Private Letter Ruling 9405006, 10/15/1993, IRC Sec(s). 167

UIL No. 0167.19-01

Date: October 15, 1993
TR-32-346-92
District Director
Taxpayer's Name: ***
Taxpayer's Address: ***
Identification No.: ***
Years Involved: ***
Conference Held: ***

LEGEND:
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State = ***
Location = ***
Report = ***
Commission = ***
AREA = ***
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Issues

1. When was the Plant placed in service for purposes of sections 38, 167, and 168 of the Internal Revenue Code of 1954? 1

2. When were the nuclear fuel rod assemblies that were loaded in the reactor of the Plant placed in service for purposes of sections 38, 167, and 168 of Code?

Facts

Taxpayer is a public utility engaged in business of the production, transmission, distribution, and sale of electricity in State. Taxpayer files a Federal income tax return on a calendar year basis.

The Plant is a nuclear powered, electrical generating facility, located in Location. The Plant includes a boiling water nuclear reactor with a containment structure and produces electricity for transmission and sale to customers by the use of the nuclear reactor and a steam driven turbine generator.

The Plant has a design electrical generating capability rating of a megawatts (MW) and its nuclear reactor's steam output is b pounds per hour at c degrees fahrenheit and d pounds per square inch. The Plant is a "base load" generating unit which is considered the cheapest to operate and therefore is designed and operated to deliver all of its available generating capacity to the electric transmission system whenever it is operating. The Plant includes such component parts as the boiling water nuclear reactor, nuclear fuel rod assemblies, the nuclear steam supply system, the turbine generator, fuel handling and storage facilities, a condenser cooling system, the residual heat removal system, the primary and secondary containment structures, emergency core cooling systems, emergency diesel generators, radwaste systems, and on-site waste storage facility.

Formal plans for the construction of the Plant were announced in e. Site preparation started in f, and construction of the Plant was commenced in g. Construction was temporarily halted in h and was resumed in i. The Taxpayer had responsibility for and control over the design, construction, licensing and operation of the Plant from the inception of the project. As a part of the construction process, the various components and systems of the Plant were tested extensively to assure their operational capability.

During and after completion of construction and prior to fuel load, Nuclear Regulatory Commission (the "NRC") regulations required equipment components and systems of the Plant to undergo exceptionally stringent, exhaustive testing. NRC Regulatory Guide 1.68, "Initial Test Programs for Water-Cooled Nuclear Plants", prescribes a testing program for commercial nuclear reactors, to be established and followed prior to fuel load and during initial operation. The program must contain two clearly defined categories of testing:

1) the preoperational testing program, and,

2) the initial startup testing program.

The testing program at the Plant (the "Initial Testing Program") is described in Chapter 14 of the Report to the NRC. It includes a preoperational testing program and an initial startup testing program as specified in Reg. Guide 1.68. Chapter 14 of the Report is a negotiated testing program between Taxpayer and the NRC for the testing of components, sub-systems, systems, and integrated systems of the Plant. This test program enables Taxpayer, NRC, and other interested parties to verify the proper design, construction, and operation of the parts of the Plant and the entire plant as a unit of property.

The Plant Initial Testing Program called for three phases of testing prior to commencement of the initial startup testing program: the construction test phase, the checkout and initial operations phase and the preoperational test phase (i.e., the preoperational testing program). During the checkout and initial operations phase, personnel conducted initial equipment energizing, instrument calibration, electrical wiring and equipment tests, valve testing, and initial equipment and system operation for tens of thousands of system components. During the preoperational test phase, numerous preoperational and acceptance tests were performed that are described in Chapter 14 of the Report. Except for four tests identified in an attachment to the Full Power License, the preoperational test phase was completed prior to the fuel loading and the commencement of the startup test phase (i.e., the initial startup testing program).

On l, the NRC issued a Facility Operating License (m% thermal power) and fuel loading began. At fuel loading, the Plant entered the startup test phase. The startup test phase consisted of fuel loading and open-vessel tests, initial heating to rated temperature and pressure, power testing from rated temperature and pressure to n% of rated thermal power (the "power ascension program" or "power ascension tests") and the warranty run.

Initial criticality was achieved on o, and on p, the NRC issued a Facility Operating License (n% thermal power) or the Full Power License to Taxpayer authorizing it to operate the Plant at reactor core power levels not to exceed n% of thermal power. The attachment to the Full Power License identified four incomplete tests of the preoperational test phase and required that they be completed in accordance with the scheduled commitments contained in certain reference documents. Each of these tests had been passed over during its normal performance period by the Taxpayer and deferred to a later date by the NRC, prior to the end of the startup test phase of the Initial Testing Program. These four tests were completed by q.

