

transferred. When the disposition relates to retirement of an item or items under a group method of depreciation where there is no tax effect in the year of retirement, no entries are required in this account if it can be determined that the related balance would be necessary to be retained to offset future group item tax deficiencies.

283 Accumulated deferred income taxes—Other.

A. This account shall include all credit tax deferrals resulting from the adoption of the principles of comprehensive interperiod income tax allocation described in General Instruction 18 of this system of accounts other than those deferrals which are includible in Accounts 281, Accumulated Deferred Income Taxes—Accelerated Amortization Property and 282, Accumulated Deferred Income Taxes—Other Property.

B. This account shall be credited and accounts 410.1 Provision for Deferred Income Taxes, Utility Operating Income, or 410.2, Provision for Deferred Income Taxes, Other Income and Deductions, as appropriate, shall be debited with tax effects related to items described in paragraph A above where taxable income is lower than pretax accounting income due to differences between the periods in which revenue and expense transactions affect taxable income and the periods in which they enter into the determination of pretax accounting income.

C. This account shall be debited and accounts 411.1, Provision for Deferred Income Taxes—Credit, Utility Operating Income or 411.2, Provision for Deferred Income Taxes—Credit, Other Income and Deductions, as appropriate, shall be credited with tax effects related to items described in paragraph A above where taxable income is higher than pretax accounting income due to differences between the periods in which revenue and expense transactions affect taxable income and the periods in which they enter into the determination of pretax accounting income.

D. Records with respect to entries to this account, as described above, and the account balance, shall be so maintained as to show the factors of calculation with respect to each annual amount of the item or class of items.

E. The utility is restricted in its use of this account to the purposes set forth above. It shall not transfer the balance in the account or any portion thereof to retained earnings or to any other account or make any use thereof except as provided in the text of this account, without prior approval of the Commission. Upon the disposition by sale, exchange, transfer, abandonment or premature retirement of items on which there is a related balance herein, this account shall be charged with an amount equal to the related income tax effect, if any, arising from such disposition and account 411.1, Provision For Deferred Income Taxes—Credit, Utility Operating Income, or 411.2, Provision For Deferred Income Taxes—Credit, Other Income and Deductions, as appropriate, shall be credited. When the remaining balance, after consideration of any related tax expenses, is less than \$25,000, this account shall be charged and account 411.1 or 411.2, as appropriate, credited with such balance. If after consideration of any related income tax expense, there is a remaining amount of \$25,000 or more, the Commission shall authorize or direct how such amount shall be accounted for at the time approval for the disposition of accounting is granted.

When plant is disposed of by transfer to a wholly owned subsidiary, the related balance in this account shall also be transferred. When the disposition relates to retirement of an item or items under a group method of depreciation where there is no tax effect in the year of retirement, no entries are required in this account if it can be determined that the related balance would be necessary to be retained to offset future group item tax deficiencies.

Electric Plant Chart of Accounts

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Electric Plant Accounts

301 Organization.

This account shall include all fees paid to federal or state governments for the privilege of incorporation and expenditures incident to organizing the corporation, partnership, or other enterprise and putting it into readiness to do business.

Items

1. Cost of obtaining certificates authorizing an enterprise to engage in the public-utility business.
2. Fees and expenses for incorporation
3. Fees and expenses for mergers or consolidations.
4. Office expenses incident to organizing the utility.
5. Stock and minute books and corporate seal.

Note A: This account shall not include any discounts upon securities issued or assumed; nor shall it include any costs incident to negotiating loans, selling bonds or other evidences of debt or expenses in connection with the authorization, issuance or sale of capital stock.

Note B: Exclude from this account and include in the appropriate expense account the cost of preparing and filing papers in connection with the extension of the term of incorporation unless the first organization costs have been

written off. When charges are made to this account for expenses incurred in mergers, consolidations, or reorganizations, amounts previously included herein or in similar accounts in the books of the companies concerned shall be excluded from this account.

302 Franchises and consents.

A. This account shall include amounts paid to the federal government, to a state or to a political subdivision thereof in consideration for franchises, consents, water power licenses, or certificates, running in perpetuity or for a specified term of more than one year, together with necessary and reasonable expenses incident to procuring such franchises, consents, water power licenses, or certificates of permission and approval, including expenses of organizing and merging separate corporations, where statutes require, solely for the purpose of acquiring franchises.

B. If a franchise, consent, water power license or certificate is acquired by assignment, the charge to this account in respect thereof shall not exceed the amount paid therefor by the utility to the assignor, nor shall it exceed the amount paid by the original grantee, plus the expense of acquisition to such grantee. Any excess of the amount actually paid by the utility over the amount above specified shall be charged to account 426.5, Other Deductions.

C. When any franchise has expired, the book cost thereof shall be credited hereto and charged to account 426.5, Other Deductions, or to account 111, Accumulated Provision for Amortization of Electric Utility Plant (for Nonmajor utilities, account 110, Accumulated Provision for Depreciation and Amortization of Electric Plant), as appropriate.

D. Records supporting this account shall be kept so as to show separately the book cost of each franchise or consent.

Note: Annual or other periodic payments under franchises shall not be included herein but in the appropriate operating expense account.

303 Miscellaneous intangible plant.

A. This account shall include the cost of patent rights, licenses, privileges, and other intangible property necessary or valuable in the conduct of utility operations and not specifically chargeable to any other account.

B. When any item included in this account is retired or expires, the book cost thereof shall be credited hereto and charged to account 426.5, Other Deductions, or account 111, Accumulated Provision for Amortization of Electric Utility Plant (for Nonmajor utilities, account 110, Accumulated Provision for Depreciation and Amortization of Electric Plant), as appropriate.

C. This account shall be maintained in such a manner that the utility can furnish full information with respect to the amounts included herein.

310 Land and land rights.

This account shall include the cost of land and land rights used in connection with steam-power generation. (See electric plant instruction 7.)

311 Structures and improvements.

This account shall include the cost in place of structures and improvements used in connection with steam-power generation. (See electric plant instruction 8.)

Note: Include steam production roads and railroads in this account.

312 Boiler plant equipment.

This account shall include the cost installed of furnaces, boilers, coal and ash handling and coal preparing equipment, steam and feed water piping, boiler apparatus and accessories used in the production of steam, mercury, or other vapor, to be used primarily for generating electricity.

Items

1. Ash handling equipment, including hoppers, gates, cars, conveyors, hoists, sluicing equipment, including pumps and motors, sluicing water pipe and fittings, sluicing trenches and accessories, etc., except sluices which are a part of a building.
2. Boiler feed system, including feed water heaters, evaporator condensers, heater drain pumps, heater drainers, deaerators, and vent condensers, boiler feed pumps, surge tanks, feed water regulators, feed water measuring equipment, and all associated drives.
3. Boiler plant cranes and hoists and associated drives.
4. Boilers and equipment, including boilers and baffles, economizers, superheaters, soot blowers, foundations and settings, water walls, arches, grates, insulation, blow-down system, drying out of new boilers, also associated motors or other power equipment.
5. Breeching and accessories, including breeching, dampers, soot spouts, hoppers and gates, cinder eliminators, breeching insulation, soot blowers and associated motors.
6. Coal handling and storage equipment, including coal towers, coal lorries, coal cars, locomotives and tracks when devoted principally to the transportation of coal, hoppers, downtakes, unloading and hoisting equipment, skip hoists and conveyors, weighing equipment, magnetic separators, cable ways, housings and supports for coal handling equipment.
7. Draft equipment, including air preheaters and accessories, induced and forced draft fans, air ducts, combustion control mechanisms, and associated motors or other power equipment.
8. Gas-burning equipment, including holders, burner equipment and piping, control equipment, etc.
9. Instruments and devices, including all measuring, indicating, and recording equipment for boiler plant service together with mountings and supports.
10. Lighting systems.
11. Oil-burning equipment, including tanks, heaters, pumps with drive, burner equipment and piping, control equipment, etc.
12. Pulverized fuel equipment, including pulverizers, accessory motors, primary air fans, cyclones and ducts, dryers, pulverized fuel bins, pulverized fuel conveyors and equipment, burners, burner piping, priming equipment, air compressors, motors, etc.
13. Stacks, including foundations and supports, stack steel and ladders, stack brick work, stack concrete, stack lining, stack painting (first), when set on separate foundations, independent of substructure or superstructure of building.
14. Station piping, including pipe, valves, fittings, separators, traps, desuperheaters, hangers, excavation, covering, etc., for station piping system, including all steam, condensate, boiler feed and water supply piping, etc., but not condensing water, plumbing, building heating, oil, gas, air piping or piping specifically provided for in account 313.
15. Stoker or equivalent feeding equipment, including stokers and accessory motors, clinker grinders, fans and motors, etc.
16. Ventilating equipment.
17. Water purification equipment, including softeners and accessories, evaporators and accessories, heat exchangers, filters, tanks for filtered or softened water, pumps, motors, etc.
18. Water-supply systems, including pumps, motors, strainers, raw-water storage tanks, boiler wash pumps, intake and discharge pipes and tunnels not a part of a building.
19. Wood fuel equipment, including hoppers, fuel hogs and accessories, elevators and conveyors, bins and gates, spouts, measuring equipment and associated drives.

Note: When the system for supplying boiler or condenser water is elaborate, as when it includes a dam, reservoir, canal, pipe line, cooling ponds, or where gas or oil is used as a fuel for producing steam and is supplied through a pipe line system owned by the utility, the cost of such special facilities shall be charged to a subdivision of account 311, Structures and Improvements.

313 Engines and engine-driven generators.

This account shall include the cost installed of steam engines, reciprocating or rotary, and their associated auxiliaries; and engine-driven main generators, except turbogenerator units.

Items

1. Air cleaning and cooling apparatus, including blowers, drive equipment, air ducts not a part of building, louvers, pumps, hoods, etc.
2. Belting, shafting, pulleys, reduction gearing, etc.
3. Circulating pumps, including connections between condensers and intake and discharge tunnels.
4. Cooling system, including towers, pumps, tank, and piping.
5. Condensers, including condensate pumps, air and vacuum pumps, ejectors, unloading valves and vacuum breakers, expansion devices, screens, etc.
6. Cranes, hoists, etc., including items wholly identified with items listed herein.
7. Engines, reciprocating or rotary.
8. Fire-extinguishing systems.
9. Foundations and settings, especially constructed for and not expected to outlast the apparatus for which provided.
10. Generators—Main, a.c. or d.c., including field rheostats and connections for self-excited units, and excitation systems when identified with the generating unit.
11. Governors.
12. Lighting systems.
13. Lubricating systems including gauges, filters, tanks, pumps, piping, motors, etc.
14. Mechanical meters, including gauges, recording instruments, sampling and testing equipment.
15. Piping—main exhaust, including connections between generator and condenser and between condenser and hotwell.
16. Piping—main steam, including connections from main throttle valve to turbine inlet.
17. Platforms, railings, steps, gratings, etc., appurtenant to apparatus listed herein.
18. Pressure oil system, including accumulators, pumps, piping, motors, etc.
19. Throttle and inlet valve.
20. Tunnels, intake and discharge, for condenser system, when not a part of a structure.
21. Water screens, motors, etc.

314 Turbogenerator units.

This account shall include the cost installed of main turbine-driven units and accessory equipment used in generating electricity by steam.

Items

1. Air cleaning and cooling apparatus, including blowers, drive equipment, air ducts not a part of building, louvers, pumps, hoods, etc.
2. Circulating pumps, including connections between condensers and intake and discharge tunnels.
3. Condensers, including condensate pumps, air and vacuum pumps, ejectors, unloading valves and vacuum breakers, expansion devices, screens, etc.
4. Generator hydrogen, gas piping and detrainment equipment.
5. Cooling system, including towers, pumps, tanks, and piping.
6. Cranes, hoists, etc., including items wholly identified with items listed herein.
7. Excitation system, when identified with main generating units.
8. Fire-extinguishing systems.
9. Foundations and settings, especially constructed for and not expected to outlast the apparatus for which provided.
10. Governors.
11. Lighting systems.
12. Lubricating systems, including gauges, filters, water separators, tanks, pumps, piping, motors, etc.
13. Mechanical meters, including gauges, recording instruments, sampling and testing equipment.
14. Piping—main exhaust, including connections between turbogenerator and condenser and between condenser and hotwell.
15. Piping—main steam, including connections from main throttle valve to turbine inlet.
16. Platforms, railings, steps, gratings, etc., appurtenant to apparatus listed herein.
17. Pressure oil systems, including accumulators, pumps, piping, motors, etc.
18. Steelwork, specially constructed for apparatus listed herein.
19. Throttle and inlet valve.
20. Tunnels, intake and discharge, for condenser system, when not a part of structure, water screens, etc.
21. Turbogenerators—main, including turbine and generator, field rheostats and electric connections for self-excited units.

22. Water screens, motors, etc.
23. Moisture separator for turbine steam.
24. Turbine lubricating oil (initial charge).

315 Accessory electric equipment.

This account shall include the cost installed of auxiliary generating apparatus, conversion equipment, and equipment used primarily in connection with the control and switching of electric energy produced by steam power, and the protection of electric circuits and equipment, except electric motors used to drive equipment included in other accounts. Such motors shall be included in the account in which the equipment with which they are associated is included.

Items

1. Auxiliary generators, including boards, compartments, switching equipment, control equipment, and connections to auxiliary power bus.
2. Excitation system, including motor, turbine and dual-drive exciter sets and rheostats, storage batteries and charging equipment, circuit breakers, panels and accessories, knife switches and accessories, surge arresters, instrument shunts, conductors and conduit, special supports for conduit, generator field and exciter switch panels, exciter bus tie panels, generator and exciter rheostats, etc., special housing, protective screens, etc.
3. Generator main connections, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, current transformers, potential transformers, protective relays, isolated panels and equipment, conductors and conduit, special supports for generator main leads grounding switch, etc., special housings, protective screens, etc.
4. Station buses including main, auxiliary, transfer, synchronizing and fault ground buses, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, reactors and accessories, voltage regulators and accessories, compensators, resistors, starting transformers, current transformers, potential transformers, protective relays, storage batteries and charging equipment, isolated panels and equipment, conductors and conduit, special supports, special housings, concrete pads, general station grounding system, special fire-extinguishing system, and test equipment.
5. Station control system, including station switchboards with panel wiring, panels with instruments and control equipment only, panels with switching equipment mounted or mechanically connected, truck-type boards complete, cubicles, station supervisory control boards, generator and exciter signal stands, temperature recording devices, frequency-control equipment, master clocks, watt-hour meters and synchronoscope in the turbine room, station totalizing wattmeter, boiler-room load indicator equipment, storage batteries, panels and charging sets, instrument transformers for supervisory metering, conductors and conduit, special supports for conduit, switchboards, batteries, special housing for batteries, protective screens, doors, etc.

Note A: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electricity for the purposes of transmission or distribution.

Note B: When any item of equipment listed herein is used wholly to furnish power to equipment included in another account, its cost shall be included in such other account.

316 Miscellaneous power plant equipment.

This account shall include the cost installed of miscellaneous equipment in and about the steam generating plant devoted to general station use, and which is not properly includible in any of the foregoing steam-power production accounts.

Items

1. Compressed air and vacuum cleaning systems, including tanks, compressors, exhausters, air filters, piping, etc.
2. Cranes and hoisting equipment, including cranes, cars, crane rails, monorails, hoists, etc., with electric and mechanical connections.
3. Fire-extinguishing equipment for general station use.
4. Foundations and settings specially constructed for and not expected to outlast the apparatus for which provided.
5. Locomotive cranes not includible elsewhere.

6. Locomotives not includible elsewhere.
7. Marine equipment, including boats, barges, etc.
8. Miscellaneous belts, pulleys, countershafts, etc.
9. Miscellaneous equipment, including atmospheric and weather indicating devices, intrasite communication equipment, laboratory equipment, signal systems, callphones emergency whistles and sirens, fire alarms, insect-control equipment, and other similar equipment.
10. Railway cars not includible elsewhere.
11. Refrigerating systems, including compressors, pumps, cooling coils, etc.
12. Station maintenance equipment, including lathes, shapers, planers, drill presses, hydraulic presses, grinders, etc., with motors, shafting, hangers, pulleys, etc.
13. Ventilating equipment, including items wholly identified with apparatus listed herein.

Note: When any item of equipment listed herein is wholly used in connection with equipment included in another account, its cost shall be included in such other account.

317 Asset retirement costs for steam production plant.

This account shall include asset retirement costs on plant included in the steam production function.

320 Land and land rights (Major only).

This account shall include the cost of land and land rights used in connection with nuclear power generation. (See electric plant instruction 7.)

321 Structures and improvements (Major only).

This account shall include the cost in place of structures and improvements used and useful in connection with nuclear power generation. (See electric plant instruction 8.)

Note: Include vapor containers and nuclear production roads and railroads in this account.

322 Reactor plant equipment (Major only).

This account shall include the installed cost of reactors, reactor fuel handling and storage equipment, pressurizing equipment, coolant charging equipment, purification and discharging equipment, radioactive waste treatment and disposal equipment, boilers, steam and feed water piping, reactor and boiler apparatus and accessories and other reactor plant equipment used in the production of steam to be used primarily for generating electricity, including auxiliary superheat boilers and associated equipment in systems which change temperatures or pressure of steam from the reactor system.

Items

1. Auxiliary superheat boilers and associated fuel storage handling preparation and burning equipment, etc. (See account 312 Boiler Plant Equipment, for items, but exclude water supply, water flow lines, and steam lines, as well as other equipment not strictly within the superheat function.)
2. Boiler feed system, including feed water heaters, evaporator condensers, heater drain pumps, heater drainers, deaerators, and vent condensers, boiler feed pumps, surge tanks, feed water regulators, feed water measuring equipment, and all associated drivers.
3. Boilers and heat exchangers.
4. Instruments and devices, including all measuring, indicating, and recording equipment for reactor and boiler plant service together with mountings and supports.
5. Lighting systems.
6. Moderators, such as heavy water, graphite, etc., initial charge.
7. Reactor coolant; primary and secondary systems (initial charge).
8. Radioactive waste treatment and disposal equipment, including tanks, ion exchangers, incinerators, condensers, chimneys, and diluting fans and pumps.

9. Foundations and settings, especially constructed for and not expected to outlast the apparatus for which provided.
10. Reactor including shielding, control rods and mechanisms.
11. Reactor fuel handling equipment, including manipulating and extraction tools, underwater viewing equipment, seal cutting and welding equipment, fuel transfer equipment and fuel disassembly machinery.
12. Reactor fuel element failure detection system.
13. Reactor emergency poison container and injection system.
14. Reactor pressurizing and pressure relief equipment, including pressurizing tanks and immersion heaters.
15. Reactor coolant or moderator circulation charging, purification, and discharging equipment, including tanks, pumps, heat exchangers, demineralizers, and storage.
16. Station piping, including pipes, valves, fittings, separators, traps, desuperheaters, hangers, excavation, covering, etc., for station piping system, including all-reactor coolant, steam, condensate, boiler feed and water supply piping, etc., but not condensing water, plumbing, building heating, oil, gas, or air piping.
17. Ventilating equipment.
18. Water purification equipment, including softeners, demineralizers, and accessories, evaporators and accessories, heat exchangers, filters, tanks for filtered or softened water, pumps, motors, etc.
19. Water supply systems, including pumps, motors, strainers, raw-water storage tanks, boiler wash pumps, intake and discharge pipes and tunnels not a part of a building.
20. Reactor plant cranes and hoists, and associated drives.

Note: When the system for supplying boiler or condenser water is elaborate, as when it includes a dam, reservoir, canal, pipe lines, or cooling ponds, the cost of such special facilities shall be charged to a subdivision of account 321, Structures and Improvements.

323 Turbogenerator units (Major only).

This account shall include the cost installed of main turbine-driven units and accessory equipment used in generating electricity by steam.

Items

1. Air cleaning and cooling apparatus, including blowers, drive equipment, air ducts not a part of building, louvers, pumps, hoods, etc.
2. Circulating pumps, including connections between condensers, and intake and discharge tunnels.
3. Condensers, including condensate pumps, air and vacuum pumps ejectors, unloading valves and vacuum breakers, expansion devices, screens, etc.
4. Generator hydrogen gas piping system and hydrogen detrainment equipment, and bulk hydrogen gas storage equipment.
5. Cooling system, including towers, pumps, tanks and piping.
6. Cranes, hoists, etc., including items wholly identified with items listed herein.
7. Excitation system, when identified with main generating units.
8. Fire extinguishing systems.
9. Foundations and settings, especially constructed for and not expected to outlast the apparatus for which provided.
10. Governors.
11. Lighting systems.
12. Lubricating systems, including gauges filters, water separators, tanks, pumps, piping motors, etc.
13. Mechanical meters, including gauges recording instruments, sampling and testing equipment.
14. Piping—main exhaust, including connections between turbogenerator and condenser and between condenser and hotwell.
15. Piping—main steam, including connections from main throttle valve to turbine inlet.
16. Platforms, railings, steps, gratings, etc. appurtenant to apparatus listed herein.
17. Pressure oil systems, including accumulators, pumps, piping, motors, etc.
18. Steelwork, specially constructed for apparatus listed herein.
19. Throttle and inlet valve.
20. Tunnels, intake and discharge, for condenser system, when not a part of structure water screens, etc.
21. Turbogenerators—main, including turbine and generator, field rheostats and electric connections for self-excited units.
22. Water screens, motors, etc.
23. Moisture separators for turbine steam.
24. Turbine lubricating oil (initial charge).

324 Accessory electric equipment (Major only).

This account shall include the cost installed of auxiliary generating apparatus, conversion equipment, and equipment used primarily in connection with the control and switching of electric energy produced by nuclear power, and the protection of electric circuits and equipment, except electric motors used to drive equipment included in other accounts. Such motors shall be included in the account in which the equipment with which they are associated is included.

Note: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electric energy for the purpose of transmission or distribution.

Items

1. Auxiliary generators, including boards, compartments, switching equipment, control equipment, and connections to auxiliary power bus.
2. Excitation system, including motor, turbine and dual-drive exciter sets and rheostats, storage batteries and charging equipment, circuit breakers, panels and accessories, knife switches and accessories, surge arresters, instrument shunts, conductors and conduit, special supports for conduit, generator field and exciter switch panels, exciter bus tie panels, generator and exciter rheostats, etc., special housing, protective screens, etc.
3. Generator main connections, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, current transformers, potential transformers, protective relays, isolated panels and equipment, conductors and conduit, special supports for generator main leads, grounding switch, etc., special housings, protective screens, etc.
4. Station buses, including main, auxiliary, transfer, synchronizing and fault ground buses, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, reactors and accessories, voltage regulators and accessories, compensators, resistors, starting transformers, current transformers, potential transformers, protective relays, storage batteries and charging equipment, isolated panels and equipment, conductors and conduit, special supports, special housings, concrete pads, general station grounding system, fire-extinguishing system, and test equipment.
5. Station control system, including station switchboards with panel wiring, panels with instruments and control equipment only, panels with switching equipment mounted or mechanically connected, truck-type boards complete, cubicles, station supervisory control boards, generator and exciter signal stands, temperature recording devices, frequency-control equipment, master clocks, watt-hour meters and synchronoscope in the turbine room, station totalizing wattmeter, boiler-room load indicator equipment, storage batteries, panels and charging sets, instrument transformers for supervisory metering, conductors and conduit, special supports for conduit, switchboards, batteries, special housing for batteries, protective screens, doors, etc.

Note: When any item of equipment listed herein is used wholly to furnish power to equipment included in another account, its cost shall be included in such other account

325 Miscellaneous power plant equipment (Major only).

This account shall include the cost installed of miscellaneous equipment in and about the nuclear generating plant devoted to general station use, and which is not properly includible in any of the foregoing nuclear-power production accounts.

Items

1. Compressed air and vacuum cleaning systems, including tanks, compressors, exhausters, air filters, piping, etc.
2. Cranes and hoisting equipment, including cranes, cars, crane rails, monorails, hoists, etc., with electric and mechanical connections.
3. Fire-extinguishing equipment for general station and site use.
4. Foundations and settings specially constructed for and not expected to outlast the apparatus for which provided.
5. Locomotive cranes not includible elsewhere.
6. Locomotives not included elsewhere.
7. Marine equipment, including boats, barges, etc.
8. Miscellaneous belts, pulleys, countershafts, etc.

9. Miscellaneous equipment, including atmospheric and weather recording devices, intrasite communication equipment, laboratory equipment, signal systems, callophones emergency whistles and sirens, fire alarms, insect-control equipment, and other similar equipment.
10. Railway cars or special shipping containers not includible elsewhere.
11. Refrigerating systems, including compressors, pumps, cooling coils, etc.
12. Station maintenance equipment, including lathes, shapers, planers, drill presses, hydraulic presses, grinders, etc., with motors, shafting, hangers, pulleys, etc.
13. Ventilating equipment, including items wholly identified with apparatus listed herein.
14. Station and area radiation monitoring equipment.

Note: When any item of equipment listed herein is wholly used in connection with equipment included in another account, its cost shall be included in such other account.

326 Asset retirement costs for nuclear production plant (Major only).

This account shall include asset retirement costs on plant included in the nuclear production function.

330 Land and land rights.

This account shall include the cost of land and land rights used in connection with hydraulic power generation. (See electric plant instruction 7.) For Major utilities, it shall also include the cost of land and land rights used in connection with (1) the conservation of fish and wildlife, and (2) recreation. Separate subaccounts shall be maintained for each of the above.

331 Structures and improvements.

This account shall include the cost in place of structures and improvements used in connection with hydraulic power generation. (See electric plant instruction 8.) For Major utilities, it shall also include the cost in place of structures and improvements used in connection with (1) the conservation of fish and wildlife, and (2) recreation. Separate subaccounts shall be maintained for each of the above.

332 Reservoirs, dams, and waterways.

This account shall include the cost in place of facilities used for impounding, collecting, storage, diversion, regulation, and delivery of water used primarily for generating electricity. For Major utilities, it shall also include the cost in place of facilities used in connection with (a) the conservation of fish and wildlife, and (b) recreation. Separate subaccounts shall be maintained for each of the above. (See electric plant instruction 8C.)

Items

1. Bridges and culverts (when not a part of roads or railroads).
2. Clearing and preparing land.
3. Dams, including wasteways, spillways, flash boards, spillway gates with operating and control mechanisms, tunnels, gate houses, and fish ladders.
4. Dikes and embankments.
5. Electric system, including conductors control system, transformers, lighting fixtures, etc.
6. Excavation, including shoring, bracing, bridging, refill, and disposal of excess excavated material.
7. Foundations and settings specially constructed for and not expected to outlast the apparatus for which provided.
8. Intakes, including trash racks, rack cleaners, control gates and valves with operating mechanisms, and intake house when not a part of station structure.
9. Platforms, railings, steps, gratings, etc., appurtenant to structures listed herein.
10. Power line wholly identified with items included herein.
11. Retaining walls.
12. Water conductors and accessories, including canals, tunnels, flumes, penstocks pipe conductors, forebays, tailraces, navigation locks and operating mechanisms, waterhammer and surge tanks, and supporting trestles and structures.

