26 CFR 1.263(a)-1: Capital expenditures; in general.

(Also: §§ 162 and 446)

Rev. Proc. 2013-24

SECTION 1. PURPOSE

This revenue procedure provides definitions of units of property and major components taxpayers may use to determine whether expenditures to maintain, replace, or improve steam or electric power generation property must be capitalized under § 263(a) of the Internal Revenue Code. This revenue procedure also provides procedures for obtaining automatic consent to change to a method of accounting that uses all, or some of, the unit of property definitions provided.

SECTION 2. BACKGROUND

- .01 Taxpayers that generate steam or electric power incur significant expenditures to maintain, replace, and improve generation property. Whether these expenditures are deductible as repairs under § 162 or must be capitalized as improvements under § 263(a) depends on whether the expenditures materially increase the value of the property or appreciably prolong its life. See § 1.162-4 of the Income Tax Regulations. In general, under § 263(a) the cost of replacing a unit of property or major component must be capitalized.
- .02 A generation plant is composed of numerous functionally interdependent items of machinery and equipment, and it can be difficult to identify which items constitute discrete units of property, major components, or something else. As a consequence, taxpayers and the Internal Revenue Service (Service) often disagree about whether the cost to replace a particular item is a capital or deductible expense.
- .03 To minimize disputes regarding the deductibility or capitalization of expenditures to maintain, replace, or improve generation property, this revenue procedure provides "unit of property" and "major component" definitions which, if used

by a taxpayer as provided in the revenue procedure, will not be challenged by the Service.

.04 A taxpayer's method for determining whether an expenditure is deductible or is capitalizable, including unit of property and major component definitions, is a method of accounting under § 446. Section 446(e) and § 1.446-1(e) require taxpayers to secure the consent of the Commissioner before changing a method of accounting for Federal income tax purposes. Section 1.446-1(e)(3)(ii) authorizes the Commissioner to prescribe administrative procedures setting forth the limitations, terms, and conditions necessary to permit a taxpayer to obtain consent to change a method of accounting.

SECTION 3. SCOPE

- .01 <u>Applicability</u>. This revenue procedure applies to a taxpayer that has a depreciable interest in steam or electric power generation property primarily used in the trade or business of generating or selling steam (or steam in the form of heat) or electricity.
- .02 <u>Inapplicability</u>. This revenue procedure applies only to property defined in Appendix A of this revenue procedure. Specifically, this revenue procedure does not apply to property used to produce electricity from alternative energy sources such as wind or photovoltaic.
- .03 <u>Scope determined at entity level for consolidated groups and passthrough entities</u>. The determination of whether a taxpayer is within the scope of this revenue procedure is made by each member of a consolidated group, by a partnership, or by an S corporation.

SECTION 4. DEFINITIONS

The following definitions apply solely for purposes of this revenue procedure:

- .01 <u>Generation property</u>. "Generation property" means real and personal property that is used to generate steam or electricity and transmit that steam or electricity to the transmission and distribution network. Generation property excludes the transmission and distribution network. Examples of generation property include coal-fired, natural gas-fired, oil-fired, hydroelectric, and nuclear-powered power stations. Generation property does not include real or personal property not directly used to generate, conduct, or control steam or electricity at any point within a power station. For example, generation property does not include an accessory building (such as an administrative, training, or laboratory building), an office building, an administrative office section of a power station, or furniture and equipment used in such buildings or offices.
- .02 <u>Power station</u>. A "power station" is generally, at a minimum, one generating unit that is, the combination of a power source (some means of providing kinetic energy to the turbine, such as a boiler or dam), a turbine, and a generator. A power station may combine multiple generating units. However, a heat-only boiler station for generating steam power also qualifies as a power station for purposes of this revenue procedure. Due to design variations, an individual power station may or may not contain all of the units of property or major components listed in Appendix A.

SECTION 5. UNITS OF PROPERTY AND MAJOR COMPONENTS OF GENERATION PROPERTY

- .01 <u>In general</u>. If used in accordance with the requirements set forth in this revenue procedure, the unit of property or major component determinations provided in Appendix A of this revenue procedure will not be challenged by the Service under § 263(a) and the regulations thereunder.
- .02 <u>Universal use of units of property not required</u>. A taxpayer within the scope of this revenue procedure is not required to use all the unit of property definitions provided in Appendix A of this revenue procedure and, therefore, may use one or more of the unit of property definitions provided. However, this revenue procedure does not apply to property for which a taxpayer does not use a unit of property definition provided in Appendix A. A taxpayer that uses a unit of property definition provided in Appendix A must also use the major component definition(s) listed in Appendix A for that unit of property. Additionally, a taxpayer may not rely on a major component definition without using the corresponding unit of property definition. Once used, a unit of property definition and the corresponding major component definition(s) for that unit of property apply to all similar assets, including similar electric generation property subsequently acquired in an applicable asset acquisition as defined in § 1060 or in a transaction to which § 338(h)(10) applies.
- .03 <u>Limitation</u>. A taxpayer may not rely on the unit of property definitions provided in this revenue procedure for any other purpose of the Code or Regulations, including for determining the unit of property under other Code sections (for example, § 263A), or determining the asset for depreciation purposes (including placed in service dates, retirements, dispositions, or classification under § 168(e) or Rev. Proc. 87-56, 1987-2 C.B. 674), for the same or similar type of assets used in electric power generation.
- .04 Example. X is an electric utility company that files its Federal income tax return on a calendar year basis. X operates a power plant to generate electricity and uses the unit of property and major component definitions provided by this revenue procedure for each of the following items of property: (1) a structure that is not a building under § 1.48-1(e)(1), (2) four pulverizers that grind coal, (3) one boiler that produces steam, (4) one turbine that converts the steam into mechanical energy, and (5) one generator that converts mechanical energy into electrical energy. In addition, the turbine contains a series of blades that cause the turbine to rotate when affected by the steam. Under section 5 and Appendix A, section 2, of this revenue procedure, X treats the structure (Appendix A, section 2.02), the boiler (Appendix A, section 2.03), the turbine (Appendix A, section 2.11), the generator (Appendix A, section 2.12), and each of the four pulverizers (Appendix A, section 2,18) as separate units of property. X is not required to treat components, such as the turbine blades, as separate units of property, but under Appendix A, section 2.11(2)(c), each complete set of blades in each section of the turbine must be treated as a major component.

SECTION 6. CHANGE IN METHOD OF ACCOUNTING

.01 <u>In general</u>. A change to use the unit of property and major component definitions provided by this revenue procedure is a change in method of accounting to

which the provisions of §§ 446 and 481, and the regulations thereunder, apply. A taxpayer that wants to change to the method of accounting described in this revenue procedure must use the automatic change in method of accounting provisions in Rev. Proc. 2011-14, 2011-1 C.B. 330, or its successor, as modified by this revenue procedure.

- .02 <u>Extrapolation</u>. Taxpayers applying the method of accounting provided in this revenue procedure may extrapolate results to determine the § 481(a) adjustment amount for certain years by following the relevant procedures provided in Appendix B to this revenue procedure. Extrapolation methodologies not permitted in Appendix B to this revenue procedure are not permitted under the method of accounting.
- .03 <u>Automatic change</u>. Rev. Proc. 2011-14 is modified to add new section 3.20 to the APPENDIX, to read as follows:
- .20 <u>Method of accounting under Rev. Proc. 2013-24 for taxpayers in the business of generating steam or electric power.</u>
- (1) <u>Description of change</u>. This change applies to a taxpayer that is within the scope of Rev. Proc. 2013-24 and wants to change its treatment of generation property expenditures to use all, or some of, the unit of property definitions and the corresponding major component definitions described in Rev. Proc. 2013-24.
- (2) <u>Waiver of scope limitations</u>. The scope limitations in section 4.02 of this revenue procedure do not apply to an eligible taxpayer that changes to the method of accounting provided in Rev. Proc. 2013-24 for its first, second, or third taxable year ending after December 30, 2012.

(3) Section 481(a) adjustment.

- (a) A taxpayer must take the entire net § 481(a) adjustment into account (whether positive or negative) in computing taxable income in the year of change. For guidance regarding the use of extrapolation in computing a § 481(a) adjustment, see Rev. Proc. 2013-24, section 6.02 and Appendix B.
- (b) A taxpayer changing to this method of accounting must not include in the § 481(a) adjustment any amount attributable to property for which the taxpayer elected to apply the repair allowance under § 1.167(a)–11(d)(2) for any taxable year in which the repair allowance election was made.
- (4) Ogden copy of Form 3115 required in lieu of national office copy. A taxpayer changing its method of accounting under section 3.20 of the APPENDIX must file a signed copy of its completed Form 3115 with the IRS in Ogden, UT (Ogden copy), in lieu of filing the national office copy no earlier than the first day of the year of change and no later than the date the taxpayer files the original Form 3115 with its Federal income tax return for the year of change. See sections 6.02(3)(a)(ii)(B) (providing the general rules) and section 6.02(7)(b) (providing the mailing address) of this revenue procedure.
- (5) <u>Designated automatic accounting method change numbers</u>. The designated automatic accounting method change number for a change to the method of accounting provided in Rev. Proc. 2013-24 is "182."

