

**Intellectual Property Issues:  
A proposed strategy to facilitate partnerships among industry, DOE, and NASULGC  
affiliates**

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**Background.** Historically, the Department of Energy has engaged the research capacity of many universities through a variety of DOE research programs, largely drawing on the engineering and physics research capacities of institutions. I suspect, although I have no data of support, that Land Grant institutions have not been major participants in such research, largely because of their emphasis on biological research. The data dump from EERE, however, may provide definitive answers. Regardless, new opportunities may be developed as renewable energy programs at DOE look to biobased research with one of the strategic goals of agricultural biomass conversion for alternative fuels. Thus, there is likely to be a learning curve for NASULGC affiliates as they seek “new” partnerships with EERE of DOE. As currently envisioned, a major reason for the survey associated with Project 4 will be to determine best / worst practices in securing funding through solicitations.

**Issue:** The issue of intellectual property protection and licensing has become somewhat troublesome in recent years, but generally only under the unusual circumstances of consortia that include federal laboratories (which, within DOE are largely Government Owned, Contractor Operated facilities (GOCO)), industrial firms, and universities.

Typically, the issue arises when a university becomes a subcontractor of a private sector industrial company in which DOE and industry share costs of conducting the research. Intellectual property that results from research funded in part by federal funds is subject to the Bayh-Dole provisions of federal law in which the subcontractor can retain title to such inventions, and seek private sector licensees to commercialize the invention. Bayh-Dole rights hold whether the research institution (i.e., university) is the primary contractor, or a sub contractor. Industry has balked at the 3-way partnership, because there is no assurance that technologies developed by the university, using DOE and industry funds, will be made available to the industry partner that contributed the funds. In fact, there is concern that the university might license the technology to a competitor of the industrial firm that supplied the funds. Ironically, under this scenario, the Bayh-Dole rights have become a barrier to effective technology development and adoption.

**Solution:** The Bayh-Dole act, however, authorizes adjustments to IP rights under “exceptional circumstances” that must be analyzed --- for the specifics of the research program --- and presented to the Secretary of Commerce for comment (35 U.S.C. 202(a)(ii)) . Based on my conversations with several program managers and attorneys at DOE, perhaps the best example of this is found in the Solid State Energy Conversion Alliance (SECA) in the Fossil Energy

research program.

On November 30, 2000, the Department of Energy executed a determination titled “Exceptional Circumstance Determination for Inventions Arising Under SECA”. I have attached it here for further reference. You will note that the analysis is substantial, and very specific to the technologies anticipated from the project. Consequently, disposition of rights to subject inventions made under subsequent SECA awards was subject to the terms of this determination.

Below, I have described the terms of the awards, drawing largely from the actual wording in the Agreements.

Briefly, the Recipient of the funds (university) must offer to each of the SECA Industrial Teams or individual Team members the first option to enter into a non-exclusive license upon terms that are reasonable under the circumstances, including royalties, for elected subject inventions developed under the SECA program. Specific to SECA, the field of use of the license could be limited to solid oxide fuel cell applications, although greater rights could be offered at the discretion of the invention owner. The offer must be held open for at least one year after the U.S. patent issues and the invention owner must agree to negotiate in good faith with any and all Industrial Teams or Team members that indicate a desire to obtain at least a non-exclusive license. Exclusive licensing may be considered if only one Industrial Team or Team member expresses an interest in licensing the invention. Partially exclusive licenses in a defined field of use may be granted to an Industrial Team, as long as doing so would not preclude any other Industrial Team that indicates a desire to license the invention from being granted at least a non-exclusive license. However, the Government will not require the patent owner to grant any exclusive or partially exclusive licenses. The Recipient must enter into good faith negotiations with the individual Industrial Team or Team member. In the event the parties to the negotiation cannot reach agreement on the terms of the license, as set forth above, within nine months of initiating good faith negotiations, the Industrial Team Members shall have the right of a third party beneficiary to maintain an action in a court of competent jurisdiction to force licensing on reasonable terms and conditions. Any assignment of the invention must be made subject to these requirements. DOE does not require the licensing of any background patents owned by the invention owner. However, the above described obligation to license subject inventions must be flowed down to any subaward in which research, development or demonstration is anticipated to be performed. Under 37 CFR 401.4, the Recipient has a right to appeal the imposition of this determination.

**Recommendation:** I propose that this wording be provided to NASULGC affiliates as a part of the survey to determine whether they are likely to accept such terms. I am encouraged that they will, given that 9 of the 10 universities participating in SECA are NASULGC members (Montana State University – Bozeman, MT; Texas A&M University – College Station, TX; University of Florida – Gainesville, FL; University of Illinois – Chicago, IL; University of Missouri – Rolla, MO; University of Pittsburgh – Pittsburgh, PA; University of Utah – Salt Lake City, UT; University of Washington – Seattle, WA; Virginia Tech – Blacksburg, VA).