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Submitted electronically to [GC-62@hq.doe.gov](mailto:GC-62@hq.doe.gov)

Office of the Assistant General Counsel for Technology Transfer  
and Intellectual Property  
U.S. Department of Energy  
1000 Independence Ave., SW  
Washington, DC 20585  
Attn: Technology Transfer Questions

Subject: Notice of Inquiry: Technology Transfer Practices at Department of Energy (DOE)  
Laboratories (73 FR 72036)

Dear Mr. Gottlieb:

This is in response to the Federal Register Notice of Inquiry: Technology Transfer Practices at Department of Energy (DOE) Laboratories issued on November 26, 2008 (73 FR 72036). The University of California is pleased to provide feedback on the technology transfer practices at DOE laboratories, with the aim of encouraging more efficient and effective technology partnerships between the DOE laboratories and non-profit institutions and industry. The University of California (UC) consists of 10 research-intensive campuses and is involved in the management of three DOE national laboratories. This provides UC with the ability to offer a unique perspective as both a manager of three DOE national laboratories and as an academic research collaborator/facility user in non-DOE funded research projects performed at DOE laboratory facilities. Faculty at many UC campuses often collaborate with researchers at the DOE laboratories to solve scientific endeavors, and many researchers at the Lawrence Berkeley National Laboratory (LBNL) have joint academic appointments at UC campuses.

UC is pleased for the opportunity to respond to the specific questions set out by DOE in its Notice of Inquiry cited above. The comments provided below are organized in a form that correlates directly with the questions posed by DOE in the Notice of Inquiry.

1. Existing and Other Agreements

i) Improvements to existing transactions

Several DOE laboratory management contracts employed across the DOE complex include academic research institutions as a critical member of the contractor management team. Such academic institutions have a wealth of knowledge and experience in obtaining sponsored research funding from a variety of sources and the administrative systems (and agreements) required to

effectively establish and sustain active scientific research programs. The current DOE technology transfer system contains barriers making it difficult for research staff at such laboratories to pursue opportunities to seek additional research funding from non-DOE sources to complement the DOE mission and research programs. If DOE could adapt its agreement structure to permit such DOE laboratories to operate in a manner more consistent with traditional research funding paradigms practiced within the academic environment, the laboratory could advance the scientific knowledge base for its research programs and leverage DOE funding at the same time.

The DOE technology partnering agreements referenced in the Notice of Inquiry are often overly prescriptive, creating a “take it or leave it” interaction with research partners interested in collaborating with the research staff at the DOE laboratories. This is a particular concern in multi-party, multi-disciplinary research projects that involve academic, industry, and federal participants where a certain amount of “give-and-take” is required to successfully negotiate a research agreement that meets the needs of parties with disparate administrative policies. The terms in the DOE partnering agreements could be less prescriptive by allowing the DOE laboratories greater discretion and authority in negotiating (and approving) the more problematic terms in these agreements (see (ii), below). This additional flexibility would assist the DOE laboratories in forging relationships in a timely manner with funding sponsors and subawardees hoping to collaborate with the laboratories on individual and multi-party research projects.

The DOE programs could be significantly enhanced by fostering and promoting technology partnering through a simplification of its procedures. Increased collaboration between the DOE laboratories and industry continues to be an important national goal and is one that receives considerable support from Congress. Increased work with other public agencies, including state agencies, and with non-profit foundations allows DOE new avenues to cooperate with diverse groups on common scientific missions. Overall, these projects provide an enormous opportunity for DOE to leverage its use of internal funds. Such leveraging is increasingly rewarded (and at times required) by Congress. DOE policies and practices that create barriers clearly interfere with achieving these U.S. research and development program policies and objectives to their maximum extent.

