## STATEMENT OF CONSIDERATIONS

CLASS PATENT WAIVER OF U.S. AND FOREIGN PATENT RIGHTS IN INVENTIONS MADE BY INFORMAL COLLABORATORS WORKING WITH EMPLOYEES OF OR CONTRACTORS FOR THE NATIONAL ENERGY TECHNOLOGY LABORATORY; W(C)2021-002

As a Government-Owned, Government-Operated (GOGO) National Laboratory under the Department of Energy's (DOE) Office of Fossil Energy and Carbon Management (FECM), the National Energy Technology Laboratory (NETL) supports a diverse portfolio of research that advances the science needed for revolutionary energy and environmental sustainability breakthroughs. The National Energy Technology Laboratory supports DOE's mission through research activities involving the following Core Competencies: Computational Science and Engineering; Materials Engineering and Manufacturing; Geological and Environmental Systems; Energy Conversion Engineering; and Strategic Systems Analysis and Engineering.

NETL is an important national resource capable of providing significant contributions to the development of new products and processes for an environmentally sustainable and prosperous energy future. Such developments will support job creation, skill enhancement of the U.S. labor force, and improved U.S. competitiveness. Because of NETL's unique facilities and expertise, the public frequently engages with the laboratory's researchers and facilities via a number of agreement types, including Cooperative Research and Development Agreements (CRADAs), Strategic Partnership Projects (SPPs), and Memorandums of Understanding (MOUs). In the future, NETL may add User Agreements (UAs) to its portfolio of agreement types. In addition to employing an extensive Federal and contractor research staff, NETL hosts visiting researchers who work under a formal agreement or arrangement with NETL, such as a CRADA, SPP, Oak Ridge Institute for Science and Education (ORISE) appointment or subcontract. Such agreements specify the terms under which the researcher works at NETL's facilities, including safety and security, export control, protection of proprietary information, and rights to Intellectual Property. Thus, in most situations when NETL researchers collaborate with outside entities, intellectual property rights are expressly addressed. NETL researchers also often collaborate informally with non-Federal researchers ("Informal Collaborator"), such as through informal research projects, attendance at scientific and technical meetings, interactions with private sector colleagues, or by seeking out information from private sector sources. When NETL researchers enter into an informal collaboration with a non-Federal researcher, no formal agreement is in place

<sup>&</sup>lt;sup>1</sup> The agreements explicitly provide whether DOE or the visiting scientists will own rights to any inventions.

between NETL and said non-Federal researcher to specify which entity or person retains rights to resulting inventions, making it difficult to determine ownership of said inventions.

## Section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. § 5908)

Section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (Section 9) provides that title to any inventions conceived or first actually reduced to practice under any DOE "contract" vests in the United States, except where the Bavh-Dole Act<sup>2</sup> provides otherwise for nonprofit organizations or small business firms, or where DOE waives title to inventions to the inventor. As used in Section 9, "contract" means "any contract, grant, agreement, understanding, or other arrangement which includes research, development, or demonstration work." [Emphasis added.] Without clear legislative history or case law that defines the terms, "understandings" and "other arrangements," these terms can be interpreted quite broadly, casting a cloud on rights to inventions in a variety of circumstances. Arguably, Section 9 applies to inventions that arise out of a long-term collaborative relationship between a NETL "Employee" and a non-Federal researcher. As used herein, "Employee" includes employees of NETL as well as all varieties of contractor and subcontractors working for NETL. In the extreme, Section 9 may even apply when an invention results from a mere conversation between such a researcher and a NETL Employee. Absent guiding regulations or rules, the interpretation and application of Section 9 to informal collaborations has been inconsistent. Accordingly, a class patent waiver is needed to clarify rights to inventions in certain specific situations as discussed in this Statement of Considerations.

## <u>Class Patent Waiver of Subject Inventions Made During Informal</u> <u>Collaborations</u>

DOE may grant an advance patent waiver for a particular entity or a class patent waiver for a class of similarly situated entities. A class patent waiver is appropriate when all members of a particular class would likely qualify for an advance patent waiver. As demonstrated below, "Informal Collaborators" constitute a class of entities in which all of the members would likely qualify for an advance patent waiver.

This class patent waiver is directed to the class of inventions which comprises subject inventions made by "Informal Collaborators" jointly with one or more NETL Employee(s)

<sup>&</sup>lt;sup>2</sup>35 U.S.C. § 200 et seq.

during an informal collaboration and waives rights<sup>3</sup> to such class of inventions to the "Informal Collaborator", with the Department retaining an undivided interest in the invention as a result of the NETL Employee's inventive contribution. As used herein, "Informal Collaborator" means a third-party person who collaborates with a NETL Employee(s) and makes a joint invention with the NETL Employee(s) without any official contractual agreement in place. The term does not include third-party researchers that visit a NETL facility to perform research on site under a CRADA, SPP or other such agreement that specifies rights to resulting inventions.

Specifically excluded from this class patent waiver are: (1) inventions made solely by an Informal Collaborator(s); (2) inventions which fall under Section 152 of the Atomic Energy Act; (3) inventions covered by an Exceptional Circumstance Determination; and (4) inventions covered by international or other agreements.

