Introduction

Scientific advancements emanating from research can drive the global marketplace, strengthen U.S. competitiveness, and support economic development in our communities. Breakthrough technologies and scientific innovation often result in intellectual property (IP) that may support businesses and the transition of science to the marketplace. This IP is captured in patents and copyrights, and the U.S. Department of Energy (DOE) national laboratories work with companies to transfer this IP so that products, services, and consumer goods are developed to benefit the public. License agreements are the legal instruments by which the national laboratories grant access to use their IP. Pacific Northwest National Laboratory (PNNL) has a team of technology commercialization professionals committed to transferring technologies to the private sector.

PNNL, like most DOE national laboratories, is a government-owned, contractor-operated facility. It is owned by DOE but managed by Battelle under a management and operating (M&O) contract. Among many other things, this M&O contract outlines the requirements that allow Battelle to obtain title to inventions and license and transfer technologies derived at PNNL. While the license agreements themselves are between Battelle (licensor) and the licensing company (licensee), various required DOE provisions must be included.

Although every license agreement may contain unique elements, most include several common principles, phrases, and requirements. The following provides information regarding these required terms and what you can expect to see in a license agreement with PNNL.

Basic Licensing Principles

Licensing technologies fulfills a part of DOE’s mission to transfer government-funded technologies to the private sector, while protecting taxpayers’ interests. Contractor personnel, such as commercialization managers at PNNL, use prudent business judgment and move technology from the Laboratory to industry effectively and responsibly. Further, we are required to recover a fair return on U.S. taxpayer’s investment into Laboratory technologies by including reasonable commercial fees and royalties in our commercial licenses.

We understand that licensees must make substantial investments in these technologies to take them to market, and we aim to structure arrangements to obtain benefits for both parties. An understanding of the potential licensee’s business, their proposed use of the technology, and their ability to move the technology forward are important in qualifying a party for a license. Often, a written document, such as a business plan, may be requested to obtain this information.

When multiple parties come forward with interest in a particular technology, those parties that most closely align with PNNL’s strategy for licensing will be selected. Criteria typically considered to qualify a licensee include the following:

- technology development capabilities
- technical and financial resources
- management experience and commitment
- experience in relevant markets.
Assuming all factors are equal, the laws governing the disposition of inventions developed using federal funds also provide preferential consideration to U.S. small businesses that demonstrate the capacity and commitment to commercialize the technology.

**Basic License Requirements**

All technologies created with government funding are subject to various government rights and protections. All license agreements must reserve the government’s paid-up, worldwide, royalty-free, nonexclusive license to use the technology by or on behalf of the U.S. government. License agreements also must include language that provides for compliance with other regulations, such as export control and substantial U.S. manufacturing. Other clauses that limit the government’s liability and indemnify the government for the licensee’s actions must also be included. Diligence milestones, royalty payments, and a licensing fee are typically required. At PNNL, we also must include specific requirements defined in our M&O contract. Hence, a license agreement from PNNL may not be the same as license agreements from other DOE national laboratories.

**License Types**

We offer a variety of license agreements at PNNL, including the following:

- **Patent license**: A license to commercially practice the inventions as claimed in one or more U.S. or foreign, pending, or issued patents.

- **Software site license**: A license to use a software program by the licensee internally and not for commercial purposes (e.g., resell or consulting services).

- **Software marketing license**: A license to access software code for commercial purposes (e.g., resell, incorporation into other systems, or consulting services).

- **Option**: An option to negotiate a full license within a specified period (i.e., the term of the option). An option prevents PNNL from licensing exclusive rights to others during the option period.

- **Research license**: Allows access to a technology for research purposes (i.e., noncommercial purposes).

- **Trial installation agreement**: Allows access to software code for a limited period for testing and evaluation.

- **Exploratory license**: Combination of a six-month research license and a six-month nonexclusive option for a fixed fee and with fixed terms. This simple, two-page license can be executed within a few weeks and is a fast and easy way to access PNNL technology for evaluation purposes.

**Licensing Language**

The terms of each license agreement vary based upon various factors, such as the market value of each technology and the common licensing practices of the relevant industrial sector. However, some of the more common terms are described below:

- **Monetary Terms** Licenses typically include at least these four monetary terms:
• License issue fee, due upon execution of the agreement
• Running royalty, most commonly based on a percentage of sales
• Minimum annual royalties or milestone payments
• Patent cost reimbursements, which may include expenses for patent filing, patent prosecution, and maintenance, and governmental patent office fees (e.g., filing fees, issue fees, maintenance fees, and annuities).

Note: Battelle can consider equity ownership in a licensee to satisfy some of these obligations. However, certain limitations apply, and equity ownership may not always be an option. Battelle must operate free of any appearance of a conflict of interest, which must be addressed in any equity term.

