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1	LAND AND LAI	ND RIGHT	S							
2	330 if Hydraulic Production	100	010	LAND AND LAND RIGHTS	1	Acquisi	tions	N/A	*None	
3	Plant, 350 if Transmission					а	Fee Land		Each parcel retired or added	
4	Plant, 389 if General Plant					b	Easements, Lesser Interest			
5						С	Resettlements and Damages			76
6						d	Land Acquisition Expenses			76
7						е	Other Land Costs			
8		110	020	LAND AND LAND RIGHTS	2	Relocat	tion	N/A	*None	
9						а	Relocation of Fee Land Property of Others			76
10						b	Easements, Lesser Interest			76
11						С	Resettlements and Damages	-		76
12						е	Relocation of Highways and Roads	-		
13						е	Railroads and Appurtenant Structures	-		

<sup>&</sup>lt;sup>1</sup> This appendix is an excerpt from the fiscal year 2016 beta version of the Federal Replacements Units, Service Lives, Factors (Replacement Book).

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14						f	Relocation of Utilities			
15						g	Power Lines, Telephone, Telegraph, Gas, Oil, Water Lines, Buildings, Cemeteries, and Historical Monuments			
16						h	Land Acquisition Expenses			
17					3		L uction Cost, including payments for on by owner	N/A	*None	76
18	331 if Hydraulic Production Plant, 352 if Transmission Plant, 390 if General Plant	120	N/A	LAND CLEARING	4	Clearin	g	N/A	*None.  Per FERC, Clearing is not to be charged to the land and land rights accounts, but to the appropriate plant account directly benefitted, assumed to be in 331, 352 or 390.	
19						а	Clearing Land and Right-of-Way		All clearing operations other than initial clearing should be charged to maintenance.	
20						b	Clearing and Cutting Danger Trees	-		
21						С	Clearing Substation and Switching Area		All clearing operations other than initial clearing should be charged to maintenance.	
22						d	Clearing Transmission Line Land Right- of-Way		All clearing operations other than initial clearing should be charged to maintenance.	

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23	STRUCTURES	AND IMP	ROVEMENT	rs						
24	331	130	Use 071 Power- house,	STRUCTURES AND IMPROVEMENTS	POWER	R HOUSE	OR PUMPING PLANT			
25			for Pumpin		1	Basic S	Structure			
26			g Plants use 013			а	Major Structure (Category 1)	100	Basic structure has no maintenance items	7
27						b	Building, except roof covering of the types defined below (Category 1 defined in Justification 7)	100	Concrete, grounding mat, foundations, grouting, weeps and drains, tunnel, pipe, backfill, structural steel frame, walls, interior partitions, seals, floors, trim doors, windows, platform railings and gratings	7
28					2		I ouse and Pumping Plant Structural and I Service Facilities Systems	100	*Complete structure, including sub items a - k	
29						а	Water System, Potable and Raw Water			
30						b	Sewer System	25	*System, complete, each system  Septic tanks, treatment tanks, settling basins, pumps, motors, manholes, pipelines, disposal, facilities	

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31						С	Heating, Ventilating and Airconditioning Systems (HVAC)	25	Ducts, fans, motors, louvers, controls, grilles, gratings, pumps, motors, condensers, compressors, piping, controls, wiring	
32						d	Drainage System	25	*System, complete, each system  Sump pump, motor, controls or protective items, piping, drain	
33						е	Fire Protection System	25	Sprinklers, hose, reels, racks, pipe, valve, controls, alarm, CO2 cylinder, extinguisher	
34						f	Lighting System	35	*System, complete, each system Fixtures, switches, wiring	
35						g	Signaling System	25	Horns, gongs, lights, bells, switches, wiring	
36						h	Plumbing System	25	Toilet facilities, piping, traps, vents	
37						i	Vacuum Cleaning System	25	Motor, controls, fans, piping, outlets	
38						j	Water System	25	Wells, pumps, storage tanks, treatment plants, filters, distribution system, pipelines, meters, motors, valves, manholes	
39						k	Heating System, Solar	15	Pumps, tanks, piping, individual collectors	48

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40						I	All Components Not Listed Elsewhere	N/A	*None	76
41					3		I		*Complete structure, including sub items a-f	76
42						а	Lifting Beams	100	*Complete Set of all Intake Beams	76
43						b	Intake Gates	100		76
44						С	Machinery, Gate Operating	100	*Complete System for one Gate	76
45						d	Stoplogs and Bulkheads	50	*Complete Set for all gates	76
46						е	Cranes, Hoists, Derricks and Cableways, and the machinery or operating them excluding mobile crane and crawler types	50	*Cranes, complete  For category 2 buildings with cranes, hoists and derricks: Bridge traveling and trolley traveling equipment, controls, motors, runway collectors, blocks, wire ropes, bearings	19
47						f	All components not listed elsewhere	N/A	*None	76
48					4		I r, complete with operating mechanism, ng embedded parts	40		76
49					5	Trash F	Racks	40	*Complete Set for one generating unit	76
50					6	Floating	g Trash Boom	25		76

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51					7	building other ty (exclus	overing, 3,000 sq. ft. and over for one gwhen made of impervious, bituminous or pes of nonpermanent materials live of permanent deck, structural is, and insulation)	20	Roof patching materials, flashing, cement slab, gravel, title, slate, composition	42
52	331, 332	130, 153	060	STRUCTURES AND IMPROVEMENTS	FISH AN	ıND WILDI	LIFE FACILITIES			
53					1		Fish Hatchery Station (Category 2)	50	Foundation, floor, walls, windows, doors, partitions, plumbing, wiring, heating and ventilating, roof (except for roof covering listed below)	7
54					-	а	Fish ladders Structure, including Collection Channel and Training Walls	100		76
55						b	Weirs	50	*Complete System for one Fish ladder	76
56						С	Stoplogs	50	*Complete Set for all Fish ladders	76
57						d	Valves, Gates and Operating Machinery	50	*Complete System for one Fish ladder	76
58						е	Other Fish ladder components not listed elsewhere	N/A	*None	
59					2		evator or Fish locks, complete with ng Mechanism	50		76

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60					3	Fish Pro	ppagation Facilities not otherwise listed	50		76
61					4	Wildlife listed	Preservation Facilities not otherwise	50		76
62					5	Building 3,000 se	s, concrete, excluding replaceable roofs q. ft. and over per building	50		76
63					6	excludir	is, other than concrete, complete, ng replaceable roofs, 3,000 sq. ft. and r building	50		76
64					7	Fish Att 250 hp	raction Water Pumps and Motors under	30	*Complete Set of all pumps and motors	76
65					8	Pump ir	npeller, 1,500 hp and over	40		32,76
66					9	Pump ir	npeller, 250-1,499 hp	35		32,76
67					10		otor, Stator Winding (less stator iron), p and over	25		51.76
68					11	Pump m 250-1,4	notor, Stator Winding (less stator iron), 99 hp	35		51,76
69					12	Pump m	notor, Thrust Bearing, 1,500 hp and over	50		76
70					13	Lighting	System	35		76
71					14	Engine	ower System, excluding Power Boards, Generator Sets 100-kW and over and rmers 1,000-kw and over	50		76

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72					15		ower, Lighting and Control Boards, e with attached accessories	35		76
73					16	1,000 k	mers, Liquid-filled or air or Gas insulated, VA total or more in one or more phases of power board	15		76
74					17	Engine	Generator Sets, 100-kW or over	40		76
75					18	Air Com	pressors, complete, 100 cfm and over	25		76
76					19	Roof co	verings, 3,000 sq. ft or over per building	20		76
77					20		and Fish Transportation Tanks, including ation and aeration equipment, if ble	10		76
78					21	Fish Ta	oping Station, concrete, complete	50		76
79					22	Fish Ta	pping Station, timber, complete	25		76
80					23		ng By-pass Channels, Systems lle and Equipment	XX	*As applicable	76
81					24	Fish Att applicat	raction and Guidance Systems; ole Sonic, Visual, Electrical and Electronic	XX	*As applicable	76
82					25	Wildlife (Catego	Refuge Buildings ry 2)	50	Foundation, floor, walls, windows, doors, partitions, plumbing, wiring, heating and ventilating, roof (except for roof covering listed below)	7

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83					26	impervi nonperi	overing for one building, when made of ous, bituminous or other types of manent materials (exclusive of permanent tructural supports, and insulation)	20	Roof patching materials, flashings, cement slab, gravel, tile, slate, composition	42
84	331,352,353, 398	130	19	Note: use FERC code 331 for Hydraulic Production Plant,	GROUN	IDS; AND	MP, VILLAGE, and STATION YARD BUILE RECREATION FACILITIES APPURTENAN PERTIES			
85				352 for Transmission Plant, 353 for Station Equipment, 398 for General Plant	1	Operati Concre	res (Category 2 Defined On A-7): onal Buildings and Structures, other than te, excluding replaceable Roof Coverings 0 sq. ft. or more		Foundation, floor, walls, windows, doors, partitions, plumbing, wiring, heating, and ventilating.	7
86						а	Laboratory	50		
87						b	Dwelling	50		
88						С	Personnel Residence Housing	50		76
89						d	Dormitory	50		
90						е	Guest house	50		
91						f	Office Building	50		
92						g	Administration Building	50		
93						h	Municipal Building	50		

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94						i	Community Buildings	50		
95						j	Police Station	50		
96						k	Fire Station	50		
97							Hospital	50		
98						m	School	50		
99						n	Garage	50		
100						0	Storage Building	50		
101						р	Warehouse	50		
102						q	Tool House	50		
103						r	Shop	50		
104					2		L	50	Bridge traveling and trolley traveling equipment, controls, motors, runway collectors, blocks	19
105					3	made o	overing complete for one building, when of impervious, bituminous or other types of manent materials (excluding supports, sulation)	20	Roof patching materials, flashings, cement slab, gravel, tile, slate, composition	42
106	331, 352	130	19	Use FERC code 331 for Hydraulic Production Plant,	4		ral and General Service Facility Systems, ds and Utilities			