13. Water storage reservoirs, including dams, flashboards, spillway gates and operating mechanisms, inlet and outlet tunnels, regulating valves and valve towers, silt and mud sluicing tunnels with valve or gate towers, and all other structures wholly identified with any of the foregoing items.

333 Water wheels, turbines and generators.

This account shall include the cost installed of water wheels and hydraulic turbines (from connection with penstock or flume to tailrace) and generators driven thereby devoted to the production of electricity by water power or for the production of power for industrial or other purposes, if the equipment used for such purposes is a part of the hydraulic power plant works.

Items

1. Exciter water wheels and turbines, including runners, gates, governors, pressure regulators, oil pumps, operating mechanisms, scroll cases, draft tubes, and draft-tube supports.
2. Fire-extinguishing equipment.
3. Foundations and settings, specially constructed for and not expected to outlast the apparatus for which provided.
4. Generator cooling system, including air cooling and washing apparatus, air fans and accessories, air ducts, etc.
5. Generators—main, a.c. or d.c., including field rheostats and connections for self-excited units and excitation system when identified with the generating unit.
6. Lighting systems.
7. Lubricating systems, including gauges, filters, tanks, pumps, piping, etc.
8. Main penstock valves and appurtenances, including main valves, control equipment, bypass valves and fittings, and other accessories.
9. Main turbines and water wheels, including runners, gates, governors, pressure regulators, oil pumps, operating mechanisms, scroll cases, draft tubes, and draft-tube supports.
10. Mechanical meters and recording instruments.
11. Miscellaneous water-wheel equipment, including gauges, thermometers, meters, and other instruments.
12. Platforms, railings, steps, gratings, etc., appurtenant to apparatus listed herein.
13. Scroll case filling and drain system, including gates, pipe, valves, fittings, etc.
14. Water-actuated pressure-regulator system, including tanks and housings, pipes, valves, fittings and insulations, piers and anchorage, and excavation and backfill.

334 Accessory electric equipment.

This account shall include the cost installed of auxiliary generating apparatus, conversion equipment, and equipment used primarily in connection with the control and switching of electric energy produced by hydraulic power and the protection of electric circuits and equipment, except electric motors used to drive equipment included in other accounts, such motors being included in the account in which the equipment with which they are associated is included.

Items

1. Auxiliary generators, including boards, compartments, switching equipment, control equipment, and connections to auxiliary power bus.
2. Excitation system, including motor, turbine, and dual-drive exciter sets and rheostats, storage batteries and charging equipment, circuit breakers, panels and accessories, knife switches and accessories, surge arresters, instrument shunts, conductors and conduit, special supports for conduit, generator field and exciter switch panels, exciter bus tie panels, generator and exciter rheostats, etc., special housings, protective screens, etc.
3. Generator main connections, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, current transformers, potential transformers, protective relays, isolated panels and equipment, conductors and conduit, special supports for generator main leads, grounding switch, etc., special housings, protective screens, etc.
4. Station buses, including main, auxiliary, transfer, synchronizing, and fault ground buses, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, reactors and accessories, voltage regulators and accessories, compensators, resistors starting transformers, current transformers, potential transformers, protective relays, storage batteries, and charging equipment, isolated panels and equipment, conductors and conduit, special supports, special fire-extinguishing system, and test equipment.

5. Station control system, including station switchboards with panel wiring panels with instruments and control equipment only, panels with switching equipment mounted or mechanically connected, trucktype boards complete, cubicles, station supervisory control devices, frequency control equipment, master clocks, watt-hour meter, station totalizing watt-meter, storage batteries, panels and charging sets, instrument transformers for supervisory metering, conductors and conduit, special supports for conduit, switchboards, batteries, special housings for batteries, protective screens, doors, etc.

Note A: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electricity for the purpose of transmission or distribution.

Note B: When any item of equipment listed herein is used wholly to furnish power to equipment, it shall be included in such equipment account.

335 Miscellaneous power plant equipment.

This account shall include the cost installed of miscellaneous equipment in and about the hydroelectric generating plant which is devoted to general station use and is not properly includible in other hydraulic production accounts. For Major utilities, it shall also include the cost of equipment used in connection with (a) the conservation of fish and wildlife, and (b) recreation. Separate subaccounts shall be maintained for each of the above.

Items

1. Compressed air and vacuum cleaning systems, including tanks, compressors, exhausters, air filters, piping, etc.
2. Cranes and hoisting equipment, including cranes, cars, crane rails, monorails, hoists, etc., with electric and mechanical connections.
3. Fire-extinguishing equipment for general station use.
4. Foundations and settings, specially constructed for and not expected to outlast the apparatus for which provided.
5. Locomotive cranes not includible elsewhere.
6. Locomotives not includible elsewhere.
7. Marine equipment, including boats, barges, etc.
8. Miscellaneous belts, pulleys, countershafts, etc.
9. Miscellaneous equipment, including atmospheric and weather indicating devices, intrasite communication equipment, laboratory equipment, insect control equipment, signal systems, callophones, emergency whistles and sirens, fire alarms, and other similar equipment.
10. Railway cars, not includible elsewhere.
11. Refrigerating system, including compressors, pumps, cooling coils, etc.
12. Station maintenance equipment, including lathes, shapers, planers, drill presses, hydraulic presses, grinders, etc., with motors, shafting, hangers, pulleys, etc.
13. Ventilating equipment, including items wholly identified with apparatus listed herein.

Note: When any item of equipment, listed herein is used wholly in connection with equipment included in another account, its cost shall be included in such other account.

336 Roads, railroads and bridges.

This account shall include the cost of roads, railroads, trails, bridges, and trestles used primarily as production facilities. It includes also those roads, etc., necessary to connect the plant with highway transportation systems, except when such roads are dedicated to public use and maintained by public authorities.

Items

1. Bridges, including foundations, piers, girders, trusses, flooring, etc.
2. Clearing land.
3. Railroads, including grading, ballast, ties, rails, culverts, hoists, etc.
4. Roads, including grading, surfacing, culverts, etc.
5. Structures, constructed and maintained in connection with items listed herein.

6. Trails, including grading, surfacing, culverts, etc.
7. Trestles, including foundations, piers, girders, trusses, flooring, etc.

Note A: Roads intended primarily for connecting employees' houses with the powerplant, and roads used primarily in connection with fish and wildlife, and recreation activities, shall not be included herein but in account 331, Structures and Improvements.

Note B: The cost of temporary roads, bridges, etc. necessary during the period of construction but abandoned or dedicated to public use upon completion of the plant, shall not be included herein but shall be charged to the accounts appropriate for the construction.

337 Asset retirement costs for hydraulic production plant.

This account shall include asset retirement costs on plant included in the hydraulic production function.

340 Land and land rights.

This account shall include the cost of land and land rights used in connection with other power generation. (See electric plant instruction 7.)

341 Structures and improvements.

This account shall include the cost in place of structures and improvements used in connection with other power generation. (See electric plant instruction 8.)

342 Fuel holders, producers, and accessories.

This account shall include the cost installed of fuel handling and storage equipment used between the point of fuel delivery to the station and the intake pipe through which fuel is directly drawn to the engine, also the cost of gas producers and accessories devoted to the production of gas for use in prime movers driving main electric generators.

Items

1. Blower and fans.
2. Boilers and pumps.
3. Economizers.
4. Exhauster outfits.
5. Flues and piping.
6. Pipe system.
7. Producers.
8. Regenerators.
9. Scrubbers.
10. Steam injectors.
11. Tanks for storage of oil, gasoline, etc.
12. Vaporizers.

343 Prime movers.

This account shall include the cost installed of Diesel or other prime movers devoted to the generation of electric energy, together with their auxiliaries.

Items

1. Air-filtering system.
2. Belting, shafting, pulleys, reduction gearing, etc.

3. Cooling system, including towers, pumps, tanks, and piping.
4. Cranes, hoists, etc., including items wholly identified with apparatus listed herein.
5. Engines, Diesel, gasoline, gas, or other internal combustion.
6. Foundations and settings specially constructed for and not expected to outlast the apparatus for which provided.
7. Governors.
8. Ignition system.
9. Inlet valve.
10. Lighting systems.
11. Lubricating systems, including filters, tanks, pumps, and piping.
12. Mechanical meters, including gauges, recording instruments, sampling, and testing equipment.
13. Mufflers.
14. Piping.
15. Starting systems, compressed air, or other, including compressors and drives, tanks, piping, motors, boards and connections, storage tanks, etc.
16. Steelwork, specially constructed for apparatus listed herein.
17. Waste heat boilers, antifluators, etc.

344 Generators.

This account shall include the cost installed of Diesel or other power driven main generators.

Items

1. Cranes, hoists, etc., including items wholly identified with such apparatus.
2. Fire-extinguishing equipment.
3. Foundations and settings, specially constructed for and not expected to outlast the apparatus for which provided.
4. Generator cooling system, including air cooling and washing apparatus, air fans and accessories, air ducts, etc.
5. Generators—main, a.c. or d.c., including field rheostats and connections for self-excited units and excitation system when identified with the generating unit.
6. Lighting systems.
7. Lubricating system, including tanks, filters, strainers, pumps, piping, coolers, etc.
8. Mechanical meters, and recording instruments.
9. Platforms, railings, steps, gratings, etc., appurtenant to apparatus listed herein.

Note: If prime movers and generators are so integrated that it is not practical to classify them separately, the entire unit may be included in account 344, Generators.

345 Accessory electric equipment.

This account shall include the cost installed of auxiliary generating apparatus, conversion equipment, and equipment used primarily in connection with the control and switching of electric energy produced in other power generating stations, and the protection of electric circuits and equipment, except electric motors used to drive equipment included in other accounts. Such motors shall be included in the account in which the equipment with which it is associated is included.

Items

1. Auxiliary generators, including boards, compartments, switching equipment, control equipment, and connections to auxiliary power bus.
2. Excitation system, including motor, turbine and dual-drive exciter sets and rheostats, storage batteries and charging equipment, circuit breakers, panels and accessories, knife switches and accessories, surge arresters, instrument shunts, conductors and conduit, special supports for conduit, generator field and exciter switch panels, exciter bus tie panels, generator and exciter rheostats, etc., special housings, protective screens, etc.
3. Generator main connections, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, current transformers, potential transformers, protective relays, isolated panels and equipment, conductors and conduit, special supports for generator main leads, grounding switch, etc., special housing, protective screens, etc.

4. Station control system, including station switchboards with panel wiring, panels with instruments and control equipment only, panels with switching equipment mounted or mechanically connected, trunktype boards complete, cubicles, station supervisory control boards, generator and exciter signal stands, temperature-recording devices, frequency control equipment, master clocks, watt-hour meter, station totalizing wattmeter, storage batteries, panels and charging sets, instrument transformers for supervisory metering, conductors and conduit, special supports for conduit, switchboards, batteries, special housing for batteries, protective screens, doors, etc.
5. Station buses, including main, auxiliary transfer, synchronizing and fault ground buses, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, reactors and accessories, voltage regulators and accessories, compensators, resistors, starting transformers, current transformers, potential transformers, protective relays, storage batteries and charging equipment, isolated panels and equipment, conductors and conduit, special supports, special housings, concrete pads, general station ground system, special fire-extinguishing system, and test equipment.

Note A: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electric energy for the purpose of transmission or distribution.

Note B: When any item of equipment listed herein is used wholly to furnish power to equipment included in another account, its cost shall be included in such other account.

346 Miscellaneous power plant equipment.

This account shall include the cost installed of miscellaneous equipment in and about the other power generating plant, devoted to general station use, and not properly includible in any of the foregoing other power production accounts.

Items

1. Compressed air and vacuum cleaning systems, including tanks, compressors, exhausters, air filters, piping, etc.
2. Cranes and hoisting equipment, including cranes, cars, crane rails, monorails, hoists, etc., with electric and mechanical connections.
3. Fire-extinguishing equipment for general station use.
4. Foundations and settings, specially constructed for and not expected to outlast the apparatus for which provided.
5. Miscellaneous equipment, including atmospheric and weather indicating devices, intrasite communication equipment, laboratory equipment, signal systems, callophones, emergency whistles and sirens, fire alarms, and other similar equipment.
6. Miscellaneous belts, pulleys, countershafts, etc.
7. Refrigerating system including compressors, pumps, cooling coils, etc.
8. Station maintenance equipment, including lathes, shapers, planers, drill presses, hydraulic presses, grinders, etc., with motors, shafting, hangers, pulleys, etc.
9. Ventilating equipment, including items wholly identified with apparatus listed herein.

Note: When any item of equipment, listed herein is used wholly in connection with equipment included in another account, its cost shall be included in such other account.

347 Asset retirement costs for other production plant.

This account shall include asset retirement costs on plant included in the other production function.

348 Energy Storage Equipment—Production

A. This account shall include the cost installed of energy storage equipment used to store energy for load managing purposes. Where energy storage equipment can perform more than one function or purpose, the cost of the equipment shall be allocated among production, transmission, and distribution plant based on the services provided by the asset and the allocation of the asset's cost through rates approved by a relevant regulatory agency. Reallocation of the cost of equipment recorded in this account shall be in accordance with Electric Plant Instruction No. 12, Transfers of Property.

B. Labor costs and power purchased to energize the equipment are includible on the first installation only. The cost of removing, relocating and resetting energy storage equipment shall not be charged to this account but to accounts Account 548.1, Operation of Energy Storage Equipment, and Account 553.1, Maintenance of Energy Storage Equipment., as appropriate.

C. The records supporting this account shall show, by months, the function(s) each energy storage asset supports or performs.

Items

1. Batteries/Chemical
2. Compressed Air
3. Flywheels
4. Superconducting Magnetic Storage
5. Thermal

Note: The cost of pumped storage hydroelectric plant shall be charged to hydraulic production plant. These are examples of items includible in this account. This list is not exhaustive.

350 Land and land rights.

This account shall include the cost of land and land rights used in connection with transmission operations. (See electric plant instruction 7.)

351 Energy Storage Equipment—Transmission

A. This account shall include the cost installed of energy storage equipment used to store energy for load managing purposes. Where energy storage equipment can perform more than one function or purposes, the cost of the equipment shall be allocated among production, transmission, and distribution plant based on the services provided by the asset and the allocation of the asset's cost through rates approved by a relevant regulatory agency. Reallocation of the cost of equipment recorded in this account shall be in accordance with Electric Plant Instruction No. 12, Transfers of Property.

B. Labor costs and power purchased to energize the equipment are includible on the first installation only. The cost of removing, relocating and resetting energy storage equipment shall not be charged to this account but to Account 562.1, Operation of Energy Storage Equipment, and Account, 570.1, Maintenance of Energy Storage Equipment, as appropriate.

C. The records supporting this account shall show, by months, the function(s) each energy storage asset supports or performs.

Items

1. Batteries/Chemical
2. Compressed Air
3. Flywheels
4. Superconducting Magnetic Storage
5. Thermal

352 Structures and improvements.

This account shall include the cost in place of structures and improvements used in connection with transmission operations. (See electric plant instruction 8.)

353 Station equipment.

This account shall include the cost installed of transforming, conversion, and switching equipment used for the purpose of changing the characteristics of electricity in connection with its transmission or for controlling transmission circuits.

Items

1. Bus compartments, concrete, brick, and sectional steel, including items permanently attached thereto.
2. Conduit, including concrete and iron duct runs not a part of a building.

3. Control equipment, including batteries battery charging equipment, transformers, remote relay boards, and connections.
4. Conversion equipment, including transformers, indoor and outdoor, frequency changers, motor generator sets, rectifiers, synchronous converters, motors, cooling equipment, and associated connections.
5. Fences.
6. Fixed and synchronous condensers, including transformers, switching equipment blowers, motors and connections.
7. Foundations and settings, specially constructed for and not expected to outlast the apparatus for which provided.
8. General station equipment, including air compressors, motors, hoists, cranes, test equipment, ventilating equipment, etc.
9. Platforms, railings, steps, gratings, etc. appurtenant to apparatus listed herein.
10. Primary and secondary voltage connections, including bus runs and supports, insulators, potheads, lightning arresters, cable and wire runs from and to outdoor connections or to manholes and the associated regulators, reactors, resistors, surge arresters, and accessory equipment.
11. Switchboards, including meters, relays, control wiring, etc.
12. Switching equipment, indoor and outdoor, including oil circuit breakers and operating mechanisms, truck switches, and disconnect switches.
13. Tools and appliances.

354 Towers and fixtures.

This account shall include the cost installed of towers and appurtenant fixtures used for supporting overhead transmission conductors.

Items

1. Anchors, guys, braces.
2. Brackets.
3. Crossarms, including braces.
4. Excavation, backfill, and disposal of excess excavated material.
5. Foundations.
6. Guards.
7. Insulator pins and suspension bolts.
8. Ladders and steps.
9. Railings, etc.
10. Towers.

355 Poles and fixtures.

This account shall include the cost installed of transmission line poles, wood, steel, concrete, or other material, together with appurtenant fixtures used for supporting overhead transmission conductors.

Items

1. Anchors, head arm and other guys, including guy guards, guy clamps, strain insulators, pole plates, etc.
2. Brackets.
3. Crossarms and braces.
4. Excavation and backfill, including disposal of excess excavated material.
5. Extension arms.
6. Gaining, roofing stenciling, and tagging.
7. Insulator pins and suspension bolts.
8. Paving.
9. Pole steps.
10. Poles, wood, steel, concrete, or other material.
11. Racks complete with insulators.
12. Reinforcing and stubbing.
13. Settings.
14. Shaving and painting.

356 Overhead conductors and devices.

This account shall include the cost installed of overhead conductors and devices used for transmission purposes.

Items

1. Circuit breakers.
2. Conductors, including insulated and bare wires and cables.
3. Ground wires and ground clamps.
4. Insulators, including pin, suspension, and other types.
5. Lightning arresters.
6. Switches.
7. Other line devices.

357 Underground conduit.

This account shall include the cost installed of underground conduit and tunnels used for housing transmission cables or wires. (See electric plant instruction 14.)

Items

1. Conduit, concrete, brick or tile, including iron pipe, fiber pipe, Murray duct, and standpipe on pole or tower.
2. Excavation, including shoring, bracing, bridging, backfill, and disposal of excess excavated material.
3. Foundations and settings specially constructed for and not expected to outlast the apparatus for which provided.
4. Lighting systems.
5. Manholes, concrete or brick, including iron or steel, frames and covers, hatchways, gratings, ladders, cable racks and hangers, etc., permanently attached to manholes.
6. Municipal inspection.
7. Pavement disturbed, including cutting and replacing pavement, pavement base and sidewalks.
8. Permits.
9. Protection of street openings.
10. Removal and relocation of subsurface obstructions.
11. Sewer connections, including drains, traps, tide valves, check valves, etc.
12. Sumps, including pumps.
13. Ventilating equipment.

358 Underground conductors and devices.

This account shall include the cost installed of underground conductors and devices used for transmission purposes.

Items

1. Armored conductors, buried, including insulators, insulating materials, splices, potheads, trenching, etc.
2. Armored conductors, submarine, including insulators, insulating materials, splices in terminal chambers, potheads, etc.
3. Cables in standpipe, including pothead and connection from terminal chamber of manhole to insulators on pole.
4. Circuit breakers.
5. Fireproofing, in connection with any items listed herein.
6. Hollow-core oil-filled cable, including straight or stop joints pressure tanks, auxiliary air tanks, feeding tanks, terminals, potheads and connections, ventilating equipment, etc.
7. Lead and fabric covered conductors, including insulators, compound filled, oil filled, or vacuum splices, potheads, etc.
8. Lightning arresters.
9. Municipal inspection.
10. Permits.
11. Protection of street openings.
12. Racking of cables.
13. Switches.
14. Other line devices.

359 Roads and trails.

This account shall include the cost of roads, trails, and bridges used primarily as transmission facilities.

Items

1. Bridges, including foundation piers, girders, trusses, flooring, etc.
2. Clearing land.
3. Roads, including grading, surfacing, culverts, etc.
4. Structures, constructed and maintained in connection with items included herein.
5. Trails, including grading, surfacing, culverts, etc.

Note: The cost of temporary roads, bridges, etc., necessary during the period of construction but abandoned or dedicated to public use upon completion of the plant, shall be charged to the accounts appropriate for the construction.

359.1 Asset retirement costs for transmission plant.

This account shall include asset retirement costs on plant included in the transmission plant function.

360 Land and land rights.

This account shall include the cost of land and land rights used in connection with distribution operations. (See electric plant instruction 7.)

Note: Do not include in this account the cost of permits to erect poles, towers, etc., or to trim trees. (See account 364, Poles, Towers and Fixtures, and account 365, Overhead Conductors and Devices.)

361 Structures and improvements.

This account shall include the cost in place of structures and improvements used in connection with distribution operations. (See electric plant instruction 8.)

362 Station equipment.

This account shall include the cost installed of station equipment, including transformer banks, etc., which are used for the purpose of changing the characteristics of electricity in connection with its distribution.

Items

1. Bus compartments, concrete, brick and sectional steel, including items permanently attached thereto.
2. Conduit, including concrete and iron duct runs not part of building.
3. Control equipment, including batteries, battery charging equipment, transformers, remote relay boards, and connections.
4. Conversion equipment, indoor and outdoor, frequency changers, motor generator sets, rectifiers, synchronous converters, motors, cooling equipment, and associated connections.
5. Fences.
6. Fixed and synchronous condensers, including transformers, switching equipment, blowers, motors, and connections.
7. Foundations and settings, specially constructed for and not expected to outlast the apparatus for which provided.
8. General station equipment, including air compressors, motors, hoists, cranes, test equipment, ventilating equipment, etc.
9. Platforms, railings, steps, gratings, etc., appurtenant to apparatus listed herein.
10. Primary and secondary voltage connections, including bus runs and supports, insulators, potheads, lightning arresters, cable and wire runs from and to outdoor connections or to manholes and the associated regulators, reactors, resistors, surge arresters, and accessory equipment.
11. Switchboards, including meters, relays, control wiring, etc.

12. Switching equipment, indoor and outdoor, including oil circuit breakers and operating mechanisms, truck switches, disconnect switches.

Note: The cost of rectifiers, series transformers, and other special station equipment devoted exclusively to street lighting service shall not be included in this account, but in account 373, Street Lighting and Signal Systems.

363 Energy Storage Equipment—Distribution

A. This account shall include the cost installed of energy storage equipment used to store energy for load managing purposes. Where energy storage equipment can perform more than one function or purpose, the cost of the equipment shall be allocated among production, transmission, and distribution plant based on the services provided by the asset and the allocation of the asset's cost through rates approved by a relevant regulatory agency. Reallocation of the cost of equipment recorded in this account shall be in accordance with Electric Plant Instruction No. 12, Transfers of Property.

B. Labor costs and power purchased to energize the equipment are includible on the first installation only. The cost of removing, relocating and resetting energy storage equipment shall not be charged to this account but to Account 582.1, Operation of Energy Storage Equipment, and Account, 592.1, Maintenance of Energy Storage Equipment, as appropriate.

C. The records supporting this account shall show, by months, the function(s) each energy storage asset supports or performs.

Items

1. Batteries/Chemical
2. Compressed Air
3. Flywheels
4. Superconducting Magnetic Storage
5. Thermal

364 Poles, towers and fixtures.

This account shall include the cost installed of poles, towers, and appurtenant fixtures used for supporting overhead distribution conductors and service wires.

Items

1. Anchors, head arm, and other guys, including guy guards, guy clamps, strain insulators, pole plates, etc.
2. Brackets.
3. Crossarms and braces.
4. Excavation and backfill, including disposal of excess excavated material.
5. Extension arms.
6. Foundations.
7. Guards.
8. Insulator pins and suspension bolts.
9. Paving.
10. Permits for construction.
11. Pole steps and ladders.
12. Poles, wood, steel, concrete, or other material.
13. Racks complete with insulators.
14. Railings.
15. Reinforcing and stubbing.
16. Settings.
17. Shaving, painting, galing, roofing, stenciling, and tagging.
18. Towers.
19. Transformer racks and platforms.

365 Overhead conductors and devices.

This account shall include the cost installed of overhead conductors and devices used for distribution purposes.

Items

1. Circuit breakers.
2. Conductors, including insulated and bare wires and cables.
3. Ground wires, clamps, etc.
4. Insulators, including pin, suspension, and other types, and tie wire or clamps.
5. Lightning arresters.
6. Railroad and highway crossing guards.
7. Splices.
8. Switches.
9. Tree trimming, initial cost including the cost of permits therefor.
10. Other line devices.

Note: The cost of conductors used solely for street lighting or signal systems shall not be included in this account but in account 373, Street Lighting and Signal Systems.

366 Underground conduit.

This account shall include the cost installed of underground conduit and tunnels used for housing distribution cables or wires.

Items

1. Conduit, concrete, brick and tile, including iron pipe, fiber pipe, Murray duct, and standpipe on pole or tower.
2. Excavation, including shoring, bracing, bridging, backfill, and disposal of excess excavated material.
3. Foundations and settings specially constructed for and not expected to outlast the apparatus for which constructed.
4. Lighting systems.
5. Manholes, concrete or brick, including iron or steel frames and covers, hatchways, gratings, ladders, cable racks and hangers, etc., permanently attached to manholes.
6. Municipal inspection.
7. Pavement disturbed, including cutting and replacing pavement, pavement base, and sidewalks.
8. Permits.
9. Protection of street openings.
10. Removal and relocation of subsurface obstructions.
11. Sewer connections, including drains, traps, tide valves, check valves, etc.
12. Sumps, including pumps.
13. Ventilating equipment.

Note: The cost of underground conduit used solely for street lighting or signal systems shall be included in account 373, Street Lighting and Signal Systems.

367 Underground conductors and devices.

This account shall include the cost installed of underground conductors and devices used for distribution purposes.

Items

1. Armored conductors, buried, including insulators, insulating materials, splices, potheads, trenching, etc.
2. Armored conductors, submarine, including insulators, insulating materials, splices in terminal chamber, potheads, etc.
3. Cables in standpipe, including pothead and connection from terminal chamber or manhole to insulators on pole.
4. Circuit breakers.
5. Fireproofing, in connection with any items listed herein.

6. Hollow-core oil-filled cable, including straight or stop joints, pressure tanks, auxiliary air tanks, feeding tanks, terminals, potheads and connections, etc.
7. Lead and fabric covered conductors, including insulators, compound-filled, oil-filled or vacuum splices, potheads, etc.
8. Lightning arresters.
9. Municipal inspection.
10. Permits.
11. Protection of street openings.
12. Racking of cables.
13. Switches.
14. Other line devices.

Note: The cost of underground conductors and devices used solely for street lighting or signal systems shall be included in account 373, Street Lighting and Signal Systems.

368 Line transformers.

A. This account shall include the cost installed of overhead and underground distribution line transformers and poletype and underground voltage regulators owned by the utility, for use in transforming electricity to the voltage at which it is to be used by the customer, whether actually in service or held in reserve.

B. When a transformer is permanently retired from service, the original installed cost thereof shall be credited to this account.

C. The records covering line transformers shall be so kept that the utility can furnish the number of transformers of various capacities in service and those in reserve, and the location and the use of each transformer.

Items

1. Installation, labor of (first installation only).
2. Transformer cut-out boxes.
3. Transformer lightning arresters.
4. Transformers, line and network.
5. Capacitors.
6. Network protectors.

