Attachment D

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New York Power Authority) Docket No. ER22-___-000

PREPARED DIRECT TESTIMONY OF DANE WATSON ON BEHALF OF NEW YORK POWER AUTHORITY

Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. My name is Dane A. Watson. I am a Partner of Alliance Consulting Group. Our business address is 101 E. Park Blvd., Suite 220, Plano, TX 75074. Alliance Consulting Group provides depreciation consulting and expert services to the utility industry.

I. POSITION AND QUALIFICATIONS

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I hold a Bachelor of Science degree in Electrical Engineering from the University of Arkansas at Fayetteville and a Master's Degree in Business Administration from Amberton University.

Q. DO YOU HOLD ANY SPECIAL CERTIFICATION AS A DEPRECIATION EXPERT?

A. Yes. The Society of Depreciation Professionals ("SDP") has established national standards for depreciation professionals. The SDP administers an examination and has certain required qualifications to become certified in this field. I met all requirements and hold a Certified Depreciation Professional certification.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE.

A. Since graduation from college in 1985, I have worked in depreciation and valuation. I founded Alliance Consulting Group in 2004 and am responsible for conducting

depreciation, valuation, and certain accounting-related studies for clients in various industries. My duties related to depreciation studies include the assembly and analysis of historical and simulated data, conducting field reviews, determining service life and net salvage estimates, calculating annual depreciation, presenting recommended depreciation rates to utility management for its consideration, and supporting such rates before regulatory bodies.

My prior employment from 1985 to 2004 was with Texas Utilities Electric Company and successor companies ("TXU"). During my tenure with TXU, I was responsible for, among other things, conducting valuation and depreciation studies for the domestic TXU companies. During that time, I served as Manager of Property Accounting Services and Records Management in addition to my depreciation responsibilities.

I have twice been Chair of the Edison Electric Institute ("EEI") Property Accounting and Valuation Committee and have been Chairman of EEI's Depreciation and Economic Issues Subcommittee. I am a Registered Professional Engineer ("PE") in the State of Texas as well as a Certified Depreciation Professional. I am a Senior Member of the Institute of Electrical and Electronics Engineers ("IEEE") and served for several years on the Executive Board of the Dallas Section of IEEE as well as national and global offices. I have twice served as Past President of the Society of Depreciation Professionals, most recently in 2015. I also teach depreciation seminars annually for EEI and the American Gas Association (both basic and advanced levels) and I developed and teach the advanced training for the Society of Depreciation

Professionals and other venues. Additionally, I teach depreciation at Michigan State University's Institute for Public Utilities.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY COMMISSIONS?

A. Yes. In my 37-year career, I have testified in nearly 300 proceedings before nearly 40 regulatory commissions across the United States and North America, including before the Federal Energy Regulatory Commission ("FERC" or "Commission"). A listing of the various proceedings in which I have appeared is provided in Exhibit DAW-1. I performed the last depreciation study for New York Power Authority ("NYPA" or "Company") which was filed in FERC Docket No. ER17-1010-000. I also appeared in FERC Docket No. RM02-7-000 as an industry panelist on asset retirement obligations.

II. PURPOSE AND SUMMARY OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. NYPA retained Alliance Consulting Group to conduct two depreciation rate studies for assets subject to the Commission's jurisdiction. The first study is for Transmission assets. The second is for General Plant assets. The purpose of my testimony is to sponsor and explain the recent Depreciation Studies completed for NYPA and to support and justify the recommended depreciation rates based on the results of the Depreciation Studies.

Q. ARE YOU SPONSORING ANY EXHIBITS IN THIS PROCEEDING?

A. Yes. I am sponsoring the Depreciation Studies conducted by Alliance Consulting Group for NYPA. The Depreciation Study for Transmission Plant is Exhibit DAW-2. The Depreciation Study for General Plant is Exhibit DAW-3.

Q. WERE THE NYPA DEPRECIATION STUDIES PREPARED BY YOU OR UNDER YOUR SUPERVISION AND CONTROL?

A. Yes.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING DEPRECIATION EXPENSE FOR TRANSMISSION PLANT.

A. This study recommends an overall increase of $7.4 million in annual depreciation expense for transmission assets compared to rates currently in effect, based on asset values at December 31, 2020. Exhibit DAW-2, Appendix A shows the computation of the proposed depreciation rates. Exhibit DAW-2, Appendix B demonstrates the change in depreciation expense for the various accounts.

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING DEPRECIATION EXPENSE FOR GENERAL PLANT.

A. As shown in Exhibit DAW-3, this study recommends an overall decrease of $1.9 million in annual depreciation expense for all general plant accounts compared to rates currently in effect, based on asset values at December 31, 2019. Exhibit DAW-3, Appendix A shows the computation of the proposed depreciation rates. Exhibit DAW-3, Appendix B demonstrates the change in depreciation expense for the various accounts.

Q. WHAT ARE THE PRIMARY FACTORS THAT HAVE INFLUENCED THE CHANGE IN NYPA'S PROPOSED DEPRECIATION RATES?

A. The primary factors influencing the change in depreciation rates are changes in the expected lives and net salvage for transmission assets and changes in as the expected lives, moving to a fixed life approach for some accounts and net salvage for general assets.

III. DEVELOPMENT OF DEPRECIATION RATES FOR NYPA

Q. WHY ARE DEPRECIATION STUDIES NEEDED FOR ACCOUNTING AND RATEMAKING PURPOSES?

A. Over time, life, and net salvage characteristics of various assets may change. The purpose of updating depreciation studies periodically is to ensure the most accurate possible projection of future lives and net salvage to appropriately reflect and recover the costs of assets over their lives. Alliance generally recommends updating depreciation studies every three to five years, if possible.

Q. DID NYPA MAINTAIN THAT THREE- TO FIVE-YEAR INTERVAL BETWEEN DEPRECIATION STUDIES?

A. Yes. The prior depreciation study for Transmission Plant was based on data for year end 2015 plant data, and the new study is based on 2020 plant data, a five-year interval. The prior depreciation study for General Plant was based on data for year end 2015 plant data, and the new study is based on 2019 plant data, a four-year interval.

Q. WHAT ARE THE STEPS INVOLVED IN CONDUCTING A DEPRECIATION STUDY?

A. These depreciation studies encompassed four distinct phases. The first phase involved data collection and field interviews. The second phase was where the initial

data analysis occurred. The third phase was where the information and analysis were evaluated. Once the first three stages were complete, the fourth phase began. This phase involved the calculation of depreciation rates and documenting the corresponding recommendations.

During the Phase 1 data collection process, historical data was compiled from continuing property records and general ledger systems. Data was validated for accuracy by extracting and comparing to multiple financial system sources. Audit of this data was validated against historical data from prior periods, historical general ledger sources, and field personnel discussions. This data was reviewed extensively to put in the proper format for a depreciation study. Further discussion on data review and adjustment is found in the Salvage Analysis of the studies. Also as part of the Phase 1 data collection process, numerous discussions were conducted with engineers and field operations personnel to obtain information that would assist in formulating life and salvage recommendations. One of the most important elements of performing a proper depreciation study is to understand how the Company utilizes assets and the environment in which those assets operate. Interviews with engineering and operations personnel are important ways to allow the analyst to obtain information that is beneficial when evaluating the output from the life and net salvage programs in relation to the Company's actual asset utilization and environment. Information that was gleaned in these discussions is found both in the Detailed Discussion of the studies in the life analysis and salvage analysis sections and also in workpapers.

Phase 2 is where the actuarial analysis is performed. The detailed property records information is used in Phase 2 to develop observed life tables for life analysis. These tables are visually compared to industry standard tables to determine historical life characteristics. It is possible that the analyst would cycle back to this phase based on the evaluation process performed in Phase 3. Net salvage analysis consists of compiling historical salvage and removal data by functional group to determine values and trends in gross salvage and removal cost. This information was then carried forward into Phase 3 for the evaluation process.

Phase 3 is the evaluation process which synthesizes analysis, interviews, and operational characteristics into a final selection of asset lives and net salvage parameters. The historical analysis from Phase 2 is further enhanced by the incorporation of recent or future changes in the characteristics or operations of assets that were revealed in Phase 1. Phases 2 and 3 allow the depreciation analyst to validate the asset characteristics as seen in the accounting transactions with actual Company operational experience.

Finally, Phase 4 involved the calculation of accrual rates, making recommendations and documenting the conclusions in a final report.

IV. 2020 DEPRECIATION RATE STUDY FOR NYPA TRANSMISSION PLANT

Q. DID NYPA PROVIDE YOU WITH THE APPROPRIATE PLANT ACCOUNTING DATA FOR YOU TO CONDUCT THE TRANSMISSION DEPRECIATION STUDY?

A. Yes. NYPA maintains its plant accounting records according to the FERC Uniform System of Accounts. For many years, NYPA has maintained vintage plant accounting records by plant account for plant in service. They also have maintained

depreciation reserves at the account and subaccount level, including gross salvage and cost of removal history.

Q. WHAT ANALYSES DID YOU CONDUCT WITH NYPA'S PLANT ACCOUNTING DATA?

A. As part of this Depreciation Study, I conducted a statistical life study, a net salvage analysis, and an analysis of recorded depreciation reserves for all NYPA's Transmission plant and equipment.

Q. PLEASE DESCRIBE THE BASIS OF YOUR DEPRECIATION ESTIMATES IN THIS STUDY.

A. The straight-line, broad (average) life group, remaining-life depreciation system was employed to calculate annual and accrued depreciation in this study. In this system, the annual depreciation expense for each group is computed by dividing the original cost of the asset less allocated depreciation reserve less estimated net salvage by its respective average life group remaining life. The resulting annual accrual amounts of all depreciable property within a function were accumulated, and the total was divided by the original cost of all functional depreciable property to determine the depreciation rate. The calculated remaining lives and annual depreciation accrual rates were based on attained ages of plant in service and the estimated service life and salvage characteristics of each depreciable group. The computations of the annual account level depreciation rates are shown in Exhibit DAW-2, Appendix A.

Q. DID YOU FOLLOW THE CALCULATION PROCESS IN THE SAME MANNER AS PREVIOUSLY USED FOR NYPA?

A. No. In the previous depreciation study, an 80-year life-span was set for each transmission line, including multiple FERC accounts. Since the last depreciation

study, NYPA has begun increased capital spending to complete transmission projects that increase transfer limits from areas rich in renewable resources to load centers. In addition, NYPA's transmission team is executing a long-term plan for continuous equipment and technology improvements that will increase capacity, add versatility, reduce outages, and provide deep, real-time information about system operations. NYPA has multiple projects underway. Given the new operating paradigm, this study recommends the use of varying lives for each account (1) based on industry experience; (2) the impact on lives due to the efforts to address end of life issues and to replace lower voltage with higher voltage facilities to increase transfer capability; and (3) feedback from Company subject matter experts.

Q. HOW DID YOU ADDRESS REMOVAL COST IN THE STUDY?

A. Historically, NYPA did not charge removal cost for individual equipment replacement activity as a normal practice for transmission lines. It charged such removal costs to O&M. However, removal costs were historically charged by NYPA to accumulated depreciation with the total replacement of a transmission line. NYPA is moving to the standard practice in the utility industry – to record all removal costs incurred for replacement and removal-only activity in accumulated depreciation. This change is incorporated in the depreciation study. The removal cost for a current transmission replacement project (MA1 and MA2) was calculated and that information was used as a proxy for the terminal removal cost for the replacement of NYPA's transmission lines. Appendix D of Exhibit DAW-2 shows the calculation of the removal cost based on the current transmission line replacement project. Although the removal cost percentage based on the MA1/MA2 line replacement is

dramatically more negative, the removal cost percentages for transmission line structures and conductor were capped at negative 59 percent (the average settled net salvage for the three, primary transmission line accounts) for this study. Other accounts were estimated using industry norms.

Q. ARE YOU RECOMMENDING A REBALANCING OF DEPRECIATION RESERVES FOR NYPA?

A. No. The calculation of depreciation rates uses the actual book reserve for each account or subaccount as recorded on the books of NYPA.

Q. PLEASE DESCRIBE THE DEPRECIATION SYSTEM USED TO DERIVE NYPA'S DEPRECIATION RATES?

A. Annual depreciation expense amounts for the depreciable accounts of NYPA were calculated by the straight-line method, average life group (broad group or life-span) procedure, and remaining-life technique. With this approach, remaining lives were calculated according to standard Average Life Group ("ALG") expectancy techniques, using the Iowa Survivor Curves noted in the calculation. For each plant account, the difference between the gross investment, adjusted for estimated net salvage, and the allocated accumulated book depreciation, was divided by the average remaining life to yield the annual depreciation expense.

Q. PLEASE SUMMARIZE THE DEPRECIATION RATES AND ACCRUALS RECOMMENDED FOR NYPA'S TRANSMISSION PLANT.

A. The table accompanying my testimony shows the depreciation rates and accruals recommended for NYPA's transmission assets. The accrual amounts are annualized based on investment at December 31, 2020. *See* Exhibit DAW-2, Appendix A**.** The detailed analysis and recommended lives and net salvage are found in Exhibit DAW-

2, Appendix C. The plant balances and proposed depreciation rates are found in Exhibit DAW-2, Appendix B.

V. 2019 DEPRECIATION RATE STUDY FOR NYPA GENERAL PLANT

Q. DID NYPA PROVIDE YOU WITH THE APPROPRIATE PLANT ACCOUNTING DATA FOR YOU TO CONDUCT THE DEPRECIATION STUDY FOR GENERAL PLANT?

A. Yes. NYPA maintains its plant accounting records according to the FERC Uniform System of Accounts. For many years, NYPA has maintained vintage plant accounting records by plant account for plant in service. They also have maintained depreciation reserves at the account and subaccount level, including gross salvage and cost of removal history.

Q. WHAT ANALYSES DID YOU CONDUCT WITH NYPA'S PLANT ACCOUNTING DATA?

A. As part of this Depreciation Study, I conducted a statistical life study, a net salvage analysis, and an analysis of recorded depreciation reserves for all NYPA's general plant and equipment.

Q. PLEASE DESCRIBE THE BASIS OF YOUR DEPRECIATION ESTIMATES IN THIS STUDY.

A. The straight-line, broad (average) life group, remaining-life depreciation system was employed to calculate annual and accrued depreciation in this study. In this system, the annual depreciation expense for each group is computed by dividing the original cost of the asset less allocated depreciation reserve less estimated net salvage by its respective average life group remaining life. With exceptions for high volume, low value assets, the resulting annual accrual amounts of all depreciable property within a function were accumulated, and the total was divided by the original cost of all

functional depreciable property to determine the depreciation rate. The calculated remaining lives and annual depreciation accrual rates were based on attained ages of plant in service and the estimated service life and salvage characteristics of each depreciable group. The computations of the annual account level depreciation rates are shown in Exhibit DAW-3, Appendix A.

Q. DID YOU FOLLOW THE CALCULATION PROCESS PREVIOUSLY USED TO DETERMINE NYPA'S CURRENT GENERAL PLANT DEPRECIATION RATES?

A. Yes, with the exception of high-volume, low-cost items described below, the calculation for general plant assets is the same as used in previous studies. The straight line, average life broad group, remaining life depreciation system was used to develop the existing and proposed general plant depreciation rates.

Q. ARE THERE ANY CHANGES YOU ARE RECOMMENDING REGARDING NYPA'S GENERAL PLANT?

A. Yes. We recommend the adoption of FERC Accounting Release 15 which allows a company to automatically retire low-value, high-volume assets older than the useful life assigned to the account without maintaining detailed inventories. To implement this amortization mechanism, it is necessary to first retire the assets which age is longer than the recommended service life for each group. Using this approach, NYPA will no longer need to track the location and retirement of those assets. This approach will be applied to the following accounts: (1) Account 391, Office Furniture and Equipment; (2) Account 391.2, Computer Equipment 5-year life; (3) Account 391.3, Computer Equipment 10-year life; (4) Account 397, Communication Equipment; and (5) Account 399, Other Tangible Property.

Q. HOW DID YOU ADDRESS REMOVAL COST IN THE STUDY?

A. As with transmission plant, NYPA historically did not charge removal cost for general plant replacement activity as a normal practice. NYPA is planning to change its process to charge removal cost on capital projects for general plant, whether the activity is replacement or retirement only. As a result, I have included removal costs in the depreciation rates. Appendix C of Exhibit DAW-3 shows the life and net salvage parameters proposed for this depreciation study.

Q. ARE YOU RECOMMENDING A REBALANCING OF DEPRECIATION RESERVES FOR NYPA?

A. No, except for those accounts with high-volume, low-value items. The calculation of depreciation rates uses the reserve for each account or subaccount as recorded on the books of NYPA.

Q. PLEASE DESCRIBE THE DEPRECIATION SYSTEM USED TO DERIVE NYPA'S DEPRECIATION RATES?

A. Annual depreciation expense amounts for the depreciable accounts of NYPA were calculated by the straight-line method, average life group (broad group) procedure, and remaining-life technique. With this approach, remaining lives were calculated according to standard ALG expectancy techniques, using the Iowa Survivor Curves noted in the calculation. For each plant account, the difference between the gross investment, adjusted for estimated net salvage, and the allocated accumulated depreciation, was divided by the average remaining life to yield the annual depreciation expense.

Q. PLEASE SUMMARIZE THE DEPRECIATION RATES AND ACCRUAL AMOUNTS RECOMMENDED FOR NYPA GENERAL PLANT.

A. The table accompanying my testimony shows the depreciation rates and accruals recommended for NYPA's general plant assets. The accrual amounts are annualized based on investment at December 31, 2020. See Exhibit DAW-3, Appendix A and Appendix A-1. The item entitled, Accrual for Reserve Imbalance, represents the high-volume, low-value items whose lives were longer than that used for each group. The detailed analysis and recommended lives and net salvage are found in Exhibit DAW-3, Appendix C. The plant balances and proposed accrual rates are found in Exhibit DAW-3, Appendix B.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed the 28th day of July 2022.

Dane Watson

Dane Watson

Exhibit DAW-1

Dane Watson Testimony

Dane Watson Testimony Appearances

Asset Location	Commission	Docket (If Applicable	Company	Year	Description
South Carolina	South Carolina Public Service Commission	2022-89-G	Piedmont Natural Gas	2022	Natural Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-22-034	Chugach Electirc Association	2022	Electric Depreciation Study
Georgia	Georgia Public Service Commission	44280	Georgia Power Company	2022	Electric Depreciation Study
Texas	Public Utility Commission of Texas	53719	Entergy Texas	2022	Electric Depreciation Study
California	California Public Utilities Commission	22-005-xxx	San Diego Gas and Electric	2022	Electirc Gas and Common Depreciation Study
California	California Public Utilities Commission	22-005-xxx	Southern California Gas	2022	Gas Depreciation Study
Colorado	Colorado Public Utilities Commission	22AL-0046G	Public Service of Colorado	2022	Gas Alternatives to Climate Goals
Texas	Public Utility Commission of Texas	53601	Oncor Electric Delivery	2022	Electric Depreciation Study
New Jersey	New Jersey Board of Public Utilities	GR2222040253	South Jersey Gas	2022	Gas Depreciation Study
Oklahoma	Coporation Commission of Oklahoma	PUD 202100163	Empire District Electric Company	2022	Electric Depreciation Study
Michigan	Michigan Public Service Commission	U-21176	Consumers Gas	2021	Gas Depreciation Study
New Jersey	New Jersey Board of Public Utilities	GR21121254	Elizabethtown Natural Gas	2021	Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	TA116-118, TA115-97, TA160-37 and TA110-290	Fairbanks Water and Wastewater	2021	Water and Waste Water Depreciation Study
Alaska	Regulatory Commission of Alaska	U-21-025	Golden Valley Electric Association	2021	Electric Depreciation Study
Colorado	Public Utilities Commission of Colorado	21AL-0317E	Public Service of Colorado	2021	Electric and Common Depreciation Study
Wisconsin	Public Serice Commission of Wisconsin	5-DU-103	WE Energies	2021	Electric and Gas Depreciation Study
Kentucky	Public Service Commission of Kentucky	2021-00214	Atmos Kentucky	2021	Gas Depreciation Study
Missouri	Missouri Public Service Commission	ER-2021-0312	Empire District Electric Company	2021	Electric Depreciation Study
Louisiana	Louisiana Public Service Commission	U-35951	Atmos Louisiana	2021	Gas Depreciation Study
Minnesota	Minnesota Public Utilities Commission	E015-D-21-229	Allete Minnesota Power	2021	Intangible, Transmission, Distribution, and General Depreciation Study

Dane Watson Testimony Appearances

Asset Location	Commission	Docket (If Applicable	Company	Year	Description
Michigan	Michigan Public Service Commission	U-20849	Consumers Energy	2021	Electric and Common Depreciation Study
Texas	Texas Public Utility Commission	51802	Southwestern Public Service Company	2021	Electric Technical Update
MultiState	FERC	RP21-441-000	Florida Gas Transmission	2021	Gas Depreciation Study
New Mexico	New Mexico Public Regulation Commission	20-00238-UT	Southwestern Public Service Company	2021	Electric Technical Update
MultiState	FERC	ER21-709-000	American Transmission Company	2020	Electric Depreciation Study
Texas	Texas Public Utility Commission	51611	Sharyland Utilities	2020	Electric Depreciation Study
Texas	Texas Public Utility Commission	51536	Brownsville Public Utilities Board	2020	Electric Depreciation Study
New Jersey	New Jersey Board of Public Utilities	WR20110729	Suez Water New Jersey	2020	Water and Waste Water Depreciation Study
Idaho	Idaho Public Service Commission	SUZ-W-20-02	Suez Water Idaho	2020	Water Depreciation Study
Texas	Texas Public Utility Commission	50944	Monarch Utilities	2020	Water and Waste Water Depreciation Study
Michigan	Michigan Public Service Commission	U-20844	Consumers Energy/DTE Electric	2020	Ludington Pumped Storage Depreciation Study
Tennessee	Tennessee Public Utility Commission	20-00086	Piedmont Natural Gas	2020	Gas Depreciation Study
Texas	Railroad Commission of Texas	OS-00005136	CoServ Gas	2020	Gas Depreciation Study
Texas	Railroad Commission of Texas	GUD 10988	EPCOR Gas Texas	2020	Gas Depreciation Study
Florida	Florida Public Service Commission	20200166-GU	People Gas System	2020	Gas Depreciation Study
Mississippi	Federal Energy Regulatory Commission	ER20-1660-000	Mississippi Power Company	2020	Electric Depreciation Study
Texas	Public Utility Commission of Texas	50557	Corix Utilities	2020	Water and Waste Water Depreciation Study
Georgia	Georgia Public Service Commission	42959	Liberty Utilities Peach State Natural Gas	2020	Gas Depreciation Study
New Jersey	New Jersey Board of Public Utilities	GR20030243	South Jersey Gas	2020	Gas Depreciation Study
Colorado	Colorado Public Utilities Commission	20AL-0049G	Public Service of Colorado	2020	Gas Depreciation Study
New York	Federal Energy Regulatory Commission	ER20-716-000	LS Power Grid New York, Corp.	2019	Electric Transmission Depreciation Study
Mississippi	Mississippi Public Service Commission	2019-UN-219	Mississippi Power Company	2019	Electric Depreciation Study

Dane Watson Testimony Appearances

Asset Location	Commission	Docket (If Applicable	Company	Year	Description
Texas	Public Utility Commission of Texas	50288	Kerrville Public Utility District	2019	Electric Depreciation Study
Texas	Railroad Commission of Texas	GUD 10920	CenterPoint Gas	2019	Gas Depreciation Study and Propane Air Study
Texas, New Mexico	Federal Energy Regulatory Commission	ER20-277-000	Southwestern Public Service Company	2019	Electric Production and General Plant Depreciation Study
Alaska	Regulatory Commission of Alaska	U-19-086	Alaska Electric Light and Power	2019	Electric Depreciation Study
Delaware	Delaware Public Service Commission	19-0615	Suez Water Delaware	2019	Water Depreciation Study
Texas	Public Utility Commission of Texas	49831	Southwestern Public Service Company	2019	Electric Depreciation Study
New Mexico	New Mexico Public Regulation Commission	19-00170-UT	Southwestern Public Service Company	2019	Electric Depreciation Study
Georgia	Georgia Public Service Commission	42516	Georgia Power Company	2019	Electric Depreciation Study
Georgia	Georgia Public Service Commission	42315	Atlanta Gas Light	2019	Gas Depreciation Study
Arizona	Arizona Corporation Commission	G-01551A-19-0055	Southwest Gas Corporation	2019	Gas Removal Cost Study
New Hampshire	New Hampshire Public Service Commission	DE 19-064	Liberty Utilities	2019	Electric Distribution and General
New Jersey	New Jersey Board of Public Utilities	GR19040486	Elizabethtown Natural Gas	2019	Gas Depreciation Study
Texas	Public Utility Commission of Texas	49421	CenterPoint Houston Electric LLC	2019	Electric Depreciation Study
North Carolina	North Carolina Utilities Commission	Docket No. G-9, Sub 743	Piedmont Natural Gas	2019	Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-18-121	Municipal Power and Light City of Anchorage	2018	Electric Depreciation Study
Various	FERC	RP19-352-000	Sea Robin	2018	Gas Depreciation Study
Texas New Mexico	Federal Energy Regulatory Commission	ER19-404-000	Southwestern Public Service Company	2018	Electric Transmission Depreciation Study
California	Federal Energy Regulatory Commission	ER19-221-000	San Diego Gas and Electric	2018	Electric Transmission Depreciation Study
Kentucky	Kentucky Public Service Commission	2018-00281	Atmos Kentucky	2018	Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-18-054	Matanuska Electric Coop	2018	Electric Generation Depreciation Study
California	California Public Utilities Commission	A17-10-007	San Diego Gas and Electric	2018	Electric and Gas Depreciation Study

Dane Watson Testimony Appearances

Asset Location	Commission	Docket (If Applicable	Company	Year	Description
Texas	Public Utility Commission of Texas	48401	Texas New Mexico Power	2018	Electric Depreciation Study
Nevada	Public Utility Commission of Nevada	18-05031	Southwest Gas	2018	Gas Depreciation Study
Texas	Public Utility Commission of Texas	48231	Oncor Electric Delivery	2018	Depreciation Rates
Texas	Public Utility Commission of Texas	48371	Entergy Texas	2018	Electric Depreciation Study
Kansas	Kansas Corporation Commission	18-KCPE-480-RTS	Kansas City Power and Light	2018	Electric Depreciation Study
Arkansas	Arkansas Public Service Commission	18-027-U	Liberty Pine Bluff Water	2018	Water Depreciation Study
Kentucky	Kentucky Public Service Commission	2017-00349	Atmos KY	2018	Gas Depreciation Rates
Tennessee	Tennessee Public Utility Commission	18-00017	Chattanooga Gas	2018	Gas Depreciation Study
Texas	Railroad Commission of Texas	10679	Si Energy	2018	Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-17-104	Anchorage Water and Wastewater	2017	Water and Waste Water Depreciation Study
Michigan	Michigan Public Service Commission	U-18488	Michigan Gas Utilities Corporation	2017	Gas Depreciation Study
Texas	Railroad Commission of Texas	10669	CenterPoint South Texas	2017	Gas Depreciation Study
Arkansas	Arkansas Public Service Commission	17-061-U	Empire District Electric Company	2017	Depreciation Rates for New Wind Generation
Kansas	Kansas Corporation Commission	18-EPDE-184-PRE	Empire District Electric Company	2017	Depreciation Rates for New Wind Generation
Oklahoma	Oklahoma Corporation Commission	PUD 201700471	Empire District Electric Company	2017	Depreciation Rates for New Wind Generation
Missouri	Missouri Public Service Commission	EO-2018-0092	Empire District Electric Company	2017	Depreciation Rates for New Wind Generation
Michigan	Michigan Public Service Commission	U-18457	Upper Peninsula Power Company	2017	Electric Depreciation Study
Florida	Florida Public Service Commission	20170179-GU	Florida City Gas	2017	Gas Depreciation Study
Michigan	FERC	ER18-56-000	Consumers Energy	2017	Electric Depreciation Study
Missouri	Missouri Public Service Commission	GR-2018-0013	Liberty Utilities	2017	Gas Depreciation Study
Michigan	Michigan Public Service Commission	U-18452	SEMCO	2017	Gas Depreciation Study
Texas	Public Utility Commission of Texas	47527	Southwestern Public Service Company	2017	Electric Production Depreciation Study
MultiState	FERC	ER17-1664	American Transmission Company	2017	Electric Depreciation Study

Dane Watson Testimony Appearances

Asset Location	Commission	Docket (If Applicable	Company	Year	Description
Alaska	Regulatory Commission of Alaska	U-17-008	Municipal Power and Light City of Anchorage	2017	Generating Unit Depreciation Study
Mississippi	Mississippi Public Service Commission	2017-UN-041	Atmos Energy	2017	Gas Depreciation Study
Texas	Public Utility Commission of Texas	46957	Oncor Electric Delivery	2017	Electric Depreciation Study
Oklahoma	Oklahoma Corporation Commission	PUD 201700078	CenterPoint Oklahoma	2017	Gas Depreciation Study
New York	FERC	ER17-1010-000	New York Power Authority	2017	Electric Depreciation Study
Texas	Railroad Commission of Texas	GUD 10580	Atmos Pipeline Texas	2017	Gas Depreciation Study
Texas	Railroad Commission of Texas	GUD 10567	CenterPoint Texas	2016	Gas Depreciation Study
MultiState	FERC	ER17-191-000	American Transmission Company	2016	Electric Depreciation Study
New Jersey	New Jersey Board of Public Utilities	GR16090826	Elizabethtown Natural Gas	2016	Gas Depreciation Study
North Carolina	North Carolina Utilities Commission	Docket G-9 Sub 77H	Piedmont Natural Gas	2016	Gas Depreciation Study
Michigan	Michigan Public Service Commission	U-18195	Consumers Energy/DTE Electric	2016	Ludington Pumped Storage Depreciation Study
Alabama	FERC	ER16-2313-000	SEGCO	2016	Electric Depreciation Study
Alabama	FERC	ER16-2312-000	Alabama Power Company	2016	Electric Depreciation Study
Michigan	Michigan Public Service Commission	U-18127	Consumers Energy	2016	Natural Gas Depreciation Study
Mississippi	Mississippi Public Service Commission	2016 UN 267	Willmut Natural Gas	2016	Natural Gas Depreciation Study
Iowa	Iowa Utilities Board	RPU-2016-0003	Liberty-Iowa	2016	Natural Gas Depreciation Study
Illinois	Illinois Commerce Commission	GRM #16-208	Liberty-Illinois	2016	Natural Gas Depreciation Study
Kentucky	FERC	RP16-097-000	KOT	2016	Natural Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-16-067	Alaska Electric Light and Power	2016	Generating Unit Depreciation Study
Florida	Florida Public Service Commission	160170-EI	Gulf Power	2016	Electric Depreciation Study
California	California Public Utilities Commission	A 16-07-002	California American Water	2016	Water and Waste Water Depreciation Study
Arizona	Arizona Corporation Commission	G-01551A-16-0107	Southwest Gas	2016	Gas Depreciation Study
Texas	Public Utility Commission of Texas	45414	Sharyland	2016	Electric Depreciation Study