ii) Troublesome terms and conditions

- a) Indemnification – The general indemnity provision in the Work For Others (WFO) agreement template is viewed as one sided and risky for many industry and non-profit institutions providing research funds to the DOE laboratory. The standard practice within the university-industry collaborative research paradigm utilizes a mutual indemnification provision for sponsored research agreements. At the very minimum, DOE should consider a mutual indemnity provision which UC has found acceptable in working with its sponsors, and should consider relaxing or waiving indemnification provisions that require more financial protection than is already available under modern comparative negligence principles.
- b) Subawards to DOE laboratories – Federal agencies issue grants to universities and small businesses that contain terms and conditions requiring the flow-down of certain provisions to any subcontractors under the federal award. Many of the WFO arrangements involve subawards to the DOE laboratory from a non-profit institution (e.g., a research university) or

small business through their prime award under a federal grant. The DOE WFO terms offered to the non-profit or small business entity are generally inconsistent with the terms of the federal prime award and any required flow-down provisions. This results in a cumbersome and lengthy negotiation process as the non-profit or small business entity attempts to reconcile the WFO terms with their requirements under the prime award from another federal agency. These situations result in substantive delays to the timely start of the project which causes significant loss of scientific progress.

It is worth noting that the Federal Demonstration Partnership (FDP) issued a model subagreement that provides standard, predictable language addressing both federal and non-federal requirements of collaborative arrangements between parties in research awards (see [http://thefdp.org/Subawards\\_Forms.html](http://thefdp.org/Subawards_Forms.html)). We highly recommend that DOE adopt the FDP Model Subagreement to facilitate research collaborations between the parties and the timely acceptance of subawards under the WFO umbrella. This would eliminate the protracted negotiations and expedite the collaborative science required for a successful research project.

- c) Advance funding requirement – For non-federal sponsors, DOE requires a 90 day advance payment be maintained throughout the life of the project. In order to meet this requirement DOE laboratories must receive a 4 month advance on funding from the non-federal sponsor before the commencement of any scientific research at the DOE laboratory. This requirement is problematic for universities or small businesses issuing a subaward to the DOE laboratory, particularly under a federal prime award. Federal and state agency funding only reimburses the award recipient for costs incurred in the performance of the award, but do not provide funds for advance payments. In this situation, universities would have to identify a source of their own internal funding that can be tapped to comply with DOE regulations. Project start dates are delayed while university prime awardees grapple with the requirement to advance a sizeable amount of money to the DOE laboratory.

We recommend that DOE establish an advance funding model for subawards from non-profit and small business entities that better conforms to the funding model used in the prime awardee's agreement with its sponsor. Especially for prime awards from other federal agencies, DOE could modify its advance funding practices for any resulting subawards issued to a DOE laboratory without assuming any additional risk.

- d) Non-Profit Foundations – Non-profit foundations often provide funding opportunities for DOE laboratory researchers in scientific areas of common interest. Research institutions can submit research proposals to these foundations that then provide funds to universities and DOE laboratories for a public good in line with the foundation's mission, e.g., biosystems and health research. The Board of Directors of these foundations establish standard "grant terms" in line with their policies, and such terms are often incompatible with WFO terms. One of the most common inconsistencies is a limitation (or prohibition) on the application of foundation funds to the overhead costs incurred by the recipient institution. We recommend that DOE consider adopting a policy that permits DOE laboratories to accept work on a less than full cost recovery basis for non-profits and federal agencies that have published program rules which limit the recovery of overhead costs from the funds awarded.

e) Government Rights to Inventions – Many potential industry partners have expressed concerns over i) the contract terms addressing the federal government’s rights to a sponsor’s/user’s future inventions arising from a WFO or User Facility arrangement, ii) the U.S. Preference requirements and iii) government march-in rights imposed as a condition of a sponsor’s/user’s election of title to a future invention. For many sponsors, the risks associated with accepting these provisions make the WFO or User Facility arrangement unacceptable and thus elect not to collaborate with the DOE laboratory. Many federal agencies offer similar vehicles for collaboration that do not require such obligations from the sponsor/user. Given the lack of any specific statutory requirement for such provisions in a WFO/User Facility arrangement and the DOE’s interest in attracting a wider pool of potential industry collaborators, the DOE might reconsider the need for such requirements in the future.