Note: The cost of removing and resetting line transformers shall not be charged to this account but to account 583, Overhead Line Expenses, or account 584, Underground Line Expenses (for Nonmajor utilities, account 561, Line and Station Labor, or account 562, Line and Station Supplies and Expenses), as appropriate. The cost of line transformers used solely for street lighting or signal systems shall be included in account 373, Street Lighting and Signal Systems.

369 Services.

This account shall include the cost installed of overhead and underground conductors leading from a point where wires leave the last pole of the overhead system or the distribution box or manhole, or the top of the pole of the distribution line, to the point of connection with the customer's outlet or wiring. Conduit used for underground service conductors shall be included herein.

Items

1. Brackets.
2. Cables and wires.
3. Conduit.
4. Insulators.
5. Municipal inspection.
6. Overhead to underground, including conduit or standpipe and conductor from last splice on pole to connection with customer's wiring.
7. Pavement disturbed, including cutting and replacing pavement, pavement base, and sidewalks.

8. Permits.
9. Protection of street openings.
10. Service switch.
11. Suspension wire.

370 Meters.

- A. This account shall include the cost installed of meters or devices and appurtenances thereto, for use in measuring the electricity delivered to its users, whether actually in service or held in reserve.
- B. When a meter is permanently retired from service, the installed cost included herein shall be credited to this account.
- C. The records covering meters shall be so kept that the utility can furnish information as to the number of meters of various capacities in service and in reserve as well as the location of each meter owned.

Items

1. Alternating current, watt-hour meters.
2. Current limiting devices.
3. Demand indicators.
4. Demand meters.
5. Direct current watt-hour meters.
6. Graphic demand meters.
7. Installation, labor of (first installation only).
8. Instrument transformers.
9. Maximum demand meters.
10. Meter badges and their attachments.
11. Meter boards and boxes.
12. Meter fittings, connections, and shelves (first set).
13. Meter switches and cut-outs.
14. Prepayment meters.
15. Protective devices.
16. Testing new meters.

Note A: This account shall not include meters for recording output of a generating station, substation meters, etc. It includes only those meters used to record energy delivered to customers.

Note B: The cost of removing and resetting meters shall be charged to account 586, Meter Expenses (for Nonmajor utilities, account 556, Meter Expenses).

371 Installations on customers' premises.

This account shall include the cost installed of equipment on the customer's side of a meter when the utility incurs such cost and when the utility retains title to and assumes full responsibility for maintenance and replacement of such property. This account shall not include leased equipment, for which see account 372, Leased Property on Customers' Premises.

Items

1. Cable vaults.
2. Commercial lamp equipment.
3. Foundations and settings specially provided for equipment included herein.
4. Frequency changer sets.
5. Motor generator sets.
6. Motors.
7. Switchboard panels, high or low tension.
8. Wire and cable connections to incoming cables.

Note: Do not include in this account any costs incurred in connection with merchandising, jobbing, or contract work activities.

372 Leased property on customers' premises.

This account shall include the cost of electric motors, transformers, and other equipment on customers' premises (including municipal corporations), leased or loaned to customers, but not including property held for sale.

Note A: The cost of setting and connecting such appliances or equipment on the premises of customers and the cost of resetting or removal shall not be charged to this account but to operating expenses, account 587, Customer Installations Expenses (for Nonmajor utilities, account 567, Customer Installations Expenses).

Note B: Do not include in this account any costs incurred in connection with merchandising, jobbing, or contract work activities.

373 Street lighting and signal systems.

This account shall include the cost installed of equipment used wholly for public street and highway lighting or traffic, fire alarm, police, and other signal systems.

Items

1. Armored conductors, buried or submarine, including insulators, insulating materials, splices, trenching, etc.
2. Automatic control equipment.
3. Conductors, overhead or underground, including lead or fabric covered, parkway cables, etc., including splices, insulators, etc.
4. Lamps, are, incandescent, or other types, including glassware, suspension fixtures, brackets, etc.
5. Municipal inspection.
6. Ornamental lamp posts.
7. Pavement disturbed, including cutting and replacing pavement, pavement base, and sidewalks.
8. Permits.
9. Posts and standards.
10. Protection of street openings.
11. Relays or time clocks.
12. Series contactors.
13. Switches.
14. Transformers, pole or underground.

374 Asset retirement costs for distribution plant.

This account shall include asset retirement costs on plant included in the distribution plant function.

380 Land and Land Rights.

This account shall include the cost of land and land rights used in connection with regional transmission and market operations.

381 Structures and Improvements.

This account shall include the cost in place of structures and improvements used for regional transmission and market operations.

382 Computer Hardware.

This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching, system planning, standards development, market monitoring, and market administration activities. Records shall be maintained identifying to the maximum extent practicable computer hardware owned and used for: (1) Scheduling, system control and dispatching, (2) system planning and standards development, and (3) market monitoring and market administration activities.

Items

1. Personal computers
2. Servers
3. Workstations
4. Energy Management System (EMS) hardware
5. Supervisory Control and Data Acquisition (SCADA) system hardware
6. Peripheral equipment
7. Networking components

383 Computer Software.

This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching, system planning, standards development, market monitoring, and market administration activities. Records shall be maintained identifying to the maximum extent practicable the cost of software used for:

- (1) Scheduling, system control and dispatching,
- (2) System planning and standards development, and
- (3) Market monitoring and market administration activities.

Items

1. Software licenses
2. User interface software
3. Modeling software
4. Database software
5. Tracking and monitoring software
6. Energy Management System (EMS) software
7. Supervisory Control and Data Acquisition (SCADA) system software
8. Evaluation and assessment system software
9. Operating, planning and transaction scheduling software
10. Reliability applications
11. Market application software

384 Communication Equipment.

This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.

Items

1. Fiber optic cable
2. Remote terminal units
3. Microwave towers
4. Global Positioning System (GPS) equipment
5. Servers
6. Workstations
7. Telephones

385 Miscellaneous Regional Transmission and Market Operation Plant.

This account shall include the cost of regional transmission and market operation plant and equipment not provided for elsewhere,

386 Asset Retirement Costs for Regional Transmission and Market Operation Plant.

This account shall include asset retirement costs on regional control and market operation plant and equipment.

389 Land and land rights.

This account shall include the cost of land and land rights used for utility purposes, the cost of which is not properly includible in other land and land rights accounts. (See electric plant instruction 7.)

390 Structures and improvements.

This account shall include the cost in place of structures and improvements used for utility purposes, the cost of which is not properly includible in other structures and improvements accounts (See electric plant instruction 8.)

391 Office furniture and equipment.

This account shall include the cost of office furniture and equipment owned by the utility and devoted to utility service, and not permanently attached to buildings, except the cost of such furniture and equipment which the utility elects to assign to other plant accounts on a functional basis.

Items

1. Bookcases and shelves.
2. Desks, chairs, and desk equipment.
3. Drafting-room equipment.
4. Filing, storage, and other cabinets.
5. Floor covering.
6. Library and library equipment.
7. Mechanical office equipment, such as accounting machines, typewriters, etc.
8. Safes.
9. Tables.

392 Transportation equipment.

This account shall include the cost of transportation vehicles used for utility purposes.

Items

1. Airplanes.
2. Automobiles.
3. Bicycles.
4. Electrical vehicles.
5. Motor trucks.
6. Motorcycles.
7. Repair cars or trucks.
8. Tractors and trailers.
9. Other transportation vehicles.

393 Stores equipment.

This account shall include the cost of equipment used for the receiving, shipping, handling, and storage of materials and supplies.

Items

1. Chain falls.
2. Counters.
3. Cranes (portable).
4. Elevating and stacking equipment (portable).
5. Hoists.
6. Lockers.
7. Scales.
8. Shelving.
9. Storage bins.
10. Trucks, hand and power driven.
11. Wheelbarrows.

394 Tools, shop and garage equipment.

This account shall include the cost of tools, implements, and equipment used in construction, repair work, general shops and garages and not specifically provided for or includible in other accounts.

Items

1. Air compressors.
2. Anvils.
3. Automobile repair shop equipment.
4. Battery charging equipment.
5. Belts, shafts and countershafts.
6. Boilers.
7. Cable pulling equipment.
8. Concrete mixers.
9. Drill presses.
10. Derricks.
11. Electric equipment.
12. Engines.
13. Forges.
14. Furnaces.
15. Foundations and settings specially constructed for and not expected to outlast the equipment for which provided.
16. Gas producers.
17. Gasoline pumps, oil pumps and storage tanks.
18. Greasing tools and equipment.
19. Hoists.
20. Ladders.
21. Lathes.
22. Machine tools.
23. Motor-driven tools.
24. Motors.
25. Pipe threading and cutting tools
26. Pneumatic tools.
27. Pumps.
28. Riveters.
29. Smithing equipment.
30. Tool racks.
31. Vises.
32. Welding apparatus.
33. Work benches.

395 Laboratory equipment.

This account shall include the cost installed of laboratory equipment used for general laboratory purposes and not specifically provided for or includible in other departmental or functional plant accounts.

Items

1. Ammeters.
2. Current batteries.
3. Frequency changers.
4. Galvanometers.
5. Inductometers.
6. Laboratory standard millivolt meters.
7. Laboratory standard volt meters.
8. Meter-testing equipment.
9. Millivolt meters.
10. Motor generator sets.
11. Panels.
12. Phantom loads.
13. Portable graphic ammeters, voltmeters, and wattmeters.
14. Portable loading devices.
15. Potential batteries.
16. Potentiometers.
17. Rotating standards.
18. Standard cell, reactance, resistor, and shunt.
19. Switchboards.
20. Synchronous timers.
21. Testing panels.
22. Testing resistors.
23. Transformers.
24. Voltmeters.
25. Other testing, laboratory, or research equipment not provided for elsewhere.

396 Power operated equipment.

This account shall include the cost of power operated equipment used in construction or repair work exclusive of equipment includible in other accounts. Include, also, the tools and accessories acquired for use with such equipment and the vehicle on which such equipment is mounted.

Items

1. Air compressors, including driving unit and vehicle.
2. Back filling machines.
3. Boring machines.
4. Bulldozers.
5. Cranes and hoists.
6. Diggers.
7. Engines.
8. Pile drivers.
9. Pipe cleaning machines.
10. Pipe coating or wrapping machines.
11. Tractors—Crawler type.
12. Trenchers.
13. Other power operated equipment.

Note: It is intended that this account include only such large units as are generally self-propelled or mounted on movable equipment.

397 Communication equipment.

This account shall include the cost installed of telephone, telegraph, and wireless equipment for general use in connection with utility operations.

Items

1. Antennae.
2. Booths.
3. Cables.
4. Distributing boards.
5. Extension cords.
6. Gongs
7. Hand sets, manual and dial.
8. Insulators.
9. Intercommunicating sets.
10. Loading coils.
11. Operators' desks.
12. Poles and fixtures used wholly for telephone or telegraph wire.
13. Radio transmitting and receiving sets.
14. Remote control equipment and lines.
15. Sending keys.
16. Storage batteries
17. Switchboards.
18. Telautograph circuit connections.
19. Telegraph receiving sets.
20. Telephone and telegraph circuits.
21. Testing instruments.
22. Towers.
23. Underground conduit used wholly for telephone or telegraph wires and cable wires.

398 Miscellaneous equipment.

This account shall include the cost of equipment, apparatus, etc., used in the utility operations, which is not includible in any other account of this system of accounts.

Items

1. Hospital and infirmary equipment.
2. Kitchen equipment.
3. Employees' recreation equipment.
4. Radios.
5. Restaurant equipment.
6. Soda fountains.
7. Operators' cottage furnishings.
8. Other miscellaneous equipment.

Note: Miscellaneous equipment of the nature indicated above wherever practicable shall be included in the utility plant accounts on a functional basis.

399 Other tangible property.

This account shall include the cost of tangible utility plant not provided for elsewhere.

399.1 Asset retirement costs for general plant.

This account shall include asset retirement costs on plant included in the general plant function.

Income Chart of Accounts

1. Utility Operating Income

- 400 Operating revenues.
- 401 Operation expense.
- 402 Maintenance expense.
- 403 Depreciation expense.
- 404 Amortization of limited-term electric plant.
- 405 Amortization of other electric plant.
- 406 Amortization of electric plant acquisition adjustments.
- 407 Amortization of property losses, unrecovered plant and regulatory study costs.
- 407.3 Regulatory debits.
- 407.4 Regulatory credits.
- 408 [Reserved]
- 408.1 Taxes other than income taxes, utility operating income.
- 409 [Reserved]
- 409.1 Income taxes, utility operating income.
- 410 [Reserved]
- 410.1 Provisions for deferred income taxes, utility operating income.
- 411 [Reserved]
- 411.1 Provision for deferred income taxes—Credit, utility operating income.
- 411.3 [Reserved]
- 411.4 Investment tax credit adjustments, utility operations.
- 411.6 Gains from disposition of utility plant.
- 411.7 Losses from disposition of utility plant.
- 411.8 Gains from disposition of allowances.
- 411.9 Losses from disposition of allowances.
- 412 Revenues from electric plant leased to others.
- 413 Expenses of electric plant leased to others.
- 414 Other utility operating income.

2. Other Income and Deductions

a. other income

- 415 Revenues from merchandising, jobbing, and contract work.
- 416 Costs and expenses of merchandising, jobbing, and contract work.
- 417 Revenues from nonutility operations.
- 417.1 Expenses of nonutility operations.
- 418 Nonoperating rental income.
- 418.1 Equity in earnings of subsidiary companies (Major only).
- 419 Interest and dividend income.
- 419.1 Allowance for other funds used during construction.
- 420 Investment tax credits.
- 421 Miscellaneous nonoperating income.
- 421.1 Gain on disposition of property.

b. other income deductions

- 421.2 Loss on disposition of property.
- 425 Miscellaneous amortization.
- 426 [Reserved]
- 426.1 Donations.
- 426.2 Life insurance.
- 426.3 Penalties.

- 426.4 Expenditures for certain civic, political and related activities.
- 426.5 Other deductions.
- Total other income deductions. Total Other Income and Deductions.

c. taxes applicable to other income and deductions

- 408.2 Taxes other than income taxes, other income and deductions.
- 409.2 Income tax, other income and deductions.
- 409.3 Income taxes, extraordinary items.
- 410.2 Provision for deferred income taxes, other income and deductions.
- 411.2 Provision for deferred income taxes—Credit, other income and deductions.
- 411.5 Investment tax credit adjustments, nonutility operations.
- 420 Investment tax credits.
- Total taxes on other income and deductions. Net other income and deductions.

3. Interest Charges

- 427 Interest on long-term debt.
- 428 Amortization of debt discount and expense.
 - 428.1 Amortization of loss on reacquired debt.
- 429 Amortization of premium on debt—Cr.
 - 429.1 Amortization of gain on reacquired debt—Credit.
- 430 Interest on debt to associated companies.
- 431 Other interest expense.
- 432 Allowance for borrowed funds used during construction—Credit.

4. Extraordinary Items

- 434 Extraordinary income.
- 435 Extraordinary deductions.

Income Accounts

400 Operating revenues.

There shall be shown under this caption the total amount included in the electric operating revenue accounts provided herein.

401 Operation expense.

There shall be shown under this caption the total amount included in the electric operation expense accounts provided herein. (See note to operating expense instruction 3.)

402 Maintenance expense.

There shall be shown under this caption the total amount included in the electric maintenance expense accounts provided herein.

403 Depreciation expense.

A. This account shall include the amount of depreciation expense for all classes of depreciable electric plant in service except such depreciation expense as is chargeable to clearing accounts or to account 416, Costs and Expenses of Merchandising, Jobbing and Contract Work.

B. The utility shall keep such records of property and property retirements as will reflect the service life of property which has been retired and aid in estimating probable service life by mortality, turnover, or other appropriate methods; and also such records as will reflect the percentage of salvage and costs of removal for property retired from each account, or subdivision thereof, for depreciable electric plant.

Note A: Depreciation expense applicable to property included in account 104, Electric Plant Leased to Others, shall be charged to account 413, Expenses of Electric Plant Leased to Others.

Note B: Depreciation expenses applicable to transportation equipment, shop equipment, tools, work equipment, power operated equipment and other general equipment may be charged to clearing accounts as necessary in order to obtain a proper distribution of expenses between construction and operation.

Note C: Depreciation expense applicable to transportation equipment used for transportation of fuel from the point of acquisition to the unloading point shall be charged to Account 151, Fuel Stock.

403.1 Depreciation expense for asset retirement costs.

This account shall include the depreciation expense for asset retirement costs included in electric utility plant in service.

404 Amortization of limited-term electric plant.

This account shall include amortization charges applicable to amounts included in the electric plant accounts for limited-term franchises, licenses, patent rights, limited-term interests in land, and expenditures on leased property where the service life of the improvements is terminable by action of the lease. The charges to this account shall be such as to distribute the book cost of each investment as evenly as may be over the period of its benefit to the utility.

(See account 111, Accumulated Provision for Amortization of Electric Utility Plant.)

405 Amortization of other electric plant.

A. When authorized by the Commission, this account shall include charges for amortization of intangible or other electric utility plant which does not have a definite or terminable life and which is not subject to charges for depreciation expense.

B. This account shall be supported in such detail as to show the amortization applicable to each investment being amortized, together with the book cost of the investment and the period over which it is being written off.

406 Amortization of electric plant acquisition adjustments.

This account shall be debited or credited, as the case may be, with amounts includible in operating expenses, pursuant to approval or order of the Commission, for the purpose of providing for the extinguishment of the amount in account 114, Electric Plant Acquisition Adjustments.

407 Amortization of property losses, unrecovered plant and regulatory study costs.

This account shall be charged with amounts credited to account 182.1, Extraordinary Property Losses, and account 182.2, Unrecovered Plant and Regulatory Study Costs, when the Commission has authorized the amount in the latter account to be amortized by charges to electric operations.

407.3 Regulatory debits.

This account shall be debited, when appropriate, with the amounts credited to Account 254, Other Regulatory Liabilities, to record regulatory liabilities imposed on the utility by the ratemaking actions of regulatory agencies. This account shall also be debited, when appropriate, with the amounts credited to Account 182.3, Other Regulatory Assets, concurrent with the recovery of such amounts in rates.

407.4 Regulatory credits.

This account shall be credited, when appropriate, with the amounts debited to Account 182.3, Other Regulatory Assets, to establish regulatory assets. This account shall also be credited, when appropriate, with the amounts debited to Account 254, Other Regulatory Liabilities, concurrent with the return of such amounts to customers through rates.

408 [Reserved]

special instructions, accounts 408.1 and 408.2

- A. These accounts shall include the amounts of ad valorem, gross revenue or gross receipts taxes, state unemployment insurance, franchise taxes, Federal excise taxes, social security taxes, and all other taxes assessed by Federal, state, county, municipal, or other local governmental authorities, except income taxes.
- B. These accounts shall be charged in each accounting period with the amounts of taxes which are applicable thereto, with concurrent credits to account 236, Taxes Accrued, or account 165, Prepayments, as appropriate. When it is not possible to determine the exact amounts of taxes, the amounts shall be estimated and adjustments made in current accruals as the actual tax levies become known.
- C. The charges to these accounts shall be made or supported so as to show the amount of each tax and the basis upon which each charge is made. In the case of a utility rendering more than one utility service, taxes of the kind includible in these accounts shall be assigned directly to the utility department the operation of which gave rise to the tax in so far as practicable. Where the tax is not attributable to a specific utility department, it shall be distributed among the utility departments or nonutility operations on an equitable basis after appropriate study to determine such basis.

Note 1: Special assessments for street and similar improvements shall be included in the appropriate utility plant or nonutility property account.

Note 2: Taxes specifically applicable to construction shall be included in the cost of construction.

Note 3: Gasoline and other sales taxes shall be charged as far as practicable to the same account as the materials on which the tax is levied.

Note 4: Social security and other forms of so-called payroll taxes shall be distributed to utility departments and to nonutility functions on a basis related to payroll. Amounts applicable to construction shall be charged to the appropriate plant account.

Note 5: Interest on tax refunds or deficiencies shall not be included in these accounts but in account 419, Interest and Dividend Income, or 431, Other Interest Expense, as appropriate.

408.1 Taxes other than income taxes, utility operating income.

This account shall include those taxes other than income taxes which relate to utility operating income. This account shall be maintained so as to allow ready identification of the various classes of taxes relating to Utility Operating Income (by department), Utility Plant Leased to Others and Other Utility Operating Income.

408.2 Taxes other than income taxes, other income and deductions.

This account shall include those taxes other than income taxes which relate to Other Income and Deductions.

409 [Reserved]

special instructions, accounts 409.1, 409.2, and 409.3.

A. These accounts shall include the amounts of local, state and Federal income taxes on income properly accruable during the period covered by the income statement to meet the actual liability for such taxes. Concurrent credits for the tax accruals shall be made to account 236, Taxes Accrued, and as the exact amounts of taxes become known, the current tax accruals shall be adjusted by charges or credits to these accounts, so that these accounts as nearly as can be ascertained shall include the actual taxes payable by the utility.

B. The accruals for income taxes shall be apportioned among utility departments and to Other Income and Deductions so that, as nearly as practicable, each tax shall be included in the expenses of the utility department or Other Income and Deductions, the income from which gave rise to the tax. The tax effects relating to Interest Charges shall be allocated between utility and nonutility operations. The basis for this allocation shall be the ratio of net investment in utility plant to net investment in nonutility plant.

Note 1: Taxes assumed by the utility on interest shall be charged to account 431, Other Interest Expense.

Note 2: Interest on tax refunds or deficiencies shall not be included in these accounts but in account 419, Interest and Dividend Income, or account 431, Other Interest Expense, as appropriate.

409.1 Income taxes, utility operating income.

This account shall include the amount of those local, state and Federal income taxes which relate to utility operating income. This account shall be maintained so as to allow ready identification of tax effects (both positive and negative) relating to Utility Operating Income (by department), Utility Plant Leased to Others and Other Utility Operating Income.

409.2 Income taxes, other income and deductions.

This account shall include the amount of those local, state and Federal income taxes (both positive and negative), which relate to Other Income and Deductions.

409.3 Income taxes, extraordinary items.

This account shall include the amount of those local, state and Federal income taxes (both positive and negative), which relate to Extraordinary Items.

410 [Reserved]

special instructions, accounts 410.1, 410.2, 411.1, and 411.2.

A. Accounts 410.1 and 410.2 shall be debited, and Accumulated Deferred Income Taxes shall be credited, with amounts equal to any current deferrals of taxes on income or any allocations of deferred taxes originating in prior periods, as provided by the texts of accounts 190, 281, 282, and 283. There shall not be netted against entries required to be made to these accounts any credit amounts appropriately includible in account 411.1 or 411.2.

B. Accounts 411.1 and 411.2 shall be credited, and Accumulated Deferred Income Taxes shall be debited, with amounts equal to any allocations of deferred taxes originating in prior periods or any current deferrals of taxes on income, as provided by the texts of accounts 190, 281, 282, and 283. There shall not be netted against entries required to be made to these accounts any debit amounts appropriately includible in account 410.1 or 410.2.

410.1 Provision for deferred income taxes, utility operating income.

This account shall include the amounts of those deferrals of taxes and allocations of deferred taxes which relate to Utility Operating Income (by department).

410.2 Provision for deferred income taxes, other income and deductions.

This account shall include the amounts of those deferrals of taxes and allocations of deferred taxes which relate to Other Income and Deductions.

411 [Reserved]

411.1 Provision for deferred income taxes—Credit, utility operating income.

This account shall include the amounts of those allocations of deferred taxes and deferrals of taxes, credit, which relate to Utility Operating Income (by department).

411.2 Provision for deferred income taxes—Credit, other income and deductions.

This account shall include the amounts of those allocations of deferred taxes and deferrals of taxes, credit, which relate to Other Income and Deductions.

411.3 [Reserved]

special instructions—accounts 411.4 and 411.5

- A. Account 411.4 shall be debited with the amounts of investment tax credits related to electric utility property that are credited to account 255, Accumulated Deferred Investment Tax Credits, by companies which do not apply the entire amount of the benefits of the investment credit as a reduction of the overall income tax expense in the year in which such credit is realized (see account 255).
- B. Account 411.4 shall be credited with the amounts debited to account 255 for proportionate amounts of tax credit deferrals allocated over the average useful life of electric utility property to which the tax credits relate or such lesser period of time as may be adopted and consistently followed by the company.
- C. Account 411.5 shall also be debited and credited as directed in paragraphs A and B, for investment tax credits related to nonutility property.

411.4 Investment tax credit adjustments, utility operations.

This account shall include the amount of those investment tax credit adjustments related to property used in Utility Operations (by department).

411.5 Investment tax credit adjustments, nonutility operations.

This account shall include the amount of those investment tax credit adjustments related to property used in Nonutility Operations.

411.6 Gains from disposition of utility plant.

A. This account shall include, as approved by the Commission, amounts relating to gains from the disposition of future use utility plant including amounts which were previously recorded in and transferred from account 105, Electric Plant Held for Future Use, under the provisions of paragraphs B, C, and D thereof. Income taxes relating to gains recorded in this account shall be recorded in account 409.1, Income Taxes, Utility Operating Income.

B. The utility shall record in this account gains resulting from the settlement of asset retirement obligations related to utility plant in accordance with the accounting prescribed in General Instruction 25.

411.7 Losses from disposition of utility plant.

A. This account shall include, as approved by the Commission, amounts relating to losses from the disposition of future use utility plant including amounts which were previously recorded in and transferred from account 105, Electric Plant Held for Future Use, under the provisions of paragraphs B, C, and D thereof. Income taxes relating to losses, recorded in this account shall be recorded in account 409.1, Income Taxes, Utility Operating Income.

B. The utility shall record in this account losses resulting from the settlement of asset retirement obligations related to utility plant in accordance with the accounting prescribed in General Instruction 25.

411.8 Gains from disposition of allowances.

This account shall be credited with the gain on the sale, exchange, or other disposition of allowances in accordance with paragraph (H) of General Instruction No. 21. Income taxes relating to gains recorded in this account shall be recorded in Account 409.1, Income Taxes, Utility Operating Income.

411.9 Losses from disposition of allowances.

This account shall be debited with the loss on the sale, exchange, or other disposition of allowances in accordance with paragraph (H) of General Instruction No. 21. Income taxes relating to losses recorded in this account shall be recorded in Account 409.1, Income Taxes, Utility Operating Income.

411.10 Accretion expense.

This account shall be charged for accretion expense on the liabilities associated with asset retirement obligations included in account 230, Asset retirement obligations, related to electric utility plant.

412 Revenues from electric plant leased to others.

413 Expenses of electric plant leased to others.

A. These accounts shall include respectively, revenues from electric property constituting a distinct operating unit or system leased by the utility to others, and which property is properly includible in account 104, Electric Plant Leased to Others, and the expenses attributable to such property.

B. The detail of expenses shall be kept or supported so as to show separately the following:

- Operation.
- Maintenance.
- Depreciation.
- Amortization.

Note: Related taxes shall be recorded in account 408.1, Taxes Other Than Income Taxes, Utility Operating Income, or account 409.1, Income Taxes, Utility Operating Income, as appropriate.

414 Other utility operating income.

A. This account shall include the revenues received and expenses incurred in connection with the operations of utility plant, the book cost of which is included in account 118, Other Utility Plant.

B. The expenses shall include every element of cost incurred in such operations, including depreciation, rents, and insurance.

Note: Related taxes shall be recorded in account 408.1, Taxes Other Than Income Taxes, Utility Operating Income, or account 409.1, Income Taxes, Utility Operating Income, as appropriate.

415 Revenues from merchandising, jobbing and contract work.

416 Costs and expenses of merchandising, jobbing and contract work.

A. These accounts shall include respectively, all revenues derived from the sale of merchandise and jobbing or contract work, including any profit or commission accruing to the utility on jobbing work performed by it as agent under contracts whereby it does jobbing work for another for a stipulated profit or commission, and all expenses incurred in such activities. Interest related income from installment sales shall be recorded in Account 419, Interest and Dividend income.

B. Records in support of these accounts shall be so kept as to permit ready summarization of revenues, costs and expenses by such major items as are feasible.

Note 1: The classification of revenues, costs, and expenses of merchandising, jobbing, and contract work as nonoperating, and thus inclusion in this account, is for accounting purposes. It does not preclude consideration of justification to the contrary for ratemaking or other purposes.

Note 2: Related taxes shall be recorded in account 408.2, Taxes Other Than Income Taxes, Other Income and Deductions, or account 409.2, Income Taxes, Other Income and Deductions, as appropriate.

Items

Account 415:

1. Revenues from sale of merchandise and from jobbing and contract work.
2. Discounts and allowances made in settlement of bills for merchandise and jobbing work.

Account 416:

Labor—

1. Canvassing and demonstrating appliances in homes and other places for the purpose of selling appliances.
2. Demonstrating and selling activities in sales rooms.
3. Installing appliances on customer premises where such work is done only for purchasers of appliances from the utility.
4. Installing wiring, piping, or other property work, on a jobbing or contract basis.
5. Preparing advertising materials for appliance sales purposes.
6. Receiving and handling customer orders for merchandise or for jobbing services.
7. Cleaning and tidying sales rooms.
8. Maintaining display counters and other equipment used in merchandising.
9. Arranging merchandise in sales rooms and decorating display windows.
10. Reconditioning repossessed appliances.
11. Bookkeeping and other clerical work in connection with merchandise and jobbing activities.
12. Supervising merchandise and jobbing operations.

Materials and expenses—

13. Advertising in newspapers, periodicals, radio, television, etc.
14. Cost of merchandise sold and of materials used in jobbing work.
15. Stores expenses on merchandise and jobbing stocks.
16. Fees and expenses of advertising and commercial artists' agencies.
17. Printing booklets, dodgers, and other advertising data.
18. Premiums given as inducement to buy appliances.
19. Light, heat and power.
20. Depreciation on equipment used primarily for merchandise and jobbing operations.
21. Rent of sales rooms or of equipment.
22. Transportation expense in delivery and pick-up of appliances by utility's facilities or by others.
23. Stationery and office supplies and expenses.
24. Losses from uncollectible merchandise and jobbing accounts.

417 Revenues from nonutility operations.

417.1 Expenses of nonutility operations.

A. These accounts shall include revenues and expenses applicable to operations which are nonutility in character but nevertheless constitute a distinct operating activity of the enterprise as a whole, such as the operation of an ice department where applicable statutes do not define such operation as a utility, or the operation of a servicing organization for furnishing supervision, management, engineering, and similar services to others.

B. The expenses shall include all elements of costs incurred in such operations, and the accounts shall be maintained so as to permit ready summarization as follows:

- Operation.
- Maintenance.
- Rents.
- Depreciation.
- Amortization.

Note: Related taxes shall be recorded in account 408.2, Taxes Other Than Income Taxes, Other Income and Deductions, or account 409.2, Income Taxes, Other Income and Deductions, as appropriate.

418 Nonoperating rental income.

A. This account shall include all rent revenues and related expenses of land, buildings, or other property included in account 121, Nonutility Property, which is not used in operations covered by account 417 or 417.1.

B. The expenses shall include all elements of costs incurred in the ownership and rental of property and the accounts shall be maintained so as to permit ready summarization as follows:

- Operation.
- Maintenance.
- Rents.
- Depreciation.
- Amortization.

Note: Related taxes shall be recorded in account 408.2, Taxes Other Than Income Taxes, Other Income and Deductions, or account 409.2, Income Taxes, Other Income and Deductions, as appropriate.

418.1 Equity in earnings of subsidiary companies (Major only).

This account shall include the utility's equity in the earnings or losses of subsidiary companies for the year.

419 Interest and dividend income.

A. This account shall include interest revenues on securities, loans, notes, advances, special deposits, tax refunds and all other interest-bearing assets, and dividends on stocks of other companies, whether the securities on which the interest and dividends are received are carried as investments or included in sinking or other special fund accounts.

B. This account may include the pro rata amount necessary to extinguish (during the interval between the date of acquisition and the date of maturity) the difference between the cost to the utility and the face value of interest-bearing securities. Amounts thus credited or charged shall be concurrently included in the accounts in which the securities are carried.

C. Where significant in amount, expenses, excluding operating taxes and income taxes, applicable to security investments and to interest and dividend revenues thereon shall be charged hereto.

Note 1: Related taxes shall be recorded in account 408.2, Taxes Other Than Income Taxes, Other Income and

Deductions, or account 409.2, Income Taxes, Other Income and Deductions, as appropriate.

Note 2: Interest accrued, the payment of which is not reasonably assured, dividends receivable which have not been declared or guaranteed, and interest or dividends upon reacquired securities issued or assumed by the utility shall not be credited to this account.

419.1 Allowance for other funds used during construction.

This account shall include concurrent credits for allowance for other funds used during construction, not to exceed amounts computed in accordance with the formula prescribed in Electric Plant Instruction 3(17).

420 Investment tax credits.

This account shall be credited as follows with investment tax credit amounts not passed on to customers:

A. By amounts equal to debits to accounts 411.4, Investment Tax Credit Adjustments, Utility Operations, and 411.5, Investment Tax Credit Adjustments, Nonutility Operations, for investment tax credits used in calculating income taxes for the year when the company's accounting provides for nondeferral of all or a portion of such credits; and,

B. By amounts equal to debits to account 255, Accumulated deferred investment tax credits, for proportionate amounts of tax credit deferrals allocated over the average useful life of the property to which the tax credits relate, or such lesser period of time as may be adopted and consistently used by the company.

421 Miscellaneous nonoperating income.

This account shall include all revenue and expense items except taxes properly includible in the income account and not provided for elsewhere. Related taxes shall be recorded in account 408.2, Taxes Other Than Income Taxes, Other Income and Deductions, or account 409.2, Income Taxes, Other Income and Deductions, as appropriate.

Items

1. Profit on sale of timber. (See electric plant instruction 7C.)
2. Profits from operations of others realized by the utility under contracts.
3. Gains on disposition of investments. Also, gains on reacquisition and resale or retirement of utilities debt securities when the gain is not amortized and used by a jurisdictional regulatory agency to reduce embedded debt cost in establishing rates. See General Instruction 17.
4. This account shall include the accretion expense on the liability for an asset retirement obligation included in account 230, Asset retirement obligations, related to nonutility plant.
5. This account shall include the depreciation expense for asset retirement costs related to nonutility plant.
6. The utility shall record in this account gains resulting from the settlement of asset retirement obligations related to nonutility plant in accordance with the accounting prescribed in General Instruction 25.

421.1 Gain on disposition of property.

This account shall be credited with the gain on the sale, conveyance, exchange, or transfer of utility or other property to another. Amounts relating to gains on land and land rights held for future use recorded in account 105, Electric Plant Held for Future Use will be accounted for as prescribed in paragraphs B, C, and D thereof. (See electric plant instructions 5F, 7E, and 10E.) Income taxes on gains recorded in this account shall be recorded in account 409.2, Income Taxes, Other Income and Deductions.

421.2 Loss on disposition of property.

This account shall be charged with the loss on the sale, conveyance, exchange or transfer of utility or other property to another. Amounts relating to losses on land and land rights held for future use recorded in account 105, Electric Plant Held for Future Use will be accounted for as prescribed in paragraphs B, C, and D thereof. (See electric plant instructions 5F, 7E, and 10E.) The reduction in

income taxes relating to losses recorded in this account shall be recorded in account 409.2, Income Taxes, Other Income and Deductions.

425 Miscellaneous amortization.

This account shall include amortization charges not includible in other accounts which are properly deductible in determining the income of the utility before interest charges. Charges includible herein, if significant in amount, must be in accordance with an orderly and systematic amortization program.

Items

1. Amortization of utility plant acquisition adjustments, or of intangibles included in utility plant in service when not authorized to be included in utility operating expenses by the Commission.
2. Other miscellaneous amortization charges allowed to be included in this account by the Commission.

426 [Reserved]

special instructions—accounts 426.1, 426.2, 426.3, 426.4 and 426.5

These accounts shall include miscellaneous expense items which are nonoperating in nature but which are properly deductible before determining total income before interest charges.

Note: The classification of expenses as nonoperating and their inclusion in these accounts is for accounting purposes. It does not preclude Commission consideration of proof to the contrary for ratemaking or other purposes.

426.1 Donations.

This account shall include all payments or donations for charitable, social or community welfare purposes.

426.2 Life insurance.

This account shall include all payments for life insurance of officers and employees where company is beneficiary (net premiums less increase in cash surrender value of policies).

426.3 Penalties.

This account shall include payments by the company for penalties or fines for violation of any regulatory statutes by the company or its officials.

426.4 Expenditures for certain civic, political and related activities.

This account shall include expenditures for the purpose of influencing public opinion with respect to the election or appointment of public officials, referenda, legislation, or ordinances (either with respect to the possible adoption of new referenda, legislation or ordinances or repeal or modification of existing referenda, legislation or ordinances) or approval, modification, or revocation of franchises; or for the purpose of influencing the decisions of public officials, but shall not include such expenditures which are directly related to appearances before regulatory or other governmental bodies in connection with the reporting utility's existing or proposed operations.

426.5 Other deductions.

This account shall include other miscellaneous expenses which are nonoperating in nature, but which are properly deductible before determining total income before interest charges.

Items

1. Loss relating to investments in securities written-off or written-down.
2. Loss on sale of investments.
3. Loss on reacquisition, resale or retirement of utility's debt securities, when the loss is not amortized and used by a jurisdictional regulatory agency to increase embedded debt cost in establishing rates. See General Instruction 17.
4. Preliminary survey and investigation expenses related to abandoned projects, when not written-off to the appropriate operating expense account.
5. Costs of preliminary abandonment costs recorded in accounts 182.1, Extraordinary Property Losses, and 182.2, Unrecovered Plant and Regulatory Study Costs, not allowed to be amortized to account 407, Amortization of Property Losses, Unrecovered Plant and Regulatory Study Costs.
6. The utility shall record in this account losses resulting from the settlement of asset retirement obligations related to nonutility plant in accordance with the accounting prescribed in General Instruction 25.

427 Interest on long-term debt.

A. This account shall include the amount of interest on outstanding long-term debt issued or assumed by the utility, the liability for which is included in account 221, Bonds, or account 224, Other Long-Term Debt.

B. This account shall be so kept or supported as to show the interest accruals on each class and series of long-term debt.

Note: This account shall not include interest on nominally issued or nominally outstanding long-term debt, including securities assumed.

428 Amortization of debt discount and expense.

A. This account shall include the amortization of unamortized debt discount and expense on outstanding long-term debt. Amounts charged to this account shall be credited concurrently to accounts 181, Unamortized Debt Expense, and 226, Unamortized Discount on Long-Term Debt—Debit.

B. This account shall be so kept or supported as to show the debt discount and expense on each class and series of long-term debt.

428.1 Amortization of loss on reacquired debt.

A. This account shall include the amortization of the losses on reacquisition of debt. Amounts charged to this account shall be credited concurrently to account 189, Unamortized Loss on Reacquired Debt.

B. This account shall be maintained so as to allow ready identification of the loss amortized applicable to each class and series of long-term debt reacquired. See General Instruction 17.

429 Amortization of premium on debt—Cr.

A. This account shall include the amortization of unamortized net premium on outstanding long-term debt. Amounts credited to this account shall be charged concurrently to account 225, Unamortized Premium on Long-Term Debt.

B. This account shall be so kept or supported as to show the premium on each class and series of long-term debt.

429.1 Amortization of gain on reacquired debt—Credit.

A. This account shall include the amortization of the gains realized from reacquisition of debt. Amounts credited to this account shall be charged concurrently to account 257, Unamortized Gain on Reacquired Debt.

B. This account shall be maintained so as to allow ready identification of the gains amortized applicable to each class and series of long-term debt reacquired. See General Instruction 17.

430 Interest on debt to associated companies.

A. This account shall include the interest accrued on amounts included in account 223, Advances from Associated Companies, and on all other obligations to associated companies.

B. The records supporting the entries to this account shall be so kept as to show to whom the interest is to be paid, the period covered by the accrual, the rate of interest and the principal amount of the advances or other obligations on which the interest is accrued.

431 Other interest expense.

This account shall include all interest charges not provided for elsewhere.

Items

1. Interest on notes payable on demand or maturing one year or less from date and on open accounts, except notes and accounts with associated companies.
2. Interest on customers' deposits.
3. Interest on claims and judgments, tax assessments, and assessments for public improvements past due.
4. Income and other taxes levied upon bondholders of utility and assumed by it.

432 Allowance for borrowed funds used during construction—Credit.

This account shall include concurrent credits for allowance for borrowed funds used during construction, not to exceed amounts computed in accordance with the formula prescribed in Electric Plant Instruction 3(17).

434 Extraordinary income.

This account shall be credited with gains of unusual nature and infrequent occurrence, which would significantly distort the current year's income computed before Extraordinary Items, if reported other than as extraordinary items. Income tax relating to the amounts recorded in this account shall be recorded in account 409.3, Income Taxes, Extraordinary Items. (See General Instruction 7.)

435 Extraordinary deductions.

This account shall be debited with losses of unusual nature and infrequent occurrence, which would significantly distort the current year's income computed before Extraordinary Items, if reported other than as extraordinary items. Income tax relating to the amounts recorded in this account shall be recorded in account 409.3, Income Taxes, Extraordinary Items. (See General Instruction 7.)

Retained Earnings Chart of Accounts

- 433 Balance transferred from income.
- 436 Appropriations of retained earnings.
- 437 Dividends declared—preferred stock.
- 438 Dividends declared—common stock.
- 439 Adjustments to retained earnings.

Retained Earnings Accounts

433 Balance transferred from income.

This account shall include the net credit or debit transferred from income for the year.

436 Appropriations of retained earnings.

This account shall include appropriations of retained earnings.

Items

1. Appropriations required under terms of mortgages, orders of courts, contracts, or other agreements.
2. Appropriations required by action of regulatory authorities.
3. Other appropriations made at option of utility for specific purposes.

437 Dividends declared—preferred stock.

A. This account shall include amounts declared payable out of retained earnings as dividends on actually outstanding preferred or prior lien capital stock issued by the utility.

B. Dividends shall be segregated for each class and series of preferred stock as to those payable in cash, stock, and other forms. If not payable in cash, the medium of payment shall be described with sufficient detail to identify it.

438 Dividends declared—common stock.

A. This account shall include amounts declared payable out of retained earnings as dividends on actually outstanding common capital stock issued by the utility.

B. Dividends shall be segregated for each class of common stock as to those payable in cash, stock and other forms. If not payable in cash, the medium of payment shall be described with sufficient detail to identify it.

439 Adjustments to retained earnings.

A. This account shall, with prior Commission approval, include significant nonrecurring transactions accounted for as prior period adjustments, as follows:

(1) Correction of an error in the financial statements of a prior year.

(2) Adjustments that result from realization of income tax benefits of pre-acquisition operating loss carryforwards of purchased subsidiaries.

All other items of profit and loss recognized during a year shall be included in the determination of net income for that year;

B. Adjustments, charges, or credits due to losses on reacquisition, resale or retirement of the company's own capital stock shall be included in this account. (See account 210, Gain on Resale or Cancellation of Reacquired Capital Stock, for the treatment of gains.)

Operating Revenue Chart of Accounts

1. Sales of Electricity

- 440 Residential sales.
- 442 Commercial and industrial sales.
- 444 Public street and highway lighting.
- 445 Other sales to public authorities (Major only).
- 446 Sales to railroads and railways (Major only).
- 447 Sales for resale.
- 448 Interdepartmental sales.
- 449 Other sales (Nonmajor only).
- 449.1 Provision for rate refunds.

2. Other Operating Revenues

- 450 Forfeited discounts.
- 451 Miscellaneous service revenues.
- 453 Sales of water and water power.
- 454 Rent from electric property.
- 455 Interdepartmental rents.

456 Other electric revenues.

456.1 Revenues from transmission of electricity of others.

457.1 Regional transmission service revenues.

457.2 Miscellaneous revenues.

Operating Revenue Accounts

440 Residential sales.

A. This account shall include the net billing for electricity supplied for residential or domestic purposes.

B. Records shall be maintained so that the quantity of electricity sold and the revenue received under each rate schedule shall be readily available.

Note: When electricity supplied through a single meter is used for both residential and commercial purposes, the total revenue shall be included in this account, or account 442, Commercial and Industrial Sales, according to the rate schedule which is applied. If the same rate schedules apply to residential as to commercial and industrial service, classification shall be made according to principal use.

442 Commercial and industrial sales.

A. This account shall include the net billing for electricity supplied to customers for commercial and industrial purposes.

B. Records shall be maintained so that the quantity of electricity sold and the revenue received under each rate schedule shall be readily available. Records shall be maintained also so as to show separately the revenues from commercial and industrial customers (1) which have demands generally of 1000 kw or more, and (2) those which have demands generally less than 1000 kw. Reasonable deviations above or below the 1000 kw demand are permissible in order that transfers of customers between the two classes during the year may be minimized.

Note A: If the utility classifies large commercial and industrial customers and related revenues on a lesser basis than 1000 kilowatts of demand, or segregates industrial customers and related revenues according to a recognized definition of an industrial customer, such classifications are acceptable in lieu of those otherwise required by the text of this account on the basis of 1000 kilowatts of demand.

Note B: When electricity supplied through a single meter is used for both commercial and residential purposes, the total revenue shall be included in this account, or in account 440, Residential Sales, according to the rate schedule which is applied. If the same rate schedules apply to residential as to commercial and industrial service, classification shall be made according to the principal use.

444 Public street and highway lighting.

A. This account shall include the net billing for electricity supplied and services rendered for the purposes of lighting streets, highways, parks and other public places, or for traffic or other signal system service, for municipalities or other divisions or agencies of state or federal governments.

B. Records shall be maintained so that the quantity of electricity sold and the revenue received from each customer shall be readily available. In addition, the records shall be maintained so as to show the revenues from (1) contracts which include both electricity and services, and (2) contracts which include sales of electricity only.

445 Other sales to public authorities (Major only).

A. This account shall include the net billing for electricity supplied to municipalities or divisions or agencies of federal or state governments, under special contracts or agreements or service classifications applicable only to public authorities, except such revenues as are includible in accounts 444 and 447.

B. Records shall be maintained so as to show the quantity of electricity sold and the revenues received from each customer.

446 Sales to railroads and railways (Major only).

A. This account shall include the net billing for electricity supplied to railroads and interurban and street railways, for general railroad use, including the propulsion of cars or locomotives, where such electricity is supplied under separate and distinct rate schedules.

B. Records shall be maintained so that the quantity of electricity sold and the revenue received from each customer shall be readily available.

Note: Revenues from incidental use of electricity furnished under a contract for propulsion of cars or locomotives shall be included herein.

447 Sales for resale.

A. This account shall include the net billing for electricity supplied to other electric utilities or to public authorities for resale purposes.

B. Records shall be maintained so as to show the quantity of electricity sold and the revenue received from each customer.

Note: Revenues from electricity supplied to other public utilities for use by them and not for distribution, shall be included in account 442, Commercial and Industrial Sales, unless supplied under the same contract as and not readily separable from revenues includible in this account.

448 Interdepartmental sales.

A. This account shall include amounts charged by the electric department at tariff or other specified rates for electricity supplied by it to other utility departments.

B. Records shall be maintained so that the quantity of electricity supplied each other department and the charges therefor shall be readily available.

449 Other sales (Nonmajor only).

A. This account shall include revenues for electricity supplied which are not provided for elsewhere.

B. Records shall be maintained so as to show the quantity of electricity sold and the revenues received from each customer.

449.1 Provision for rate refunds.

A. This account shall be charged with provisions for the estimated pretax effects on net income of the portions of amounts being collected subject to refund which are estimated to be required to be refunded. Such provisions shall be credited to Account 229, Accumulated Provision for Rate Refunds.

B. This account shall also be charged with amounts refunded when such amounts had not been previously accrued.

C. Income tax effects relating to the amounts recorded in this account shall be recorded in account 410.1, Provision for Deferred Income Taxes, Utility Operating Income, or account 411.1, Provision for Deferred Income Taxes—Credit, Utility Operating Income, as appropriate.

450 Forfeited discounts.

This account shall include the amount of discounts forfeited or additional charges imposed because of the failure of customers to pay their electric bills on or before a specified date.

451 Miscellaneous service revenues.

This account shall include revenues for all miscellaneous services and charges billed to customers which are not specifically provided for in other accounts.

Items

1. Fees for changing, connecting or disconnecting service.
2. Profit on maintenance of appliances, wiring, piping or other installations on customers' premises.
3. Net credit or debit (cost less net salvage and less payment from customers) on closing of work orders for plant installed for temporary service of less than one year. (See account 185, Temporary Facilities.)
4. Recovery of expenses in connection with current diversion cases (billing for the electricity consumed shall be included in the appropriate electric revenue account).

453 Sales of water and water power.

A. This account shall include revenues derived from the sale of water for irrigation, domestic, industrial or other uses, or for the development by others of water power, or for headwater benefits; also, revenues derived from furnishing water power for mechanical purposes when the investment in the property used in supplying such water or water power is carried as electric plant in service.

B. The records for this account shall be kept in such manner as to permit an analysis of the rates charged and the purposes for which the water was used.

454 Rent from electric property.

A. This account shall include rents received for the use by others of land, buildings, and other property devoted to electric operations by the utility.

B. When property owned by the utility is operated jointly with others under a definite arrangement for apportioning the actual expenses among the parties to the arrangement, any amount received by the utility for interest or return or in reimbursement of taxes or depreciation on the property shall be credited to this account.

Note: Do not include in this account rents from property constituting an operating unit or system. (See account 412, Revenues from Electric Plant Leased to Others.)

455 Interdepartmental rents.

This account shall include rents credited to the electric department on account of rental charges made against other departments (gas, water, etc.) of the utility. In the case of property operated under a definite arrangement to allocate the costs among the departments using the property, any reimbursement to the electric department for interest or return and depreciation and taxes shall be credited to this account.

456 Other electric revenues.

This account shall include revenues derived from electric operations not includible in any of the foregoing accounts. It shall also include in a separate subaccount revenues received from operation of fish and wildlife, and recreation facilities whether operated by the company or by contract concessionaires, such as revenues from leases, or rentals of land for cottage, homes, or campsites.

Items

1. Commission on sale or distribution of electricity of others when sold under rates filed by such others.
2. Compensation for minor or incidental services provided for others such as customer billing, engineering, etc.
3. Profit or loss on sale of material and supplies not ordinarily purchased for resale and not handled through merchandising and jobbing accounts.
4. Sale of steam, but not including sales made by a steamheating department or transfers of steam under joint facility operations.
5. Include in a separate subaccount revenues in payment for rights and/or benefits received from others which are realized through research, development, and demonstration ventures. In the event the amounts received are so large as to distort revenues for the year in which received (5 percent of net income before application of the benefit) the amounts shall be credited to Account 253, Other Deferred Credits, and amortized by credits to this account over a period not to exceed 5 years.

456.1 Revenues From Transmission of Electricity of Others.

This account shall include revenues from transmission of electricity of others over transmission facilities of the utility.

457.1 Regional Transmission Service Revenues.

This account shall include revenues derived from providing scheduling, system control and dispatching services. Include also in this account reimbursements for system planning, standards development, and market monitoring and market compliance activities. Records shall be maintained so as to show: (1) The services supplied and revenues received from each customer and (2) the amounts billed by tariff or specified rates.

457.2 Miscellaneous Revenues.

This account shall include revenues and reimbursements for costs incurred by regional transmission service providers not provided for elsewhere. Records shall be maintained so as to show: (1) The services supplied and revenues received from each customer, and (2) the amounts billed by tariff or specified rates.

Operation and Maintenance Expense Chart of Accounts

1. Power Production Expenses

a. steam power generation

Operation

- 500 Operation supervision and engineering.
- 501 Fuel.
- 502 Steam expenses (Major only).
- 503 Steam from other sources.
- 504 Steam transferred—Credit.
- 505 Electric expenses (Major only).
- 506 Miscellaneous steam power expenses (Major only).
- 507 Rents.
- 508 Operation supplies and expenses (Nonmajor only).
- 509 Allowances.

Maintenance

- 510 Maintenance supervision and engineering (Major only).
- 511 Maintenance of structures (Major only).
- 512 Maintenance of boiler plant (Major only).
- 513 Maintenance of electric plant (Major only).
- 514 Maintenance of miscellaneous steam plant (Major only).
- 515 Maintenance of steam production plant (Nonmajor only).

b. nuclear power generation

Operation

- 517 Operation supervision and engineering (Major only).
- 518 Nuclear fuel expense (Major only).
- 519 Coolants and water (Major only).
- 520 Steam expenses (Major only).
- 521 Steam from other sources (Major only).
- 522 Steam transferred—Credit. (Major only).
- 523 Electric expenses (Major only).
- 524 Miscellaneous nuclear power expenses (Major only).
- 525 Rents (Major only).

Maintenance

- 528 Maintenance supervision and engineering (Major only).
- 529 Maintenance of structures (Major only).
- 530 Maintenance of reactor plant equipment (Major only).
- 531 Maintenance of electric plant (Major only).
- 532 Maintenance of miscellaneous nuclear plant (Major only).

c. hydraulic power generation

Operation

- 535 Operation supervision and engineering.
- 536 Water for power.
- 537 Hydraulic expenses (Major only).
- 538 Electric expenses (Major only).
- 539 Miscellaneous hydraulic power generation expenses (Major only).
- 540 Rents.
- 540.1 Operation supplies and expenses (Nonmajor only).

Maintenance

- 541 Maintenance supervision and engineering (Major only).
- 542 Maintenance of structures (Major only).
- 543 Maintenance of reservoirs, dams and waterways (Major only).
- 544 Maintenance of electric plant (Major only).
- 545 Maintenance of miscellaneous hydraulic plant (Major only).
- 545.1 Maintenance of hydraulic production plant (Nonmajor only).

d. other power generation

Operation

- 546 Operation supervision and engineering.
- 547 Fuel.
- 548 Generation expenses (Major only).
- 548.1 Operation of Energy Storage Equipment
- 549 Miscellaneous other power generation expenses (Major only).
- 550 Rents.
- 550.1 Operation supplies and expenses (Nonmajor only).

