INTERNAL REVENUE SERVICE
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Taxpayer's Name:
Taxpayer's Address:

Taxpayer's Identification No
Year(s) Involved:
Date of Conference:

LEGEND:

Taxpayer =
Date 1 =
Date 2 =

ISSUE:

Are transmission and distribution costs incurred by Taxpayer handling costs that must be capitalized pursuant to § 1.263A-3(c)(4) of the Income Tax Regulations?

CONCLUSION:

Some transmission and distribution costs incurred by Taxpayer are handling costs that must be capitalized pursuant to §1.263A-3(c)(4).

FACTS:

Taxpayer is a diversified power utility that owns various regulated and non-regulated subsidiaries. Through its subsidiaries, Taxpayer provides electricity to residential, commercial, industrial, and government customers (end-use customers). There are three distinct functions involved in providing electricity to an end-use customer: generation, transmission, and distribution. Through its subsidiaries, Taxpayer performs all three of these functions.

Electricity has a number of immutable characteristics that dictate the design and function of a generation, transmission, and distribution system. In particular, there are four terms that are fundamental to any understanding of the operation of these systems - electric power (P), voltage (V), current (I), and resistance (R).

Voltage is a force that is analogous to pressure. Higher voltage levels have greater potential to transport and deliver power. Thus, high voltage transmission lines are used to move electricity over long distances, whereas lower voltage distribution lines are used to move electricity locally. Transformers are devices that "step-up" or "step-down" voltage.

Current is the flow of electrical charges and is measured in amps. The product of current and voltage is referred to as power (P=I*V).

Resistance is an obstruction to current flow and is measured in ohms. A conductor has a low resistance and an insulator has a high resistance. Lights, appliances, motors, and all electrical equipment have resistance. The amount of power used by electrical equipment is a function of its resistance.

The relationship between voltage, current, and resistance is a fundamental law of physics, called Ohm's Law, that is expressed by the following formula: Current=Voltage/Resistance (I=V/R). This formula discloses a critical property of power – if there is no user of power, resistance is infinity and no current flows in the circuit.[1] In other words, with constant voltage the resistance of the load determines the amount of current flowing in the circuit. Thus, in response to voltage level changes in a commercial electric power system, additional or less electricity is produced and introduced into the transmission and distribution system to maintain stable voltage.

An electric utility attempts to maintain the supply of power and the voltage on its transmission and distribution system equal to the anticipated needs and demands of its customers. An electric utility considers many factors in determining the amount of power that is going to be needed to meet its customers' needs. Some of these factors include the time of year, time of day, weather, temperatures, and historical data. Based

[1] Current would continue to flow through a utility's transmission and distribution lines even if no customers were connected to the lines because the resistance of the lines and equipment is sufficient to require the flow of current. In other words, the transmission and distribution system itself is a user of electricity.

upon its load forecasting, a utility then develops a schedule to determine what generators it will put into service and then continually checks its transmission and distribution system to make sure that the generation of electricity is meeting its customers' demands. The primary methods used by the utility to discover if generation is sufficient is by monitoring and controlling the voltage and frequency of the transmission and distribution system. For instance, if the transmission and distribution system experiences a "below-target" voltage drop it would indicate that customer demand is increasing. This monitoring of voltage and frequency does not recognize the loss or increase of any single customer, but instead measures aggregate change in demand (up or down) to sufficiently impact the system's voltage and/or frequency.

At the present time, electricity cannot be stored economically. Therefore, as electricity is generated, it is generally transmitted and distributed to customers. Generally, generating plants produce electricity at 18 to 22 kilovolts (KV) and are connected to a nationwide network of transmission lines that are known as the grid. When electricity enters the grid from a generating plant, depending on the distance the electricity needs to travel and the amount of electricity needed, the electricity is stepped-up in voltage to the desired voltage using transformers. Electricity is transmitted over high-voltage lines at between 138 and 765 KV.[2]

The nation's transmission lines have evolved into three major networks or grids, within which are smaller groupings or power pools. The major networks are the Eastern Interconnect, the Western Interconnect, and the Texas Interconnect. Interconnected utilities within a power grid coordinate operations and buy and sell power among themselves. In these wholesale or "wheeling" arrangements, utilities transport electricity for other utilities. Generally, the voltage of electricity transferred in wheeling transactions does not need to be transformed (i.e., stepped-up or down) because the voltage of the delivering utilities' transmission system and the voltage of the receiving utilities' transmission system is the same at the interconnection point.