The objectives of DOE's patent waiver regulations set forth In 10 CFR Part 784 have been examined and are discussed below. As a primary consideration, the proposed patent waiver makes the benefits of the energy research, development and demonstration program available to the public in the shortest practicable time and promotes commercial utilization of inventions. Without this patent waiver, an identified patent waiver petition would have to be submitted to DOE for approval each time an invention is jointly made by a NETL Employee and an Informal Collaborator. The patent waiver approval process is often a time-consuming process for both the petitioner and DOE. By having rights vest with the Informal Collaborator in advance, NETL and the Informal Collaborator can agree more quickly on how the joint Invention will be protected and commercialized. Moreover, recent changes to U.S. patent law have made rapid filing of patent applications of greater importance; therefore, this patent waiver enhances the protection of valuable intellectual property (IP) rights and increases the licensing potential of the IP.

The proposed patent waiver also serves to encourage participation by private persons In DOE's energy research, development, and demonstration programs. In order to advance the fundamental R&D mission of DOE, researchers from NETL (like most scientists and engineers) cooperate both informally and formally with a wide range of entities and individuals at various organizations, both in the U.S. and around the world. This patent

<sup>&</sup>lt;sup>3</sup> The term, "rights" used herein means the undivided rights of the informal collaborator. Under patent law and unless otherwise agreed to, joint inventors have equal, undivided rights to "make, use, offer to sell, or sell the patented Invention within the United States, or Import the patented invention Into the United States, without the consent of and without accounting to the other owners. "35 USC § 262.

waiver thus promotes an open and interactive scientific environment by removing uncertainty as to rights to any joint inventions resulting from an informal collaboration.

This patent waiver also enhances commercialization of joint inventions because the patent waiver permits the parties who own the rights to make the business decisions as to how to best commercialize the technology. For example, if the Informal Collaborator has an established commercial position, then it may be expeditious to grant the Informal Collaborator an exclusive license in NETL's undivided rights.<sup>4</sup> Absent this patent waiver, commercialization efforts are likely hampered when an Informal Collaborator's rights are vested in DOE, which may lack the interest or acumen to optimally commercialize the invention.

In accordance with applicable federal regulations, inventions covered by this class patent waiver are subject to U.S. preference, march-in provisions, and the retention by the Government of a worldwide, nonexclusive, nontransferable, irrevocable, paid-up license to practice for or on behalf of the Government. It is believed that these retained rights and other requirements represent sufficient consideration to the Government in exchange for this patent waiver, given the typical absence of DOE funding or use of other Government resources in such informal arrangements.

As stated above, this patent waiver only applies to inventions jointly made by Informal Collaborators and a NETL Employee(s). Third-party researchers visiting or working at NETL who have or should have executed a formal agreement addressing Intellectual property rights-are categorically excluded from the benefits of this class patent waiver. Accordingly, the patent waiver of rights to the Informal Collaborator shall be automatic and granted without a request or petition by the Informal Collaborator, upon a determination from DOE field patent counsel (based on information submitted by NETL) that:

(1) The work under which the invention arose is not covered by a contract, agreement or arrangement falling under DOE's or other federal statutory patent policy;<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> As stated earlier, this class waiver waives the Informal collaborator's undivided rights in the subject inventions to the Informal Collaborator. If there is an employment or other agreement requiring the Informal Collaborator to assign rights, then such further disposition of rights is not impacted by this waiver, except that any such assignment is subject to the retention of Government rights and other obligations set forth herein.

<sup>&</sup>lt;sup>5</sup> e.g., SPP, CRADA, User Agreement, or agreements under 10 CFR 600 or 48 CFR, Federal Acquisition Regulations.

- (2) The work under which the invention arose is not covered by an international or other agreement;
- (3) The Subject Invention is not covered by an Exceptional Circumstance Determination; and
- (4) At least one NETL Employee is a joint inventor.

## Conclusion

The disposition of patent rights described herein resolves a long standing uncertainty as to rights in inventions arising out of informal collaborations between NETL Employees and non-Federal parties, and will best encourage the utilization and further development of technology developed at NETL. Accordingly, in view of the Congressional and statutory objectives to be obtained and the factors to be considered under DOE's Statutory Patent Waiver Policy, all of which have been considered, it is determined that this Class Patent Waiver will best serve the interests of the United States and the general public. I therefore recommend that the patent waiver be granted.

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Date: 2/15/2022

Date: 2/15/2022

Pursuant to the authority provided in Section 152 of the Atomic Energy Act of 1954, as amended (42U.S.C. § 2182), Section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974, as amended (42 U.S.C. § 5908), and the implementing regulations promulgated there under for waivers of patent rights, it is concluded that it is in the best interests of the United States and the general public to grant a waiver of patent rights to the class described herein. Therefore, it is ordered that a waiver of U.S. and foreign patent rights to the class of inventors described in the foregoing Statement of Considerations is hereby granted. The patent waiver is limited to inventions which are conceived or first actually reduced to practice in the course of or under an informal collaboration and is subject to all the limitations, terms, and conditions set forth in the foregoing Statement of Considerations. The Assistant General Counsel for Technology Transfer and Intellectual Property shall be responsible for issuing instructions for implementation of this patent waiver in accordance with DOE regulations for the waiver of patent rights.

CONCURRENCE:	APPROVAL:
Brian J. Anderson, Ph.D. Director	Brian J. Lally Assistant General Counsel for
National Energy Technology Laboratory	Technology, Transfer, and Intellectual Property, GC-62
Date: February 15, 2022	Date: