The Research Tax Credit: Accounting for Nexus

*By Kreig D. Mitchell**

Kreig D. Mitchell examines nexus and the IRS's heightened recordkeeping requirement for the research tax credit.

The research tax credit is popular with politicians and taxpayers. It has not been as well received by the Internal Revenue Service (IRS). The research tax credit continues to generate quite a bit of controversy between the government and taxpayers. Much of this controversy stems from the IRS's attempt to impose a stringent substantiation requirement for research tax credits. This requirement has been rejected by Congress and, recently, by several courts.[1]

The IRS has not been deterred and has redoubled its efforts. Its latest angle is to replace the word "substantiation" with the word "nexus." In addition to putting a new name on the old concept, the IRS is using its nexus idea to impose a heightened recordkeeping requirement. This heightened requirement makes the availability of the research tax credit contingent on whether the taxpayer creates and keeps project-based records. This article examines nexus and the IRS's heightened recordkeeping requirement for the research tax credit.

About the Research Tax Credit

The research tax credit is best described as a jobs tax credit. It essentially rewards taxpayers for paying scientists, engineers and other technical employees to perform qualified research in the United States. The financial benefit is significant. Assuming the tax credit is extended beyond 2011, the government estimates that taxpayers will claim $82 billion in research tax credits from 2011 through 2020.[2]

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The Code sets out a four-part test that defines what research qualifies for the tax credit.[3] It also includes several limitations.[4] The tests and limitations describe research in terms of activities. Unlike other Code sections that consider the taxpayer's activities, in this case, the activity is to be examined at the individual business component level rather than the business entity level.[5]

To qualify, the Code says that the research must relate to the development of a new or improved business component.[6] A business component is essentially a product. It can be a tangible or intangible product.[7] It can also be a process for making a product.[8] According to the regulations, if the product as a whole does not qualify, individual subcomponents may qualify.[9] The business component is to be viewed at the most narrowly defined subcomponent level. The regulations include an example of an engine.[10] While the engine as a whole did not qualify, the individual parts that made up the engine did.

The Code also includes several rules that define what expenses for business components qualify. These qualified research expenses (QREs) can include wages, supply costs, computer rental costs and contractor costs.[11] Wage QREs make up the lion's share of QREs for most taxpayers.[12] Only wages for qualified services are counted.[13] Qualified services include engaging in qualified research or directly supporting or supervising qualified research.[14] These expenses are to be identified on an employee-by-employee basis, presumably on a minute-by-minute basis.

What Does Nexus Mean?

Nexus usually refers to sourcing rules found in the law that tie income to a specific location, as in the case of state and local or international tax. It is used to determine which state or country is entitled to impose a tax on the income and what expenses are to be allocated to the state or country. This, however, is not the meaning espoused by the IRS for the research tax credit.

As explained below, the only reference to a nexus requirement is a document written by the IRS entitled *Research Tax Credit Claims Audit Techniques Guide*.[15] This document vaguely refers to nexus in accounting terms. It describes how QREs are matched with research activities in contemporaneous business records. According to the document, nexus is established if the taxpayer's accounting records capture QREs at the business component level. It goes on to say that accounting records that capture costs using different approaches do not establish nexus. Thus, the IRS is using the term "nexus" to mean project-based accounting records that show a connection between individual QREs and individual business components; nexus is the paper or electronic records connecting the three concepts.

What Are Project-Based Accounting Records?

It is easier to explain what project-based accounting records are by using an example. Assume the taxpayer designs a new widget and only half of the widget meets the requirements of the four-part test. The taxpayer pays one of its engineers to design the widget and the engineer spends 100 hours on the project. According to the IRS, the taxpayer is only entitled to a research tax credit if it can produce contemporaneous accounting records to show that the engineer spent 50 hours designing just the half of the widget that is qualified.

What accounting records satisfy this requirement? Theoretically, this information might be in the engineer's time cards if the engineer periodically stopped his research efforts to take note of his activities. He would also need to include a description of what part of the widget he was working on at the time. He would have to do this consistently every day he worked on the project. The taxpayer would also need to keep similar accounting records for every project and for every one of its engineers who worked on projects throughout the year. All of these hours, and the amount of the wages paid for the hours, could then be tallied at the end of the year and used to compute the taxpayer's research tax credit. The hours and QREs for business components that meet the four-part test are included.

What Are the Cost-Center and Hybrid Approaches?

