PUBLIC UTILITY COMMISSION OF TEXAS

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SOAH DOCKET NO. 473-22-04394
PUC DOCKET NO. 53719

APPLICATION OF ENTERGY TEXAS, INC. FOR AUTHORITY TO CHANGE RATES	**§ § §**	**STATE OFFICE OF ADMINISTRATIVE HEARINGS**

RESPONSE OF ENTERGY TEXAS, INC.
TO CITIES FIRST REQUEST FOR INFORMATION:
CITIES 1:1 THROUGH 30

Entergy Texas, Inc. ("ETI" or the "Company") files its Response to Cities First Request for Information. The response to such request is attached and is numbered as in the request. An additional copy is available for inspection at the Company's office in Austin, Texas.

ETI believes the foregoing response is correct and complete as of the time of the response, but the Company will supplement, correct or complete the response if it becomes aware that the response is no longer true and complete, and the circumstance is such that failure to amend the answer is in substance misleading. The parties may treat this response as if it were filed under oath.

Respectfully submitted,

Kristen F. Yates

Kristen Yates
ENTERGY SERVICES, LLC
919 Congress Avenue, Suite 701
Austin, Texas 78701
Office: (512) 487-3962
Facsimile: (512) 487-3958

Attachments: **CITIES 1:1 THROUGH 30**

CERTIFICATE OF SERVICE

I certify that a copy of the foregoing Response of Entergy Texas, Inc. to Cities First Request for Information has been sent by either hand delivery, electronic delivery, facsimile, overnight delivery, or U.S. Mail to the party that initiated this request in this docket on this the 6th day of September 2022.

Kristen F. Yates

Kristen Yates

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 53719

Response of: Entergy Texas, Inc.
to the First Set of Data Requests
of Requesting Party: CITIES

Prepared By: Dane A. Watson
Sponsoring Witness: Dane A. Watson
Beginning Sequence No. LC71
Ending Sequence No. LC72

Question No.: CITIES 1-1 Part No.: Addendum:

Question:

Please provide all property data utilized in the depreciation study, including, but not limited to, additions, retirements, transfers, sales, adjustments, cost of removal, and salvage data.

a. Please provide this data by account, placement, and experience year since the date of inception.

b. Please provide all survivors for each account as of the study date.

c. Please include all transaction codes and a description of each transaction code.

d. Please also provide a description of any production unit / group / location codes if applicable.

e. Please provide a description or legend for each account number.

f. This data should allow for the reconstruction of the analysis and calculations performed as part of the depreciation study.

g. Please provide this information in Excel format with formulae intact where applicable.

Response:

The public and highly sensitive workpapers with the data supporting Dane A. Watson's depreciation study were provided as Exhibit DAW-2 to Mr. Watson's Direct Testimony. Mr. Watson's public workpapers are included in Entergy Texas Inc.'s "Voluminous Exhibits and Workpapers_Public.zip" file, which is available for download via the Commission's Interchange at the following link:
https://interchange.puc.texas.gov/search/documents/?controlNumber=53719&itemNumber=3

Question No.: CITIES 1-1

Highly sensitive materials have been included on the secure ShareFile site provided to the parties that have executed protective order certifications in this proceeding.

Specific data for various pieces of information requested are found within different sub-folders in Mr. Watson's voluminous workpapers folder entitled "Watson Direct_WP_DAW-2." For accounts where actuarial data (aged retirements) are available, please refer to sub-folder "Actuarial Data Sets." There are two files in that folder, one for production function assets and another for TDG (Transmission, Distribution, and General) Actuarial Data. Finally, net salvage data is found in the sub-folder "Net Salvage." There are two files in that sub-folder, one for Production and another for TDG assets.