On the other hand, the vast majority of Taxpayer's customers cannot use electricity at the voltage on the transmission lines, but must have the voltage reduced or stepped-down to use it. Thus, electricity from the transmission system is stepped-down at a substation to service specific distribution areas. Some large retail customers can take delivery of high voltage electricity at various points throughout the transmission system.[3]

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[2] Taxpayer generally views the use of lines that are 100KV and above as transmission, whereas lines below 100KV are generally viewed as distribution.

[3] Some large retail customers (e.g., a large industrial factory) may access electricity directly from a transmission line coming from the transmission-to-distribution substation because they may need the high voltage or simply do not need to have the voltage stepped down. The service lines of these customers are tied directly into the distribution feeder or distribution lines of the utility, and end at a transformer-rated meter.

The distribution system includes low voltage lines, substations, and transformers that are used to deliver electricity to end-use customers (e.g., homes and businesses). Distribution begins at a substation, where transformers reduce the voltage of electricity to a lower level so that it can be carried on the distribution lines. In addition to stepping-down the electricity, a substation may also have a "bus" that splits the power off in multiple directions, sometimes at different voltages. Small transformers on poles or underground further reduce the voltage so that it can be used by the customers. These transformers are usually located within several hundred feet of the customer's property. The electricity then flows through a service or a drop line from the transformer to a meter affixed to the customer's property. A meter is an electric motor connected to a series of pointers or dials on the meter's face that measures the amount of electricity used by a customer. As electricity is used by the customer, it flows through the meter, causing it to turn and move the pointers. The greater the amount of electricity used, the faster the meter turns. Large customers purchase electricity using a Mega-watt hour (Mwh) and smaller distribution customers (e.g., residential customers) buy electricity using a Kilowatt-watt hour (Kwh). The meter used by a customer is calibrated to the measure used by the customer. In newer models the dials have been replaced by digital displays.

The electric utility industry is highly regulated by federal and state regulatory commissions. In particular, Taxpayer's subsidiaries that transmit and distribute electricity are subject to regulation by the Federal Energy Regulatory Commission (FERC) and the public utility commissions in states were they have distribution customers. The state public utility commissions set the retail rates for electricity and rates are based on what are termed "cost of service" and "rate of return." A utility's cost of service includes the cost to the utility for generated and purchased power; the capital costs of generation, transmission, and distributions plants; all operations and maintenance expenses; and the costs to provide programs often mandated by the public utility commission for consumer protections and energy efficiency. A utility's rate of return is that amount that a utility is allowed to earn on its investment in facilities used to provide utility services to its customers. This rate structure may result in delivery voltage being a component of the rate schedule under which a customer receives electricity. For example, a large commercial customer that receives electricity at a higher voltage may receive a discount due to the reduced infrastructure required to deliver electricity at the higher voltage.

On Date 1, Taxpayer filed a Form 3115, Application for Change in Accounting Method, for its tax year ending Date 2, which requested the Commissioner's consent to change its method of accounting for mixed service costs. According to the Form 3115, Taxpayer's former method of allocating direct and indirect costs (presumably including mixed service costs) to self-constructed assets was a specific identification method. The Form 3115 also indicates that Taxpayer accounted for inventories on an "expensable method". Under its new method, Taxpayer allocates direct and indirect costs by tracing such costs to departments on the basis of a cause and effect or other reasonable relationship between the cost and the department. Taxpayer then allocates

mixed service costs to the inventory it produces (electricity) and self-constructed assets using the simplified service cost method with the production cost allocation ratio. Taxpayer also allocates additional §263A costs to inventory and self-constructed assets using the simplified production method without the historic absorption ratio. The characterization of Taxpayer's transmission and distribution costs as either deductible or capitalizable may affect the results reached under the simplified service cost and simplified production methods.

