



February 27, 2009

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

Subject: Questions Concerning Technology Transfer Practices at DOE Laboratories (Federal Register/Vol. 73, No. 229/ November 26, 2008 /Notices)

Dear Mr. Gottlieb,

I appreciate the opportunity to comment on the questions published in the Federal Register. It's comforting to know that DOE strives to understand and improve industry's opinion of its commercialization efforts to maximize engagement and success for all parties. As CEO of a venture-backed start up company that has licensed technology both from the National Renewable Energy Laboratory (NREL) and Oak Ridge National Laboratory (NREL), and having benefited from CRADA work at NREL, I find the questions astute. My prior experience includes in-licensing technologies and spin-outs from universities, spinning technologies out of large corporations and some attempts at spin-outs from DOE labs and facilities. When compared to the other efforts, the DOE activities were more challenging and time consuming.

To help improve this process and experience for future entrepreneurs,, I'd like to respond to a few of the specific questions listed in the register. In question 2, you solicit ideas for "best practices" from other institutions. Within university licensing, intra-institutional agreements are common practice and straight forward. This enables a commercial partner, as potential licensee, to have a single point of contact in rolling-up technologies and negotiating a single set of terms. In these cases, the institutions have previously negotiated their share of proceeds between/among them. Our company needed to license technology from two DOE laboratories and no such intra-institutional agreement was available us at that time. Therefore, the negotiations took longer and required double the effort, an increased barrier to commercialization. Perhaps DOE could consider adopting a template and guidelines to enable laboratories to roll-up IP and provide a single point of contact for negotiations. This could apply to lab-lab IP as well as lab-university, as universities often also receive DOE funding.

Additionally, in response to question 2, I would recommend that DOE review NIH and other university or consortium sites in considering an IP portal to aggregate technologies in a particular field. My understanding is that it is DOE policy to award several programs at multiple institutions to solve a particular problem. As a result, it is likely that related or complementary

intellectual property is located throughout the DOE system and within universities. Given the necessity of a multi-disciplinary approach to address today's increasingly complex energy-related and scientific programs, it's likely a potential commercial partner would want to identify these pieces of the puzzle and secure multiple licenses to build a defensible IP base. This is of particular value to DOE in that it could enable successful commercialization of pieces of technology that might otherwise go unlicensed. To enable this, DOE might consider a portal that tracks a particular program and theme (e.g. fuel cells) and list award programs and key contacts at each institution. If such a portal was user-friendly, searchable, and well marketed, I believe DOE could greatly improve its technology transfer success rates. Additionally, while I know EERE has begun to host venture-related activities, DOE might consider "Program Days" by sector (e.g. wind, smart grid, storage) allowing the pieces of the puzzle to be presented in a consolidated fashion.

Another best practice utilized by universities in my experience includes key terms that better enable a small company to license and commercialize early stage intellectual property. Within the license agreement, it is my understanding that the DOE prefers to limit field of use to a narrow interpretation to enable multiple licensing opportunities for the same IP. By contrast, many universities grant exclusive license to all fields of use for particular technologies where that makes sense for the application. This is critical, not only to provide adequate competitive protection to the start-up or licensee, but also in that it is conducive to the platform nature and increasing complexities in company financing and commercialization. In the case of larger, most established companies where IP could be an add-on to an established technology, a non-exclusive license could be adequate for purposes of commercialization. I would recommend DOE consider providing greater flexibility to the lab managers as well as local field offices, with a bias toward supporting exclusive licenses where possible. Another problematic clause in DOE IP agreements is prohibiting the company from assigning IP at the time of sale of that company. This clause could limit the "exits" for venture-backed companies and thereby limit a licensee's ability to raise capital. While I can appreciate and support DOE's desire to protect technologies related to national security, would DOE consider language stating that a license is assignable with the exception of entities in an "unfriendly country" or for technologies related to national security rather than the default being that no assignability is possible? This could greatly speed negotiations and improve the desired outcomes and ultimate large scale transfer of technologies to global market leaders, benefiting both U.S. and international persons.

A final consideration for DOE would be to recommend or support laboratories' engagement of third-party, experienced securities transaction and IP lawyers to make negotiations more efficient with a higher probability of execution. It seems much of the legal expertise in the laboratories is dedicated to and experience with contract management, not transactions and licensing. In our case, NREL elected to take equity as part of our license agreement, which is a wonderful show of support from the laboratory and aligns key stakeholders in the future success of the company. However, lab counsel had no direct experience in the securities issues associated with our transaction which extended the timelines for executing the license and moving the technology toward the marketplace.

In conclusion, I believe the DOE and its associated laboratories represent some of the country's last remaining sources of true innovation. Under that belief, I'm delighted to see that DOE is seeking to improve its methods of identifying intellectual property for license, revisiting license

terms and potentially enlisting help of more qualified counsel to reduce barrier to entry for commercialization. Thank you again for the opportunity to comment on such material issues.

Sincerely,

A handwritten signature in black ink, appearing to be 'Scott Faris', written over a horizontal line.

Scott Faris

Chief Executive Officer
Planar Energy Devices