Dane Watson Testimony Appearances

Asset Location	Commission	Docket (If Applicable	Company	Year	Description
Colorado	Colorado Public Utilities Commission	16A-0231E	Public Service Company of Colorado	2016	Electric Depreciation Study
Multi-State NE US	FERC	16-453-000	Northeast Transmission Development, LLC	2015	Electric Depreciation Study
Arkansas	Arkansas Public Service Commission	15-098-U	CenterPoint Arkansas	2015	Gas Depreciation Study and Cost of Removal Study
New Mexico	New Mexico Public Regulation Commission	15-00296-UT	Southwestern Public Service Company	2015	Electric Depreciation Study
Atmos Energy Corporation	Tennessee Regulatory Authority	14-00146	Atmos Tennessee	2015	Natural Gas Depreciation Study
New Mexico	New Mexico Public Regulation Commission	15-00261-UT	Public Service Company of New Mexico	2015	Electric Depreciation Study
Hawaii	NA	NA	Hawaii American Water	2015	Water/Wastewater Depreciation Study
Kansas	Kansas Corporation Commission	16-ATMG-079-RTS	Atmos Kansas	2015	Gas Depreciation Study
Texas	Public Utility Commission of Texas	44704	Entergy Texas	2015	Electric Depreciation Study
Alaska	Regulatory Commission of Alaska	U-15-089	Fairbanks Water and Wastewater	2015	Water and Waste Water Depreciation Study
Arkansas	Arkansas Public Service Commission	15-031-U	Source Gas Arkansas	2015	Underground Storage Gas Depreciation Study
New Mexico	New Mexico Public Regulation Commission	15-00139-UT	Southwestern Public Service Company	2015	Electric Depreciation Study
Texas	Public Utility Commission of Texas	44746	Wind Energy Transmission Texas	2015	Electric Depreciation Study
Colorado	Colorado Public Utilities Commission	15-AL-0299G	Atmos Colorado	2015	Gas Depreciation Study
Arkansas	Arkansas Public Service Commission	15-011-U	Source Gas Arkansas	2015	Gas Depreciation Study
Texas	Railroad Commission of Texas	GUD 10432	CenterPoint- Texas Coast Division	2015	Gas Depreciation Study
Kansas	Kansas Corporation Commission	15-KCPE-116-RTS	Kansas City Power and Light	2015	Electric Depreciation Study
Alaska	Regulatory Commission of Alaska	U-14-120	Alaska Electric Light and Power	2014-2015	Electric Depreciation Study
Texas	Public Utility Commission of Texas	43950	Cross Texas Transmission	2014	Electric Depreciation Study
New Mexico	New Mexico Public Regulation Commission	14-00332-UT	Public Service of New Mexico	2014	Electric Depreciation Study
Texas	Public Utility Commission of Texas	43695	Xcel Energy	2014	Electric Depreciation Study

Dane Watson Testimony Appearances

Asset Location	Commission	Docket (If Applicable	Company	Year	Description
Multi State – SE US	FERC	RP15-101	Florida Gas Transmission	2014	Gas Transmission Depreciation Study
California	California Public Utilities Commission	A.14-07-006	Golden State Water	2014	Water and Waste Water Depreciation Study
Michigan	Michigan Public Service Commission	U-17653	Consumers Energy Company	2014	Electric and Common Depreciation Study
Colorado	Public Utilities Commission of Colorado	14AL-0660E	Public Service of Colorado	2014	Electric Depreciation Study
Wisconsin	Wisconsin	05-DU-102	WE Energies	2014	Electric, Gas, Steam and Common Depreciation Studies
Texas	Public Utility Commission of Texas	42469	Lone Star Transmission	2014	Electric Depreciation Study
Nebraska	Nebraska Public Service Commission	NG-0079	Source Gas Nebraska	2014	Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-14-055	TDX North Slope Generating	2014	Electric Depreciation Study
Alaska	Regulatory Commission of Alaska	U-14-054	Sand Point Generating LLC	2014	Electric Depreciation Study
Alaska	Regulatory Commission of Alaska	U-14-045	Matanuska Electric Coop	2014	Electric Generation Depreciation Study
Texas, New Mexico	Public Utility Commission of Texas	42004	Southwestern Public Service Company	2013-2014	Electric Production, Transmission, Distribution and General Plant Depreciation Study
New Jersey	New Jersey Board of Public Utilities	GR13111137	South Jersey Gas	2013	Gas Depreciation Study
Various	FERC	RP14-247-000	Sea Robin	2013	Gas Depreciation Study
Arkansas	Arkansas Public Service Commission	13-078-U	Arkansas Oklahoma Gas	2013	Gas Depreciation Study
Arkansas	Arkansas Public Service Commission	13-079-U	Source Gas Arkansas	2013	Gas Depreciation Study
California	California Public Utilities Commission	Proceeding No.: A.13-11-003	Southern California Edison	2013	Electric Depreciation Study
North Carolina/South Carolina	FERC	ER13-1313	Progress Energy Carolina	2013	Electric Depreciation Study
Wisconsin	Public Service Commission of Wisconsin	4220-DU-108	Northern States Power Company - Wisconsin	2013	Electric, Gas and Common Transmission, Distribution and General
Texas	Public Utility Commission of Texas	41474	Sharyland	2013	Electric Depreciation Study

Dane Watson Testimony Appearances

Asset Location	Commission	Docket (If Applicable	Company	Year	Description
Kentucky	Kentucky Public Service Commission	2013-00148	Atmos Energy Corporation	2013	Gas Depreciation Study
Minnesota	Minnesota Public Utilities Commission	13-252	Allete Minnesota Power	2013	Electric Depreciation Study
New Hampshire	New Hampshire Public Service Commission	DE 13-063	Liberty Utilities	2013	Electric Distribution and General
Texas	Railroad Commission of Texas	10235	West Texas Gas	2013	Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-12-154	Alaska Telephone Company	2012	Telecommunications Utility
New Mexico	New Mexico Public Regulation Commission	12-00350-UT	Southwestern Public Service Company	2012	Electric Depreciation Study
Colorado	Colorado Public Utilities Commission	12AL-1269ST	Public Service Company of Colorado	2012	Gas and Steam Depreciation Study
Colorado	Colorado Public Utilities Commission	12AL-1268G	Public Service Company of Colorado	2012	Gas and Steam Depreciation Study
Alaska	Regulatory Commission of Alaska	U-12-149	Municipal Power and Light City of Anchorage	2012	Electric Depreciation Study
Texas	Texas Public Utility Commission	40824	Xcel Energy	2012	Electric Depreciation Study
South Carolina	Public Service Commission of South Carolina	Docket 2012-384-E	Progress Energy Carolina	2012	Electric Depreciation Study
Alaska	Regulatory Commission of Alaska	U-12-141	Interior Telephone Company	2012	Telecommunications Utility
Michigan	Michigan Public Service Commission	U-17104	Michigan Gas Utilities Corporation	2012	Gas Depreciation Study
North Carolina	North Carolina Utilities Commission	E-2 Sub 1025	Progress Energy Carolina	2012	Electric Depreciation Study
Texas	Texas Public Utility Commission	40606	Wind Energy Transmission Texas	2012	Electric Depreciation Study
Texas	Texas Public Utility Commission	40604	Cross Texas Transmission	2012	Electric Depreciation Study
Minnesota	Minnesota Public Utilities Commission	12-858	Northern States Power Company - Minnesota	2012	Electric, Gas and Common Transmission, Distribution and General
Texas	Railroad Commission of Texas	10170	Atmos Mid-Tex	2012	Gas Depreciation Study
Texas	Railroad Commission of Texas	10174	Atmos West Texas	2012	Gas Depreciation Study
Texas	Railroad Commission of Texas	10182	CenterPoint Beaumont/ East Texas	2012	Gas Depreciation Study
Kansas	Kansas Corporation Commission	12-KCPE-764-RTS	Kansas City Power and Light	2012	Electric Depreciation Study

Dane Watson Testimony Appearances

Asset Location	Commission	Docket (If Applicable	Company	Year	Description
Nevada	Public Utility Commission of Nevada	12-04005	Southwest Gas	2012	Gas Depreciation Study
Texas	Railroad Commission of Texas	10147, 10170	Atmos Mid-Tex	2012	Gas Depreciation Study
Kansas	Kansas Corporation Commission	12-ATMG-564-RTS	Atmos Kansas	2012	Gas Depreciation Study
Texas	Texas Public Utility Commission	40020	Lone Star Transmission	2012	Electric Depreciation Study
Michigan	Michigan Public Service Commission	U-16938	Consumers Energy Company	2011	Gas Depreciation Study
Colorado	Public Utilities Commission of Colorado	11AL-947E	Public Service of Colorado	2011	Electric Depreciation Study
Texas	Texas Public Utility Commission	39896	Entergy Texas	2011	Electric Depreciation Study
MultiState	FERC	ER12-212	American Transmission Company	2011	Electric Depreciation Study
California	California Public Utilities Commission	A1011015	Southern California Edison	2011	Electric Depreciation Study
Mississippi	Mississippi Public Service Commission	2011-UN-184	Atmos Energy	2011	Gas Depreciation Study
Michigan	Michigan Public Service Commission	U-16536	Consumers Energy Company	2011	Wind Depreciation Rate Study
Texas	Public Utility Commission of Texas	38929	Oncor	2011	Electric Depreciation Study
Texas	Railroad Commission of Texas	10038	CenterPoint South TX	2010	Gas Depreciation Study
Alaska	Regulatory Commission of Alaska	U-10-070	Inside Passage Electric Cooperative	2010	Electric Depreciation Study
Texas	Public Utility Commission of Texas	36633	City Public Service of San Antonio	2010	Electric Depreciation Study
Texas	Texas Railroad Commission	10000	Atmos Pipeline Texas	2010	Gas Depreciation Study
Multi State – SE US	FERC	RP10-21-000	Florida Gas Transmission	2010	Gas Depreciation Study
Maine/ New Hampshire	FERC	10-896	Granite State Gas Transmission	2010	Gas Depreciation Study
Texas	Public Utility Commission of Texas	38480	Texas New Mexico Power	2010	Electric Depreciation Study
Texas	Public Utility Commission of Texas	38339	CenterPoint Electric	2010	Electric Depreciation Study
Texas	Texas Railroad Commission	10041	Atmos Amarillo	2010	Gas Depreciation Study
Georgia	Georgia Public Service Commission	31647	Atlanta Gas Light	2010	Gas Depreciation Study
Texas	Public Utility Commission of Texas	38147	Southwestern Public Service	2010	Electric Technical Update
Alaska	Regulatory Commission of Alaska	U-09-015	Alaska Electric Light and Power	2009-2010	Electric Depreciation Study

Dane Watson Testimony Appearances

Asset Location	Commission	Docket (If Applicable	Company	Year	Description
Alaska	Regulatory Commission of Alaska	U-10-043	Utility Services of Alaska	2009-2010	Water Depreciation Study
Michigan	Michigan Public Service Commission	U-16055	Consumers Energy/DTE Energy	2009-2010	Ludington Pumped Storage Depreciation Study
Michigan	Michigan Public Service Commission	U-16054	Consumers Energy	2009-2010	Electric Depreciation Study
Michigan	Michigan Public Service Commission	U-15963	Michigan Gas Utilities Corporation	2009	Gas Depreciation Study
Michigan	Michigan Public Service Commission	U-15989	Upper Peninsula Power Company	2009	Electric Depreciation Study
Texas	Railroad Commission of Texas	9869	Atmos Energy	2009	Shared Services Depreciation Study
Mississippi	Mississippi Public Service Commission	09-UN-334	CenterPoint Energy Mississippi	2009	Gas Depreciation Study
Texas	Railroad Commission of Texas	9902	CenterPoint Energy Houston	2009	Gas Depreciation Study
Colorado	Colorado Public Utilities Commission	09AL-299E	Public Service Company of Colorado	2009	Electric Depreciation Study
Louisiana	Louisiana Public Service Commission	U-30689	Cleco	2008	Electric Depreciation Study
Texas	Public Utility Commission of Texas	35763	Southwestern Public Service Company	2008	Electric Production, Transmission, Distribution and General Plant Depreciation Study
Wisconsin	Wisconsin	05-DU-101	WE Energies	2008	Electric, Gas, Steam and Common Depreciation Studies
North Dakota	North Dakota Public Service Commission	PU-07-776	Northern States Power Company - Minnesota	2008	Net Salvage
New Mexico	New Mexico Public Regulation Commission	07-00319-UT	Southwestern Public Service Company	2008	Testimony – Depreciation
Multiple States	Railroad Commission of Texas	9762	Atmos Energy	2007-2008	Shared Services Depreciation Study
Minnesota	Minnesota Public Utilities Commission	E015/D-08-422	Minnesota Power	2007-2008	Electric Depreciation Study
Texas	Public Utility Commission of Texas	35717	Oncor	2008	Electric Depreciation Study
Texas	Public Utility Commission of Texas	34040	Oncor	2007	Electric Depreciation Study
Michigan	Michigan Public Service Commission	U-15629	Consumers Energy	2006-2009	Gas Depreciation Study
Colorado	Colorado Public Utilities Commission	06-234-EG	Public Service Company of Colorado	2006	Electric Depreciation Study
Arkansas	Arkansas Public Service Commission	06-161-U	CenterPoint Energy – Arkla Gas	2006	Gas Distribution Depreciation Study and Removal Cost Study

Dane Watson Testimony Appearances

Asset Location	Commission	Docket (If Applicable	Company	Year	Description
Texas, New Mexico	Public Utility Commission of Texas	32766	Southwestern Public Service Company	2005-2006	Electric Production, Transmission, Distribution and General Plant Depreciation Study
Texas	Railroad Commission of Texas	9670/9676	Atmos Energy Corp	2005-2006	Gas Distribution Depreciation Study
Texas	Railroad Commission of Texas	9400	TXU Gas	2003-2004	Gas Distribution Depreciation Study
Texas	Railroad Commission of Texas	9313	TXU Gas	2002	Gas Distribution Depreciation Study
Texas	Railroad Commission of Texas	9225	TXU Gas	2002	Gas Distribution Depreciation Study
Texas	Public Utility Commission of Texas	24060	TXU	2001	Line Losses
Texas	Public Utility Commission of Texas	23640	TXU	2001	Line Losses
Texas	Railroad Commission of Texas	9145-9148	TXU Gas	2000-2001	Gas Distribution Depreciation Study
Texas	Public Utility Commission of Texas	22350	TXU	2000-2001	Electric Depreciation Study, Unbundling
Texas	Railroad Commission of Texas	8976	TXU Pipeline	1999	Pipeline Depreciation Study
Texas	Public Utility Commission of Texas	20285	TXU	1999	Fuel Company Depreciation Study
Texas	Public Utility Commission of Texas	18490	TXU	1998	Transition to Competition
Texas	Public Utility Commission of Texas	16650	TXU	1997	Customer Complaint
Texas	Public Utility Commission of Texas	15195	TXU	1996	Mining Company Depreciation Study
Texas	Public Utility Commission of Texas	12160	TXU	1993	Fuel Company Depreciation Study
Texas	Public Utility Commission of Texas	11735	TXU	1993	Electric Depreciation Study

Exhibit DAW-2

Electric Transmission Utility Plant Depreciation Rate Study

NEW YORK POWER AUTHORITY

ELECTRIC TRANSMISSION UTILITY PLANT

DEPRECIATION RATE STUDY

AT DECEMBER 31, 2020

ALLIANCE CONSULTING GROUP

http://www.utilityalliance.com

NEW YORK POWER AUTHORITY

ELECTRIC TRANSMISSION PLANT

DEPRECIATION RATE STUDY

EXECUTIVE SUMMARY

New York Power Authority ("NYPA" or "Company") engaged Alliance Consulting Group to conduct a depreciation study of the Company's Transmission utility plant depreciable assets as of December 31, 2020. NYPA's last transmission asset depreciation study was performed in 2016 on the Company's depreciable assets as of December 31, 2015.

This study was conducted under a traditional depreciation study approach for life and net salvage. The broad group, average life, remaining life depreciation system was used. This methodology has been adopted by numerous state commissions and FERC.

This study recommends an overall increase in annual depreciation expense of $7.4 million for all accounts compared to rates currently in effect. Appendix A shows the computation of the proposed depreciation rates. Appendix B demonstrates the change in depreciation expense for the various accounts. Appendix C shows a summary of parameters, existing and recommended, for transmission depreciation.

NEW YORK POWER AUTHORITY

ELECTRIC TRANSMISSION PLANT

DEPRECIATION RATE STUDY

AT DECEMBER 31, 2020

Table of Contents

PURPOSE

The purpose of this study is to develop depreciation rates for the depreciable transmission property as recorded on NYPA's books at December 31, 2020. The account-based depreciation rates were designed to recover the total remaining undepreciated investment, adjusted for net salvage, over the remaining life of NYPA's transmission property, on a straight-line basis.

NYPA provides transmission service in various parts of New York State (or "State") over more than 1,400 circuit-miles of transmission facilities, which account for one-third of the State's high-voltage lines. NYPA maintains its power lines with a strong commitment to safety and the environment and works closely with the New York Independent System Operator, Inc. ("NYISO"), other transmission owners and the New York State Public Service Commission ("NYPSC") to help ensure a high level of power-system reliability.

STUDY RESULTS

Overall depreciation rates for all NYPA depreciable transmission property are shown in Appendix A.[1] These rates translate into an annual depreciation accrual of $56.3 million based on NYPA's depreciable investment at December 31, 2020. The annual depreciation expense calculated using current depreciation rates for transmission assets at December 31, 2020 was $48.8 million. The change in depreciation expense is recognizing the unique depreciation parameters associated with NYPA's transmission assets.

Appendix A demonstrates the development of the annual depreciation rates and accruals. Appendix B presents a comparison of current depreciation rates versus proposed rates by account. Appendix C presents a summary of mortality and net salvage estimates by account. Appendix D shows net salvage information, and Appendix E is a system map of the NYPA transmission system.

GENERAL DISCUSSION

Definition

The term "depreciation" as used in this study is considered in the accounting sense, that is, a system of accounting that distributes the cost of assets, less net salvage (if any), over the estimated useful life of the assets in a systematic and rational manner. It is a process of allocation, not valuation. This expense is systematically allocated to accounting periods over the life of the properties. The amount allocated to any one accounting period does not necessarily represent the loss or decrease in value that will occur during that particular period. The Company accrues depreciation based on the original cost of all depreciable property included in each functional property group. Upon retirement, the full cost of depreciable property, less the net salvage value, is charged to the depreciation reserve.

Basis of Depreciation Estimates

[1] The general plant depreciation rates are from a companion depreciation study done for NYPA's general plant depreciable assets as of December 31, 2019.

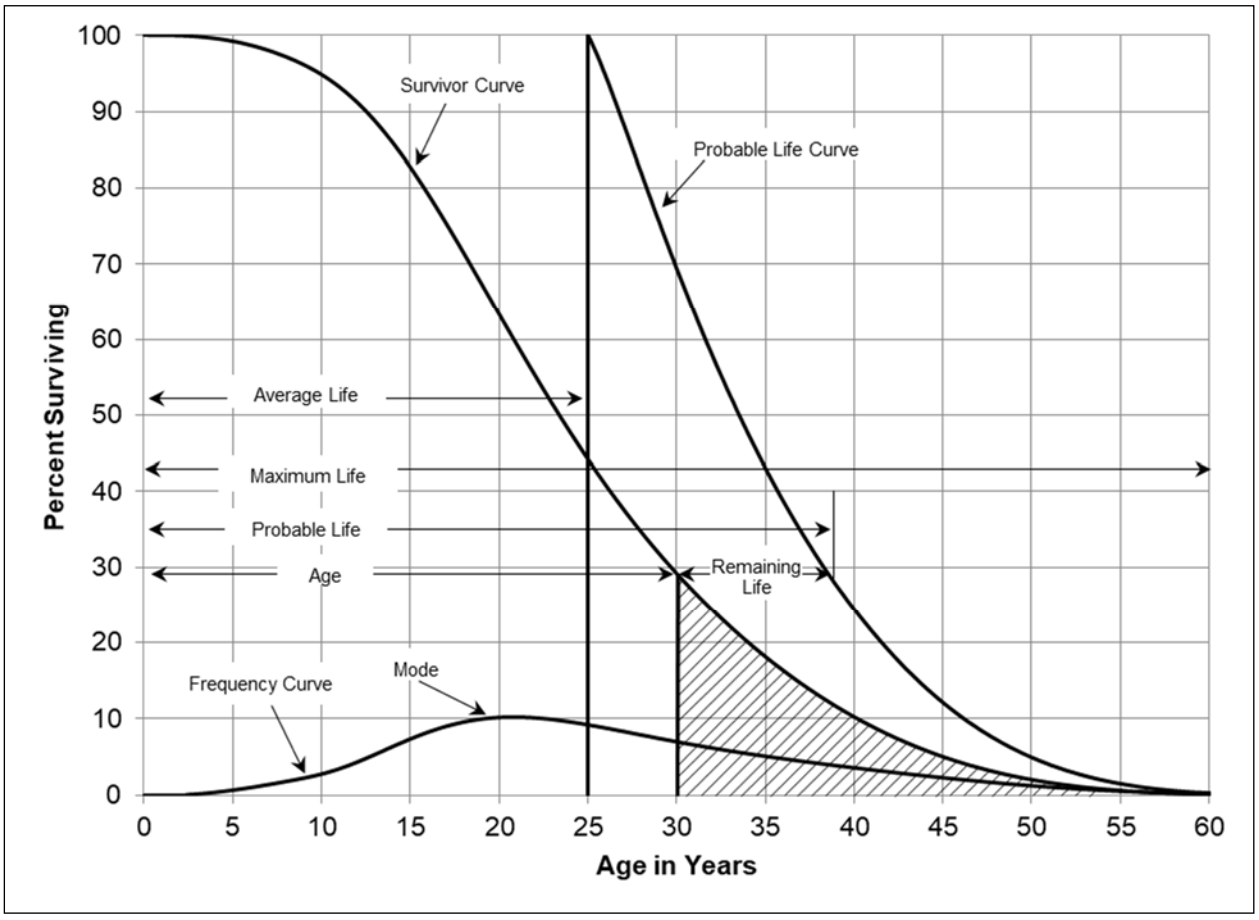
The straight-line, broad (average) life group, remaining-life depreciation system was employed to calculate annual and accrued depreciation in this study. In this system, the annual depreciation expense for each group is computed by dividing the original cost of the asset less allocated depreciation reserve less estimated net salvage by its respective average life group remaining life. The resulting annual accrual amounts of all depreciable property within a function were accumulated, and the total was divided by the original cost of all functional depreciable property to determine the depreciation rate. The calculated remaining lives and annual depreciation accrual rates were based on attained ages of plant in service and the estimated service life and salvage characteristics of each depreciable group. The computations of the annual account level depreciation rates are shown in Appendix A.

Actuarial analysis was used with each account within a function where sufficient data was available, and judgment was used to some degree on all accounts.

Survivor Curves

To fully understand depreciation projections in a regulated utility setting, there must be a basic understanding of survivor curves. Individual property units within a group do not normally have identical lives or investment amounts. The average life of a group can be determined by first constructing a survivor curve which is plotted as a percentage of the units surviving at each age. A survivor curve represents the percentage of property remaining in service at various age intervals. The chart below shows a typical generalized survivor curve as well as some of the life characteristics that can be derived from the survivor curve.

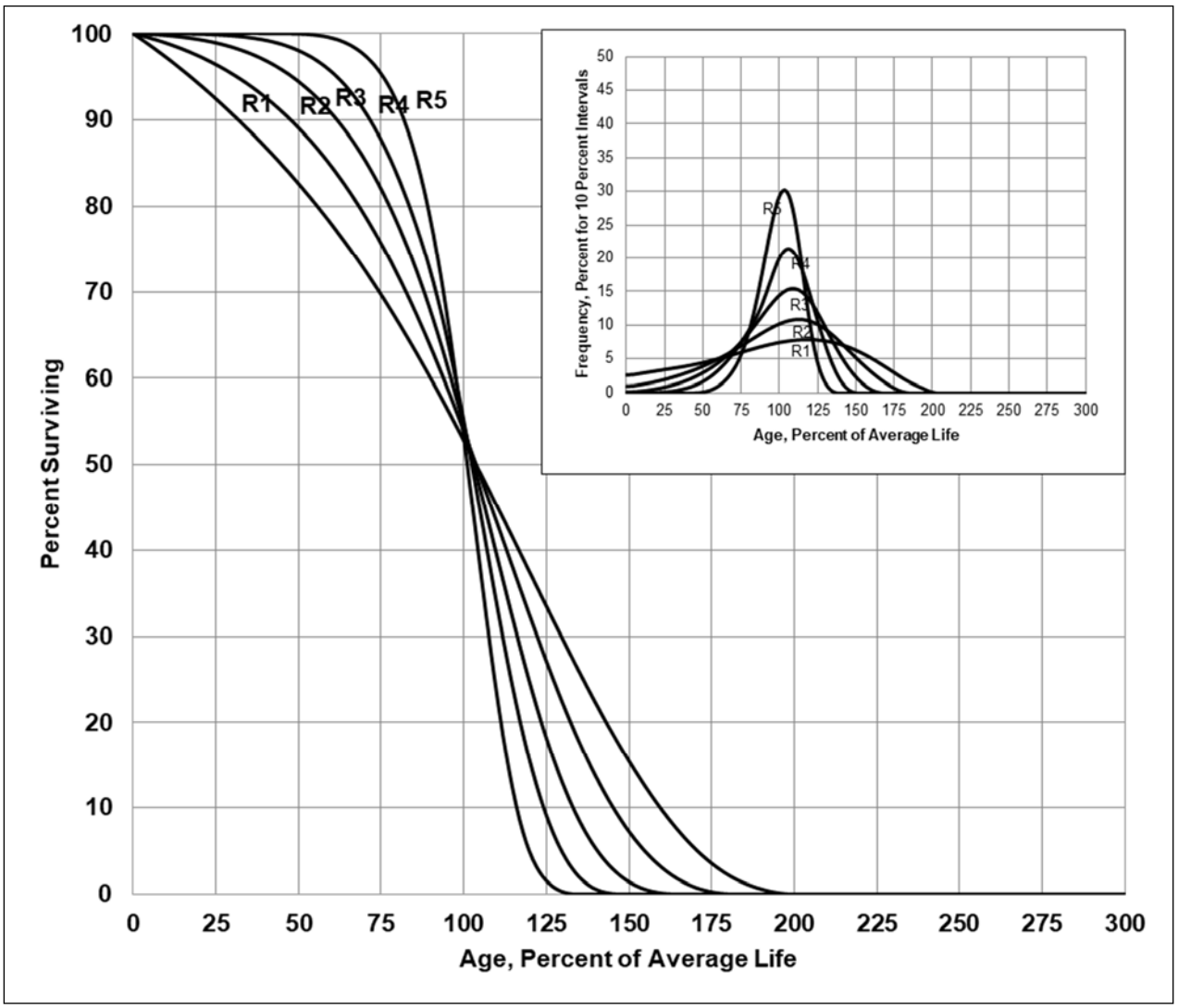
GENERALIZED SURVIVOR CURVE



The Iowa Curves (survivor curves) are the result of an extensive investigation of life characteristics of physical property made at Iowa State College Engineering Experiment Station in the first half of the prior century. Through common usage, revalidation and regulatory acceptance, these curves have become a descriptive standard for the life characteristics of industrial property.

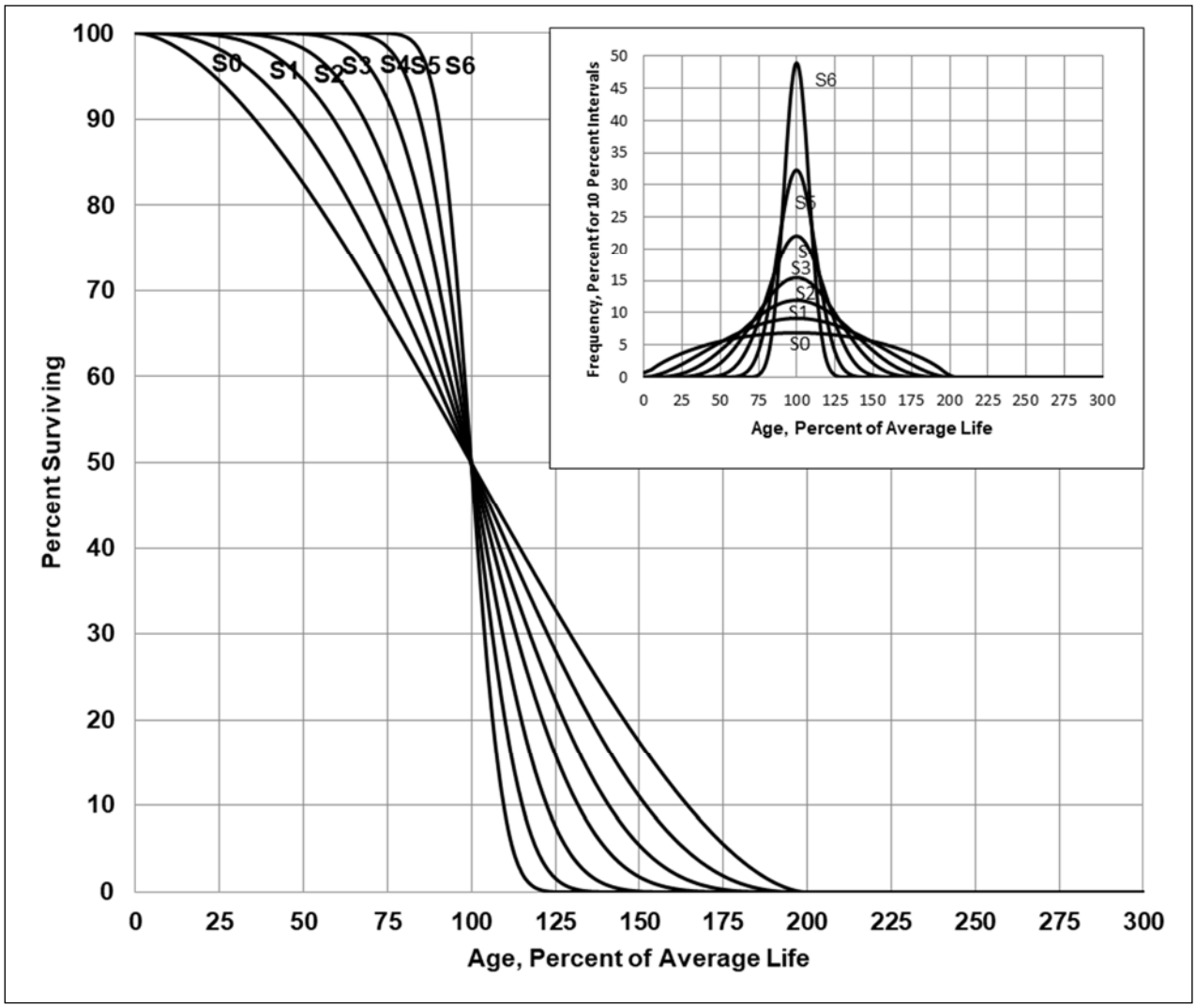
There are four families in the Iowa Curves that are distinguished by the relation of the age at the retirement mode (largest annual retirement frequency) and the average life. For distributions with the mode age greater than the average life, an "R" designation (*i.e.*, Right modal) is used. The family of “R” moded curves is shown below.

