A Practical Guide to Identifying, Gathering, and Documenting a Sustainable Research Tax Credit Claim

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Introduction

The United States Research and Experimentation Tax Credit (hereinafter “RTC”) Program was added to the U.S. Internal Revenue Code (hereinafter “I.R.C.”) in 1981 to incentivize qualified research and development activities conducted within the United States and its possessions (e.g., United States Virgin Islands, Puerto Rico, Guam, etc.). As a direct result of the overwhelming success of this program at the Federal-Level, most states currently offer a research tax incentive (e.g., credit or deduction) as well. These combined Federal and Multi-State research tax incentives significantly assist companies in tax effecting their actual expenditures incurred when designing and developing their next generation “best in class” products as well as their manufacturing process improvements.

While the RTC serves as a highly valuable tax incentive for business entities conducting qualified research and development activities it is imperative that the RTC be methodically documented on a contemporaneous basis both from a qualitative and quantitative perspective to ensure a sustainable result should an Internal Revenue Service (hereinafter “the Service”) and / or state level examination come to fruition. To that end, it is critical to design and implement a methodology that is in full compliance with all applicable statutory, administrative and judicial interpretations to ensure a sustainable tax return filing position per Circular 230. This article will serve as a practical guide to identifying, gathering and documenting a sustainable RTC claim.

Identifying, Gathering, and Documenting Qualified Research Activities (QRAs)

In order to identify and qualify research and experimentation activities for purposes of the RTC the subsequent four criteria must be satisfied and documented on a contemporaneous basis as set forth pursuant to I.R.C. § 41(d) and Treas. Reg. § 1.41-4:

Technological in Nature Requirement

The research must be undertaken for the purposes of discovering information that is technological in nature. As provided in Treas. Reg. § 1.41-4(a)(4), information is technological in nature if the process of experimentation used to discover such information fundamentally relies on principles of the physical or biological sciences, engineering, or computer science.
A taxpayer may employ existing technologies and may rely on existing principles of the physical or biological sciences, engineering, or computer science to satisfy this requirement. The regulations further provide that a taxpayer need not seek to obtain information that exceed, expands or refines the common knowledge of skilled professionals in the particular field of science or engineering, nor is the taxpayer required to succeed in developing a new or improved business component as set forth under Treas. Reg. § 1.41-4(a)(3)(ii).

**Process of Experimentation Requirement**

Substantially all (i.e., meaning 80% or greater) of the activities must constitute, or be deemed to constitute, elements of a process of experimentation for a qualified purpose pursuant to I.R.C. § 41(d)(1)(3). As clarified in Treas. Reg. § 1.41-4(a)(5), a process of experimentation “is a process designed to evaluate one or more alternatives to achieve a result where the capability or the method of achieving the result, or the appropriate design of that result, is uncertain as of the beginning of the taxpayer’s research activities.”

The so-called “core elements” of a process of experimentation require that the taxpayer (i.e., either directly or through another party acting on its behalf):

- Fundamentally rely on principles of the physical or biological sciences, engineering, or computer science;
- Identify uncertainty concerning the development or improvement of a business component;
- Identify one or more alternatives intended to eliminate that uncertainty; and
- Identify and conduct a process for evaluating the alternatives.

The regulations provide that such a process may involve, for example, modeling, simulation, or a systematic trial and error methodology. The regulations under Treas. Reg. § 1.41-4(a)(5) further provide: “A process of experimentation must be an evaluative process and generally should be capable of evaluating more than one alternative.”

**Technical Uncertainty Requirement**

Expenditures attributable to research activities must be eligible to be treated as research expenses under I.R.C. § 174. As described under Treas. Reg. § 1.174-2(a), expenditures are costs “incurred in connection with the taxpayer’s trade or business that represent research and development costs in the experimental or laboratory sense.” Pursuant to I.R.C. § 174(c), expenditures generally include all costs incident to the development or improvement of a product, but not expenditures for the acquisition or improvement of land or depreciable property.
Permitted Purpose Requirement

A process of experimentation is conducted for a qualified purpose if the research relates to:

- A New or Improved Function;
- Increased Performance;
- Enhanced Reliability; or
- Enhanced Quality.

Pursuant to I.R.C. § 41(D)(3), research is not considered to be conducted for a “qualified purpose” if it relates to style, taste, cosmetic, or seasonal design factors commonly referred to as mere aesthetics.

The aforementioned requirements described above are applied separately to each business component. Noting, I.R.C. § 41(d)(2)(c) provides that any plant, process, machinery, or technique for commercial production of a business shall be treated as a separate business component, and not as part of the business component (e.g., inventory) being produced. In cases involving development of both a product and a manufacturing process improvement for that product, research activities relating to the product are not “qualified research” unless the requirements described above are met for the research activities to the product without taking into account the activities related to their development of the manufacturing process improvement as discussed under Treas. Reg. § 1.41-4(b).