On r, s days before the NRC granted Taxpayer's Full Power License, an incident occurred in which an operator withdrew the reactor control rods farther than called for in the Plant's operating procedures. On t, the NRC issued a confirmatory action letter (a "CAL") regarding the r inadvertent criticality incident. In the CAL, the NRC stated its understanding that the Taxpayer would make certain evaluations, assurances, and verifications before seeking concurrence from the NRC that Taxpayer was ready to proceed to operate the Plant above m% thermal power. The NRC's concern was directed toward the personnel, methods, and procedures Taxpayer had in place for operating the Plant.

The initial turbine roll was completed on u. An equipment upgrade outage began on v, and lasted until w.

At the Plant, the power ascension program portion of the startup test phase "closely adhered" to Reg. Guide 1.68. Power ascension tests are conducted while the reactor of the Plant is operating at various ranges of thermal power and core flow up to various thermal power levels (at the Plant approximately m%, x%, y%, z%, and n%) to confirm that the Plant as a unit will operate safely in accordance with its design and will respond as designed to anticipated conditions and postulated transients.

Primarily as a result of the "rod pull" incident and subsequent "management, procedural and technical difficulties," Taxpayer and the NRC agreed that the power ascension program would proceed more cautiously at the Plant than at other nuclear generating stations. Taxpayer agreed that specific NRC concurrence would be obtained before Taxpayer proceeded to each step in the power ascension program.

Taxpayer restarted the reactor on aa. On bb, Taxpayer received NRC concurrence that it could begin power ascension to reactor core power levels up to x% thermal power. On cc, the turbine and generator were synchronized with Taxpayer's electrical transmission system for the first time. After operating for dd hours, the unit was shut down so that a problem with reactor water chemistry could be investigated. After modifications to the steam side of the main condenser were performed, and other maintenance work and surveillance tests conducted, the reactor was restarted on ee. After further startup testing, the generator was synchronized with the electrical system again on ff. The unit was shut down on gg, due to pressure fluctuations caused by a false output signal from the main turbine pressure regulator. The reactor was restarted the next day, and the turbine generator was resynchronized with the transmission system on hh. A scheduled outage to test the remote shutdown panel began on ii, and lasted until jj.

The generator was resynchronized with Taxpayer's electrical system on kk. On ll, the turbine automatically tripped off line as a result of a false signal by a vibration monitor, and the reactor power was reduced to mm% as the result of a condenser vacuum problem. The reactor was shut down on nn, to correct the condenser vacuum problem caused by excessive air in-leakage. After repairs and modifications to the condenser were made, and other testing and maintenance tasks completed, the reactor was restarted on oo, and the generator was resynchronized on pp.

The main turbine was taken off line again on qq, in order to repair three broken spare instrument lines that connected to the main steam lines between the turbine control valves and the main turbine. On ss, the reactor was shut down in order to repair steam leaks on instrument pressure taps on the main steam line. Work on the instrument pressure taps was completed on tt. The unit was restarted on uu, but problems arose when there was an inability to maintain condenser vacuum. The reactor remained at about m% thermal power while the problem was investigated and resolved.

On vv, the turbine generator was resynchronized with Taxpayer's electrical system, and on ww, the Plant operated at x% reactor core (thermal) power, producing xx megawatts electrical. On yy, Taxpayer submitted its formal request to raise thermal power above x%. The NRC Restart Team ("Restart Team") had already begun an assessment process on zz, and had completed the initial phase just prior to receipt of Taxpayer's request. The Restart Team determined that, in view of the problems which had occurred during the startup, the Restart Team could not approve operation above x% thermal power without an additional period of successful operation. The High Pressure Coolant Injection System (HPCI) had been inoperable since aaa, and the reactor was then in a 14 day Limiting Condition for Operation.

The Restart Team completed its assessment of Taxpayer's readiness to conduct power operation up to y% thermal power on bbb. By that date, the Plant had completed over ccc days of continuous routine operation and the Restart Team recommended that the Plant be given approval to operate up to y% thermal power and to proceed with further testing.

Electricity was placed in the transmission system and sold to customers without interruption from vv, until ddd, when the turbine- generator was off the system for eee hours, having tripped during performance of a test. On ddd, the NRC authorized power ascension up to the y% thermal power level. This authorization permitted Taxpayer to proceed with the startup test phase. The turbine-generator tripped and was off the system for fff hours on ggg, and for hhh hours on iii, while a possible ground fault was investigated. The unit was off the system for jjj hours on kkk, while the cause of the generator trips was again investigated and for lll hours beginning on mmm, while the problem causing the negative ground fault was identified and corrected.