The IRS says there are two other approaches to capturing QREs—the cost-center and so-called hybrid approaches. It also asserts that these approaches are different than the project-based approach. According to the IRS, the cost-center approach involves identifying one or more cost centers and identifying QREs associated with each cost center.[16] A cost center is a business unit or grouping of expenses in the taxpayer's accounting records.[17] The distinguishing feature of the cost-center approach is that the taxpayer's accounting records do not divide costs between different business components.[18]

For example, assume a taxpayer employs several engineers. The taxpayer's accounting records may include the wage amounts that were paid to the engineers in a separate account. The accounting records may not go further to identify which business components the individual engineers work on during the year. If the individual engineers work on qualified and nonqualified business components, the taxpayer would have to rely on more than just accounting records to determine which business components the individual engineers work on during the year. While it may be difficult, taxpayers can make up for the lack of detail in their accounting records by producing other evidence to show which QREs are for qualified and nonqualified business components.

The IRS says the so-called hybrid approach is similar to the cost-center approach. According to the IRS, this hybrid approach is a combination of the project-based and cost-center approaches. It involves identifying cost centers then identifying business components and research activities associated with those business components. The document gives the example of employee wages being captured by department then identifying business components that were worked on by employees in those departments. The four-part test is applied to those business components using contemporaneous business records and employee testimony. Employee testimony helps to approximate the number of hours individual employees spent working on each component during the year. The approximated hours for each employee are then applied to the wage expenses for each employee. The amounts are then summed up and used to compute the taxpayer's research tax credit.

Where Did the Nexus Requirement Come from?

The IRS's nexus requirement has developed over several years. The origin and evolution can be found in various documents issued by the IRS.

The idea of nexus originates in the IRS's 1996 document entitled *Audit Plan for Examination of the Research Tax Credit*.[19] This document explains that there are three approaches taxpayers use to identify QREs—by project, cost center or simply providing the IRS with a list of QREs. It even describes various nonaccounting documents revenue agents are to request and evaluate as part of the audit.

The IRS's 2004 document entitled *Briefing Paper on Taxpayer Approaches to Capturing Costs for the Research Credit*[20] purports to build on the 1996 document. However, it omits any reference to the third approach taxpayers can use to identify QREs, *i.e.*, by simply providing a list of QREs. It also omits any reference to revenue agents requesting or evaluating anything other than the taxpayer's accounting records. Importantly, this document makes it clear that business components are to be tied to individual QREs and individual research activities.

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The IRS's 2005 document entitled *Research Tax Credit Audit Techniques Guide* picks up where the 2004 document ends. It instructs revenue agents to request whether the taxpayer used the project or cost-center approach to identify QREs. Simply providing the IRS with a list of QREs is not one of the choices. The document stops short of saying that nexus is required. Finally, the IRS's 2008 document entitled *Research Tax Credit Claims Audit Techniques Guide*,[21] described above, builds on the 2005 document. It adds the idea of nexus to the mix, essentially saying that it is a requirement taxpayers must satisfy and that taxpayers must have project-based accounting records to meet the requirement.

During a recent conversation, an IRS national office attorney conveyed a belief that the Code implicitly imposes a nexus requirement. The attorney based this assertion on his reading of the Code. His analysis seemed to be that because the Code says that the four-part test is to be applied to business components and that only research expenses for business components are qualified, Congress intended that taxpayers produce records that tie research activities and QREs to specific business components. While of the IRS's employees are not able to articulate this rationale, their conclusions are often consistent with it.

What Do the Code and Regulations Say?

The Code does not use the term "nexus" or "project-based accounting records." There is currently no specific recordkeeping requirement for the research tax credit. The general rule in Code Sec. 6001 still applies.[22] This rule simply says that taxpayers are to keep records sufficient to substantiate their tax credits. This is a flexible rule.

The U.S. Treasury Department ("the Treasury") has tried to impose a stringent recordkeeping requirement for the research tax credit in the past.[23] These rules were short lived. The Treasury removed the rules after prompting from Congress.[24] The Treasury concluded that stringent recordkeeping requirements conflict with the Congressional intent for the research tax credit.[25] It even said that the failure to keep records in a particular manner cannot serve as a basis for denying the research tax credit.[26] While these short-lived rules created higher recordkeeping requirements for research tax credits, they did not go so far as to impose a nexus or project-based accounting record requirement. They essentially required taxpayers to keep records explaining how their business components satisfied the four-part test.