a. See above. Not all accounts had experience years from the date of inception. The available data is provided in the "Actuarial Data Sets" sub-folder.
b. See above. For survivors for each account, please see the data found in the "Accrual HSPM" sub-folder. The file "Accrual Energy TX Accrual HSPM" contains the survivors for each account in various tabs: Production Theo Res, Transmission Theo Res, Distribution Theo Res, General Plant Theo Res Dep, General Plant Theo Res Amort, Production Theo Res, and Other Production Theo Res.
c. Mr. Watson does not use transaction codes. All transactions are described using terms like "Addition," "Retirement," "Transfer," and other commonly used terms, similar to those found in the learned treatise *Depreciation Systems* by Drs. F, K. Wolf and W.C, Fitch at pages 15-18.
d. Mr. Watson does not utilize any location codes. All units are described with generating unit name and plant account.
e. The account numbers used are consistent with FERC's Uniform System of Accounts. Please see FERC Code of Federal Regulations 18, Part 101 for more information.
f. See information referenced above.
g. Where available, the requested information has been provided in Excel format with formulae.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 53719

Response of: Entergy Texas, Inc. to the First Set of Data Requests of Requesting Party: CITIES	Prepared By: Dane A. Watson Sponsoring Witness: Dane A. Watson Beginning Sequence No. LC73 Ending Sequence No. LC73

Question No.: CITIES 1-2 Part No.: Addendum:

Question:

Please provide all workpapers, schedules, tables, and exhibits used in the depreciation study or relied upon in conducting the depreciation study in Excel format with formulae intact where applicable.

Response:

The public and highly sensitive workpapers with the data supporting Dane A. Watson's depreciation study, which is attached as Exhibit DAW-2 to Mr. Watson's Direct Testimony, were filed with Entergy Texas, Inc.'s ("ETI") Application. Mr. Watson's public workpapers are included in ETI's "Voluminous Exhibits and Workpapers_Public.zip" file, which is available for download via the Commission's Interchange at the following link:
https://interchange.puc.texas.gov/search/documents/?controlNumber=53719&itemNumber=3

Highly sensitive materials have been included on the secure ShareFile site provided to the parties that have executed protective order certifications in this proceeding.

Please also see ETI's response to TIEC 1-46.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 53719

Response of: Entergy Texas, Inc.
to the First Set of Data Requests
of Requesting Party: CITIES

Prepared By: Dane A. Watson
Sponsoring Witness: Dane A. Watson
Beginning Sequence No. LC74
Ending Sequence No. LC74

Question No.: CITIES 1-3 Part No.: Addendum:

Question:

Please provide all final observed life tables generated for each account in Excel format.

Response:

The observed life tables are produced by Alliance Consulting Group's proprietary software PowerPlan, which does not produce the requested information in Excel format. Rather, the data is provided in Adobe format. For the accounts analyzed via actuarial analysis, the requested information in Adobe format is included in the sub-folder "Actuarial Analysis" located within Mr. Watson's voluminous workpapers folder entitled "Watson Direct_WP_DAW-2," which was filed with Entergy Texas Inc.'s voluminous exhibits and workpapers to the Application. Each plant account analyzed via actuarial analysis has a folder with three subfolders: "Graphs," "Observed Life Table," and "Statistics." All available requested information for each account in Adobe format is in the "Observed Life Table" sub-folder within each plant account sub-folder. If there was no retirement data for an account, the sub-folders for that account do not contain any information, for example "FERC Account 359 No retires" or "373.2 Zero Balance."

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 53719

Response of: Entergy Texas, Inc. to the First Set of Data Requests of Requesting Party: CITIES	Prepared By: Dane A. Watson Sponsoring Witness: Dane A. Watson Beginning Sequence No. LC75 Ending Sequence No. LC75

Question No.: CITIES 1-4 Part No.: Addendum:

Question:

Please provide all remaining life calculations in Excel format.

Response:

Please refer to sub-folder "Appendices" located within Dane A. Watson's voluminous workpapers folder entitled "Watson Direct_WP_DAW-2," which was filed with Entergy Texas Inc.'s voluminous exhibits and workpapers. Appendix F shows the requested information in various tabs that are organized by functional group.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 53719

Response of: Entergy Texas, Inc.
to the First Set of Data Requests
of Requesting Party: CITIES

Prepared By: Dane A. Watson
Sponsoring Witness: Dane A. Watson
Beginning Sequence No. LC76
Ending Sequence No. LC76

Question No.: CITIES 1-5 Part No.: Addendum:

Question:

Please provide the average age of survivors as of the study date for each production plant by account.

Response:

Please see the attachment (TP-53917-00CIT001-X005).