(6) <u>Contact information</u>. For further information regarding a change under this section, contact Alan S. Williams at (202) 622-4950 (not a toll free call).

SECTION 8. EFFECT ON OTHER DOCUMENTS

Rev. Proc. 2011-14 is modified to include the accounting method change in this revenue procedure in section 3 of the Appendix.

SECTION 9. EFFECTIVE DATE

This revenue procedure is effective for taxable years ending on or after December 31, 2012.

SECTION 10. DRAFTING INFORMATION

The principal author of this revenue procedure is Alan S. Williams of the Office of Associate Chief Counsel (Income Tax and Accounting). For further information regarding this revenue procedure contact Alan S. Williams at 202-622-4950 (not a toll free call).

APPENDIX A

Unit of Property & Major Component Definitions

SECTION 1. IN GENERAL

- .01 <u>In general</u>. Listed throughout this Appendix are units of property and major components for specified power stations. Due to design variations, an individual power station may not contain all of the units of property or major components listed for that particular type of power station. A power station may combine multiple generating units. A generating unit generally includes, at a minimum, a power source, a turbine, and a generator. A unit of property that is shared by more than one generating unit is a single unit of property.
- .02 <u>Fans and pumps</u>. Unless otherwise stated, all fans and pumps include the electric motor that powers the fan or pump.
- .03 <u>Water conveyance system</u>. A water conveyance system includes all piping, fittings, valves, pumps, and other equipment included in the unit of property through which water or steam passes, unless identified with another major component.
- .04 <u>Instrumentation and controls</u>. Instrumentation and controls includes both those in the control room and those adjacent to the unit of property for which they are a major component.
- .05 <u>Generating unit determination</u>. For purposes of this revenue procedure, the units of property for a power station are determined on a generating-unit-by-generating-unit basis.

SECTION 2. UNITS OF PROPERTY FOR COAL-FIRED POWER STATIONS

.01 <u>In general</u>. For coal-fired power stations, the Service will not challenge any of the following unit of property or major component determinations for purposes of the application of § 263(a) and the regulations thereunder.

.02 Station property.

(1) Station property serving a generating unit constitutes a single unit of property. Station property is each structure that physically supports and/or encloses the generating unit equipment, along with the structure's associated systems and support facilities. It does not include accessory buildings (such as administrative, training, or laboratory buildings) or administrative office sections of the power station and systems that support administrative space (such as heating, air conditioning and ventilation, plumbing, and the electrical system within the administrative space). As noted in Appendix A, section 1.01 above, if a unit of property is shared by more than one generating unit, the unit of property is a single unit of property. However, in a power station with two generating units, if a single structure and its associated systems solely supports generating unit 1, another structure and its associated systems solely supports generating units 1 and 2, there are three separate units of station property (the structure and its associated systems solely supporting generating unit 1, the structure and its

associated systems solely supporting generating unit 2, and the structure and its associated systems supporting both generating units 1 and 2).

- (2) Station property contains the following major components:
 - (a) turbine building crane,
 - (b) all other overhead cranes, and
 - (c) all compressed air systems.
- .03 <u>Main boiler</u>. (1) Each main boiler constitutes a single unit of property. The main boiler is the equipment where coal is burned and heat is transferred to water in a process that creates steam.
 - (2) Each main boiler contains the following major components:
 - (a) primary furnace, including all tubing, baffles, and valves,
 - (b) economizer,
 - (c) steam drum,
 - (d) reheater,
 - (e) superheater,
 - (f) convection pass,
 - (g) complete burner system, and
 - (h) instrumentation and controls.
- .04 <u>Auxiliary boiler</u>. (1) Each auxiliary boiler constitutes a single unit of property. The auxiliary boiler is the equipment that supplies steam from a source independent of the main boiler. The auxiliary boiler is generally used to power the turbines during the process of starting the operation of the generating unit before the main boiler is operating.
 - (2) The auxiliary boiler has no major components.
- .05 <u>Combustion air system</u>. (1) Each combustion air system constitutes a single unit of property. The combustion air system is the equipment that controls the air draft for efficient burning of coal and the discharge of flue gas.
 - (2) Each combustion air system contains the following major components:
 - (a) forced draft fan,
 - (b) induced draft fan,
 - (c) induced draft booster fan,
- (d) ductwork, including the combustion air ductwork, the flue gas ductwork, and all related expansion joints,
 - (e) air preheater, and
 - (f) instrumentation and controls.

- .06 <u>Flue-gas desulfurization (FGD) scrubber (SO_x removal) system</u>. (1) Each Flue-gas desulfurization (FGD) scrubber (SO_x removal) system constitutes a single unit of property. The FGD scrubber system is the equipment that removes forms of sulfur oxide (SO_x) from flue gas.
 - (2) FGD scrubber system contains the following major components:
- (a) FGD sorbent handling system, which receives, stores, and transports the sorbent,
- (b) sorbent delivery system, which includes the crushing and slicing equipment,
 - (c) FGD vessel,
 - (d) scrubber circulating pumps,
 - (e) scrubber wastewater removal system, and
 - (f) instrumentation and controls.
- .07 $\underline{NO_x}$ removal system. (1) Each NO_x removal system constitutes a single unit of property. The NO_x removal system is the equipment that removes nitrogen oxides (NO_x) from the flue gas.
 - (2) The NO_x removal system contains the following major components:
 - (a) selective catalytic reducer box, and
- (b) ammonia/urea transport system, including the transport and injection equipment, and
 - (c) instrumentation and controls.
- .08 <u>Activated carbon handling and injection system</u>. (1) Each activated carbon handling and injection system constitutes a single unit of property. The activated carbon handling and injection system is the equipment that removes mercury (Hg) by the injection of carbon into the flue gas.
- (2) The activated carbon handling and injection system contains one major component: the instrumentation and controls.
- .09 <u>Continuous emissions monitoring system</u>. (1) Each continuous emissions monitoring system constitutes a single unit of property. The continuous emissions monitoring system is the equipment that monitors emissions at all times.
- (2) The continuous emissions monitoring system contains one major component: the instrumentation and controls.
- .10 <u>Condensate/feedwater system</u>. (1) Each condensate/feedwater system constitutes a single unit of property. The condensate/feedwater system is the equipment that forms a closed loop through which the treated feedwater circulates from the condenser to the steam drum within the boiler, through the turbines, and back to the condenser.

- (2) The condensate/feedwater system contains the following major components, the number of which will vary depending on the number of boiler feed pumps, boiler feed pump turbines, and condensate pumps in the system:
- (a) each boiler feed pump turbine, if the boiler feed pump is powered by a steam turbine,
 - (b) each boiler feed pump,
 - (c) the deaerater system,
 - (d) the primary condensate pump,
 - (e) the water conveyance system,
 - (f) the evaporator system, and
 - (g) instrumentation and controls.
- .11 <u>Turbine</u>. (1) Each turbine constitutes a single unit of property. The turbine is the equipment that extracts thermal power from pressurized steam and converts the energy into a rotary motion, which motion is used to power the generator.
- (2) The turbine contains the following major components, the number of which will vary, depending on the number of pressure sections in the turbine:
 - (a) shell and casing,
 - (b) instrumentation and controls,
- (c) complete set of blades in each section of the turbine (e.g., if turbine has high, medium, and low-pressure sections, there are three major components: one set of blades for each section of the turbine), and
- (d) shaft section in each section of the turbine (e.g., if turbine has high, medium, and low-pressure sections, there are three major components, one shaft for each section of the turbine).
- .12 <u>Generator</u>. (1) Each generator constitutes a single unit of property. The generator is the equipment that converts the mechanical energy produced by the turbine to electrical energy.
 - (2) The generator contains the following major components:
 - (a) stator, including the windings, shell, and casing,
 - (b) rotor, including core and windings, and
 - (c) instrumentation and controls.
- .13 <u>Condenser and cooling water system</u>. (1) Each condenser and cooling water system constitutes a single unit of property. The condenser and cooling water system is the equipment that converts the steam in the condensate/feedwater system back to water as it passes into the condenser.
- (2) The condenser and cooling water system contains the following major components, the number of which will vary, depending on the number of circulating

water pumps used to draw water from a lake, river, or ocean or to feed one or more cooling water towers:

- (a) condenser,
- (b) cooling tower,
- (c) water conveyance system,
- (d) the primary circulating water pump that draws from a unique water source (such as a lake, river, or ocean) for a once-through system, or which feeds one or more cooling water towers, and
 - (e) instrumentation and controls.
- .14 <u>Water treatment system</u>. (1) Each water treatment system constitutes a single unit of property. The water treatment system is generally the equipment that removes minerals and other impurities in the water, which is used in the condensate/feedwater system and the condenser and cooling water system.
 - (2) The water treatment system contains the following major components:
 - (a) filtration system,
 - (b) desalinization system,
 - (c) demineralization system,
 - (d) disinfection system, including chlorination,
 - (e) sedimentation system, and
 - (f) instrumentation and controls.
- .15 <u>Water supply system</u>. (1) Each water supply system constitutes a single unit of property. The water supply system is the equipment that supplies water to a generating unit.
 - (2) The water supply system contains the following major components:
 - (a) each storage tank,
 - (b) water conveyance system, and
 - (c) instrumentation and controls.
- .16 <u>Wastewater system</u>. (1) Each wastewater system constitutes a single unit of property. A wastewater system that integrates multiple treatment processes into one system is a single unit of property. Wholly separate and discrete wastewater systems are treated as separate units of property. The wastewater system is the equipment that treats and disposes of wastewater.
 - (2) The wastewater system contains the following major components:
 - (a) each treatment tank,
 - (b) wastewater conveyance system, and
 - (c) instrumentation and controls.

- .17 <u>Fuel storage and handling system</u>. (1) Each fuel storage and handling system constitutes a single unit of property. The fuel storage and handling system is the equipment that receives the coal, stores it, and delivers it to the boiler.
- (2) The fuel storage and handling system contains the following major components:
 - (a) coal handling systems,
 - (b) coal conveyors,
 - (c) each silo,
 - (d) coal handling stations, and
 - (e) instrumentation and controls.
- .18 <u>Pulverizer</u>. (1) Each pulverizer constitutes a separate unit of property. The pulverizer is the equipment that grinds the coal into a finer substance to improve combustion.
 - (2) The pulverizer has no major components.
- .19 <u>Ash handling system</u>. (1) Each ash handling system constitutes a single unit of property. The ash handling system is the equipment that captures, removes, transports, and stores bottom ash and fly ash, which are particulates created by the burning of coal.
 - (2) The ash handling system contains the following major components:
 - (a) each fly ash pond,
 - (b) bottom ash handling system,
 - (c) electrostatic precipitator,
 - (d) bag house, including bags,
 - (e) fly ash handling system, and
 - (f) instrumentation and controls.
- .20 <u>Auxiliary power system</u>. (1) Each auxiliary power system constitutes a single unit of property. The auxiliary power system is the equipment that provides back-up electrical power for a generating unit, which is needed to restart the generating unit after a shutdown.
- (2) The auxiliary power system contains one major component: each auxiliary generator.
- .21 <u>Simulator</u>. (1) Each simulator constitutes a single unit of property. The simulator is the equipment that is used to train plant personnel in the operations (including safety and rescue) of the power plant.
 - (2) The simulator has no major components.
- .22 <u>Main step-up transformer</u>. (1) Each main step-up transformer constitutes a single unit of property. The main step-up transformer is equipment that increases the

voltage of the electricity generated at the generation plant to a voltage level needed for the transmission of the electricity.

- (2) The main step-up transformer has no major components.
- .23 <u>Ventilation system</u>. (1) Each ventilation system serving a unit of station property, as defined in subsection 2.02 above, constitutes a single unit of property. The ventilation system is the equipment that circulates and filters the air in the station property.
- (2) No special rule is provided under this revenue procedure for the major components of the ventilation system. The major components of the ventilation system are determined under the general principles of § 263(a).
- .24 <u>Station electrical delivery system</u>. (1) A power station's electrical delivery system constitutes a single unit of property. The station electrical delivery system is the equipment that distributes electrical power in the power plant.
- (2) No special rule is provided under this revenue procedure for the major components of the station electrical system. The major components of the station electrical delivery system are determined under the general principles of § 263(a).
- .25 <u>Safety system</u>. (1) A power station's safety equipment constitutes a single unit of property. The safety system is the equipment that alerts power plant personnel to potentially hazardous conditions (including sirens, alarms, and evacuation systems).
- (2) No special rule is provided under this revenue procedure for the major components of the safety system. The major components of the safety system are determined under the general principles of § 263(a).
- .26 <u>Fire protection system</u>. (1) A power station's fire protection system constitutes a single unit of property. The fire protection system is the equipment that detects, suppresses, and extinguishes fires.
- (2) No special rule is provided under this revenue procedure for the major components of the fire protection system. The major components of the fire protection system are determined under the general principles of § 263(a).
- .27 <u>Accessory Buildings</u>. (1) Each accessory building constitutes a single unit of property. An accessory building is a building located at a power plant that is not station property as defined in subsection 2.02 above. For example, laboratory buildings, training buildings, warehouses, administrative buildings, pre-admittance buildings, and maintenance shops are accessory buildings.
- (2) No special rule is provided under this revenue procedure for the major components of the accessory buildings. The major components or substantial structural parts of an accessory building are determined under the general principles of § 263(a).
- SECTION 3. UNITS OF PROPERTY FOR NATURAL GAS OR OIL FIRED POWER STATIONS
- .01 <u>In general</u>. For natural gas or oil fired power stations, the Service will not challenge any of the following unit of property or major component determinations for purposes of the application of § 263(a) and the regulations thereunder.

- .02 Station property. (1) Station property serving a natural gas or oil fired generating unit constitutes a single unit of property. Station property is each structure that physically supports and/or encloses the generating unit equipment, and associated systems and support facilities. It does not include accessory buildings (such as administrative, training, or laboratory buildings) or administrative office sections of the power station and systems that support administrative space (such as heating, air conditioning and ventilation, plumbing, and the electrical system within the administrative space). As noted in Appendix A, section 1.01 above, if a unit of property is shared by more than one generating unit, the unit of property is a single unit of property. However, in a power station with two generating units, if a single structure and its associated systems solely supports generating unit 1, another structure and its associated systems solely supports generating unit 2, and a third structure and its associated systems supports both generating units 1 and 2, there are three separate units of station property (the structure and its associated systems solely supporting generating unit 1, the structure and its associated systems solely supporting generating unit 2, and the structure and its associated systems supporting both generating units 1 and 2).
 - (2) Station property contains the following major components:
 - (a) turbine building crane,
 - (b) all other overhead cranes, and
 - (c) all compressed air systems.
- .03 <u>Main Boiler</u>. (1) Each main boiler constitutes a single unit of property. The main boiler is the equipment where natural gas or oil is burned and heat is transferred to water in a process that creates steam. This unit of property is not included with either single-cycle or combined-cycle power stations.
 - (2) Each main boiler contains the following major components:
 - (a) primary furnace, including all tubing, baffles, and valves,
 - (b) economizer,
 - (c) steam drum,
 - (d) reheater,
 - (e) superheater,
 - (f) convection pass,
 - (g) complete burner system, and
 - (h) instrumentation and controls.
- .04 <u>Auxiliary boiler</u>. (1) Each auxiliary boiler constitutes a single unit of property. The auxiliary boiler is the equipment that supplies steam from a source independent of the main boiler. The auxiliary boiler is generally used to power the turbines during the process of starting the operation of the generation plant before the main boiler is operating.
 - (2) The auxiliary boiler has no major components.

- .05 <u>Combustion air system</u>. (1) Each combustion air system constitutes a single unit of property. The combustion air system is the equipment that controls the air draft for efficient burning of natural gas or oil and the discharge of flue gas.
 - (2) The combustion air system contains the following major components:
 - (a) forced draft fan,
 - (b) induced draft fan,
- (c) ductwork, including the combustion air ductwork, the flue gas ductwork, and all related expansion joints,
 - (d) air preheater, and
 - (e) instrumentation and controls.
- .06 $\underline{NO_x}$ removal system. (1) Each NOx removal system constitutes a single unit of property. The NO_x removal system is the equipment that removes nitrogen oxides (NO_x) from the flue gas.
 - (2) The NO_x removal system contains the following major components:
 - (a) selective catalytic reducer box,
- (b) ammonia/urea transport system, including the transport and injection equipment, and
 - (c) instrumentation and controls.
- .07 <u>Continuous emissions monitoring System</u>. (1) Each continuous emissions monitoring system constitutes a single unit of property. The continuous emissions monitoring system is the equipment that monitors emissions at all times.
- (2) The continuous emissions monitoring system contains one major component: the instrumentation and controls.
- .08 <u>Condensate/feedwater system</u>. (1) Each condensate/feedwater system constitutes a single unit of property. The condensate/feedwater system is the equipment that forms a closed loop through which the treated feedwater circulates from the condenser to the steam drum within the boiler, through the turbines, and back to the condenser.
- (2) The condensate/feedwater system contains the following major components, the number of which will vary depending on the number of boiler feed pumps, boiler feed pump turbines, and condensate pumps in the system:
- (a) each boiler feed pump turbine, if the boiler feed pump is powered by a steam turbine,
 - (b) each boiler feed pump,
 - (c) the deaerater system,
 - (d) the primary condensate pump,
 - (e) the water conveyance system,

- (f) the evaporator system, and
- (g) the instrumentation and controls.
- .09 <u>Turbine</u>. (1) Each turbine constitutes a single unit of property. The turbine is the equipment that extracts thermal power from pressurized steam and converts the energy into a rotary motion, which motion is used to power the generator.
- (2) The turbine contains the following major components, the number of which will vary, depending on the number of pressure sections in the turbine:
 - (a) shell and casing,
 - (b) instrumentation and controls,
- (c) complete set of blades in each section of the turbine (e.g., if the turbine has high, medium, and low-pressure sections, there are three major components: one set of blades for each section of the turbine),
- (d) shaft section in each section of the turbine (e.g., if the turbine has high, medium, and low-pressure sections, there are three major components: one shaft section for each section of the turbine).
- .10 <u>Generator</u>. (1) Each generator constitutes a single unit of property. The generator is the equipment that converts the mechanical energy produced by the turbine to electrical energy.
 - (2) The generator contains the following major components:
 - (a) stator, including the windings, shell, and casing,
 - (b) rotor, including core and windings, and
 - (c) instrumentation and controls.
- .11 <u>Condenser and cooling water system</u>. (1) Each condenser and cooling water system constitutes a single unit of property. The condenser and cooling water system is the equipment that converts the steam in the condensate/feedwater system back to water as it passes into the condenser.
- (2) The condenser and cooling water system contains the following major components, the number of which will vary, depending on the number of circulating water pumps used to draw water from a lake, river, or ocean or to feed one or more cooling water towers:
 - (a) condenser,
 - (b) cooling tower,
 - (c) water conveyance system,
- (d) each primary circulating water pump that draws from a unique water source (such as a lake, river, or ocean) for a once-through system, or which feeds one or more cooling water towers, and
 - (e) instrumentation and controls.

- .12 <u>Water treatment system</u>. (1) Each water treatment system constitutes a single unit of property. The water treatment system is generally the equipment that removes minerals and other impurities in the water, which is used in the condensate/feedwater system and the condenser and cooling water system.
 - (2) The water treatment system contains the following major components:
 - (a) filtration system,
 - (b) desalinization system,
 - (c) demineralization system,
 - (d) disinfection system, including chlorination,
 - (e) sedimentation system, and
 - (f) instrumentation and controls.
- .13 <u>Water supply system</u>. (1) Each water supply system constitutes a single unit of property. The water supply system is the equipment that supplies water to a generating unit.
 - (2) The water supply system contains the following major components:
 - (a) each storage tank,
 - (b) water conveyance system, and
 - (c) instrumentation and controls.
- .14 <u>Wastewater system</u>. (1) Each wastewater system constitutes a single unit of property. A wastewater system that integrates multiple treatment processes into one system is a single unit of property. Wholly separate and discrete wastewater systems are treated as separate units of property. The wastewater system is the equipment that treats and disposes of wastewater.
 - (2) The wastewater system contains the following major components:
 - (a) each treatment tank,
 - (b) wastewater conveyance system, and
 - (c) instrumentation and controls.
- .15 <u>Fuel storage and handling system</u>. (1) Each fuel storage and handling system constitutes a single unit of property. The fuel storage and handling system is the equipment that receives the natural gas or oil, stores it, and delivers it to the boiler.
- (2) The fuel storage and handling system contains the following major components:
 - (a) each fuel storage tank,
 - (b) fuel transport system, and
 - (c) instrumentation and controls.

- .16 <u>Auxiliary power system</u>. (1) Each auxiliary power system constitutes a single unit of property. The auxiliary power system is the equipment that provides back-up electrical power for a generating unit, which is needed to restart the generating unit after a shutdown.
- (2) The auxiliary power system contains one major component: each auxiliary generator.
- .17 <u>Simulator</u>. (1) Each simulator constitutes a single unit of property. The simulator is the equipment that is used to train plant personnel in the operations (including safety and rescue) of the power plant.
 - (2) The simulator has no major components.
- .18 <u>Main step-up transformer</u>. (1) Each main step-up transformer constitutes a single unit of property. The main step-up transformer is equipment that increases the voltage of the electricity generated at the generation plant to a voltage level needed for the transmission of the electricity.
 - (2) The main step-up transformer has no major components.
- .19 <u>Ventilation system</u>. (1) Each ventilation system serving a unit of station property, as defined in subsection 3.02 above, constitutes a single unit of property. The ventilation system is the equipment that circulates and filters the air in the station property.
- (2) No special rule is provided under this revenue procedure for the major components of the ventilation system. The major components of the ventilation system are determined under the general principles of § 263(a).
- .20 <u>Station electrical delivery system</u>. (1) A power station's electrical delivery system constitutes a single unit of property. The station electrical delivery system is the equipment that distributes electrical power in the generation plant.
- (2) No special rule is provided under this revenue procedure for the major components of the station electrical system. The major components of the station electrical system are determined under the general principles of § 263(a).
- .21 <u>Safety system</u>. (1) A power station's safety equipment constitutes a single unit of property. The safety system is the equipment that alerts generation plant personnel to potentially hazardous conditions (including sirens, alarms, and evacuation systems).
- (2) No special rule is provided under this revenue procedure for the major components of the safety system. The major components of the safety system are determined under the general principles of § 263(a).
- .22 <u>Fire protection system</u>. (1) A power station's fire protection system constitutes a single unit of property. The fire protection system is the equipment that detects, suppresses and extinguishes fires.
- (2) No special rule is provided under this revenue procedure for the major components of the fire protection system. The major components of the fire protection system are determined under the general principles of § 263(a).

- .23 <u>Combustion turbine</u>. (1) Each combustion turbine constitutes a single unit of property. The combustion turbine is the equipment that draws in air, compresses it, mixes it with fuel, ignites it to produce hot gases, and converts the energy into a rotary motion, which motion is used to power the generator.
 - (2) The combustion turbine contains the following major components:
 - (a) compressor section,
 - (b) combustor section,
 - (c) drive section.
 - (d) shaft,
 - (e) shell and casing, and
 - (f) instrumentation and controls.
- .24 <u>Heat recovery steam generator</u>. (1) Each heat recovery steam generator is a unit of property. The heat recovery steam generator is the equipment that uses heat exhaust from a combustion turbine and produces steam that can be used on a steam turbine. A heat recovery steam generator is used in a combined-cycle power station.
 - (2) The heat recovery steam generator has six major components:
- (a) ductwork, including the combustion air ductwork, the flue gas ductwork, and all related expansion joints,
 - (b) deaerator,
 - (c) economizer,
 - (d) evaporator,
 - (e) superheater, and
 - (f) instrumentation and controls.
- .25 <u>Accessory buildings</u>. (1) Each accessory building constitutes a single unit of property. An accessory building is a building located at a power plant that is not station property as defined in subsection 3.02 above. For example, laboratory buildings, training buildings, warehouses, administrative buildings, pre-admittance buildings, and maintenance shops are accessory buildings.
- (2) No special rule is provided under this revenue procedure for the major components of the accessory buildings. The major components or substantial structural parts of an accessory building are determined under the general principles of § 263(a).

SECTION 4. UNITS OF PROPERTY FOR HYDROELECTRIC POWER STATIONS.

- .01 <u>In general</u>. For hydroelectric power stations, the Service will not challenge any of the following unit of property or major component determinations for purposes of the application of § 263(a) and the regulations thereunder.
- .02 <u>Station Property</u>. (1) Station property serving a hydroelectric generating unit constitutes a single unit of property. Station property is each structure that physically supports and/or encloses the generating unit equipment, and associated systems and

support facilities. It does not include accessory buildings (such as administrative, training, or laboratory buildings) or administrative office sections of the power station and systems that support administrative space (such as heating, air conditioning and ventilation, plumbing, and the electrical system within the administrative space). As noted in Appendix A, section 1.01 above, if a unit of property is shared by more than one generating unit, the unit of property is a single unit of property. However, in a power station with two generating units, if a single structure and its associated systems solely supports generating unit 1, another structure and its associated systems supports both generating units 1 and 2, there are three separate units of station property (the structure and its associated systems solely supporting generating unit 1, the structure and its associated systems solely supporting generating unit 2, and the structure and its associated systems solely supporting generating unit 2, and the structure and its associated systems supporting both generating units 1 and 2).