Maintenance

- 551 Maintenance supervision and engineering (Major only).
- 552 Maintenance of structures (Major only).

- 553 Maintenance of generating and electric plant (Major only).
- 553.1 Maintenance of Energy Storage Equipment
- 554 Maintenance of miscellaneous other power generation plant (Major only).
- 554.1 Maintenance of other power production plant (Nonmajor only).

e. other power supply expenses

- 555 Purchased power.
- 555.1 Power Purchased for Storage Operations
- 556 System control and load dispatching (Major only).
- 557 Other expenses.

2. Transmission Expenses

Operation

- 560 Operation supervision and engineering.
- 561.1 Load dispatch—Reliability.
- 561.2 Load dispatch—Monitor and operate transmission system.
- 561.3 Load dispatch—Transmission service and scheduling.
- 561.4 Scheduling, system control and dispatch services.
- 561.5 Reliability planning and standards development.
- 561.6 Transmission service studies.
- 561.7 Generation interconnection studies.
- 561.8 Reliability planning and standards development services.
- 562 Station expenses (Major only).
- 562.1 Operation of Energy Storage Equipment
- 563 Overhead line expense (Major only).
- 564 Underground line expenses (Major only).
- 565 Transmission of electricity by others (Major only).
- 566 Miscellaneous transmission expenses (Major only).
- 567 Rents.
- 567.1 Operation supplies and expenses (Nonmajor only).

Maintenance

- 568 Maintenance supervision and engineering (Major only).
- 569 Maintenance of structures (Major only).
- 569.1 Maintenance of computer hardware.
- 569.2 Maintenance of computer software.
- 569.3 Maintenance of communication equipment.
- 569.4 Maintenance of miscellaneous regional transmission plant.
- 570 Maintenance of station equipment (Major only).
- 570.1 Maintenance of Energy Storage Equipment
- 571 Maintenance of overhead lines (Major only).
- 572 Maintenance of underground lines (Major only).
- 573 Maintenance of miscellaneous transmission plant (Major only).
- 574 Maintenance of transmission plant (Nonmajor only).

3. Regional Market Expenses

Operation

- 575.1 Operation Supervision.
- 575.2 Day-ahead and real-time market administration.
- 575.3 Transmission rights market administration.
- 575.4 Capacity market administration.
- 575.5 Ancillary services market administration.
- 575.6 Market monitoring and compliance.

- 575.7 Market facilitation, monitoring and compliance services.
- 575.8 Rents.

Maintenance

- 576.1 Maintenance of structures and improvements.
- 576.2 Maintenance of computer hardware.
- 576.3 Maintenance of computer software.
- 576.4 Maintenance of communication equipment.
- 576.5 Maintenance of miscellaneous market operation plant.

4. Distribution Expenses

Operation

- 580 Operation supervision and engineering.
- 581 Load dispatching (Major only).
- 581.1 Line and station expenses (Nonmajor only).
- 582 Station expenses (Major only).
- 583 Overhead line expenses (Major only).
- 584 Underground line expenses (Major only).
- 584.1 Operation of Energy Storage Equipment
- 585 Street lighting and signal system expenses.
- 586 Meter expenses.
- 587 Customer installations expenses.
- 588 Miscellaneous distribution expenses.
- 589 Rents.

Maintenance

- 590 Maintenance supervision and engineering (Major only).
- 591 Maintenance of structures (Major only).
- 592 Maintenance of station equipment (Major only).
- 592.1 Maintenance of structures and equipment (Nonmajor only).
- 592.2 Maintenance of Energy Storage Equipment
- 593 Maintenance of overhead lines (Major only).
- 594 Maintenance of underground lines (Major only).
- 594.1 Maintenance of lines (Nonmajor only).
- 595 Maintenance of line transformers.
- 596 Maintenance of street lighting and signal systems.
- 597 Maintenance of meters.
- 598 Maintenance of miscellaneous distribution plant.

5. Customer Accounts Expenses

Operation

- 901 Supervision (Major only).
- 902 Meter reading expenses.
- 903 Customer records and collection expenses.
- 904 Uncollectible accounts.
- 905 Miscellaneous customer accounts expenses (Major only).

6. Customer Service and Informational Expenses

Operation

- 906 Customer service and informational expenses (Nonmajor only).
- 907 Supervision (Major only).

- 908 Customer assistance expenses (Major only).
- 909 Informational and instructional advertising expenses (Major only).
- 910 Miscellaneous customer service and informational expenses (Major only).

7. Sales Expenses

Operation

- 911 Supervision (Major only).
- 912 Demonstrating and selling expenses (Major only).
- 913 Advertising expenses (Major only).
- 916 Miscellaneous sales expenses (Major only).
- 917 Sales expenses (Nonmajor only).

8. Administrative and General Expenses

Operation

- 920 Administrative and general salaries.
- 921 Office supplies and expenses.
- 922 Administrative expenses transferred—Credit.
- 923 Outside services employed.
- 924 Property insurance.
- 925 Injuries and damages.
- 926 Employee pensions and benefits.
- 927 Franchise requirements.
- 928 Regulatory commission expenses.
- 929 Duplicate charges—Credit.
- 930.1 General advertising expenses.
- 930.2 Miscellaneous general expenses.
- 931 Rents.
- 933 Transportation expenses (Nonmajor only).

Maintenance

- 935 Maintenance of general plant.

Operation and Maintenance Expense Accounts

500 Operation supervision and engineering.

A. For Major Utilities, this account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of steam power generating stations. Direct supervision of specific activities, such as fuel handling, boiler room operations, generator operations, etc., shall be charged to the appropriate account. (See operating expense instruction 1.)

B. For Nonmajor Utilities, this account shall include the cost of supervision and labor in the operation of steam power generating stations.

Items (Nonmajor only)

BOILER ROOM LABOR:

1. Supervising steam production.
2. Operating fuel conveying, storage, weighing and processing equipment within boiler plant.
3. Operating boiler and boiler auxiliary equipment.
4. Operating boiler feed water purification and treatment equipment.
5. Operating ash collection and disposal equipment located inside the plant.
6. Operating boiler plant electrical equipment.
7. Keeping boiler plant log and records and preparing reports on boiler plant operations.

8. Testing boiler water.
9. Testing, checking, and adjusting meters, gauges and other instruments in boiler plant.
10. Cleaning boiler plant equipment when not incidental to maintenance work.
11. Repacking glands and replacing gauge classes where the work involved is of a minor nature and is performed by regular operating crews. Where the work is of a major character such as that performed on high pressure boilers the item should be considered as maintenance.

ELECTRIC PLANT LABOR:

12. Supervising electric production.
13. Operating turbines, engines, generators and exciters.
14. Operating condensers, circulating water systems and other auxiliary apparatus.
15. Operating generator cooling system.
16. Operating lubrication and oil control system, including oil purification.
17. Operating switchboards, switch gear and electric control and protective equipment.
18. Keeping electric plant log and records and preparing reports on electric plant operations.
19. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in electric plant.
20. Cleaning electric plant equipment when not incidental to maintenance work.
21. Repacking glands and replacing gauge glasses.

MISCELLANEOUS LABOR:

22. General clerical and stenographic work at plant.
23. Guarding and patrolling plant and yard.
24. Building service.
25. Care of grounds including snow removal, cutting grass, etc.
26. Miscellaneous labor.

501 Fuel.

A. This account shall include the cost of fuel used in the production of steam for the generation of electricity, including expenses in unloading fuel from the shipping media and handling thereof up to the point where the fuel enters the first boiler plant bunker, hopper, bucket, tank or holder of the boiler-house structure. Records shall be maintained to show the quantity, B.t.u. content and cost of each type of fuel used.

B. The cost of fuel shall be charged initially to account 151, Fuel Stock (for Nonmajor utilities, appropriate fuel accounts carried under account 154, Plant Materials and Operating Supplies) and cleared to this account on the basis of the fuel used. Fuel handling expenses may be charged to this account as incurred or charged initially to account 152, Fuel Stock Expenses Undistributed (for Nonmajor utilities, an appropriate subaccount of account 154, Plant Materials and Operating Supplies). In the latter event, they shall be cleared to this account on the basis of the fuel used. Respective amounts of fuel stock and fuel stock expenses shall be readily available.

Items

Labor:

1. Supervising purchasing and handling of fuel.
2. All routine fuel analyses.
3. Unloading from shipping facility and putting in storage.
4. Moving of fuel in storage and transferring fuel from one station to another.
5. Handling from storage or shipping facility to first bunker, hopper, bucket, tank or holder of boiler-house structure.
6. Operation of mechanical equipment, such as locomotives, trucks, cars, boats, barges, cranes, etc.

Materials and Expenses:

7. Operating, maintenance and depreciation expenses and ad valorem taxes on utility-owned transportation equipment used to transport fuel from the point of acquisition to the unloading point (Major only).
8. Lease or rental costs of transportation equipment used to transport fuel from the point of acquisition to the unloading point (Major only).
9. Cost of fuel including freight, switching, demurrage and other transportation charges.

10. Excise taxes, insurance, purchasing commissions and similar items.
11. Stores expenses to extent applicable to fuel.
12. Transportation and other expenses in moving fuel in storage.
13. Tools, lubricants and other supplies.
14. Operating supplies for mechanical equipment.
15. Residual disposal expenses less any proceeds from sale of residuals.

Note: Abnormal fuel handling expenses occasioned by emergency conditions shall be charged to expense as incurred.

502 Steam expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in production of steam for electric generation. This includes all expenses of handling and preparing fuel beginning at the point where the fuel enters the first boiler plant bunker, hopper, tank or holder of the boiler-house structure.

Items

Labor:

1. Supervising steam production.
2. Operating fuel conveying, storage weighing and processing equipment within boiler plant.
3. Operating boiler and boiler auxiliary equipment.
4. Operating boiler feed water purification and treatment equipment.
5. Operating ash-collecting and disposal equipment located inside the plant.
6. Operating boiler plant electrical equipment.
7. Keeping boiler plant log and records and preparing reports on boiler plant operation.
8. Testing boiler water.
9. Testing, checking, and adjusting meters, gauges, and other instruments and equipment in boiler plant.
10. Cleaning boiler plant equipment when not incidental to maintenance work.
11. Repacking glands and replacing gauge glasses where the work involved is of a minor nature and is performed by regular operating crews. Where the work is of a major character, such as that performed on high-pressure boilers, the item should be considered as maintenance.

Materials and Expenses:

12. Chemicals and boiler inspection fees.
13. Lubricants.
14. Boiler feed water purchased and pumping supplies.

503 Steam from other sources.

This account shall include the cost of steam purchased, or transferred from another department of the utility or from others under a joint facility operating arrangement, for use in prime movers devoted to the production of electricity.

Note: The records shall be so kept as to show separately for each company from which steam is purchased, the point of delivery, the quantity, the price, and the total charge. When steam is transferred from another department or from others under a joint operating arrangement, the utility shall be prepared to show full details of the cost of producing such steam, the basis of the charge to electric generation and the extent and manner of use by each department or party involved.

504 Steam transferred—Credit.

A. This account shall include credits for expenses of producing steam which are charged to others or to other utility departments under a joint operating arrangement. Include also credits for steam expenses chargeable to other electric accounts outside of the steam generation group. Full details of the basis of determination of the cost of steam transferred shall be maintained.

B. If the charges to others or to other departments of the utility include an amount for depreciation, taxes and return on the joint steam facilities, such portion of the charge shall be credited, in the case of others, to account 454, Rent from Electric Property, and in the case of other departments of the utility, to account 455, Interdepartmental Rents.

505 Electric expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in operating prime movers, generators, and their auxiliary apparatus, switch gear and other electric equipment to the points where electricity leaves for conversion for transmission or distribution.

Items

Labor:

1. Supervising electric production.
2. Operating turbines, engines, generators and exciters.
3. Operating condensers, circulating water systems and other auxiliary apparatus.
4. Operating generator cooling system.
5. Operating lubrication and oil control system, including oil purification.
6. Operating switchboards, switch gear and electric control and protective equipment.
7. Keeping electric plant log and records and preparing reports on electric plant operations.
8. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.
9. Cleaning electric plant equipment when not incidental to maintenance work.
10. Repacking glands and replacing gauge glasses.

Materials and Expenses:

11. Lubricants and control system oils.
12. Generator cooling gases.
13. Circulating water purification supplies.
14. Cooling water purchased.
15. Motor and generator brushes.

506 Miscellaneous steam power expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred which are not specifically provided for or are not readily assignable to other steam generation operation expense accounts.

Items

Labor:

1. General clerical and stenographic work.
2. Guarding and patrolling plant and yard.
3. Building service.
4. Care of grounds including snow removal, cutting grass, etc.
5. Miscellaneous labor.

Materials and Expenses:

6. General operating supplies, such as tools, gaskets, packing waste, gauge glasses, hose, indicating lamps, record and report forms, etc.
7. First-aid supplies and safety equipment.
8. Employees' service facilities expenses.
9. Building service supplies.
10. Communication service.
11. Miscellaneous office supplies and expenses, printing and stationery.
12. Transportation expenses.
13. Meals, traveling and incidental expenses.
14. Research, development, and demonstration expenses.

507 Rents.

This account shall include all rents of property of others used, occupied or operated in connection with steam power generation. (See operating expense instruction 3.)

508 Operation supplies and expenses (Nonmajor only).

This account shall include the cost of materials used and expenses incurred in the operation of steam power generating stations.

Items

1. Chemicals and boiler inspection fees.
2. Lubricants and control system oils.
3. Boiler feed water purchased and pumping supplies.
4. Generator cooling gases.
5. Circulating water purification supplies.
6. Cooling water purchased.
7. Motor and generator brushes.
8. General operating supplies, such as tools, gaskets, packing waste, gauge glasses, hose, indicating lamps, record and report forms, etc.
9. First-aid supplies and safety equipment.
10. Employees' service facilities expenses.
11. Building service supplies.
12. Communication service.
13. Miscellaneous office supplies and expenses, printing and stationery.
14. Transportation expenses.
15. Meals, traveling and incidental expenses.

509 Allowances.

This account shall include the cost of allowances expensed concurrent with the monthly emission of sulfur dioxide. (See General Instruction No. 21.)

510 Maintenance supervision and engineering (Major only).

This account shall include the cost of labor and expenses incurred in the general supervision and direction of maintenance of steam generation facilities. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account. (See operating expense instruction 1.)

511 Maintenance of structures (Major only).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of steam structures, the book cost of which is includible in account 311, Structures and Improvements. (See operating expense instruction 2.)

512 Maintenance of boiler plant (Major only).

A. This account shall include the cost of labor, materials used and expenses incurred in the maintenance of steam plant, the book cost of which is includible in account 312, Boiler Plant Equipment. (See operating expense instruction 2.)

B. For the purpose of making charges hereto and to account 513, Maintenance of Electric Plant, the point at which steam plant is distinguished from electric plant is defined as follows:

1. Inlet flange of throttle valve on prime mover.
2. Flange of all steam extraction lines on prime mover.
3. Hotwell pump outlet on condensate lines.

4. Inlet flange of all turbine-room auxiliaries.
5. Connection to line side of motor starter for all boiler-plant equipment.

513 Maintenance of electric plant (Major only).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of electric plant, the book cost of which is includible in account 313, Engines and Engine-Driven Generators, account 314, Turbogenerator Units, and account 315, Accessory Electric Equipment. (See operating expense instruction 2 and paragraph B of account 512.)

514 Maintenance of miscellaneous steam plant (Major only).

This account shall include the cost of labor, materials used and expenses incurred in maintenance of miscellaneous steam generation plant, the book cost of which is includible in account 316, Miscellaneous Power Plant Equipment. (See operating expense instruction 2.)

515 Maintenance of steam production plant (Nonmajor only).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of steam production plant the book cost of which is includible in plant accounts 311 to 316, inclusive. (See operating expense instruction 2.)

517 Operation supervision and engineering (Major only).

This account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of nuclear power generating stations. Direct supervision of specific activities, such as fuel handling, reactor operations, generator operations, etc., shall be charged to the appropriate account. (See operating expense instruction 1.)

518 Nuclear fuel expense (Major only).

A. This account shall be debited and account 120.5, Accumulated Provision for Amortization of Nuclear Fuel Assemblies, credited for the amortization of the net cost of nuclear fuel assemblies used in the production of energy. The net cost of nuclear fuel assemblies subject to amortization shall be the cost of nuclear fuel assemblies plus or less the expected net salvage of uranium, plutonium, and other byproducts and unburned fuel. The utility shall adopt the necessary procedures to assure that charges to this account are distributed according to the thermal energy produced in such periods.

B. This account shall also include the costs involved when fuel is leased.

C. This account shall also include the cost of other fuels, used for ancillary steam facilities, including superheat.

D. This account shall be debited or credited as appropriate for significant changes in the amounts estimated as the net salvage value of uranium, plutonium, and other byproducts contained in account 157, Nuclear Materials Held for Sale and the amount realized upon the final disposition of the materials. Significant declines in the estimated realizable value of items carried in account 157 may be recognized at the time of market price declines by charging this account and crediting account 157. When the declining change occurs while the fuel is recorded in account 120.3, Nuclear Fuel Assemblies in Reactor, the effect shall be amortized over the remaining life of the fuel.

519 Coolants and water (Major only).

This account shall include the cost of labor, materials used and expenses incurred for heat transfer materials and water used for steam and cooling purposes.

Items

Labor:

1. Operation of water supply facilities.
2. Handling of coolants and heat transfer materials.

Materials and Expenses:

3. Chemicals.
4. Additions to or refining of, fluids used in reactor systems.
5. Lubricants.
6. Pumping supplies and expenses.
7. Miscellaneous supplies and expenses.
8. Purchased water.

Note: Do not include in this account water for general station use or the initial charge for coolants, heat transfer or moderator fluids, chemicals or other supplies capitalized.

520 Steam expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in production of steam through nuclear processes, and similar expenses for operation of any auxiliary superheat facilities.

Items

Labor:

1. Supervising steam production.
2. Fuel handling including removal, insertion, disassembly and preparation for cooling operations and shipment.
3. Testing instruments and gauges.
4. Health, safety, monitoring and decontamination activities.
5. Waste disposal.
6. Operating steam boilers and auxiliary steam, superheat facilities.

Materials and Expenses:

7. Chemical supplies.
8. Charts, logs, etc.
9. Health, safety, monitoring and decontamination supplies.
10. Boiler inspection fees.
11. Lubricants.

521 Steam from other sources (Major only).

This account shall include the cost of steam purchased or transferred from another department of the utility or from others under a joint facility operating arrangement for use in prime movers devoted to the production of electricity.

Note: The records shall be so kept as to show separately for each company from which steam is purchased, the point of delivery, the quantity, the price, and the total charge. When steam is transferred from another operating department, the utility shall be prepared to show full details of the cost of producing such steam, the basis of the charges to electric generation, and the extent and manner of use by each department involved.

522 Steam transferred—Credit (Major only).

A. This account shall include credits for expenses of producing steam which are charged to others or to other utility departments under a joint operating arrangement. Include also credits for steam expenses chargeable to other electric accounts outside of the steam generation group. Full details of the basis of determination of the cost of steam transferred shall be maintained.

B. If the charges to others or to other departments of the utility include an amount for depreciation, taxes and return on the joint steam facilities, such portion of the charge shall be credited, in the case of others, to account 454, Rent from Electric Property, and in the case of other departments of the utility, to account 455, Interdepartmental Rents.

523 Electric expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in operating turbogenerators, steam turbines and their auxiliary apparatus, switch gear and other electric equipment to the points where electricity leaves for conversion for transmission or distribution.

Items

Labor:

1. Supervising electric production.
2. Operating turbines, engines, generators and exciters.
3. Operating condensers, circulating water systems and other auxiliary apparatus.
4. Operating generator cooling system.
5. Operating lubrication and oil control system, including oil purification.
6. Operating switchboards, switch gear and electric control and protective equipment.
7. Keeping plant log and records and preparing reports on electric plant operations.
8. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.
9. Cleaning electric plant equipment when not incidental to maintenance.
10. Repacking glands and replacing gauge glasses.

Materials and Expenses:

11. Lubricants and control system oils.
12. Generator cooling gases.
13. Log sheets and charts.
14. Motor and generator brushes.

524 Miscellaneous nuclear power expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred which are not specifically provided for or are not readily assignable to other nuclear generation operation accounts.

Items

Labor:

1. General clerical and stenographic work.
2. Plant security.
3. Building service.
4. Care of grounds, including snow removal, cutting grass, etc.
5. Miscellaneous labor.

Materials and Expenses:

6. General operating supplies, such as tools, gaskets, hose, indicating lamps, record and report forms, etc.
7. First-aid supplies and safety equipment.
8. Employees' service facilities expenses.
9. Building service supplies.
10. Communication service.
11. Miscellaneous office supplies and expenses, printing and stationery.
12. Transportation expenses.
13. Meals, traveling and incidental expenses.
14. Research, development, and demonstration expenses.

525 Rents (Major only).

This account shall include all rents of property of others used, occupied or operated in connection with nuclear generation. (See operating expense instruction 3.)

528 Maintenance supervision and engineering (Major only).

This account shall include the cost of labor and expenses incurred in the general supervision and direction of maintenance of nuclear generation facilities. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account. (See operating expense instruction 1.)

529 Maintenance of structures (Major only).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of structures, the book cost of which is includible in account 321, Structures and Improvements. (See operating expense instruction 2.)

530 Maintenance of reactor plant equipment (Major only).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of reactor plant, the book cost of which is includible in account 322, Reactor Plant Equipment. (See operating expense instruction 2.)

531 Maintenance of electric plant (Major only).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of electric plant, the book cost of which is includible in account 323, Turbogenerator Units, and account 324, Accessory Electric Equipment. (See operating expense instruction 2.)

532 Maintenance of miscellaneous nuclear plant (Major only).

This account shall include the cost of labor, materials used and expenses incurred in maintenance of miscellaneous nuclear generating plant, the book cost of which is includible in account 325, Miscellaneous Power Plant Equipment. (See operating expense instruction 2.)

535 Operation supervision and engineering.

A. For Major utilities, this account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of hydraulic power generating stations. Direct supervision of specific activities, such as hydraulic operation, generator operation, etc., shall be charged to the appropriate account (See operating expense instruction 1).

B. For Nonmajor utilities, this account shall include the cost of supervision and labor in the operation of hydraulic power generating stations.

Items (Nonmajor Only)

Hydraulic Labor:

1. Supervising hydraulic operation.
2. Removing debris and ice from trash racks, reservoirs and waterways.
3. Patrolling reservoirs and waterways.
4. Operating intakes, spillways, sluiceways and outlet works.
5. Operating bubbler, heater or other deicing systems.
6. Ice and log jam work.
7. Operating navigation facilities.
8. Operations relating to conservation of game, fish, forests, etc.
9. Insect control activities.

Electric Labor:

10. Supervising electric production.
11. Operating prime movers, generators and auxiliary equipment.
12. Operating generator cooling system.
13. Operating lubrication and oil control systems, including oil purification.
14. Operating switchboards, switchgear and electric control and protection equipment.
15. Keeping plant log and records and preparing reports on plant operations.
16. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the plant.

17. Cleaning plant equipment when not incidental to maintenance work.
 18. Repacking glands.
- Miscellaneous Labor:
19. General clerical and stenographic work.
 20. Guarding and patrolling plant and yard.
 21. Building service.
 22. Care of grounds, including snow removal, cutting grass, etc.
 23. Snow removal from roads and bridges.
 24. Miscellaneous labor.

536 Water for power.

This account shall include the cost of water used for hydraulic power generation.

Items

1. Cost of water purchased from others, including water tolls paid reservoir companies.
2. Periodic payments for licenses or permits from any governmental agency for water rights, or payments based on the use of the water.
3. Periodic payments for riparian rights.
4. Periodic payments for headwater benefits or for detriments to others.
5. Cloud seeding.

537 Hydraulic expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in operating hydraulic works including reservoirs, dams, and waterways, and in activities directly relating to the hydroelectric development outside the generating station. It shall also include the cost of labor, materials used and other expenses incurred in connection with the operation of (a) fish and wildlife, and (b) recreation facilities. Separate subaccounts shall be maintained for each of the above.

Items

Labor:

1. Supervising hydraulic operation.
2. Removing debris and ice from trash racks, reservoirs and waterways.
3. Patrolling reservoirs and waterways.
4. Operating intakes, spillways, sluiceways, and outlet works.
5. Operating bubbler, heater or other deicing systems.
6. Ice and log jam work.
7. Operating navigation facilities.
8. Operations relating to conservation of game, fish, forests, etc.
9. Insect control activities.

Materials and Expenses:

10. Insect control materials.
11. Lubricants, packing, and other supplies used in operation of hydraulic equipment.
12. Transportation expense.

538 Electric expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in operating prime movers, generators, and their auxiliary apparatus, switchgear, and other electric equipment, to the point where electricity leaves for conversion for transmission or distribution.

Items

Labor:

1. Supervising electric production.
2. Operating prime movers, generators and auxiliary equipment.

3. Operating generator cooling system.
 4. Operating lubrication and oil control systems, including oil purification.
 5. Operating switchboards, switchgear, and electric control and protection equipment.
 6. Keeping plant log and records and preparing reports on plant operations.
 7. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls, and other equipment in the plant.
 8. Cleaning plant equipment when not incidental to maintenance work.
 9. Repacking glands.
- Materials and Expenses:
10. Lubricants and control system oils.
 11. Motor and generator brushes.

539 Miscellaneous hydraulic power generation expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred which are not specifically provided for or are not readily assignable to other hydraulic generation operation expense accounts.

Items

Labor:

1. General clerical and stenographic work.
2. Guarding and patrolling plant and yard.
3. Building service.
4. Care of grounds including snow removal, cutting grass, etc.
5. Snow removal from roads and bridges.
6. Miscellaneous labor.

Materials and Expenses:

7. General operating supplies, such as tools, gaskets, packing, waste, hose, indicating lamps, record and report forms, etc.
8. First-aid supplies and safety equipment.
9. Employees' service facilities expenses.
10. Building service supplies.
11. Communication service.
12. Office supplies, printing and stationery.
13. Transportation expenses.
14. Fuel.
15. Meals, traveling and incidental expenses.
16. Research, development, and demonstration expenses.

540 Rents.

This account shall include all rents of property of others used, occupied or operated in connection with hydraulic power generation, including amounts payable to the United States for the occupancy of public lands and reservations for reservoirs, dams, flumes, forebays, penstocks, power houses, etc., but not including transmission right of way. (See operating expense instruction 3.)

540.1 Operation supplies and expenses (Nonmajor only).

This account shall include the cost of materials used and expenses incurred in the operation of hydraulic power generating stations.

Items

1. Insect control materials.
2. Lubricants, packing, and other supplies used in operation of hydraulic equipment.
3. Supplies and expenses in conservation of game, fish, forests, etc.
4. Transportation expense.
5. Control system oils.
6. Motor and generator brushes.
7. General operating supplies, such as tools, gaskets, packing, waste hose, indicating lamps, record and report forms, etc.

8. First-aid supplies and safety equipment.
9. Employees' service facilities expenses.
10. Building service supplies.
11. Communication service.
12. Office supplies, printing and stationery.
13. Transportation expenses.
14. Fuel.
15. Meals, traveling and incidental expenses.

541 Maintenance supervision and engineering (Major only).

This account shall include the cost of labor and expenses incurred in the general supervision and direction of the maintenance of hydraulic power generating stations. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account. (See operating expense instruction 1.)

542 Maintenance of structures (Major only).

This account shall include the cost of labor, materials used, and expenses incurred in maintenance of hydraulic structures, the book cost of which is includible in Account 331, Structures and Improvements. (See operating expense instruction 2) However, the cost of labor, materials used and expenses incurred in the maintenance of fish and wildlife, and recreation facilities, the book cost of which is includible in Account 331, Structures and Improvements, shall be charged to Account 545, Maintenance of Miscellaneous Hydraulic Plant.

543 Maintenance of reservoirs, dams, and waterways (Major only).

This account shall include the cost of labor, materials used, and expenses incurred in maintenance of plant includible in Account 332, Reservoirs, Dams, and Waterways. (See operating expense instruction 2) However, the cost of labor materials used and expenses incurred in the maintenance of fish and wildlife, and recreation facilities, the book cost of which is includible in Account 332, Reservoirs, Dams and Waterways, shall be charged to Account 545, Maintenance of Miscellaneous Hydraulic Plant.

544 Maintenance of electric plant (Major only).

This account shall include the cost of labor, materials used and expenses incurred in maintenance of plant includible in Account 333, Water Wheels, Turbines and Generators, and account 334, Accessory Electric Equipment. (See operating expense instruction 2.)

545 Maintenance of miscellaneous hydraulic plant (Major only).

This account shall include the cost of labor, materials used, and expenses incurred in maintenance of plant, the book cost of which is includible in Account 335, Miscellaneous Power Plant Equipment, and Account 336, Roads, Railroads and Bridges. (See operating expense instruction 2.) It shall also include the cost of labor, materials used and other expenses incurred in the maintenance of (a) fish and wildlife, and (b) recreation facilities. Separate subaccounts shall be maintained for each of the above.

545.1 Maintenance of hydraulic production plant (Nonmajor only).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of hydraulic production plant the book cost of which is includible in plant accounts 331 to 336, inclusive. (See operating expense instruction 2.)

546 Operation supervision and engineering.

A. For Major utilities, this account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of other power generating stations. Direct supervision of specific activities, such as fuel handling, engine and generator operation, etc., shall be charged to the appropriate account. (See operating expense instruction 1.)

B. For Nonmajor utilities, this account shall include the cost of supervision and labor in the operation of other power generating stations.

GENERATING LABOR:

1. Supervising other power generation operation.
2. Operating prime movers, generators and auxiliary apparatus and switching and other electric equipment.
3. Keeping plant log and records and preparing reports on plant operations.
4. Testing, checking, cleaning, oiling and adjusting equipment.

MISCELLANEOUS LABOR:

5. General clerical and stenographic work.
6. Guarding and patrolling plant and yard.
7. Building service.
8. Care of grounds, including snow removal, cutting grass, etc.
9. Miscellaneous labor.

547 Fuel.

This account shall include the cost delivered at the station (see account 151, Fuel Stock, for Major utilities, and account 154, Plant Materials and Operating Supplies, for Nonmajor utilities) of all fuel, such as gas, oil, kerosene, and gasoline used in other power generation.

548 Generation expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in operating prime movers, generators and electric equipment in other power generating stations, to the point where electricity leaves for conversion for transmission or distribution.

Items

Labor:

1. Supervising other power generation operation.
2. Operating prime movers, generators and auxiliary apparatus and switching and other electric equipment.
3. Keeping plant log and records and preparing reports on plant operations.
4. Testing, checking, cleaning, oiling and adjusting equipment.

Materials and Expenses:

5. Dynamo, motor, and generator brushes.
6. Lubricants and control system oils.
7. Water for cooling engines and generators.

548.1 Operation of Energy Storage Equipment

This account shall include the cost of labor, materials used and expenses incurred in the operation of energy storage equipment includible in Account 348, Energy Storage Equipment—Production, which are not specifically provided for or are readily assignable to other production operation expense accounts.

549 Miscellaneous other power generation expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in the operation of other power generating stations which are not specifically provided for or are not readily assignable to other generation expense accounts.

Items

Labor:

1. General clerical and stenographic work.
2. Guarding and patrolling plant and yard.
3. Building service.
4. Care of grounds, including snow removal, cutting grass, etc.
5. Miscellaneous labor.

Materials and Expenses:

6. Building service supplies.
7. First-aid supplies and safety equipment.
8. Communication service.
9. Employees' service facilities expenses.
10. Office supplies, printing and stationery.
11. Transportation expense.
12. Meals, traveling and incidental expenses.
13. Fuel for heating.
14. Water for fire protection or general use.
15. Miscellaneous supplies, such as hand tools, drills, saw blades, files, etc.
16. Research, development, and demonstration expenses.

550 Rents.

This account shall include all rents of property of others used, occupied, or operated in connection with other power generation. (See operating expense instruction 3.)

550.1 Operation supplies and expenses (Nonmajor only).

This account shall include the cost of materials used and expenses incurred in the operation of other power generating stations.

Items

1. Dynamo, motor, and generator brushes.
2. Lubricants and control system oils.
3. Water for cooling engines and generators.
4. Building service supplies.
5. First-aid supplies and safety equipment.
6. Communication service.
7. Employees' service facilities expenses.
8. Office supplies, printing and stationery.
9. Transportation expense.
10. Meals, traveling and incidental expenses.
11. Fuel for heating.
12. Water for fire protection or general use.
13. Miscellaneous supplies, such as hand tools, drills, saw blades, files, etc.

551 Maintenance supervision and engineering (Major only).

This account shall include the cost of labor and expenses incurred in the general supervision and direction of the maintenance of other power generating stations. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account. (See operating expense instruction 1.)

552 Maintenance of structures (Major only).

This account shall include the cost of labor, materials used and expenses incurred in maintenance of facilities used in other power generation, the book cost of which is includible in account 341, Structures and Improvements, and account 342, Fuel Holders, Producers and Accessories. (See operating expense instruction 2.)

553 Maintenance of generating and electric equipment (Major only).

This account shall include the cost of labor, materials used and expenses incurred in maintenance of plant, the book cost of which is includible in account 343, Prime Movers, account 344, Generators, and account 345, Accessory Electric Equipment. (See operating expense instruction 2.)

553.1 Maintenance of Energy Storage Equipment

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of energy storage equipment includible in Account 348, Energy Storage Equipment—Production, which are not specifically provided for or are readily assignable to other production maintenance expense accounts.

554 Maintenance of miscellaneous other power generation plant (Major only).

This account shall include the cost of labor, materials used and expenses incurred in maintenance of other power generation plant, the book cost of which is includible in account 346, Miscellaneous Power Plant Equipment. (See operating expense instruction 2.)

554.1 Maintenance of other power production plant (Nonmajor only).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of other power generation plant, the book cost of which is includible in plant accounts 341 to 346, inclusive. (See operating expense instruction 2.)

555 Purchased power.

A. This account shall include the cost at point of receipt by the utility of electricity purchased for resale. It shall include, also, net settlements for exchange of electricity or power, such as economy energy, off-peak energy for on-peak energy, spinning reserve capacity, etc. In addition, the account shall include the net settlements for transactions under pooling or interconnection agreements wherein there is a balancing of debits and credits for energy, capacity, etc. Distinct purchases and sales shall not be recorded as exchanges and net amounts only recorded merely because debit and credit amounts are combined in the voucher settlement.

B. The records supporting this account shall show, by months, the demands and demand charges, kilowatt-hours and prices thereof under each purchase contract and the charges and credits under each exchange or power pooling contract.

555.1 Power Purchased for Storage Operations

A. This account shall include the cost at point of receipt by the utility of electricity purchased for use in storage operations, including power purchased and consumed or lost in energy storage operations during the provision of services, including but not limited to energy purchased and stored for resale. It shall also include but not be limited to net settlements for exchange of electricity or power, such as economy energy, off-peak energy for on-peak energy, and spinning reserve capacity. In addition, the account shall include the net settlements for transactions under pooling or interconnection agreements wherein there is a balancing of debits and credits for energy, capacity, and possibly other factors. Distinct purchases and sales shall not be recorded as exchanges and net amounts only recorded merely because debit and credit amounts are combined in the voucher settlement.

B. The records supporting this account shall show, by months, the kilowatt hours and prices thereof under each purchase contract and the charges and credits under each exchange or power pooling contract.

556 System control and load dispatching (Major only).

This account shall include the cost of labor and expenses incurred in load dispatching activities for system control. Utilities having an interconnected electric system or operating under a central authority which controls the production and dispatching of electricity may apportion these costs to this account and transmission expense Accounts 561.1 through 561.4, and Account 581, Load Dispatching-Distribution.

Items

Labor:

1. Allocating loads to plants and interconnections with others.
2. Directing switching.
3. Arranging and controlling clearances for construction, maintenance, test and emergency purposes.
4. Controlling system voltages.
5. Recording loadings, water conditions, etc.
6. Preparing operating reports and data for billing and budget purposes.

7. Obtaining reports on the weather and special events.

Expenses:

8. Communication service provided for system control purposes.

9. System record and report forms.

10. Meals, traveling and incidental expenses.

11. Obtaining weather and special events reports.

557 Other expenses.

A. This account shall be charged with any production expenses including expenses incurred directly in connection with the purchase of electricity, which are not specifically provided for in other production expense accounts. Charges to this account shall be supported so that a description of each type of charge will be readily available.

B. Recoveries from insurance companies, under use and occupancy provisions of policies, of amounts in reimbursement of excessive or added production costs for which the insurance company is liable under the terms of the policy shall be credited to this account.

560 Operation supervision and engineering.

A. For Major utilities, this account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of the transmission system as a whole. Direct supervision of specific activities, such as station operation, line operation, etc., shall be charged to the appropriate account. (See operating expense instruction 1.)

B. For Nonmajor utilities, this account shall include the cost of supervision and labor in the operation of the transmission system.

Items (Nonmajor Only)

LOAD DISPATCHING LABOR:

1. Direct switching.

2. Arranging and controlling clearances for construction, maintenance, test and emergency purposes.

3. Controlling system voltages.

4. Obtaining reports on the weather and special events.

5. Preparing operating reports and data for billing and budget purposes.

Station Labor:

6. Supervising station operation.

7. Adjusting station equipment where such adjustment primarily affects performance, such as regulating the flow of cooling water, adjusting current in fields of a machine or changing voltage of regulators changing station transformer taps.

8. Inspecting, testing and calibrating station equipment for the purpose of checking its performance.

9. Keeping station log and records and preparing reports on station operation.

10. Operating switching and other station equipment.

11. Standing watch, guarding and patrolling station and station yard.

12. Sweeping, mopping and tidying station.

13. Care of grounds, including snow removal, cutting grass, etc.

LINE LABOR:

14. Supervising line operation.

15. Inspecting and testing lightning arresters, circuit breakers, switches and grounds.

16. Load tests of circuits.

17. Routine line patrolling.

18. Routine voltage surveys made to determine the condition of efficiency of transmission system.

19. Transferring loads, switching and reconnecting circuits and equipment for operating purposes. (Switching for construction or maintenance purposes is not includible in this account.)

20. Routine inspection and cleaning of manholes, conduit, network and transformer vaults.

21. Electrolysis surveys.

22. Inspecting and adjusting line testing equipment such as voltmeters, ammeters, wattmeters, etc.

23. Regulation and addition of oil or gas in high voltage cable systems.

MISCELLANEOUS LABOR:

24. General records of physical characteristics of lines and stations, such as capacities, etc.
25. Ground resistance records.
26. Janitorial work at transmission office buildings, including care of grounds, snow removal, cutting grass, etc.
27. Joint pole maps and prints.
28. Line load and voltage records.
29. Preparing maps and prints.
30. General clerical and stenographic work.
31. Miscellaneous labor.

561.1 Load Dispatch—Reliability.

This account shall include the cost of labor, materials used and expenses incurred by a regional transmission service provider or other transmission provider to manage the reliability coordination function as specified by the North American Electric Reliability Council (NERC) and individual reliability organizations. These activities shall include performing current and next day reliability analysis. This account shall include the costs incurred to calculate load forecasts, and performing contingency analysis.

561.2 Load Dispatch—Monitor and Operate Transmission System.

This account shall include the costs of labor, materials used and expenses incurred by a regional transmission service provider or other transmission provider to monitor, assess and operate the power system and individual transmission facilities in real-time to maintain safe and reliable operation of the transmission system. This account shall also include the expense incurred to manage transmission facilities to maintain system reliability and to monitor the real-time flows and direct actions according to regional plans and tariffs as necessary.

Items

1. Receive and analyze outage requests
2. Reschedule outage plans
3. Monitor solution quality field data values, providing model updates to NERC and coordinating network model changes across all systems
4. Conduct operating training related to NERC certification
5. Monitor generation resources and communicate expected dispatch actions
6. Ensure ancillary service requirements are met
7. Directing switching
8. Controlling system voltages
9. Obtaining reports on the weather and special events
10. Preparing operating reports and data for billing and budget purposes

561.3 Load Dispatch—Transmission Service and Scheduling.

This account shall include the costs of labor, materials used and expenses incurred by a regional transmission service provider or other transmission provider to process hourly, daily, weekly and monthly transmission service requests using an automated system such as an Open Access Same-Time Information System (OASIS). It shall also include the expenses incurred to operate the automated transmission service request system and to monitor the status of all scheduled energy transactions.

561.4 Scheduling, System Control and Dispatching Services.

This account shall include the costs billed to the transmission owner, load serving entity or generator for scheduling, system control and dispatching service. Include in this account service billings for system control to maintain the reliability of the transmission area in accordance with reliability standards, maintaining defined voltage profiles, and monitoring operations of the transmission facilities.

561.5 Reliability, Planning and Standards Development.

This account shall include the cost of labor, materials used and expenses incurred for the system planning of the interconnected bulk electric transmission systems within a planning authority area.

Items

1. Developing and maintaining transmission system models to evaluate transmission system performance.
2. Maintaining and applying methodologies and tools for the analysis and simulation of the transmission systems for the assessment and development of transmission expansion plans.
3. Assessing, developing and documenting transmission expansion plans.
4. Maintaining transmission system models (steady-state, dynamics, and short circuit).
5. Collecting transmission information and transmission facility characteristics and ratings.
6. Notifying participants of any planned transmission changes that may impact their facilities.
7. Developing and reporting on transmission expansion plans for assessment and compliance with reliability standards.
8. Developing reliability standards for the planning and operation of the interconnected bulk electric transmission systems that serve the United States, Canada, and Mexico.
9. Developing criteria and certification procedures for reliability authorities, transmission operators and others.
10. Outside services employed.

Note: The cost of supervision, customer records and collection expenses, administrative and general salaries, office supplies and expenses, property insurance, injuries and damages, employee pension and benefits, regulatory commission expenses, general advertising, and rents shall be charged to the customer accounts, service, and administrative and general expense accounts contained in the Uniform System of Accounts.

561.6 Transmission Service Studies.

This account shall include the cost of labor, materials used and expenses incurred to conduct transmission services studies for proposed interconnections with the transmission system. Detailed records shall be maintained for each study undertaken and all reimbursements received for conducting such a study.

561.7 Generation Interconnection Studies.

This account shall include the cost of labor, materials used and expenses incurred to conduct generation interconnection studies for proposed interconnections with the transmission system. Detailed records shall be maintained for each study undertaken and all reimbursements received for conducting such a study.

561.8 Reliability Planning and Standards Development Services

This account shall include the costs billed to the transmission owner, load serving entity, or generator for system planning of the interconnected bulk electric transmission system. Include also the costs billed by the regional transmission service provider for system reliability and resource planning to develop long-term strategies to meet customer demand and energy requirements. This account shall also include fees and expenses for outside services incurred by the regional transmission service provider and billed to the load serving entity, transmission owner or generator.

562 Station expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in operating transmission substations and switching stations. If transmission station equipment is located in or adjacent to a generating station the expenses applicable to transmission station operations shall nevertheless be charged to this account.

Items

Labor:

1. Supervising station operation.

2. Adjusting station equipment where such adjustment primarily affects performance, such as regulating the flow of cooling water, adjusting current in fields of a machine or changing voltage of regulators, changing station transformer taps.
3. Inspecting, testing and calibrating station equipment for the purpose of checking its performance.
4. Keeping station log and records and preparing reports on station operation.
5. Operating switching and other station equipment.
6. Standing watch, guarding, and patrolling station and station yard.
7. Sweeping, mopping, and tidying station.
8. Care of grounds, including snow removal, cutting grass, etc.

Materials and Expenses:

9. Building service expenses.
10. Operating supplies, such as lubricants, commutator brushes, water, and rubber goods.
11. Station meter and instrument supplies, such as ink and charts.
12. Station record and report forms.
13. Tool expense.
14. Transportation expenses.
15. Meals, traveling, and incidental expenses.

562.1 Operation of Energy Storage Equipment

This account shall include the cost of labor, materials used and expenses incurred in the operation of energy storage equipment includible in Account 351, Energy Storage Equipment—Transmission, which are not specifically provided for or are readily assignable to other transmission operation expense accounts.

563 Overhead line expenses (Major only).

564 Underground line expenses (Major only).

- A. These accounts shall include the cost of labor, materials used and expenses incurred in the operation of transmission lines.
- B. If the expenses are not substantial for both overhead and underground lines, these accounts may be combined.

Items

Labor:

1. Supervising line operation.
2. Inspecting and testing lightning arresters, circuit breakers, switches, and grounds
3. Load tests of circuits.
4. Routine line patrolling.
5. Routine voltage surveys made to determine the condition or efficiency of transmission system.
6. Transferring loads, switching and reconnecting circuits and equipment for operating purposes. (Switching for construction or maintenance purposes is not includible in this account.)
7. Routine inspection and cleaning of manholes, conduit, network and transformer vaults.
8. Electrolysis surveys.
9. Inspecting and adjusting line-testing equipment, such as voltmeters, ammeters, wattmeters, etc.
10. Regulation and addition of oil or gas in high-voltage cable systems.

Materials and Expenses:

11. Transportation expenses.
12. Meals, traveling and incidental expenses.
13. Tool expenses.
14. Operating supplies, such as instrument charts, rubber goods, etc.

565 Transmission of electricity by others (Major only).

This account shall include amounts payable to others for the transmission of the utility's electricity over transmission facilities owned by others.

566 Miscellaneous transmission expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in transmission map and record work, transmission office expenses, and other transmission expenses not provided for elsewhere.

Items

Labor:

1. General records of physical characteristics of lines and stations, such as capacities, etc.
2. Ground resistance records.
3. Janitor work at transmission office buildings, including care of grounds, snow removal, cutting grass, etc.
4. Joint pole maps and records.
5. Line load and voltage records.
6. Preparing maps and prints.
7. General clerical and stenographic work.
8. Miscellaneous labor.

Materials and Expenses:

9. Communication service.
10. Building service supplies.
11. Map and record supplies.
12. Transmission office supplies and expenses, printing and stationery.
13. First-aid supplies.
14. Research, development, and demonstration expenses.

567 Rents.

This account shall include rents of property of others used, occupied, or operated in connection with the transmission system, including payments to the United States and others for use of public or private lands and reservations for transmission line rights of way. (See operating expense instruction 3.)

567.1 Operation supplies and expenses (Nonmajor only).

This account shall include the cost of materials used and expenses incurred in the operation of the transmission system.

Items

1. Building service expenses.
2. Operating supplies, such as lubricants, commutator brushes, water, and rubber goods.
3. Station meter and instrument supplies, such as ink and charts.
4. Station record and report forms.
5. Communication service.
6. First-aid supplies.
7. Tool expense.
8. Transportation expenses.
9. Meals, traveling, and incidental expenses.

568 Maintenance supervision and engineering (Major only).

This account shall include the cost of labor and expenses incurred in the general supervision and direction of maintenance of the transmission system. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account. (See operating expense instruction 1.)

569 Maintenance of structures (Major only).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of structures, the book cost of which is includible in account 352, Structures and Improvements. (See operating expense instruction 2.)

569.1 Maintenance of Computer Hardware.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the transmission function.

569.2 Maintenance of Computer Software.

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the transmission function.

Items

1. Telephone support
2. Onsite support
3. Software updates and minor revisions

569.3 Maintenance of Communication Equipment.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the transmission function.

569.4 Maintenance of Miscellaneous Regional Transmission Plant.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of miscellaneous regional transmission plant serving the transmission function.

570 Maintenance of station equipment (Major only).

This account shall include the cost of labor, materials used and expenses incurred in maintenance of station equipment the book cost of which is includible in account 353, Station Equipment. (See operating expense instruction 2.)

570.1 Maintenance of Energy Storage Equipment

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of energy storage equipment includible in Account 351, Energy Storage Equipment—Transmission, which are not specifically provided for or are readily assignable to other transmission maintenance expense accounts.

571 Maintenance of overhead lines (Major only).

This account shall include the cost of labor, materials used and expenses incurred in maintenance of transmission plant, the book cost of which is includible in accounts 354, Towers and Fixtures, 355, Poles and Fixtures, 356, Overhead Conductors and Devices, 359, Roads and Trails. (See operating expense instruction 2.)

Items

1. Work of the following character on poles, towers and fixtures:
 - a. Installing or removing additional clamps or strain insulators on guys in place.
 - b. Moving line or guy pole in relocation of the same pole or section of line.
 - c. Painting poles, towers, crossarms or pole extensions.
 - d. Readjusting and changing position of guys or braces.
 - e. Realigning and straightening poles, cross arms braces, and other pole fixtures.
 - f. Reconditioning reclaimed pole fixtures.
 - g. Relocating crossarms, racks, brackets, and other fixtures on poles.
 - h. Repairing or realigning pins, racks, or brackets.
 - i. Repairing pole supported platform.

- j. Repairs by others to jointly owned poles.
- k. Shaving, cutting rot, or treating poles or crossarms in use or salvaged for reuse.
- l. Stubbing poles already in service.
- m. Supporting fixtures and conductors and transferring them to new pole during poles replacements.
- n. Maintenance of pole signs, stencils, tags, etc.
- 2. Work of the following character on overhead conductors and devices:
 - a. Overhauling and repairing line cutouts, line switches, line breakers, etc.
 - b. Cleaning insulators and bushings.
 - c. Refusing cutouts.
 - d. Repairing line oil circuit breakers and associated relays and control wiring.
 - e. Repairing grounds.
 - f. Resagging, retying, or rearranging position or spacing of conductors.
 - g. Standing by phones, going to calls, cutting faulty lines clear, or similar activities at times of emergencies.
 - h. Sampling, testing, changing, purifying, and replenishing insulating oil.
 - i. Repairing line testing equipment.
 - j. Transferring loads, switching and reconnecting circuits and equipment for maintenance purposes.
 - k. Trimming trees and clearing brush.
 - l. Chemical treatment of right of way areas when occurring subsequent to construction of line.
- 3. Work of the following character on roads and trails:
 - a. Repairing roadway, bridges, etc.
 - b. Trimming trees and brush to maintain previous roadway clearance.
 - c. Snow removal from roads and trails.
 - d. Maintenance work on publicly owned roads and trails when done by utility at its expense.

572 Maintenance of underground lines (Major only).

This account shall include the cost of labor, materials used and expenses incurred in maintenance of transmission plant, the book cost of which is includible in accounts 357, Underground Conduit, and 358, Underground Conductors and Devices. (See operating expense instruction 2.)

Items

- 1. Work of the following character on underground conduit:
 - a. Cleaning ducts, manholes, and sewer connections.
 - b. Minor alterations of handholes, manholes, or vaults.
 - c. Refastening, repairing, or moving racks, ladders, or hangers in manholes, or vaults.
 - d. Plugging and shelving or replugging ducts.
 - e. Repairs to sewers and drains, walls and floors, rings and covers.
- 2. Work of the following character on underground conductors and devices:
 - a. Repairing oil circuit breakers, switches, cutouts, and control wiring.
 - b. Repairing grounds.
 - c. Retraining and reconnecting cables in manhole, including transfer of cables from one duct to another.
 - d. Repairing conductors and splices.
 - e. Repairing or moving junction boxes and potheads.
 - f. Refireproofing of cables and repairing supports.
 - g. Repairing electrolysis preventive devices for cables.
 - h. Repairing cable bonding systems.
 - i. Sampling, testing, changing, purifying and replenishing insulating oil.
 - j. Transferring loads, switching and reconnecting circuits and equipment for maintenance purposes.
 - k. Repairing line testing equipment.
 - l. Repairs to oil or gas equipment in highvoltage cable system and replacement of oil or gas.

573 Maintenance of miscellaneous transmission plant (Major only).

This account shall include the cost of labor, materials used and expenses incurred in maintenance of owned or leased plant which is assignable to transmission operations and is not provided for elsewhere. (See operating expense instruction 2.)

574 Maintenance of transmission plant (Nonmajor only).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of transmission plant the book cost of which is includible in plant accounts 351 to 359 inclusive. (See operating expense instruction 2.)

Items

1. Work of the following character on poles, towers and fixtures:
 - a. Installing or removing additional clamps or strain insulators on guys in place.
 - b. Moving line or guy pole in relocation of the same pole or section of line.
 - c. Painting poles, towers, crossarms or pole extensions.
 - d. Readjusting and changing position of guys or braces.
 - e. Realigning and straightening poles, crossarms, braces and other pole fixtures.
 - f. Reconditioning reclaimed pole fixtures.
 - g. Relocating crossarms, racks, brackets, and other fixtures on poles.
 - h. Repairing or realigning pins, racks, or brackets.
 - i. Repairing pole supported platform.
 - j. Repairs by others to jointly owned poles.
 - k. Shaving, cutting rot, or treating poles or crossarms in use or salvaged for reuse.
 - l. Stubbing poles already in service.
 - m. Supporting fixtures and conductors and transferring them to new pole during pole replacement.
 - n. Maintenance of pole signs, stencils, tags, etc.
2. Work of the following character on overhead conductors and devices:
 - a. Overhauling and repairing line cutouts, line switches, line breakers, etc.
 - b. Cleaning insulators and bushings.
 - c. Refusing cutouts.
 - d. Repairing line oil circuit breakers and associated relays and control wiring.
 - e. Repairing grounds.
 - f. Resagging, retying, or rearranging position or spacing of conductors.
 - g. Standing by phones, going to calls, cutting faulty lines clear, or similar activities at times of emergencies.
 - h. Sampling, testing, changing, purifying, and replenishing insulating oil.
 - i. Repairing line testing equipment.
 - j. Transferring loads, switching and reconnecting circuits and equipment for maintenance purposes.
 - k. Trimming trees and clearing brush.
 - l. Chemical treatment of right of way areas when occurring subsequent to construction of line.
3. Work of the following character on roads and trails:
 - a. Repairing roadway, bridges, etc.
 - b. Trimming trees and brush to maintain previous roadway clearance.
 - c. Snow removal from roads and trails.
 - d. Maintenance work on publicly owned roads and trails when done by utility at its expense.
4. Work of the following character on underground conduit:
 - a. Cleaning ducts, manholes, and sewer connections.
 - b. Minor alterations of handholes, manholes, or vaults.
 - c. Refasting, repairing, or moving racks, ladders, or hangers in manholes, or vaults.
 - d. Plugging and shelving or replugging ducts.
 - e. Repairs to sewers and drains, walls and floors, rings and covers.
5. Work of the following character on underground conductors and devices:
 - a. Repairing oil circuit breakers, switches, cutouts, and control wiring.
 - b. Repairing grounds.
 - c. Retraining and reconnecting cables in manhole, including transfer of cables from one duct to another.
 - d. Repairing conductors and splices.
 - e. Repairing or moving junction boxes and potheads.
 - f. Refireproofing of cables and repairing supports.
 - g. Repairing electrolysis preventive devices for cables.
 - h. Repairing cable bonding systems.
 - i. Sampling, testing, changing, purifying and replenishing insulating oil.
 - j. Transferring loads, switching and reconnecting circuits and equipment for maintenance purposes.
 - k. Repairing line testing equipment.
 - l. Repairs to oil or gas equipment in high voltage cable system and replacement of oil or gas.