Utility Acct	Unit	Vintage	Age	Cost	$ x Age	Avg Age
311 Total	Big Cajun 2 Common			827,846.52	8,432,492.06	10.19
312 Total	Big Cajun 2 Common			1,012,765.43	11,546,185.35	11.40
314 Total	Big Cajun 2 Common			316,523.68	3,650,512.91	11.53
315 Total	Big Cajun 2 Common			847,724.43	11,297,246.77	13.33
316 Total	Big Cajun 2 Common			540,687.17	6,444,893.31	11.92
311 Total	Big Cajun 2 Unit 3			19,684,801.26	740,536,631.28	37.62
312 Total	Big Cajun 2 Unit 3			60,534,154.06	1,902,560,183.30	31.43
314 Total	Big Cajun 2 Unit 3			18,427,011.30	653,375,396.98	35.46
315 Total	Big Cajun 2 Unit 3			12,166,066.29	430,574,127.05	35.39
316 Total	Big Cajun 2 Unit 3			829,561.24	19,836,972.66	23.91
341 Total	Hardin County Common			1,492,258.10	746,129.05	0.50
342 Total	Hardin County Common			1,738,071.12	869,035.56	0.50
344 Total	Hardin County Common			495,504.04	247,752.02	0.50
345 Total	Hardin County Common			537,374.04	268,687.02	0.50
346 Total	Hardin County Common			1,500,396.11	750,198.06	0.50
341 Total	Hardin County Unit 1			83,536.00	41,768.00	0.50
343 Total	Hardin County Unit 1			10,548,634.80	5,274,317.40	0.50
344 Total	Hardin County Unit 1			330,662.02	165,331.01	0.50
345 Total	Hardin County Unit 1			1,112,879.08	556,439.54	0.50
346 Total	Hardin County Unit 1			170,615.01	85,307.51	0.50
341 Total	Hardin County Unit 2			83,536.00	41,768.00	0.50
343 Total	Hardin County Unit 2			10,548,634.76	5,274,317.38	0.50
344 Total	Hardin County Unit 2			330,662.02	165,331.01	0.50
345 Total	Hardin County Unit 2			1,112,879.08	556,439.54	0.50
346 Total	Hardin County Unit 2			170,615.01	85,307.51	0.50
344 Total	HEB Grocery			2,504,022.54	3,655,929.27	1.46
316 Total	Lewis Creek Unit 1			37,396.18	168,282.81	4.50
311 Total	Lewis Creek Common			129,103,038.51	946,100,422.24	7.33
312 Total	Lewis Creek Common			5,307,683.18	134,068,084.37	25.26
314 Total	Lewis Creek Common			1,099,747.32	12,527,670.06	11.39
315 Total	Lewis Creek Common			3,879,691.14	90,910,041.88	23.43
316 Total	Lewis Creek Common			5,685,127.64	42,056,055.16	7.40
311 Total	Lewis Creek Unit 1			3,057,966.19	81,095,932.87	26.52
312 Total	Lewis Creek Unit 1			39,355,417.07	704,031,008.80	17.89
314 Total	Lewis Creek Unit 1			38,129,257.09	606,601,280.49	15.91
315 Total	Lewis Creek Unit 1			6,656,788.35	154,347,834.57	23.19
311 Total	Lewis Creek Unit 2			2,751,578.43	73,666,883.58	26.77
312 Total	Lewis Creek Unit 2			41,035,808.63	718,020,342.73	17.50
314 Total	Lewis Creek Unit 2			45,063,579.50	537,065,387.52	11.92
315 Total	Lewis Creek Unit 2			5,445,485.08	94,262,186.91	17.31
341 Total	Montgomery County Power Station			40,531,159.61	20,265,579.81	0.50
342 Total	Montgomery County Power Station			9,682,165.20	4,841,082.60	0.50
343 Total	Montgomery County Power Station			332,427,455.01	166,297,820.11	0.50
344 Total	Montgomery County Power Station			240,926,511.33	120,463,255.67	0.50
345 Total	Montgomery County Power Station			73,471,796.35	36,735,898.18	0.50
346 Total	Montgomery County Power Station			6,387,425.05	3,489,738.11	0.55
311 Total	Nelson Common			3,472,258.82	119,006,274.64	34.27
312 Total	Nelson Common			2,891,968.99	119,161,839.38	41.20
314 Total	Nelson Common			150,433.95	2,229,002.39	14.82
315 Total	Nelson Common			523,559.66	8,761,772.05	16.74
316 Total	Nelson Common			346,938.72	3,751,374.73	10.81
311 Total	Nelson Unit 6			29,566,423.80	1,062,516,326.65	35.94
312 Total	Nelson Unit 6			121,567,392.25	3,530,100,836.66	29.04
314 Total	Nelson Unit 6			29,770,610.79	732,475,227.00	24.60
315 Total	Nelson Unit 6			20,861,463.84	750,473,392.16	35.97
316 Total	Nelson Unit 6			1,658,690.86	49,860,865.69	30.06
312.1 Tota	Nelson Rail Car			1,061,826.82	3,681,871.61	3.47
311 Total	Sabine Common			28,082,977.78	957,410,123.06	34.09
312 Total	Sabine Common			23,057,825.89	900,199,518.26	39.04
314 Total	Sabine Common			3,799,176.19	35,245,771.42	9.28
315 Total	Sabine Common			6,744,856.92	184,157,965.09	27.30
316 Total	Sabine Common			5,766,939.76	120,358,231.38	20.87

311 Total	Sabine Unit 1	1,911,983.93	15,141,254.05	7.92
312 Total	Sabine Unit 1	15,552,034.80	563,951,917.77	36.26
314 Total	Sabine Unit 1	31,611,966.74	680,244,410.86	21.52
315 Total	Sabine Unit 1	7,364,898.40	188,392,713.07	25.58
316 Total	Sabine Unit 1	91,344.64	1,050,463.36	11.50
311 Total	Sabine Unit 3	2,138,683.27	57,633,171.29	26.95
312 Total	Sabine Unit 3	32,836,732.87	908,651,689.37	27.67
314 Total	Sabine Unit 3	34,009,548.22	696,775,871.68	20.49
315 Total	Sabine Unit 3	9,743,561.83	206,837,712.32	21.23
311 Total	Sabine Unit 4	7,443,522.30	281,049,501.56	37.76
312 Total	Sabine Unit 4	55,955,054.14	1,317,684,434.34	23.55
314 Total	Sabine Unit 4	63,788,492.87	1,084,834,477.43	17.01
315 Total	Sabine Unit 4	8,365,786.79	280,714,932.33	33.56
316 Total	Sabine Unit 4	101,334.19	565,491.34	5.58
311 Total	Sabine Unit 5	9,427,830.70	328,908,431.57	34.89
312 Total	Sabine Unit 5	78,863,802.81	2,982,432,959.24	37.82
314 Total	Sabine Unit 5	61,728,419.39	1,827,109,401.80	29.60
315 Total	Sabine Unit 5	23,128,294.07	796,059,722.58	34.42
316 Total	Sabine Unit 5	75,137.76	103,337.97	1.38
311 Total	Spindletop	65,844,002.08	808,105,001.18	12.27
312 Total	Spindletop	114,139.68	1,207,568.70	10.58
315 Total	Spindletop	6,071,612.07	59,006,695.01	9.72
316 Total	System Production Training	3,447,018.07	112,614,306.35	32.67
311 Total	System Repair	568,325.78	20,156,184.89	35.47
315 Total	System Repair	95,188.27	3,379,183.59	35.50
316 Total	System Repair	56,274.69	1,930,758.06	34.31
Grand Total		1,977,640,833.39	30,157,985,471.76	15.25

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 53719

Response of: Entergy Texas, Inc.
to the First Set of Data Requests
of Requesting Party: CITIES

Prepared By: Dane A. Watson
Sponsoring Witness: Dane A. Watson
Beginning Sequence No. LC77
Ending Sequence No. LC77

Question No.: CITIES 1-6 Part No.: Addendum:

Question:

Please provide the book reserve (accumulated depreciation) balances for each account as of the depreciation study date.

Response:

Please see the attachment (TP-53917-00CIT-001-X006).