The Code and regulations also include a method of accounting rules. These rules are intended to make taxpayer's match income to expenses. They are based on the account principle that income should be offset by expenses associated with the income. The rules do not impose a uniform method.[27] They merely say that taxpayers can adopt the methods that are, in their judgment, best suited for their needs.[28] Also, the rules do not require taxpayers to adopt a project-based accounting method for the research tax credit. It is not altogether clear whether the project-based approach is even an accounting method. If it is, it seems that the permissive accounting method rules would allow taxpayers to use a method of their choosing for the research tax credit, including methods other than those put forth by the IRS.

What Do the Courts Say?

The courts have not addressed this issue in terms of the accounting method rules. Instead, they have addressed this issue in the context of substantiation. In doing so, they have not imposed a nexus or project-based accounting record requirement for the research tax credit. In fact, the courts have made it clear that where there is evidence that taxpayers engaged in qualified research activities, the courts should look to employee testimony and other evidence to make a "fair estimate" of the amount of the QREs.[29] This rule is best understood by considering the *N.E. Eustace*[30] and *E.D. Fudim*[31] cases.

In *Eustace*, the taxpayer designed several computer programs. The computer programs were the taxpayer's business components. The court applied the now defunct "discovery test" to determine that the taxpayer did not engage in qualified research activities. In reaching this conclusion, the court declined to estimate the amount of the taxpayer's QREs. It did not need to get to this step, as the taxpayer did not establish that it engaged in qualified research.

Compare this to *Fudim*. In *Fudim*, the taxpayer developed a rapid modeling process. The process was the taxpayer's business component. The taxpayer took a research tax credit for his self-employment income and wages paid to his wife and daughter. He was not able to produce any records detailing the time spent on research activities or what the research activities included. The court considered the taxpayer's testimony, his reputation for performing research and his patent records in light of the "substantially all" rule.[32] This rule says that if substantially all, *i.e.*, 80 percent, of the researcher's activities are for qualified services, all of the researcher's activities are deemed to be qualified.[33] The court concluded that the taxpayer and his wife engaged in qualified research; however, his daughter did not.

At least one court has even allowed the taxpayer to take a research tax credit when it could not identify each of its individual business components. Specifically, in *Trinity Industries, Inc.*,[34] the taxpayer designed several new types of ships. It did not break the ship down into subcomponents or explain how the four-part tests applied to each subcomponent. Instead, the taxpayer took the position that the business component was the ship as a whole. It probably did this because it did not create and keep project-based accounting records and, therefore, was not able to tie specific employee hours and wages to specific subcomponents. If the taxpayer did create and keep these records, it did not produce them. The court did not find the lack of evidence fatal for the taxpayer. It considered the taxpayer's position in light of the "substantially all" rule, concluding that some of the taxpayer's ships, as a whole, were qualified and others were not.

While the courts have said they are to estimate the amount of the taxpayer's QREs, they have only considered the issue in light of what research activities were qualified. They were presented with records establishing the amount of the underlying QREs. In other words, the taxpayer was able to produce records showing the amounts that it paid.

However, the courts have not addressed the situation where the taxpayer is not able to provide this type of record. The courts have considered this issue outside of the context of the research tax credit. The *T. Langworthy, Jr.*[35] case provides an example. The taxpayer in *Langworthy* operated a tavern. One of the issues in the case was whether the taxpayer could establish the amount of beer he sold from kegs for purposes of his cost-of-goods tax deduction. The taxpayer did not keep any records for the sales—even though these are the type of records that would have been developed in the course of the taxpayer's business and that a prudent businessman would have kept. The taxpayer and one of his employees testified that the taxpayer sold kegs of beer; however, neither was able to recall the number of kegs that were sold. The taxpayer estimated that he sold 60 kegs of beer. Given this testimony, the court concluded that the taxpayer did in fact sell kegs of beer. Once it made this determination, it estimated that the taxpayer sold 40 kegs of beer. The court allowed the taxpayer a deduction in an amount based on its estimation. Given the other research tax credit cases, it appears the courts would reach a similar conclusion if the taxpayer did not keep records establishing the amount it paid for its research.

As these cases show, the courts have never required the taxpayer to establish nexus. They have never considered project-based accounting records to be a requirement. As the *Langworthy* case demonstrates, the courts have even allowed tax deductions where no records are available even though, unlike project-based accounting records, they are the type of records taxpayers normally create and keep.

The Reality of Nexus and Project-Based Accounting Records

Project-based records are just what the term implies. They are records compiled using ideas about accounting rules. They are not records compiled using ideas about the law. It is well settled that accounting rules are neither controlling nor even presumptively correct for tax purposes.[36] By imposing accounting rules as a requirement, the IRS is deciding whether taxpayers are entitled to research tax credits based on accounting rules rather than applying the existing law. This is reflected in the wide disparity between how the IRS examines research tax credits and how the courts examine research tax credits.