Treas. Reg. § 1.41-4(a)(6) provides that, if 80% or more of a taxpayer’s research activities with respect to a business component constitute elements of a process of experimentation for a qualified purpose, the substantially all requirement is satisfied even if the remaining 20% or less of a taxpayer’s research activities with respect to that business component does not constitute elements of a process of experimentation for a qualified purpose. However, in no event may activities be treated as “qualified research” if such activities do not fall within the scope of I.R.C. § 174 or if such activities are specifically excluded under I.R.C. § 41-(d)(4).

If the requirement of qualified research cannot be satisfied when applied first at the level of the product or process that is to be held for sale, lease, or license, or used by the taxpayer in its own trade or business, then such requirements should be applied at the most significant subset of elements of the product or process. This “shrinking back” of the business component is continued until either a subset of elements of the business that satisfies the requirement of “qualified research” is reached, or the most basic element of the product is reached and the requirements of “qualified research” are not met as set forth under Treas. Reg. § 1.41-4(b)(2).
To that end, even though a taxpayer’s research activities, viewed in their entirety, for a new or improved product (e.g., an aircraft) may not satisfy the “substantially all” test or other requirements for “qualified research”, activities related to developing or improving a portion of the product (e.g., the flight actuation system) may still be eligible for the RTC.

Statutorily Excluded Activities

I.R.C. § 41(d)(4) specifically excludes the subsequent activities from being treated as “qualified research” and therefore are ineligible for the RTC.

Research After Commercial Production

Activities conducted after the beginning of commercial production of a business component generally do not constitute qualified research if such activities are conducted after the component is developed to the point where it is ready for commercial sale or use. However, even after a product meets the taxpayer’s basic functional requirements, activities relating to the manufacturing process still may constitute qualified research under Treas. Reg. § 1.41-4(c)(2).

Adaptation of Existing Business Component

Activities related to adapting an existing business component to a particular customer’s requirements are ineligible for the RTC. As set forth under Treas. Reg. § 1.41-4(c)(3), this exclusion does not apply, however, merely because a business component is intended for a specific client.

Duplication of Existing Business Component

As illustrated under Treas. Reg. § 1.41-4(c)(4), qualified research does not include activities relating to reproducing an existing business component (i.e., reverse engineering) from a physical examination of the component itself or from blueprints and / or detailed specifications drawings.

Surveys and Studies

Excluded from qualified research are activities in connection to:

- Efficiency Surveys;
- Management Functions or Techniques;
- Market Research;
- Routine Data Collections; and
- Ordinary Testing or Inspections for Quality Control.
**Foreign Research**

Research conducted outside the United States or its possessions such as Puerto Rico and Guam may not be treated as qualified research.

**Funded Research**

To the extent research is funded by another person or government entity (i.e., by grant, contract, or otherwise), such research may not be treated as qualified research. There are limited exceptions to this general rule in cases where overtures are incurred that are not funded. For example, if an Aerospace & Defense Company (hereinafter “A&D Company”) had a Cost Plus Contract with a client and this contract was funded up to $5 Million to develop a flight actuation system and that A&D Company incurred $6 Million to develop the flight actuation system then the $1 Million overture could potentially be claimed as part of RTC assuming the A&D Company had substantially all of the rights to the research (e.g., not needing to make a royalty payment to use that technology on a carryforward basis to the company that originally funded the research) and had the economic risk of loss.

**Identifying, Gathering and Documenting Qualified Research Expenditures (QREs)**

Expenditures that qualify for the RTC generally include: (1) in-house research expenses for wages paid to employees for the performance of “qualified services”; (2) amounts paid for supplies used in the performance of qualified services; and (3) certain “qualified research expenses” paid to third parties. The term “qualified services” includes the services of employees who are actually engaged in qualified research and the services of employees who are engaged in direct support or the first level of research activities that constitute qualified research.