During the nnn-day period from ww, to ooo, with the exceptions noted above, the Plant produced electricity which was placed in the transmission system and sold to customers, operating at from ppp% to qqq% reactor core power. During this period, the Plant produced rrr kilowatt hours of electricity which was sold to customers. Estimated revenues of sss dollars were collected from customers for this electricity based upon the ratio of total Taxpayer operating revenues to total kilowatt-hour sales during ttt.

From uuu, to vvv, the Restart Team continued to provide augmented inspection coverage for the Plant. Members of the Team evaluated control room operations, major test performance, and major maintenance activities. Taxpayer conducted testing to calibrate nuclear instruments, assess core performance, and verify proper operation of the pressure regulator, safety relief valves, feedwater control system, reactor recirculation flow control system, and turbine bypass system. The most significant test conducted during this phase was a scheduled outage initiated by performing the Loss of Turbine-Generator and Offsite Power Test on ooo. This test involved a trip of the turbine-generator and offsite power feeds and resulted in a reactor scram, main steam isolation valve closure, the starting of all four emergency diesel generators, and engineered safety features actuation. During this outage, certain planned modifications to the moisture separator reheaters were made, and scheduled maintenance work, required periodic surveillance tests, and

inspections were also performed. In a letter dated www, Taxpayer requested the NRC's concurrence to operate the Plant above y% thermal power.

The unit was resynchronized briefly on xxx, and ran until an error by a technician conducting surveillance testing caused an outage. The Plant came back on line on yyy, and ran until zzz, when the main turbine generator was manually tripped due to a failed vibration sensing element. The failed equipment was replaced. On aaaa, a steam leak from instrument taps on the main steam lines caused operators to shut down the reactor. During this outage, engineers worked to determine the cause of the leaks. After the cause of the leaks was identified, modifications to attachments to the turbine valves were designed and installed. Other scheduled maintenance work was also performed during this outage.

The reactor was placed back in operation at low thermal power on bbbb. Prior to the resynchronization of the turbine, a vibration problem caused the south reactor feedpump turbine to trip on cccc. On dddd, the reactor was shut down due to leakage from a valve (unrelated to the south reactor feedpump). Repairs to the valve, on the bottom head drain line of the reactor pressure vessel, were made and the reactor was restarted on eeee. The turbine was resynchronized on ffff.

From ffff, to gggg, the Plant, operating at up to y% reactor core power, produced electricity which was placed in the transmission system and sold to customers on hhhh of iiii days. It operated continuously during this period except for jjjj hours beginning kkkk, when the turbine generator was taken off line to change two pressure relief diaphragms on the transformer; llll hours on mmmm, to correct a bearing vibration sensor problem; and nnnn hours beginning oooo, when the reactor was manually shut down to inspect and repair the brushes on a reactor recirculation pump motor generator set and to perform certain other scheduled repairs.

On gggg, a shutdown was caused by a false high vibration signal from a bearing in the main turbine-generator. The reactor was restarted on pppp. A shutdown to repair a leaking feedwater check valve began on gggg. During this outage, management decided to perform preventative maintenance work and various other repairs and modifications.

In response to the Taxpayer's www, letter requesting the NRC's concurrence to operate the Plant above y% thermal power, the NRC Regional Administrator responded that, as a result of the need to consider certain factors, he would not have the necessary information to make a decision to allow operation of the Plant above y% thermal power. Some of these factors included the NRC's evaluation of continuing equipment and personnel error problems and the NRC's examination of the circumstances surrounding the unplanned mode change event (i.e., an unmonitored heatup) which occurred on rrrr.

On gggg, the generator was taken off line and reactor power was reduced to repair a leaking feedwater check valve. Subsequently, on ssss, the reactor was shut down. In a letter dated tttt, to the NRC Regional Administrator, Taxpayer withdrew its request for the NRC's concurrence to operate above y% thermal power due to the need to further

improve plant material condition and operational performance. In response, in a letter dated uuuu, the NRC acknowledged that there were equipment and personnel issues that needed to be addressed. The letter advised Taxpayer that a number of issues required evaluation prior to any Plant restart. On vvvv, Taxpayer met with NRC officials to address the resolution of outstanding technical issues and to demonstrate that the Taxpayer had improved the plant material condition substantially enough to support successful startup and operation.