iii) Offering other types of research agreements or mechanisms

Non-DOE sponsored research that complements the DOE laboratories’ mission also strengthens the core scientific competencies of the research staff at such facilities. While the WFO agreement is the primary vehicle for conducting non-DOE sponsored work at the DOE laboratories, this does not reflect the fundamental nature of the “partnership” or the mutual benefits derived by the DOE, the laboratories, and the sponsor. In addition, the inherent framework of the WFO agreement does not accommodate the underlying collaborative nature of the “partnership” between the DOE and the sponsor but appears to represent a “work for hire” framework whereby the laboratory staff only serve as a “pair of hands” with little creative input into the design and implementation of the project. The WFO arrangement fails to sufficiently capture and recognize the outstanding work performed at the DOE laboratories under a truly collaborative relationship with non-profits and industry. The DOE should consider a new category of agreement that captures and reflects a collaborative effort between the DOE laboratories and a non-profit or industry sponsor – the “Work With Others” agreement.

DOE should also consider developing a ‘sponsored research’ agreement that recognizes that a DOE laboratory can seek funds based upon its own ideas submitted through a proposal to a potential sponsor with the result being a grant, cooperative agreement or other sponsored research vehicle as an alternative to performing contract work for the sponsor. Acceptance of standard published grant terms or using the DOE contractor’s standard contract terms that are in alignment with the DOE contract as the starting position for the negotiation of the ‘sponsored research’ agreement would greatly aid DOE in its ability to leverage DOE funds with other potential non-federal funding sources.

## 2. Best Practices

The Federal Demonstration Partnership has established terms and conditions that apply to most federal awards. When another university subawards federal research funds to a UC campus, UC accepts the FDP Research Subagreement terms. This greatly simplifies our interactions with other universities who welcome the ability to utilize these FDP terms rather than the lengthy negotiations that result from the

forced use of the WFO model. As discussed earlier, we strongly recommend that DOE adopt the FDP protocols and model agreements when receiving or issuing subawards for sponsored research.

When our campuses work with industry, UC utilizes a mutually agreeable general indemnification provision and does not require other indemnifications such as Product Liability, Indemnification and Patent and Copyright Indemnification contained in the DOE WFO, CRADA and User agreements. We recommend that DOE replace its current multi-faceted indemnification approach with a simple general indemnification provision as employed by most U.S.-based universities.

The purpose of the DOE User program is to allow rapid access to DOE's unique facilities. UC believes that while DOE has simplified the User Agreement by standardization, the agreement remains a long, verbose document that requires time-consuming legal review by the user. We encourage DOE to consider the use of National Institute of Standards and Technology's (NIST) abbreviated Facility Use Agreements (see the Sample Forms at <http://patapsc.nist.gov/ts/220/external/index.htm>) which does not require the same intensive legal review and facilitates the timely access to facilities by the user.

Finally, in the area of technology licensing, a number of institutions, including the University of California, have endorsed the concepts described in a document called "In the Public Interest: Nine Points to Consider in Licensing University Technology" ([http://www.autm.net/AM/Template.cfm?Section=Nine\\_Points\\_to\\_Consider](http://www.autm.net/AM/Template.cfm?Section=Nine_Points_to_Consider)). This document expresses certain core values that would be applicable to the licensing activities at DOE laboratories, too. We recommend that DOE consider adopting these principles for application to the technology transfer licensing activities conducted throughout the national laboratory complex.

### 3. U.S. Competitiveness

While UC supports the goals of the U.S. Competitiveness provision (i.e., fostering a strong U.S. economy), DOE's implementation of this provision creates certain challenges when attempting to persuade a large pool of potential non-federal research partners to collaborate on research projects with DOE laboratories. These requirements can also inhibit UC's efforts to include DOE laboratories in multi-party collaborations, particularly those involving industrial partners. DOE's current implementation of the U.S. Competitiveness provision has the unintended consequence of inhibiting research and any resulting innovation that may aid the U.S. economy by limiting the availability of highly desirable research partnerships. The Public Health Service, Army, Bureau of Reclamation, and Environmental Protection Agency CRADAs do not contain a requirement for U.S. Competitiveness. It is highly suggested that DOE review other government CRADAs and reassess the need for and the nature of such provisions.