R-TYPE IOWA SURVIVOR CURVES



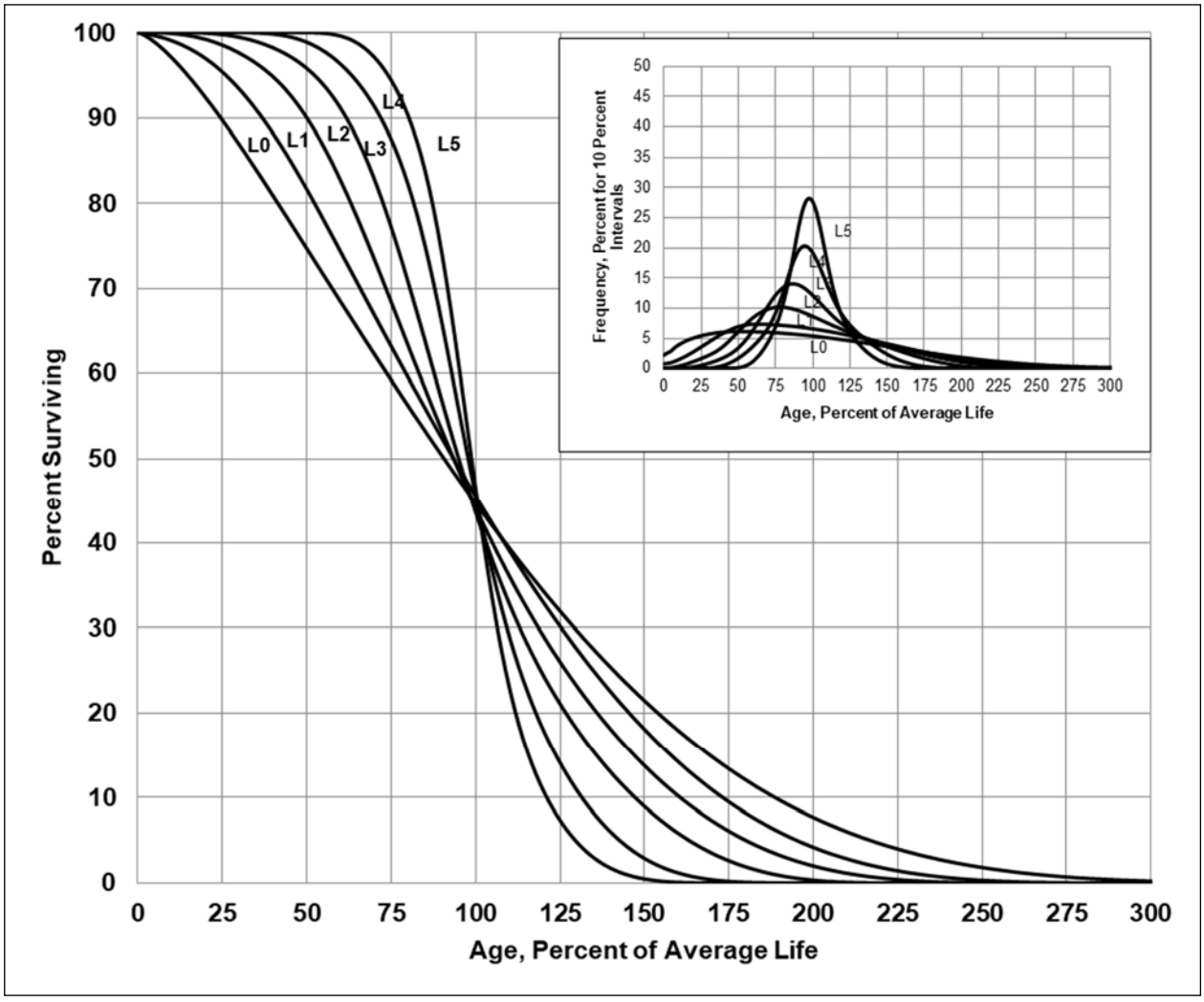
Similarly, an "S" designation (*i.e.*, Symmetric modal) is used for the family whose mode age is symmetric about the average life. The higher the number of the curve, the greater the peak. A graph showing the S curves is shown below.

S-TYPE IOWA SURVIVOR CURVES



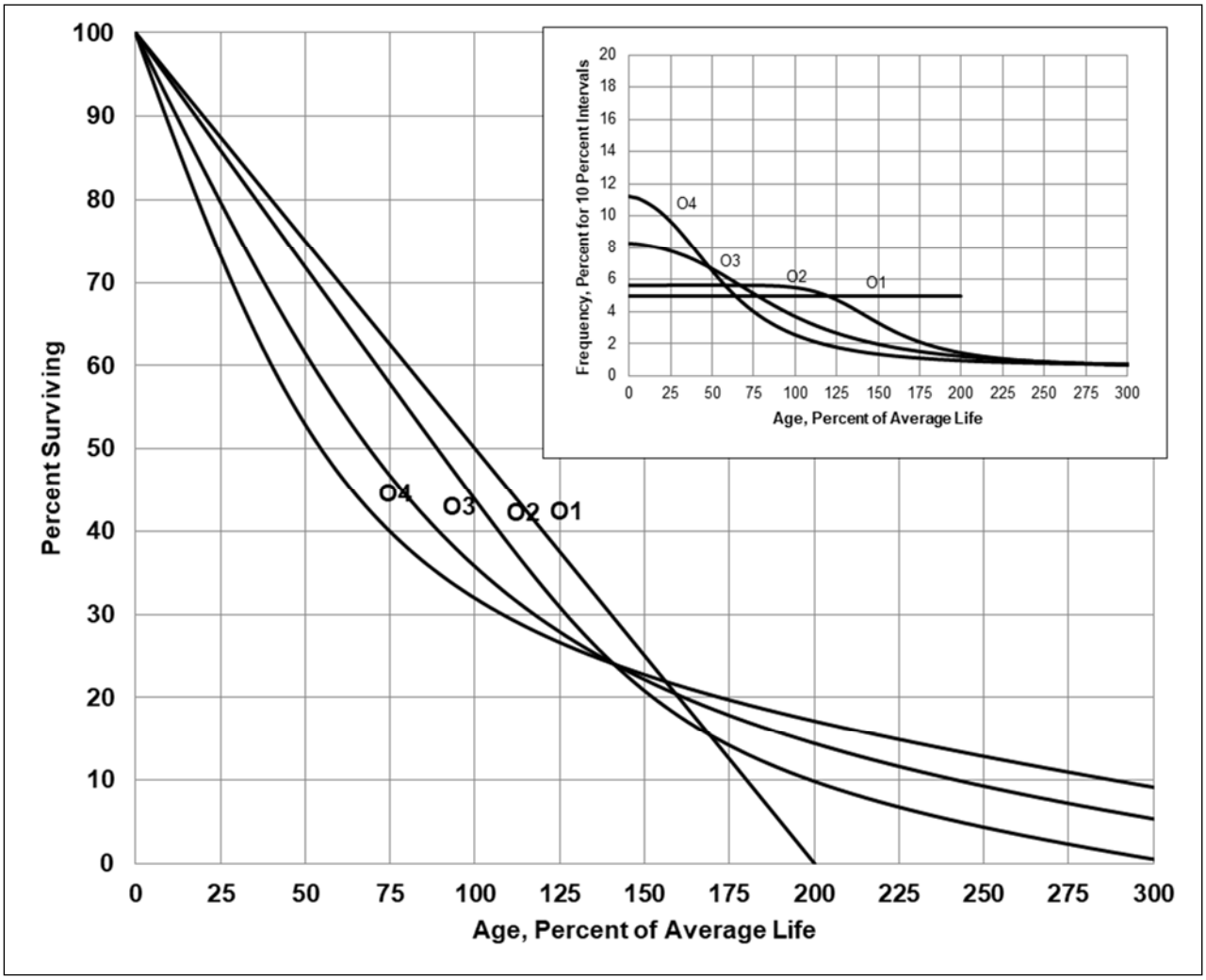
For distributions with the mode age less than the average life, a "L" designation (*i.e.*, Left modal) is used. The family of “L” moded curves is shown below.

L-TYPE IOWA SURVIVOR CURVES



A special case of left modal dispersion is the "O" or origin modal curve family which was developed in the 1950s.

O-TYPE IOWA SURVIVOR CURVES



The O curves are seldom used in analyzing utility property in Alliance Consulting Group's experience. The O curves have been used for intellectual property.

Within each curve family, numerical designations are used to describe the relative magnitude of the retirement frequencies at the mode. A "6" indicates that the retirements are not greatly dispersed from the mode (*i.e.*, high mode frequency), while a "1" indicates a large dispersion about the mode (*i.e.*, low mode frequency). For example, a curve with an average life of 30 years and an "L3" dispersion is a moderately dispersed, left modal curve that can be designated as a 30 L3 Curve. An SQ, or square, survivor curve occurs where no dispersion is present (*i.e.*, units of common age retire simultaneously).

Most property groups can be closely fitted to one Iowa Curve with a unique average service life. The blending of judgment concerning current conditions and future trends along with the matching of historical data permits the depreciation analyst to make an informed selection of an account's average life and retirement dispersion pattern.

Life Span Procedure

In the prior 2016 depreciation study, the life span procedure was used for transmission line facilities for which most components are expected to have a retirement date concurrent with the planned retirement date of a generating unit or the expected life cycle of the entire transmission line. The terminal retirement date refers to the year that each transmission line will cease operations. The terminal retirement date along with the interim retirement characteristics of the assets (where applicable) that will retire prior to the facility ceasing operation are used to describe the pattern of retirement of the assets that comprise a unit. The estimated terminal retirement dates for the various transmission lines were determined based on consultation with NYPA management, and financial and engineering staff. Those estimated terminal retirement dates are shown in Appendix C and were applied to assets in Accounts 354-356: Transmission Towers and Fixtures, Transmission Poles, and Transmission Overhead Conductor.

In this study, after interviews between Alliance and various NYPA personnel, it was determined that the life span approach is no longer a model that NYPA will

use going forward. At this point, NYPA is working with state agencies to implement recently enacted climate change legislation by building transmission facilities that will enable renewable resources to reach load centers. Both the significant replacement activity that will occur related to this legislation and the large number of retirements that will occur as a part of that effort necessitate the change to an average life structure for calculating depreciation expense.

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Actuarial Analysis

Actuarial analysis ("Retirement Rate" method) was used in evaluating historical asset retirement experience where vintage data were available and sufficient retirement activity was present. In actuarial analysis, interval exposures (total property subject to retirement at the beginning of the age interval, regardless of vintage) and age interval retirements are calculated. The complement of the ratio of interval retirements to interval exposures establishes a survivor ratio. The survivor ratio is the fraction of property surviving to the end of the selected age interval, given that it has survived to the beginning of that age interval. Survivor ratios for all the available age intervals were chained by successive multiplications to establish a series of survivor factors, collectively known as an observed life table. The observed life table shows the experienced mortality characteristic of the account and may be compared to standard mortality curves such as the Iowa Curves. Where data was available, accounts were analyzed using this method. Placement bands were used to illustrate the composite history over a specific era, and experience bands were used to focus on retirement history for all vintages during a set period. The results from these analyses for those accounts which had data sufficient to be analyzed using this method are shown in the Life Analysis section of this report. Given the backlog of retirement activity at NYPA, actuarial analysis was of limited use in determining the proposed life parameters in this study.

Judgment

Any depreciation study requires informed judgment by the analyst conducting the study. A knowledge of the property being studied, company policies and procedures, general trends in technology and industry practice, and a sound understanding of depreciation theory are needed to apply this informed judgment. Judgment was used in areas such as survivor curve modeling and selection, depreciation method selection, simulated plant record method analysis, and actuarial analysis.

Judgment is not defined as being used in cases where there are specific, significant pieces of information that influence the choice of a life or curve. Those cases would simply reflect specific facts in the analysis. Where there are multiple factors, activities, actions, property characteristics, statistical inconsistencies, implications of applying certain curves, property mix in accounts or a multitude of other considerations that impact the analysis (potentially in various directions), judgment is used to take all these factors and synthesize them into a general direction or understanding of the characteristics of the property. Individually, no one factor in these cases may have a substantial impact on the analysis, but overall, may shed light on the utilization and characteristics of assets. Judgment may also be defined as deduction, inference, wisdom, common sense, or the ability to make sensible decisions. There is no single correct result from statistical analysis; hence, there is no answer absent judgment. At the very least, for example, any analysis requires choosing bands upon which to place more emphasis.

The establishment of appropriate average service lives and retirement dispersions for each account requires judgment to incorporate the understanding of the operation of the system with the available accounting information analyzed using the Retirement Rate actuarial methods. The appropriateness of lives and curves depends not only on statistical analyses, but also on how well future retirement patterns will match past retirements.

Current applications and trends in use of the equipment also need to be factored into life and survivor curve choices for appropriate mortality characteristics to be chosen.

Average Life Group ("ALG") Depreciation

The most common depreciation system used by regulated utilities is the broad group, average life, remaining life depreciation system. At the request of NYPA, this study continues to use the ALG depreciation procedure to group the assets within each account. After an average service life and dispersion were selected for each account, those parameters were used to estimate what portion of the surviving investment of each vintage was expected to retire. The depreciation of the group continues until all investment in the vintage group is retired. ALG is defined by their respective account dispersion, life, and salvage estimates. A straight-line rate for each ALG is calculated by computing a composite remaining life for each group across all vintages within the group, dividing the remaining investment to be recovered by the remaining life to find the annual depreciation expense and dividing the annual depreciation expense by the surviving investment. The resultant rate for each ALG group is designed to recover all retirements less net salvage when the last unit retires. The ALG procedure recovers net book cost over the life of each account by averaging many components.

Theoretical Depreciation Reserve

This study used a reserve model that relied on a prospective concept relating future retirement and accrual patterns for property, given current life and salvage estimates. The theoretical reserve of a group is developed from the estimated remaining life, total life of the property group, and estimated net salvage. The theoretical reserve represents the portion of the group cost that would have been accrued if current forecasts were used throughout the life of the group for future depreciation accruals. The computation involves multiplying the vintage balances within the group by the theoretical reserve ratio for each vintage. The average life group method requires an estimate of dispersion and service life to establish how much of each vintage is expected to be retired in each year until all property within the group is retired. Estimated average service lives and dispersion determine the amount within each average life group. The straight-line remaining-life theoretical reserve ratio at any given age ("RR") is calculated as:

$$RR = 1 - \frac{(Average\ Remaining\ Life)}{(Average\ Service\ Life)} * (1 - Net\ Salvage\ Ratio)$$

The accumulated book depreciation reserve by account was compared to the theoretical reserve model based on the proposed life and net salvage parameters. Differences between book and theoretical reserves are recovered over the remaining life for each group through ALG depreciation approach.

DETAILED DISCUSSION

Depreciation Study Process

This depreciation study encompassed four distinct phases (*i.e.* Phases 1 through 4). Phase 1 involved data collection and field interviews. Phase 2 consisted of the initial data analysis. Phase 3 involved evaluating the information and analysis. Once the first three stages were complete, Phase 4 began, which involved the calculation of depreciation rates and documenting the corresponding recommendations.

During the Phase I data collection process, historical data was compiled from continuing property records and general ledger systems. Data was validated for accuracy by extracting and comparing to multiple financial system sources. The audit of this data was validated against historical data from prior periods, historical general ledger sources, and field personnel discussions. This data was reviewed extensively to put it in the proper format for a depreciation study. Further discussion on data review and adjustment is found in the Salvage Considerations Section of this study. Also, as part of the Phase 1 data collection process, numerous discussions were conducted with engineers and field operations personnel to obtain information that would assist in formulating life and salvage recommendations in this study. One of the most important elements of performing a proper depreciation study is to understand how the Company utilizes assets and the surrounding environment of those assets. Interviews with engineering and operations personnel are important ways to allow the analyst to obtain information that is beneficial when evaluating the output from the life and net salvage programs in relation to the Company's actual asset utilization and environment. Information that was gleaned in these discussions is found both in this Detailed Discussion section of this study in the life analysis and salvage analysis sections and in workpapers.

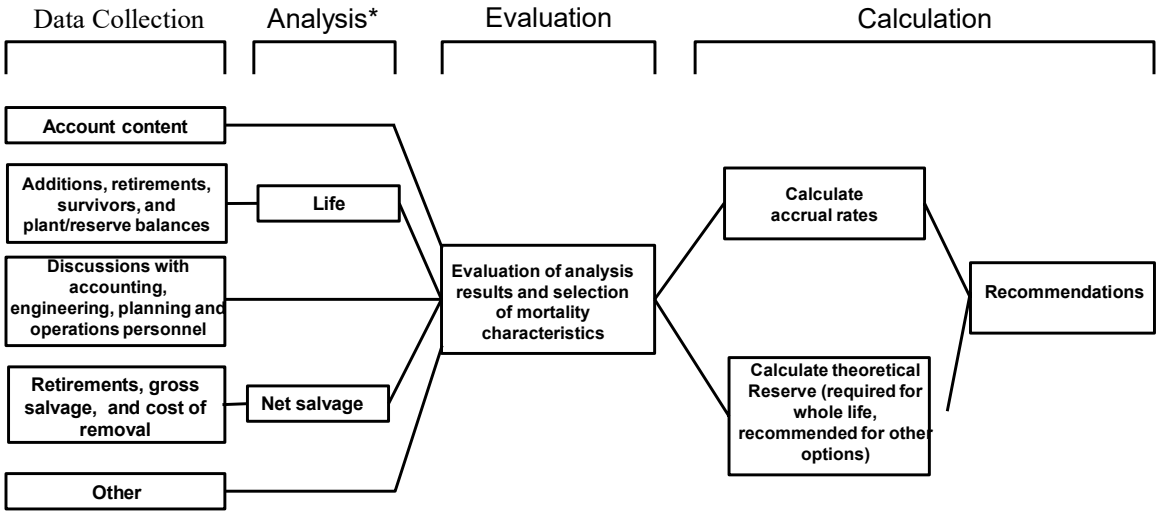
Phase 2 is where the actuarial analysis is performed. Phases 2 and 3 overlap to a significant degree. The detailed property records information is used in Phase 2 to develop observed life tables for life analysis. These tables are

visually compared to industry standard tables to determine historical life characteristics. It is possible that the analyst would cycle back to this phase based on the evaluation process performed in Phase 3. Net salvage analysis consists of compiling historical salvage and removal data by functional group to determine values and trends in gross salvage and removal cost. This information was then carried forward into Phase 3 for the evaluation process.

Phase 3 is the evaluation process which synthesizes analysis, interviews, and operational characteristics into a final selection of asset lives and net salvage parameters. The historical analysis from Phase 2 is further enhanced by the incorporation of recent or future changes in the characteristics or operations of assets that were revealed in Phase 1. Phases 2 and 3 allow the depreciation analyst to validate the asset characteristics as seen in the accounting transactions with actual Company operational experience.

Finally, Phase 4 involved the calculation of accrual rates, making recommendations and documenting the conclusions in a final report. The calculation of accrual rates is found in Appendix A to this report. Recommendations for the various accounts are contained within this Detailed Discussion section. The depreciation study flow diagram shown as Figure 1[2] documents the steps used in conducting this study. An authoritative treatise, Depreciation Systems[3], page 289, documents the same basic processes in performing a depreciation study which are: statistical analysis, evaluation of statistical analysis, discussions with management, forecast assumptions, and document recommendations.

[2] INTRODUCTION TO DEPRECIATION FOR PUBLIC UTILITIES & OTHER INDUSTRIES, AGA EEI (2013).
[3] Depreciation Systems, F.K. Wolf & W.C. Fitch, Iowa State University Press, 1994.



Source: Introduction to Depreciation for Public Utilities and Other Industries, AGA EEI , 2013.

*Although not specifically noted, the mathematical analysis may need some level of input from other sources (for example, to determine analysis bands for life and adjustments to data used in all analysis).

Figure 1

NEW YORK POWER AUTHORITY TRANSMISSION DEPRECIATION STUDY PROCESS

Depreciation Rate Calculation

Annual depreciation expense amounts for the transmission depreciable accounts of NYPA were calculated by the straight-line method, average life group procedure, and remaining-life technique. With this approach, remaining lives were calculated according to standard ALG expectancy techniques, using the Iowa Survivor Curves noted in the calculation. For each plant account, the difference between the surviving investment, adjusted for estimated net salvage, and the allocated book depreciation reserve, was divided by the average remaining life to yield the annual depreciation expense. These calculations are shown in Appendix A to this study.

Remaining Life Calculation

The establishment of appropriate average service lives and retirement dispersions for each account within a functional group was based on engineering judgment that incorporated available accounting information analyzed using the Retirement Rate actuarial methods. After establishment of appropriate average service lives and retirement dispersions, a remaining life was computed for each account. The composite remaining life for each account was determined by direct weighting (*i.e.* by multiplying vintage investment by the vintage remaining life and dividing by the plant balance for each account).

Account Calculation Process

Annual depreciation expense were calculated by the straight line, remaining life procedure.

In a whole life representation, the annual accrual rate is computed by the following equation,

$$\text{Annual Accrual Rate} = \frac{(100\% - \text{Net Salvage Percent})}{\text{Average Service Life}}$$

Use of the remaining life depreciation system adds a self-correcting mechanism, which accounts for any differences between theoretical and book depreciation reserve over the remaining life of the group. With the straight line,

remaining life, average life group system using Iowa Curves, composite remaining lives were calculated according to standard broad group expectancy techniques, noted in the formula below:

$$\text{Composite Remaining Life} = \frac{\sum \text{Original Cost} - \text{Theoretical Reserve}}{\sum \text{Whole Life Annual Accrual}}$$

For each plant account, the difference between the gross investment, adjusted for estimated net salvage, and the allocated book accumulated depreciation, was divided by the composite remaining life to yield the annual depreciation expense as noted in this equation.

$$\textit{Annual Depreciation Expense} = \frac{\textit{Original Cost} - \textit{Book Reserve} - (\textit{Original Cost} * \textit{Net Salvage \%})}{\textit{Remaining Life}}$$

where the net salvage percent represents future net salvage.

Within a group, the sum of the group annual depreciation expense amounts, as a percentage of the depreciable original cost investment summed, gives the annual depreciation rate as shown below:

$$\textit{Annual Depreciation Rate} = \frac{\sum \textit{Annual Depreciation Expense}}{\sum \textit{Original Cost}}$$

These calculations are shown in Appendix A to this study.

Life Analysis

The Retirement Rate actuarial analysis method was applied to all transmission accounts for NYPA where sufficient retirement activity was available for analysis. For each account, an actuarial Retirement Rate analysis was made with placement and experience bands of varying width. The historical observed life table was plotted and compared with various Iowa Survivor Curves to obtain the most appropriate match. A selected curve for each account is shown in the Life Analysis Section of this report. The observed life tables for all analyzed placement and experience bands are provided in workpapers.

For each account on the overall band (*i.e.*, placement from earliest vintage year which varied for each account through 2020), approved lives were used as a starting point. Then using the same average life, various dispersion curves were plotted. Frequently, visual matching would confirm one specific dispersion pattern (*i.e.*, L, S, or R) as an obviously better match than others. The next step would be to determine the most appropriate life using that dispersion pattern. Retirement experience began in 1982. For each account, the overall experience band for 1982-2020 was analyzed. Next, placement bands of varying width were plotted with each experience band discussed above. For most accounts, an overall placement band was analyzed along with shorter bands of approximately 20 and 50 years, respectively. [how can you use 50 years if the retirement data only goes back to 1982, as there is only 40 years maximum available?] Repeated matching usually pointed to a focus on one dispersion family and small range of service lives. The goal of visual matching was to minimize the differential between the observed life table and Iowa curve in top and mid range of the plots. These results are used in conjunction with all other factors that may influence asset lives.

NYPA TRANSMISSION MODERNIZATION

NYPA operates one-third of the major transmission lines in New York State, helping to form the backbone of the statewide grid for electric power transmission. The 1,400 miles of transmission lines carry power from generation sources to

substation distribution centers, where they feed the lines that connect to individual customers. From high-tech transformers and other major equipment to advanced monitoring and automated, instantaneous response capability, NYPA, coordinating with other transmission-owning utilities in New York State and the NYISO, is actively improving New York's grid. New capital is being expended to address end of life issues as well as to build new projects that will help enable New York to attain its clean energy requirements by adding transfer capacity between renewable resources and load centers.

NYPA's transmission team is executing a long-term plan for continuous equipment and technology improvements that will increase transfer capability and operational flexibility, reduce outages, and provide deep, real-time information about system operations. NYPA has multiple projects underway, some of which will help the State attain its clean energy goals. Just a few of those efforts are:

- Central East Energy Connect - NYPA has teamed up with LS Power Grid New York to build this 93-mile section of transmission lines from Marcy to New Scotland. The work will increase west to east capacity and substantially reduce congestion, improve resiliency and help New York State meet its clean energy goals by adding transfer capability so renewable energy can access load centers, like New York City.

- Smart Path - NYPA is rebuilding its 86-mile-long Moses-Adirondack double circuit transmission line ("MA1 and MA2"). Though consistently well-maintained, the line is over 70 years old and has exceeded its service life. Rebuilding the line will lead to long-term benefits and support future upgrades in voltage, which would allow for greater transmission of energy from renewable sources developed in Northern New York. The MA1 and MA2 lines are essential for system reliability and system restoration, including blackstart capability). Plans are underway to removal of the old wooden H-frame structures and to rebuild with modern steel monopole structures. The route of the MA1 and MA2 transmission lines is depicted in

the map below.

- Smart Path Connect ("SPC") Project - The SPC Project consists of rebuilding approximately 100 linear miles of existing 230-kilovolt ("kV") transmission lines in northern New York to 345 kV along with associated substation construction and upgrades. Northern New York is the site of significant amounts of existing and planned renewable generation development needed to meet the New York's recently enacted climate and clean energy goals. The State's transmission system in the region currently is constrained, affecting existing generation, and the system currently does not offer sufficient transmission capability to deliver large amounts of planned, not yet operating, renewable generation to load centers. The SPC Project would address these transmission constraints by establishing,

together with other projects currently under development by NYPA, a continuous 345 kV transmission path from northern to central New York that would enable an additional 1,000 MW of transfer capability to central New York and then to high demand areas in other parts of the State. NYPA is partnering with National Grid in the development and construction of this project.

- Switchyard Automated Monitoring and Controls ("SAMAC") Advanced Transmission Hub - At the Robert Moses substation, which transmits St. Lawrence-FDR hydropower across the State, NYPA has created one of the most advanced transmission hubs in North America. The technology includes a system whose microprocessors dynamically adapt to changing conditions. Real-time information is communicated to system operators and to automated switchyard components for precision monitoring and control of electricity transmission. The system even anticipates or mitigates equipment failures.
- Dynamic Line Ratings - Dynamic Line Rating technology uses field instruments and software to track the transmission capacity of power lines. That capacity changes due to weather conditions: ambient temperature, wind speed, solar radiation, and humidity. Real-time information can be used to adjust the use of conductors, resulting in a potential five-to-15 percent increase in capacity. This "hidden capacity" can be used to optimize power flows across the grid. NYPA is applying dynamic ratings technologies along three major transmission corridors near its large hydroelectric plants: the 345-kV Niagara-Rochester line near the Niagara Power Project, the 345-kV Gilboa-Fraser line near the Blenheim-Gilboa Pumped Storage Power Project, and the 230-kV Moses-Willis-Plattsburgh line near the St. Lawrence-FDR Power Project.
- Wood Pole Inspection and Treatment Program - NYPA operates and maintains a 1,400+ mile statewide transmission system that includes nearly 7,000 wood utility poles that operate from 2,400 to 345,000 volts. Wood

poles serve the 345 KV system on Marcy South and GR-5 since NYPA's inception with 390 structures in total. The wood pole inspection and treatment program helps to ensure that the reliability of the system is maintained by closely monitoring the life cycle of the wood poles, as well as preventing premature failure by applying the latest inspection, treatment and repair techniques. Maximizing the life of wood utility poles is performed in a multi-step process that includes the development of demanding purchasing specifications followed by a comprehensive inspection, testing and treatment program. At the end of the pole's life, it is disposed. Coupled with NYPA's Integrated Vegetation Management program, which is recognized as a "Right-of-Way Steward Utility" through the accreditation program of the Right-of-Way Stewardship Council, the wood pole treatment and inspection program is geared to minimize the environmental impact and disturbance to local land owners. Wood poles will remain prevalent in the Northern Region on 115kV and lower voltages. Wood poles will also remain on Marcy-South at 345kV in the Central Region.

- Vegetation Management Program - NYPA has a systemwide Long-Range Transmission Right-of-Way Vegetation Management Plan and Program to ensure the physical integrity of its transmission lines and support structures through a program of regular preventive maintenance. It is designed to support the safe and reliable transmission of electric power in an economically, environmentally sound and sustainable manner. The process of Integrated Vegetation Management (IVM) is employed to ensure that tall growing trees and woody shrubs do not interfere with these critically important electric power transmission facilities. IVM balances the use of cultural, biological, physical and chemical procedures for controlling undesirable species while at the same time promoting desirable low growing plant species such as shrubs, herbs, grasses, forbs and ferns, which enhance wildlife and pollinator habitat.

The magnitude of these effort will affect the lives of the assets on NYPA's system

– some efforts extending lives while rebuilds will reduce the lives of many transmission assets as they are retired as part of the major construction projects.

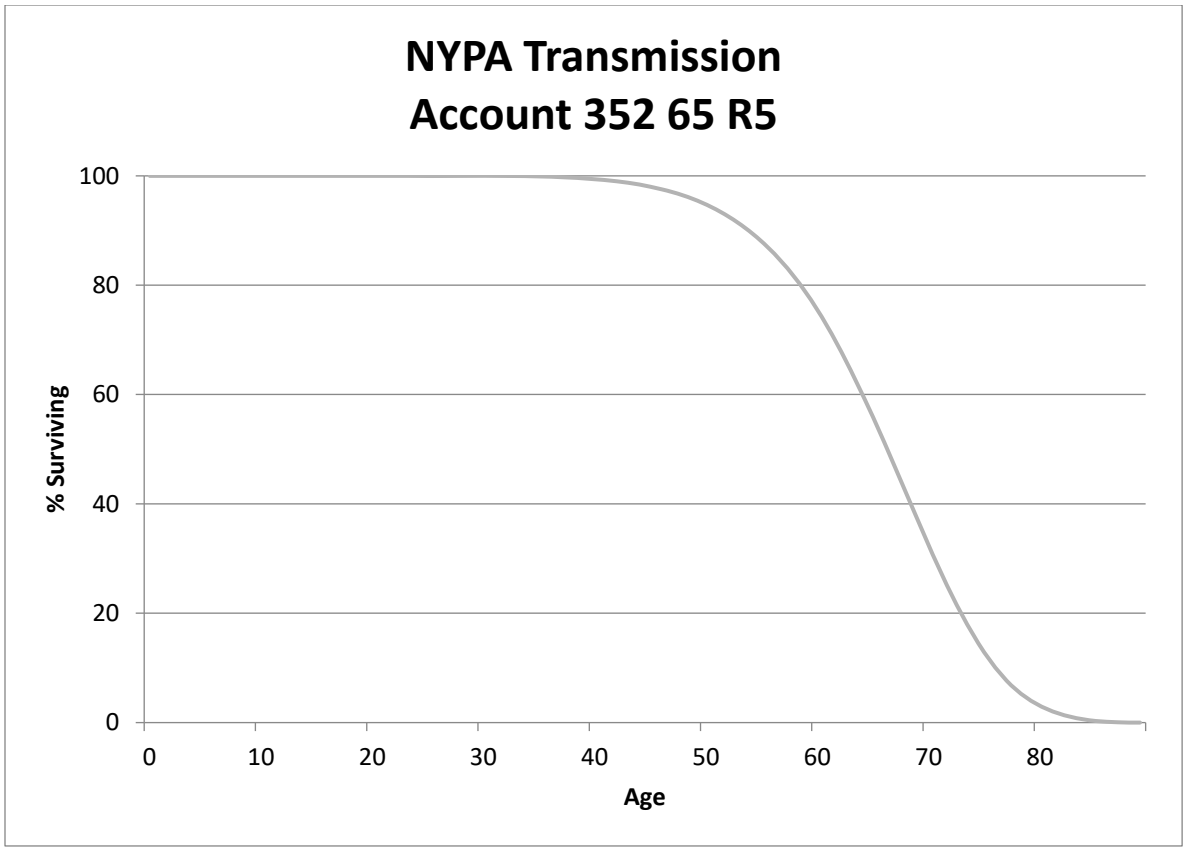
TRANSMISSION PLANT

Transmission Plant Accounts, FERC Accounts 352.00-359.00

FERC Account 352 Substation Structures & Improvements 65 R5

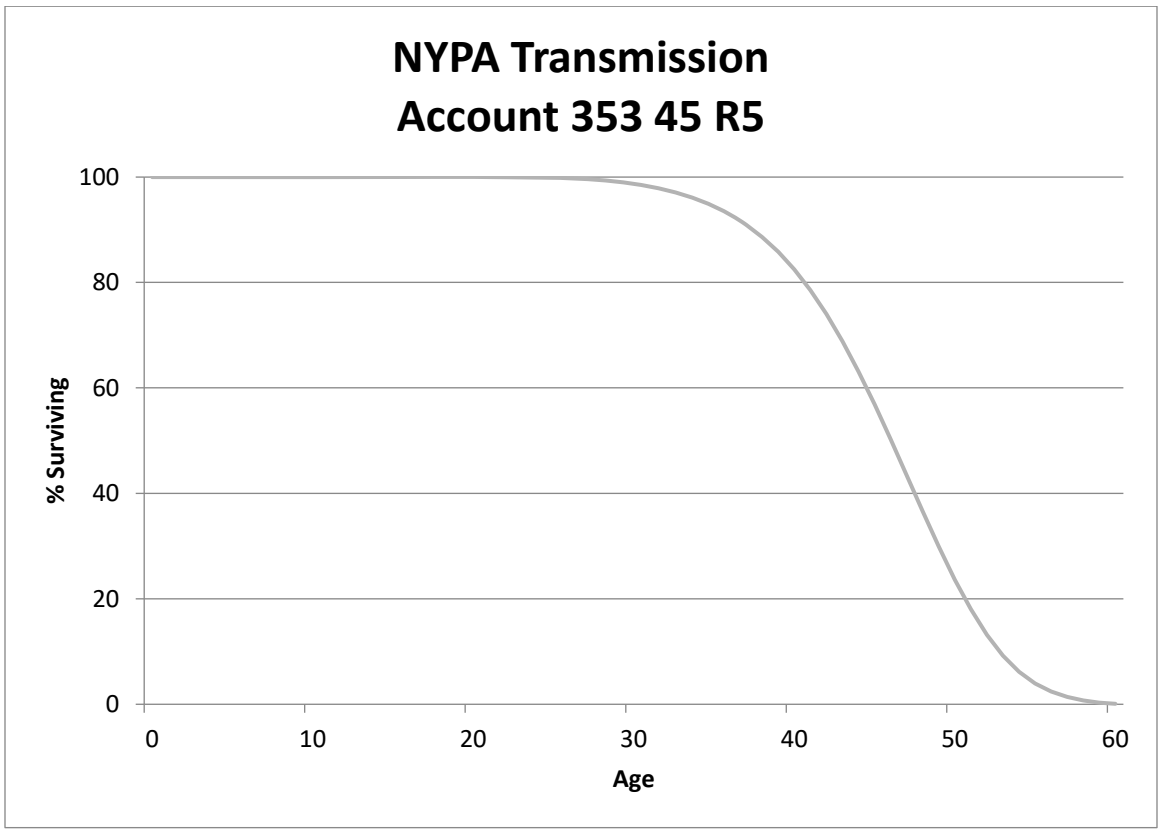
This account consists of control building, fencing, landscaping/yard surfacing and station lighting. The current balance[4] is $94.3 million for this account. This account has an existing life of 75 R5. Actuarial analysis was of limited value. The appropriate life and dispersion curve was selected for this account based on the range of lives and curves used by other peer utilities, the type and characteristics of assets in this account and judgment. This study recommends moving to a 65 R5 dispersion curve. A representative curve shape is shown below.

4 Current, as used in this section of the transmission depreciation study, refers to December 31, 2020.


NYPA Transmission
Account 352 65 R5
100
80
60
40
20
0
% Surviving
0
10
20
30
40
50
60
70
80
Age

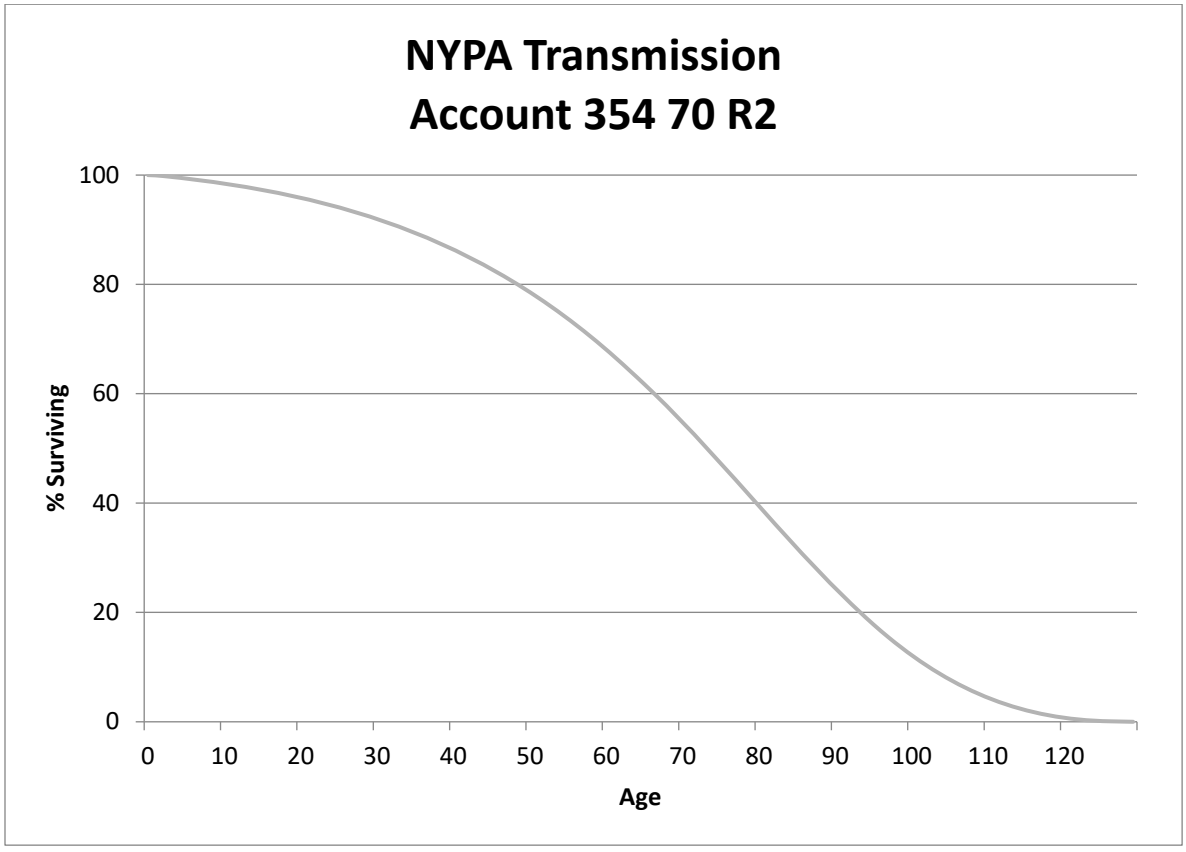
FERC Account 353 Station Equipment 45 R5

This account includes the cost of transformers, capacitor banks, circuit breakers, cubicle switchgear, equipment foundation, station controls and station wiring for transmission plant. The current balance is $1.4 billion for this account. This account has an existing life of 60 R5. Actuarial analysis was of limited value. Based on the type of assets in this group, a review of lives used by other peer utilities, and judgment, this study recommends a 45 R5 dispersion curve. As NYPA embarks on a massive construction program, much of the Company's substation assets will be replaced or upgraded and equipped with electronic monitoring devices. A representative curve shape is shown below.



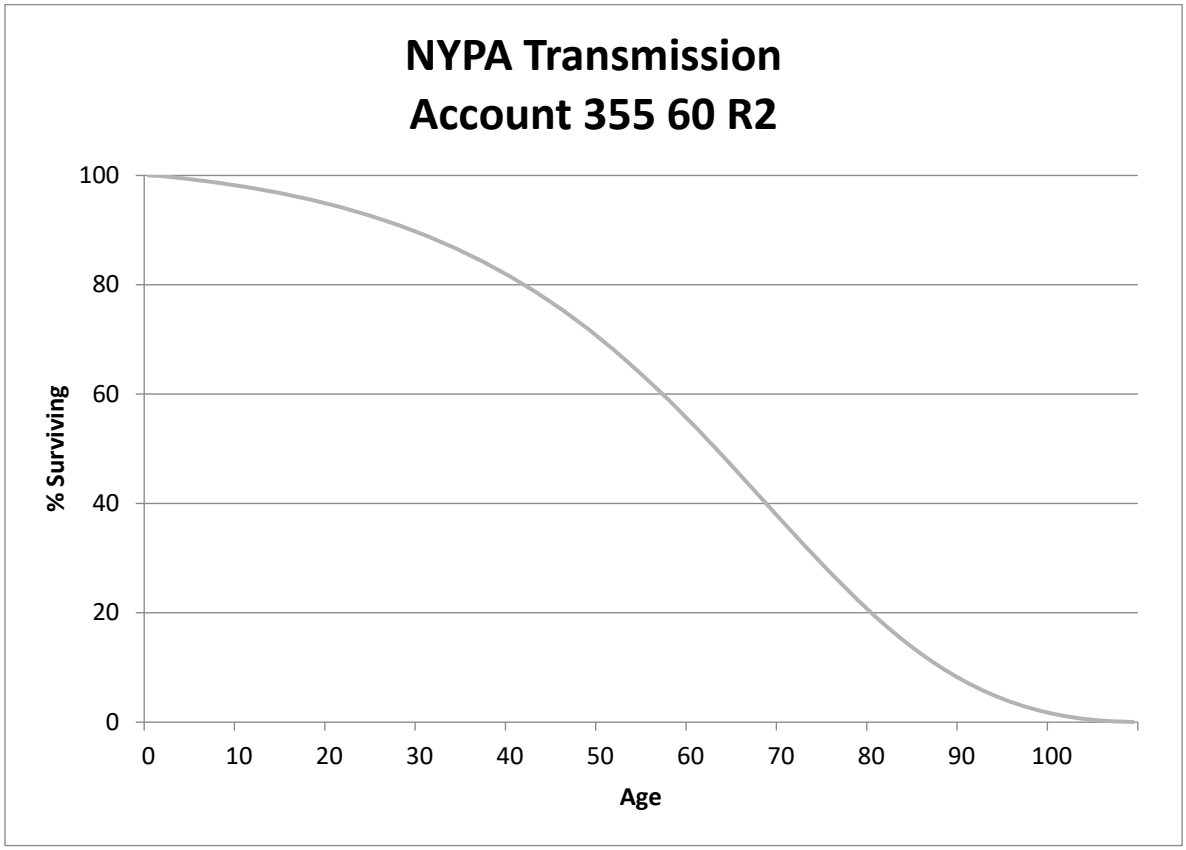
FERC Account 354 Transmission Towers & Fixtures 70 R2

This account consists of concrete foundations and lattice transmission structures. The current balance is $206.5 million for this account. This account has an existing life of 80 SQ, with life span dates for various transmission locations. NYPA has historically retired very little investment in this account and treated individual transmission lines as life cycle or lifespan types of assets. Going forward, the Company will operate like other regulated utilities with replacements and removal costs being incurred. The appropriate life and dispersion curve was selected for this account based on the range of lives and curves used by other peer utilities, the type and characteristics of assets in this account and judgment. This study recommends moving to a 70 R2 dispersion curve. A representative curve shape is shown below.



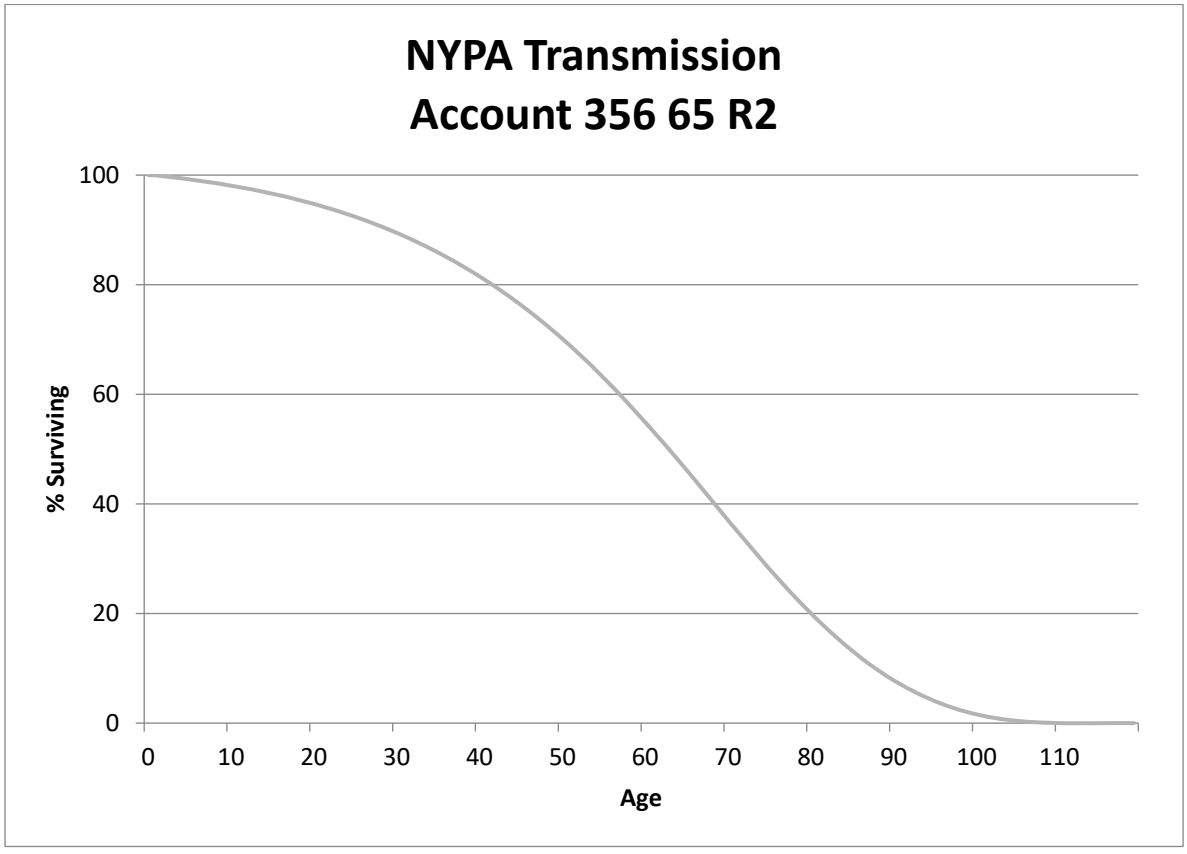
FERC Account 355 Poles & Fixtures 60 R2

This account includes equipment foundation and many kinds of poles for transmission plant. The current balance is $240.4 million for this account. This account has an existing life of 80 SQ, with lifespan dates for various transmission locations. NYPA has historically retired very little investment in this account and treated individual transmission lines as life cycle or lifespan types of assets. Going forward, the Company will operate like other regulated utilities with replacements and removal costs being incurred. The appropriate life and dispersion curve was selected for this account based on the range of lives and curves used by other peer utilities, the type and characteristics of assets in this account and judgment. This study recommends moving to a 60 R2 dispersion curve. A representative curve shape is shown below.



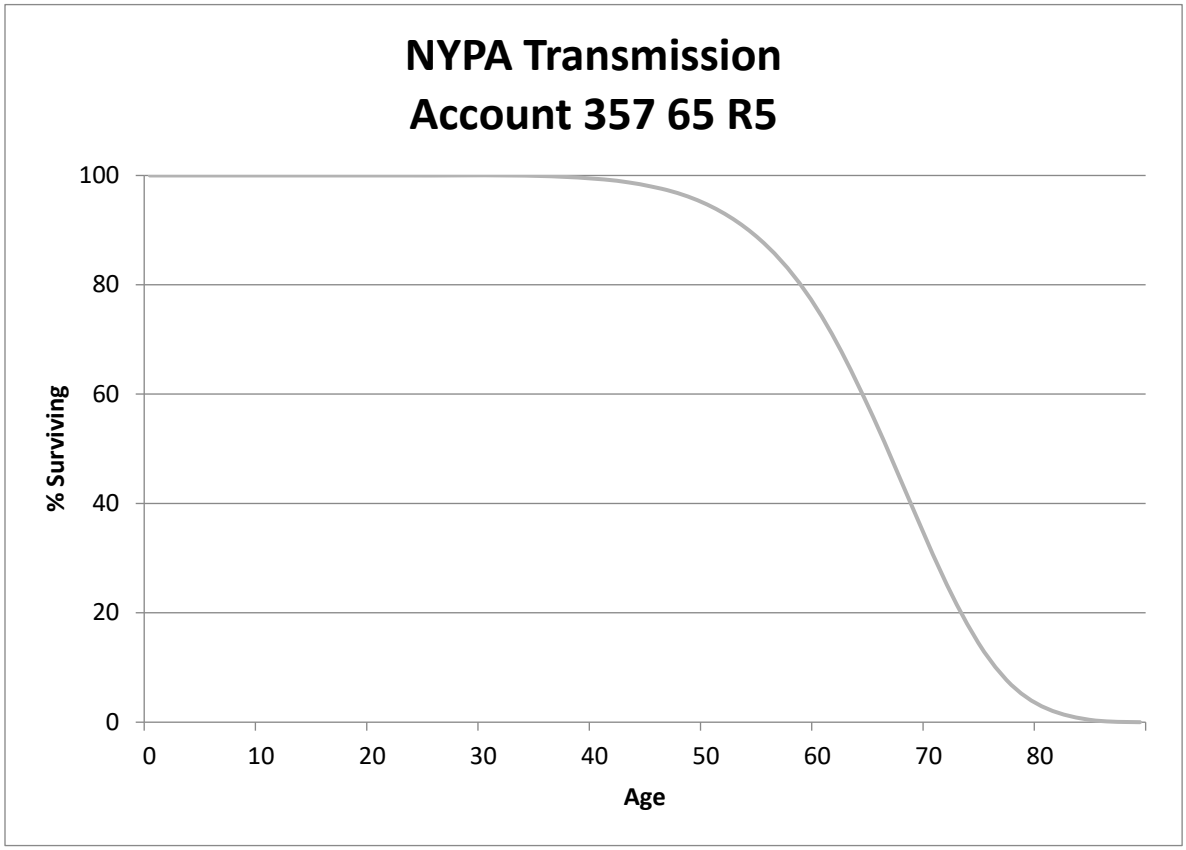
FERC Account 356 Overhead Conductor and Devices 65 R2

This account consists of conductors and insulators. The current balance is $261.1 million for this account. This account has an existing life of 80 SQ, with life span dates for various transmission locations. NYPA has historically retired very little investment in this account and treated individual transmission lines as life cycle or lifespan types of assets. Going forward, the Company will operate like other regulated utilities with replacements and removal costs being incurred. The appropriate life and dispersion curve was selected for this account based on the range of lives and curves used by other utilities, the type and characteristics of assets in this account and judgment. This study recommends moving to a 65 R2 dispersion curve. A representative curve shape is shown below.



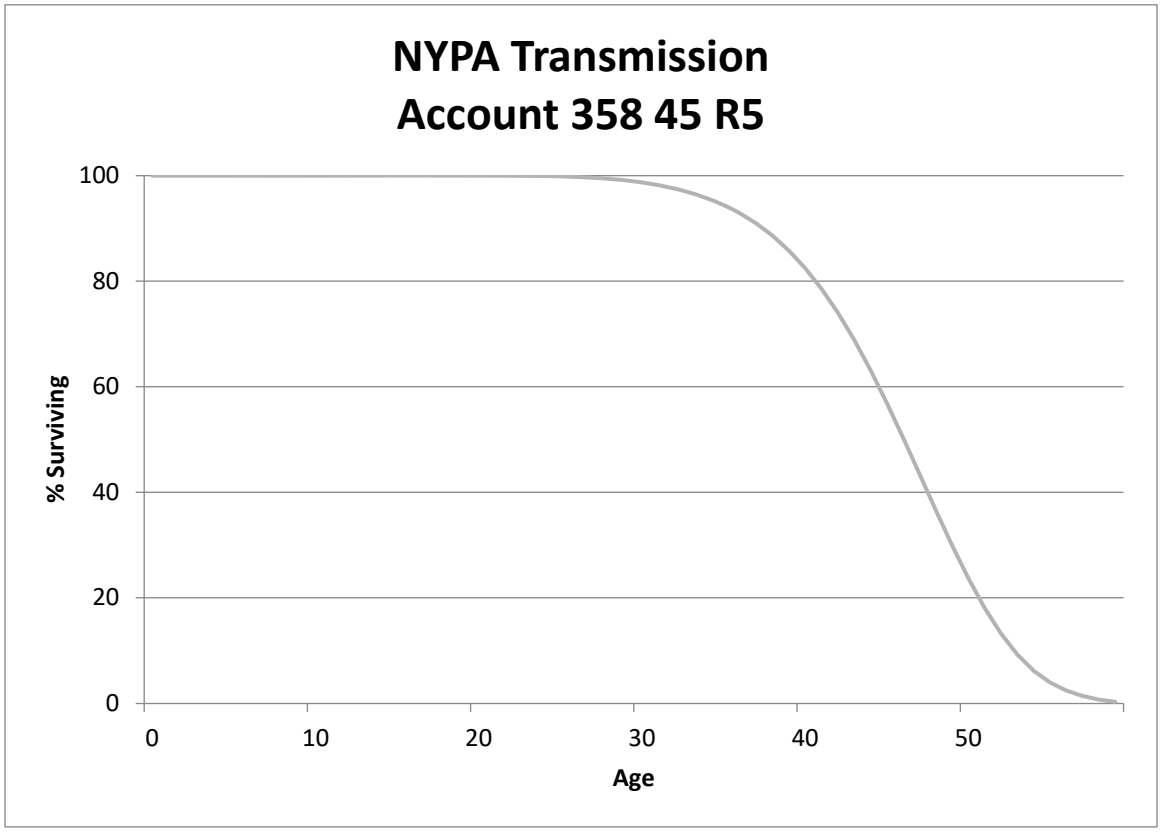
FERC Account 357 Underground Conduit 65 R5

This account consists of electric transmission conduit, electric manholes, vaults, tunnels, and spreader head assembly. The current balance is $145.6 million for this account. This account has an existing life of 75 R5. More than $60 million of the plant in this account is associated with Y-49 transmission line which is approximately 30 years old. This line, also known as the Long Island Sound Cable, is being partially replaced. After reviewing current Company plans, a shorter life is indicated. The appropriate life and dispersion curve was selected for this account based on the range of lives and curves used by other peer utilities, the type and characteristics of assets in this account and judgment. This study recommends moving to a 65 R5 dispersion curve. A representative curve shape is shown below.



FERC Account 358 Underground Conductors and Devices 45 R5

This account consists of conductors, line potheads, pipeline oil pumps, and underground cable. The current balance is $219.4 million for this account. This account has an existing life of 50 R5. More than $162.7 million of the plant in this account is associated with Y-49 line which is approximately 30 years old. There have been four faults in the past year, which is causing the Company to replace portions of the Long Island Sound Cable in Nassau County. NYPA plans to replace about one-third of the Long Island Sound Cable investment. Another $30 million is 230kV submarine cable under Lake Champlain. The appropriate life and dispersion curve was selected for this account based on the range of lives and curves used by other peer utilities, the type and characteristics of assets in this account, the replacement plans of the Company and judgment. This study recommends moving to a 45 R5 dispersion curve. A representative curve shape is shown below.



FERC Account 359 Roads and Trails 75 SQ

This account consists of bridges, trails, and roads. The current balance is $28.5 million for this account. There is insufficient history to analyze this account with actuarial analysis. This account has an existing life of 100 SQ. Company experts state that historically, these assets were seldom retired. As part of the Smart Path project, some roads and trails will be retired. The comparable utilities examined showed a composite life of 72 years. Based on the characteristics of the assets in this account and judgment, this study recommends retaining a 75 SQ dispersion curve. No graph is provided below.

SALVAGE AND COST OF REMOVAL

Net Salvage Analysis

When a capital asset is retired, physically removed from service and finally disposed of, terminal retirement is said to have occurred. The residual value of a terminal retirement is called gross salvage. Net salvage is the difference between the gross salvage (for what the asset was sold) and the removal cost (cost to remove or dispose of the asset).

Salvage and removal cost percentages are calculated by dividing the current cost of salvage or removal by the original installed cost of the asset. Some plant assets can experience significant negative removal cost percentages due to the timing of the original addition versus the retirement. For example, a transmission asset in FERC Account 355 with a current installed cost of $500 (2020) would have had an installed cost of $34.88[5] in 1960 (which reflects the proposed average life of the account). A removal cost of $50 for the asset calculated (incorrectly) on current installed cost would only have a negative 10 percent removal cost ($50/$500). However, a correct removal cost calculation would show a 143 percent removal cost for that asset ($50/$34.88). Inflation from the time of installation of the asset until the time of its removal must be considered in the calculation of the removal cost percentage because the depreciation rate, which includes the removal cost percentage, will be applied to the original installed cost of assets. The net salvage analysis uses the history of the individual accounts to estimate the future net salvage that NYPA can expect in its operations. As a result, the analysis not only looks at the historical experience of NYPA, but also recent and expected changes in operations that could reasonably lead to different future expectations for net salvage than were experienced in the past.

[5] Using the Handy-Whitman Bulletin No. 193, E-1, line 36, $34.88 = $500 x 51/731.

Salvage Characteristics

NYPA has not historically booked cost of removal for most of its accounts. The existing net salvage percentages were based on estimates of terminal removal cost back in 2015 and 2016 when the prior depreciation study was conducted. To develop data for a similar analysis, one of NYPA's largest replacement projects was used as a proxy for terminal net salvage. The summary of net salvage is shown in Appendix D.

The project used to estimate removal costs is the replacement of the MA1 and MA2 transmission lines: The MA1 transmission line includes - one 230kV oil circuit breaker, three disconnect switches, one wave trap, one surge arrester, one coupling capacitor, one voltage transformer with carrier accessories, two current transformers, and associated line supports and foundations; and the MA2 transmission line includes - one 230kV oil circuit breaker, three disconnect switches, one wave trap, one surge arrester, one coupling capacitor, one voltage transformer with carrier accessories, two current transformers, and associated line supports and foundations. The summary results are shown in Appendix D-1.

Transmission Plant

Since NYPA has not historically recorded removal cost into accumulated depreciation, there is no history to analyze in estimating net salvage. As the Company implements industry best practice and converts its removal cost process, data will become available for future depreciation studies. In the interim, this study uses industry averages of other utilities to estimate net salvage for some accounts and a current estimates of removal cost for transmission line assets.

TRANSMISSION PLANT

Transmission Plant Accounts, FERC Accounts 352.00-359.00

FERC Account 352 Substation Structures & Improvements (-25%)

This account consists of control building, fencing, landscaping/yard surfacing and station lighting. The current net salvage percentage is negative 20 percent. Based on industry averages and general expectations of the future as NYPA upgrades its infrastructure, this study recommends a negative 25 percent net salvage rate for this account.

FERC Account 353 Station Equipment (-20%)

This account consists of substation equipment. The current net salvage percentage is negative 12 percent. Based on industry averages and general expectations of the future as NYPA upgrades its infrastructure, this study recommends a negative 20 percent net salvage rate for this account.

FERC Account 354 Transmission Towers & Fixtures (-59%)

This account consists of concrete foundations and lattice transmission structures. The current net salvage percentage is negative 65 percent. As NYPA's process changes to record net salvage to accumulated depreciation, there will be better data available in subsequent years. The removal cost indications from a the ongoing MA1 and MA2 line replacements suggest a large negative net salvage component – much larger than the peer group average. NYPA's current net salvage rates were determined in FERC Docket No. ER17-1010-010. With uncertainty on the level of removal cost in the future, this study incorporated the previously approved net salvage percentages for accounts 354, 355, and 356 dollar weighted by NYPA's plant balances in each account at December 31, 2020. That computation yielded a composite net salvage for these three accounts of negative 59 percent. Given the uncertainty of how much more negative the eventual removal cost projections will be for specific NYPA projects, this study recommends using 59 percent net salvage rate for this account until better

information is available.

FERC Account 355 Poles & Fixtures (-59%)

This account consists of transmission poles and foundations. The current net salvage percentage is negative 65 percent. As NYPA's process changes to record net salvage to accumulated depreciation, there will be better data available in subsequent years. The removal cost indications from a the ongoing MA1 and MA2 line replacements suggest a large negative net salvage component – much larger than the peer group average. With uncertainty on the level of removal cost in the future, this study developed a composite net salvage for Accounts 354, 355 and 356 combined as discussed above. Given the uncertainty of how much more negative the eventual removal cost projections will be for specific NYPA projects, this study recommends using negative 59 percent net salvage rate for this account until better information is available.

FERC Account 356 Overhead Conductor and Devices (-59%)

This account consists of conductors and insulators. The current net salvage percentage is negative 50 percent. As NYPA's process changes to record net salvage to accumulated depreciation, there will be better data available in subsequent years. The removal cost indications from a the ongoing MA1 and MA2 line replacements suggest a large negative net salvage component – much larger than the peer group average. With uncertainty on the level of removal cost in the future, this study developed a composite net salvage for Accounts 354, 355 and 356 combined as discussed above. Given the uncertainty of how much more negative the eventual removal cost projections will be for specific NYPA projects, this study recommends using negative 59 percent net salvage rate for this account until better information is available.

FERC Account 357 Underground Conduit (-5%)

This account consists of electric transmission pipe, electric manholes,

vaults, tunnels, and spreader head assembly. The current net salvage percentage is negative 5 percent. When retired, much of this equipment will be abandoned in place. Based on industry averages and general expectations of the future, this study recommends continuing the negative 5 percent net salvage rate for this account.

FERC Account 358 Underground Conductor and Devices (-10%)

This account consists of conductors, line potheads, pipeline oil pumps, and underground cable. The current net salvage percentage is negative 5 percent. Based on industry averages and general expectations of the future, this study recommends a negative 10 percent net salvage rate for this account.

FERC Account 359 Roads and Trails (0%)

This account consists of bridges, trails, and roads. The current net salvage percentage is zero percent. Based on industry averages and general expectations of the future, this study recommends a zero percent net salvage rate for this account.

APPENDIX A

Computation of Annual Depreciation Rate

NEW YORK POWER AUTHORITY
COMPUTATION OF ANNUAL DEPRECIATION RATE
At December 31, 2020

Account	Account Description	Plant Balance at 12/31/2020 $	Total Accumulated Depreciation at 12/31/2020 $	Life Accumulated Depreciation at 12/31/2020	COR Accumulated Depreciation at 12/31/2020 $	Net Salvage %	Net Salvage Amount $	Unaccrued Balance $	Remaining Life Yrs	Annual Accrual $	Annual Accrual %
TRANSMISSION PLANT											
Astoria 2											
353	Station Equipment	60,481,915.00	28,665,303.00	28,665,303.00	0.00	-20.00%	(12,096,383.00)	43,912,995.00	35.50	1,236,985.77	2.05%
357	Underground Conduit	24,644,166.00	11,705,986.00	11,705,986.00	0.00	-10.00%	(2,464,416.60)	15,402,596.60	55.50	277,524.26	1.13%
Astoria											
353	Station Equipment	87,822,364.66	39,165,381.36	39,165,381.36	0.00	-20.00%	(17,564,472.93)	66,221,456.23	31.91	2,075,435.40	2.36%
Blenheim Gilboa											
352	Structures & Improvements	4,733,437.00	3,600,594.12	3,600,594.12	0.00	-25.00%	(1,183,359.25)	2,316,202.13	30.67	75,523.99	1.60%
353	Station Equipment	63,678,238.00	17,252,442.76	17,252,442.76	0.00	-20.00%	(12,735,647.60)	59,161,442.84	33.34	1,774,742.98	2.79%
354	Towers & Fixtures	22,612,274.00	21,903,770.29	21,903,770.29	0.00	-59.00%	(13,341,241.66)	14,049,745.37	37.73	372,346.22	1.65%
355	Poles & Fixtures	1,953,118.00	2,155,337.75	2,155,337.75	0.00	-59.00%	(1,152,339.62)	950,119.87	28.52	33,311.33	1.71%
356	Overhead Conductors & Devices	9,403,929.00	8,904,736.13	8,904,736.13	0.00	-59.00%	(5,548,318.11)	6,047,510.98	32.98	183,370.93	1.95%
359	Roads & Trails	670,808.00	428,285.24	428,285.24	0.00	0.00%	0.00	242,522.76	35.50	6,831.63	1.02%
J. A. Fitzpatrick											
352	Structures & Improvements	0.00	77,356.00	77,356.00	0.00	0.00	0.00	(77,356.00)	0.00	0.00	0.00
354	Towers & Fixtures	10,051,183.00	12,706,758.30	11,267,011.84	1,439,746.46	-59.00%	(5,930,197.97)	3,274,622.67	37.65	86,976.82	0.87%
356	Overhead Conductors & Devices	5,926,677.00	6,739,028.50	5,791,959.46	947,069.04	-59.00%	(3,496,739.43)	2,684,387.93	32.98	81,395.25	1.37%
359	Roads & Trails	80,335.00	77,080.20	68,902.59	8,177.61	0.00%	0.00	3,254.80	36.67	88.76	0.11%
Flynn											
353	Station Equipment	11,982,219.84	5,410,119.78	5,410,119.78	0.00	-20.00%	(2,396,443.97)	8,968,544.03	26.52	338,209.71	2.82%
Long Island Sound Cable											
352	Structures & Improvements	6,286,201.00	5,770,675.61	5,770,675.61	0.00	-25.00%	(1,571,550.25)	2,087,075.64	37.48	55,686.13	0.89%
353	Station Equipment	65,050,619.00	57,897,039.50	57,897,039.50	0.00	-20.00%	(13,010,123.80)	20,163,703.30	18.56	1,086,467.96	1.67%
357	Underground Conduit	60,722,320.00	59,983,969.00	59,983,969.00	0.00	-10.00%	(6,072,232.00)	6,810,583.00	35.51	191,781.81	0.32%
358	Underground Conductors & Devices	162,719,244.00	159,960,181.00	159,960,181.00	0.00	-10.00%	(16,271,924.40)	19,030,987.40	15.86	1,200,138.01	0.74%
Marcy South											
353	Station Equipment	71,362,197.00	18,201,966.87	16,826,731.17	1,375,235.71	-20.00%	(14,272,439.40)	67,432,669.53	32.57	2,070,301.97	2.90%
354	Towers & Fixtures	75,439,776.00	51,219,120.90	38,607,241.08	12,611,879.82	-59.00%	(44,509,467.84)	68,730,122.94	42.97	1,599,362.01	2.12%
355	Poles & Fixtures	210,096,383.00	173,900,316.33	127,767,090.80	46,133,225.53	-59.00%	(123,956,865.97)	160,152,932.64	33.39	4,795,966.59	2.28%
356	Overhead Conductors & Devices	116,584,296.00	70,492,145.90	60,848,064.52	9,644,081.38	-59.00%	(68,784,734.64)	114,876,884.74	40.60	2,829,614.41	2.43%
357	Underground Conduit	43,951,419.00	23,084,832.40	22,417,014.57	667,817.83	-10.00%	(4,395,141.90)	25,261,728.50	32.70	772,435.12	1.76%
358	Underground Conductors & Devices	12,314,493.00	8,809,938.30	7,945,000.89	864,937.41	-10.00%	(1,231,449.30)	4,736,004.00	13.20	358,754.49	2.91%
359	Roads & Trails	22,421,909.00	8,692,860.00	8,692,860.00	0.00	0.00%	0.00	13,729,049.00	43.03	319,054.02	1.42%
Marcy Massena											
352	Structures & Improvements	40,705,099.00	28,122,581.26	0.00	2,939,550.57	-25.00%	(10,176,274.75)	22,758,792.49	30.49	746,345.89	1.83%
353	Station Equipment	212,203,702.00	135,800,410.30	128,925,869.60	6,874,540.69	-20.00%	(42,440,740.40)	118,844,032.10	19.81	5,998,647.44	2.83%
353	Windfarm Assets	83,102,898.00	13,882,835.97	13,882,835.97	0.00	-20.00%	(16,620,579.60)	85,840,641.63	36.31	2,364,308.20	2.85%
354	Towers & Fixtures	64,465,654.00	57,377,021.64	46,590,876.84	10,786,144.80	-59.00%	(38,034,735.86)	45,123,368.22	37.96	1,188,811.43	1.84%
355	Poles & Fixtures	19,615,058.00	21,392,948.18	17,226,812.07	4,166,136.11	-59.00%	(11,572,884.22)	9,794,994.04	28.47	344,058.83	1.75%
356	Overhead Conductors & Devices	42,480,940.00	25,533,220.65	22,038,575.82	3,494,644.83	-59.00%	(25,063,754.60)	42,011,473.95	34.89	1,204,126.08	2.83%
359	Roads & Trails	5,105,433.00	2,859,242.00	2,859,242.00	0.00	0.00%	0.00	2,246,191.00	35.73	62,864.05	1.23%
Niagara											
352	Structures & Improvements	24,449,344.00	21,322,085.81	17,744,323.76	3,577,762.04	-25.00%	(6,112,336.00)	9,239,594.19	21.20	435,857.86	1.78%
353	Station Equipment	191,290,775.00	65,751,356.01	60,989,232.99	4,762,123.02	-20.00%	(38,258,155.00)	163,797,573.99	30.54	5,362,986.13	2.80%
354	Towers & Fixtures	18,743,984.00	21,233,351.50	16,663,999.13	4,569,352.37	-59.00%	(11,058,950.56)	8,569,583.06	27.65	309,900.21	1.65%
355	Poles & Fixtures	19,726.00	22,828.02	17,133.21	5,694.81	-59.00%	(11,638.34)	8,536.32	18.84	453.06	2.30%
356	Overhead Conductors & Devices	42,873,942.00	30,034,927.17	25,699,407.34	4,335,519.83	-59.00%	(25,295,625.78)	38,134,640.61	39.47	966,116.07	2.25%
359	Roads & Trails	42,797.00	38,823.93	36,197.60	2,626.33	0.00%	0.00	3,973.07	17.50	227.03	0.53%

NEW YORK POWER AUTHORITY
COMPUTATION OF ANNUAL DEPRECIATION RATE
At December 31, 2020

Account	Account Description	Plant Balance at 12/31/2020 $	Total Accumulated Depreciation at 12/31/2020 $	Life Accumulated Depreciation at 12/31/2020	COR Accumulated Depreciation at 12/31/2020 $	Net Salvage %	Net Salvage Amount $	Unaccrued Balance $	Remaining Life Yrs	Annual Accrual $	Annual Accrual %
Poletti											
352	Structures & Improvements	69,748.00	59,684.64	59,684.64	0.00	-25.00%	(17,437.00)	27,500.36	21.91	1,255.13	1.80%
353	Station Equipment	14,716,023.00	15,378,377.59	15,378,377.59	0.00	-20.00%	(2,943,204.60)	2,280,850.01	5.19	439,164.33	2.98%
357	Underground Conduit	16,192,845.00	16,524,976.03	16,524,976.03	0.00	-10.00%	(1,619,284.50)	1,287,153.47	21.91	58,746.38	0.36%
358	Underground Conductors & Devices	14,726,135.00	14,423,773.74	14,423,773.74	0.00	-10.00%	(1,472,613.50)	1,774,974.76	7.20	246,385.55	1.67%
Small Clean Power Plant											
353	Station Equipment - Brentwood	6,883,706.14	5,831,892.00	5,831,892.00	0.00	-20.00%	(1,376,741.23)	2,428,555.37	26.99	89,979.19	1.31%
353	Station Equipment - Gowanus	28,715,226.87	27,580,353.33	27,580,353.33	0.00	-20.00%	(5,743,045.37)	6,877,918.91	28.46	241,683.76	0.84%
353	Station Equipment- Hellgate	25,061,553.13	18,368,465.00	18,368,465.00	0.00	-20.00%	(5,012,310.63)	11,705,398.76	31.92	366,732.38	1.46%
353	Station Equipment - Harlem River Yards	25,080,072.26	20,656,156.00	20,656,156.00	0.00	-20.00%	(5,016,014.45)	9,439,930.71	30.25	312,045.26	1.24%
353	Station Equipment - Kent	10,506,621.83	9,794,419.24	9,794,419.24	0.00	-20.00%	(2,101,324.37)	2,813,526.96	26.66	105,526.04	1.00%
353	Station Equipment - Pouch Terminal	11,520,027.09	10,468,678.05	10,468,678.05	0.00	-20.00%	(2,304,005.42)	3,355,354.46	26.32	127,501.85	1.11%
353	Station Equipment - Vernon Blvd	16,526,682.62	6,635,442.85	6,635,442.85	0.00	-20.00%	(3,305,336.52)	13,196,576.29	26.61	495,889.92	3.00%
Small Hydro											
353	Station Equipment- Crescent	2,395,536.00	1,182,675.00	1,182,675.00	0.00	-20.00%	(479,107.20)	1,691,968.20	9.71	174,248.24	7.27%
353	Station Equipment- Jarvis	4,403,687.68	2,126,558.68	2,126,558.68	0.00	-20.00%	(880,737.54)	3,157,866.54	9.06	348,364.81	7.91%
353	Station Equipment- Vischer Ferry	663,158.00	327,407.00	327,407.00	0.00	-20.00%	(132,631.60)	468,382.60	9.71	48,236.63	7.27%
St. Lawrence											
352	Structures & Improvements	18,079,757.17	8,544,307.77	7,381,748.91	1,162,558.86	-25.00%	(4,519,939.29)	14,055,388.70	41.55	338,239.57	1.87%
353	Station Equipment	360,828,317.62	84,538,327.01	76,660,295.60	7,878,031.41	-20.00%	(72,165,663.52)	348,455,654.14	35.33	9,862,265.48	2.73%
354	Towers & Fixtures	15,185,237.00	15,387,404.65	11,832,462.17	3,554,942.48	-59.00%	(8,959,289.83)	8,757,122.18	35.33	247,857.03	1.63%
355	Poles & Fixtures	8,667,261.95	7,249,467.97	5,647,761.98	1,601,705.99	-59.00%	(5,113,684.55)	6,531,478.53	33.31	196,059.88	2.26%
356	Overhead Conductors & Devices	43,799,856.34	16,556,142.33	14,602,719.07	1,953,423.25	-59.00%	(25,841,915.24)	53,085,629.25	52.17	1,017,479.49	2.32%
357	Underground Conduit	61,047.00	61,644.16	59,832.48	1,811.68	-10.00%	(6,104.70)	5,507.54	8.75	629.18	1.03%
358	Underground Conductors & Devices	29,629,416.65	2,656,096.21	2,534,329.76	121,766.45	-10.00%	(2,962,941.67)	29,936,262.11	40.89	732,069.27	2.47%
359	Roads & Trails	193,299.00	143,684.74	110,507.06	33,177.68	0.00%	0.00	49,614.26	33.39	1,485.80	0.77%

APPENDIX B

Comparison of Depreciation Accrual

NEW YORK POWER AUTHORITY
COMPARISON OF EXISTING VS PROPOSED DEPRECIATION RATES
AT DECEMBER 31, 2020

Account	Account Description	Plant Balance at 12/31/2020 $	Accumulated Depreciation at 12/31/2020 $	Current Life Rates Annual Accrual Amount $	COR Existing Rates Annual Accrual Amount	Total Existing Rates Annual Accrual Amount	Total Proposed Accrual Rate %	Life Proposed Accrual Rate %	COR Proposed Accrual Rate %	Proposed Accrual Amount $	Proposed - Current Difference $
TRANSMISSION PLANT											
Astoria 2											
353	Station Equipment	60,481,915.00	28,665,303.00	3,011,360.00	0.00	3,011,360.00	2.05%	1.48%	0.56%	1,236,985.77	(1,774,374.23)
357	Underground Conduit	24,644,166.00	11,705,986.00	1,232,209.00	0.00	1,232,209.00	1.13%	0.95%	0.18%	277,524.26	(954,684.74)
Astoria											
353	Station Equipment	87,822,364.66	39,165,381.36	2,817,865.36	0.00	2,817,865.36	2.36%	1.74%	0.63%	2,075,435.40	(742,429.96)
Blenheim Gilboa											
352	Structures & Improvements	4,733,437.00	3,600,594.12	67,229.74	0.00	67,229.74	1.60%	0.78%	0.82%	75,523.99	8,294.25
353	Station Equipment	63,678,238.00	17,252,442.76	980,808.20	0.00	980,808.20	2.79%	2.19%	0.60%	1,774,742.98	793,934.79
354	Towers & Fixtures	22,612,274.00	21,903,770.29	450,343.87	0.00	450,343.87	1.65%	0.08%	1.56%	372,346.22	(77,997.65)
355	Poles & Fixtures	1,953,118.00	2,155,337.75	37,450.95	0.00	37,450.95	1.71%	-0.36%	2.07%	33,311.33	(4,139.62)
356	Overhead Conductors & Devices	9,403,929.00	8,904,736.13	104,604.32	0.00	104,604.32	1.95%	0.16%	1.79%	183,370.93	78,766.61
359	Roads & Trails	670,808.00	428,285.24	7,666.46	0.00	7,666.46	1.02%	1.02%	0.00%	6,831.63	(834.83)
J. A. Fitzpatrick											
352	Structures & Improvements	0.00	77,356.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
354	Towers & Fixtures	10,051,183.00	12,706,758.30	47,669.00	57,362.45	105,031.45	0.87%	-0.32%	1.19%	86,976.82	(18,054.63)
356	Overhead Conductors & Devices	5,926,677.00	6,739,028.50	16,320.00	19,638.25	35,958.25	1.37%	0.07%	1.30%	81,395.25	45,437.01
359	Roads & Trails	80,335.00	77,080.20	452.00	543.90	995.90	0.11%	0.39%	-0.28%	88.76	(907.14)
Flynn											
353	Station Equipment	11,982,219.84	5,410,119.78	317,733.78	0.00	317,733.78	2.82%	2.07%	0.75%	338,209.71	20,475.93
Long Island Sound Cable											
352	Structures & Improvements	6,286,201.00	5,770,675.61	209,542.00	0.00	209,542.00	0.89%	0.22%	0.67%	55,686.13	(153,855.87)
353	Station Equipment	65,050,619.00	57,897,039.50	2,079,346.63	0.00	2,079,346.63	1.67%	0.59%	1.08%	1,086,467.96	(992,878.67)
357	Underground Conduit	60,722,320.00	59,983,969.00	2,024,078.00	0.00	2,024,078.00	0.32%	0.03%	0.28%	191,781.81	(1,832,296.19)
358	Underground Conductors & Devices	162,719,244.00	159,960,181.00	5,450,121.00	0.00	5,450,121.00	0.74%	0.11%	0.63%	1,200,138.01	(4,249,982.99)
Marcy South											
353	Station Equipment	71,362,197.00	18,201,966.87	929,121.64	74,839.04	1,003,960.68	2.90%	2.35%	0.55%	2,070,301.97	1,066,341.29
354	Towers & Fixtures	75,439,776.00	51,219,120.90	777,074.00	685,152.86	1,462,226.86	2.12%	1.14%	0.98%	1,599,362.01	137,135.14
355	Poles & Fixtures	210,096,383.00	173,900,316.33	1,638,203.00	2,507,660.22	4,145,863.22	2.28%	1.17%	1.11%	4,795,966.59	650,103.37
356	Overhead Conductors & Devices	116,584,296.00	70,492,145.90	973,874.00	522,786.77	1,496,660.77	2.43%	1.18%	1.25%	2,829,614.41	1,332,953.64
357	Underground Conduit	43,951,419.00	23,084,832.40	507,941.00	36,314.61	544,255.61	1.76%	1.50%	0.26%	772,435.12	228,179.51
358	Underground Conductors & Devices	12,314,493.00	8,809,938.30	154,696.00	47,087.46	201,783.46	2.91%	2.69%	0.23%	358,754.49	156,971.03
359	Roads & Trails	22,421,909.00	8,692,860.00	201,147.00	0.00	201,147.00	1.42%	1.42%	0.00%	319,054.02	117,907.02
Marcy Massena											
352	Structures & Improvements	40,705,099.00	28,122,581.26	403,960.00	210,140.37	614,100.37	1.83%	3.28%	0.58%	746,345.89	132,245.52
353	Station Equipment	212,203,702.00	135,800,410.30	3,199,140.08	490,990.39	3,690,130.47	2.83%	1.98%	0.85%	5,998,647.44	2,308,516.97
353	Windfarm Assets	83,102,898.00	13,882,835.97	1,663,426.00	0.00	1,663,426.00	2.85%	2.29%	0.55%	2,364,308.20	700,882.20
354	Towers & Fixtures	64,465,654.00	57,377,021.64	522,251.00	766,138.84	1,288,389.84	1.84%	0.73%	1.11%	1,188,811.43	(99,578.40)
355	Poles & Fixtures	19,615,058.00	21,392,948.18	67,682.00	296,291.46	363,973.46	1.75%	0.43%	1.33%	344,058.83	(19,914.63)
356	Overhead Conductors & Devices	42,480,940.00	25,533,220.65	294,040.00	246,350.99	540,390.99	2.83%	1.38%	1.46%	1,204,126.08	663,735.09
359	Roads & Trails	5,105,433.00	2,859,242.00	37,248.00		37,248.00	1.23%	1.23%	0.00%	62,864.05	25,616.05
Niagara											
352	Structures & Improvements	24,449,344.00	21,322,085.81	232,339.00	244,640.45	476,979.45	1.78%	1.29%	0.49%	435,857.86	(41,121.59)
353	Station Equipment	191,290,775.00	65,751,356.01	2,203,314.21	325,254.17	2,528,568.38	2.80%	2.23%	0.57%	5,362,986.13	2,834,417.75
354	Towers & Fixtures	18,743,984.00	21,233,351.50	288,369.00	310,423.86	598,792.86	1.65%	0.40%	1.25%	309,900.21	(288,892.65)
355	Poles & Fixtures	19,726.00	22,828.02	359.00	387.14	746.14	2.30%	0.70%	1.60%	453.06	(293.07)
356	Overhead Conductors & Devices	42,873,942.00	30,034,927.17	198,228.00	293,020.50	491,248.50	2.25%	1.01%	1.24%	966,116.07	474,867.57
359	Roads & Trails	42,797.00	38,823.93	136.00	190.68	326.68	0.53%	0.88%	-0.35%	227.03	(99.65)

NEW YORK POWER AUTHORITY
COMPARISON OF EXISTING VS PROPOSED DEPRECIATION RATES
AT DECEMBER 31, 2020

Account	Account Description	Plant Balance at 12/31/2020 $	Accumulated Depreciation at 12/31/2020 $	Current Life Rates Annual Accrual Amount $	COR Existing Rates Annual Accrual Amount	Total Existing Rates Annual Accrual Amount	Total Proposed Accrual Rate %	Life Proposed Accrual Rate %	COR Proposed Accrual Rate %	Proposed Accrual Amount $	Proposed - Current Difference $
Poletti											
352	Structures & Improvements	69,748.00	59,684.64	0.00	0.00	0.00	1.80%	0.66%	1.14%	1,255.13	1,255.13
353	Station Equipment	14,716,023.00	15,378,377.59	0.00	0.00	0.00	2.98%	-0.87%	3.85%	439,164.33	439,164.33
357	Underground Conduit	16,192,845.00	16,524,976.03	0.00	0.00	0.00	0.36%	-0.09%	0.46%	58,746.38	58,746.38
358	Underground Conductors & Devices	14,726,135.00	14,423,773.74	30,451.00	0.00	30,451.00	1.67%	0.29%	1.39%	246,385.55	215,934.55
Small Clean Power Plant											
353	Station Equipment - Brentwood	6,883,706.14	5,831,892.00	37,305.00	0.00	37,305.00	1.31%	0.57%	0.74%	89,979.19	52,674.19
353	Station Equipment - Gowanus	28,715,226.87	27,580,353.33	0.00	0.00	0.00	0.84%	0.14%	0.70%	241,683.76	241,683.76
353	Station Equipment- Hellgate	25,061,553.13	18,368,465.00	684,730.00	0.00	684,730.00	1.46%	0.84%	0.63%	366,732.38	(317,997.62)
353	Station Equipment - Harlem River Yards	25,080,072.26	20,656,156.00	487,234.00	0.00	487,234.00	1.24%	0.58%	0.66%	312,045.26	(175,188.74)
353	Station Equipment - Kent	10,506,621.83	9,794,419.24	4,010.24	0.00	4,010.24	1.00%	0.25%	0.75%	105,526.04	101,515.80
353	Station Equipment - Pouch Terminal	11,520,027.09	10,468,678.05	0.00	0.00	0.00	1.11%	0.35%	0.76%	127,501.85	127,501.85
353	Station Equipment - Vernon Blvd	16,526,682.62	6,635,442.85	0.00	0.00	0.00	3.00%	2.25%	0.75%	495,889.92	495,889.92
Small Hydro											
353	Station Equipment- Crescent	2,395,536.00	1,182,675.00	39,926.00	0.00	39,926.00	7.27%	5.21%	2.06%	174,248.24	134,322.24
353	Station Equipment- Jarvis	4,403,687.68	2,126,558.68	74,240.68	0.00	74,240.68	7.91%	5.70%	2.21%	348,364.81	274,124.13
353	Station Equipment- Vischer Ferry	663,158.00	327,407.00	11,053.00	0.00	11,053.00	7.27%	5.21%	2.06%	48,236.63	37,183.63
St. Lawrence											
352	Structures & Improvements	18,079,757.17	8,544,307.77	151,580.51	88,766.80	240,347.31	1.87%	1.42%	0.45%	338,239.57	97,892.27
353	Station Equipment	360,828,317.62	84,538,327.01	3,758,505.21	600,834.22	4,359,339.43	2.73%	2.23%	0.50%	9,862,265.48	5,502,926.05
354	Towers & Fixtures	15,185,237.00	15,387,404.65	200,955.00	268,750.07	469,705.07	1.63%	0.62%	1.01%	247,857.03	(221,848.04)
355	Poles & Fixtures	8,667,261.95	7,249,467.97	198,637.98	121,163.23	319,801.21	2.26%	1.05%	1.22%	196,059.88	(123,741.34)
356	Overhead Conductors & Devices	43,799,856.34	16,556,142.33	1,162,488.56	146,155.56	1,308,644.12	2.32%	1.28%	1.05%	1,017,479.49	(291,164.63)
357	Underground Conduit	61,047.00	61,644.16	0.00	137.62	137.62	1.03%	0.23%	0.80%	629.18	491.56
358	Underground Conductors & Devices	29,629,416.65	2,656,096.21	475,127.31	9,275.79	484,403.10	2.47%	2.24%	0.23%	732,069.27	247,666.18
359	Roads & Trails	193,299.00	143,684.74	1,289.00	2,532.26	3,821.26	0.77%	1.28%	-0.51%	1,485.80	(2,335.46)
		2,549,994,088.85	1,504,672,791.67	40,464,882.73	8,372,829.96	48,837,712.69				56,258,853.06	7,421,140.37

	Existing	Proposed Existing Plant
Blended Rate	1.92%	2.21%

Note: Rate for future plant is applied to existing investment and will vary as new plant additions are installed

APPENDIX C

Proposed Depreciation Parameters

NYPA TRANSMISSION
CURRENT AND PROPOSED DEPRECIATION PARAMETERS
AT DECEMBER 31, 2020

		Existing			Proposed		
Acct	**Description**	**Life**	**Curve**	**Net Salvage**	**Life**	**Curve**	**Net Salvage**
352	Structures & Improvements	75	R5	-20%	65	R5	-25%
353	Station Equipment	60	R5	-12%	45	R5	-20%
354	Towers & Fixtures	80	SQ	-65%	70	R2	-59%
355	Poles & Fixtures	80	SQ	-65%	60	R2	-59%
356	Overhead Conductors & Devices	80	SQ	-50%	65	R2	-59%
357	Underground Conduit	75	R5	-5%	65	R5	-10%
358	Underground Conductors & Devices	50	R5	-5%	45	R5	-10%
359	Roads & Trails	100	SQ	0%	75	SQ	0%
Prior Study did not include Long Island Sound Cable							
	Long Island Cable Contract	30	SQ	0%			
	Astoria						
	Astoria 2						
	Flynn						
	Poletti						
	Small Clean Power Plant						
	Small Hydro Units						

	Existing Retirement Date	
Transmission Line	**In Service Yr**	**Ret Yr**
Massena- Marcy Project	1981	2061
Marcy-South Project	1988	2068
St Lawrence/FDR Project	1960	2040
Niagara Project	1963	2043
Blenheim-Gilboa Project	1981	2061
J A FitzPatrick Project	1975	2055

APPENDIX D

Net Salvage Analysis

NEW YORK POWER AUTHORITY

ESTIMATED REMOVAL COST TRANSMISSION FACILITIES

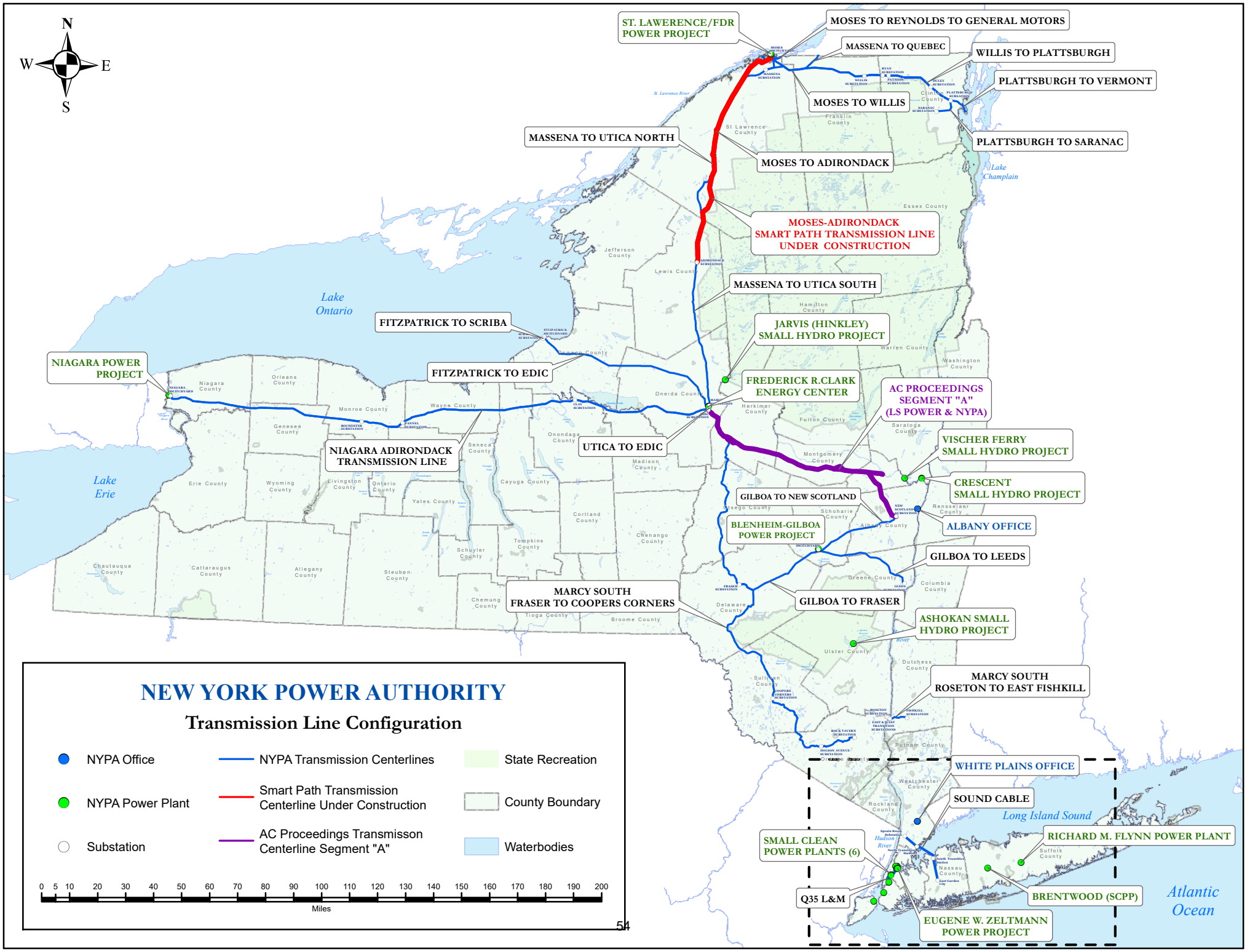
Appendix D-1

Asset Class	FERC	FERC Description	%	Estimated Project Cost	Estimated Retirement	Estimated Dismantling	Estimated Net Salv% (1)	Current Net Salv%
TRANS52S	352	Structures & Improvements	7%	15,975,177	1,323,910			-25
TRANS53S	353	Station Equipment	74%	178,236,240	18,951,701	600,000	-2.96%	-15
TRANS54S	354	Towers & Fixtures	8%	19,653,135	1,608,276			-40
TRANS55S	355	Poles & Fixtures	3%	8,318,854	616,211			-40
TRANS56S	356	Overhead Conductors & Devices	8%	20,025,029	1,944,768	32,000,000	-767.52%	-20
			100%	**242,208,434.8**	**24,444,866**	**32,600,000**		
	357	Underground Conduit						-5
	358	Underground Conductors & Devices						-15

(1) Estimated Net Salvage calculated separately for 352/353 and 354/355/356.

APPENDIX E

NYPA System Maps


N
W
E
S
ST. LAWERENCE/FDR POWER PROJECT
MOSES TO REYNOLDS TO GENERAL MOTORS
MASSENA TO QUEBEC
WILLIS TO PLATTSBURGH
PLATTSBURGH TO VERMONT
MOSES TO WILLIS
PLATTSBURGH TO SARANAC
MASSENA TO UTICA NORTH
MOSES TO ADIRONDACK
MOSES-ADIRONDACK SMART PATH TRANSMISSION LINE UNDER CONSTRUCTION
MASSENA TO UTICA SOUTH
JARVIS (HINKLEY) SMALL HYDRO PROJECT
FITZPATRICK TO SCRIBA
NIAGARA POWER PROJECT
FITZPATRICK TO EDIC
FREDERICK R.CLARK ENERGY CENTER
AC PROCEEDINGS SEGMENT "A" (LS POWER & NYPA)
VISCHER FERRY SMALL HYDRO PROJECT
NIAGARA ADIRONDACK TRANSMISSION LINE
UTICA TO EDIC
CRESCENT SMALL HYDRO PROJECT
GILBOA TO NEW SCOTLAND
ALBANY OFFICE
BLENHEIM-GILBOA POWER PROJECT
GILBOA TO LEEDS
MARCY SOUTH FRASER TO COOPERS CORNERS
GILBOA TO FRASER
ASHOKAN SMALL HYDRO PROJECT
MARCY SOUTH ROSETON TO EAST FISHKILL
WHITE PLAINS OFFICE
SOUND CABLE
SMALL CLEAN POWER PLANTS (6)
RICHARD M. FLYNN POWER PLANT
Q35 L&M
BRENTWOOD (SCPP)
EUGENE W. ZELTMANN POWER PROJECT
Lake Ontario
Lake Erie
Lake Champlain
Long Island Sound
Atlantic Ocean
St. Lawrence River
Hudson River
NEW YORK POWER AUTHORITY
Transmission Line Configuration
NYPA Office
NYPA Power Plant
Substation
NYPA Transmission Centerlines
Smart Path Transmission Centerline Under Construction
AC Proceedings Transmisson Centerline Segment "A"
State Recreation
County Boundary
Waterbodies
0 5 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200
Miles


Long Island Sound
Atlantic Ocean
Hudson River
WHITE PLAINS OFFICE
Sprain Brook Substation
SOUND CABLE
North Transition Station
South Transition Station
East Garden City
HARLEM RIVER YARDS
HELL GATE
VERNON BLVD.
KENT
SEYMOUR
Q35 L&M
POUCH
EUGENE W. ZELTMANN POWER PROJECT
BRENTWOOD
RICHARD M. FLYNN POWER PLANT
Warwick
Tuxedo
Greenwood Lake
Stony Point
Peekskill
Yorktown
Lewisboro
Cortlandt
Bedford
Pound Ridge
Haverstraw
Ramapo
Deforest Lake
Clarkstown
Ossining
New Castle
Mt. Kisco
North Castle
Mount Pleasant
Orangetown
Greenburgh
Harrison
White Plains
Rye
Scarsdale
Yonkers
New Rochelle
Mt. Vernon
Pelham
Glen Cove
Bronx
Manhattan
North Hempstead
Oyster Bay
Huntington
Smithtown
Riverhead
Southampton
Babylon
Long Island
Staten Island
Queens County
Nassau County
Suffolk County
Kings County
Richmond County
Bronx County
Westchester County
Rockland County
Orange County
N
S
E
W
NEW YORK POWER AUTHORITY
Transmission Line Configuration
NYPA Office
NYPA Power Plant
Substation
NYPA Transmission Centerlines
Smart Path Transmission Centerline Under Construction
AC Proceedings Transmisson Centerline Segment "A"
State Recreation
County Boundary
Waterbodies
0 5 10 20 30 40 50
Miles

Exhibit DAW-3

General Plant Depreciation Rate Study

NEW YORK POWER AUTHORITY

GENERAL PLANT

DEPRECIATION RATE STUDY

AT DECEMBER 31, 2019

http://www.utilityalliance.com

NEW YORK POWER AUTHORITY
GENERAL PLANT
DEPRECIATION RATE STUDY
EXECUTIVE SUMMARY

The New York Power Authority ("NYPA" or "the company") engaged Alliance Consulting Group to conduct a depreciation study of the company's General Plant facilities as of December 31, 2019.

This study was conducted under the traditional depreciation approach. This study recommends a decrease of $1.9 million in annual depreciation expense compared to the current annualized depreciation expense and using plant balances at December 31, 2019. Appendix B demonstrates the change in depreciation expense for the various accounts.

NEW YORK POWER AUTHORITY

GENERAL PLANT

DEPRECIATION RATE STUDY

AT DECEMBER 31, 2019

Table of Contents

PURPOSE

The purpose of this study is to develop depreciation rates for general plant depreciable property as recorded on the books of NYPA at December 31, 2019. The account-based depreciation rates were designed to recover the total remaining undepreciated investment, adjusted for net salvage, over the remaining life of NYPA's property on a straight-line basis. Non-depreciable property was excluded from this study.

NYPA is the largest state public power utility in the country. NYPA provides transmission service in various parts of New York State (or "State") over more than 1,400 circuit-miles of transmission facilities, which account for one-third of the State's high-voltage lines. NYPA maintains its power lines with a strong commitment to safety and the environment and works closely with the New York Independent System Operator, Inc. ("NYISO"), other transmission owners and the New York State Public Service Commission ("NYPSC") to help ensure a high level of power-system reliability. A portion of NYPA's depreciable general plant is allocable to NYPA's transmission cost of service.

STUDY RESULTS

Proposed depreciation rates for NYPA's general plant assets are shown in Appendix B, Page 1. These rates translate into an annual depreciation accrual of $30.4 million based on NYPA's depreciable investment at December 31, 2019. The existing annual depreciation expense using current depreciation rates is $32.3 million. Appendix A demonstrates the development of the annual depreciation rates and accruals. Appendix B presents a comparison of current expense versus proposed expense by account. Appendix C presents a comparison of depreciation parameters. The summary results are shown in the table below.

NEW YORK POWER AUTHORITY
COMPARISON OF CURRENT AND PROPOSED DEPRECIATION EXPENSE
AT DECEMBER 31, 2019

Function	Plant	Reserve	Current Expense	Proposed Expense	Difference
General Plant	498,666,282	156,883,174	32,276,882	30,419,078	(1,857,804)

Excludes Relicensing costs booked in account 398

As part of the depreciation study implementation, Alliance makes the following recommendations:

- Convert from the current practice of component depreciation accounting to group depreciation for general plant. NYPA is currently using component lives for its facilities. The standard in the regulated utility industry is to use group depreciation with no gain or loss. Under group depreciation any facility that retires is credited to plant in service and debited to accumulated depreciation. Any difference between the asset value and its accumulated depreciation is embedded in the depreciation reserve and will be recovered over the remaining life of the asset. NYPA's peer utilities use group depreciation.
- Adopt general plant amortization for the following general plant accounts – Account 391, 391.2, 391.3, 397, and 399.

GENERAL DISCUSSION

Definition

The term "depreciation" as used in this study is considered in the accounting sense; that is, a system of accounting that distributes the cost of assets, less net salvage (if any), over the estimated useful life of the assets in a systematic and rational manner. It is a process of allocation, not valuation. This expense is systematically allocated to accounting periods over the life of the properties. The amount allocated to any one accounting period does not necessarily represent the loss or decrease in value that will occur during that particular period. The company accrues depreciation on the basis of the original cost of all depreciable property included in each functional property group. Upon retirement, the full cost of depreciable property, less the net salvage value, is charged to the depreciation reserve.

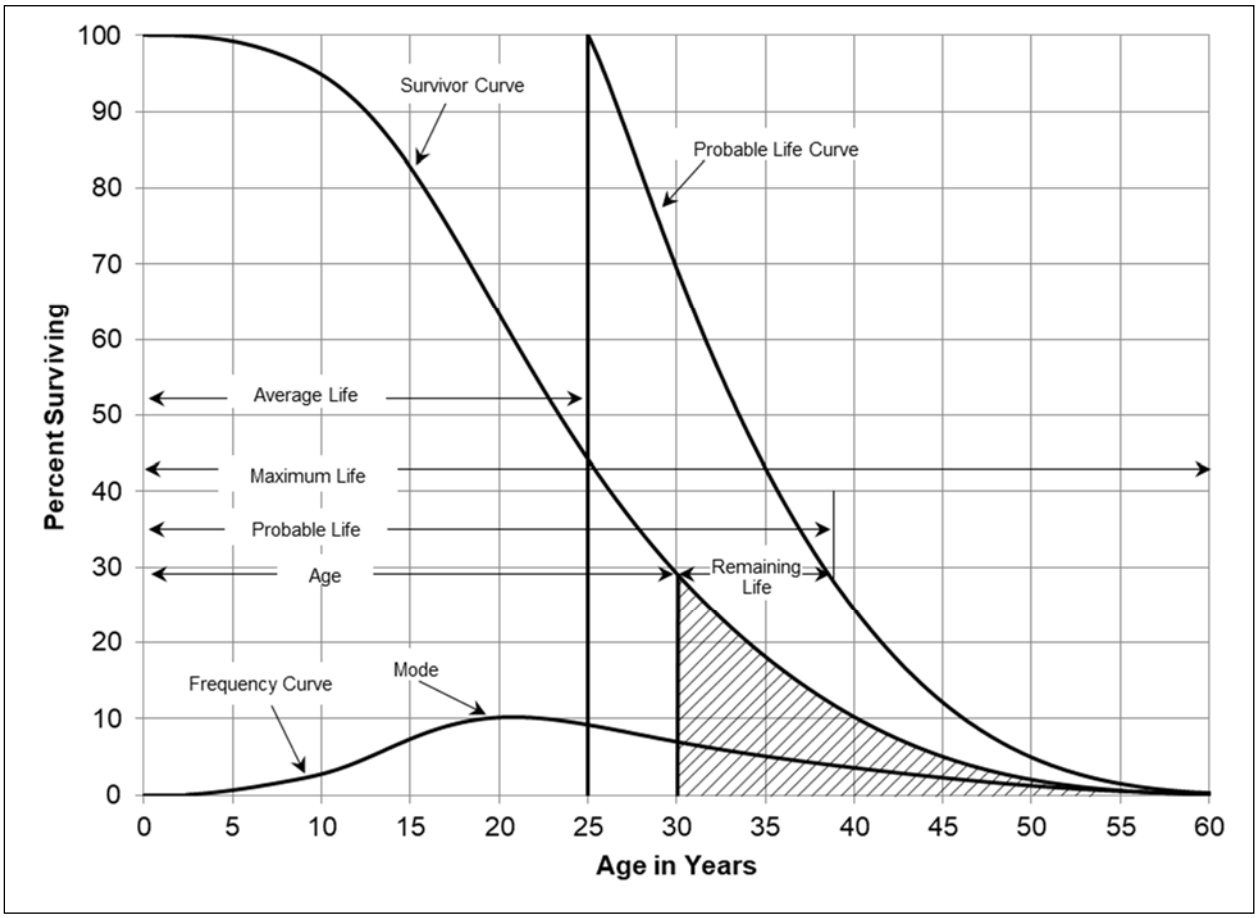
Basis of Depreciation Estimates

The straight-line, broad (average) life group, remaining-life (life-span) depreciation system was employed to calculate annual and accrued depreciation in this study. In this system, the annual depreciation expense for each group is computed by dividing the original cost of the asset less allocated depreciation reserve less estimated net salvage by its respective average life group remaining life. The resulting annual accrual amounts of all depreciable property within a function were accumulated, and the total was divided by the original cost of all functional depreciable property to determine the depreciation rate. The calculated remaining lives and annual depreciation accrual rates were based on attained ages of plant in service and the estimated service life and salvage characteristics of each depreciable group. The computations of the annual depreciation rates are shown in Appendix A.

Survivor Curves

To fully understand depreciation projections in a regulated utility setting, there must be a basic understanding of survivor curves. Individual property units within a group do not normally have identical lives or investment amounts. The average life of a group can be determined by first constructing a survivor curve which is plotted as a percentage of the units surviving at each age. A survivor curve represents the percentage of property remaining in service at various age intervals. The chart below shows a typical generalized survivor curve as well as some of the life characteristics that can be derived from the survivor curve.

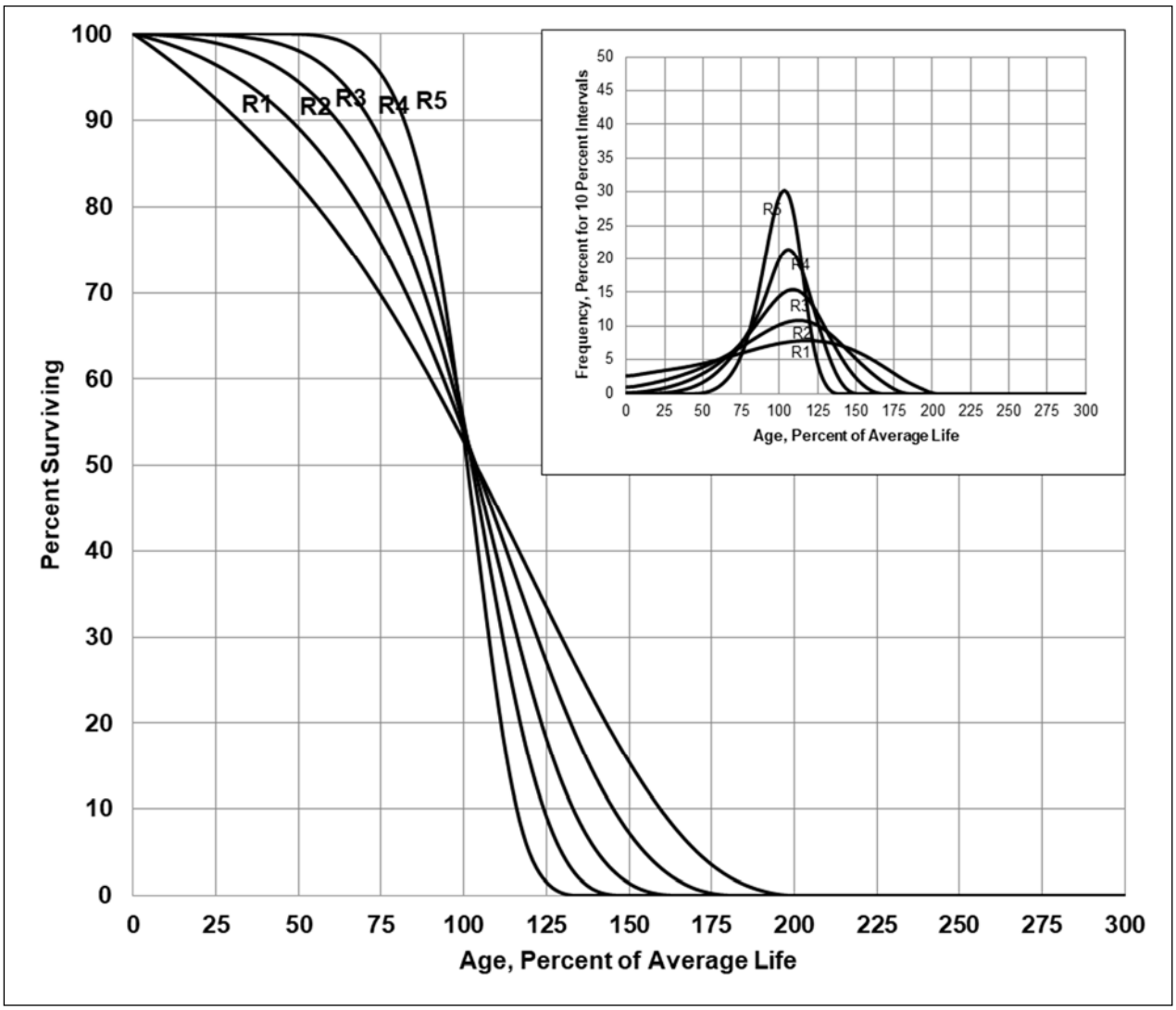
GENERALIZED SURVIVOR CURVE



The Iowa Curves (survivor curves) are the result of an extensive investigation of life characteristics of physical property made at Iowa State College Engineering Experiment Station in the first half of the prior century. Through common usage, revalidation and regulatory acceptance, these curves have become a descriptive standard for the life characteristics of industrial property.

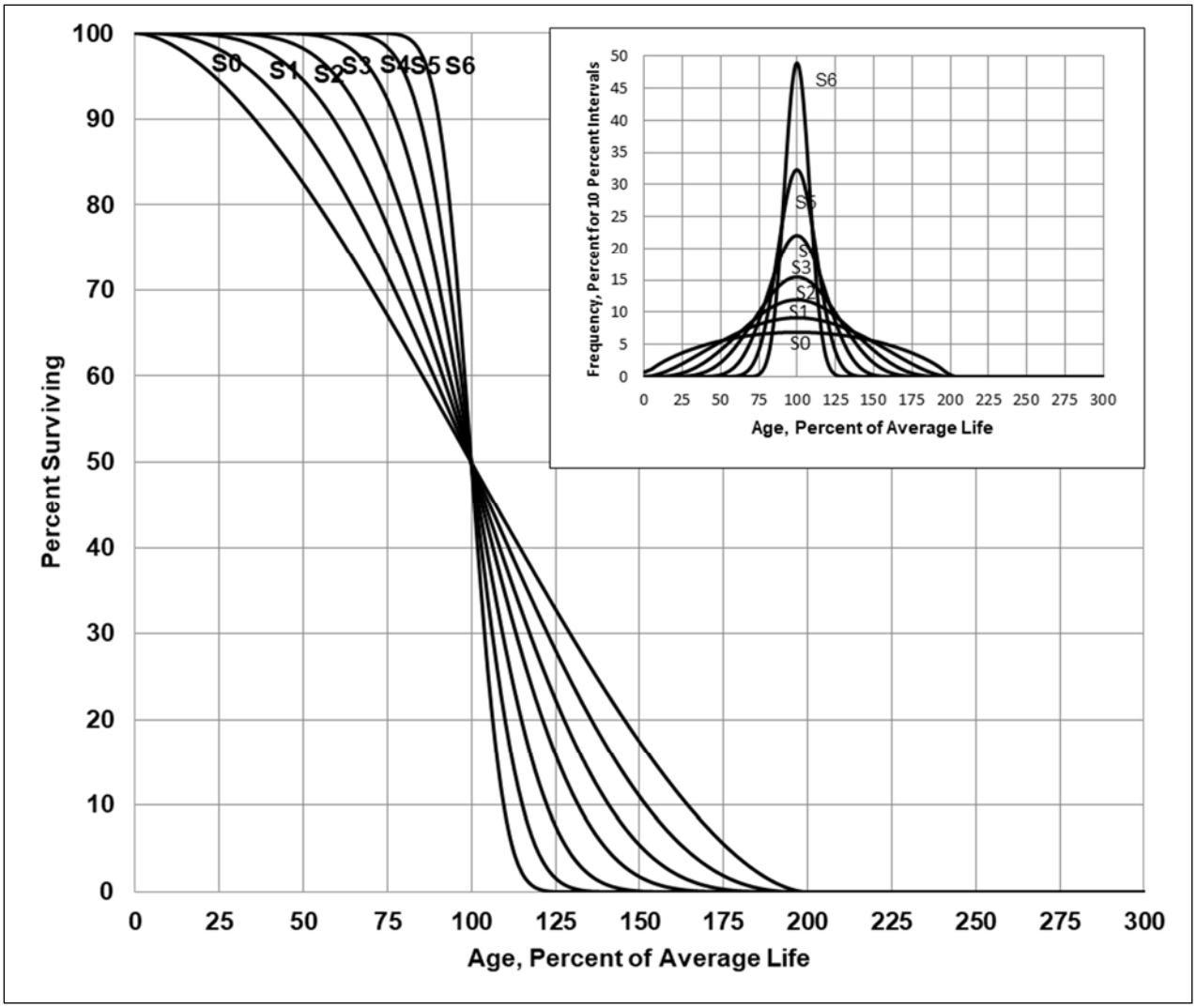
There are four families in the Iowa Curves that are distinguished by the relation of the age at the retirement mode (largest annual retirement frequency) and the average life. For distributions with the mode age greater than the average life, an "R" designation (i.e., Right modal) is used. The family of “R” moded curves is shown below.

R-TYPE IOWA SURVIVOR CURVES



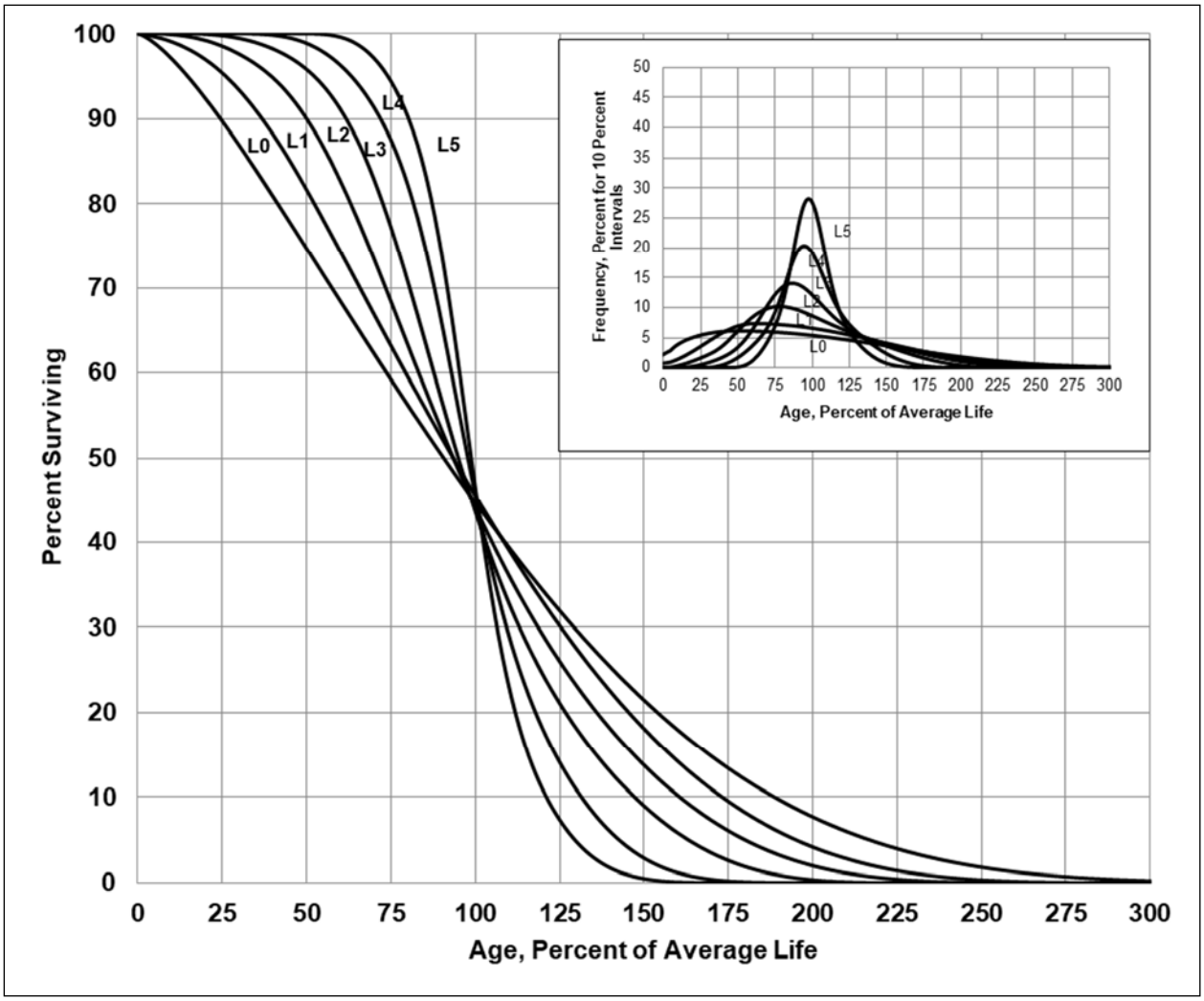
Similarly, an "S" designation (i.e., Symmetric modal) is used for the family whose mode age is symmetric about the average life. The higher the number of the curve, the greater the peak. A graph showing the S curves is shown below.

S-TYPE IOWA SURVIVOR CURVES



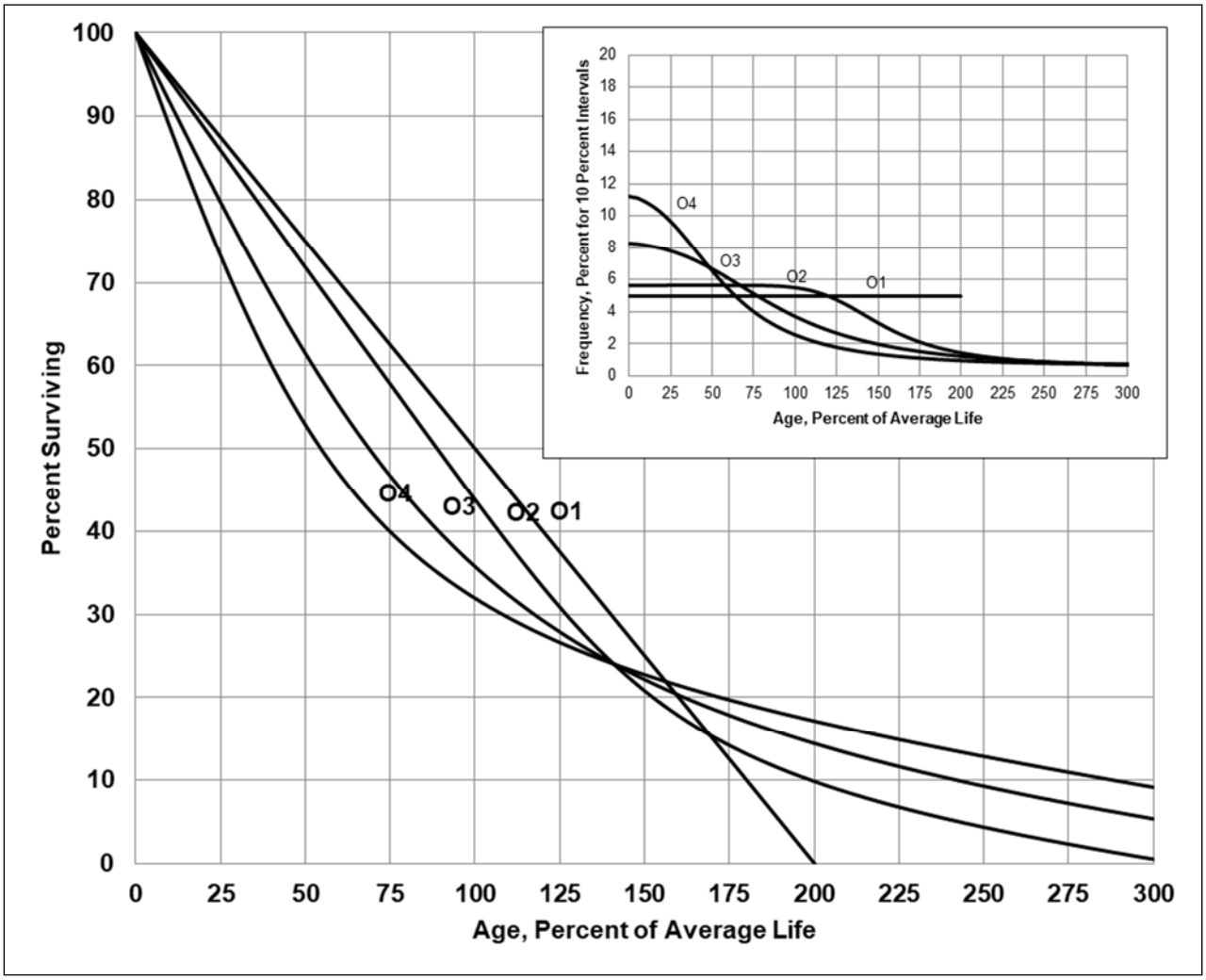
For distributions with the mode age less than the average life, a "L" designation (i.e., Left modal) is used. The family of “L” moded curves is shown below.

L-TYPE IOWA SURVIVOR CURVES



A special case of left modal dispersion is the "O" or origin modal curve family which was developed in the 1950s.

O-TYPE IOWA SURVIVOR CURVES



Given how long the O curves live, the O curves are seldom used in analyzing utility property in Alliance Consulting Group's experience. The O curves have been used for intellectual property.

Within each curve family, numerical designations are used to describe the relative magnitude of the retirement frequencies at the mode. A "6" indicates that the retirements are not greatly dispersed from the mode (i.e., high mode frequency), while a "1" indicates a large dispersion about the mode (i.e., low mode frequency). For example, a curve with an average life of 30 years and an "L3" dispersion is a moderately dispersed, left modal curve that can be designated as a 30 L3 Curve. An SQ, or square, survivor curve occurs where no dispersion is present (i.e., units of common age retire simultaneously).

Most property groups can be closely fitted to one Iowa Curve with a unique average service life. The blending of judgment concerning current conditions and future trends along with the matching of historical data permits the depreciation analyst to make an informed selection of an account's average life and retirement dispersion pattern.

Judgment

Any depreciation study requires informed judgment by the analyst conducting the study. A knowledge of the property being studied, company policies and procedures, general trends in technology and industry practice, and a sound basis of understanding depreciation theory are needed to apply this informed judgment. Judgment was used in areas such as survivor curve modeling and selection, depreciation method selection, simulated plant record method analysis, and actuarial analysis.

Judgment is not defined as being used in cases where there are specific, significant pieces of information that influence the choice of a life or curve. Those cases would simply be a reflection of specific facts in the analysis. Where there are multiple factors, activities, actions, property characteristics, statistical inconsistencies, implications of applying certain curves, property mix in accounts or a multitude of other considerations that impact the analysis (potentially in various directions), judgment is used to consider all of these factors and synthesize

them into a general direction or understanding of the characteristics of the property. Individually, no one factor in these cases may have a substantial impact on the analysis, but overall, may shed light on the utilization and characteristics of assets. Judgment may also be defined as deduction, inference, wisdom, common sense, or the ability to make sensible decisions. There is no single correct result from statistical analysis; hence, there is no answer absent judgment. At the very least for example, any analysis requires choosing the bands on which to place more emphasis.

The establishment of appropriate lives, interim retirement dispersions, and interim net salvage for NYPA's accounts requires judgment to incorporate the understanding of the operation of the system with the available accounting information. The appropriateness of lives and curves depends not only on statistical analyses, but also on how well future retirement patterns will match past retirements.

Current applications and trends in use for the equipment also need to be factored into life and survivor curve choices to allow appropriate mortality characteristics to be chosen.

Theoretical Depreciation Reserve

The book depreciation reserve was derived from company records. This study used a reserve model that relied on a prospective concept relating future retirement and accrual patterns for property, given current life and salvage estimates. The theoretical reserve of a group is developed from the estimated remaining life, total life of the property group, and estimated net salvage. The theoretical reserve represents the portion of the group cost that would have been accrued if current forecasts were used throughout the life of the group for future depreciation accruals. The computation involves multiplying the vintage balances within the group by the theoretical reserve ratio for each vintage. The average life group method requires an estimate of dispersion and service life to establish how much of each vintage is expected to be retired in each year until all property within the group is retired. Estimated average service lives and dispersion determine the amount within each average life group. The straight-line remaining-life theoretical reserve ratio at any given age ("RR") is calculated as:

$$RR = 1 - \frac{(\text{Average Remaining Life})}{(\text{Average Service Life})} * (1 - \text{Net Salvage Ratio})$$

DETAILED DISCUSSION

Depreciation Study Process

This depreciation study encompassed four distinct phases (*i.e.* Phases 1 – 4). Phase 1 involved data collection and interviews. Phase 2 involved the initial data analysis. Phase 3 involved evaluating the information and analysis. Once the first three phases were complete, the Phase 4 began. This phase involved the calculation of deprecation rates and documentation of the corresponding recommendations.

During the Phase 1 data collection process, historical data was compiled from continuing property records and general ledger systems. Data was validated for accuracy by extracting and comparing to multiple financial system sources. Audit of this data was validated against historical data from prior periods, historical general ledger sources, and field personnel discussions. This data was reviewed extensively to put it in the proper format for a depreciation study. Further discussion on data review and adjustment is found in the Salvage Considerations Section of this study. Also, as part of the Phase 1 data collection process, discussions were conducted with NYPA personnel to obtain information that would assist in formulating life and salvage recommendations in this study. One of the most important elements of performing a proper depreciation study is to understand how the company utilizes assets and the operating environment of those assets. Discussions with company personnel is an important way for the analyst to obtain information that is beneficial when evaluating the output from the life and net salvage programs in relation to the company's actual asset utilization and environment.