ENTERGY TEXAS
ACCUMULATED DEPRECIATION
AT DECEMBER 31, 2021

Acct	Unit	Total Accumulated Depn
3010 3010000 Organization	3010 3010000 Organization	6,305,131.11
3010 3010000 Organization Total		6,305,131.11
3030 15YR Life - Intangibles	3030 15YR Life - Intangibles	21,223,964.84
3030 15YR Life - Intangibles Total		21,223,964.84
3030 5YR Life - Intangibles	3030 5YR Life - Intangibles	105,876,802.04
3030 5YR Life - Intangibles Total		105,876,802.04
3030 10YR Life - Intangibles	3030 10YR Life - Intangibles	67,154,487.26
3030 10YR Life - Intangibles Total		67,154,487.26
3030 20YR Life - Intangibles	3030 20YR Life - Intangibles	6,233,688.32
3030 20YR Life - Intangibles Total		6,233,688.32
3109 Land	Lewis Creek Common	(2.83)
3109 Land	Neches Common	(945.20)
3109 Land Total		(948.03)
3110 Structures & Improvements	Big Cajun 2 Common	339,387.34
3110 Structures & Improvements	Big Cajun Unit 3	16,772,400.87
3110 Structures & Improvements	Lewis Creek Common	11,251,107.94
3110 Structures & Improvements	Lewis Creek Contra	(7,844.31)
3110 Structures & Improvements	Lewis Creek Unit 1	1,132,127.63
3110 Structures & Improvements	Lewis Creek Unit 2	1,365,614.96
3110 Structures & Improvements	Nelson Common	1,292,103.44
3110 Structures & Improvements	Nelson Contra	(18,363.37)
3110 Structures & Improvements	Nelson Unit 6	22,548,155.15
3110 Structures & Improvements	Sabine Common	20,419,154.92
3110 Structures & Improvements	Sabine Contra	(142,067.19)
3110 Structures & Improvements	Sabine Unit 1	1,791,811.24
3110 Structures & Improvements	Sabine Unit 3	1,284,317.49
3110 Structures & Improvements	Sabine Unit 4	5,461,861.50
3110 Structures & Improvements	Sabine Unit 5	6,951,597.69
3110 Structures & Improvements	Spindletop Orignal Acq	63,917,624.04
3110 Structures & Improvements	Spindeltop Acquistion Adj	1,127,777.95
3110 Structures & Improvements	Spindletop Gas Repair	(79,303.51)
3110 Structures & Improvements	System Repair	595,344.82
3110 Structures & Improvements Total		156,002,808.60
3120 Boiler Plant Equipment	Big Cajun 2 Common	162,191.83
3120 Boiler Plant Equipment	Big Cajun Unit 3	41,303,525.12
3120 Boiler Plant Equipment	Lewis Creek Common	2,398,205.89
3120 Boiler Plant Equipment	Lewis Creek Unit 1	13,281,930.74
3120 Boiler Plant Equipment	Lewis Creek Unit 2	12,202,580.62
3120 Boiler Plant Equipment	Nelson Common	1,324,913.93
3120 Boiler Plant Equipment	Nelson Contra	7,808.34
3120 Boiler Plant Equipment	Nelson Unit 6	69,495,595.25
3120 Boiler Plant Equipment	Sabine Common	18,891,746.18
3120 Boiler Plant Equipment	Sabine Contra	(7,557.57)
3120 Boiler Plant Equipment	Sabine Unit 1	14,798,693.53
3120 Boiler Plant Equipment	Sabine Unit 2	(111,403.43)
3120 Boiler Plant Equipment	Sabine Unit 3	26,211,197.95
3120 Boiler Plant Equipment	Sabine Unit 4	24,618,567.35
3120 Boiler Plant Equipment	Sabine Unit 5	65,810,124.49
3120 Boiler Plant Equipment	Spindletop	42,426.78

3120 Boiler Plant Equipment Total		290,430,547.00
3121 Boiler Plant Railcars	Nelson Unit 6	132,829.02
3121 Boiler Plant Railcars Total		132,829.02
3140 Turbogenerator Units	Big Cajun 2 Common	110,260.80
3140 Turbogenerator Units	Big Cajun Unit 3	14,842,881.91
3140 Turbogenerator Units	Lewis Creek Common	345,940.74
3140 Turbogenerator Units	Lewis Creek Unit 1	14,569,433.64
3140 Turbogenerator Units	Lewis Creek Unit 2	13,836,473.15
3140 Turbogenerator Units	Nelson Common	28,903.28
3140 Turbogenerator Units	Nelson Contra	(46,933.66)
3140 Turbogenerator Units	Nelson Unit 6	10,664,866.53
3140 Turbogenerator Units	Sabine Common	512,388.60
3140 Turbogenerator Units	Sabine Contra	(444,456.27)
3140 Turbogenerator Units	Sabine Unit 1	21,171,100.74
3140 Turbogenerator Units	Sabine Unit 3	20,088,273.45
3140 Turbogenerator Units	Sabine Unit 4	21,680,004.81
3140 Turbogenerator Units	Sabine Unit 5	33,116,744.15
3140 Turbogenerator Units Total		150,475,881.87
3150 Accessory Electric Equipment	Big Cajun 2 Common	308,183.46
3150 Accessory Electric Equipment	Big Cajun Unit 3	9,757,631.87
3150 Accessory Electric Equipment	Lewis Creek Common	2,923,810.44
3150 Accessory Electric Equipment	Lewis Creek Unit 1	3,655,184.22
3150 Accessory Electric Equipment	Lewis Creek Unit 2	1,800,370.42
3150 Accessory Electric Equipment	Nelson Common	117,807.36
3150 Accessory Electric Equipment	Nelson Unit 6	15,638,432.80
3150 Accessory Electric Equipment	Sabine Common	4,280,685.13
3150 Accessory Electric Equipment	Sabine Contra	196,516.06
3150 Accessory Electric Equipment	Sabine Unit 1	7,727,330.67
3150 Accessory Electric Equipment	Sabine Unit 2	3.98
3150 Accessory Electric Equipment	Sabine Unit 3	6,809,447.42
3150 Accessory Electric Equipment	Sabine Unit 4	7,075,024.53
3150 Accessory Electric Equipment	Sabine Unit 5	17,431,532.57
3150 Accessory Electric Equipment	Spindletop	1,927,458.75
3150 Accessory Electric Equipment	System Repair	84,074.73
3150 Accessory Electric Equipment Total		79,733,494.41
3160 Misc Power Plant Equipment	Big Cajun 2 Common	156,047.48
3160 Misc Power Plant Equipment	Big Cajun Unit 3	554,043.05
3160 Misc Power Plant Equipment	Lewis Creek Common	1,241,034.13
3160 Misc Power Plant Equipment	Lewis Creek Unit 1	8,028.95
3160 Misc Power Plant Equipment	Nelson Common	82,441.55
3160 Misc Power Plant Equipment	Nelson Contra	(69.40)
3160 Misc Power Plant Equipment	Nelson Unit 6	1,091,283.56
3160 Misc Power Plant Equipment	Sabine Common	4,102,256.34
3160 Misc Power Plant Equipment	Sabine Contra	(449,078.50)
3160 Misc Power Plant Equipment	Sabine Unit 1	91,365.84
3160 Misc Power Plant Equipment	Sabine Unit 4	19,593.22
3160 Misc Power Plant Equipment	Spindletop	155,610.07
3160 Misc Power Plant Equipment	System Lab	71,177.02
3160 Misc Power Plant Equipment	System Maintenance Mgmnt	1,795,766.06
3160 Misc Power Plant Equipment	System Production Training	782,687.56
3160 Misc Power Plant Equipment	System Repair	109,275.47
3160 Misc Power Plant Equipment Total		9,811,462.40
3170 Asset Retire Costs-Steam	Big Cajun Unit 3	51,098.38
3170 Asset Retire Costs-Steam	Lewis Creek Unit 1	(903,379.99)
3170 Asset Retire Costs-Steam	Lewis Creek Unit 2	(890,916.03)