### 4. The Intellectual Property Rights Disposition in Work For Others (WFO) Agreements

University policies generally stipulate that universities own inventions made by their employees, in large part to preserve important academic objectives. These objectives include ensuring i) the ability to publish the results of its research in a timely manner; ii) any resulting inventions will be available for future research and educational purposes; and iii) any commercial use is diligently advanced for the ultimate

benefit of the public (timely due diligence). Universities preserve these academic objectives while meeting the intellectual property needs of industry sponsors through the offer of a first right to negotiate a commercial license to any resulting inventions.

UC finds itself in a unique position as it is on both sides of WFO arrangements. As a manager of a DOE laboratory, the University must give up title to inventions in a lab-administered WFO arrangement, which can prevent it from meeting academic and public benefit objectives. But as a “sponsor” in a WFO arrangement, the University has the opportunity to own inventions made by DOE researchers. However, it is not the practice of universities to take title to the inventions of other entities, and we do not see this as a critical advantage (except where we have obligations to a “prime” sponsor of our own, though UC ownership of DOE inventions is not generally necessary in order to meet these obligations).

The current DOE policy of allowing sponsors to hold title to inventions made by DOE researchers in the performance of a WFO project diverges from the usual application of U.S. Patent laws as well as most other DOE partnering mechanisms. We recommend that DOE re-evaluate its policy in the WFO area and consider allowing its laboratories (the managing contractor) to retain title to inventions made by its employees, meeting sponsor interests through an option or a first right to negotiate an exclusive or non-exclusive license. If DOE needs to provide authority for invention title to follow inventorship under U.S. Patent law instead of being silent on this matter in view of DOE’s constitutive statutes, then a provision could be added to the standard WFO agreement articulating this approach. This provision could also provide an appropriate advance waiver that supports this approach. We also recommend that the details of such license not be specified by policy in advance (such as exclusive vs. non-exclusive, or all fields vs. specific fields in the sponsor’s business area), but be subject to some discretion to best meet the needs of varied sponsors and technologies while supporting the public service mission of the DOE laboratories.

## 5. Negotiable or Non-negotiable User Agreements

UC believes the new DOE user agreements are an improvement, but would encourage DOE as previously mentioned, to simplify them as modeled by the NIST Facility Use Agreements (see #2 above).

## 6. Other

A successful research and technology transfer program is predicated on the ability to collaborate with others, including bringing funds into the laboratory and sending subawards out. A challenge at the DOE Laboratories is that subawards must include the government procurement terms and conditions. These agreements could be put in place much more easily if the DOE could devise a more flexible mechanism that acknowledges requirements imposed by the source of funds in the case of nonfederal sponsors or flow-down provisions from the prime award in the case of federal or foundation grants. In addition, DOE’s use of federal procurement terms and conditions when issuing subawards to non-DOE laboratory researchers further exacerbates the difficulties in negotiating a timely and acceptable subaward agreement with the subawardee as the procurement process is designed for the acquisition of goods and commercial services and not the conduct of collaborative research projects. We recommend that DOE adopt a different funding vehicle for issuing subawards - outside of the procurement area - that better recognizes and accommodates

the collaborative nature and the scientific perspective (versus the procurement perspective) of the relationship between the DOE laboratory and the subawardee.

The University of California appreciates this opportunity to provide input on DOE's technology transfer and partnering practices. We fully support the DOE in its review of its technology transfer partnering mechanisms utilized by DOE laboratories and facilities, and appreciate the opportunity to help identify ways to make such mechanisms stronger and more effective.

Sincerely,



William T. Tucker  
Executive Director  
Research Administration and  
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cc: Executive Vice President Darling  
Vice President Beckwith  
Executive Director Nelson  
Director Falle  
Director Streitz