575.1 Operation Supervision.

This account shall include the cost of labor and expenses incurred in the general supervision and direction of the regional energy markets.

575.2 Day-Ahead and Real-Time Market Administration.

This account shall include the cost of labor, materials used and expenses incurred to facilitate the Day-Ahead and Real-Time markets. This account shall also include the costs incurred to manage the real-time deployment of resources to meet generation needs and to provide capacity adequacy verification. Include in this account the costs incurred to maintain related sections of the tariff, market rules, operating procedures, and standards and coordinating with neighboring areas.

Items

1. Consultant fees and expenses
2. System record and report forms
3. Meals, traveling and incidental expenses

Note: The cost of supervision, customer records and collection expenses, administrative and general salaries, office supplies and expenses, property insurance, injuries and damages, employee pension and benefits, regulatory commission expenses, general advertising, and rents shall be charged to the customer accounts, service, and administrative and general expense accounts contained in the Uniform System of Accounts.

575.3 Transmission Rights Market Administration.

This account shall include the cost of labor, materials used and expenses incurred to manage the allocation and auction of transmission rights.

575.4 Capacity Market Administration.

This account shall include the cost of labor, materials used and expenses incurred to manage the allocation of capacity rights.

575.5 Ancillary Services Market Administration.

This account shall include the cost of labor, materials used and expenses incurred to manage all other ancillary services market functions.

575.6 Market Monitoring and Compliance.

This account shall include the cost of labor, materials used and expenses incurred to review market data and operational decisions for compliance with market rules. It shall also include the costs incurred to interface with external market monitors.

575.7 Market Administration, Monitoring and Compliance Services.

This account shall include the costs billed to the transmission owner, load serving entity or generator for market administration, monitoring and compliance services.

575.8 Rents.

This account shall include all rents of property of others used, occupied, or operated in connection with market administration and monitoring. (See operating expense instruction 3.)

576.1 Maintenance of Structures and Improvements.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of structures used in market administration and monitoring. (See operating expense instruction 2.)

576.2 Maintenance of Computer Hardware.

The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware used in market administration and monitoring.

576.3 Maintenance of Computer Software.

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products used in market administration and monitoring.

Items

1. Telephone support
2. Onsite support
3. Software updates and minor revisions

576.4 Maintenance of Communication Equipment.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment used in market administration and monitoring.

576.5 Maintenance of Miscellaneous Market Operation Plant.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of miscellaneous market operation plant used in market administration and monitoring.

580 Operation supervision and engineering.

This account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of the distribution system. Direct supervision of specific activities, such as station operation, line operation, meter department operation, etc., shall be charged to the appropriate account. (For Major utilities, see operating expense instruction 1.)

581 Load dispatching (Major only).

This account (the keeping of which is optional with the utility) shall include the cost of labor, materials used and expenses incurred in load dispatching operations pertaining to the distribution of electricity.

Items

Labor:

1. Directing switching.
2. Arranging and controlling clearances for construction, maintenance, test and emergency purposes.
3. Controlling system voltages.
4. Preparing operating reports.
5. Obtaining reports on the weather and special events.

Expenses:

6. Communication service provided for system control purposes.
7. System record and report forms.
8. Meals, traveling and incidental expenses.

581.1 Line and station supplies and expenses (Nonmajor only).

582 Station expenses (Major only).

583 Overhead line expenses (Major only).

584 Underground line expenses (Major only).

Accounts 581.1 through 584 shall include, respectively, the cost of labor, materials used and expenses incurred in the operation of overhead and underground distribution lines and stations.

Items

Line Labor:

1. Supervising line operation.
2. Changing line transformer taps.
3. Inspecting and testing lightning arresters, line circuit breakers, switches and grounds.
4. Inspecting and testing line transformers for the purpose of determining load, temperature or operating performance.
5. Patrolling lines.
6. Load tests and voltages surveys of feeders, circuits and line transformers.
7. Removing line transformers and voltage regulators with or without replacements.
8. Installing line transformers or voltage regulators with or without change in capacity provided that the first installation of these items is included in account 368, Line transformers.
9. Voltage surveys, either routine or upon request of customers, including voltage tests at customers' main switch.
10. Transferring loads, switching and reconnecting circuits and equipment for operation purposes.
11. Electrolysis surveys.
12. Inspecting and adjusting line testing equipment.

Line Supplies and Expenses:

13. Tool expenses.
14. Transportation expenses.
15. Meals, traveling and incidental expense.
16. Operating supplies, such as instrument charts, rubber goods, etc.

Station Labor:

1. Supervising station operation.
2. Adjusting station equipment where such adjustment primarily affects performance, such as regulating the flow of cooling water, adjusting current in fields of a machine, changing voltage of regulators or changing station transformer taps.
3. Keeping station log and records and preparing reports on station operation.
4. Inspecting, testing and calibrating station equipment for the purpose of checking its performance.
5. Operating switching and other station equipment.
6. Standing watch, guarding and patrolling station and station yard.
7. Sweeping, mopping and tidying station.
8. Care of grounds, including snow removal, cutting grass, etc.

Station Supplies and Expenses:

9. Building service expenses.
10. Operating supplies, such as lubricants, commutator brushes, water and rubber goods.
11. Station meter and instrument supplies, such as ink and charts.
12. Station record and report forms.
13. Tool expenses.
14. Transportation expenses.
15. Meals, traveling and incidental expenses.

Note (Major only): If the utility owns storage battery equipment used for supplying electricity to customers in periods of emergency, the cost of operating labor and of supplies, such as acid, gloves, hydrometers, thermometers, soda,

automatic cell fillers, acid proof shoes, etc., shall be included in this account. If significant in amount, a separate subdivision shall be maintained for such expenses.

584.1 Operation of Energy Storage Equipment

This account shall include the cost of labor, materials used and expenses incurred in the operation of energy storage equipment includible in Account 363, Energy Storage Equipment—Distribution, which are not specifically provided for or are readily assignable to other distribution operation expense accounts.

585 Street lighting and signal system expenses.

A. For Nonmajor utilities, this account shall include the cost of labor, materials used and expenses incurred in the operation of street lighting and signal system plant.

B. For Major utilities, this account shall include the cost of labor, materials used and expenses incurred in: (a) The operation of street lighting and signal system plant which is owned or leased by the utility; and (b) the operation and maintenance of such plant owned by customers where such work is done regularly as a part of the street lighting and signal system service.

Items

Labor:

1. Supervising street lighting and signal systems operation.
2. Replacing lamps and incidental cleaning of glassware and fixtures in connection therewith.
3. Routine patrolling for lamp outages, extraneous nuisances or encroachments, etc.
4. Testing lines and equipment including voltage and current measurement.
5. Winding and inspection of time switch and other controls.

Materials and Expenses:

6. Street lamp renewals.
7. Transportation and tool expense.
8. Meals, traveling, and incidental expenses.

586 Meter expenses.

This account shall include the cost of labor, materials used and expenses incurred in the operation of customer meters and associated equipment.

Items

Labor:

1. Supervising meter operation.
2. Clerical work on meter history and associated equipment record cards, test cards, and reports.
3. Disconnecting and reconnecting, removing and reinstalling, sealing and unsealing meters and other metering equipment in connection with initiating or terminating services including the cost of obtaining meter readings, if incidental to such operation.
4. Consolidating meter installations due to elimination of separate meters for different rates of service.
5. Changing or relocating meters, instrument transformers, time switches, and other metering equipment.
6. Resetting time controls, checking operation of demand meters and other metering equipment, when done as an independent operation.
7. Inspecting and adjusting meter testing equipment.
8. Inspecting and testing meters, instrument transformers, time switches, and other metering equipment on premises or in shops excluding inspecting and testing incidental to maintenance

Materials and Expenses:

9. Meter seals and miscellaneous meter supplies.
10. Transportation expenses.
11. Meals, traveling, and incidental expenses.
12. Tool expenses.

Note: The cost of the first setting and testing of a meter is chargeable to utility plant account 370, Meters.

587 Customer installations expenses.

This account shall include the cost of labor, materials used and expenses incurred in work on customer installations in inspecting premises and in rendering services to customers of the nature of those indicated by the list of items hereunder.

Items

Labor:

1. Supervising customer installations work.
2. Inspecting premises, including check of wiring for code compliance.
3. Investigating, locating, and clearing grounds on customers' wiring.
4. Investigating service complaints, including load tests of motors and lighting and power circuits on customers' premises; field investigations of complaints on bills or of voltage.
5. Installing, removing, renewing, and changing lamps and fuses.
6. Radio, television and similar interference work including erection of new aerials on customers' premises and patrolling of lines, testing of lightning arresters, inspection of pole hardware, etc., and examination on or off premises of customers' appliances, wiring, or equipment to locate cause of interference.
7. Installing, connecting, reinstalling, or removing leased property on customers' premises.
8. Testing, adjusting, and repairing customers' fixtures and appliances in shop or on premises.
9. Cost of changing customers' equipment due to changes in service characteristics.
10. Investigation of current diversion including setting and removal of check meters and securing special readings thereon; special calls by employees in connection with discovery and settlement of current diversion; changes in customer wiring and any other labor cost identifiable as caused by current diversion.

Materials and Expenses:

11. Lamp and fuse renewals.
12. Materials used in servicing customers' fixtures, appliances and equipment.
13. Power, light, heat, telephone, and other expenses of appliance repair department.
14. Tool expense.
15. Transportation expense, including pickup and delivery charges.
16. Meals, traveling and incidental expenses.
17. Rewards paid for discovery of current diversion.

Note A: Amounts billed customers for any work, the cost of which is charged to this account, shall be credited to this account. Any excess over costs resulting therefrom shall be transferred to account 451, Miscellaneous Service Revenues.

Note B: Do not include in this account expenses incurred in connection with merchandising, jobbing and contract work.

588 Miscellaneous distribution expenses.

This account shall include the cost of labor, materials used and expenses incurred in distribution system operation not provided for elsewhere.

Items

Labor:

1. General records of physical characteristics of lines and substations, such as capacities, etc.
2. Ground resistance records.
3. Joint pole maps and records.
4. Distribution system voltage and load records.
5. Preparing maps and prints.

6. Service interruption and trouble records.

7. General clerical and stenographic work except that chargeable to account 586, Meter expenses.

Expenses:

8. Operating records covering poles, transformers, manholes, cables, and other distribution facilities. Exclude meter records chargeable to account 586. Meter Expenses and station records chargeable to account 582, Station Expenses (For Nonmajor utilities, account 581.1, Line and Station Expenses), and stores records (For Nonmajor utilities, station records) chargeable to account 163, Stores Expense Undistributed (For Nonmajor utilities, account 581.1, Line and Station Expenses).

9. Janitor work at distribution office buildings including snow removal, cutting grass, etc.

Materials and Expenses:

10. Communication service.

11. Building service expenses.

12. Miscellaneous office supplies and expenses, printing, and stationery, maps and records and first-aid supplies.

13. Research, development, and demonstration expenses (Major only).

589 Rents.

This account shall include rents of property of others used, occupied, or operated in connection with the distribution system, including payments to the United States and others for the use and occupancy of public lands and reservations for distribution line rights of way. (See operating expense instruction 3.)

590 Maintenance supervision and engineering (Major only).

This account shall include the cost of labor and expenses incurred in the general supervision and direction of maintenance of the distribution system. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account. (See operating expense instruction 1.)

591 Maintenance of structures (Major only).

This account shall include the cost of labor, materials used and expenses incurred in maintenance of structures, the book cost of which is includible in account 361, Structures and Improvements. (See operating expense instruction 2.)

592 Maintenance of station equipment (Major only).

This account shall include the cost of labor, materials used and expenses incurred in maintenance of plant, the book cost of which is includible in account 362, Station Equipment, and account 363, Storage Battery Equipment. (See operating expense instruction 2.)

592.1 Maintenance of Structures and Equipment (Nonmajor Only)

This account shall include the cost of labor, materials used and expenses incurred in maintenance of structures, the book cost of which is includible in account 361, Structures and Improvements, and account 362, Station Equipment. (See operating expense instruction 2.)

593 Maintenance of overhead lines (Major only).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of overhead distribution line facilities, the book cost of which is includible in account 364, Poles, Towers and Fixtures, account 365, Overhead Conductors and Devices, and account 369, Services. (See operating expense instruction 2.)

Items

1. Work of the following character on poles, towers, and fixtures:

- a. Installing additional clamps or removing clamps or strain insulators on guys in place.
- b. Moving line or guy pole in relocation of pole or section of line.
- c. Painting poles, towers, crossarms, or pole extensions.
- d. Readjusting and changing position of guys or braces.

- e. Realigning and straightening poles, crossarms, braces, pins, racks, brackets, and other pole fixtures.
 - f. Reconditioning reclaimed pole fixtures.
 - g. Relocating crossarms, racks, brackets, and other fixtures on poles.
 - h. Repairing pole supported platform.
 - i. Repairs by others to jointly owned poles.
 - j. Shaving, cutting rot, or treating poles or crossarms in use or salvaged for reuse.
 - k. Stubbing poles already in service.
 - l. Supporting conductors, transformers, and other fixtures and transferring them to new poles during pole replacements.
 - m. Maintaining pole signs, stencils, tags, etc.
2. Work of the following character on overhead conductors and devices:
- a. Overhauling and repairing line cutouts, line switches, line breakers, and capacitor installations.
 - b. Cleaning insulators and bushings.
 - c. Refusing line cutouts.
 - d. Repairing line oil circuit breakers and associated relays and control wiring.
 - e. Repairing grounds.
 - f. Resagging, retying, or rearranging position or spacing of conductors.
 - g. Standing by phones, going to calls, cutting faulty lines clear, or similar activities at times of emergency.
 - h. Sampling, testing, changing, purifying, and replenishing insulating oil.
 - i. Transferring loads, switching, and reconnecting circuits and equipment for maintenance purposes.
 - j. Repairing line testing equipment.
 - k. Trimming trees and clearing brush.
 - l. Chemical treatment of right of way area when occurring subsequent to construction of line.
3. Work of the following character on overhead services:
- a. Moving position of service either on pole or on customers' premises.
 - b. Pulling slack in service wire.
 - c. Retying service wire.
 - d. Refastening or tightening service bracket.

594 Maintenance of underground lines (Major only).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of underground distribution line facilities, the book cost of which is includible in account 366, Underground Conduit, account 367, Underground Conductors and Devices, and account 369, Services. (See operating expense instruction 2.)

Items

1. Work of the following character on underground conduit:
 - a. Cleaning ducts, manholes, and sewer connections.
 - b. Moving or changing position of conduit or pipe.
 - c. Minor alterations of handholes, manholes, or vaults.
 - d. Refastening, repairing, or moving racks, ladders, or hangers in manholes or vaults.
 - e. Plugging and shelving ducts.
 - f. Repairs to sewers, drains, walls, and floors, rings and covers.
2. Work of the following character on underground conductors and devices:
 - a. Repairing circuit breakers, switches, cutouts, network protectors, and associated relays and control wiring.
 - b. Repairing grounds.
 - c. Retraining and reconnecting cables in manholes including transfer of cables from one duct to another.
 - d. Repairing conductors and splices.
 - e. Repairing or moving junction boxes and potheads.
 - f. Refireproofing cables and repairing supports.
 - g. Repairing electrolysis preventive devices for cables.
 - h. Repairing cable bonding systems.
 - i. Sampling, testing, changing, purifying and replenishing insulating oil.
 - j. Transferring loads, switching and reconnecting circuits and equipment for maintenance purposes.
 - k. Repairing line testing equipment.
 - l. Repairing oil or gas equipment in high voltage cable systems and replacement of oil or gas.
3. Work of the following character on underground services:
 - a. Cleaning ducts.

- b. Repairing any underground service plant.

594.1 Maintenance of lines (Nonmajor only).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of distribution line facilities, the book cost of which is includible in account 364, Poles, Towers and Fixtures, account 365, Overhead Conductors and Devices, account 366, Underground Conduit, account 367, Underground Conductors and Devices, and account 369, Services. (See operating expense instruction 2.)

Items

1. Work of the following character on poles, towers, and fixtures:

- a. Installing additional clamps or removing clamps or strain insulators on guys in place.
- b. Moving line or guy pole in relocation of pole or section of line.
- c. Painting poles, towers, crossarms, or pole extensions.
- d. Readjusting and changing position of guys or braces.
- e. Realigning and straightening poles, crossarms, braces, pins, racks, brackets, and other pole fixtures.
- f. Reconditioning reclaimed pole fixtures.
- g. Relocating crossarms, racks, brackets, and other fixtures on pole.
- h. Repairing pole supported platform.
- i. Repairs by others to jointly owned poles.
- j. Shaving, cutting rot, or treating poles or crossarms in use or salvage for reuse.
- k. Stubbing poles already in service.
- l. Supporting conductors, transformers, and other fixtures and transferring them to new poles during pole replacement.
- m. Maintaining pole signs, stencils, tags, etc.

2. Work of the following character on overhead conductors and devices:

- a. Overhauling and repairing line cutouts, line switches, line breakers, and capacitor installations.
- b. Cleaning insulators and bushings.
- c. Refusing line cutouts.
- d. Repairing line oil circuit breakers and associated relays and control wiring.
- e. Repairing grounds.
- f. Resagging, retying, or rearranging position or spacing of conductors.
- g. Standing by phones, going to calls, cutting faulting lines clear, or similar activities at times of emergencies.
- h. Sampling, testing, changing, purifying, and replenishing insulating oil.
- i. Transferring loads, switching, and reconnecting circuits and equipment for maintenance purposes.
- j. Repairing line testing equipment.
- k. Trimming trees and clearing brush.
- l. Chemical treatment of right of way area when occurring subsequent to construction of line.

3. Work of the following character on underground conduit:

- a. Cleaning ducts, manholes, and sewer connections.
- b. Moving or changing position of conduit or pipe.
- c. Minor alterations of handholes, manholes, or vaults.
- d. Refastening, repairing or moving racks, ladders, or hangers in manholes or vaults.
- e. Plugging and shelving ducts.
- f. Repairs to sewers, drains, walls and floors, rings and covers.

4. Work of the following character on underground conductors and devices:

- a. Repairing circuit breakers, switches, cutouts, network protectors, and associated relays and control wiring.
- b. Repairing grounds.
- c. Retraining and reconnecting cables in manhole including transfer of cables from one duct to another.
- d. Repairing conductors and splices.
- e. Repairing or moving junction boxes and potheads.
- f. Refireproofing cables and repairing supports.
- g. Repairing electrolysis preventive devices for cables.
- h. Repairing cable bonding systems.
- i. Sampling, testing, changing, purifying and replenishing insulating oil.
- j. Transferring loads, switching and reconnecting circuits and equipment for maintenance purposes.
- k. Repairing line testing equipment.
- l. Repairing oil or gas equipment in high voltage cable system and replacement of oil or gas.

5. Work of the following character on services:

- a. Moving position of service either on pole or on customers' premises.
- b. Pulling slack in service wire.
- c. Retying service wire.
- d. Refastening or tightening service bracket.
- e. Cleaning ducts.

595 Maintenance of line transformers.

This account shall include the cost of labor, materials used and expenses incurred in maintenance of distribution line transformers, the book cost of which is includible in account 368, Line Transformers. (See operating expense instruction 2.)

596 Maintenance of street lighting and signal systems.

This account shall include the cost of labor, materials used and expenses incurred in maintenance of plant, the book cost of which is includible in account 373, Street Lighting and Signal Systems. (See operating expense instruction 2.)

597 Maintenance of meters.

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of meters and meter testing equipment, the book cost of which is includible in account 370, Meters, and account 395, Laboratory Equipment, respectively. (See operating expense instruction 2.)

598 Maintenance of miscellaneous distribution plant.

This account shall include the cost of labor, materials used and expenses incurred in maintenance of plant, the book cost of which is includible in accounts 371, Installations on Customers' Premises, and 372, Leased Property on Customers' Premises, and any other plant the maintenance of which is assignable to the distribution function and is not provided for elsewhere. (See operating expense instruction 2.)

Items

- a. Work of similar nature to that listed in other distribution maintenance accounts.
- b. Maintenance of office furniture and equipment used by distribution system department.

901 Supervision (Major only).

This account shall include the cost of labor and expenses incurred in the general direction and supervision of customer accounting and collecting activities. Direct supervision of a specific activity shall be charged to account 902, Meter Reading Expenses, or account 903, Customer Records and Collection Expenses, as appropriate. (See operating expense instruction 1.)

902 Meter reading expenses.

This account shall include the cost of labor, materials used and expenses incurred in reading customer meters, and determining consumption when performed by employees engaged in reading meters.

Items

Labor:

1. Addressing forms for obtaining meter readings by mail.
2. Changing and collecting meter charts used for billing purposes.
3. Inspecting time clocks, checking seals, etc., when performed by meter readers and the work represents a minor activity incidental to regular meter reading routine.
4. Reading meters, including demand meters, and obtaining load information for billing purposes. Exclude and charge to account 586, Meter Expenses, or to account 903, Customer Records and Collection Expenses, as applicable, the cost of obtaining meter readings, first and final, if incidental to the operation of removing or resetting, sealing, or locking, and

disconnecting or reconnecting meters.

5. Computing consumption from meter reader's book or from reports by mail when done by employees engaged in reading meters.

6. Collecting from prepayment meters when incidental to meter reading.

7. Maintaining record of customers' keys.

8. Computing estimated or average consumption when performed by employees engaged in reading meters.

Materials and Expenses:

9. Badges, lamps, and uniforms.

10. Demand charts, meter books and binders and forms for recording readings, but not the cost of preparation.

11. Postage and supplies used in obtaining meter readings by mail.

12. Transportation, meals, and incidental expenses.

903 Customer records and collection expenses.

This account shall include the cost of labor, materials used and expenses incurred in work on customer applications, contracts, orders, credit investigations, billing and accounting, collections and complaints.

Items

Labor:

1. Receiving, preparing, recording and handling routine orders for service, disconnections, transfers or meter tests initiated by the customer, excluding the cost of carrying out such orders, which is chargeable to the account appropriate for the work called for by such orders.

2. Investigations of customers' credit and keeping of records pertaining thereto, including records of uncollectible accounts written off.

3. Receiving, refunding or applying customer deposits and maintaining customer deposit, line extension, and other miscellaneous records.

4. Checking consumption shown by meter readers' reports where incidental to preparation of billing data.

5. Preparing address plates and addressing bills and delinquent notices.

6. Preparing billing data.

7. Operating billing and bookkeeping machines.

8. Verifying billing records with contracts or rate schedules.

9. Preparing bills for delivery, and mailing or delivering bills.

10. Collecting revenues, including collection from prepayment meters unless incidental to meter-reading operations.

11. Balancing collections, preparing collections for deposit, and preparing cash reports.

12. Posting collections and other credits or charges to customer accounts and extending unpaid balances.

13. Balancing customer accounts and controls.

14. Preparing, mailing, or delivering delinquent notices and preparing reports of delinquent accounts.

15. Final meter reading of delinquent accounts when done by collectors incidental to regular activities.

16. Disconnecting and reconnecting service because of nonpayment of bills.

17. Receiving, recording, and handling of inquiries, complaints, and requests for investigations from customers, including preparation of necessary orders, but excluding the cost of carrying out such orders, which is chargeable to the account appropriate for the work called for by such orders.

18. Statistical and tabulating work on customer accounts and revenues, but not including special analyses for sales department, rate department, or other general purposes, unless incidental to regular customer accounting routines.

19. Preparing and periodically rewriting meter reading sheets.

20. Determining consumption and computing estimated or average consumption when performed by employees other than those engaged in reading meters.

Materials and Expenses:

21. Address plates and supplies.

22. Cash overages and shortages.

23. Commissions or fees to others for collecting.

24. Payments to credit organizations for investigations and reports.

25. Postage.

26. Transportation expenses (Major only), including transportation of customer bills and meter books under centralized billing procedure.

27. Transportation, meals, and incidental expenses.

28. Bank charges, exchange, and other fees for cashing and depositing customers' checks.

29. Forms for recording orders for services removals, etc.
30. Rent of mechanical equipment.
31. Communication service (Nonmajor only).
32. Miscellaneous office supplies and expenses and stationery and printing (Nonmajor only).

Note: The cost of work on meter history and meter location records is chargeable to account 586, Meter Expenses.

904 Uncollectible accounts.

This account shall be charged with amounts sufficient to provide for losses from uncollectible utility revenues. Concurrent credits shall be made to account 144, Accumulated Provision for Uncollectible Accounts—Cr. Losses from uncollectible accounts shall be charged to account 144.

905 Miscellaneous customer accounts expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred not provided for in other accounts.

Items

Labor:

1. General clerical and stenographic work.
2. Miscellaneous labor.

Materials and Expenses:

3. Communication service.
4. Miscellaneous office supplies and expenses and stationery and printing other than those specifically provided for in accounts 902 and 903.

906 Customer service and informational expenses (Nonmajor only).

This account shall include the cost of supervision, labor, and expenses incurred in customer service and informational activities, the purpose of which is to encourage safe and efficient use of the utility's service, to encourage conservation of the utility's service, and to assist present customers in answering specific inquiries as to the proper and economic use of the utility's service and the customer's equipment utilizing the service.

907 Supervision (Major only).

This account shall include the cost of labor and expenses incurred in the general direction and supervision of customer service activities, the object of which is to encourage safe, efficient and economical use of the utility's service. Direct supervision of a specific activity within customer service and informational expense classification shall be charged to the account wherein the costs of such activity are included. (See operating expense instruction 1.)

908 Customer assistance expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in providing instructions or assistance to customers, the object of which is to encourage safe, efficient and economical use of the utility's service.

Items

Labor:

1. Direct supervision of department.
2. Processing customer inquiries relating to the proper use of electric equipment, the replacement of such equipment and information related to such equipment.
3. Advice directed to customers as to how they may achieve the most efficient and safest use of electric equipment.
4. Demonstrations, exhibits, lectures, and other programs designed to instruct customers in the safe, economical or efficient use of electric service, and/or oriented toward conservation of energy.

5. Engineering and technical advice to customers, the object of which is to promote safe, efficient and economical use of the utility's service.