3170 Asset Retire Costs-Steam	Nelson Unit 6	29,759.80
3170 Asset Retire Costs-Steam	Sabine Unit 1	(714,781.42)
3170 Asset Retire Costs-Steam	Sabine Unit 2	(598,581.42)
3170 Asset Retire Costs-Steam	Sabine Unit 3	(1,140,624.76)
3170 Asset Retire Costs-Steam	Sabine Unit 4	(1,237,302.46)
3170 Asset Retire Costs-Steam Total		(5,404,727.90)
3410 Structures & Improvements	Hardin Non Depreciable	41,793,161.48
3410 Structures & Improvements	Hardin County Common	37,306.44
3410 Structures & Improvements	Hardin Count Unit 1	2,088.42
3410 Structures & Improvements	Hardin County Unit 2	2,088.42
3410 Structures & Improvements	Montgomery Power Station	854,125.45
3410 Structures & Improvements Total		42,688,770.21
3420 Fuel Holdrs,Producrs&Access	Hardin County Common	43,451.76
3420 Fuel Holdrs,Producrs&Access	Montgomery Power Station	240,635.76
3420 Fuel Holdrs,Producrs&Access Total		284,087.52
3430 Prime Movers	Hardin County Common	527,431.74
3430 Prime Movers	Hardin Count Unit 1	263,715.90
3430 Prime Movers	Hardin County Unit 2	263,715.84
3430 Prime Movers	Montgomery Power Station	8,244,498.73
3430 Prime Movers Total		9,299,362.21
3440 Generators	Hardin County Common	12,387.60
3440 Generators	Hardin Count Unit 1	8,266.56
3440 Generators	Hardin County Unit 2	8,266.56
3440 Generators	HEB Backup Generator	90,171.63
3440 Generators Total		119,092.35
3450 Accessory Electric Equipment	Hardin County Common	13,434.36
3450 Accessory Electric Equipment	Hardin Count Unit 1	27,822.00
3450 Accessory Electric Equipment	Hardin County Unit 2	27,822.00
3450 Accessory Electric Equipment	Montgomery Power Station	1,826,031.92
3450 Accessory Electric Equipment Total		1,895,110.28
3460 Misc. Power Plant Equip	Hardin County Common	37,509.90
3460 Misc. Power Plant Equip	Hardin Count Unit 1	4,265.40
3460 Misc. Power Plant Equip	Hardin County Unit 2	4,265.40
3460 Misc. Power Plant Equip	Montgomery Power Station	152,396.09
3460 Misc. Power Plant Equip Total		198,436.79
3501 Land	3501 Land	0.38
3501 Land Total		0.38
3502 Land Rights - High Voltage	3502 Land Rights - High Voltage	7,057,522.17
3502 Land Rights - High Voltage Total		7,057,522.17
3503 Land Rights - Low Voltage	3503 Land Rights - Low Voltage	9,061,687.88
3503 Land Rights - Low Voltage Total		9,061,687.88
3520 Structure & Improvements	3520 Structure & Improvements	11,961,426.40
3520 Structure & Improvements Total		11,961,426.40
3530 Stn Eqpt-Trans	3530 Stn Eqpt-Trans	208,781,843.95
3530 Stn Eqpt-Trans Total		208,781,843.95
3540 Twrs & Fxtrs-Trans	3540 Twrs & Fxtrs-Trans	17,782,694.26
3540 Twrs & Fxtrs-Trans Total		17,782,694.26
3550 Poles & Fxtrs -Trans	3550 Poles & Fxtrs -Trans	88,319,112.70
3550 Poles & Fxtrs -Trans Total		88,319,112.70
3561 Overhd Cond & Devices	3561 Overhd Cond & Devices	68,695,816.44
3561 Overhd Cond & Devices Total		68,695,816.44
3562 Overhd Cond & Devs - Dmgs	3562 Overhd Cond & Devs - Dmgs	690,795.34
3562 Overhd Cond & Devs - Dmgs Total		690,795.34
3563 Overhd Cond & Dev - Clr&Gra	3563 Overhd Cond & Dev - Clr&Gra	6,825,063.88
3563 Overhd Cond & Dev - Clr&Gra Total		6,825,063.88