LAW AND ANALYSIS:

The director contends that transmission and distribution costs incurred by Taxpayer are handling costs that must be capitalized under § 1.263A-3(c)(4). Handling costs are generally capitalized to the extent they are properly allocable to produced property. See §1.263A-1(e)(3)(ii)(G). For the reasons stated below, some transmission and distribution costs incurred by Taxpayer are handling costs that must be capitalized pursuant to § 1.263A-3(c)(4).

Law

Section 263A generally requires a taxpayer to capitalize the direct costs and an allocable share of the indirect costs of real or tangible personal property produced by a taxpayer. The direct costs of produced property include direct material costs and direct labor costs. See § 1.263A-1(e)(2)(i). The indirect costs of produced property are all costs other than direct material costs and direct labor costs. See § 1.263A-1(e)(3)(i). Indirect costs are properly allocable to property produced when the costs directly benefit or are incurred by reason of the performance of production activities. Id. Indirect costs may be allocable to production activities, resale activities, and other activities that are not subject to § 263A. Accordingly, taxpayers must make a reasonable allocation of indirect costs between production and non-production activities. See § 1.263A-1(e)(3)(i). Handling costs are an example of an indirect cost that generally must be capitalized to the extent they are properly allocable to produced property. See § 1.263A-1(e)(3)(ii)(G).[4]

Handling costs include costs attributable to processing, assembling, repackaging, transporting, and other similar activities with respect to produced property, provided the activities do not come within the meaning of the term produced as defined in § 1.263A-2(a)(1). See § 1.263A-3(c)(4)(i).[5] Processing costs are the costs a producer incurs in making minor changes or alterations to the nature or form of a produced product. See

[4] Handling costs incurred at a retail sales facility with respect to property sold to retail customers at the facility are not required to be capitalized. See § 1.263A-3(c)(4)(i). A retail sales facility is defined as a facility where a taxpayer sells merchandise exclusively to retail customers in on-site sales. See § 1.263A-3(c)(5)(ii)(A). In the instant case, neither Taxpayer nor the director contends that Taxpayer operates a retail sales facility for purposes of this section.

[5] Section 1.263A-3(c)(4) is written in the context of a reseller, rather than a producer. However, § 1.263A-3(c)(1) clarifies that as directed by § 1.263A-1(e), the provisions of § 1.263A-3(c) apply to a producer incurring purchasing, handling, and storage costs.

§ 1.263A-3(c)(4)(ii). Assembling costs are costs associated with incidental activities that are necessary in readying property for sale. See § 1.263A-3(c)(4)(iii). Transportation costs are generally the costs a taxpayer incurs moving or shipping produced property. Generally, transportation costs are required to be capitalized and include costs incurred in transporting property: (A) from the vendor to the taxpayer; (B) from one of the taxpayer's storage facilities to another of its storage facilities; (C) from the taxpayer's storage facility to a retail sales facility; (D) from the taxpayer's retail sales facility to its storage facility; and (E) from one of the taxpayer's retail sales facilities to another of its retail sales facilities. See § 1.263A-3(c)(4)(v). However, § 1.263A-3(c)(4)(vi) provides that transportation costs that are distribution costs are not required to be capitalized. Distribution costs are transportation cost incurred outside a storage facility in delivering goods to a customer. See § 1.263A-3(c)(4)(vi)(A).

Director and Taxpayer's positions

The director contends that the costs related to Taxpayer's transmission and distribution system are handling costs that must be capitalized under § 263A. Taxpayer argues that its transmission and distribution costs are deductible as incurred. In particular, Taxpayer contends that costs associated with transmitting and distributing electricity are excluded from capitalization because such costs are distribution costs under § 1.263A-3(c)(4)(vi). Taxpayer further argues that its transmission and distribution costs are deductible because the operational nature of an electric utility supports the current deduction of transmission and distribution costs.

Transmission and Distribution Costs are capitalizable handling costs under § 1.263A-3(c)(4).