The NRC, in an wwww, letter to Taxpayer, authorized the Plant's restart and resumption of y% thermal operation and acknowledged the overall improvements made, particularly in the maintenance backlog and AREA and in plant material operation. The letter outlined additional items requiring action on the part of the Taxpayer in order to permit the NRC to further measure objectively the results of its management changes and the improved operation practices, and to permit close monitoring of the various improvement programs in place.

The unit was restarted on wwww, and resynchronized on xxxx. From xxxx, to the end of the year, the Plant produced electricity around the clock for yyyy consecutive days, operating at reactor core power levels from y% to z% thermal power for all but the first three days. It produced zzzz kilowatt hours of electricity which was placed in the transmission system and sold to customers. Estimated revenues of aaaaa dollars were collected from customers for this electricity based upon the ratio of total Taxpayer operating revenues to total kilowatt-hour sales during ttt.

Noting that since bbbbb, Taxpayer had operated the Plant continuously at y% thermal power with few major problems, the NRC approved power ascension to levels up to z% thermal power on ccccc. The Plant operated continuously for the balance of ddddd. On eeeee, Taxpayer requested, and on fffff, the NRC approved power ascension to levels up to n% thermal power.

A "ggggg-hour commercial operation run at hhhhh% net electrical generation" was successfully conducted from iiiii, through jjjjj. On jjjjj, the Plant was placed in commercial operation for ratemaking and regulatory accounting purposes. The criterion for determining the commencement of the recovery of a portion of the cost of the Plant from customers (the commercial service date for ratemaking and regulatory accounting purposes) was established in an administrative rate proceeding before the Commission. The Commission Order in Case kkkkk, permitted Taxpayer to increase its rates for the cost of the Plant after completion of the ggggg-hour period of electrical generation at hhhhh% or greater power. In llllll, the NRC power ascension program was completed with final tests at n% thermal power.

Law (ISSUE #1)
Section 1.46-3(d)(1)(ii) of the Income Tax Regulations provides that property is considered placed in service in the taxable year in which the property is placed in a condition or state of readiness and availability for a specifically assigned function. Section 1.46-3(d)(2) provides examples of when property is considered in a condition or

state of readiness and availability for a specifically assigned function within the meaning of section 1.46- 3(d)(1)(ii). Such examples include where "(iii) Equipment is acquired for a specifically assigned function and is operational but is undergoing testing to eliminate any defects." The term "placed in service" has consistently been construed as having the same meaning for purposes of the investment tax credit and depreciation/cost recovery-deductions. See, e.g., Rev. Rul. 76-256, 1976-2 C.B. 46; Wilkison v. Commissioner, T.C.M. 1988-386, (the term "placed in service" for cost recovery deductions under section 168 of the Code has the same meaning as it does for depreciation under section 167 and for investment credit under section 46).

In Rev. Rul. 76-256, 1976-2 C.B. 46, a coal-fired electric generating unit was placed in service (i.e., in a condition or state of readiness and availability for a specifically assigned function) when (1) the necessary permits and licenses to operate the generating unit had been approved; (2) the generating unit was synchronized into the taxpayer's power grid for its function in the business of generating electric energy for the production of income; (3) the critical tests for the various components of the generating unit had been completed; (4) the generating unit was placed in the control of the taxpayer by the contractor; and (5) the daily operation of the generating unit had begun, notwithstanding the fact that the generating unit would undergo further testing to eliminate any defects.

Rev. Rul. 76-428, 1976-2 C.B. 47, describes the major components that are necessary to the operation of a nuclear generating unit as including a nuclear steam supply, a reactor auxiliary system, a control and safety instrumentation system, a radioactive waste disposal system, a fuel handling and storage system, a turbine system, and a containment system. Under the facts and circumstances described in Rev. Rul. 76-428, the unit was placed in service on December 23, 1975, when (1) the necessary permits and licenses had been approved; (2) all critical tests for various components had been completed; (3) the nuclear electric generating unit had been placed in the control of the taxpayer by the contractor; and (4) the generating unit had been synchronized into the taxpayer's power grid for its function in the business of generating nuclear electrical energy for the production of income, even though the generating unit would undergo further testing to eliminate any defects. Other pivotal facts in Rev. Rul. 76-428 include: (1) all systems had been proven operational during the preoperational testing program; (2) a full term, full power operating license was issued for the unit on November 19, 1975; (3) all critical tests necessary for power operation were performed prior to December 23, 1975; and (4) on December 23, 1975, initial synchronization and power operation were achieved at greater than 17 percent of the electrical capacity of the unit.