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107				352 for Transmission Plant		а	Water Meters and Supply System for a building or for general purposes	25	Wells, pumps, storage tank, treatment plants, filters, distribution system, pipelines, meters, motors, valves, manholes	
108						b	Sewer System	25	Septic tanks, treatment tanks, settling basins, pumps, motors, manholes, pipelines, disposal facilities	
109						С	Lighting System	35		76
110						d	Electric Distribution System	25	Distribution transformers, poles and appurtenances, conductors, insulators, cables, lighting facilities	
111						е	Gas System	25	Pipes, shutoff valves	
112						f	Fire Protection System (when forming a part of a structure)	25	Sprinkler system, hose and cabinets, reels and racks, pipes and valves, controls and alarms, CO2 cylinders and valves	
113						g	Drainage System	25	Sump pumps, motors, controls, protective items, pipes, drains	76
114						h	Incinerator	25	Burners, grate, handling equipment	
115						i	Heating System, Conventional	25	See air conditioning system	
116						j	Heating System, Solar	15	Pumps, tanks, piping	48

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117					5	Ground	ls And Site Improvements			
118						а	Streets, Roads and Roadways, Curbs, and Sidewalks intrasite, intended primarily for connecting employee's houses with the power plant, pumping plant, and other structures.	100	Total replacement of a complete site improvement at one time is not expected. Maintenance includes the repair and replacement of all items in the grounds and site improvement category. Roads and Parking - if item is replaced and life extended it will be capitalized (50 years). Refer to Methodology Section/Test for Capitalization Grading, culverts, etc., including permanent paving and surfacing within the property lines.	
119						С	Fences and fence curbs and other protective works	N/A	Posts, wire, gates	
120						d	Landscaping, Lawns, Shrubbery	N/A	Shrubs, grass, trees	
121						е	Piers, Docks, and mooring facilities: Concrete	50	*Independent Structure, complete	76
122						f	Parking Areas	50	Resurfacing	
123					-	g	Retaining Walls	N/A	Concrete, reinforcing steel	
124						h	Sidewalks and Walkways, Culverts, Curbs, Gutters, etc.	N/A	Concrete, asphalt	
125						i	Sprinkling systems	N/A	Piping, heads, valves	

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126						j	Streets and Alleys	N/A	Resurfacing, culverts	
127						k	Waterfront Improvements, Docks, Pipers, Wharves, etc.	50	*Building or structure, complete Timbers, posts, concrete, floats	
128						I	Water supply piping, hydrants, and wells	N/A	Pipe, valves, casings	
129						m	Yard Drainage System	N/A	Sump pump, motor, controls, pipes, drains	
130						m	Yard Lighting System	35	Poles, lights, wire, switches, distribution transformers	
131						n	Other components not listed elsewhere	N/A	*None	
132	331, 352	130	14	STRUCTURES AND IMPROVEMENTS	6	Recrea	Itional Facilities			
133						а	Buildings, concrete, excluding replaceable roof coverings of 3,000 sq. ft. and over per building	100		76
134						b	Buildings, other than Concrete excluding replaceable Roofing Coverings of 3,000 sq. ft. or over per building	50		76

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135						С	Roof Coverings, complete for one building, 3,000 sq. ft or more per building	20		76
136						d	Athletic Field Structures and Improvements	N/A	Bleachers, lights, and equipment	
137						е	Roads Including Roadbase, Culverts, Surfacing, Bridges Including Concrete, Concrete, or Masonry	100	*Complete item, including sub items a-d	76
138						f	Parking Areas	100		76
139						g	Sewers, Drainage Facilities, and Other Recreation Developments excluding components listed elsewhere	100	*Complete item, including sub items a-c	76
140						h	Electric System, Power and Lighting	25		76
141						i	Piers, docks, booms, and bridges: timber	25	*Independent Structure, complete	76
142					7	Other N	I Najor Structures			
143						а	Permanent Structures adjacent to the Powerhouse or Pumping Plant Building (Category 2) Buildings For General Public Needs, Vista Houses	50	See Operators Camp or Village above for typical minor items of property	7
144						b	Buildings For General Public Safety Needs	50		7

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145						С	Miscellaneous Major Structures appurtenant to identified properties such as Personnel Housing, Tool Houses, Warehouses, Garages, Shops, Service Centers Laboratories (See Operators Camp Or Village)	50		7
146						d	Roof covering complete for one building, when made of impervious, bituminous or other types of nonpermanent materials (exclusive of permanent deck, structural supports, and insulation)	20	Roof patching materials, flashings, cement slab, gravel, tile, slate, composition	42
147						е	Miscellaneous Systems (Except Solar Heating)	N/A		
148						f	Heating System, Solar	15	Pumps, tanks, piping, individual collectors	48
149						g	Railroad Siding (Powerhouse Spur) Or Railroad, Intrasite	N/A	Rails and accessories, ties, switches, tie plates, ballast, guards, fencing	
150						h	Structures and Equipment for Gaging and Water-Level Recording Purposes. (Category 3)	25	House and structure, well, cableway, car, recording and transmitting equipment	7
151	331, 352	130	076	Use FERC code 331 for Hydraulic Production Plant, 352 for	SWITCH	YARD AI	ND SUBSTATION			
152				Transmission		Switchy	vard And Substation Building			

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153				Plant	1		re, except roof covering of the types below. (Category 2)	50	Foundation, floor, walls, windows, doors, partitions, plumbing, wiring, heating, and ventilating	7
154					2	bitumin materia	overing, when made of impervious, ous or other types of nonpermanent lls (exclusive of permanent deck, ral supports, and insulation	20	Roof patching materials, flashings, cement slab, gravel, tile, slate, composition	42
155					3	Bus Su	pport Or Terminal Structure			
156						а	Steel	100	Steel members for bus support, grounding connection	53
157						b	Timber	25	Poles, cross arms, hardware	53
158						С	Foundations, Footings, Tunnels, Duct Lines, Manholes	50	Cable tunnel, concrete, metalwork, lighting, drains, seals and joints, materials, ducts, trays, conduit, cable racks	53
159					4	Miscella	Ianeous Structures and Equipment		*Complete Item, including sub items a-i	
160						а	Steel Structures, complete (excluding foundations)	50	*Complete Switchyard Structural System	76
161						b	Bus & Insulations, including mounting hardware	50		76
162						С	Lighting System	35		76

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163						d.	Conduit, Steel, Power and Control	50		76
164						е	Insulating Oil Storage and Piping System (does not include oil purifiers listed under item 13)	50		76
165						f	Power Transformers, 1,000 kiva and over including Auto Transformers	45	*Transformer, complete, excluding windings	76
166						g.	Main Power Cable, 15-kiva and over	50	*System, complete for each transformer	76
167						h	Grounding System, Including Grounding Mat, if separate from Powerhouse Grounding Mat	50		76
168						i.	All components not listed elsewhere	N/A	*None	76
169					5	Reacto	Irs, Shunt or Series, 15-kiva and over	50		76
170					6	Lighting	g Arresters, 15-kiva and over per phase	35	*Complete three-phase Set	76
171					7	Transfo and CT	ormers, Instrument, 15-kiva and over, PT	45		76
172					8	Transfo	ormer, Regulating	45		76
173					9	Circuit	Breakers, 15-kiva and over	50		76
174					10	Disconi	necting Switches, 15-kiva and over	50		76

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175					11	Couplin equipm	g Capacitors, including auxiliary ent	35		76
176					12	Carrier	Current Line Traps	35	*One unit for all traps	76
177					13	Vacuun	fiers, Portable or Fixed, Centrifugal, n, or Clay Treatment, with or without Filter 000 GPM or over	35		76
178					14	Control	Cable Systems	35		76
179					15	Lighting attache	g and Power Boards, complete with d Accessory Equipment	35		76
180	PUMPING PLA	NTS, PUM	PS AND PI	RIME MOVERS					l	
181	331	130	13	STRUCTURES AND IMPROVEMENTS	PUMPIN	IG PLAN	TS			
182					1	Basic F	eatures		*Complete item, including sub items a,b	
183						а	Concrete Buildings, excluding replaceable Roof Coverings of 3,000 sq. ft. and over per building	100		76
184					-	b.	Other Components not listed elsewhere	N/A	*None	
185					2	replace	gs, other than concrete excluding able Roof Coverings of 3,000 sq. ft. or or building	50		76

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186					3		ormers, Liquid-Filled or Air or Gas ed, 1,000-kiva or more in one or more	45		76
187					4.	Engine	Generator Sets, 100 kW or more	40		76
188					5		g, Power and Control Boards complete ached Accessory Equipment	35		76
189					6	Air Con	npressors, complete, 100 cfm and over	25		76
190					7	Roof Co	overings complete for one building, 3,000 r more per building	20		76
191	331	160	13		8	Pumps	And Prime Movers			
192						а	Pump, 250-hp (186 kW) prime mover and larger	35	Impeller parts, case, shaft, packing gland, head cover, wearing rings, platforms, bearings, lubricating system	51
193						b	Pump Impeller, 250-1,499 hp	35		32. 76
194						С	Pump Impeller, 1,500 hp or more	40		32,76
195	331	160	13		9	Electric	Type Prime Movers (Motors)			
196						а	Rotor 250-hp (186 kW) and above	50	Field pole, amortisseur winding, brushes, spider, shaft	43
197						b	Stator Winding, 250-1,499 hp	35	Field pole, amortisseur winding, brushes, spider, shaft	51, 76