Contrary to Taxpayer's arguments, not all of its transmission and distribution costs are deductible as incurred. As indicated above, the vast majority of Taxpayer's customers cannot use electricity at the voltage levels on its transmission lines or its distribution lines until the electricity passes through the last transformer in the distribution system and onto the drop line that is connected to its customers' meters. The substations and transformers in the transmission and distribution system "step-down" the voltage to proper delivery standards to make the electricity usable by Taxpayer's customers. The step-down of voltage required to deliver electricity to the majority of Taxpayer's customers is a processing or assembling activity, the costs of which are required to be capitalized under § 1.263A-3(c)(4).

Taxpayer has argued that the step down of electricity performed by the substations and transformers are not processing or assembly because the substations and transformers do not contain any moving parts. Taxpayer has further argued that a transformer simply changes the voltage at which a customer receives electricity or power and that it does not change the amount of power consumed by a customer. Taxpayer contrasts changing voltage with heat treating a metal object – a process that it argues is a production activity because it changes the underlying product. Taxpayer

also argues that heat treating metal changes the product so that it will be recognized in the marketplace as distinctive and that like changing the pressure of water, changing the voltage of electricity does not result in a distinctive product but is merely a delivery standard (e.g., water is water regardless of its pressure and electricity is electricity regardless of its voltage).

Taxpayer's arguments deviate from the relevant inquiry. Contrary to Taxpayer's argument, the question is not whether changing voltage is a production activity for purposes of § 263A because handling costs, including assembly and processing, are not production costs. Instead, to determine whether the costs associated with changing the voltage of electricity are processing costs, the proper focus is whether the change in voltage affects the nature or form of the underlying product. Likewise, to determine whether the costs associated with changing the voltage of electricity are assembly costs, it must be determined whether the activity makes the product ready for sale. A change in form or nature of a product does not affect the underlying substance of the product. Form is the shape and structure of something as distinguished from its substance. The American Heritage Dictionary 525 (Second College ed. 1982). Nature in this context means the essential characteristics and qualities of a thing. Id. at 832. Taxpayer's argument fails to recognize that voltage is a fundamental characteristic of electricity and that high voltage electricity is not usable by a majority of its customers. Taxpayer is required to change the form or nature of the electricity by changing its voltage to meet the delivery requirements of its customers. Accordingly, stepping-down the voltage of the electricity readies the electricity for sale to Taxpayer's customers and is either processing or assembly, the costs of which are required to capitalized under § 1.263A-1(e)(3)(ii)(G) and § 1.263A-3(c)(4)(ii) and (iii).

Additionally, electricity at different voltages is recognized in the marketplace as distinctive. Although some of Taxpayer's customers expect and can accept high voltage electricity directly from its transmission lines, the vast majority of its customers expect Taxpayer to step-down the voltage prior to delivery because they cannot accept delivery at the increased voltage. Taxpayer has also acknowledged that delivery voltage is relevant in determining the rate schedule under which a customer receives service. Thus, it is incorrect to assert that the marketplace views all electricity regardless of its voltage as the same.

Taxpayer has also argued that costs associated with its transmission and distribution systems are not required to be capitalized because they are distribution costs under § 1.263A-3(c)(4)(vi). Distribution costs are any transportation costs incurred outside a storage facility in delivering goods to a customer. In the instant case, Taxpayer's transmission and distribution costs are incurred outside a storage facility because Taxpayer has no storage facility for electricity. Taxpayer further argues that since the costs are incurred outside a storage facility, the transmission and distribution costs must be distribution costs, because the transmission and distribution system is designed to accomplish one single function – delivery of electricity to customers.

Taxpayer's position regarding the scope of the exception from capitalization for distribution costs is overly broad. If Taxpayer's position were correct, all transportation would be distribution. In all cases, once a product leaves a factory, the transportation of the product at least to some extent relates to delivery of the goods to customers. In other words, when a manufacturer ships the product from its factory to its warehouse the product moves closer to the manufacturer's customers. Likewise, when the product is shipped from the warehouse to a retail sales facility the product is one step closer to a customer. However, § 1.263A-3(c)(4)(v) clearly indicates that the costs associated with transporting goods from a vendor (in the case of a manufacturer the comparable is the factory) to the warehouse and from the warehouse to the retail sales facility are subject to capitalization. See §§1.263A-3(c)(4)(v)(A) and (C). Accordingly, Taxpayer's position regarding distribution is not persuasive. Instead, transportation costs are only exempted from capitalization as distribution costs when the transportation directly results in the delivery of the product to a customer. When a product is not completely ready for delivery to a customer, but instead is transported to another site for completion, processing, or assembly, the transportation is not direct delivery of the product to a customer and is, therefore, not distribution. Compare §§ 1.263A-3(c)(4)(v) and 1.263A-3(c)(4)(vi).