Rev. Rul. 79-98, 1979-1 C.B. 103, held that a nuclear electric generating unit was first placed in service when the unit became operational on May 25, 1974, rather than on July 9, 1974, the date the nuclear electric generating unit was accepted by the taxpayer from the contractor. On March 4, 1974, the unit was synchronized into the taxpayer's transmission and distribution system and by May 25, 1974, all critical tests were complete and the unit was able to operate even though it was still undergoing testing to eliminate any defects. The unit became operational on May 25, 1974, because, by that

date, the taxpayer had control of the unit, synchronization had been achieved, and all critical tests were completed.

Rev. Rul. 84-85, 1984-1 C.B. 10, clarified Rev. Rul. 79-98, by noting that the determination of when a facility is placed in service is not necessarily dependent on whether the facility is able to operate at its rated capacity. The analysis used in these revenue rulings is consistent with factors in Rev. Rul. 76-256.

The revenue rulings and court decisions have generally focused on five specific factors as most relevant to the determination of when an electric generating facility is placed in service. Those factors are as follows: (1) approval of the necessary licenses and permits; (2) passage of control of the facility from the contractor to the taxpayer; (3) completion of the critical tests; (4) synchronization of the generating unit into the taxpayer's power grid for its function in the generating of electrical energy for the production of income; and (5) commencement of daily operation. See Rev. Rul. 76-256, 1976-2 C.B. 46; Rev. Rul. 76-428, 1976-2 C.B. 47; Rev. Rul. 79-98, 1979-1 C.B. 103; Rev. Rul. 84-85, 1984-1 C.B. 11; Consumers Power Company v. Commissioner, 89 T.C. 710 (1987); and Oglethorpe Power Company v. Commissioner, T.C.M. 1990-505.

Although setting forth five factors to consider in making the placed in service determination, both Rev. Rul. 76-256 and Rev. Rul. 76-428 held that the generating facilities were placed in service at the time of initial synchronization because at that time all the other factors were also present. However, Rev. Rul. 79-98, as clarified by Rev. Rul. 84-85, holds, by looking at all the enumerated factors, that the subject electric generating facility was placed in service on a date after initial synchronization.

In Oglethorpe, the court analyzed the Service's revenue rulings and held that synchronization was not the controlling factor in making a placed in service determination, in part, because the ability of an electric generating unit to operate on a regular basis cannot be demonstrated until after synchronization. The court instead found that placed in service determinations require a consideration and balancing of all five factors. See generally Consumers Power Company v. Commissioner, supra. Accordingly, in determining the placed in service issue, we must analyze the five specific factors.

The District Director, in its request for Technical Advice, conceded that the Taxpayer had met the control factor prior to the years under examination. However, we simply note that Rev. Rul. 76- 256 and Rev. Rul. 76-428, with respect to the control factor, require that an electrical generating unit must be under the control of the taxpayer at the time the electrical generating unit is placed in service. Further, the control factor along with the other four factors must be present at the time when the electrical generating unit is placed in service.

Specifically, with reference to the synchronization factor, Rev. Rul. 76-428 states that the unit at issue had been placed in service when it was synchronized with the taxpayer's power grid for its function in the business of generating nuclear electric energy for the production of income. Rev. Rul. 76-256 included the commencement of daily operations

as a factor in the determination of the placed in service date. Based on these authorities, the proper interpretation of synchronization refers not to initial synchronization but rather to that synchronization which marks the beginning of the unit's regular operation for the production of power for sale to customers.

Next, we must analyze the remaining three factors to determine when the electrical generating facility was placed in service. First, we must consider whether the permits and licenses necessary for operation had been issued. Second, we must examine when all the critical tests of the component systems were completed. Third, we must determine when the electrical generating facility began daily operations, notwithstanding the continuation of testing to eliminate defects.

With reference to the licensing factor, Rev. Rul. 76-256 and Rev. Rul. 76-428 state that the necessary permits and licenses to operate the electrical generating unit had been approved when the electrical generating unit was placed in service. Rev. Rul. 76-428 describes a full term, full power operating license as having been issued for the generating unit prior to its placed-in-service date. Every nuclear plant license contains specifications for operation, including completion of start-up and preoperational tests. Every licensee, once the license is issued, is subject to a myriad of operating conditions, which are conditions subsequent for retaining the license. The licensee is also subject to NRC oversight throughout the life of the licensed facility, including imposition of new operating conditions within the reasonable discretion of the regulator. In any event, the license factor alone is not dispositive of when the electrical generating unit was placed in service. We must consider all the factors set forth in the revenue rulings.