- (2) Station property contains the following major components:
 - (a) turbine room crane,
 - (b) all other overhead cranes, and
 - (c) all compressed air systems.
- .03 <u>Dam</u>. (1) Each dam constitutes a single unit of property. The dam is the equipment that forms a barrier that impounds water and manages its flow.
 - (2) The dam contains the following major components:
 - (a) spillway,
 - (b) each spillway gate,
 - (c) intakes, including trash racks and rakes,
 - (d) fish passage system (e.g., fish ladders, elevators, and similar
 - (e) instrumentation and controls.
- .04 <u>Water control system</u>. (1) Each water control system constitutes an individual unit of property. The water control system is the equipment that controls the flow of water through the dam and to a water turbine. Within the water control system, a penstock carries water from a starting point, such as a reservoir intake, to a subsequent location, such as a turbine or a point of branching to multiple turbines or other penstocks. If the latter point is a branch, then that is the point of beginning of another penstock.
 - (2) The water control system contains the following major components:
 - (a) each penstock, including tunnels, flumes, and canals,
 - (b) each primary shut-off gate,
 - (c) surge shafts, tanks, and chambers associated with each

penstock,

items), and

(d) navigation locks, and

- (e) instrumentation and controls.
- .05 <u>Water turbine</u>. (1) Each water turbine constitutes an individual unit of property. The water turbine is the equipment that converts the kinetic energy of moving water into a rotary motion, which motion is used to power the generator.
 - (2) The water turbine contains the following major components:
 - (a) nozzles,
 - (b) each complete water wheel or runner,
 - (c) turbine shaft.
 - (d) turbine shell and casing,
 - (e) each wicket gate set, and
 - (f) instrumentation and control.
- .06 <u>Generator</u>. (1) Each generator constitutes a single unit of property. The generator is the equipment that converts the mechanical energy produced by the water turbine to electrical energy.
 - (2) The generator contains the following major components:
 - (a) stator, including the windings, shell, and casing,
 - (b) rotor, including core and windings, and
 - (c) instrumentation and controls.
- .07 <u>Water treatment system (e.g., at pumped storage facility)</u>. (1) Each water treatment system constitutes a single unit of property. The water treatment system is generally the equipment that removes minerals and other impurities in the water to produce higher purity water for industrial cooling, which, if present, is used for cooling the turbines and generators.
 - (2) The water treatment system contains the following major components:
 - (a) filtration system,
 - (b) demineralization system, and
 - (c) instrumentation and controls.
- .08 <u>Cooling and utility water system</u>. (1) Each cooling and utility water system constitutes a single unit of property. The cooling and utility water system is the equipment that supplies cooling water or utility water to a generating unit.
- (2) The cooling and utility water system contains the following major components:
 - (a) tanks,
 - (b) piping system, and
 - (c) instrumentation and controls.

- .09 <u>Auxiliary power system</u>. (1) Each auxiliary power system constitutes a single unit of property. The auxiliary power system is the equipment that provides back-up electrical power for the generation plant.
- (2) The auxiliary power system contains one major component: each auxiliary generator.
- .10 <u>Main step-up transformer</u>. (1) Each main step-up transformer constitutes a single unit of property. The main step-up transformer is equipment that increases the voltage of the electricity generated at the generation plant to a voltage level needed for the transmission of the electricity.
 - (2) The main step-up transformer has no major components.
- .11 <u>Ventilation System</u>. (1) Each ventilation system serving a unit of station property, as defined in subsection 4.02 above, constitutes a single unit of property. The ventilation system is the equipment that circulates and filters the air in the station property.
- (2) No special rule is provided under this revenue procedure for the major components of the ventilation system. The major components of the ventilation system are determined under the general principles of § 263(a).
- .12 <u>Station electrical delivery system</u>. (1) A power station's electrical delivery system constitutes a single unit of property. The station electrical delivery system is the equipment that distributes electrical power in the power plant.
- (2) No special rule is provided under this revenue procedure for the major components of the station electrical system. The major components of the station electrical system are determined under the general principles of § 263(a).
- .13 <u>Safety system</u>. (1) A power station's safety equipment constitutes a single unit of property. The safety system is the equipment that alerts generation plant personnel to potentially hazardous conditions (including sirens, alarms, and evacuation systems).
- (2) No special rule is provided under this revenue procedure for the major components of the safety system. The major components of the safety system are determined under the general principles of § 263(a).
- .14 <u>Fire Protection System</u>. (1) A power station's fire protection system constitutes a single unit of property. The fire protection system is the equipment that detects, suppresses, and extinguishes fires.
- (2) No special rule is provided under this revenue procedure for the major components of the fire protection system. The major components of the fire protection system are determined under the general principles of § 263(a).
- .15 <u>Accessory Buildings</u>. (1) Each accessory building constitutes a single unit of property. An accessory building is a building located at a hydroelectric power plant that is not station property. For example, laboratory buildings, training buildings, warehouses, administrative buildings, pre-admittance buildings, and maintenance shops are accessory buildings.

(2) No special rule is provided under this revenue procedure for the major components of the accessory buildings, The major components or substantial structural parts of an accessory building are determined under the general principles of § 263(a).

SECTION 5. UNITS OF PROPERTY FOR NUCLEAR-POWERED POWER STATIONS

- .01 <u>In general</u>. A nuclear-powered power station uses either a boiling water reactor (BWR) or a pressurized water reactor (PWR) to generate steam, but not both. Therefore, an individual nuclear-powered power station will not contain all of the units of property or major components listed below. For nuclear-powered power stations, the Service will not challenge any of the following unit of property or major component determinations for purposes of the application of § 263(a) and the regulations thereunder.
- .02 Station property. (1) Station property serving a generating unit constitutes a single unit of property. Station property is each structure that physically supports and/or encloses the generating unit equipment, and associated systems and support facilities. It does not include accessory buildings (such as administrative, training, or laboratory buildings) or administrative office sections of the power station and systems that support administrative space (such as heating, air conditioning and ventilation, plumbing, and the electrical system within the administrative space). As noted in Appendix A, section 1.01 above, if a unit of property is shared by more than one generating unit, the unit of property is a single unit of property. However, in a power station with two generating units, if a single structure and its associated systems solely supports generating unit 1, another structure and its associated systems solely supports generating unit 2, and a third structure and its associated systems supports both generating units 1 and 2, there are three separate units of station property (the structure and its associated systems solely supporting generating unit 1, the structure and its associated systems solely supporting generating unit 2, and the structure and its associated systems supporting both generating units 1 and 2).
 - (2) Station property contains the following major components:
 - (a) turbine building crane,
 - (b) reactor building crane,
 - (c) all other overhead cranes, and
 - (d) all compressed air systems.
- .03 <u>Containment Building</u>. (1) Each containment building constitutes a single unit of property. The containment building is the structure enclosing a nuclear reactor.
- (2) The containment building contains one major component: the containment building access doors.
- .04 <u>Reactor emergency poison system</u>. (1) Each emergency poison system for an individual reactor constitutes a single unit of property. The reactor emergency poison system is the equipment used to inject soluble neutron poison into the reactor coolant in the event of an emergency to terminate the heat generating nuclear reaction.

- (2) The reactor emergency poison system contains the following major components:
 - (a) storage tank, and
 - (b) injection equipment.
- .05 <u>Reactor vessel</u>. (1) Each reactor vessel constitutes a single unit of property. The reactor vessel is the pressurized vessel containing the reactor coolant and the reactor core where the heat produced by nuclear fission is transferred to water in a process that creates steam.
 - (2) The reactor vessel contains the following major components:
 - (a) reactor vessel head,
 - (b) steam separator (BWR),
 - (c) steam dryer (BWR),
 - (d) reactor core plate assembly, and
 - (e) instrumentation and controls.
- .06 <u>Nuclear fuel system</u>. (1) Each nuclear fuel system constitutes a single unit of property. The nuclear fuel system is the equipment that monitors and controls the nuclear fuel in a reactor vessel.
- (2) The nuclear fuel system contains one major component: instrumentation and controls.
- .07 <u>Reactor recirculation system (BWR)</u>. (1) Each reactor recirculation system constitutes a single unit of property. The reactor recirculation system is the equipment in a boiling water reactor that returns condensed water to the reactor core to be heated into steam.
- (2) The reactor recirculation system contains the following major components:
 - (a) each recirculating pump,
 - (b) each jet pump, and
 - (c) instrumentation and controls.
- .08 Reactor coolant system (PWR). (1) Each reactor coolant system constitutes a single unit of property. The reactor coolant system is the equipment in a pressurized water reactor that circulates liquid coolant through the reactor core, the pressurizer, and the steam generator.
 - (2) The reactor coolant system contains the following major components:
 - (a) each steam generator,
 - (b) pressurizer,
 - (c) each reactor cooling water pump,
 - (d) each loop of the water conveyance system,