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Even in the unlikely event that Congress or the courts adopt the IRS's nexus and project-based accounting record requirements, it should be noted that project-based accounting records generally do not establish the type of nexus that the IRS seems to imply that they do. In fact, on closer inspection, project-based accounting records may not be as reliable as one would think.

One cannot really find nexus in an accounting record. The research tax credit uses several units of measure—projects, subcomponents and individual researcher time using the smallest time increment possible. These units of measurement typically do not line up perfectly in the real world or in project-based accounting records. Finding nexus in a single set of accounting records is usually not possible.

Even then, project-based accounting records do not capture information about business components. Why should they? The concept of a business component is unique to the research tax credit. The regulations make it clear that a business component is viewed at the subcomponent level.[37] Accounting records do not capture information at this level. Since accounting records do not capture costs at the subcomponent level, even taxpayers who have project-based accounting records must use other records to differentiate between qualifying and nonqualifying subcomponents. Accordingly, there really is no such thing as a project-based approach. Every approach is a cost-center approach.

Moreover, project-based accounting records do not even capture information about many qualifying business components. For example, intangible property (such as techniques, formulas, etc.), process improvements, in-house projects and failed projects are typically not reflected as business components in the taxpayer's project-based accounting records—even though the Code makes it clear that these are business components that can qualify for the research tax credit. Imposing a nexus and project-based accounting requirement prevents taxpayers from taking research tax credits for this type of qualified research.

Even if the taxpayer creates and keeps project-based accounting records that meet these requirements, the records would not capture information about whether the activities are qualified under the four-part test. As with the business component rules, the four-part test is unique to the research tax credit. Neither the taxpayer nor their researchers are using the four-part test rules when they create their accounting records. Reviewing project-based accounting records after the fact will not necessarily show that researchers engaged in qualified research activities as defined in the Code. For example, time entries made by engineers that include the word "research" or "R&D" do not necessarily establish that the taxpayer engaged in qualified research activities as defined in the Code. The same goes for "quality control" or other terms that seemingly indicate that the activity was not qualified given the rules in the Code.[38]

Perhaps the ultimate irony is that if the taxpayer is keeping these records, the IRS is likely to deny the taxpayer's research tax credit based on the funded research limitation. This limitation sets out a two-part test to determine whether the research activities are qualified when they are performed for another party.[39] Taxpayers usually only keep project-based accounting records if they are billing someone else for their research efforts. Thus, if the taxpayer does not have project-based accounting records, it loses its tax credit because it does not have them. If it has project-based accounting records, it loses its tax credit because it has them. This heads-I-win-tails-you-lose approach by the IRS highlights the fallacy of a nexus and project-based accounting record requirement.

While the IRS has shunned the cost-center and hybrid accounting approaches, they are usually the most accurate approaches to identify the taxpayer's research activities, business components and QREs. An experienced tax practitioner that uses the cost-center approach can identify the taxpayer's business components. He can also get a genuine sense of whether the taxpayer's activities for each business component satisfy the four-part test and determine the amount of the QREs for each qualifying business component. This can usually only be done by evaluating business records (including accounting records) and employee testimony using a cost-center or hybrid approach.

Conclusion

The IRS continues to try to impose a strict substantiation requirement for the research tax credit. Its newest effort is to create a nexus requirement that can only be met by creating and maintaining project-based accounting records. The IRS believes such a requirement is implicit in the Code, despite the contrary statements by Congress, the approach used by the Courts and the reality of nexus and project-based accounting records.

It is not difficult to understand the IRS's desire to impose a stringent substantiation requirement. Research tax credits are difficult for the IRS to audit. Their employees have expertise in evaluating accounting and similar records. However, they do not have experience in evaluating research documents and other technical evidence.[40] Even if they did have the expertise, reviewing these other types of evidence is time consuming for the IRS. It takes a lot longer to review a myriad of documents and to interview the taxpayer's employees than it does to spot check a listing of expenses in an accounting record. Unfortunately, it is just not that easy.

ENDNOTES

* This discussion is not intended as legal advice and cannot be relied on for any purpose without the services of a qualified professional.

1 *See, e.g., A.R. McFerrin*, CA-5, 2009-1 ustc ¶50,430, 570 F3d 672, 678–679; *Trinity Indus. v. United States*, 691 F. Supp. 2d 688, 692-94 (N.D. Tex. 2010).