With reference to the critical testing factor, Rev. Rul. 76-428 requires that all critical tests necessary for power operation must be performed prior to the placed in service date and describes power operation as being achieved when greater than ppp% percent of the electrical capacity of the nuclear-powered, electrical generating facility has been reached.

We must, also, determine when the electric generating facility began daily operation. An electrical generating facility is considered in daily operation when it is routinely operating to supply power to the transmission grid for sale to customers. In reaching a determination that property has been placed in service, the regulations require that property be operational (i.e., in a condition of readiness to perform its assigned function). The regulations expressly state that so long as the property is "operational," it may be placed in service even though it is "undergoing testing to eliminate any defects." See sections 1.46- 3(d)(1)(ii) and 1.46-3(d)(2)(iii) of the regulations. Thus, daily operations will begin when an electric generating facility begins continuous operation at progressively increasing output consistent with the fact that the taxpayer is continuing to test the facility for defects. If outages occur during this period all the facts and circumstances must be examined to determine whether these outages are consistent with a facility being ready and available for its specified function.

A placed in service determination is made only after a review of all relevant facts and circumstances, including, but by no means limited to, the five factors expressly

referenced in Rev. Rul. 76-256 and later revenue rulings. The determination takes into account those factors occurring before and after the date ultimately determined to be the placed in service date. For example, if a nuclear powered, electrical generating facility that has already satisfied the testing, licensing, and control criteria is synchronized and has commenced daily operations at ppp% electrical capacity, the electrical generating facility may be considered placed in service at synchronization because all factors will have been satisfied at this point. See Rev. Rul. 76-428. On the other hand, a nuclear generating facility will not be considered to have been placed in service at synchronization if it is clear on a review of all of the relevant facts and circumstances that at least one of the factors, other than synchronization, was not satisfied as of the date of synchronization. For example, the existence of a condition or conditions that are not consistent with the concept of daily operation would indicate that the daily operation factor has not been satisfied. In such a case, daily operation would not begin until the condition or conditions have been alleviated, and the generation facility is ready and available for its specifically assigned function. Thus, the ability of an electric generating facility to operate on a daily, regular, continuous, or sustained basis cannot be demonstrated until after synchronization.

Analysis (ISSUE #1)
Before proceeding with our analysis ofISSUE #1, the following is a discussion of the District Director's position and Taxpayer's position with respect toISSUE #1.

District Director's Position

The District Director, in its request for Technical Advice, noted that it had been established that Taxpayer had met the control factor for the placed-in-service determination prior to the years under examination. Before discussing the District Director's arguments as to the remaining four placed-in-service factors, we note that the District Director concluded that the Plant was not placed in service until mmmmm (the date the startup test phase of Taxpayer's initial testing and operating program was completed). In addition, it is not disputed that the Plant's initial synchronization occurred prior to ttt. On the other hand, Taxpayer argues that the Plant was placed in service on ww, a date subsequent to initial synchronization. We will address Taxpayer's position after discussing the District Director's position, which follows.

The District Director has argued that the Full Power License, issued on p, is subject to three major restrictions, the last of which was not removed until mmmmm (the date of completion of the startup test phase). The first restriction is that placed on the Plant by the startup test phase of the Initial Testing Program (i.e., Chapter 14 of Report). The Initial Testing Program is a negotiated testing program between Taxpayer and the NRC. This test program enables Taxpayer, the NRC, and other interested parties to verify the proper design, construction, and operation of the components of the Plant and the entire plant as a unit of property.

The second restriction referred to is an attachment to the Full Power License. The attachment identified four incomplete preoperational tests and required that the tests be

completed in accordance with the scheduled commitments contained in certain reference documents. These tests were not completed until j.

The third license restriction is the issuance of the CAL dated t, the day after Taxpayer received the Full Power License for the Plant. The circumstances surrounding the issuance of the CAL by the NRC and the contents of the CAL are described in the facts above. The final permission to increase to n% of rated thermal power was granted on fffff.

Further, the District Director has taken the position that all tests comprising the Initial Testing Program are critical tests (to assure that the various components of the Plant can operate as an integrated unit of property in the manner in which it was designed) for purposes of determining the placed-in-service date of the Plant. It is clear that the startup test phase of the Initial Test Program was not completed until mmmmm.