**QRE Wages**

Compensation for the performance of qualified research services should include only compensation treated as wages for income tax withholding purposes. Therefore, in addition to regular wages, the allocation of compensation to research projects should include bonuses and the compensation element recognized on the exercise of nonqualified stock options, but should not include payments to qualified pension and profit sharing plans, including employee I.R.C. § 401(k) contributions and nontaxable fringe benefits. Practically speaking, you should be including each employee wage as documented on Form W-2, Box 1 and then multiplying it by a direct qualifying labor wage percentage. This direct qualifying labor wage percentage, for each person, should be calculated as a numerator that is directly tied to qualifying research projects by hour and a fixed denominator of 2,080 hours which can be further reduced for paid holidays and vacation / sick time. It is imperative to ensure proper and clear nexus between QRAs and QREs at this stage so that an IRS Agent is able to see the link between qualified research hours, by project, to person to expenditures.
In addition, it should be duly noted that under a special safe-harbor rule, if at least 80% of the services performed by an employee during the taxable year constitute “qualified services”, then all 100% of services performed by the employee during the taxable year may be treated as “qualified services”. In all cases, each employee and title/rank within the company should also be documented so that an IRS agent can determine whether that employee was supervising the research (e.g., Oncology Practice Leader for a Life Sciences Company), conducting the research (e.g., Bio-Chemist Researcher for a Life Sciences Company), or supporting the research (e.g., Lab Technician supporting oncology experimentation for a Life Sciences Company). It should be noted, however, that employee’s titles are not exclusive indicators in determining whether the activities performed by that employee qualify for the RTC.

**QRE Supplies**

In general, QRE Supply costs can be claimed if the supplies are consumed or destroyed in the research process. The term “supplies” is broadly defined to include any tangible property, other than land, improvements to land, and depreciable property. Expenditures for supplies that are indirect research expenditures or general and administrative expenses do not qualify as in-house research expenses. For example, amounts paid for electricity used for general laboratory lighting are treated as general and administrative expenses, although amounts paid for electricity used in operating high-energy equipment for qualified research (e.g., such as a laser for nuclear research) may be treated as expenditures for supplies in the conduct of qualified research as illustrated under Treas. Reg. § 1.41-2(b)(2)(ii).

**QRE Contract Research**

The amount of third party contractor costs eligible for the RTC is computed at 65%, or 75% in cases for payments to select research consortia’s, of amounts paid to persons other than employees for services that, if performed by an employee, would constitute qualified services under I.R.C. § 41(b)(3) and Treas. Reg. § 1.41-2(e)(1). Additionally, contract research performed on behalf of a taxpayer is qualified research only if incurred pursuant to an agreement (i.e., either oral or written), entered into prior to the performance of the research, and requiring the taxpayer to bear the expenses even if the research is not successful. Any payment made by the taxpayer to a third party which is contingent upon the success of the research is considered to be paid for the product or result rather than the performance of the research, and thus, may not be treated as qualified research expenses under Treas. Reg. § 1.41-2(e)(2).

**Gathering Contemporaneous Documentation to Support a RTC Claim**

As set forth pursuant to Treas. Reg. § 1.41-4(d), taxpayers must retain records in sufficiently usable form (i.e., in an IRS audit ready format per the IRS Audit Technique
Guidelines for research tax credit claims) and detail to substantiate claimed QREs (i.e., Wages, Supplies, & Contract Research) and QRAs (i.e., at the project level). To that effect, it is critical that sufficient contemporaneous documentation be identified, gathered, properly compiled and retained as forms of substantiation documentation to assist in ensuring that the Service does not disallow the merits of the RTC claim should an examination come to fruition.

In cases in which a company is government regulated such as with Life Science companies (e.g., Pharmaceuticals, Bio-Technology & Medical Devices) then the FDA record keeping requirements can be leveraged to support research activities. Another example, with A&D Companies then the FAA and DCAA record keeping requirements can also be leveraged to support the research activities. In cases, where companies apply for a patent or have a patent granted then these forms of contemporaneous documentation serve as the strongest forms of qualified research documentation due to the inherently arduous process to apply for a patent.

From a Best Practice Perspective for tax controversy purposes, the subsequent examples of contemporaneous documentation illustrate key documents that the Service typically requests during the course of an examination including, but not limited to:

- Complete Project Lists identifying the Full Scope of Research Based Projects vs. the Actual Claimed Research Projects after Conducting Systematic Project Based Qualitative Interviews;
- Patents or Patent Applications;
- Annual R&D or Technology Plans;
- Research Project Authorization Requests;
- Internal and External Correspondence on R&D;
- Design Requirements or Functional Specifications;
- Testing Scripts or Testing Logs;
- Modifications Reports or Error Logs;
- Technical Reports or Plans;
- Laboratory Notebooks;
- Ingredient Consumption Worksheets; and / or
- Raw Material Usage Records.

I highly recommend that the more contemporaneous documentation from the aforementioned list that can be obtained should be obtained and meticulously compiled in an IRS audit ready format as it will incontestably assist in strengthening the merits of the RTC claim and overall RTC filing position (i.e., always strive for “More-Likely-Than-Not” or higher, but never file a claim unless you can get at least to “Substantial Authority” per Circular 230).