- (e) each safety injection tank, and
- (f) instrumentation and controls.
- .09 <u>Feed and steam cycle</u>. (1) Each feed and steam cycle serving an individual reactor constitutes a single unit of property. The feed and steam cycle is the equipment that forms a closed loop through which the treated water circulates from the condenser to the reactor or steam generator, through the turbines, and back to the condenser.
- (2) The feed and steam cycle contains the following major components, the number of which will vary depending on the reactor technology used:
 - (a) each reactor feed pump (BWR),
 - (b) each feedwater pump (PWR),
 - (c) each loop of the water conveyance system,
 - (d) each condenser,
 - (e) each condensate pump,
 - (f) each demineralizer,
 - (g) each heat exchanger or feedwater heater,
 - (h) each moisture separator, and
 - (i) instrumentation and controls.
- .10 <u>Cooling water system</u>. (1) Each cooling water system constitutes a single unit of property. The cooling water system is the equipment that removes heat from the feed and steam cycle. The removal of heat is accomplished by bringing in water from an outside source and using a cooling tower or other cooling device to remove heat.
 - (2) The cooling water system contains the following major components:
 - (a) each cooling water pump,
 - (b) each cooling tower,
 - (c) each loop of the water conveyance system,
 - (d) screens, and
 - (e) instrumentation and controls.
- .11 <u>High pressure core safety system (BWR)</u>. (1) Each high pressure core safety system constitutes a single unit of property. The high pressure core safety system is the equipment that injects pressurized coolant into a boiling water reactor vessel in the event of an emergency.
- (2) The high pressure core safety system contains the following major components:
 - (a) each tank,
 - (b) each high pressure core injection pump,
 - (c) each loop of the water conveyance system, and

- (d) instrumentation and controls.
- .12 <u>Automatic depressurization system (BWR)</u>. (1) Each automatic depressurization system constitutes a single unit of property. The automatic depressurization system is the equipment that depressurizes a boiling water reactor vessel and allows lower pressure coolant injection systems to function.
- (2) The automatic depressurization system contains the following major components:
 - (a) each loop of the water conveyance system, and
 - (b) instrumentation and controls.
- .13 Low pressure coolant injection system (BWR). (1) Each low pressure coolant injection system constitutes a single unit of property. The low pressure coolant injection system is the equipment that injects coolant into a depressurized boiling water reactor vessel in the event of an emergency. This unit of property may not be in place where a low pressure core spray system is used.
- (2) The low pressure injection system contains the following major components:
 - (a) each residual heat removal exchanger,
 - (b) each low pressure coolant injection pump,
 - (c) each tank,
 - (d) each loop of the water conveyance system, and
 - (e) instrumentation and controls.
- .14 <u>Low pressure core spray system (BWR)</u>. (1) Each low pressure core spray system constitutes a single unit of property. The low pressure core spray system is the equipment that sprays water onto the nuclear fuel in a depressurized boiling water reactor vessel in the event of an emergency. This unit of property may not be in place where a low pressure coolant injection system is used.
- (2) The low pressure core spray system contains the following major components:
 - (a) each low pressure core spray pump,
 - (b) each tank,
 - (c) each loop of the water conveyance system, and
 - (d) instrumentation and controls.
- .15 <u>Core flood system (PWR)</u>. (1) Each core flood system constitutes a single unit of property. The core flood system is the equipment used to flood the reactor vessel in a pressurized water reactor in the event of an emergency.
 - (2) The core flood system contains the following major components:
 - (a) each core flood tank,

- (b) each loop of the water conveyance system, and
- (c) instrumentation and controls.
- .16 <u>Turbine</u>. (1) Each turbine constitutes a single unit of property. The turbine is the equipment that extracts thermal power from pressurized steam and converts the energy into a rotary motion, which motion is used to power the generator.
 - (2) The turbine contains the following major components:
 - (a) complete set of turbine high-pressure section blades,
 - (b) complete set of turbine mid-pressure section blades,
 - (c) complete set of turbine low-pressure section blades,
- (d) shaft section in each section of the turbine (i.e., since the turbine has high, medium, and low-pressure sections, there are three major components: one shaft for each section of the turbine),
 - (e) shell and casing, and
 - (f) instrumentation and controls.
- .17 <u>Generator</u>. (1) Each generator constitutes a single unit of property. The generator is the equipment that converts the mechanical energy produced by the water turbine to electrical energy.
 - (2) The generator contains the following major components:
 - (a) stator, including the windings, shell, and casing,
 - (b) rotor, including core and windings, and
 - (c) instrumentation and controls.
- .18 <u>Water treatment system</u>. (1) Each water treatment system constitutes a single unit of property. The water treatment system is generally the equipment that removes minerals and other impurities in the water, which is used in the reactor vessel, the reactor recirculation system (BWR), the reactor coolant system (PWR), the feed and steam cycle, the cooling water system, the high pressure core safety system (BWR), the automatic depressurization system (BWR), the low pressure coolant injection system (BWR), the low pressure core spray system (BWR), and the core flood system (PWR).
 - (2) The water treatment system contains the following major components:
 - (a) filtration system,
 - (b) desalinization system,
 - (c) evaporator,
 - (d) demineralization system,
 - (e) disinfection system,
 - (f) sedimentation system, and
 - (g) instrumentation and controls.

- .19 <u>Water supply system</u>. (1) Each water supply system constitutes a single unit of property. The water supply system is the equipment that supplies water to the generation plant.
 - (2) The water supply system contains the following major components:
 - (a) each storage tank,
 - (b) water conveyance system, and
 - (c) instrumentation and controls.
- .20 <u>Wastewater system</u>. (1) Each wastewater system constitutes a single unit of property. A wastewater system that integrates multiple treatment processes into one system is a single unit of property. Wholly separate and discrete wastewater systems are treated as separate units of property. The wastewater system is the equipment that treats and disposes of wastewater.
 - (2) The wastewater system contains the following major components:
 - (a) each treatment tank,
 - (b) wastewater conveyance system, and
 - (c) instrumentation and controls.
- .21 <u>Radioactive liquid treatment and disposal system</u>. (1) Each radioactive liquid treatment and disposal system constitutes a single unit of property. The radioactive liquid treatment and disposal system is the equipment that decontaminates liquid radioactive waste prior to the release or recycling of the decontaminated liquid.
- (2) The radioactive liquid treatment and disposal system contains the following major components:
 - (a) each tank,
 - (b) liquid conveyance system,
 - (c) liquid concentrator, and
 - (d) instrumentation and controls.
- .22 <u>Radioactive gas treatment and disposal system</u>. (1) Each radioactive gas treatment and disposal system constitutes a single unit of property. The radioactive gas treatment and disposal system is the equipment that decontaminates gaseous radioactive waste prior to the release of the decontaminated gas.
- (2) The radioactive gas treatment and disposal system contains the following major components:
 - (a) each tank,
 - (b) gas conveyance system,
 - (c) condenser,
 - (d) each stack, and
 - (e) instrumentation and controls.

- .23 <u>Radioactive solid treatment and disposal system</u>. (1) Each radioactive solid treatment and disposal system constitutes a single unit of property. The radioactive solid treatment and disposal system is the equipment that compacts or incinerates radioactive solids prior to storage or disposal.
- (2) The radioactive solid treatment and disposal system contains one major component: the instrumentation and controls.
- .24 <u>Fuel storage and handling system</u>. (1) Each fuel storage and handling system constitutes a single unit of property. The fuel storage and handling system is the equipment that receives fresh nuclear fuel, stores fresh fuel, delivers it to the reactor, removes spent fuel from the reactor, and stores the spent fuel prior to dry cask storage.
- (2) The fuel storage and handling system contains the following major components:
 - (a) fuel pool,
 - (b) fuel storage rack system,
 - (c) fuel cranes, and
 - (d) instrumentation and controls.
- .25 <u>Dry cask facility</u>. (1) Each dry cask facility constitutes a single unit of property. The dry cask facility is the equipment that temporarily stores spent nuclear fuel, where applicable.
 - (2) The dry cask facility contains the following major components:
 - (a) each spent fuel cask prior to being filled,
 - (b) each dry cask transfer vehicle, and
 - (c) instrumentation and controls.
- .26 <u>Auxiliary power system</u>. (1) Each auxiliary power system constitutes a single unit of property. The auxiliary power system is the equipment that provides back-up electrical power for the generation plant, which is needed to restart the generating unit after a shutdown.
- (2) The auxiliary power system contains one major component: each auxiliary generator.
- .27 <u>Simulator</u>. (1) Each simulator constitutes a single unit of property. The simulator is the equipment that is used to train plant personnel in the operations (including safety and rescue) of the power plant.
 - (2) The simulator has no major components.
- .28 <u>Main step-up transformer</u>. (1) Each main step-up transformer constitutes a single unit of property. The main step-up transformer is equipment that increases the voltage of the electricity generated at the generation plant to a voltage level needed for the transmission of the electricity.
 - (2) The main step-up transformer has no major components.