Taxpayer's Position

Taxpayer's position is that the Plant was placed in service on ww. Taxpayer argues that the facts and circumstances relative to the operation of its nuclear powered, electrical generating facility, the Plant, are so similar to the facts and circumstances presented in Rev. Rul. 76-428 that the conclusion reached in this revenue ruling can and must be applied to its own situation.

In specific reference to the synchronization requirement of the placed-in-service determination, Taxpayer noted that it did not claim that the Plant was placed in service on the date on which the unit was first synchronized, cc. The Plant was synchronized and ran for very limited periods several times before being resynchronized on vv. With reference to the licensing factor of the placed-in-service determination, Taxpayer argued that by ww, the Plant met the requirement of Rev. Rul. 76-428 that the necessary licenses and permits had been obtained (i.e., the Plant had a full power license and all other licenses that were necessary for operation of the Plant).

National Office's Position

We have reviewed the facts surrounding the case, the District Director's position, and the Taxpayer's position. We view the pivotal factors, set forth in Rev. Rul. 76-428 that are determinative of when a nuclear powered, electrical generating facility is placed in service, as being present on xxxx, at the Plant. 2

The most important factor in this case, in our view, is the commencement of daily operation factor of the placed-in-service determination. An electrical generating facility is considered in daily operation when it is routinely operating to supply power to the transmission grid for sale to customers. In reaching a determination that property has been placed in service, the regulations require that property be operational (i.e., in a condition of readiness to perform its assigned function). The regulations expressly state that so long as the property is "operational," it may be placed in service even though it is

"undergoing testing to eliminate any defects." See sections 1.46-3(d)(1)(ii) and 1.46(d)(2)(iii) of the regulations. Thus, daily operations will begin when an electrical generating facility begins continuous operation at progressively increasing output consistent with the fact that the taxpayer is continuing to test the facility for defects. If outages occur during this period all the facts and circumstances must be examined to determine whether these outages are consistent with a facility being ready and available for its specified function.

A review of the electrical power generated in ttt shows that following synchronization on xxxx, the Plant achieved power generation at greater than ppp% of the electrical capacity of the Plant. During a period from xxxx, to the end of ttt, the Plant produced electricity around the clock for yyyy consecutive days, by progressively increasing electrical power during this period to just under z% of the electrical capacity of the Plant. It produced zzzz kilowatt hours of electricity that was placed in the transmission system and sold to customers. Estimated revenues of aaaaa dollars were collected from customers for this electricity based upon the ratio of total Taxpayer operating revenues to total kilowatt-hour sales during ttt. Thus, electricity was placed in the transmission system and sold to customers without interruption for yyyy days, from xxxx, to the end of the year.

With reference to the synchronization requirement of the placed- in-service determination, Taxpayer noted that it did not claim that the Plant was placed in service on the date on which the unit was first synchronized, cc. Based on Rev. Rul. 76-428 and Rev. Rul. 76- 256, the proper interpretation of synchronization refers to that synchronization that marks the beginning of the unit's regular operation for the production of power for sale to customers. This did not occur earlier than xxxx, when the Plant began continuous operation at progressively increasing output.

With reference to the licensing requirement of the placed-in- service determination, the Taxpayer's Full Power License, issued on p, is of the type described as a full term, full power operating license in Rev. Rul. 76-428. Every nuclear power plant license contains specifications for operation, and every licensee, once the license is issued, is subject to numerous operating conditions, which are conditions subsequent for retaining the license. The Plant had a full power license, and all other licenses necessary for operation of the Plant, prior to xxxx.

With reference to the critical testing factor of Rev. Rul. 76- 428, Taxpayer completed (except for the four tests which were identified in an attachment to the Full Power License) the preoperational test phase of the Initial Testing Program prior to the fuel loading and the commencement of the startup test phase. On l, the NRC issued a Facility Operating License (m% thermal power) and fuel loading began. At fuel loading, the Plant entered the startup test phase. Rev. Rul. 76-428 requires that all critical tests necessary for power operation must be performed prior to placement- in-service. From the facts presented, all such critical tests had been completed by xxxx.

A placed-in-service determination is made only after a review of all relevant facts and circumstances including those occurring before and after the date ultimately determined

to be the placed-in-service date. A nuclear powered, electrical generating facility will not be considered to have been placed in service at synchronization if it is clear on a review of all of the relevant facts and circumstances that at least one of the factors, other than synchronization, was not satisfied as of the date of synchronization. For example, the existence of a condition or conditions that are not consistent with the concept of daily operation would indicate that the daily operation factor has not been satisfied. In such a case, daily operation would not begin until the condition or conditions have been alleviated, and the electrical generating facility is ready and available for its specifically assigned function.