From a Risk Management Perspective, in order to mitigate or avoid income tax return paid preparer penalties pursuant to I.R.C. § 6694 (i.e., penalties that are assessed on both
paid tax return preparers and tax advisers that are deemed paid tax return preparers due
to their consulting on matters that constitute a substantial portion of their client’s tax
returns even if they were not engaged to prepare nor review the tax return), a “More-
Likely-Than-Not” standard should be satisfied. The subsequent standards of the
applicable levels of opinions should be scrupulously analyzed when assessing your
RTC tax return filing position:

- **“Will” Standard:** Generally, a 95% or greater probability of success if chal-
  lenged by the IRS. A “Will” opinion generally represents the highest level of
  assurance that can be provided by an opinion;
- **“Should” Standard:** Generally, a 70% or greater probability of success if
  challenged by the IRS. A “Should” opinion provides a lower level of assurance
  than is provided by a “Will” opinion, but a higher level of assurance than is pro-
  vided by a “More-Likely-Than-Not” opinion;
- **“More-Likely-Than-Not” Standard:** A greater than 50% probability of
  success if challenged by the IRS. The “More-Likely-Than-Not” standard is
  the highest level of accuracy required for purposes of avoiding the accuracy-
  related penalties under I.R.C. 6662A;
- **“Substantial Authority” Standard:** Typically, greater than a “Realistic
  Possibility of Success” standard and lower than “More-Likely-Than-Not”
  standard (i.e., 40% probability of success);
- **“Realistic Possibility of Success” Standard:** Approximately a one-in-three
  or greater possibility of success if challenged by the Service;
- **“Reasonable Basis” Standard:** Significantly higher than the “Not Frivolous”
  standard (i.e., that is, not deliberately improper) and lower than the “Realistic
  Possibility of Success” standard. The position must be reasonable based on at
  least one tax authority that can be cited as valid legal authority;
- **“Non-Frivolous” Standard:** Approximately a 10% chance of being upheld
  upon examination by the Service and accordingly under no circumstance
  should a tax professional ever render services with this level of comfort; and
- **“Frivolous” Standard:** Approximately a percentage less than a 10% chance
  of being upheld upon examination by the Service and accordingly under no
  circumstances should a tax professional ever render services with this level
  of comfort.

It should be duly noted that each of the aforementioned standards above has a relevant
meaning to both the taxpayers and tax professionals when evaluating a tax position and
the related disclosure requirements. Noting, the percentages listed for “More-Likely-
Than-Not” and “Realistic Possibility of Success” are specifically provided for and dis-
cussed in the treasury regulations. In contrast, the percentages for “Substantial Authori-
ty”, “Reasonable Basis”, “Non-Frivolous”, “Frivolous” have been developed based upon
their relative importance in the hierarchy of standards of opinion as primarily provided
for in congressional committee reports. Moreover, while not mathematically calculable,
the percentages are still practical in demonstrating the relative strength of one level as
opposed to another level.
Conclusion

When identifying, gathering, and documenting a RTC claim, both from a qualitative and quantitative perspective, be sure to adhere to all applicable statutory, administrative and judicial interpretations and consult a true subject matter expert in this area of the tax law to ensure both a sustainable tax return filing position per Circular 230 and a sustainable financial statement reporting position per ASC 740 and FIN 48.

About the Author

Peter J. Scalise serves as the Federal Tax Credits & Incentives Practice Leader for Prager Metis CPAs, LLC a member of The Prager Metis International Group. Peter is a highly distinguished BIG 4 Alumni Tax Practice Leader and has approximately twenty years of progressive public accounting experience developing, managing and leading multi-million dollar tax advisory practices on both a regional and national level.

Peter is a highly acclaimed thought leader in the fields of accounting and taxation with deep subject matter expertise in connection to designing, implementing and defending sustainable methodologies for specialty tax incentives including, but not limited to, research tax incentives; orphan drug credits; therapeutic discovery credits; accounting methods and periods; energy tax incentives in connection to green building envelope efficiency and benchmarking, solar energy, bio energies, fuel cells, wind turbines, micro turbines, and geothermal systems; and comprehensive fixed asset analysis incorporating principles of construction tax planning, cost segregation analysis and the final treasury regulations governing tangible property.

Peter is a renowned keynote speaker and an extensively published author on specialty tax incentives, tax controversy matters, and legislative updates from Capitol Hill for NAREIT, AGRION, USGBC, AICPA, ASTP, NATP, ABA, AIA, and TEI. Peter serves as a member of the Tax Faculty for CPAacademy, iShade and TaxConnections University (“TCU”). Peter serves on both the Board of Directors and Board of Editors for The American Society of Tax Professionals (“ASTP”) and is the Founding President and Chairman of The Northeastern Region Tax Roundtable.