Territory: Licenses typically cover those countries for which patents have been filed, which will be listed. PNNL typically does not file for foreign patent rights unless requested and paid for by the licensee. For copyrights, the licenses are usually worldwide.

Performance Requirements: Licenses also typically contain performance requirements for the licensee. These are mutually agreed upon milestones that reflect the licensee's expected progress toward developing the technology into a product and/or service. These requirements help ensure that technologies developed at DOE’s laboratories are advanced and that the public ultimately enjoys the benefits from products or services that include the technology.

Field of Use: Licenses are often limited by fields of use. This means the technology is licensed according to the licensee’s intended use or application or anticipated market. Technology transfer offices work closely with prospective licensees to determine a field of use that supports the company's business plan and commercialization strategy. Limitations as to geographic territories also may be used to meet the needs of the parties.

Exclusivity: Licenses may be exclusive or nonexclusive. In either case, the license will normally be granted for a specific field of use. An invention may be licensed exclusively to more than one company in clearly separate fields of use.

Licensing Requirements for Federally Funded Inventions

Requirement for Manufacture in the United States for U.S. Products: Under the Bayh-Dole Act, products produced under exclusive licenses to IP developed with federal funding must be substantially manufactured in the United States if they are to be sold in the United States. The intent of this requirement is to assure that the taxpayers’ investment in research and development at federal laboratories and facilities benefits the United States through the generation of employment opportunities. Waivers may be granted by the funding agency if domestic manufacture of the product is not commercially feasible or if attempts to find a U.S. manufacturer have been unsuccessful or if other factors demonstrate a benefit to the U.S. economy sufficient to offset this requirement.

Government March-In Rights: Under limited circumstances, generally relating to an urgent national need and a licensee’s inability to commercialize an invention to meet that need, the U.S. Government retains the right to grant a license to a technology developed under federal funding even if such technology is exclusively licensed to another party. Note, however, that 35 U.S.C. § 203 provides that an exclusive licensee will first be provided the right to sublicense.
the exclusively licensed technology prior to the government exercising its march-in-rights. While this required provision may be a source of concern to prospective licensees, in practice the U.S. Government has never exercised this right.

**Government Use Rights:** All licenses of IP developed under federal funding must grant the U.S. Government nonexclusive rights to use such IP for government purposes. This means that if a licensee of an invention sells a patent-protected product to the U.S. government or is contracted by the U.S. Government to perform a service that requires the use of the invention, the licensee is not obligated to pay royalties on such sales or services. In addition, a company that is contracted by the U.S. Government to supply a product or a service that requires the use of a federally funded invention may use the invention without an obligation to have a license.

### Licensing Requirements Based on DOE Policies

**Fairness of Opportunity:** It is DOE policy to ensure widespread public notice of opportunities to license inventions developed with DOE funding. This requirement may be satisfied in several ways. Demonstration of this notice must take place before any exclusive licensing can occur.

**U.S. Competitiveness:** DOE requires its laboratories and facilities to consider U.S. competitiveness in all license agreements. The requirement for U.S. competitiveness can be satisfied by substantially manufacturing products in the United States or obtaining a waiver by demonstrating the presence of a business unit in the United States and significant economic and technical benefit to the United States from the transaction. Several factors are used to determine whether a licensee meets the U.S. competitiveness requirement, and whether a waiver is appropriate. If the U.S. competitiveness requirement will not be met, DOE approval must be obtained to proceed with the license agreement.

**Export Control:** All DOE laboratories and facilities must include an export control clause in their license agreements. This clause simply states that the licensee agrees to comply with the export control laws designed to protect items and information important to the United States. Additionally, new DOE rules require PNNL to vet all potential licensees through an export control review to ensure there is no transfer of sensitive technologies to certain countries.

### Sample License Terms

Our sample license is for illustrational and discussion purposes only. The sample license is intended to provide prospective licensees with an example of the basic provisions that may be included in a nonexclusive license with Battelle. An actual license would be specifically tailored for the facts and circumstances of the individual arrangement.

**Preamble**

The first paragraph of the contract simply identifies the parties to the agreement, the nature of the parties, and the effective date of the agreement.
**Background**

Sometimes called the Recitals, and in some agreements beginning with the word “Whereas,” the Background clause introduces the nature of the contractual relationship and does not contain legally binding terms.

**Article 1: Definitions**

To streamline the language of the license, important terms are defined at the beginning. Defined terms in common contract practice are typed with capitalized letters. These terms are then used throughout the remainder of the agreement.

**Article 2: License**

The grant clause specifies the rights transferred to the licensee. A licensee should consider whether the rights provided under the grant clause support its business model and the anticipated use of the licensed patents. The grant of sublicensing rights is generally only granted in exclusive licenses. The grant in the sample license includes all rights protected by the licensed patents (e.g., make and have made) but may be limited to a field of use. Some agreements may grant only a subset of these rights. For example, a research-only license may grant only the right to make and to use licensed products for internal research purposes.