2 *U.S. Office of Management & Budget, Budget of the U.S. Government for Fiscal Year 2011*, 160, Table S-8 (U.S. Government Printing Office, Washington 2010), available online at *http://www.whitehouse.gov/sites/default/files/omb/budget/fy2011/assets/budget.pdf*. This only includes amounts claimed by taxpayers, not amounts actually allowed by the IRS.

3 Code Sec. 41(d)(1).

4 Code Sec. 41(d)(3), (4).

5 For example, Code Secs 183 and 465 examine the taxpayer's activities at the business entity level.

6 Code Sec. 41(d)(2).

7 Code Sec. 41(d)(2)(B).

8 Code Sec. 41(d)(2)(C).

9 Reg. §1.41-4(b)(2).

10 Code Sec. 1.41-4(b)(3).

11 Code Sec. 41(b).

12 *SOI Tax Stats—Corporation Research Credit, Figure C. Corporations Claiming a Credit for Increasing Research Activities*, IRS.gov, available online at *http://www.irs.gov/taxstats/article/0,,id=164402,00.html* (Apr. 1, 2011).

13 Code Sec. 41(b)(2)(B).

14 *Id.*

15 *Audit Techniques Guide (RCCATG): Credit for Increasing Research Activities* § 41, IRS.gov, available online at *http://www.irs.gov/businesses/article/0,,id=183208,00.html* (Apr. 15, 2011).

16 *Internal Revenue Service, Briefing Paper on Taxpayer Approaches to Capturing Costs for the Research Credit*, available online at http://www.irs.gov/pub/irs-utl/cost_capturing_approaches_2004-05-24.pdf (last visited Apr. 14, 2011).

17 *Id.*

18 *Id.*

19 *Internal Revenue Service, Audit Plan for Examination of the Research Credit* (1996) (copy on file with the author).

20 *Internal Revenue Service, Briefing Paper on Taxpayer Approaches to Capturing Costs for the Research Credit*, available online at *http://www.irs.gov/pub/irs-utl/cost_capturing_approaches_2004-05-24.pdf* (last visited Mar. 27, 2011).

21 *Audit Techniques Guide (RCCATG): Credit for Increasing Research Activities* § 41, IRS.gov, available online at *http://www.irs.gov/businesses/article/0,,id=183208,00.html* (Apr. 15, 2011).

22 Reg. § 1.41-4(d).

23 T.D. 8930, 2001-1 CB 433.

24 Preamble, 66 FR 66362.

25 Preamble, 66 FR 66362, *citing* H.R. CONF. REP. NO. 106-478, at 32 (1999).

26 *Id.*

27 *See generally*, Code Sec. 446.

28 Reg. § 1.446-1(a)(2).

29 *A.R. McFerrin*, CA-5, 2009-1 USTC ¶50,430, 570 F3d 672, applying *G.M. Cohan*, CA-2, 2 USTC ¶489, 39 F2d 540.

30 *See generally N.E. Eustace*, CA-7, 2003-1 USTC ¶50,133, 312 F3d 905 (holding that the taxpayer did not engage in qualified research activities under the discovery test).

31 *See generally E.V. Fudim*, 67 TCM 3011, Dec. 49,867(M), TC Memo. 1994-235 (holding that taxpayer and his wife engaged in qualified research activities under the substantially all rule).

32 Code Sec. 41(b)(2)(B) flush language.

33 Reg. §1.41-4(a)(6).

34 *Trinity Indus. v. United States*, 691 F. Supp. 2d 688 (N.D. Tex. 2010).

35 *T. Langworthy, Jr.*, 75 TCM 2501, Dec. 52,747(M), TC Memo. 1998-218.

36 *Thor Power Tool Co.*, SCt, 79-1 USTC ¶9139, 439 US 522, 99 SCt 773; FSA 200207006 (Nov. 1, 2001).

37 Reg. §1.41-4(b)(3).

38 Quality control activities are usually carried out after the research has been completed and a final product has been developed. Quality control activities are usually not qualified.

39 Code Sec. 41(d)(4)(H).

40 Former IRS Commissioner Mortimer Caplin recently made this observation, noting that "IRS personnel are people with accounting, economic and investigative abilities. The new programs require them to carry out other functions for which they're not qualified." Roger Russell, *Former Commissioner Blasts IRS's Social Mission*, ACCOUNTING TODAY, available online at *http://www.webcpa.com/news/Former-Commissioner-Blasts-IRS-Social-Mission-55981-1.html* (last visited Apr. 14, 2011).