Materials and Expenses:

6. Supplies and expenses pertaining to demonstrations, exhibits, lectures, and other programs.
7. Loss in value on equipment and appliances used for customer assistance programs.
8. Office supplies and expenses.
9. Transportation, meals, and incidental expenses.

Note: Do not include in this account expenses that are provided for elsewhere, such as accounts 416, Costs and Expenses of Merchandising, Jobbing and Contract Work, 587, Customer Installations Expenses, and 912, Demonstrating and Selling Expenses.

909 Informational and instructional advertising expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in activities which primarily convey information as to what the utility urges or suggests customers should do in utilizing electric service to protect health and safety, to encourage environmental protection, to utilize their electric equipment safely and economically, or to conserve electric energy.

Labor:

1. Direct supervision of informational activities.
2. Preparing informational materials for newspapers, periodicals, billboards, etc., and preparing and conducting informational motion pictures, radio and television programs.
3. Preparing informational booklets, bulletins, etc., used in direct mailings.
4. Preparing informational window and other displays.
5. Employing agencies, selecting media and conducting negotiations in connection with the placement and subject matter of information programs.

Materials and Expenses:

6. Use of newspapers, periodicals, billboards, radio, etc., for informational purposes.
7. Postage on direct mailings to customers exclusive of postage related to billings.
8. Printing of informational booklets, dodgers, bulletins, etc.
9. Supplies and expenses in preparing informational materials by the utility.
10. Office supplies and expenses.

Note A: Exclude from this account and charge to account 930.2, Miscellaneous General Expenses, the cost of publication of stockholder reports, dividend notices, bond redemption notices, financial statements, and other notices of a general corporate character. Exclude also all expenses of a promotional, institutional, goodwill or political nature, which are includible in such accounts as 913, Advertising Expenses, 930.1, General Advertising Expenses, and 426.4, Expenditures for Certain Civic, Political and Related Activities.

Note B: Entries relating to informational advertising included in this account shall contain or refer to supporting documents which identify the specific advertising message. If references are used, copies of the advertising message shall be readily available.

910 Miscellaneous customer service and informational expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in connection with customer service and informational activities which are not includible in other customer information expense accounts.

Labor:

1. General clerical and stenographic work not assigned to specific customer service and informational programs.
2. Miscellaneous labor.

Materials and Expenses:

3. Communication service.
4. Printing, postage and office supplies expenses.

911 Supervision (Major only).

This account shall include the cost of labor and expenses incurred in the general direction and supervision of sales activities, except merchandising. Direct supervision of a specific activity, such as demonstrating, selling, or advertising shall be charged to the account wherein the costs of such activity are included. (See operating expense instruction 1.)

912 Demonstrating and selling expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in promotional, demonstrating, and selling activities, except by merchandising, the object of which is to promote or retain the use of utility services by present and prospective customers.

Items

Labor:

1. Demonstrating uses of utility services.
2. Conducting cooking schools, preparing recipes, and related home service activities.
3. Exhibitions, displays, lectures, and other programs designed to promote use of utility services.
4. Experimental and development work in connection with new and improved appliances and equipment, prior to general public acceptance.
5. Solicitation of new customers or of additional business from old customers, including commissions paid employees.
6. Engineering and technical advice to present or prospective customers in connection with promoting or retaining the use of utility services.
7. Special customer canvasses when their primary purpose is the retention of business or the promotion of new business.

Materials and Expenses:

8. Supplies and expenses pertaining to demonstration, and experimental and development activities.
9. Booth and temporary space rental.
10. Loss in value on equipment and appliances used for demonstration purposes.
11. Transportation, meals, and incidental expenses.

913 Advertising expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in advertising designed to promote or retain the use of utility service, except advertising the sale of merchandise by the utility.

Items

Labor:

1. Direct supervision of department.
2. Preparing advertising material for newspapers, periodicals, billboards, etc., and preparing and conducting motion pictures, radio and television programs.
3. Preparing booklets, bulletins, etc., used in direct mail advertising.
4. Preparing window and other displays.
5. Clerical and stenographic work.
6. Investigating advertising agencies and media and conducting negotiations in connection with the placement and subject matter of sales advertising.

Materials and expenses:

7. Advertising in newspapers, periodicals, billboards, radio, etc., for sales promotion purposes, but not including institutional or goodwill advertising includible in account 930.1, General Advertising Expenses.
8. Materials and services given as prizes or otherwise in connection with civic lighting contests, canning, or cooking contests, bazaars, etc., in order to publicize and promote the use of utility services.
9. Fees and expenses of advertising agencies and commercial artists.
10. Novelties for general distribution.
11. Postage on direct mail advertising.
12. Premiums distributed generally, such as recipe books, etc., when not offered as inducement to purchase appliances.
13. Printing booklets, dodgers, bulletins, etc.
14. Supplies and expenses in preparing advertising material.

15. Office supplies and expenses.

Note A: The cost of advertisements which set forth the value or advantages of utility service without reference to specific appliances or, if reference is made to appliances invites the reader to purchase appliances from his dealer or refer to appliances not carried for sale by the utility, shall be considered sales promotion advertising and charged to this account. However, advertisements which are limited to specific makes of appliances sold by the utility and prices, terms, etc., thereof, without referring to the value or advantages of utility service, shall be considered as merchandise advertising and the cost shall be charged to Costs and Expenses of Merchandising, Jobbing and Contract Work, Account 416.

Note B: Advertisements which substantially mention or refer to the value or advantages of utility service, together with specific reference to makes of appliances sold by the utility and the price, terms, etc., thereof and designed for the joint purpose of increasing the use of utility service and the sales of appliances, shall be considered as a combination advertisement and the costs shall be distributed between this account and Account 416 on the basis of space, time, or other proportional factors.

Note C: Exclude from this account and charge to Account 930.2, Miscellaneous General Expenses, the cost of publication of stockholder reports, dividend notices, bond redemption notices, financial statements, and other notices of a general corporate character. Exclude also all institutional or goodwill advertising. (See Account 930.1, General Advertising Expenses.)

916 Miscellaneous sales expenses (Major only).

This account shall include the cost of labor, materials used and expenses incurred in connection with sales activities, except merchandising, which are not includible in other sales expense accounts.

Items

Labor:

1. General clerical and stenographic work not assigned to specific functions.
2. Special analysis of customer accounts and other statistical work for sales purposes not a part of the regular customer accounting and billing routine.
3. Miscellaneous labor.

Materials and Expenses:

4. Communication service.
5. Printing, postage, and office supplies and expenses applicable to sales activities, except those chargeable to account 913, Advertising Expenses.

917 Sales expenses (Nonmajor only).

This account shall include the cost of labor and expenses incurred for the purpose of promoting the sale of electricity, other than merchandising, jobbing or contract work activities.

Items

1. Advertising.
2. Demonstrating uses of utility service.
3. Home service activities.
4. Solicitation of new business.

920 Administrative and general salaries.

A. This account shall include the compensation (salaries, bonuses, and other consideration for services, but not including directors' fees) of officers, executives, and other employees of the utility properly chargeable to utility operations and not chargeable directly to a particular operating function.

B. This account may be subdivided in accordance with a classification appropriate to the departmental or other functional organization of the utility.

921 Office supplies and expenses.

A. This account shall include office supplies and expenses incurred in connection with the general administration of the utility's operations which are assignable to specific administrative or general departments and are not specifically provided for in other accounts. This includes the expenses of the various administrative and general departments, the salaries and wages of which are includible in account 920.

B. This account may be subdivided in accordance with a classification appropriate to the departmental or other functional organization of the utility.

Note: Office expenses which are clearly applicable to any group of operating expenses other than the administrative and general group shall be included in the appropriate account in such group. Further, general expenses which apply to the utility as a whole rather than to a particular administrative function shall be included in account 930.2, Miscellaneous General Expenses.

Items

1. Automobile service, including charges through clearing account.
2. Bank messenger and service charges.
3. Books, periodicals, bulletins and subscriptions to newspapers, newsletters, tax services, etc.
4. Building service expenses for customer accounts, sales, and administrative and general purposes.
5. Communication service expenses.
6. Cost of individual items of office equipment used by general departments which are of small value or short life.
7. Membership fees and dues in trade, technical, and professional associations paid by a utility for employees. (Company memberships are includible in account 930.2.)
8. Office supplies and expenses.
9. Payment of court costs, witness fees and other expenses of legal department.
10. Postage, printing and stationery.
11. Meals, traveling and incidental expenses.

922 Administrative expenses transferred—Credit.

This account shall be credited with administrative expenses recorded in accounts 920 and 921 which are transferred to construction costs or to nonutility accounts. (See electric plant instruction 4.)

923 Outside services employed.

A. This account shall include the fees and expenses of professional consultants and others for general services which are not applicable to a particular operating function or to other accounts. It shall include also the pay and expenses of persons engaged for a special or temporary administrative or general purpose in circumstances where the person so engaged is not considered as an employee of the utility.

B. This account shall be so maintained as to permit ready summarization according to the nature of service and the person furnishing the same.

Items

1. Fees, pay and expenses of accountants and auditors, actuaries, appraisers, attorneys, engineering consultants, management consultants, negotiators, public relations counsel, tax consultants, etc.
2. Supervision fees and expenses paid under contracts for general management services.

Note: Do not include inspection and brokerage fees and commissions chargeable to other accounts or fees and expenses in connection with security issues which are includible in the expenses of issuing securities.

924 Property insurance.

- A. This account shall include the cost of insurance or reserve accruals to protect the utility against losses and damages to owned or leased property used in its utility operations. It shall include also the cost of labor and related supplies and expenses incurred in property insurance activities.
- B. Recoveries from insurance companies or others for property damages shall be credited to the account charged with the cost of the damage. If the damaged property has been retired, the credit shall be to the appropriate account for accumulated provision for depreciation.
- C. Records shall be kept so as to show the amount of coverage for each class of insurance carried, the property covered, and the applicable premiums. Any dividends distributed by mutual insurance companies shall be credited to the accounts to which the insurance premiums were charged.

Items

1. Premiums payable to insurance companies for fire, storm, burglary, boiler explosion, lightning, fidelity, riot, and similar insurance.
2. Amounts credited to account 228.1, Accumulated Provision for Property Insurance, for similar protection.
3. Special costs incurred in procuring insurance.
4. Insurance inspection service.
5. Insurance counsel, brokerage fees, and expenses.

Note A: The cost of insurance or reserve accruals capitalized shall be charged to construction either directly or by transfer to construction work orders from this account.

Note B: The cost of insurance or reserve accruals for the following classes of property shall be charged as indicated.

- (1) Materials and supplies and stores equipment, to account 163, Stores Expense Undistributed (store expenses in the case of Nonmajor utilities), or appropriate materials account.
- (2) For Major Utilities, transportation and other general equipment to appropriate clearing accounts that may be maintained. For Nonmajor utilities, transportation and garage equipment, to account 933, Transportation Expenses.
- (3) Electric plant leased to others, to account 413, Expenses of Electric Plant Leased to Others.
- (4) Nonutility property, to the appropriate nonutility income account.
- (5) Merchandise and jobbing property, to Account 416, Costs and Expenses of Merchandising, Jobbing and Contract Work.

Note C (Major only): The cost of labor and related supplies and expenses of administrative and general employees who are only incidentally engaged in property insurance work may be included in accounts 920 and 921, as appropriate.

925 Injuries and damages.

- A. This account shall include the cost of insurance or reserve accruals to protect the utility against injuries and damages claims of employees or others, losses of such character not covered by insurance, and expenses incurred in settlement of injuries and damages claims. For Major utilities, it shall also include the cost of labor and related supplies and expenses incurred in injuries and

damages activities.

B. Reimbursements from insurance companies or others for expenses charged hereto on account of injuries and damages and insurance dividends or refunds shall be credited to this account.

Items

1. Premiums payable to insurance companies for protection against claims from injuries and damages by employees or others, such as public liability, property damages, casualty, employee liability, etc., and amounts credited to account 228.2, Accumulated Provision for Injuries and Damages, for similar protection.
2. Losses not covered by insurance or reserve accruals on account of injuries or deaths to employees or others and damages to the property of others.
3. Fees and expenses of claim investigators.
4. Payment of awards to claimants for court costs and attorneys' services.
5. Medical and hospital service and expenses for employees as the result of occupational injuries, or resulting from claims of others.
6. Compensation payments under workmen's compensation laws.
7. Compensation paid while incapacitated as the result of occupational injuries. (See Note A.)
8. Cost of safety, accident prevention and similar educational activities.

Note A: Payments to or in behalf of employees for accident or death benefits, hospital expenses, medical supplies or for salaries while incapacitated for service or on leave of absence beyond periods normally allowed, when not the result of occupational injuries, shall be charged to account 926, Employee Pensions and Benefits. (See also Note B of account 926.)

Note B: The cost of injuries and damages or reserve accruals capitalized shall be charged to construction directly or by transfer to construction work orders from this account.

Note C: Exclude herefrom the time and expenses of employees (except those engaged in injuries and damages activities) spent in attendance at safety and accident prevention educational meetings, if occurring during the regular work period.

Note D: The cost of labor and related supplies and expenses of administrative and general employees who are only incidentally engaged in injuries and damages activities may be included in accounts 920 and 921, as appropriate.

926 Employee pensions and benefits.

A. This account shall include pensions paid to or on behalf of retired employees, or accruals to provide for pensions, or payments for the purchase of annuities for this purpose, when the utility has definitely, by contract, committed itself to a pension plan under which the pension funds are irrevocably devoted to pension purposes, and payments for employee accident, sickness, hospital, and death benefits, or insurance therefor. Include, also, expenses incurred in medical, educational or recreational activities for the benefit of employees, and administrative expenses in connection with employee pensions and benefits.

B. The utility shall maintain a complete record of accruals or payments for pensions and be prepared to furnish full information to the Commission of the plan under which it has created or proposes to create a pension fund and a copy of the declaration of trust or resolution under which the pension plan is established.

C. There shall be credited to this account the portion of pensions and benefits expenses which is applicable to nonutility operations or which is charged to construction unless such amounts are distributed directly to the accounts involved and are not included herein in the first instance.

D. For Major utilities, records in support of this account shall be so kept that the total pensions expense, the total benefits expense, the administrative expenses included herein, and the amounts of pensions and benefits expenses transferred to construction or other accounts will be readily available.

Items

1. Payment of pensions under a nonaccrual or nonfunded basis.
2. Accruals for or payments to pension funds or to insurance companies for pension purposes.
3. Group and life insurance premiums (credit dividends received).
4. Payments for medical and hospital services and expenses of employees when not the result of occupational injuries.
5. Payments for accident, sickness, hospital, and death benefits or insurance.
6. Payments to employees incapacitated for service or on leave of absence beyond periods normally allowed, when not the result of occupational injuries, or in excess of statutory awards.
7. Expenses in connection with educational and recreational activities for the benefit of employees.

Note A: The cost of labor and related supplies and expenses of administrative and general employees who are only incidentally engaged in employee pension and benefit activities may be included in accounts 920 and 921, as appropriate.

Note B: Salaries paid to employees during periods of nonoccupational sickness may be charged to the appropriate labor account rather than to employee benefits.

927 Franchise requirements.

A. This account shall include payments to municipal or other governmental authorities, and the cost of materials, supplies and services furnished such authorities without reimbursement in compliance with franchise, ordinance, or similar requirements; provided, however, that the utility may charge to this account at regular tariff rates, instead of cost, utility service furnished without charge under provisions of franchises.

B. When no direct outlay is involved, concurrent credit for such charges shall be made to account 929, Duplicate Charges—Credit.

C. The account shall be maintained so as to readily reflect the amounts of cash outlays, utility service supplied without charge, and other items furnished without charge.

Note A: Franchise taxes shall not be charged to this account but to account 408.1, Taxes Other Than Income Taxes, Utility Operating Income.

Note B: Any amount paid as initial consideration for a franchise running for more than one year shall be charged to account 302, Franchises and Consents.

928 Regulatory commission expenses.

A. This account shall include all expenses (except pay of regular employees only incidentally engaged in such work) properly includible in utility operating expenses, incurred by the utility in connection with formal cases before regulatory commissions, or other regulatory bodies, or cases in which such a body is a party, including payments made to a regulatory commission for fees assessed against the utility for pay and expenses of such commission, its officers, agents, and employees, and also including payments made to the United States for the administration of the Federal Power Act.

B. Amounts of regulatory commission expenses which by approval or direction of the Commission are to be spread over future periods shall be charged to account 186, Miscellaneous Deferred Debits, and amortized by charges to this account.

C. The utility shall be prepared to show the cost of each formal case.

Items

1. Salaries, fees, retainers, and expenses of counsel, solicitors, attorneys, accountants, engineers, clerks, attendants, witnesses, and others engaged in the prosecution of, or defense against petitions or complaints presented to regulatory bodies, or in the valuation of property owned or used by the utility in connection with such cases.
2. Office supplies and expenses, payments to public service or other regulatory commissions, stationery and printing, traveling expenses, and other expenses incurred directly in connection with formal cases before regulatory commissions.

Note A: Exclude from this account and include in other appropriate operating expense accounts, expenses incurred in the improvement of service, additional inspection, or rendering reports, which are made necessary by the rules and regulations, or orders, of regulatory bodies.

Note B: Do not include in this account amounts includible in account 302, Franchises and Consents, account 181, Unamortized Debt Expense, or account 214, Capital Stock Expense.

929 Duplicate charges—Credit.

This account shall include concurrent credits for charges which may be made to operating expenses or to other accounts for the use of utility service from its own supply. Include, also, offsetting credits for any other charges made to operating expenses for which there is no direct money outlay.

930.1 General advertising expenses.

This account shall include the cost of labor, materials used, and expenses incurred in advertising and related activities, the cost of which by their content and purpose are not provided for elsewhere.

Items

Labor:

1. Supervision.
2. Preparing advertising material for newspapers, periodicals, billboards, etc., and preparing or conducting motion pictures, radio and television programs.
3. Preparing booklets, bulletins, etc., used in direct mail advertising.
4. Preparing window and other displays.
5. Clerical and stenographic work.
6. Investigating and employing advertising agencies, selecting media and conducting negotiations in connection with the placement and subject matter of advertising.

Materials and Expenses:

7. Advertising in newspapers, periodicals, billboards, radio, etc.
8. Advertising matter such as posters, bulletins, booklets, and related items.
9. Fees and expenses of advertising agencies and commercial artists.
10. Postage and direct mail advertising.
11. Printing of booklets, dodgers, bulletins, etc.
12. Supplies and expenses in preparing advertising materials.
13. Office supplies and expenses.

Note A: Properly includible in this account is the cost of advertising activities on a local or national basis of a good will or institutional nature, which is primarily designed to improve the image of the utility or the industry, including advertisements which inform the public concerning matters affecting the company's operations, such as, the cost of providing service, the company's efforts to improve the quality of service, the company's efforts to improve and protect the environment, etc. Entries relating to advertising included in this account shall contain or refer to supporting documents which identify the specific advertising message. If references are used, copies of the advertising message shall be readily available.

Note B: Exclude from this account and include in account 426.4, Expenditures for Certain Civic, Political and Related Activities, expenses for advertising activities, which are designed to solicit public support or the support of public

officials in matters of a political nature.

930.2 Miscellaneous general expenses.

This account shall include the cost of labor and expenses incurred in connection with the general management of the utility not provided for elsewhere.

Items

Labor:

1. Miscellaneous labor not elsewhere provided for.

Expenses:

2. Industry association dues for company memberships.

3. Contributions for conventions and meetings of the industry.

4. For Major utilities, research, development, and demonstration expenses not charged to other operation and maintenance expense accounts on a functional basis.

5. Communication service not chargeable to other accounts.

6. Trustee, registrar, and transfer agent fees and expenses.

7. Stockholders meeting expenses.

8. Dividend and other financial notices.

9. Printing and mailing dividend checks.

10. Directors' fees and expenses.

11. Publishing and distributing annual reports to stockholders.

12. Public notices of financial, operating and other data required by regulatory statutes, not including, however, notices required in connection with security issues or acquisitions of property. For Nonmajor utilities, transportation and garage equipment, to account 933, Transportation Expenses.

931 Rents.

This account shall include rents properly includible in utility operating expenses for the property of others used, occupied, or operated in connection with the customer accounts, customer service and informational, sales, and general and administrative functions of the utility. (See operating expense instruction 3.)

933 Transportation expenses (Nonmajor only).

A. This account shall include the cost of labor, materials used and expenses incurred in the operation and maintenance of general transportation equipment of the utility.

B. This account may be used as a clearing account in which event the charges hereto shall be cleared by apportionment to the appropriate operating expense, electric plant, or other accounts on a basis which will distribute the expenses equitably. Credits to this account shall be made in such detail as to permit ready analysis.

Items

1. Supervision.

2. Building service.

3. Care of grounds, including snow removal, cutting grass, etc.

4. Utility services.

5. Depreciation of transportation equipment.

6. Fuel and lubricants for vehicles (including sales and excise taxes thereon).

7. Insurance on garage equipment and transportation equipment, including public liability and property damage.

8. Maintenance of transportation and garage equipment.

9. Compensation of drivers, mechanics, clerks, and other garage employees.

10. Rent of garage buildings and grounds, vehicles or equipment.

11. Replacement of tires, tubes, batteries, etc.

12. Direct taxes, licenses, and permits.

13. Miscellaneous garage supplies, tools, and equipment.

14. Miscellaneous office supplies and expenses, printing, and stationery.
15. Transportation, meals, and incidental expenses.

Note A: The pay of employees driving trucks or other transportation equipment incidental to their regular occupation, shall not be included herein but charged directly to the appropriate expense or other account.

Note B: Transportation expenses applicable to construction shall not be included in operating expenses.

935 Maintenance of general plant.

A. This account shall include the cost assignable to customer accounts, sales and administrative and general functions of labor, materials used and expenses incurred in the maintenance of property, the book cost of which is includible in account 390, Structures and Improvements, account 391, Office Furniture and Equipment, account 397, Communication Equipment, and account 398 Miscellaneous Equipment. For Nonmajor utilities, include also other general equipment accounts (not including transportation equipment). (See operating expense instruction 2.)

B. Maintenance expenses on office furniture and equipment used elsewhere than in general, commercial and sales offices shall be charged to the following accounts:

- Steam Power Generation, Account 514.
- Nuclear Power Generation, Account 532 (Major only).
- Hydraulic Power Generation, Account 545.
- Other Power Generation, Account 554.
- Transmission, Account 573.
- Distribution, Account 598.
- Merchandise and Jobbing, Account 416.
- Garages, Shops, etc., Appropriate clearing account, if used.

Note: Maintenance of plant included in other general equipment accounts shall be included herein unless charged to clearing accounts or to the particular functional maintenance expense account indicated by the use of the equipment.

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC
Resiliency Plan
Sponsor: Jeff W. Garmon

Pre-tax WACC	Annual	Monthly
Long-term Debt	2.519%	0.207%
Common Equity	5.057%	0.412%
Total	7.575%	0.610%

TABLE 1 - Resiliency Carrying Costs Calculation		[A]	[B]	[C]	[D]	[E] = [F] - [D]	[F]	[G]	[H]	[I]	[J]
		Illustrative Resiliency Net Capital Investment	Illustrative Resiliency Deferrals	Cumulative Illustrative Resiliency Deferrals	Debt Carrying Costs	Equity Carrying Costs	Total Carrying Costs	Debt Cumulative Carrying Costs	Equity Cumulative Carrying Costs	Total Cumulative Carrying Costs	Overall Cumulative Balance
1	January-25	\$ 12,000,000	\$ -	\$ -	\$ 24,899	\$ 48,346	\$ 73,245	\$ 24,899	\$ 48,346	\$ 73,245	\$ 73,245
2	February-25	11,900,000	100,000	100,000	24,947	48,440	73,387	49,846	98,786	148,632	248,632
3	March-25	11,800,000	100,000	200,000	25,099	48,735	73,835	74,945	145,521	220,467	420,467
4	April-25	11,700,000	100,000	300,000	25,253	49,033	74,286	100,198	194,554	294,752	594,752
5	May-25	11,600,000	100,000	400,000	25,407	49,332	74,739	125,605	243,887	369,491	769,491
6	June-25	11,500,000	100,000	500,000	25,562	49,633	75,165	151,166	293,520	444,686	944,686
7	July-25	11,400,000	100,000	600,000	25,718	49,936	75,654	176,884	343,456	520,340	1,120,340
8	August-25	11,300,000	100,000	700,000	25,875	50,241	76,116	202,796	393,697	596,456	1,296,456
9	September-25	11,200,000	100,000	800,000	26,033	50,548	76,580	228,792	444,245	673,037	1,473,037
10	October-25	11,100,000	100,000	900,000	26,192	50,856	77,048	254,983	495,101	750,085	1,650,085
11	November-25	11,000,000	100,000	1,000,000	26,351	51,167	77,518	281,335	546,268	827,603	1,827,603
12	December-25	10,900,000	100,000	1,100,000	26,512	51,479	77,991	307,847	597,747	905,594	2,005,594
13											
14											
15		Total	\$ 1,100,000		\$ 307,847	\$ 597,747	\$ 905,594				
16											
17											
18											

DOCKET NO. 56548

**APPLICATION OF CENTERPOINT
ENERGY HOUSTON ELECTRIC, LLC
FOR APPROVAL OF ITS
RESILIENCY PLAN**

§
§
§
§

**PUBLIC UTILITY
COMMISSION OF TEXAS**

DIRECT TESTIMONY OF

EUGENE L. SHLATZ

ON BEHALF OF

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

April 2024

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TABLE OF EXHIBITS AND WORKPAPERS

Exhibits

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Exhibit ELS-1

Professional Experience of Eugene L. Shlatz

Exhibit ELS-2

Guidehouse’s Independent Analysis and Review of CenterPoint Energy Houston Electric’s Resiliency Plan (full-length report)

Exhibit ELS-3

Glossary of Acronyms

Workpapers

Description

N/A

I. SUMMARY OF GUIDEHOUSE'S INDEPENDENT ANALYSIS AND REVIEW

Guidehouse performed an independent analysis and review of each operational and physical security resiliency measure in CenterPoint Houston Electric LLC's ("CenterPoint Houston") Resiliency Plan using both quantitative and qualitative methods. Guidehouse's evaluation of these measures was also informed by the future risk profiles for wind and flooding resiliency events developed as part of Guidehouse's risk assessment, which indicates that the frequency and magnitude of extreme weather events such as high winds (e.g., hurricanes), floods, extreme heat, and wildfires is likely to increase over time in CenterPoint Houston's service territory.

Guidehouse finds that the operations and physical security resiliency measures included in CenterPoint Houston's Resiliency Plan are appropriate for inclusion in CenterPoint Houston's Resiliency Plan and generally follow best practices for resiliency planning for the following reasons:

- Focuses primarily on asset replacement or upgrades targeted to locations most susceptible to outages during resiliency events as well as other measures with general resiliency benefits.
- Targets circuits with a high percentage of poles that met design standards at the time they were constructed, but do not meet its current design standards and thus are more susceptible to failure resulting in outages during high winds.
- Targets elevating critical substation equipment to align with flood profiles outlined in the Guidehouse risk assessment.
- Targets transmission pole and tower replacements vulnerable to high impact tornadoes and microbursts.