- .29 <u>Heating, ventilation, and air conditioning (HVAC) system</u>. (1) Each heating, ventilation, and air conditioning (HVAC) system serving a unit of station property, as defined in subsection 5.02 above, constitutes a single unit of property. The HVAC system is the equipment that conditions, circulates, and filters the air in the station property.
- (2) No special rule is provided under this revenue procedure for the major components of the station electrical system. The major components of the HVAC system are determined under the general principles of § 263(a).
- .30 <u>Station electrical delivery system</u>. (1) A power station's electrical delivery system constitutes a single unit of property. The station electrical delivery system is the equipment that distributes electrical power in the power plant.
- (2) No special rule is provided under this revenue procedure for the major components of the station electrical system. The major components of the station electrical system are determined under the general principles of § 263(a).
- .31 <u>Safety system</u>. (1) A power station's safety system constitutes a single unit of property. The safety system is the equipment that alerts power plant personnel to potentially hazardous conditions (including sirens, alarms, and evacuation systems).
 - (2) The safety system contains the following major components:
 - (a) emergency evacuation system, and
 - (b) radiological hygiene station.
- .32 <u>Environmental radiation monitoring system</u>. (1) A power station's environmental radiation monitoring system constitutes a single unit of property. The environmental radiation monitoring system is the equipment that continuously monitors the environmental radiation levels inside and outside the generation plant.
- (2) The environmental radiation monitoring system contains the following major components:
 - (a) the water monitoring system, and
 - (b) the air monitoring system.
- .33 <u>Security system</u>. (1) The security system at a power plant constitutes a single unit of property. The security system is the equipment used to provide security at the generation plant.
 - (2) The security system contains the following major components:
 - (a) the explosive detection system, and
 - (b) each guard tower.
- .34 <u>Fire Protection System</u>. (1) A power station's fire protection system constitutes a single unit of property. The fire protection system is the equipment that detects, suppresses, and extinguishes fires.

- (2) No special rule is provided under this revenue procedure for the major components of the fire protection system. The major components of the fire protection system are determined under the general principles of § 263(a).
- .35 <u>Accessory Buildings</u>. (1) Each accessory building constitutes a single unit of property. An accessory building is a building located at a nuclear-powered power station that is not station property as defined in subsection 5.02 above. For example, laboratory buildings, training buildings, warehouses, administrative buildings, preadmittance buildings, and maintenance shops are accessory buildings.
- (2) No special rule is provided under this revenue procedure for the major components of the accessory buildings. The major components or substantial structural parts of an accessory building are determined under the general principles of § 263(a).

APPENDIX B

Extrapolation Guidance

SECTION 1. INTRODUCTION

- .01 <u>In general</u>. This appendix provides an extrapolation methodology an eligible taxpayer may use in connection with a change in method of accounting to use the unit of property and major component definitions provided by this revenue procedure. The extrapolation methodology described in this Appendix B provides the exclusive extrapolation methodology that is permitted under the method of accounting provided in this revenue procedure for determining the amount of a § 481(a) adjustment.
- .02 <u>Scope</u> This revenue procedure, including this Appendix B, does not apply to property for which a taxpayer does not use a unit of property determination provided in Appendix A to this revenue procedure.

SECTION 2. EXTRAPOLATION METHODOLOGY

- .01 In general. A taxpayer making a change to apply the method of accounting provided by this revenue procedure may use the extrapolation procedures provided in this Appendix B to determine the § 481(a) adjustment resulting from the change in method of accounting. Generally, the taxpayer first applies the method to a testing period of recent, representative years, and derives an average repair deduction under the method of accounting, as a percentage of total capital additions (for financial accounting purposes). This percentage, adjusted by a reduction percentage that varies based on time, is then applied to the adjusted capital additions (for financial accounting purposes) for prior years for which extrapolation is used to derive a deemed § 481(a) adjustment amount for each year. These extrapolated § 481(a) adjustment amounts are then combined with the actual adjustment amounts for years in which the § 481(a) adjustment is calculated in the normal manner to arrive at the total § 481(a) adjustment attributable to the change in method of accounting.
- .02 <u>Calculation methodology</u>. In order to determine the amount of the § 481(a) adjustment when extrapolation is applied, the following calculation methodology must be used:
 - (1) Testing period. First, a testing period is determined as follows:
- (a) <u>In general</u>. The taxpayer must use as the testing period a minimum of three consecutive taxable years ("testing years"), except as described in paragraph 2.02(1)(b)(ii) of this Appendix B. Generally, the final year of the testing period is the taxable year preceding the year of change. Alternatively, a taxpayer may choose the year of change as the final year of the testing period.
- (b) Representative years required. The testing years must be representative of all years included in the § 481(a) adjustment.
- (i) In determining whether a year is representative, a taxpayer must take into account restructuring transactions, including acquisitions and dispositions, as well as any other events, that may have triggered large capital additions.

- (ii) If one of the taxable years in the testing period described in section 2.02(1)(a) of this Appendix B is not representative, the taxpayer must exclude data from the non-representative year from the testing period and use data from the fourth most recent taxable year to establish a testing period (with such fourth most recent taxable year being a testing year). If the fourth most recent taxable year is not representative either, the taxpayer must consult with its examining agent or team to determine whether extrapolation is appropriate in the taxpayer's situation.
- (c) Additional years. Under the extrapolation calculation methodology, if the taxpayer has sufficient data to calculate the repair deduction percentage for more than three years, the taxpayer may include those years in the testing period. The additional testing years must be consecutive years that immediately precede the original three-year testing period, except that a year that is not representative, as described in section 2.02(1)(b) of this Appendix B, should be excluded. A taxpayer may not use, as an additional testing year, a year that is separated from the rest of the testing period by more than one non-representative year.
- (2) <u>Repair deduction percentage</u>. Second, a repair deduction percentage for each year for which extrapolation is used ("extrapolation year") is computed as follows, using data from the testing period.
- (a) Repair deductions during the testing period under the proposed method. For each testing year, the amount of repair expenses that would be deductible under the method of accounting provided in this revenue procedure, before taking into account book-tax basis adjustments, is determined.
- (b) <u>Tentative repair deduction percentage</u>. The sum of the deductible repair expenses for all testing years in the testing period, as determined under section 2.02(2)(a) of this Appendix B, is then divided by the sum of all capital additions during the testing period. For this purpose, a taxpayer must use capital additions for financial statement purposes ("book capital additions"). The resulting ratio represents the average percentage of capitalized additions that are properly treated as deductible repair expenses under the taxpayer's proposed method of accounting ("tentative repair deduction percentage"), before taking into account book-tax basis adjustments.
- (c) Repair deduction percentage for an extrapolation year. The tentative repair deduction percentage is then multiplied by a reduction percentage for each extrapolation year. For each extrapolation year, the reduction percentage is determined by using the formula $(1-(0.10^*(X/Y)))$, where X equals the number of years the extrapolation year precedes the final year of the testing period and Y equals the total of number of taxable years in the testing period. The reduction percentage for an extrapolation year multiplied by the tentative repair deduction percentage equals the repair deduction percentage for the extrapolation year.
- (3) Extrapolation year tentative repair deduction amount. Third, a tentative repair deduction amount under the proposed method is calculated for each extrapolation year.

- (a) The repair deduction amount for an extrapolation year is calculated by multiplying the repair deduction percentage for the extrapolation year (determined in section 2.02(2) of this Appendix B) by the book capital additions for the extrapolation year.
- (b) In determining the repair deduction amount for an extrapolation year, a taxpayer must account for any book-tax basis adjustments for property placed in service in the extrapolation year. Book-tax basis adjustments for property placed in service in the extrapolation year may be accounted for by multiplying the tentative repair deduction amount for an extrapolation year by the taxpayer's book-to-tax adjustment percentage for the extrapolation year. Tax adjustments that must be accounted for include, among other things, the following types of adjustments:
- (i) adjustments resulting from a change in method of accounting permitted under Rev. Proc. 2000-7, 2000-1 C.B. 712, involving the treatment of the costs incurred in removing retired assets;
- (ii) adjustments resulting from a change in the treatment of capitalized amounts determined under § 263A, including reductions for additional mixed service costs allocated to inventory and adjustments to account for changes to interest capitalization amounts;
- (iii) adjustments arising from casualty loss deductions recognized under § 165; and
- (iv) adjustments resulting from research and experimental expenditures deducted under § 174.
- (4) Repair allowance adjustment and repair deduction amount. Fourth, for each extrapolation year in which the repair allowance election under § 1.167(a)-11(d)(2) (ADR repair allowance) was made, the tentative repair deduction amount must be reduced by the cost of repairs to generation property attributable to ADR repair allowance property. To determine the reduction where a prior ADR repair allowance election was made for generation property, taxpayers must use a method comparable to the method actually used to allocate qualified repair expenditures to repair allowance property for that year. For example, if in applying § 1.167(a)-11(d)(2) for the 1997 taxable year a taxpayer determined that 73 percent of its 1997 qualified repair expenditures for generation property were attributable to repair allowance property, then that same percentage (73%) must be applied to determine the reduction to the repair deduction amount otherwise calculated under section 2.02(3) of this Appendix B. The amount determined after reducing the tentative repair deduction amount by the cost of repairs attributable to ADR repair allowance property is the repair deduction amount for the extrapolation year.
- (5) Tentative § 481(a) adjustment amount. Fifth, the tentative § 481(a) adjustment amount for each extrapolation year is determined. The tentative § 481(a) adjustment amount for each extrapolation year is calculated by subtracting the repair deduction amount for the extrapolation year, as determined in sections 2.02(1) through 2.02(4) of this Appendix B, from the amount of repair expenses the taxpayer deducted for that year under its prior method of accounting (including § 481(a) adjustments

resulting from any prior method change). The difference, whether positive or negative, is the tentative § 481(a) adjustment amount for the extrapolation year.