Thus, the ability of an electrical generating facility to operate on a daily, regular, continuous, or sustained basis cannot be demonstrated until after synchronization. From a review of the events of ttt and applying the five placed-in-service factors, we have determined that the Plant had not been placed in service on ww. During the period from ww, through bbbbb, there were numerous electrical outages at the Plant. In response to Taxpayer's request for concurrence to operate the Plant at increasing thermal power levels, the NRC noted that the Plant continued to have equipment and personnel problems including an unplanned, unmonitored heatup of the reactor. Subsequently, the Taxpayer acknowledged the need to improve equipment and personnel performance and withdrew its request to increase thermal power level. Finally, by the beginning of k, the Taxpayer was able to demonstrate to the NRC that it had improved the equipment and personnel condition of the Plant so as to support successful startup and operation. The NRC then authorized restart of the Plant and resumption of y% thermal power. The Plant was restarted on wwww, and resynchronized on xxxx. Thereafter, the Plant was in continuous operation through the beginning of rr.

Thus, prior to xxxx, the Taxpayer has not demonstrated that the Plant was ready to operate on daily, regular, or sustained basis consistent with its specified function. During the period beginning with resynchronization on xxxx, the Taxpayer has demonstrated that the Plant began continuous operation at ever increasing power levels with only normal outages that were consistent with the fact that the Taxpayer was continuing to test the Plant for defects.

Conclusion (ISSUE #1)
Accordingly, the Plant was placed in service for purposes of sections 38, 167, and 168 of the Code on xxxx.

Law AND ANALYSIS (ISSUE #2)
Where there are component parts that operate to function as a single property, the Service has treated the components as an integrated unit of property and applied the determination of the placed-in-service date to the integrated unit as a whole. See, e.g., Rev. Rul. 73-518, 1973-2 C.B. 54 electrical transmission line not placed in service until substations were completed) and Rev. Rul. 76- 238, 1976-1 C.B. 55 (individual units of machinery and equipment not placed in service until entire production line was available). The courts have required property constituting an integrated unit to be placed in service as a single property. See, e.g., Hawaiian Independent Refinery, Inc. v. United

States, 697 F.2d 1063 (Fed. Cir. 1983), cert. den., 464 U.S. 816 (1983) (component parts of oil refinery considered single property); Public Service Co. of New Mexico v. United States, 431 F.2d 980 (10th Cir. 1970) (component parts of electric generating plant considered single property); and Consumers Power Co. v. Commissioner, 89 T.C. 710 (1987) (electric generating plant must be viewed as one integrated unit because the component parts operate simultaneously and as a unit in order to produce electrical power).

The Plant is an integrated unit of property or a single property comprised of component parts. The Plant includes such component parts as the boiling water nuclear reactor, nuclear fuel rod assemblies, the nuclear steam supply system, the turbine generator, fuel handling and storage facilities, a condenser cooling system, the residual heat removal system, the primary and secondary containment structures, emergency core cooling systems, emergency diesel generators, radwaste systems, and on-site waste storage facility. Rev. Rul. 72-507, 1972-2 C.B. 198, as clarified by Rev. Rul. 74-237, 1974-1 C.B. 70, states that expenditures for nuclear fuel assemblies are capital expenditures depreciable under the Code. Thus, because the nuclear fuel rod assemblies are a component part of the Plant and the cost of the nuclear fuel rod assemblies is depreciable, the nuclear fuel rod assemblies were placed in service on the date that the entire Plant as a whole was placed in service. We concluded that the Plant was placed in service on xxxx, for purposes of sections 38, 167, and 168 of the Code.

Conclusion (ISSUE #2)
The nuclear fuel rod assemblies were placed in service on xxxx, for purposes of sections 38, 167, and 168 of the Code.

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

1

All statutory references with respect to the issue are to the Internal Revenue Code of 1954, as amended and in effect immediately prior to the Tax Reform Act of 1986 (the "Act"). We note that the District characterized the property in issue as ACRS transitional property under the Internal Revenue Code of 1986. Since the question of whether the property in issue qualifies for transitional relief under the Act (e.g., section 203 of the Act) for investment credit and depreciation purposes was not raised in the request for Technical Advice, we have not specifically addressed this issue.

2

The District Director, in its request for Technical Advice, noted that it had been established that the Taxpayer had met the control requirement factor for the placed-in-service determination prior to the years under examination.