector company must pay for their work in advance increments. All projects costing \$25,000 or under must be completely paid for in advance.

For small businesses and non-profit organizations, DOE uses several flexible advance payment arrangements so that only the monthly-required funds are paid in advance. This minimizes the impact of the DOE costs to the private organization's cash flow. Additionally, DOE by statute, waives the DOE federal administrative charge (FAC) for these organizations along with universities of higher learning in the United States.

Medium or large-scale commercial sector sponsors will provide an advance payment equal to three months of estimated effort prior to work commencing. This allows a routine billing cycle to be

established to cover all actual and estimated monthly charges.

Based on Section 3137 of the National Defense Authorization Act of 1999 (Public Law 105-261), DOE is authorized to charge a flat 3% surcharge to cover DOE administrative processing and overhead costs. This surcharge is the Federal Administrative Charge (FAC) and is charged on all non-DOE-funded work.

During the conduct of the project, the DOE contractor will invoice monthly for accumulated expenses (that is, funds spent) plus FAC, if applicable, against the project. It is the responsibility of the requesting commercial sponsor to pay that invoice.

DOE Relationships with its Performance-Based Contractors

DOE competitively awards management and operating (M&O) contracts to manage and operate DOE facilities. These M&O contractors are financially integrated with DOE and operate under strict DOE controls and guidelines. The DOE M&O performance-based contractor that operates ORNL is UT-Battelle, LLC, which is a distinct "arms-length" subsidiary of its parent organizations (the University of Tennessee and Battelle Memorial Institute). UT-Battelle, LLC is established exclusively to perform work assigned by DOE, including work which DOE accepts from private companies. A DOE M&O contractor performs a completely different role as a financially-integrated contractor of DOE versus a contractor who fulfills a Government-Owned-Contractor-Operated (GOCO) function within other federal agencies. This distinction is vital to understanding the role that DOE plays in technology research and applied development for the U.S. government and the domestic commercial sector.

DOE establishes the programmatic controls, oversight functions, customary reporting information, and general categories and procedures for the overhead cost structure for the M&O contractors. DOE approves all overhead rate categories.