**Articles 3, 4, and 5: Consideration, Minimum Royalties, and Diligence**

Articles 3, 4, and 5 describe the licensee’s obligations under the license agreement. Typically, these obligations include financial obligations (e.g., license issue fee, minimum royalties, running royalties, and patent reimbursement (discussed in Article 12)) as well as diligence, and obligations to meet milestones defined in the license agreement. Article 3 notes that the licensee will not owe royalties for licensed products purchased by the U.S. government, because the U.S. government already has access to the technology through its government license rights. The licensee therefore agrees to reduce the price to the U.S. government by the amount of the royalty it would otherwise owe. This also applies to sales to entities contracted by the U.S. government to provide such products or services.

**Article 6: U.S. Manufacturing**

As described above, DOE requires its national laboratories and facilities to consider the specific economic benefit of a license to the United States. The sample license includes the requirement to manufacture in the United States; however, a licensee may obtain a waiver of this requirement in a nonexclusive license if the licensee has a business unit in the United States and provides a significant economic and technical benefit to the United States. Alteration of this clause requires DOE approval.

**Article 7: Sublicensing**

This section outlines whether or not sublicensing of rights provided to the licensee is permissible. Sublicensing is typically not provided in nonexclusive licenses.
Article 8: Reports and Payments

Article 8 of the sample license defines record keeping requirements for verification of royalty calculations and reporting requirements.

Article 9: Representations, Hold Harmless, and Limitation of Battelle’s Liabilities

The specific representations and warranties are required by our M&O contract and alteration or modification to this language typically requires DOE approval.

Article 10: Termination

A DOE national laboratory typically may terminate the agreement only for breaches. The licensee, on the other hand, may typically terminate the agreement for any reason at any time with a written notice. In the sample license, the licensee must provide 60-day written notice prior to termination. The agreement automatically terminates when all licensed patents expire.

Article 11: Litigation

The litigation article addresses the actions required if third-party infringement occurs or suspected infringement of the licensed patents.

Article 12: Patents

Responsibility and discretion for preparing, filing, prosecuting, and maintaining the licensed patents is typically reserved to the licensor, although they may consult with the licensee on such activities. Licenses usually provide that the licensees will reimburse the licensor for incurred patent expenses. The licensor may license the same patents nonexclusively to more than one licensee. In this case, the licensor generally requires that each licensee reimburse patent costs on a pro rata basis with the other licensees.

Articles 13, 14, and 15: Records, Assignability, and Reform

These sections lay out the specific requirements for recordkeeping, transferring ownership of the agreement or modifying the license in view of countervailing legal precedent. These are standard clauses like those found in a typical contract.

Article 16: No Endorsement; Use of Battelle’s name; Use of PNNL

We have strict requirements that prohibit us from endorsing any person, product, or service. Normally, licensees may not name the government, DOE, Battelle, PNNL, or the inventors in advertising and marketing materials. Exceptions to this prohibition typically require prior written approval by the licensor.

Article 17: Waiver and Alteration

This provision outlines how modifications may be made to the agreement by mutual consent of the parties.
Article 18: Markings

Recovery of patent infringement damages can be affected based upon whether a party had notice of an existing patent or pending patent application. Most national laboratory licenses thus require licensed products to be marked “patent pending” for not-yet-issued patents or the word “patent” or abbreviation “pat” followed by the issued patent number to preserve this ability.

Articles 19 and 20: Implementation and Construction

These sections outline how the agreement is to be interpreted and authorizes each party to execute other agreements to enable the provisions of the agreement to become operative.

Article 21: Exportation of Technical Information

This provision reminds the licensee of obligations to comply with all the applicable export control laws and regulations and indemnifies the laboratory or facility against any penalties incurred if the licensee is found to have violated those laws and regulations.

Article 22: Disclaimer

DOE requires in its M&O contracts that all technology transfer agreements indemnify the government and the contractor for all damages, costs, and expenses arising from personal or property damage occurring as a result of the use of the licensed patents. This is required language and cannot be removed without DOE approval.

Article 23 and 24: No Presumption, Entire Understanding

Article 23 addresses amendments and establishes priorities for resolving conflict with other agreements. Article 24 clarifies that this is the operative agreement in the arrangement between the parties.

Article 25: Addresses

This article provides contact information as to where official correspondence is to be sent.

Article 26: Expiration

The final article contains a date through which the offer is pending and can be accepted.

Attachments

To make the presentation of the license agreement more streamlined, attachments may list additional materials (e.g., a listing of licensed IP or sample royalty report) for reporting purposes. The exact specifics of an individual arrangement may necessitate other items being included in separate attachments.
Pacific Northwest National Laboratory

For more information on PNNL’s licensing guidelines, contact:

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