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198						С	Stator Winding, 1,500 hp or more	25	Field pole, amortisseur winding, brushes, spider, shaft	51, 76
199						d	Analog Excitation System for Synchronous Motors	30	Armature, field pole, commutator, brushes, diode, silicon controlled rectifier, fuse, current transformer, bearings, rheostat, field circuit breaker, contractor, relay, wiring	24
200						е	Digital Excitation System for Synchronous Motors	15	Armature, field pole, commutator, brushes, diode, silicon controlled rectifier, fuse, current transformer, bearings, rheostat, field circuit breaker, contractor, relay, wiring	24
201					10	Hydrau	lic Type Prime Movers			
202						а	250-hp (186 kW) to 1,499-hp	30	Runner parts, case, shaft packing gland, head cover, wearing rings, platforms, bearings, lubricating system.	45
203						b	Pump Turbine Runner, 1,500 hp or more	40	Runner parts, case, shaft packing gland, head cover, wearing rings, platforms, bearings, lubricating system.	45
204					11	Fuel Ty	pe Prime Movers			
205						b	Prime Mover, Fuel Type, Low speed below 250-hp (186 kW)	25	Engine, complete Piston, bearing, crankshaft, connecting rod, block	39

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206						С	Prime Mover, Fuel-Type, Low Speed 250-hp (186 Kw) and above	40	Engine, complete Piston, bearing, crankshaft, connecting rod, block	39
207					12	Gates /	And Valves	50	Valve body, stem, leaf, hydraulic operating mechanism, motor, operating and control equipment	29
208	ROADS AND S	TRUCTUR	RES							
209	336, 359	140	08	336 - Roads, Railroads, and Bridges 359 - Roads and Trails	ROADS	AND RO	AD STRUCTURES			
210					1	Roads	and Trails		*Roads, complete, including sub items listed in a-c  Surface, culvert, guards, signs, bank protection and appurtenant structures constructed and maintained in connection therewith	
211						а	Roadway Base Culverts	100		76
212						b	Roadway Surfacing	100		76
213						С	Bridges, Concrete, Steel or Masonry	100		76

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									*Complete item, including sub items listed in a-d	
214					2	Railroad	ds and Railroad Sidings		Ballast, ties, rails and accessories, culverts, guards, fencing, and appurtenant structures constructed and maintained in connection therewith	
215						а	Rails	100		76
216						b	Ties and Ballast	100		76
217						С	Road Beds, Railroad, including Culverts	100		76
218						d	Bridges, Concrete, Steel or Masonry	100		76
219					3	Bridge a	I and Trestles steel, concrete, or masonry	50	Foundation, piers, piles, structural members, girders, flooring, guardrails	6
220					4	Bridge a	and Trestles wood - covered	40	Foundation, piers, piles, structural members, girders, flooring, guardrails	6
221	1				5	Bridge a	and Trestles wood - un-covered	25	Foundation, piers, piles, structural members, girders, flooring, guardrails	6
222	RESERVOIRS									

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223	332	150	03	RESERVOIRS, DAMS, AND WATERWAYS	RESER	VOIR, ST	ORAGE AND DIVERSION			
224					1	Floating	g trash boom, complete	25	Logs, cable, connectors, anchors, chains	5
225					2	Riprap : reservo	and other protective works to the ir area	N/A	*None Quarried rock, concrete, soil cement	
226					3	Evapora Equipm	ems in the reservoir area, such as ation Measurement Station and ent, Fish and Wildlife Facilities, Docks, Patrolman's Towers	N/A	*None See specific item elsewhere in the table. Evaporation pans, anemometers, rain gages, nesting and feeding areas, piles, timbers, floats, gates, posts, wire	
227					4		eatures, excluding other principal items lsewhere	100		76
228					5	Timber	Structures	-		76
229						а	Bulkheads	25		76
230		1				b	Retaining Walls	25		76
231		1				С	Docks, Piers, and Moving Facilities	25		76
232	DAMS									

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233	332	151	041 & 042	RESERVOIRS, DAMS, AND WATERWAYS	DAMS A	AND DIKE	S, STORAGE AND DIVERSION			
234					1	foundat	re. Dam (all types including power plant ion or substructure when constructed ly with the dam)	100	*None  Embedded gantry crane rails, hatch covers and frames, embedded metal gates guides, protective plates, metal ladders, stairway nosing, handrails, parapet walls and pier nosings, tile, terrazzo concrete floor and wall surfacing, dam deck or roadway surfacing, seals and joints, special guard railings, riprap, embedded penstock and outlet works, piping and drains, foundation grouting, upstream concrete on rock apron	20
235					2	Structur	e, Diversion	100	*None	54
236					3	Structur	re, Spillway	50	Parapet wall, concrete and embedded parts, gate or section of gate, gate seals, roller train assembly, leaf, guides	
237					-	а	Gate, spillway	50	Concrete and embedded parts, gate or section of gate, gate seals, roller train assembly, leaf, guides	76

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238						b	Machinery, gate hoist	50	*Complete system for one gate  Motor, hoist, cable, bearings, hydraulic operating mechanism, motor operating mechanism	76
239						С	Sluiceways, including gates, gatehouses, and operating mechanisms	50	Concrete and embedded parts, gate or section of gate, gate seals, roller train assembly, leaf, guides	
240						d	Outlet gate operating machinery	50		76
241						е	Apron, downstream	N/A	*None Riprap	
242						f	Embankments	N/A	*None Riprap	
243					6	Dam Ap	L opurtenances			
244						а	Water level sensing and recording equipment	N/A	*None Floats, recorders, mercury, piping	

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245						b	Bulkhead or stop logs (Steel)	50	*Complete set for the entire system  Structural steel members, piles, timbers, beams, chains, cables, seals	
246						С	Bulkhead or stop logs (Wood)	25	*Complete set for the entire system	
247						d	Crane, complete (excluding mobile and crawler type)	50		76
248						е	Lifting beams	50	*Complete set of all beams related to main dam	76
249						f	Compressed Air Systems, excluding compressors 100 CFM and over	50		76
250						g	Engine Generator Set, 100 kW and over	40		76
251						h	Air Compressors, Complete, 100 CFM and over	25		76
252						j	Trash Racks	75	*Complete set for one outlet	71
253						k	Trash rakes and removal equipment	40		76

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254					7	Service	Facilities And Systems In The Dam			
255						а	Lighting system	35	Fixtures, switches, wiring	
256						b	Domestic water, plumbing, sewage and disposal system	40		
257						С	Power System, excluding power boards and engine generator sets 100 kW and over	50		76
258						d	Main power and lighting boards complete with attached accessory equipment	35		76
259						е	Elevator, complete with operating mechanism, excluding embedded parts	40		76
260						f	Heating, ventilating, air-conditioning, and thawing systems	40		
261	332	151	043	RESERVOIRS, DAMS, AND WATERWAYS	8	Outlet V	Vorks (Exclusive Of Power)			
262						а	Basic Features, excluding other principal items	100	*Complete item, including sub items a-n	76
263						b	Steel Access Bridge	100		76

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264					-	С	Tunnels and Water Conduits	100		76
265						d	Compressed Air System, excluding compressors 100 CFM and over	50		76
266						е	Water System, excluding piping	40		76
267						f	Sewer System, excluding piping	40		76
268						g	Power System, excluding power boards and engine generator sets 100 kW and over	40		76
269						h	Lighting System	35		76
270					_	i	Stilling Basin	N/A	*None	
271						j	Stoplogs and Bulkheads	50	*Complete set for all outlets  Concrete and embedded parts, gate or section of gate, gate seals, roller train assembly, leaf, guides	76
272						k	Gate	100		76
273						l	Machinery, Gate Operating	50	*Complete system for one gate  Motor, hoist, cable, bearings, hydraulic operating mechanism, motor operating mechanism	76

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274						m	Crane, complete (excluding mobile and crawler type)	50		76
275						n	Lifting Beams	50	*Complete set of all beams related to outlet works	76
276						0	All components not listed elsewhere	N/A	*None	
277					9		I. rr, complete with operating mechanism ng embedded parts	40		76
278					10	Engine	Generator Sets 100-kw or over	40		76
279					11	Trash F	Racks	100	*Complete set for one outlet	76
280					12		and Lighting Boards, complete with daccessories	35		76
281					13	Air Con	npressor, complete, 100 cfm or over	25		76
282	1				14	Timber	Access Bridge	25		76
283					15		overing, complete for one building, 3,000 and over	20		76

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284					16	Trash R	Removal Equipment	40		76
285	332	151	044	RESERVOIRS, DAMS, AND WATERWAYS	POWER	I RINTAKE	WORKS			
286					1	Basic F	eatures, excluding other principal items		*Complete Item, including sub item a-p	
287						а	Steel Access Bridge	100		76
288						b	Tunnels and Water Conduits	100		76
289						С	Surge Tanks	100		76
290						d	Penstock	100		76
291						е	Gates	100		76
292						f	Machinery, Gate Operating	100		76
293						g	Cranes, complete (excluding mobile and crawler types)	50	Crane, complete	76
294						h	Stoplogs and Bulkheads	50	*Complete Set for all Intakes	76
295						i	Lifting Beams	50	Complete Set for all beams related to intake works	76

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296						j	Flumes, Concrete or Steel	100		76
297						k	Lighting System	35		76
298						I	Water System, excluding piping	40		76
299						m	Compressed Air System, excluding compressors 100 CFM and over	50		76
300						n	Power System, excluding power boards and engine generator Sets 100 kW and over	100		76
301						0	Sewer System, packaged unit, excluding piping	40		76
302						р	All components not listed elsewhere*	N/A	*None	76
303					2		Elevators, complete with operating mechanism, excluding embedded parts	40		76
304					3		Engine Generator Sets 100 kW and over	40		76
305					4		Trash Racks	100	*Complete Set for one Penstock	76, 71
306					5		Main Power Lighting Boards, complete unit with attached accessories	35		76
307					6		Air Compressors, complete, 100 CFM and over	25		76

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308					7		Roof covering, complete for one building, 3,000 sq. ft. and over	20		76
309					8		Trash Removal Equipment	40		76
310	332	151	045	RESERVOIRS, DAMS, AND WATERWAYS	AUXILIA	I IRY DAM	S			
311					1		Use same property items as prescribed for Account 041 - MAIN DAMS, as applicable		Same retirement unit as prescribed for Account 041 - MAIN DAMS as applicable.	
312	332	151	046	RESERVOIRS, DAMS, AND WATERWAYS	MUNICI FACILIT		I INDUSTRIAL WATER DELIVERY			
313					1		Use same property items as prescribed for Account 044 - POWER INTAKE WORKS, as applicable		Same retirement unit as prescribed for Account 044 - POWER INTAKE WORKS as applicable.	
314	332	N/A	05	RESERVOIRS, DAMS, AND WATERWAYS	LOCKS	I	I			
315					1	Basic F	eatures, excluding other principal items		*Complete Item, including sub items a-o	
316						а	Structure, excluding Timber Structures	50		76

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317						b	Gates	50	*Miter Gate, consisting of right and left gate leaves, complete; or gate complete for other type.	76
318						С	Machinery, Gate Operating	50		76
319						d	Control House, separate from lock structure	50		76
320						е	Operating Building, Concrete (excluding replaceable roofs 3,000 SQ FT and over)	100		76
321						f	Water System	40		76
322						g	Sewer System	40		76
323						h	Heating and/or Ventilating System	25		76
324						i	Filling and emptying valves and operating equipment	40		76
325						j	Lighting system	35		76
326						k	Compressed Air System, excluding compressors 100 CFM and over	50		76
327				<b></b>		I	Main Power System, excluding Power boards and engine generator sets 100 kW and over	50		76
328						m	Stoplogs and Bulkheads	50	*Complete Set, for all Systems	76

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329						n	Cranes, complete, (excluding mobile and crawler types)	50		76
330						0	All Components not listed elsewhere	N/A	*None	
331					2	part of	ng Buildings, other than concrete, not ock structure, excluding control houses, ng replaceable roofs 3,000 and over per	50		76
332					3	Radio 1	owers, 80 feet and over	50		76
333					4	Elevato excludi	r, complete, with operating mechanism, ng embedded parts	40		76
334					5	Engine	Generator Sets, 100 kW and over	40		76
335					6		ower, Lighting And Control Boards, te with attached accessories	35		76
336					7	Air Con	npressors, complete, 100 CFM and over	25		76
337					8		e and Lock Approach Structures Guide Dolphins and Other Guide Structures,	25		76
338						a.	Mooring Dolphins and other facilities for temporary moorage for water-borne traffic	25		76
339						b.	Bulkheads and retaining walls	25		76

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				9			20		76
				10	includin auxiliary antenna	g transmitter, receiver power supplies,  generators, batteries, cables, and as, but excluding land and improvements,	15		76
WATERWAYS							L		L
332	152	043 for Outlet Works, 044 for Intake Power	RESERVOIRS, DAMS, AND WATERWAYS	BASIC V	VATERW	AY FEATURES			
		Works		1			100	Sections of concrete, steel, asbestos cement or other pipeline or penstocks, access manholes, vents, blow offs, gates and valves, cathodic protection equipment, supports and footings, linings, ladders	35
				2	Pipeline	3	100	Sections of concrete, steel, asbestos cement or other pipelines, access manholes, vents, blow offs, gates and valves, cathodic protection equipment, supports and footings, linings, ladders	37
	ACCOUNT NUMBER WATERWAYS	FERC ACCOUNT NUMBER ACCT	FERC ACCOUNT NUMBER  USBR ACCT  USBR ACCT  USACE ACCT  USACE ACCT  USACE ACCT  Outlet Works, 044 for Intake	FERC ACCOUNT NUMBER  USACE ACCT  FERC UNIFORM ACCOUNT NAME   WATERWAYS  152  043 for Outlet Works, 044 for Intake Power  RESERVOIRS, DAMS, AND WATERWAYS	FERC ACCOUNT NUMBER USACE ACCT FERC UNIFORM ACCOUNT NAME ITEM  9  10  WATERWAYS  332  152  043 for Outlet Works, O44 for Intake Power Works  WATERWAYS  152  152  153  154  155  155  155  156  157  158  158  158  158  158  158  158	FERC ACCOUNT NAME USACE ACCT SERCUNIFORM ACCOUNT NAME ITEM ITEM  9 Roof Coulding auxiliary antenna building  WATERWAYS  332 152 043 for Outlet Works, 044 for Intake Power Works  WATERWAYS Water Works  1 Water County Name ITEM ITEM  10 Radio concluding auxiliary antenna building  RESERVOIRS, DAMS, AND WATERWAYS  1 Water County Name ITEM  1 Water County Na	FERC ACCOUNT NUMBER  USACE ACCT  USBR ITEM  UNIT OF PROPERTY / PLANT	FERC ACCOUNT NUMBER USACE ACCT USACE ACCT FERC UNIFORM ACCOUNT NAME ITEM UNIT OF PROPERTY / PLANT ITEM LIFE (YR)*  9 Roof Coverings, 3,000 sq. ft. and over per building, complete for one building  10 Radio communications equipment location including transmitter, receiver power supplies, and antennas, but excluding land and improvements, buildings, and tower 80 feet and over  WATERWAYS  152 O43 for Outlet Works, O44 for Intake Power Works  1 Water Conduit (Penstock, Tunnels, Intake, and Discharge Pipe)  10 Water Conduit (Penstock, Tunnels, Intake, and Discharge Pipe)	ACCOUNT NUMBER    SUBR   USACE   FERC UNIFORM   ITEM   ITEM   UNIT OF PROPERTY / PLANT ITEM   LIFE (YR)*   RETREMENT UNITS* & MAINTENANCE ITEMS

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346					3	Wells		N/A	*None  Casing, screen, concrete pad for pumping units, gravel pack					
347					4	Stilling	Basin	N/A	*None					
348					5	Timber	flumes	25		76				
349					6	Concre	te or steel flumes	50		76				
350	332	152	075		TAILRA	CE				76				
351					1	Tailrace	)	100		76				
352					2	Stoplog	s and Bulkheads	50		76				
353	332	152	09		CHANNI	ELS AND	CANALS, LATERALS, DRAINS							
354					1	Basic F			*Complete item, excluding sub items a-c Sections of levee, dike, embankment of waterway					
355						а	Concrete Buildings, excluding replaceable Roof Coverings of 3,000 and over	100		76				

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356						b	Other Concrete Structures	100		76
357					-	С	Other Components not listed elsewhere including excavated channels and canals	N/A	*None	76
358					2		L gs, other than concrete excluding able Roof Coverings of 3,000 or over per	50		76
359					3		looring Facilities, Bulkheads Training Trash Booms, Timber	25	*Independent structure, complete	76
360					4		overings, complete for one building, 3,000 r more per building	20		76
361	332		11		LEVEES	S AND FL	OODWALLS			76
362					1	Basic F	eatures		*Complete item, including sub items a-c	76
363						а	Roadways	100		76
364						b	Sewers, drainage facilities, and outfalls	100		76
365						С	Other Components not listed elsewhere	N/A	*None	
366	332	153	11	RESERVOIRS, DAMS, AND WATERWAYS	OPEN V	.IVATERW	AY STRUCTURES AND TUNNELS			

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367					1	check, i	aterway structures such as tunnels, nlet and outlet transitions for siphons and g plants, drops, chutes, etc.	100	Structures such as check, inlet and outlet transitions for siphons and pumping plants, drops, chutes, drain inlets, rating sections, measuring structures, turnouts, weirs, tunnel supports, cableway and car	76
368					2	tanks, s	and penstock structures including surge urge chambers, associated storage nd reservoirs	50	Access manholes, vents, gates, valves, supports and footings, linings, ladders	56
369					3	Flumes,	other than timber	100	Footings, piles, structural members, sheet metal sections, walks, rails	76
370					4	Flumes,	timber	25	Footings, piles, structural members, sheet metal sections, walks, rails	28
371	WATERWAY P	ROTECTIV	/E WORKS							
372	332	154		RESERVOIRS, DAMS, AND WATERWAYS	WATER	WAY PRO	TECTIVE WORKS			
373					1	runoff w	ls, waste way structures, overchutes, ater collection systems, culverts for flood flows	N/A	*None Sections of concrete, steel, or other materials.	
374	WATERWHEEL	S, TURBI	NES, AND	GENERATORS						

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375	333	165	072	WATERWHEELS, TURBINES AND GENERATORS			I 5, TURBINES, AND GENERATORS TURBI TION WITH PENSTOCKS OR FLUME TO		MP/GENERATOR	
376					TURBIN	IES			See sub-components, listed below.	
377					1		s - Reaction and Impulse Type and Furbines			
378						а	Generator Turbine runner	45	Cone, blade, hub, bolts, buckets, keys, and main shaft	46
379						b	Pump/Turbine runner with 1,500-hp (1,120 kW) prime mover or larger	50		46
380						С	Wearing rings, runner	20		74
381					2	Turbine	Components - Reaction Type			
382						а	Scroll case assembly	100	Stay ring, case, head cover, bottom ring, facing plate, pit liner, platforms	
383						b	Wicket gate assembly	100	Wicket gate, gate operating ring and linkage, servomotor, connecting rod, stems and bearings, grease pump and motor	

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384						С	Turbine Shaft, including thrust collar and Kaplan control not located in hub	100		Need justifica- tion
385						d	Turbine guide bearings and thrust bearing	50	Main guide bearing, housing, oil pump and motor, piping, controls, cooling system, gages, temperature relay	62
386						е	Draft tube	100	*None Draft tube liner, splitter noising	
387						f	Embedded turbine parts	50		76
388						g	Rotor and Shaft	50	*Rotor winding, complete set for one unit and shaft Field pole, amortisseur winding, collector rings, brushes, spider, braking ring, fans	44
389					2	Turbine	Components - Impulse Type			
390						a	Housing assembly	N/A	*None  Upper and lower housing discharge pit liner, baffle	

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391						b	Needle-valve assembly	N/A	*None Needle, nozzle, deflector, vanes	
392						С	Main bearings	50	Main bearing oil pump and motor, piping, controls, cooling system, gages, temperature relay	62
393						d	Embedded turbine parts	50	Complete set for one unit	76
394						е	Rotor and Shaft	50	*Rotor winding, complete set for one unit and shaft Field pole, amortisseur winding, collector rings, brushes, spider, braking ring, fans, shaft	44
395					3	Gove rnors				

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396						а	Mechanical governor	50	Governor ball head mechanism, head, drive motor, permanent magnet generator, speed switches, tachometer generator, pilot valve, valve servomotor, transfer valve, compensating mechanism, speed changer and indicator, speed droop adjustment mechanism and indicator, gate limit and position mechanisms and indicators, restoring mechanism, limit switches blade control valve, pump, unloaded valve and pressure switch, motor, controls, pressure tank; sump tank, piping, gages, auxiliary parts such as brake air pressure gage, generator braking control	30
397						b	Governor oil pressure pump, complete for one unit	40		30, 76
398						С	Governor air compressor, 100 CFM and over	25		30, 76
399						d	Digital governors - Control System	15	Upgrading the governor from mechanical to digital is a capital improvement on the electronic component.	30
400						e	Governor oil and lubricating oil systems which includes oil storage, purification, pumps, and piping	40	Oil pumps, servo motors, valves, filters, accumulators	30

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401					4	Stator (	Components		Individual coil, ring buses, stator iron, resistance temperature detectors	
402						а	Stator, 11.5-kV and above - Stator windings	30		52
403						b	Stator, Below 11.5-kV	50		52
404						С	Stator core iron, 11.5-kV and above	50		
405						d.	Stator core iron, below 11.5-kV	100		
406					5	Excitati	L on Systems And Appurtenances			
407						а	Rotating Excitation System	40	Armature field pole, commutator, brushes, diode, silicone controller rectifier, fuse, current transformer, bearings, frame, rheostat, field circuit breaker, contractor, relay, wiring	25
408						b	Static Excitation System	30	Replacing cards, rectifiers, bridge fans, bridges.	25
409						С	Static Excitation - Power Section Only	30	Replacing rectifiers, bridge fans, bridges	25
410						d.	Digital Excitation System - Control System	15		25

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411						f.	Excitation Supply Transformer	40		25
412					6	Other C	Components			
413						а	Pressure Regulator and Energy Absorber (when included as part of the turbine or scroll case assembly)	45	Valve body, valve stem, valve disk, pilot valve, dashpot, bell crank, connecting rod, piston, air vent, position indicator, pressure and motion recorder	38
414						b	Penstock Valves Or Gates (at entrance to scroll case)	50	Valve body, stem, leaf, hydraulic operating mechanism, motor, control equipment, bypass valves and fittings	29
415						d.	Speed Increaser	20	Housing, bearings, fittings, lubricating system, gears	50
416						е	Compressor, complete, primarily for draft tube water depression while condensing	25		76
417					7		L aneous Piping Systems And Their y Equipment			
418					8	Grease Operati	and Oil Lubrication Systems for Turbine ion	N/A	*None  Tanks, pumps, motors, piping, purifier, dying oven, filter pads, valves, fittings	

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419					9	for Gen	ater System including Pumps and Piping erator, Air Compressor, And Air oning Equipment, Cooling and Filter Plant	40	Pumps, motors, piping, valves, fittings	
420					10		pray sprinkler and carbon dioxide system protection of oil storage and oil purifier	N/A	*None Pumps, motors, piping, valves, fittings, nozzles, tanks	
421					11		lers and their piping furnished as part of a or (main units only)	40	Piping, valves	76
422	ACCESSORY E	LECTRIC	EQUIPME	NT						
423	334	170	073	ACCESSORY ELECTRIC EQUIPMENT	ACCES	SORY EL	ECTRIC EQUIPMENT			
424					1	and Pur (For pla	ory Electrical Equipment – Power Plants mping Plants nts with multiple units totaling 1,500-Hp ove. Use the following Units Of Property apply.)	50	For below 1,500-hp, it is expected that replacements as required will be made as a part of maintenance.	
425					2	Miscella	neous Equipment		Complete unit, including sub items a-f	
426						а	Generator, Neutral Grounding Equipment including Neutral Breakers	50	Complete System for all Generators	76

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427						b	Main generator bus or cable system	50	Complete System for one Generator or Transformer	76
428						С	Station Service Main Bus	50	*Complete system for one generator or transformer  Structure and supports, cable, bus, conduit, protective, housing, instrument transformers, surge protective equipment, generator neutral system, disconnecting switches, insulators, fittings, and accessories	76
429						d	Power Cables	40	*Complete system for one generator or transformer Splices, supports	8
430					-	е	Annunciator System, excluding Switchboard mounted equipment	50		76
431						f	Grounding System, Including Powerhouse Grounding Mat	50		76
432						g	All components not listed elsewhere	N/A	None	76
433					3	or Gas more pl	Interpretable of the service of the	50	Bushings, tank, core, coils, tap changer	76

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434					4		enerator Switchgear and Breakers ag Air Compressors when applicable		Breaker or Switchgear, complete with Accessories	76
435						а	Circuit Breaker—unit, complete with accessories	45	Bushings, contacts, operating mechanism, tanks and frame, oil pumps and motors, air compressors and motors, bushing current transformers	58
436						b	Motor Control Switchgear – associated with units 3,000-hp (2,240 kW) and above	35	(See circuit breaker typical minor items above) Reduced voltage starting equipment.	58
437						С	Circuit Breaker—Main Station Service, complete	35	Bushings, contacts, operating mechanisms, breaker draw out unit, tanks and frame, bushing current transformer	58
438						d	Board or panel, Control—devoted to a single purpose, with accessory electric equipment	35		58
439						е	Control and System Protection Equipment, complete, devoted to a single purpose	15	Meters, instruments, relays, control devices, master clock, wiring, terminal blocks	17

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440					5		Fault Recorder usly titled Fault Recorder and Master	15	Starting sensors, microprocessors, analog-to-digital converters, electronic memory assemblies, video display units, keyboards, computer-type printers, disk drives sequential event recorders and communications interface equipment	22
441					6	Auxiliar Genera accesso	y Power Supply System, Engine tor Set 100 kW and over, complete with ories	35		23
442					7	Battery accesso	Switchboards including attached pries	35		76
443					8	Distribu	tion Boards	20	Motor generator, circuit breaker, contractors, switches, instruments, control devices, rectifier units, transformers	3
444						а	Inverter - 24 volts and above	20		3
445						b	AC Distribution Board	35	Replace breakers, wiring	3
446						С	DC Distribution Board	25	Need maintenance items	3, 21
447					9	Battery	Bank, 48 V And Above		Battery, complete	
448						а	Battery - Gel Cell	5	Battery cells	Need to add info to justifica- tion 4

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449						b	Battery - Valve Regulated Lead Acid	5	Battery cells	4
450						С	Battery - Vented Lead Acid (flooded)	30	Battery cells	4
451						d	Battery - Nickel Cadmium (NiCad)	30	Battery cells	4
452						f	Battery Charging System	20		
453						е	Hydrogen Fuel Cell	15	Fuel cell	4
454					11	Control	I and System Protection Equipment	15	Current breaker, control devices and instruments, wiring	17
455					12	Testing	g facilities installed	N/A	*None Test panels, devices wiring	
456					13	Distribu dam sit	ution lines used only for carrying power to tes or diversion structures	50	*None  Poles, wires, cross arms, insulators, transformers, circuit breakers	
457					14	Antenn	a Towers, 80-feet and higher	50		76
458					15	Radio	or Microwave Buildings	50		76
459					16	and Un	g and Power Boards for Station Service it Auxiliaries, including Breakers, rmers, and attached Accessories	35		76

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460					17	attached	and auxiliary switchboards, including d accessories (excluding applicable items elow), complete, devoted to a single	50		76
461					18	includin	Regulation and Excitation Equipment g Motor-Generator Set, when required eneration units only)	35		76
462					19	Control single p	Cable System, complete, devoted to a urpose	35		76
463					20	Load Co	ontrol Equipment, complete, for entire	15		76
464					21		ng Annunciation mounted separately vitchboard	15		76
465					22	Data Lo from Sw	gging Equipment mounted separately vitchboard	15		76
466					23		nic Supervisory Control and Data g equipment	15		76
467		474			24	Central	Processor, electronic control installation	15		76
468					26	complet transmit generate excludir	nicrowave, or carrier equipment, e system at one location including ter receiver power supplies, auxiliary ors batteries, cables, and antennas, but ig land and improvements, buildings, and the and over	15		76

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469					27	Automa	tic Recording Oscillographs	15		76
470	TRANSMISSIO	N PLANT	(SUBSTAT	ION EQUIPMENT)						
471	352, 353	175	USACE does not have FERC 35X	STRUCTURES AND IMPROVEMENTS STATION EQUIPMENT	STATIO	N EQUIP	MENT SUPPORTS AND STRUCTURES			
472			series		1		te foundations, piers, settings, and s for equipment	50	Foundations, footings, and supports for equipment such as transformers, circuit breakers, air compressor, synchronous condensers, oil tanks	53, 59, 75
473					2		tructure—fences, platforms, railings, gratings, appurtenant to station equipment	50	Modified if necessary to accommodate equipment replacement	59, 53
474					3	Timber	Structure	50	Poles, beams	59, 75
475					4	Bus An	d Insulators—Cable Or Pipe Type	50	Bus equipment, cable, conductors, connectors, insulators, fittings	
476					5	Transfo	rmers	-		
477						a.	Main Power Transformers	45	Bushings, tank, core, coils, tap changer, load ratio-control equipment, conduit, pipe fittings, cooling equipment, control devices	66

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478						b	Instrument Transformer (current, potential, and metering set)	45		65
479						С	Voltage Regulating Transformers	40		73
480						d	Power Regulating Transformers	45		36
481						е	Grounding Transformers	45		64
482						f	Mobile Power Transformers	40		67
483						g	Station-Service Transformer	35		68
484					6	Circuit	IBreakers And Operating Mechanisms		Bushings, contacts, operating mechanism, tanks, frame, bushing-current transformer, bushing-potential device, compressed air system, and hydraulic system	13
485						а	Power Circuit Breaker - Air Magnetic / Air Blast	45		13
486						b	Power Circuit Breaker - Oil Tank Type	50		13
487						С	Power Circuit Breaker - SF6 Type	50		13
488						d	Power Circuit Breaker - Vacuum Type	50		13
489					7	Interrup	L oter Switches	20	Insulators, contacts, operating mechanism	33

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490					8	Discon	necting Switches	50	Miscellaneous parts for disconnect, sectionalizing, selector grounding switch, and interrupting elements	57
491					9	Capaci	tors			
492						а	Capacitor Bank, Shunt—Bank includes a 3-phase series-parallel grouping of capacitor units with capacitor steel racks and supporting insulators.	25	Capacitor unit, supporting insulator, fuse, buses, connectors	11
493						b	Capacitor Bank, Series—Assembly includes a single phase series-parallel grouping of capacitor units with capacitor steel racks, supporting insulators, and a set of protective equipment, i.e., relays, controls, bypass gap assembly, shorting and load break switch, damping equipment, fuses, and protective devices.	25	Capacitor unit, supporting insulator, fuse, buses, and components of set of protective equipment	11
494						С	Coupling Capacitor Voltage Transformer (CCVT) (69-kV and above)	30	Capacitor unit, line tuning unit, potential device, adjustment unit, coaxial cable	18
495					10	Reacto	Lrs, Shunt Or Series			

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496						а	Reactor, Dry Air Core	25	Coil, core, tank, bushing, connector, support insulators	41
497						b	Reactor, Oil Immersed	35		41
498					11	Surge F	L Protection, complete 3-phase set	35	Surge arrester units, connector, support insulators	2
499					12		poards, Cubicles, Control Cables And enances	15	Meters, instruments, relays, control devices, master clock, wiring, terminal blocks	17
500					13	Digital I	Fault Recorder	15	Meters, instruments, relays, control devices, master clock, wiring, terminal blocks	22
501					14	High Vo	oltage Direct Current (HVDC) And Static stem (SVS)	30	Power modules, reactors, resistors, capacitors, frames, connectors, wiring and associated control equipment	31, 63
502					15	Auxiliar	y Equipment			
503						а	Cranes, Hoists, Etc., and the machinery for operating them	50	Bridge traveling and trolley traveling equipment, controls, motors, runways collectors, blocks	19
504						b	All Other Cranes, Hoists, Derricks, and associated cableways.	50	Motors, cables, controls, transfer car	19

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505						С	Un-tanking tower and transfer track	50	Steel members, rails, ties	
506					16	Compre	L essed Air System complete with attached ories			1
507						a.	Station air System, excluding compressors 100 CFM and over	50	Compressor, motor, tanks, piping, controls, and protective devices	1, 76
508						b.	Air Compressors and motor, complete, 100 CFM or over	25	Compressor, motor, tanks, piping, controls, and protective devices	1, 76
509					17	Auxiliar	Iy Power Supply System			
510						a.	Engine Generator Set, Auxiliary	35	Generator, engine, and accessories	23
511					18		L	20	Motor generator, circuit breaker, contractors, switches, instruments, control devices, rectifier units, transformers	3
512						а	Inverter - 24 volts and above	20		3
513						b	AC Distribution Board	35		3
514						С	DC Distribution Board	25		3, 21
515					19	Battery	L	<u> </u>		
516						а	Battery - Gel Cell	5	Battery cells	4
517						b	Battery - Valve Regulated Lead Acid	5	Battery cells	4

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518						С	Battery - Vented Lead Acid	30	Battery cells	4
519						d	Battery - Nickel Cadmium (NiCad)	30	Battery cells	4
520						е	Battery - Hydrogen Fuel Cell	15	Fuel Cell	
521					20		L aneous Piping Systems And Their y Equipment			
522						а	Transformer Oil System which includes Storage Pumps, Piping, ad Purification Facilities.	25	Tanks, pumps, motors, purifier, drying oven, filter pads, piping, fittings, valves	
523						b	Circuit Breaker Oil System which includes Storage, Pumps, Piping And Purification Facilities	25	Tanks, pumps, motors, purifier, drying oven, filter pads, piping, fittings, valves	
524						С	Raw Water System which includes Pumps And Piping For Transformer Cooling	25	Pumps, motors, nozzles, piping, fittings, valves	
525						d	Dry-Pipe Fixed Spray Water System for fire protection of Transformers	25	Pumps, motors, nozzles, piping, fittings, valves	
526	INSTALLED SU	JPERVISO	RY CONTR	OL AND COMMUNIC	ATIONS I	QUIPME	ENT	<u> </u>		
527	397	180		GENERAL PLANT MISCELLANEOU S EQUIPMENT			ERVISORY CONTROL AND DNS EQUIPMENT			
528					1	Radio (	Communication Fixed Station			

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529						а	Transmitter And/Or Receiver Set, Multi- Channel Radio	10	Tubes, solid-state components, filters, crystals, capacitors, coaxial cable, fuses	40
530						b	Transmitter And/Or Receiver Set, Single Channel Radio	25		70
531						С	Antenna Tower, Radio, Including Billboard-Type Reflectors	40	Foundation, structural members, guys, hardware, antenna	15
532						d	Motor (Engine) Generator Set, Communication	15	Engine, generator, starting equipment, battery, voltage	34
533					2	Microw	ave Communication			
534						а	Microwave System (main and standby radio-frequency and multiplex equipment)	10	Tubes, solid-state components, filters, crystals, capacitors, coaxial cable, fuses	40
535						b	Active Antenna Tower Microwave, including Billboard Type Reflectors	20	Foundation, structural members, guys, hardware, antenna	15
536						С	Passive Antenna Tower – Reflector mounted on a hillside or mountain top to redirect the signal	40		15
537						d	Motor (Engine) Generator Set, Communication	15	Engine, generator, starting equipment, battery, voltage regulator	34
538					3	Telepho	nne Communication			

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539						а	Station, Signal, Or Call Communication Equipment (Intrasite)	10	Telephone switchboard, phone sets, signal equipment, distributing frame, cables, speaker, microphone	60
540						b	Telephone Intercommunication System	10	Telephone instruments, manual or automatic switchboard facilities, cable, battery, charger, protection equipment	60
541						С	Power Line Carrier System (For Telephone Communications)	15	Solid-state components, filters, capacitors, coaxial cable, fuses	69
542					4		Current Communication Line Carrier)			
543						а	Transmitter and/or Receiver Set, Carrier (exclusive of sets used for telephone communications)	25	*One unit for all traps  Solid state components, fuses, filters, capacitors	70
544						b	Coupling Capacitor Voltage Transformer (CCVT) (69-kV and above)	30	Capacitor unit, line tuning unit, potential device, adjustment unit, coaxial cable	18
545						С	Carrier Wave Trap (tunable and non-tunable)	35	*One unit for all traps Tuning packs	12

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546					5	TV Clos	sed Circuit	10	Camera, camera main tube, positioning devices, transistorized circuit elements, switches, coaxial cable, wiring, receiver, picture tube and associated controls and equipment	14
547					6	(SCAD	sory Control And Data Acquisition A) / Energy Management System (EMS) tary Designed System			
548						а	Central Processor or Computer with associated main memory, central processing unit, and back-up storage devices, Include intersite data-logging system.	10	Tape drives, hard/floppy disks, switches, software, etc.	55
549						b	Remote Terminal Unit, (RTU), Input/Output Device	10	Individual consoles, panels, cubicles, switches, pushbuttons, indicating lights, relays, transistorized card assemblies, tone transmitters, and receivers, wiring	55

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550						С	Lifecycle Designed System	40	Individual component such as servers, RTUSs, etc. replaced in accordance with IT rules.  Open system design using commercially available components such as servers, RTUs, PLC devices and COTS software or locally developed software. These system components are replaced periodically to sustain the system to Service Lives exceeding 10 years	55
551						d	Solar Voltaic Power Supply System, 100 Watts and above	15	Panel, photovoltaic cells, battery, battery charger, and voltage regulator	49
552						е	Fiber Optic Cable, Optical Ground Wire (OPT-GW), and All Dielectric Self Supporting (ADSS)	50	Install with/on Wood or Steel Poles	26
553						f	Fiber Optic Multiplexer	10		27
554					7	Sequen	tial Event Recorder System (SER)	15	Solid-state components, logic circuit boards, point cards, memory cell, digital clock, printer or typewriter, pushbuttons, wiring	47
555					8	Uninter	ruptible Power Supply System (UPS)	10	Circuitry, interconnected wiring and miscellaneous solid state devices	72

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556	TOWERS AND	FIXTURES	S							
557	354	181	USACE does not	TOWERS AND FIXTURES	TOWER	S AND FI	XTURES			
558			have FERC 35X series		1	Steel To	ower Structures with appurtenant fixtures dware	*Steel Structure, Steel Pole, or Concrete Pole Transmission Line Section  Structural steel members of tower, anchors, guys, braces, brackets, cross arms, guards, ladders, step bolts, railings, signs, protective fencing, riprap	53	
559					2	Tower a	and fixture foundations and footings	100	Normally, tower foundations and footings are not expected to be replaced when towers are replaced because of storm damage.	76
560	POLES AND FI	XTURES		1		1			1	
561	355	182	USACE does not have	POLES AND FIXTURES	POLES AND FIXTURES  *An identifiable transmission line section replacement, point-to-point or tap-to-tap.					

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562			FERC 35X series		1	Wood P Section	oles/Structures Transmission Line	50	One or more poles not apart of a complete section replacement, guys, anchors, head, arm and other guys, guy guards, guy clamps, guy insulators, pole plates, brackets, cross arms and braces, extension arms, insulator pins and suspension bolts, reinforcing and stubbing, pole steps, signs, rock backfill	75
563					2		ructures, Steel Pole, Or Concrete Pole ssion Line Section	50	One or more poles not part of a complete section replacement, bracket arms, step bolts, signs, footings and foundations	53
564					3		e Pole Structure with appurtenant and hardware (including Footings And ions)	50	One or more poles not part of a complete section replacement, arms, step bolts, signs, footings and foundations	53
565	OVERHEAD CO	ONDUCTO	RS AND D	EVICES		I			l	
566	356	183	USACE does not have	OVERHEAD CONDUCTORS AND DEVICES	GENER	ENERAL COMPONENTS				
567			FERC 35X series		1	Line dis above	connecting switches, 3-phase, 69-kV or	50	Blades, operating mechanism, support insulators	57
568					2	Surge p	rotection, 3-phase, 69-kV or above	35	Surge arrester unit, connectors, support insulator	2

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569					CONDU	CTORS				
570					1	On woo	d poles or structures	50	Conductor, overhead on wood structures. Conductors are assumed to last as long as their supporting structures.  Less than the point-to-point identified spans of insulated and bare conductor, damping devices, armor rods, connectors, spacers	75
571					2	On stee	I towers or steel or concrete poles	50	Same as above	53
572					GROUN	D WIRES				
573					1	On woo	d poles or structure	50	Ground wire, overhead on wood structures. Ground wires are assumed to last as long as their supporting structures.  Less than the point-point identified spans of insulated and bare conductor, damping devices, armor rods, connectors, spacers	75
574					2	On Stee	el towers or steel or concrete poles	50	Same as above	53
575	UNDERGROUN	ND CONDU	JCTORS AN	ND DEVICES					L	
576	358	184	USACE does not have	UNDERGROUND CONDUCTORS AND DEVICES	CONDU (BURIEI		ARINE, OR IN-CONDUIT)			

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577			FERC 35X series		1		tor, Underground, 15-kV through 35-kV. electric insulated cables in a replaceable	40	Joint connector, stop joint, insulating materials, splices, insulators, racks, trays, potheads, supports	16
578					2		tor, Underground, above 35-kV Oil and ulated cables in a replaceable section.	25	Joint connector, stop joint, insulating materials, splices, insulators, racks, trays, potheads, supports	16
579					3	Pressur media	e Maintaining Equipment for insulating	40	Pressure tanks, control devices, gages	16
580					4		s, Surge (lighting)—3-phase installation, nd above	35	Surge arrester unit, connectors, support insulator	2
581	UNDERGROUN	ID CONDU	JIT			l				
582	357	185	USACE does not have FERC 35X series	UNDERGROUND CONDUIT	1	Undergr Appurte	round Duct Lines, Conduits, and nances	100	Conduit envelope, (concrete, tile, brick, steel, etc.) manhole, cable vault, ventilating equipment, auxiliary equipment such as drainage connections, sump pumps, lighting system	
583	MISCELLANEC	US INTAI	NGIBLE PL	ANT		1			'	
584	303	190	N/A	MISCELLANEOU S INTANGIBLE PLANT	1	intangib in the co	ights, licenses, privileges, and other le property items necessary or valuable anduct of project operations are not to replacement.	N/A	*None	

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585	MISCELLANEC	OUS INSTA	ALLED EQU	JIPMENT						
586	335, 398	199	074	MISCELLANEOU S POWER PLANT EQUIPMENT	_	ER PLANT	PMENT FOR GENERAL STATION USE 'S; AND PUMPING PLANTS 1,500-HP			
587					1	manufac shipped assemb	and Prime Movers purchased from cturer's stock or of standard design and as units with only installation and minor ly required at the site and those with total pacity less than 1,500-hp	35	*None  Impeller, bearing, packing, glands, shaft, column section, packing assembly, motor winding, rotor, bearing	76
588					2	Un-Wat	ering and Low-Level Drainage System	50	Bulkheads, pumps, piping	76
589					3	Oil Stora	age, Handling and Reclaiming System	50	Tanks, pumps, motors, piping, purifier, drying oven, filter pads	76
590					4	vacuum over use	fiers, Fixed or Portable, Centrifugal, or Clay Treatment, type, 600 GPH or ed for lubricating oil, hydraulic oil or ng and insulating oil	35		76
591					5	Gages a	and Indicating Equipment	25		76
592					6	Raw wa	ter system for plant equipment cooling	40	Pumps, piping, valves, tanks, strainers	76
593					7		stection System (water and chemical for station use)	25	Pumps, piping, tanks, cabinets, hose, nozzles, tank hangers and support, regulator, alarm system	76

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594					8	Air Con	ditioning System	25	Ducts, fans, motors, louvers, controls, grilles, gratings	
595					9	Station	Air System			
596						а.	Station air System, excluding compressors 100 CFM and over	50	Tanks, piping, controls, and protective devices	1, 76
597						b.	Air Compressors and motor, complete, 100 CFM or over	25		1, 76
598					11	operation	I, Hoists, etc., and the machinery for ng them (Associated with Category 2 gs, excluding Mobile and Crawler types	50	Bridge traveling and trolley traveling equipment, controls, motors, runway collectors, block	19
599					12	All othe	r Cranes and Hoists	50	Motors, cables, controls, transfer car	19
600					13	Uninter	ruptible Power Supply System (UPS)	10	*Uninterruptible Power Supply – station service type transformer, battery bank, rectifier-charger, inverter-regulator, and station interrupter  Circuitry, interconnected wiring and miscellaneous solid state devices	72
601					14	Power	Plant Communications Equipment			76

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602						а	Antenna Tower, 80- feet and higher	50		76
603						b	Radio or Microwave Equipment Buildings	50		76
604						С	Plant communications equipment, including telephone, code call, and voice recording systems	15	*Each independent system, complete	76
605						d	Radio, Microwave or Carrier Equipment complete system at one location including Transmitter, Receiver, Power Supplies, Auxiliary Generators, Batteries Cables And Antennas, but excluding Land and Improvements, Buildings and Towers 80 Ft. and over	15		76
606	335	-	20	MISCELLANEOU S POWER PLANT EQUIPMENT	PERMA PLANT	I NENT OF	L PERATING EQUIPMENT - FLOATING			76
607					1	Dredge	is .	50		76
608					2	Tug Bo	ats	25		76

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609					3	Tenders		25		76
610					4	Drift Col	llectors	25		76
611					5	Tow Box	ats	25		76
612					6	Patrol B	oats	25		76
613					7	Snag Bo	pats	25		76
614					8	Drill Boa	ats or Barges and Jet-probing Barges	25		76
615					9	Derrick	Boats or Barges	25		76
616					10	Maneuv	er Boats	25		76

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617					11	Barges	, Mooring	25		76
618					12	Other M	lajor Non-group Floating Plant	25	*Boat, barge, vessel, or plant item complete with all Accessory Equipment	76
619					13	Miscella \$25,000	aneous Floating Plant, initial cost, new of O or more per unit			
620						а	Barges, or Floating Work Platforms	25		76
621						b	Boat, Outboard, excluding Motors	20		76
622						С	Motors, Outboard	10		76
623					14	Other it	I ems not listed elsewhere	25		76
624	335	-	20	MISCELLANEOU S POWER PLANT EQUIPMENT	AUTOM	.IIOTIVE LA	AND PLANT			
625					1	Station C	Wagons (passenger car chassis) Group	7		76
626					2	Ambula	nces (light) - Group D	10		76

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627					3	Ambula	nces (heavy) - Group DI	10		76
628					4	Trucks,	1/4-ton, 4x4- Group E	7		76
629					5	Carryall: Truck C	s (including Station Wagons mounted on hassis) Group E1	10		76
630					6	Trucks,	Panel and sedan Delivery Group E2	7		76
631					7	Trucks,	Pickup - Group F	7		76
632					8	Trucks,	3/4 - 1 - Ton - Group G	7		76
633					9	Trucks a	and Truck Tractors 1 1/2-Ton - Group H	8		76
634					10	Trucks a	and Truck Tractors, 2 1/2-Ton - Group I	8		76

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635					11	Trucks a	and Trucks Tractors, 3-4-Ton-Group J	10		76
636					12	Trucks a	and Trucks Tractors, 5-10-Ton-Group K	10		76
637					13	Trucks a Group L	and Trucks Tractors, 11-Ton and over	12		76
638					14	Trucks,	Wrecker - Group M	8		76
639					15	Fire Tru	cks - Group N	12		76
640					16	Trucks,	Refuse - Group O	8		76
641					17	Trucks, and Mai	Power Line and telephone Construction ntenance Group P	8		76
642					18	Snow P	lows, Rotary- Group Q	12		76

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643					19	Trucks,	Drill Rig - Group R	8		76
644					20	Trucks,	Mobile Crane - Group S	15		76
645					21	Trucks, T	Compressor or Welder Mounted - Group	8		76
646					22	Trucks,	Refrigerator - Group U	8		76
647					23	Trucks,	Military Design, 1/4-Ton- Group V	7		76
648					24	Trucks,	Military Design, 1/2-1-Ton- Group W	7		76
649					25	Trucks a 1/2- Tor	and Truck Tractors, Military Design, 1 n-Group X	8		76
650					26	Trucks a 1/2- Tor	and Truck Tractors, Military Design, 2 n-Group Y	8		76
651					27	Trucks a Ton-Gro	and Truck Tractors, Military Design, 3-4- oup Z	10		76

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652					28	Trucks a	and Truck Tractors, Military Design, 5-10- oup AA	10		76
653					29		Trucks and Truck Tractors, Military Design, 11- Ton and over -Group BB			76
654					30	Trucks,	Military Design, Amphibious Group CC	10		76
655					31	Motorcy	rcles, and Scooters, All Types Group DD	5		76
656					32	Trailers	, 1/4-Ton-2 1/2-Ton All Types Group EE	20		76
657					33	Trailers Group F	and semi-Trailers, 3-15-Ton All Types FF	20		76
658					34	Trailers Group (	and semi-Trailers, 16-30 Ton All Types GG	20		76
659					35		and semi-Trailers, 30 Ton and over, all Group HH	20		76
660	335	-	20	MISCELLANEOU S POWER PLANT EQUIPMENT	OTHER	MOBILE	LAND PLANT			

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		US	BR, WAPA	, USACE, BPA   FED	ERAL HY	DROPOW	ER EQUIPMENT REPLACEMENT BOOK	- TABLE 6 "BI	LUE PAGES"	
TABLE ITEM #	FERC ACCOUNT NUMBER	USBR ACCT	USACE ACCT	FERC UNIFORM ACCOUNT NAME	ITEM	SUB-	UNIT OF PROPERTY / PLANT ITEM	SERVICE LIFE (YR)*	RETIREMENT UNITS* & MAINTENANCE ITEMS	JUSTIFI- CATION NUMBER
661					1		Items not listed elsewhere, including Items with initial cost, new, of less than \$25,000 per unit			76
662					2	Locomo	tives and Railroad Cars	100		76
663					3	Tractors more	s, Wheel-mounted, initial cost \$25,000 or	12		76
664					4	Tractors, Crawler, including Bulldozers initial cost \$25,000 or more		15		76
665					5	Cranes	Mobile			76
666						а	Cranes, Wheel-mounted, excluding those classified as Automotive Equipment	15		76
667						b	Cranes, Crawler type	15		76
668					6		Earth-moving Equipment, initial cost, \$25,000 or more per unit			76
669						а	Scraper-carriers, Self-propelled or Towed	15		76
670						b	Rollers, Self-propelled or Towed	15		76

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TABLE ITEM #	FERC ACCOUNT NUMBER	USBR ACCT	USACE ACCT	FERC UNIFORM ACCOUNT NAME	ITEM	SUB-	UNIT OF PROPERTY / PLANT ITEM	SERVICE LIFE (YR)*	RETIREMENT UNITS* & MAINTENANCE ITEMS	JUSTIFI- CATION NUMBER
671						C.	Back Hoes, excluding Back Hoe attachments for general purposes Tractors or Cranes	15		76
672						d.	Loaders, excluding attachments for general purpose tractors	15		76
673						е	Ditchers, Trenchers, Excavators, and Back fillers, excluding attachments for other basic equipment	15		76
674						f	Graders, Self-propelled or Towed	15		76
675					7		I. I-handling Equipment, initial cost, new, O or more per unit	20		76
676					8		aneous Equipment, Initial cost, new, O or more per unit	15		76
677	335	-	20	MISCELLANEOU S POWER PLANT EQUIPMENT	OFFICE	FURNIT	URE AND EQUIPMENT			
678					1		re (Decks, Tables, Chairs, Lockers, Files, ases, Bookcases and Safes)			
679						а	Miscellaneous Items, initial cost, new less than \$25,000 per unit	10		76
680						b	Safes, Special Equipment, etc., initial cost, new, \$25,000 or more, per unit	20		76

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TABLE ITEM #	FERC ACCOUNT NUMBER	USBR ACCT	USACE ACCT	FERC UNIFORM ACCOUNT NAME	ITEM	SUB- ITEM	UNIT OF PROPERTY / PLANT ITEM	SERVICE LIFE (YR)*	RETIREMENT UNITS* & MAINTENANCE ITEMS	JUSTIFI- CATION NUMBER
681					2	machin Record	nent, such as Typewriter, Adding es, Calculators, Duplicating and ing Machines, Key Punch Equipment, nic Calculators and Computers	10		76
682						а	Miscellaneous Equipment not listed elsewhere, including items initial cost, new, less than \$25,000 per unit	10		76
683						b	Office Machines, such as Accounting Machines, Dictating Machines, typewriters, Adding Machines, Key Punch and Electronic Mechanical Data Processors, Electro-Mechanical Calculators, initial cost, new \$25,000 or more per unit	15		76
684						C.	Electronic-calculators, computer, and related items	15		76
685						d.	Duplicating and Reproducing Machines initial cost, new, \$25,000 or more per unit	15		76
686	335	-	20	MISCELLANEOU S POWER PLANT EQUIPMENT	MATER	ÍAL HANI	DLING EQUIPMENT			
687					1	includin \$25,000	aneous Equipment not listed elsewhere, og items initial cost, new, less than D per item (including shelving, storage ortable conveyors, dollies, and similar ent)	50		76

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TABLE ITEM #	FERC ACCOUNT NUMBER	USBR ACCT	USACE ACCT	FERC UNIFORM ACCOUNT NAME	ITEM	SUB- ITEM	UNIT OF PROPERTY / PLANT ITEM	SERVICE LIFE (YR)*	RETIREMENT UNITS* & MAINTENANCE ITEMS	JUSTIFI- CATION NUMBER
688					2	Fixed-co	onveyor Systems (Mono-rail, Roller Type) st, new \$25,000 or more per system	25		76
689					3	and sim	Storage Racks, Bins, Ramps, Platforms, ilar equipment, independent of other es, initial cost, new, \$25,000 or more per	25		76
690	335	-	20	MISCELLANEOU S POWER PLANT EQUIPMENT	SHOP T	OOLS AN	D EQUIPMENT			76
691					1	elsewhe	neous Fixed Shop Equipment not listed re, including items initial cost, new, less 5,000 per unit	10		76
692					2	items as pipe, an	xed Shop Equipment consisting of such slathes, sharpers, drying ovens, Forges, d sheet metal machines, table and band itial cost, new, \$25,000 or more, per unit	25		76
693					3	Tools no	neous Portable Shop Equipment and ot listed elsewhere, initial cost, new, less 5,000 per unit	10		76
694	LIFE SAFETY	QUIPMEN	NT		1					
695	334	170	073	ACCESSORY ELECTRIC EQUIPMENT		ety equipm on Systems	nent: Access Control and Intrusion			

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TABLE ITEM #	FERC ACCOUNT NUMBER	USBR ACCT	USACE ACCT	FERC UNIFORM ACCOUNT NAME	ITEM	SUB-	UNIT OF PROPERTY / PLANT ITEM	SERVICE LIFE (YR)*	RETIREMENT UNITS* & MAINTENANCE ITEMS	JUSTIFI- CATION NUMBER
696					1	Softwar	re /Firmware / Hardware			
697						а	Applications	5		77
698						b	Server	5		77
699						С	Workstation	5		77
700						d	Monitor	5		77
701						е	Controller Panel	7		77
702						f	Data Transport			
703						g	Switches / Routers	5		77
704						h	Media Converter	7		77
705						i	Fiber Driver	5		77
706						j	Wireless Transceiver	7		77
707		1				k	Vehicle Barrier	-		
708						I	Barrier Actuator/Controls	10		77
709						m	Barrier Structural Components	20		77
710						n	Vessel Barrier	10		77

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		US	BR, WAPA	, USACE, BPA   FEDI	ERAL HYI	DROPOW	/ER EQUIPMENT REPLACEMENT BOOK	- TABLE 6 "E	BLUE PAGES"	
TABLE ITEM #	FERC ACCOUNT NUMBER	USBR ACCT	USACE ACCT	FERC UNIFORM ACCOUNT NAME	ITEM	SUB-	UNIT OF PROPERTY / PLANT ITEM	SERVICE LIFE (YR)*	RETIREMENT UNITS* & MAINTENANCE ITEMS	JUSTIFI- CATION NUMBER
711						0	Door Hardware			
712						р	Electric Strike/Release	7		77
713						q	Balanced Magnetic Switch (BMS)	10		77
714						r	Request to Exit (REX) Device	7		77
715						S	Card Reader	7		77
716						t	Intrusion Detection			
717						u	Motion Sensors (PIR)	7		77
718						V	Radar	10		77
719						W	Radar carriage	20		77
720						х	Water Level	10		77
721						у	Power Supply	5		77
722						z	Video Amplifier	7		77
723					2	Video N	Monitoring System		The video monitoring systems may be integrated with the Access Control and Intrusion Detection Systems, not as a stand-alone system. In this case, some of the components may be shared (i.e. server, workstation).	

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TABLE ITEM #	FERC ACCOUNT NUMBER	USBR ACCT	USACE ACCT	FERC UNIFORM ACCOUNT NAME	ITEM	SUB- ITEM	UNIT OF PROPERTY / PLANT ITEM	SERVICE LIFE (YR)*	RETIREMENT UNITS* & MAINTENANCE ITEMS	JUSTIFI- CATION NUMBER				
724						а	Camera Visible Light - Fixed	7		77				
725						b	Camera Visible Light PTZ	7		77				
726						С	Camera Thermal	7		77				
727						d	Encoder / Decoder	7		77				
728						е	Matrix Switcher	7		77				
729						f	Media Converter	7		77				
730						g	Video Recorder	5		77				
731						h	Power Supply and Related	7		77				