Taxpayer's transmission and distribution system does not directly deliver electricity to the majority of its customers. Instead, Taxpayer's transmission and distribution system delivers electricity to sites where the electricity is further processed or assembled so as to meet its customers' delivery requirements. Accordingly, the transmission and distribution costs related to electricity delivered to the majority of Taxpayer's customers are not distribution costs until the voltage is stepped-down at the last transformer before passing onto the drop-line connected to the meter. In the case of large industrial customers that access electricity directly from Taxpayer's transmission system, the costs of transmitting electricity to these customers are distribution costs at the point in the system when the electricity is at an appropriate voltage to deliver to these customers. Electricity delivered in wholesale arrangements or wheeled to other utilities may be at an appropriate voltage for delivery throughout the transmission system. Accordingly, the transmission costs associated with wheeling transactions are appropriately treated as distribution costs.

Production of electricity is subject to § 263A

Taxpayer argues that the operational nature of electricity supports the deductibility of transmission and distribution costs. In this regard, Taxpayer argues that its electric business should be viewed on a "holistic" basis, making the necessary analogies where necessary and appropriate to arrive at a determination consistent with the purposes of § 263A. According to Taxpayer, the regulations under § 263A clearly provide that the costs of "freight out" are "selling costs" and that the operational aspects of an electric utility support the deductibility of transmission and distribution costs. Taxpayer argues that costs associated with produced property are not required to be capitalized when the costs are incurred close in time to the delivery of the property to

the customer. In this regard, Taxpayer further argues that the purpose of the demand estimation process (i.e., load forecast) is to provide it with information necessary to consider the resources that will be required if the estimation of demand proves accurate. Taxpayer further argues that electricity travels at the speed of light and orders for electricity are filled instantaneously. Taxpayer contends that given these realities any attempt to apply the provisions of § 263A to the transportation of electricity "amounts to the pounding of the proverbial round peg into the proverbial square hole."

Taxpayer's argument fails to address two critical facts. First, the furnishing of electricity constitutes the sale of a product or good, rather than the sale of services. See Announcement 86-65, 1986-19 I.R.B. 19; see also State Tax Commission v. Marcus J. Lawrence Mem. Hosp., 495 P.2d 129 (Ariz. 1972); Helvey v. Wabash County REMC, 278 N.E.2d 608 (Ind. App. 1972); Minnesota Power & Light Company v. Taxing District, 182 N.W.2d 685 (Minn. 1970). Section 263A requires producers and resellers of tangible personal property to capitalize the direct and a proper share of the indirect costs of such property. Taxpayer's position is contrary to this established position. Generally, electricity is generated and delivered to customers within a matter of seconds because of the speed at which it travels. If Taxpayer's position were followed, costs associated with generating electricity would not be subject to capitalization under § 263A. Second, Taxpayer's argument is inconsistent with its request to be treated as a producer of electricity under § 263A. On Date 1, Taxpayer filed a Form 3115 requesting to change its method of accounting for mixed service costs. In its Form 3115, Taxpayer requested to allocate mixed service costs using the simplified service cost method and in doing so, it stated that it produced two types of eligible property for purposes of the method – electricity and self-constructed assets. Accordingly, Taxpayer itself has fully acknowledged that the costs of producing electricity are subject to the capitalization provisions of § 263A. Therefore, since Taxpayer's production of electricity is subject to capitalization under § 263A, so are the costs of handling it.

CAVEAT(S):

A copy of this technical advice memorandum is to be given to the taxpayer(s). Section 6110(k)(3) of the Code provides that it may not be used or cited as precedent.