- (6) Extrapolation year § 481(a) adjustment amount. Sixth, the tentative § 481(a) adjustment amount for each extrapolation year must be adjusted to account for any differences in depreciation, credits, or any other cumulative differences in deductions between the extrapolation year and the year of change resulting from the taxpayer's proposed method of accounting. For instance, if under the proposed method a taxpayer's repair deduction for an extrapolation year would be tentatively increased by \$1,000, such that the unadjusted basis of the property placed in service would be correspondingly decreased by \$1,000, the \$1,000 tentative repair deduction increase for the extrapolation year must be reduced by the portion of the \$1,000 in unadjusted basis that the taxpayer had recovered prior to the year of change.
- (7) Total § 481(a) adjustment. Finally, the total § 481(a) adjustment attributable to the change to the taxpayer's proposed method of accounting is determined. The total § 481(a) adjustment for the year of change is calculated by combining the § 481(a) adjustment amounts for all extrapolation years, as described in this section 2.02, with the adjustment amounts, after taking into account book-tax basis adjustments, for years determined under § 481(a) in the normal manner.
- .03 <u>Example</u>. In 2012, W, a calendar year taxpayer, changes its method of accounting for all of W's electric generation property to use the unit of property and major component definitions provided in Appendix A of this revenue procedure. W uses the extrapolation methodology provided in section 2 of this Appendix B to determine the amount of its § 481(a) adjustment attributable to taxable years 1992 through 2008.

Following the general rule in section 2.02(1) of this Appendix B, W uses as its testing period 2009, 2010, and 2011, the three consecutive taxable years ending with 2011, the year preceding the year of change. Assume that each of 2009, 2010, and 2011 are representative of all years included in W's § 481(a) adjustment.

W's book capital additions for 2009, 2010, and 2011 are \$3,000, \$3,000, and \$4,000, respectively, for a total of \$10,000. Of these amounts, the portions that are properly treated as deductible repair expenses resulting from the application of W's proposed method of accounting for 2009, 2010, and 2011, before taking into account book-tax basis adjustments, are \$300, \$400, and \$300, respectively, for a total of \$1,000.

For 2003, W's book capital additions are \$3,333. W's book-to-tax adjustment percentage for 2003 is 90%. In 2003, W elected to apply the ADR repair allowance under § 1.167(a)-11(d)(2), which applied to 25% of W's generation property. Under W's prior method of accounting (prior to application of the method of accounting provided by this revenue procedure), W deducted \$150 in repair expenses in 2003.

W determines its section 481(a) adjustment for 2003 as follows:

- Step 1. W determines that it will use taxable years 2009, 2010, and 2011 as the testing years in its testing period.
- Step 2. W calculates its repair deduction percentage for 2003. First, a tentative repair deduction percentage is calculated using data from the testing period

(taxable years 2009, 2010, and 2011). Book capital additions that are properly treated as deductible repair expenses resulting from the application of the proposed method of accounting, before taking into account book-tax basis adjusments, for 2009, 2010, and 2011, the testing years that comprise the testing period, equal \$1,000 (\$300 + \$400 + \$300). Total book capital additions for the testing period are \$10,000 (\$3,000 + \$3,000 + \$4,000). W's tentative repair deduction percentage is 10% (\$1,000 / \$10,000).

Next, W calculates the reduction percentage for each extrapolation year using the formula (1 - 0.10 * (X/Y)), where X equals the number of years the extrapolation year precedes 2011, the final year of the testing period, and Y equals 3, the number of years in the testing period. The reduction percentage for each extrapolation year is calculated as follows:

Taxable Year	Reduction Percentage Calculation	Reduction Percentage Calculation
	(Step A)	<u>(Step B)</u>
2008	0.10 * (3/3) = 0.10	1 - 0.10 = 0.90 = 90.0%
2007	0.10 * (4/3) = 0.133	1 – 0.133 = 0.867 = 86.7%
2006	0.10 * (5/3) = 0.167	1 – 0.167 = 0.833 = 83.3%
2005	0.10 * (6/3) = 0.20	1 - 0.20 = 0.80 = 80.0%
2004	0.10 * (7/3) = 0.233	1 – 0.233 = 0.767 = 76.7%
2003	0.10 * (8/3) = 0.267	1 – 0.267 = 0.733 = 73.3%
2002	0.10 * (9/3) = 0.30	1 - 0.30 = 0.70 = 70.0%
2001	0.10 * (10/3) = .333	1 - 0.367 = 0.633 = 66.7%
2000	0.10 * (11/3) = .367	1 - 0.367 = 0.633 = 63.3%
1999	0.10 * (12/3) = .40	1 - 0.40 = 0.60 = 60.0%
1998	0.10 * (13/3) = .433	1 - 0.467 = 0.567 = 56.7%
1997	0.10 * (14/3) = .467	1 - 0.467 = 0.533 = 53.3%
1996	0.10 * (15/3) = .50	150 = 0.50 = 50.0%
1995	0.10 * (16/3) = .533	1 - 0.533 = 0.467 = 46.7%
1994	0.10 * (17/3) = .567	1 - 0.567 = 0.433 = 43.3%
1993	0.10 * (18/3) = .60	1 - 0.60 = 0.40 = 40.0%
1992	0.10 * (19/3) = .633	1 - 0.633 = 0.367 = 36.7%

Finally, W's calculates the repair deduction percentage for 2003 (7.33%) by multiplying the tentative repair deduction percentage (10%) by the reduction percentage for 2003 (73.3%).

- Step 3. W calculates a tentative repair deduction amount for 2003. First W multiplies its book capital additions for 2003 (\$3,333) by its repair deduction percentage (7.33%), resulting in an initial tentative repair deduction amount of \$244. Next, W accounts for any book-tax basis adjustments for property placed in service in 2003 by multiplying the initial tentative repair deduction amount (\$244) for 2003 by the taxpayer's book-to-tax adjustment percentage for 2003 (90%), resulting in a tentative repair deduction amount of \$220.
- Step 4. W must reduce its tentative repair deduction amount for 2003 to exclude repairs attributable to generation property for which the taxpayer elected to apply the ADR repair allowance. In 2003, W determined that 25 percent of its 2003 qualified repair expenditures for generation property were attributable to repair allowance property. Therefore, W reduces the repair deduction amount for 2003 (\$220) by 25% (\$55), yielding a repair deduction amount for 2003 of \$165.
- Step 5. W determines its tentative § 481(a) adjustment amount for 2003. W subtracts the adjusted gross repair deduction amount for 2003 (\$165) from the amount of repair expenses W deducted for 2003 under its prior method of accounting (as adjusted for purposes of computing any prior § 481(a) adjustment) (\$150). Therefore, W's § 481(a) adjustment amount for 2003 is negative \$15.
- Step 6. To determine its § 481(a) adjustment amount for 2003, W must account for its decreased depreciation deductions resulting from the additional \$15 of deductible repair expenditures permitted under the proposed method of accounting. Assuming that the additional \$15.00 of deductible repair expenditures for 2003 results in a \$4.50 of reduction in cumulative depreciation expense through the year of change that is attributable to the assets placed in service in 2003, W's § 481(a) adjustment amount for the increased repair deductions that would have been permitted in 2003 under the proposed method of accounting is negative \$10.50 (-\$15.00 + \$4.50).
- Step 7. To determine its total § 481(a) adjustment, W combines the adjustments attributable to 1992 through 2008, computed using the extrapolation method in this Appendix B (as described above for 2003), with the § 481(a) adjustments attributable to 2009 through 2011, determined using the actual data from those years and taking into account book-tax basis adjustments. W must take the entire § 481(a) adjustment (whether positive or negative) into account in 2012, W's year of change.