Phase 2 is where the actuarial analysis is performed. Phases 2 and 3 overlap to a significant degree. The detailed property records information is used in Phase 2 to develop observed life tables for life analysis. These tables are visually compared to industry standard tables to determine historical life characteristics. It is possible that the analyst would cycle back to this phase based on the evaluation process performed in Phase 3. Net salvage analysis consists of

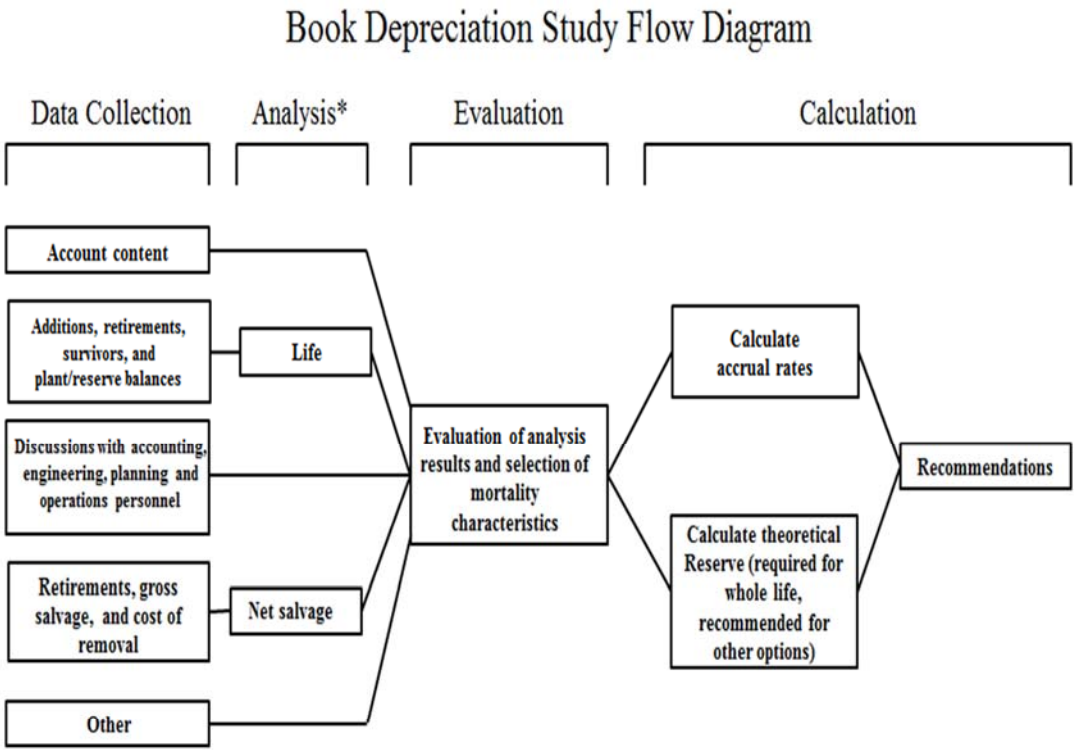
compiling historical salvage and removal data by functional group to determine values and trends in gross salvage and removal cost. This information was then carried forward into Phase 3 for the evaluation process.

Phase 3 is the evaluation process, which synthesizes analysis, interviews, and operational characteristics into a final selection of asset lives and net salvage parameters. The historical analysis from Phase 2 is further enhanced by the incorporation of recent or future changes in the characteristics or operations of assets that were revealed in Phase 1. Phases 2 and 3 allow the depreciation analyst to validate the asset characteristics as seen in the accounting transactions with actual company operational experience.

Finally, Phase 4 involved the calculation of accrual rates, making recommendations and documenting the conclusions in a final report. The calculation of accrual rates is found in Appendix A. Recommendations for the various accounts are contained within the Detailed Discussion of this report. The depreciation study flow diagram shown in Figure 1[1] documents the steps used in conducting this study. Depreciation Systems,[2] page 289, documents the same basic processes in performing a depreciation study which are: statistical analysis, evaluation of statistical analysis, discussions with management, forecast assumptions, develop supporting forecasts and estimation, and write final recommendations.

[1] Introduction to Depreciation for Public Utilities and Other Industries, AGA EEI, 2013, p. 49.

[2] Wolf & Fitch, Depreciation Systems, Iowa State Press, 1994, p. 289.



NEW YORK POWER AUTHORITY
GENERAL PLANT
DEPRECIATION STUDY PROCESS

Figure 1

Depreciation Rate Calculation

Annual depreciation expense amounts for NYPA's general asset, depreciable accounts were calculated by the straight-line method, life-span procedure, and remaining-life technique. With this approach, remaining lives were calculated according to standard ALG group expectancy techniques, using the Iowa Curves noted in the calculation. For each plant account, the difference between the surviving investment, adjusted for estimated net salvage, and the allocated book depreciation reserve, was divided by the average remaining life to yield the annual depreciation expense. These calculations are shown in Appendix A.

General Plant Depreciation Calculation Process

Annual depreciation expense amounts for NYPA's accounts were calculated by the straight line, remaining life procedure. In a whole life representation, the annual accrual rate is computed by the following equation,

$$\text{Annual Accrual Rate} = \frac{(100\% - \text{Net Salvage Percent})}{\text{Average Service Life}}$$

Use of the remaining life depreciation system adds a self-correcting mechanism, which accounts for any differences between theoretical and book depreciation reserve over the remaining life of the group. For each vintage,

$$\text{Remaining Life(i)} = \frac{\text{Area Under Survivor Curve to the Right of Age (i)}}{\text{Survivors (i)}}, \text{ and}$$

$$\text{Average Service Life} = \frac{\text{Area Under Survivor Curve}}{\text{Survivors at age zero}}$$

With the straight line, remaining life, average life group system using Iowa Curves, composite remaining lives were calculated by computing a direct weighted average of each remaining life by vintage within the group. Within each group , for each

plant account, the difference between the surviving investment, adjusted for estimated net salvage, and the allocated book depreciation reserve, was divided by the composite remaining life to yield the annual depreciation expense as noted in this equation:

$$\textit{Annual Depreciation Expense} = \frac{\textit{Original Cost - Book Reserve - (Original Cost * Net Salvage \%)}}{\textit{Composite Remaining Life}}$$

where the net salvage percent represents future net salvage.

Within a group, the sum of the group annual depreciation expense amounts, as a percentage of the depreciable original cost investment summed, gives the annual depreciation rate as shown below:

$$\text{Annual Depreciation Rate} = \frac{\sum \text{Annual Depreciation Expense}}{\sum \text{Original Cost}}$$

These calculations are shown in Appendix A. The calculations of the theoretical depreciation reserve values and the corresponding remaining life calculations are shown in the workpapers. Book depreciation reserves were derived from company records, and theoretical reserve computations were used to compute remaining life for each group by dollar weighting each account's vintage times remaining life for each vintage

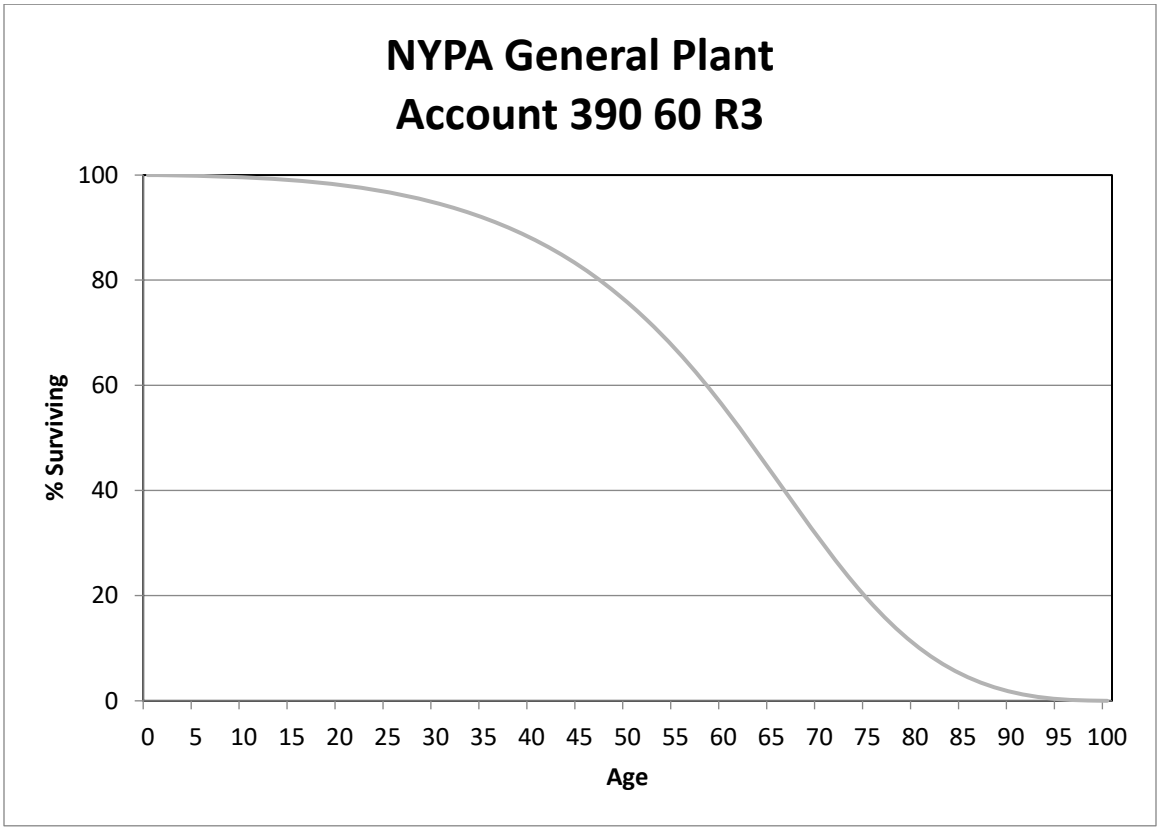
LIFE ANALYSIS

General Plant FERC Accounts 390-399

General Plant Depreciated Accounts, FERC Accounts 390.00, 392.00-396.00, and 398.00

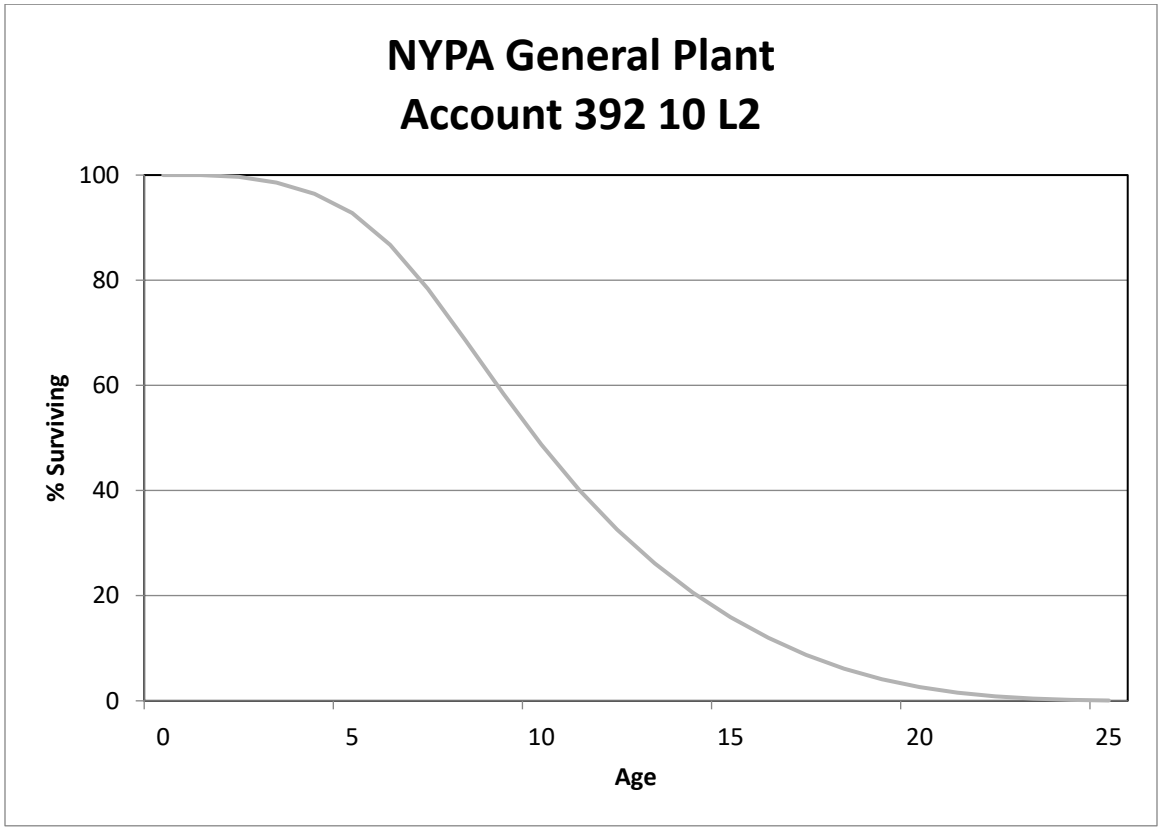
FERC Account 390.00 General Plant Structures & Improvements 60 R3

This account includes the cost of general structures and improvements used for utility service. There is approximately $241.9 million in this account. The current life of this account is 60 R3. Based on an understanding of the assets in the account and discussions with NYPA subject matter experts ("SMEs"), this study recommends retention of 60 R3 dispersion curve. A graph of the proposed survivor curve is shown below.



FERC Account 392.00 Transportation Equipment 10 L2

This account consists of transportation equipment, such as trailers, used for general utility service. There is approximately $53.0 million in this account. The existing life for this account is 10 L2. Based on the assets in the account and discussions with NYPA SMEs, this study recommends retention of the 10 L2 dispersion curve. A graph of the proposed survivor curve is shown below.



FERC Account 393.00 Stores Equipment 30 SQ

This account consists of stores equipment, such as shelving, used for general utility service. There is approximately $1.2 million in this account. The existing life for this account is 30 SQ. Based on the assets in the account and knowledge of the characteristics of similar assets, this study recommends retention of the 30 SQ dispersion curve.

FERC Account 394.00 Tools, Shop, and Garage Equipment 20 SQ

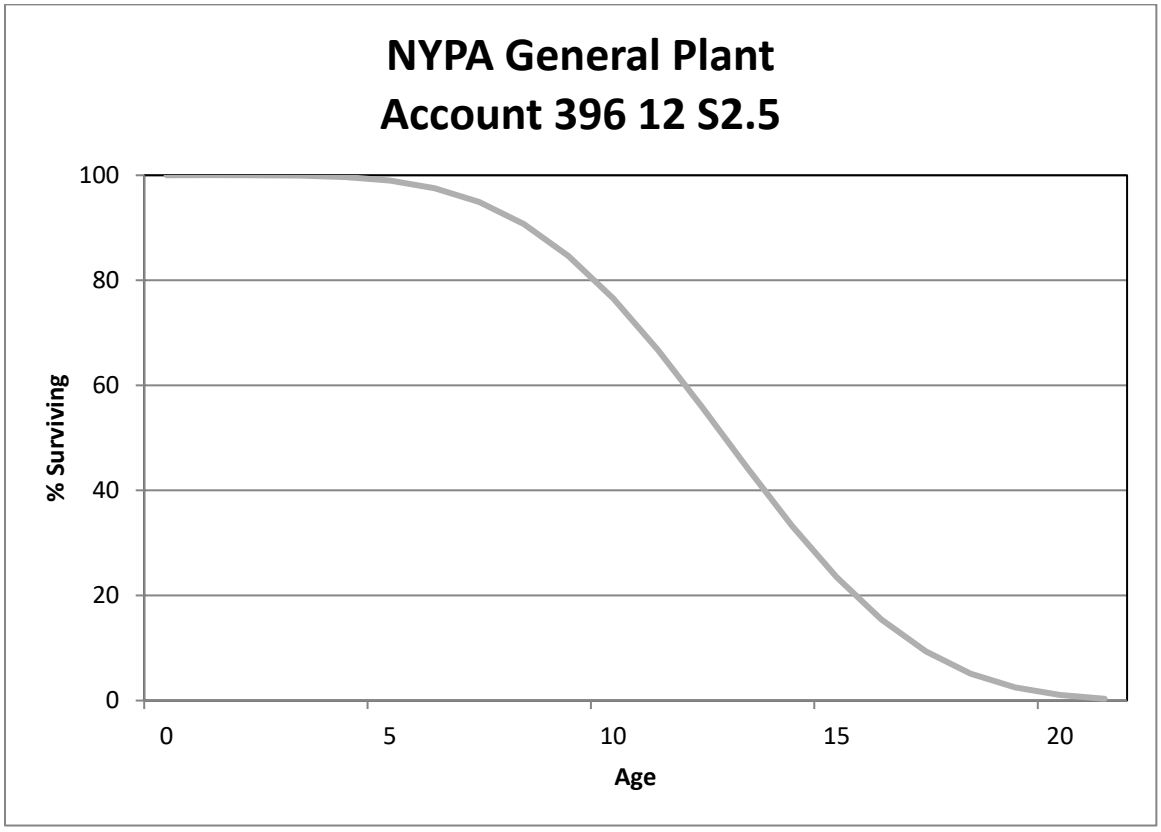
This account consists of various items or tools used in shop and garages such as air compressors, grinders, mixers, hoists, and cranes. There is approximately $15.0 million in this account. The existing life for this account is 20 SQ. Based on limited retirement data and knowledge of the characteristics of similar assets, this study recommends retention of the 20 SQ dispersion curve.

FERC Account 395.00 Laboratory Equipment 20 SQ

This account consists of laboratory equipment, such as test equipment, used for general utility service. There is approximately $9.2 million in this account. The existing life for this account is 20 SQ. Based on the assets in the account and knowledge of the characteristics of similar assets, this study recommends retention of the 20 SQ dispersion curve.

FERC Account 396.00 Power Operated Equipment 12 S2.5

This account consists of power operated equipment used in general utility service. There is approximately $20.7 million in this account. The existing life for this account is 12 S2.5. Based on the assets in the account and discussions with NYPA SMEs, this study recommends retention of the 12 S2.5 dispersion curve. A graph of the proposed survivor curve is shown below.



FERC Account 398.00 Miscellaneous Equipment 20 SQ

This account consists of miscellaneous equipment used for general utility service. The overall account contains relicensing costs for the hydro facilities. The relicensing costs were excluded from this study since those assets are recovered over the life of the relicensing period. There is approximately $29.1 million of non-relicensing costs in this account. The existing life for this account is 20 SQ. After considering the types and characteristic of assets in this account, this study recommends retaining a 20 SQ dispersion curve.

GENERAL PLANT AMORTIZED ACCOUNTS

General Plant Amortized Accounts 391.00-391.30, 397.00 and 399.00

Adoption of Vintage Group Amortization

This study recommends the adoption of vintage group amortization for accounts 391, 391.2, 391.3, 397, and 399.

FERC adopted Accounting Release 15 in 1997 which contains the following criteria:

> 1. The individual classes of assets for which vintage year accounting is followed are high-volume, low-value items;
>
> 2. There is no change in existing retirement unit designations, for purposes of determining when expenditures are capital or expense;
>
> 3. The cost of the vintage groups is amortized to depreciation expense over their useful lives and there is no change in depreciation rates resulting from the adoption of the vintage year accounting;
>
> 4. Interim retirements are not recognized;
>
> 5. Salvage and removal cost relative to items in the vintage categories are included in the accumulated depreciation account and assigned to the oldest vintage first; and
>
> 6. Properties are retired from the affected accounts that, at the date of the adoption of vintage year accounting, meet or exceed the average service life of properties in that account.
>
> A vintage year method of accounting for the general plant accounts that meets all of the foregoing requirements may be implemented without obtaining specific authorization from the Commission to do so.[3]

To implement this amortization mechanism, it is necessary to first retire the assets whose age is longer than the recommended service life for each group. It will no longer be necessary for NYPA to track the location and retirement of those assets.

[3] https://www.ferc.gov/enforcement-legal/enforcement/accounting-matters

Those amounts are shown for each account in Appendix A-1. After those assets are retired, the remaining plant in service for each account will be amortized using the amortization rates shown in Appendix A-1. Annually, assets that reach the average service life of each account will be retired. An additional accrual is also necessary for each plant account to make up the difference between the book depreciation reserve and the theoretical depreciation reserve. Since NYPA plans to perform depreciation studies approximately every three to five years, a 5-year amortization period for reserve differences is used in this study. Those amounts will be accrued until the total reserve difference for each account shown in Appendix A-1 has been accumulated. For example, in Blenheim GIlboa, Account 391 will require an annual accrual of $858 annually for 5 years until the reserve difference of $(4,292) has been accumulated. At that point the additional annual accrual will cease. NYPA proposes to implement amortization accounting consistent with Accounting Release 15 for the following general asset accounts.

FERC Account 391.00 Office Furniture and Fixtures (10 SQ)

This account consists of miscellaneous office furniture such as desks, chairs, filing cabinets, and tables used for general utility service. There is approximately $11.6 million in this account, and after the retirement of fully accrued assets the plant balance is $1.9 million. The existing life for this account is 10 SQ. Based on judgment in analyzing similar assets, this study recommends retaining the 10 SQ dispersion curve.

FERC Account 391.20 Computer Equipment (5 SQ)

This account consists of computer equipment used for general utility service. There is approximately $21.6 million in this account, and after the retirement of fully accrued assets the plant balance is $10.4 million. The existing life for this account is 5 SQ. Based on discussions with NYPA SMEs and an understanding of the characteristics of assets in this account, this study recommends retaining a 5 SQ dispersion curve.

FERC Account 391.30 Computer Equipment (10 SQ)

This account consists of computer equipment used for general utility service. There is approximately $164.5 million in this account, and after the retirement of fully accrued assets the plant balance is $97.6 million. The existing life for this account is 10 SQ. Based on discussions with NYPA SMEs and an understanding of the characteristics of assets in this account, this study recommends retaining a 10 SQ dispersion curve.

FERC Account 397.00 Communication Equipment (10 SQ)

This account consists of communication equipment such as fiber optic cables, routers, and telephone/radio equipment. There is approximately $25.5 million in this account, and after the retirement of fully accrued assets the plant balance is $14.5 million. The existing life for this account is 15 SQ. NYPA operations personnel reviewed the current plant in service and estimated life-cycles for those components based on their practices. They recommended a shorter life in the 10 year range, after considering changing technology for these assets and their usage. After considering the types and characteristic of assets in this account and input from operations personnel, this study recommends a 10 SQ dispersion curve.

FERC Account 399.00 Other Tangible Equipment (15 SQ)

This account consists of other tangible property. There is approximately $5.1 million in this account, and after the retirement of fully accrued assets the plant balance is $0. The existing life for this account is 15 SQ. After considering the types and characteristic of assets in this account, this study recommends retaining a 15 SQ dispersion curve for use for future investments in this account.

NET SALVAGE ANALYSIS

Salvage and removal cost percentages are calculated by dividing the current cost of salvage or removal by the original installed cost of the asset. Some

plant assets can experience significant negative removal cost percentages due to the timing of the original addition versus the retirement.

NYPA is not charging gross salvage and cost of removal to accumulated depreciation at the present time. NYPA is charging cost of removal to a separate liability account and includes that amount in the accumulated depreciation when calculating net electric plant in service in its transmission formula rate. NYPA plans to transfer the existing removal costs to accumulated depreciation and charge removal cost to accumulated depreciation when replacements occur going forward.

Currently all general plant accounts are using zero percent net salvage. Based on NYPA's planned change in its process for charging removal cost, this study recommends the following net salvage change.

FERC Account 390.00 General Plant Structures & Improvements (-5%)

This account includes the cost of any gross salvage or removal cost for general structures and improvements used for utility service. The current net salvage percentage for this account is 0. These assets usually have some cost of removal associated with them. Based on an understanding of the assets in the account and discussions with NYPA subject matter experts ("SMEs"), this study recommends moving to (5%) net salvage for this account.

APPENDIX A and A-1

Depreciation Rate Calculations

NEW YORK POWER AUTHORITY
COMPUTATION OF PROPOSED DEPRECIATION ACCRUAL RATES
AT DECEMBER 31, 2019

Account	Account Description	Plant Balance at 12/31/2019 $	Total Accumulated Depreciation at 12/31/2019 $	Life Accumulated Depreciation at 12/31/2019 $	COR Only Accumulated Depreciation at 12/31/2019 $	Net Salvage %	Net Salvage Amount $	Unaccrued Balance $	Remaining Life Yrs	Annual Accrual $	Annual Accrual %
GENERAL PLANT HEADQUARTERS											
390	Structures & Improvements	88,588,204.88	45,090,378.88	45,090,378.88	0.00	-5.00%	(4,429,410.24)	47,927,236.24	39.35	1,217,944.12	1.37%
392	Transportation Equipment	12,449,333.17	12,370,954.59	12,370,954.59	0.00	0.00%	0.00	78,378.58	3.12	25,101.96	0.20%
394	Tools, Shop & Garage Equipment	450,834.89	167,385.53	167,385.53	0.00	0.00%	0.00	283,449.36	13.55	20,911.63	4.64%
395	Laboratory Equipment	966,703.67	912,137.67	912,137.67	0.00	0.00%	0.00	54,566.00	8.44	6,461.97	0.67%
398	Miscellaneous Equipment	207,601.84	63,456.10	63,456.10	0.00	0.00%	0.00	144,145.74	17.36	8,303.57	4.00%
St. LAWRENCE / FDR											
390	Structures & Improvements	44,595,777.70	8,183,872.37	6,663,725.37	1,520,147.00	-5.00%	(2,229,788.89)	38,641,694.22	51.31	753,071.53	1.69%
392	Transportation Equipment	15,727,227.19	11,481,858.20	11,481,858.20	0.00	0.00%	0.00	4,245,368.99	4.84	877,694.10	5.58%
393	Stores Equipment	260,677.87	172,906.37	172,906.37	0.00	0.00%	0.00	87,771.50	11.84	7,412.38	2.84%
394	Tools, Shop & Garage Equipment	6,898,608.98	4,647,964.14	4,647,964.14	0.00	0.00%	0.00	2,250,644.84	8.32	270,636.71	3.92%
395	Laboratory Equipment	2,427,554.05	1,329,834.90	1,329,834.90	0.00	0.00%	0.00	1,097,719.15	8.74	125,554.54	5.17%
396	Power Operated Equipment	8,988,990.51	5,076,346.68	5,076,346.68	0.00	0.00%	0.00	3,912,643.83	7.03	556,623.84	6.19%
398	Miscellaneous Equipment	17,585,914.54	17,011,808.67	17,011,808.67	0.00	0.00%	0.00	574,105.87	3.00	191,368.62	1.09%
NIAGARA											
390	Structures & Improvements	47,178,401.04	22,293,137.99	19,904,049.99	2,389,088.00	-5.00%	(2,358,920.05)	27,244,183.10	37.62	724,112.45	1.53%
392	Transportation Equipment	9,511,459.12	7,878,489.57	7,878,489.57	0.00	0.00%	0.00	1,632,969.55	4.00	408,656.52	4.30%
394	Tools, Shop & Garage Equipment	4,728,022.21	4,068,785.62	4,068,785.62	0.00	0.00%	0.00	659,236.59	5.47	120,492.89	2.55%
395	Laboratory Equipment	673,156.33	308,485.37	308,485.37	0.00	0.00%	0.00	364,670.96	12.71	28,696.45	4.26%
396	Power Operated Equipment	4,546,131.60	3,363,923.82	3,363,923.82	0.00	0.00%	0.00	1,182,207.78	4.58	258,173.70	5.68%
398	Miscellaneous Equipment	1,891,950.06	714,531.06	714,531.06	0.00	0.00%	0.00	1,177,419.00	14.08	83,613.74	4.42%
BLENHEIM - GILBOA											
390	Structures & Improvements	38,577,448.05	8,910,581.73	8,910,581.73	0.00	-5.00%	(1,928,872.40)	31,595,738.72	50.88	620,930.82	1.61%
392	Transportation Equipment	6,784,230.21	4,208,298.77	4,208,298.77	0.00	0.00%	0.00	2,575,931.44	6.03	427,430.87	6.30%
393	Stores Equipment	511,332.30	343,550.47	343,550.47	0.00	0.00%	0.00	167,781.83	10.66	15,733.88	3.08%
394	Tools, Shop & Garage Equipment	1,601,239.63	578,940.39	578,940.39	0.00	0.00%	0.00	1,022,299.24	12.49	81,840.70	5.11%
395	Laboratory Equipment	668,916.60	203,434.38	203,434.38	0.00	0.00%	0.00	465,482.22	13.62	34,182.18	5.11%
396	Power Operated Equipment	2,763,842.66	2,478,990.66	2,478,990.66	0.00	0.00%	0.00	284,852.00	4.51	63,105.67	2.28%
398	Miscellaneous Equipment	1,558,668.66	801,049.38	801,049.38	0.00	0.00%	0.00	757,619.28	9.68	78,269.34	5.02%
POLETTI (Astoria)											
390	Structures & Improvements	3,235,825.75	1,288,687.36	1,288,687.36	0.00	-5.00%	(161,791.29)	2,108,929.68	51.65	40,829.61	1.26%
392	Transportation Equipment	57,156.34	57,156.63	57,156.63	0.00	0.00%	0.00	(0.29)	3.79	0.00	0.00%
393	Stores Equipment	108,837.62	101,724.62	101,724.62	0.00	0.00%	0.00	7,113.00	9.02	788.98	0.72%
394	Tools, Shop & Garage Equipment	445,908.01	123,414.57	123,414.57	0.00	0.00%	0.00	322,493.44	15.09	21,371.04	4.79%
395	Laboratory Equipment	1,622,974.91	1,644,557.93	1,644,557.93	0.00	0.00%	0.00	(21,583.02)	2.15	(10,050.00)	0.00%
396	Power Operated Equipment	163,077.92	151,870.91	151,870.91	0.00	0.00%	0.00	11,207.01	0.84	13,329.20	8.17%
398	Miscellaneous Equipment	2,960,625.83	2,964,107.93	2,964,107.93	0.00	0.00%	0.00	(3,482.10)	3.00	0.00	0.00%
MASSENA - MARCY (Clark)											
390	Structures & Improvements	19,690,803.81	1,259,939.81	1,259,939.81	0.00	-5.00%	(984,540.19)	19,415,404.19	57.85	335,596.89	1.70%
392	Transportation Equipment	7,772,966.77	5,164,565.50	5,164,565.50	0.00	0.00%	0.00	2,608,401.27	6.06	430,216.81	5.53%
393	Stores Equipment	299,434.22	187,398.69	187,398.69	0.00	0.00%	0.00	112,035.53	17.71	6,325.03	2.11%
394	Tools, Shop & Garage Equipment	638,030.98	276,127.99	276,127.99	0.00	0.00%	0.00	361,902.99	15.29	23,674.71	3.71%
395	Laboratory Equipment	671,547.85	208,488.00	208,488.00	0.00	0.00%	0.00	463,059.85	14.43	32,085.09	4.78%
396	Power Operated Equipment	3,155,741.41	2,422,917.07	2,422,917.07	0.00	0.00%	0.00	732,824.34	6.55	111,945.19	3.55%
398	Miscellaneous Equipment	30,777.49	(75,602.62)	(75,602.62)	0.00	0.00%	0.00	106,380.11	14.96	7,112.20	23.11%
MARCY-SOUTH											
396	Power Operated Equipment	763.00	(278,237.00)	(278,237.00)	0.00	0.00%	0.00	279,000.00	3.00	93,000.00	12188.73%
FLYNN (Holtsville)											
392	Transportation Equipment	91,385.71	100,227.61	100,227.61	0.00	0.00%	0.00	(8,841.90)	6.56	(1,347.16)	0.00%
394	Tools, Shop & Garage Equipment	147,596.00	138,833.00	138,833.00	0.00	0.00%	0.00	8,763.00	1.32	6,655.71	4.51%
395	Laboratory Equipment	49,048.73	58,248.73	58,248.73	0.00	0.00%	0.00	(9,200.00)	3.48	(2,644.02)	0.00%
396	Power Operated Equipment	286,292.76	102,555.75	102,555.75	0.00	0.00%	0.00	183,737.01	8.70	21,110.70	7.37%

NEW YORK POWER AUTHORITY
COMPUTATION OF PROPOSED DEPRECIATION ACCRUAL RATES
AT DECEMBER 31, 2019

Account	Account Description	Plant Balance at 12/31/2019 $	Total Accumulated Depreciation at 12/31/2019 $	Life Accumulated Depreciation at 12/31/2019 $	COR Only Accumulated Depreciation at 12/31/2019 $	Net Salvage %	Net Salvage Amount $	Unaccrued Balance $	Remaining Life Yrs	Annual Accrual $	Annual Accrual %
398	Miscellaneous Equipment	501,230.50	348,503.08	348,503.08	0.00	0.00%	0.00	152,727.42	12.68	12,048.34	2.40%
HELLGATE (Bronx)											
396	Power Operated Equipment	22,076.00	22,076.00	22,076.00	0.00	0.00%	0.00	0.00	1.69	0.00	0.00%
398	Miscellaneous Equipment	1,272,183.45	1,266,364.59	1,266,364.59	0.00	0.00%	0.00	5,818.86	7.16	812.40	0.06%
HARLEM RIVER YARDS (Bronx)											
396	Power Operated Equipment	21,882.00	21,882.00	21,882.00	0.00	0.00%	0.00	0.00	1.69	0.00	0.00%
398	Miscellaneous Equipment	1,166,179.60	1,166,179.73	1,166,179.73	0.00	0.00%	0.00	(0.13)	7.08	(0.02)	0.00%
VERNON BOULEVARD (Queens)											
396	Power Operated Equipment	22,076.00	11,029.00	11,029.00	0.00	0.00%	0.00	11,047.00	1.69	6,530.79	29.58%
398	Miscellaneous Equipment	245,849.68	100,831.00	100,831.00	0.00	0.00%	0.00	145,018.68	5.73	25,299.50	10.29%
KENT (Brooklyn)											
396	Power Operated Equipment	22,076.00	22,076.00	22,076.00	0.00	0.00%	0.00	0.00	1.69	0.00	0.00%
398	Miscellaneous Equipment	228,132.93	228,133.34	228,133.34	0.00	0.00%	0.00	(0.41)	5.52	(0.07)	0.00%
GOWANUS (Brooklyn)											
396	Power Operated Equipment	28,597.00	24,850.00	24,850.00	0.00	0.00%	0.00	3,747.00	3.08	1,218.12	4.26%
398	Miscellaneous Equipment	427,954.92	427,955.34	427,955.34	0.00	0.00%	0.00	(0.42)	5.61	(0.07)	0.00%
POUCH TERMINAL (Richmond)											
396	Power Operated Equipment	22,076.00	22,076.00	22,076.00	0.00	0.00%	0.00	0.00	1.69	0.00	0.00%
398	Miscellaneous Equipment	313,431.25	171,153.00	171,153.00	0.00	0.00%	0.00	142,278.25	5.50	25,868.77	8.25%
BRENTWOOD (Long Island)											
398	Miscellaneous Equipment	39,059.84	181,337.84	181,337.84	0.00	0.00%	0.00	(142,278.00)	8.91	(15,976.16)	0.00%
500mW C - C at Astoria											
392	Transportation Equipment	610,513.92	425,773.92	425,773.92	0.00	0.00%	0.00	184,740.00	6.16	29,989.01	4.91%
394	Tools, Shop & Garage Equipment	68,609.17	64,847.17	64,847.17	0.00	0.00%	0.00	3,762.00	20.15	186.73	0.27%
395	Laboratory Equipment	2,143,542.84	746,978.84	746,978.84	0.00	0.00%	0.00	1,396,564.00	16.31	85,630.87	3.99%
396	Power Operated Equipment	678,685.70	461,403.69	461,403.69	0.00	0.00%	0.00	217,282.01	6.46	33,660.80	4.96%
398	Miscellaneous Equipment	690,696.74	645,869.23	645,869.23	0.00	0.00%	0.00	44,827.51	12.90	3,475.66	0.50%

Note: (1) Remaining life is less than 1 year. To fully accrue asset 3 year remaining life is used

NEW YORK POWER AUTHORITY
COMPUTATION OF PROPOSED DEPRECIATION AMORTIZATION RATES
ACCOUNTS 391, 391.2, 391.3, 397, 398
AT DECEMBER 31, 2019

Account	Account Description	Plant Balance at 12/31/2019 $	Accumulated Depreciation at 12/31/2019 $	Theoretical Reserve at 12/31/2019 $	Reserve Difference $	Remaining Life Yrs	Amortize Reserve Difference $	Assets To Retire $
HEADQUARTERS								
391	Office Furniture and Equipment	11,882,275	8,395,486	10,715,061	(2,319,575)	5.00	463,915	10,325,348
391.2	Computer Equipment 5 yr	20,837,122	13,622,943	11,860,238	1,762,705	5.00	(352,541)	10,809,176
391.3	Computer Equip 10 Yr	145,491,567	27,271,314	59,264,164	(31,992,850)	5.00	6,398,570	50,871,071
397	Communication Equipment	10,199,232	1,196,551	1,908,217	(711,666)	5.00	142,333	0
St. LAWRENCE / FDR								
391	Office Furniture and Equipment	84,899	(7,983)	42,156	(50,139)	5.00	10,028	12,578
391.2	Computer Equipment 5 yr	283,695	167,768	236,858	(69,090)	5.00	13,818	216,757
391.3	Computer Equip 10 Yr	8,414,755	5,642,293	8,085,653	(2,443,360)	5.00	488,672	8,068,332
397	Communication Equipment	5,478,491	4,247,245	5,337,054	(1,089,809)	5.00	217,962	5,088,572
399	Other Tangible Property	1,126,419	495,289	1,126,419	(631,130)	5.00	126,226	1,126,419
NIAGARA								
391	Office Furniture and Equipment	20,961	6,458	3,995	2,463	5.00	(493)	2,105
391.2	Computer Equipment 5 yr	221,499	145,116	199,328	(54,211)	5.00	10,842	177,156
391.3	Computer Equip 10 Yr	2,024,180	184,567	269,746	(85,179)	5.00	17,036	0
397	Communication Equipment	3,752,150	1,059,200	1,841,082	(781,882)	5.00	156,376	679,278
399	Other Tangible Property	3,201,209	1,907,148	3,201,209	(1,294,061)	5.00	258,812	3,201,209
BLENHEIM - GILBOA								
391	Office Furniture and Equipment	29,828	(7,954)	14,440	(22,395)	5.00	4,479	9,223
391.2	Computer Equipment 5 yr	100,704	69,546	79,054	(9,508)	5.00	1,902	17,720
397	Communication Equipment	803,422	105,105	204,882	(99,777)	5.00	19,955	0
POLETTI (Astoria)								
391	Office Furniture and Equipment	833,108	833,108	833,108	0	5.00	0	833,108
397	Communication Equipment	443,045	427,385	443,045	(15,660)	5.00	3,132	443,045
399	Other Tangible Property	322,930	322,930	322,930	0	5.00	0	322,930
MASSENA - MARCY (Clark)								
391	Office Furniture and Equipment	(1,715,449)	900,754	(1,730,837)	2,631,590	5.00	(526,318)	(1,732,279)
391.2	Computer Equipment 5 yr	165,820	146,133	22,374	123,759	5.00	(24,752)	0
391.3	Computer Equip 10 Yr	7,944,330	3,269,442	7,944,330	(4,674,888)	5.00	934,978	7,944,330
397	Communication Equipment	64,570	29,771	42,185	(12,414)	5.00	2,483	
LONG ISLAND SOUND CABLE								
397	Communication Equipment	4,414,029	4,414,029	4,414,029	0	5.00	0	4,414,029
JARVIS								
399	Other Tangible Property	427,000	205,030	427,000	(221,970)	5.00	44,394	427,000
FLYNN (Holtsville)								
391	Office Furniture and Equipment	307,067	189,798	176,373	13,425	5.00	(2,685)	161,428
397	Communication Equipment	349,918	349,917	349,918	(1)	5.00	(6,849)	349,918
500mW C - C at Astoria								
391	Office Furniture and Equipment	155,630	111,075	76,828	34,247	5.00	(6,849)	14,194
391.2	Computer Equipment 5 yr	33,516	16,207	16,758	(551)	5.00	110	0
391.3	Computer Equip 10 Yr	654,888	32,745	32,744	0	5.00	(0)	0

Note: (1) Remaining life is less than 1 year. To fully accrue asset 3 year remaining life is used

AFTER RETIREMENT OF FULLY ACCRUED ASSETS

Acct	Description	Plant Balance at 12/31/2019	Allocated Reserve at 12/31/2019	Amortization Life	Amortization Net Salv %	Amortization Rate	Annual Amortization	Accrual For Reserve Difference
		$	$					
HEADQUARTERS								
391	Office Furniture and Equipment	1,556,926	(1,929,862)	10	0%	10.00%	155,693	463,915
391.2	Computer Equipment 5 yr	10,027,946	2,813,767	5	0%	20.00%	2,005,589	(352,541)
391.3	Computer Equip 10 Yr	94,620,497	(23,599,757)	10	0%	10.00%	9,462,050	6,398,570
397	Communication Equipment	10,199,232	1,196,551	10	0%	10.00%	1,019,923	142,333
St. LAWRENCE / FDR								
391	Office Furniture and Equipment	72,321	(20,561)	10	0%	10.00%	7,232	10,028
391.2	Computer Equipment 5 yr	66,938	(48,989)	5	0%	20.00%	13,388	13,818
391.3	Computer Equip 10 Yr	346,424	(2,426,038)	10	0%	10.00%	34,642	488,672
397	Communication Equipment	389,919	(841,327)	10	0%	10.00%	38,992	217,962
399	Other Tangible Property	0	(631,130)	15	0%	6.67%	0	126,226
NIAGARA								
391	Office Furniture and Equipment	18,857	4,353	10	0%	10.00%	1,886	(493)
391.2	Computer Equipment 5 yr	44,343	(32,040)	5	0%	20.00%	8,869	10,842
391.3	Computer Equip 10 Yr	2,024,180	184,567	10	0%	10.00%	202,418	17,036
397	Communication Equipment	3,072,872	379,922	10	0%	10.00%	307,287	156,376
399	Other Tangible Property	0	(1,294,061)	15	0%	6.67%	0	258,812
BLENHEIM - GILBOA								
391	Office Furniture and Equipment	20,605	(17,177)	10	0%	10.00%	2,060	4,479
391.2	Computer Equipment 5 yr	82,984	51,826	5	0%	20.00%	16,597	1,902
397	Communication Equipment	803,422	105,105	10	0%	10.00%	80,342	19,955
POLETTI (Astoria)								
391	Office Furniture and Equipment	0	0	10	0%	10.00%	0	0
397	Communication Equipment	0	(15,660)	10	0%	10.00%	0	3,132
399	Other Tangible Property	0	0	15	0%	6.67%	0	
MASSENA - MARCY (Clark)								
391	Office Furniture and Equipment	(1,715,449)	2,633,033	10	0%	10.00%	(171,545)	(526,318)
391.2	Computer Equipment 5 yr	(2,045,990)	146,133	5	0%	20.00%	(409,198)	(24,752)
391.3	Computer Equip 10 Yr	7,944,330	(4,674,888)	10	0%	10.00%	794,433	934,978
397	Communication Equipment	64,570	29,771	10	0%	10.00%	6,457	2,483
LONG ISLAND SOUND CABLE								
397	Communication Equipment	0	0	10	0%	10.00%	0	0
JARVIS								
399	Other Tangible Property	0	(221,970)	15	0%	6.67%	0	44,394
FLYNN (Holtsville)								0
391	Office Furniture and Equipment	145,639	28,370	10	0%	10.00%	14,564	(2,685)
397	Communication Equipment	0	(1)	10	0%	10.00%	0	(6,849)
500mW C - C at Astoria								
391	Office Furniture and Equipment	141,436	96,881	10	0%	10.00%	14,144	(6,849)
391.2	Computer Equipment 5 yr	33,516	16,207	5	0%	20.00%	6,703	110
391.3	Computer Equip 10 Yr	654,888	32,745	10	0%	10.00%	65,489	(0)
	Total	128,570,406	(28,034,231)				13,678,014	8,395,535

APPENDIX B

Depreciation Expense Comparison

NEW YORK POWER AUTHORITY
COMPARISON OF CURRENT AND
PROPOSED DEPRECIATION RATES
AT DECEMBER 31, 2019

Account	Account Description	Plant Balance at 12/31/2019 $	Total Accumulated Depreciation at 12/31/2019 $	Current Accrual Rate %	With COR Current Accrual Amount $	No COR Current Accrual Amount $	COR Current Accrual Amount $	Proposed Accrual Rate %	Proposed Accrual Amount $	No COR Proposed Life Accrual Amount	Proposed COR Accrual Amount	Difference $
GENERAL PLANT												
HEADQUARTERS												
Amortized Accounts reflect retirement of assets greater than average life												
390	Structures & Improvements	88,588,205	45,090,379	1.54%	998,536	998,536	0	1.37%	1,217,944	1.25%	0.13%	219,408
391	Office Furniture and Equipment	1,556,926	(1,929,862)	10.00%	660,867	660,867	0	10.00%	155,693	10.00%	0.00%	(505,174)
391.2	Computer Equipment 5 yr	10,027,946	2,813,767	20.00%	6,486,618	6,486,618	0	20.00%	2,005,589	20.00%	0.00%	(4,481,029)
391.3	Computer Equip 10 Yr	94,620,497	(23,599,757)	10.00%	10,588,546	10,588,546	0	10.00%	9,462,050	10.00%	0.00%	(1,126,496)
392	Transportation Equipment	12,449,333	12,370,955	6.67%	213,986	213,986	0	0.20%	25,102	0.20%	0.00%	(188,884)
394	Tools, Shop & Garage Equipment	450,835	167,386	2.86%	21,356	21,356	0	4.64%	20,912	4.64%	0.00%	(444)
395	Laboratory Equipment	966,704	912,138	4.76%	4,486	4,486	0	0.67%	6,462	0.67%	0.00%	1,976
397	Communication Equipment	10,199,232	1,196,551	6.67%	669,998	669,998	0	10.00%	1,019,923	10.00%	0.00%	349,925
398	Miscellaneous Equipment	207,602	63,456	2.00%	10,247	10,247	0	4.00%	8,304	4.00%	0.00%	(1,943)
	Subtotal	219,067,280	37,085,012		19,654,640	19,654,640	0		13,921,978			(5,732,662)
St. LAWRENCE / FDR												
390	Structures & Improvements	44,595,778	8,183,872	1.82%	549,354	583,770	(34,416)	1.69%	753,072	1.59%	0.10%	203,718
391	Office Furniture and Equipment	72,321	(20,561)	10.00%	4,558	4,558	0	10.00%	7,232	10.00%	0.00%	2,674
391.2	Computer Equipment 5 yr	66,938	(48,989)	20.00%	56,819	56,819	0	20.00%	13,388	20.00%	0.00%	(43,432)
391.3	Computer Equip 10 Yr	346,424	(2,426,038)	10.00%	843,484	843,484	0	10.00%	34,642	10.00%	0.00%	(808,842)
392	Transportation Equipment	15,727,227	11,481,858	10.00%	990,910	990,910	0	5.58%	877,694	5.58%	0.00%	(113,216)
393	Stores Equipment	260,678	172,906	2.63%	9,248	9,248	0	2.84%	7,412	2.84%	0.00%	(1,836)
394	Tools, Shop & Garage Equipment	6,898,609	4,647,964	6.25%	462,137	462,137	0	3.92%	270,637	3.92%	0.00%	(191,500)
395	Laboratory Equipment	2,427,554	1,329,835	5.56%	146,858	146,858	0	5.17%	125,555	5.17%	0.00%	(21,303)
396	Power Operated Equipment	8,988,991	5,076,347	5.56%	525,443	525,443	0	6.19%	556,624	6.19%	0.00%	31,180
397	Communication Equipment	389,919	(841,327)	6.67%	365,238	365,238	0	10.00%	38,992	10.00%	0.00%	(326,246)
398	Miscellaneous Equipment	17,585,915	17,011,809	11.11%	2,246,055	2,246,055	0	1.09%	191,369	1.09%	0.00%	(2,054,686)
399	Other Tangible Property	0	(631,130)	6.67%	75,095	75,095	0	6.67%	0	6.67%	0.00%	(75,095)
	Subtotal	97,360,353	43,936,546		6,275,200	6,309,616	(34,416)		2,876,616			(3,398,584)
NIAGARA												
390	Structures & Improvements	47,178,401	22,293,138	1.33%	654,120	728,328	(74,208)	1.53%	724,112	1.40%	0.13%	69,992
391	Office Furniture and Equipment	18,857	4,353	10.00%	859	859	0	10.00%	1,886	10.00%	0.00%	1,027
391.2	Computer Equipment 5 yr	44,343	(32,040)	20.00%	46,007	46,007	0	20.00%	8,869	20.00%	0.00%	(37,138)
391.3	Computer Equip 10 Yr	2,024,180	184,567	10.00%	171,071	171,071	0	10.00%	202,418	10.00%	0.00%	31,347
392	Transportation Equipment	9,511,459	7,878,490	7.14%	346,344	346,344	0	4.30%	408,657	4.30%	0.00%	62,313
394	Tools, Shop & Garage Equipment	4,728,022	4,068,786	4.17%	270,943	270,943	0	2.55%	120,493	2.55%	0.00%	(150,450)
395	Laboratory Equipment	673,156	308,485	1.56%	26,441	26,441	0	4.26%	28,696	4.26%	0.00%	2,255
396	Power Operated Equipment	4,546,132	3,363,924	6.67%	303,445	303,445	0	5.68%	258,174	5.68%	0.00%	(45,271)
397	Communication Equipment	3,072,872	379,922	6.67%	250,146	250,146	0	10.00%	307,287	10.00%	0.00%	57,141
398	Miscellaneous Equipment	1,891,950	714,531	6.67%	71,303	71,303	0	4.42%	83,614	4.42%	0.00%	12,311
399	Other Tangible Property	0	(1,294,061)	6.67%	42,683	42,683	0	6.67%	0	6.67%	0.00%	(42,683)
	Subtotal	73,689,372	37,870,095		2,183,362	2,257,570	(74,208)		2,144,205			(39,157)
BLENHEIM - GILBOA												
390	Structures & Improvements	38,577,448	8,910,582	1.85%	598,645	598,645	0	1.61%	620,931	1.51%	0.10%	22,286
391	Office Furniture and Equipment	20,605	(17,177)	10.00%	1,866	1,866	0	10.00%	2,060	10.00%	0.00%	194
391.2	Computer Equipment 5 yr	82,984	51,826	20.00%	23,344	23,344	0	20.00%	16,597	20.00%	0.00%	(6,747)
392	Transportation Equipment	6,784,230	4,208,299	9.09%	441,537	441,537	0	6.30%	427,431	6.30%	0.00%	(14,106)
393	Stores Equipment	511,332	343,550	3.23%	16,349	16,349	0	3.08%	15,734	3.08%	0.00%	(615)
394	Tools, Shop & Garage Equipment	1,601,240	578,940	3.70%	79,861	79,861	0	5.11%	81,841	5.11%	0.00%	1,980
395	Laboratory Equipment	668,917	203,434	2.33%	34,718	34,718	0	5.11%	34,182	5.11%	0.00%	(536)
396	Power Operated Equipment	2,763,843	2,478,991	7.14%	243,320	243,320	0	2.28%	63,106	2.28%	0.00%	(180,214)
397	Communication Equipment	803,422	105,105	6.67%	53,563	53,563	0	10.00%	80,342	10.00%	0.00%	26,779
398	Miscellaneous Equipment	1,558,669	801,049	3.70%	68,818	68,818	0	5.02%	78,269	5.02%	0.00%	9,452
	Subtotal	53,372,689	17,664,599		1,562,021	1,562,021			1,420,493			(141,528)
POLETTI (Astoria)												
390	Structures & Improvements	3,235,826	1,288,687	2.00%	64,717	64,717	0	1.26%	40,830	1.16%	0.10%	(23,888)
391	Office Furniture and Equipment	0	0	10.00%	0	0	0	10.00%	0	10.00%	0.00%	0
392	Transportation Equipment	57,156	57,157	10.00%	0	0	0	0.00%	0	0.00%	0.00%	0
393	Stores Equipment	108,838	101,725	3.33%	825	825	0	0.72%	789	0.72%	0.00%	(36)
394	Tools, Shop & Garage Equipment	445,908	123,415	5.00%	19,146	19,146	0	4.79%	21,371	4.79%	0.00%	2,225
395	Laboratory Equipment	1,622,975	1,644,558	4.00%	1,991	1,991	0	0.00%	0	0.00%	0.00%	(1,991)
396	Power Operated Equipment	163,078	151,871	10.00%	0	0	0	8.17%	13,329	8.17%	0.00%	13,329
397	Communication Equipment	0	(15,660)	6.67%	0	0	0	10.00%	0	10.00%	0.00%	0
398	Miscellaneous Equipment	2,960,626	2,964,108	4.00%	394	394	0	0.00%	0	0.00%	0.00%	(394)
399	Other Tangible Property	0	0	6.67%	0	0	0	6.67%	0	6.67%	0.00%	0
	Subtotal	8,594,406	6,315,860		87,073	87,073			76,319			(10,755)

NEW YORK POWER AUTHORITY
COMPARISON OF CURRENT AND
PROPOSED DEPRECIATION RATES
AT DECEMBER 31, 2019

Account	Account Description	Plant Balance at 12/31/2019 $	Total Accumulated Depreciation at 12/31/2019 $	Current Accrual Rate %	With COR Current Accrual Amount $	No COR Current Accrual Amount $	COR Current Accrual Amount $	Proposed Accrual Rate %	Proposed Accrual Amount $	No COR Proposed Life Accrual Amount	Proposed COR Accrual Amount	Difference $
MASSENA - MARCY (Clark)												
390	Structures & Improvements	19,690,804	1,259,940	1.61%	309,843	309,843	0	1.70%	335,597	1.62%	0.09%	25,754
391	Office Furniture and Equipment	(1,715,449)	2,633,033	10.00%	2,552	2,552	0	10.00%	(171,545)	10.00%	0.00%	(174,097)
391.2	Computer Equipment 5 yr	(2,045,990)	146,133	20.00%	54,753	54,753	0	20.00%	(409,198)	20.00%	0.00%	(463,951)
391.3	Computer Equip 10 Yr	7,944,330	(4,674,888)	10.00%	932,064	932,064	0	10.00%	794,433	10.00%	0.00%	(137,631)
392	Transportation Equipment	7,772,967	5,164,566	8.33%	455,415	455,415	0	5.53%	430,217	5.53%	0.00%	(25,198)
393	Stores Equipment	299,434	187,399	3.33%	9,905	9,905	0	2.11%	6,325	2.11%	0.00%	(3,580)
394	Tools, Shop & Garage Equipment	638,031	276,128	1.19%	29,115	29,115	0	3.71%	23,675	3.71%	0.00%	(5,440)
395	Laboratory Equipment	671,548	208,488	1.52%	23,993	23,993	0	4.78%	32,085	4.78%	0.00%	8,092
396	Power Operated Equipment	3,155,741	2,422,917	4.76%	181,613	181,613	0	3.55%	111,945	3.55%	0.00%	(69,668)
397	Communication Equipment	64,570	29,771	6.67%	4,305	4,305	0	10.00%	6,457	10.00%	0.00%	2,152
398	Miscellaneous Equipment	30,777	(75,603)	2.00%	1,913	1,913	0	23.11%	7,112	23.11%	0.00%	5,199
	Subtotal	36,506,764	7,577,883		2,005,472	2,005,472	0		1,167,103			(838,369)
MARCY-SOUTH												
396	Power Operated Equipment	763	(278,237)	6.67%	0	0	0	12188.73%	93,000	12188.73%	0.00%	93,000
	Subtotal											
LONG ISLAND SOUND CABLE												
397	Communication Equipment	0	0	8.33%	0	0	0	10.00%	0	10.00%	0.00%	0
JARVIS												
399	Other Tangible Property	0	(221,970)	6.67%	7,117	7,117	0	6.67%	0	6.67%	0.00%	(7,117)
FLYNN (Holtsville)												
391	Office Furniture and Equipment	145,639	28,370	10.00%	14,827	14,827	0	10.00%	14,564	10.00%	0.00%	(264)
392	Transportation Equipment	91,386	100,228	10.00%	10,779	10,779	0	0.00%	0	0.00%	0.00%	(10,779)
394	Tools, Shop & Garage Equipment	147,596	138,833	5.00%	1,056	1,056	0	4.51%	6,656	4.51%	0.00%	5,600
395	Laboratory Equipment	49,049	58,249	4.00%	12,764	12,764	0	0.00%	0	0.00%	0.00%	(12,764)
396	Power Operated Equipment	286,293	102,556	10.00%	27,635	27,635	0	7.37%	21,111	7.37%	0.00%	(6,524)
397	Communication Equipment	0	(1)	6.67%	0	0	0	10.00%	0	10.00%	0.00%	0
398	Miscellaneous Equipment	501,231	348,503	4.00%	36,569	36,569	0	2.40%	12,048	2.40%	0.00%	(24,521)
	Subtotal	1,221,193	776,737		103,630	103,630	0		54,379			(49,252)
HELLGATE (Bronx)												
396	Power Operated Equipment	22,076	22,076	10.00%	0	0		0.00%	0	0.00%	0.00%	0
398	Miscellaneous Equipment	1,272,183	1,266,365	10.00%	4,022	4,022		0.06%	812	0.06%	0.00%	(3,210)
	Subtotal	1,294,259	1,288,441		4,022	4,022	0		812			(3,210)
HARLEM RIVER YARDS (Bronx)												
396	Power Operated Equipment	21,882	21,882	10.00%	0	0	0	0.00%	0	0.00%	0.00%	0
398	Miscellaneous Equipment	1,166,180	1,166,180	10.00%	692	692	0	0.00%	0	0.00%	0.00%	(692)
	Subtotal	1,188,062	1,188,062		692	692	0		0			(692)
VERNON BOULEVARD (Queens)												
396	Power Operated Equipment	22,076	11,029	10.00%	0	0	0	10.29%	2,272	10.29%	0.00%	2,272
398	Miscellaneous Equipment	245,850	100,831	10.00%	692	692	0	0.00%	0	0.00%	0.00%	(692)
	Subtotal	267,926	111,860		692	692	0		2,272			1,580
KENT (Brooklyn)												
396	Power Operated Equipment	22,076	22,076	10.00%	0			0.00%	0	0.00%	0.00%	0
398	Miscellaneous Equipment	228,133	228,133	10.00%	0			0.00%	0	0.00%	0.00%	0
	Subtotal	250,209	250,209		0	0	0		0			0
GOWANUS (Brooklyn)												
396	Power Operated Equipment	28,597	24,850	10.00%	0	0	0	4.26%	1,218	4.26%	0.00%	1,218
398	Miscellaneous Equipment	427,955	427,955	10.00%	692	692	0	0.00%	0	0.00%	0.00%	(692)
	Subtotal	456,552	452,805		692	692	0		1,218			526
POUCH TERMINAL (Richmond)												
396	Power Operated Equipment	22,076	22,076	10.00%	0	0	0	0.00%	0	0.00%	0.00%	0
398	Miscellaneous Equipment	313,431	171,153	10.00%	0	0	0	8.25%	25,869	8.25%	0.00%	25,869
	Subtotal	335,507	193,229		0	0	0		25,869			25,869
BRENTWOOD (Long Island)												
398	Miscellaneous Equipment	39,060	181,338	10.00%	0	0	0	0.00%	0	0.00%	0.00%	0

NEW YORK POWER AUTHORITY
COMPARISON OF CURRENT AND
PROPOSED DEPRECIATION RATES
AT DECEMBER 31, 2019

Account	Account Description	Plant Balance at 12/31/2019 $	Total Accumulated Depreciation at 12/31/2019 $	Current Accrual Rate %	With COR Current Accrual Amount $	No COR Current Accrual Amount $	COR Current Accrual Amount $	Proposed Accrual Rate %	Proposed Accrual Amount $	No COR Proposed Life Accrual Amount	Proposed COR Accrual Amount	Difference $
500mW C - C at Astoria												
391	Office Furniture and Equipment	141,436	96,881	10.00%	22,814	22,814	0	10.00%	14,144	10.00%	0.00%	(8,670)
391.2	Computer Equipment 5 yr	33,516	16,207	20.00%	6,705	6,705	0	20.00%	6,703	20.00%	0.00%	(2)
391.3	Computer Equip 10 Yr	654,888	32,745	10.00%	32,745	32,745	0	10.00%	65,489	10.00%	0.00%	32,744
392	Transportation Equipment	610,514	425,774	10.00%	36,902	36,902	0	4.91%	29,989	4.91%	0.00%	(6,913)
394	Tools, Shop & Garage Equipment	68,609	64,847	5.00%	5,648	5,648	0	0.27%	187	0.27%	0.00%	(5,461)
395	Laboratory Equipment	2,143,543	746,979	4.00%	207,997	207,997	0	3.99%	85,631	3.99%	0.00%	(122,366)
396	Power Operated Equipment	678,686	461,404	10.00%	60,855	60,855	0	4.96%	33,661	4.96%	0.00%	(27,194)
398	Miscellaneous Equipment	690,697	645,869	4.00%	18,602	18,602	0	0.50%	3,476	0.50%	0.00%	(15,126)
	Subtotal	5,021,888	2,490,705		392,268	392,268	0		239,279			(152,989)
	General Plant Reserve Difference								8,395,535			8,395,535
	Total General	498,666,282	156,883,174		32,276,882	32,385,506	(108,624)		30,419,078			(1,857,804)

APPENDIX C

Depreciation Parameter Comparison

NEW YORK POWER AUTHORITY
Depreciation Parameters
AT DECEMBER 31, 2019

		Current			Proposed		
Acct	Description	Life	Curve	Net Salvage %	Life	Curve	Net Salvage %
390	Structures & Improvements	60	R3	0%	60	R3	-5%
391	Office Furniture and Equipment	18	SQ	0%	10	SQ	0%
391.2	Computer Equipment 5 yr	5	SQ	0%	5	SQ	0%
391.3	Computer Equip 10 Yr	10	SQ	0%	10	SQ	0%
392	Transportation Equipment	10	L2	0%	10	L2	0%
393	Stores Equipment	30	SQ	0%	30	SQ	0%
394	Tools, Shop & Garage Equipme	20	SQ	0%	20	SQ	0%
395	Laboratory Equipment	20	SQ	0%	20	SQ	0%
396	Power Operated Equipment	12	S2.5	0%	12	S2.5	0%
397	Communication Equipment	15	SQ	0%	10	SQ	0%
398	Miscellaneous Equipment	20	SQ	0%	20	SQ	0%
399	Other Tangible Property	15	SQ	0%	15	SQ	0%