3580 Undergrnd Cond&Devices	3580 Undergrnd Cond&Devices	108,028.49
3580 Undergrnd Cond&Devices Total		108,028.49
3590 Roads & Trails - Trans	3590 Roads & Trails - Trans	124,170.62
3590 Roads & Trails - Trans Total		124,170.62
3601 Land	3601 Land	294,927.85
3601 Land Total		294,927.85
3602 Land Rights	3602 Land Rights	5,673,929.50
3602 Land Rights Total		5,673,929.50
3610 Structures & Improvements	3610 Structures & Improvements	4,340,753.50
3610 Structures & Improvements Total		4,340,753.50
3620 Stn Equip-Dist	3620 Stn Equip-Dist	63,963,237.02
3620 Stn Equip-Dist Total		63,963,237.02
3640 Poles, Twrs & Fxtrs -Dist	3640 Poles, Twrs & Fxtrs -Dist	96,038,622.96
3640 Poles, Twrs & Fxtrs -Dist Total		96,038,622.96
3651 Overhd Cond & Devices - Dist	3651 Overhd Cond & Devices - Dist	22,503,276.13
3651 Overhd Cond & Devices - Dist Total		22,503,276.13
3653 Cost Of Clrng ROW - Dist	3653 Cost Of Clrng ROW - Dist	18,705,030.75
3653 Cost Of Clrng ROW - Dist Total		18,705,030.75
3660 Underground Conduit - Dist.	3660 Underground Conduit - Dist.	15,452,865.31
3660 Underground Conduit - Dist. Total		15,452,865.31
3670 Undrgrnd Cond & Devices	3670 Undrgrnd Cond & Devices	56,639,431.41
3670 Undrgrnd Cond & Devices Total		56,639,431.41
3681 Line Transformers - Dist	3681 Line Transformers - Dist	131,619,902.13
3681 Line Transformers - Dist Total		131,619,902.13
3691 Services, Overhead - Dist	3691 Services, Overhead - Dist	42,078,960.81
3691 Services, Overhead - Dist Total		42,078,960.81
3692 Services, Underground-Dist	3692 Services, Underground-Dist	44,628,072.87
3692 Services, Underground-Dist Total		44,628,072.87
3700 Meters (Customer)	3700 Meters (Customer)	(1,673,270.77)
3700 Meters (Customer) Total		(1,673,270.77)
3701 Meters (Substation)	3701 Meters (Substation)	2,852,510.13
3701 Meters (Substation) Total		2,852,510.13
37010 Meters (Smart Meter)	37010 Meters (Smart Meter)	7,361.83
37010 Meters (Smart Meter) Total		7,361.83
37015 Meters & Devices	37015 Meters & Devices	21,462,382.30
37015 Meters & Devices Total		21,462,382.30
3710 Inst On Cust Prem	3710 Inst On Cust Prem	14,901,417.33
3710 Inst On Cust Prem Total		14,901,417.33
3730 St Ltng & Sgnl Sys	3730 St Ltng & Sgnl Sys	(1,874,232.08)
3730 St Ltng & Sgnl Sys Total		(1,874,232.08)
3732 Non Roadway Lighting	3732 Non Roadway Lighting	(3,399.26)
3732 Non Roadway Lighting Total		(3,399.26)
3891 Land	3891 Land	(16,992.53)
3891 Land Total		(16,992.53)
3900 Structures & Improvements	3900 Structures & Improvements	20,540,143.09
3900 Structures & Improvements Total		20,540,143.09
3901 Structures & Imps - Leasehold	3901 Structures & Imps - Leaseholc	647,290.76
3901 Structures & Imps - Leasehold Total		647,290.76
3911 Office Furn & Equip	3911 Office Furn & Equip	481,916.05
3911 Office Furn & Equip Total		481,916.05
3912 Information Systems	3912 Information Systems	3,904,792.44
3912 Information Systems Total		3,904,792.44
3913 Data Handling Equipment	3913 Data Handling Equipment	731,378.83
3913 Data Handling Equipment Total		731,378.83
3920 Transportation Equipment	3920 Transportation Equipment	(10,619.78)

3920 Transportation Equipment Total		(10,619.78)
3930 Stores Equipment	3930 Stores Equipment	(27,662.17)
3930 Stores Equipment Total		(27,662.17)
3940 Tools, Shop & Garage Equip	3940 Tools, Shop & Garage Equip	5,521,445.04
3940 Tools, Shop & Garage Equip Total		5,521,445.04
3950 Laboratory Equipment	3950 Laboratory Equipment	140,327.18
3950 Laboratory Equipment Total		140,327.18
3960 Power Operated Equipment	3960 Power Operated Equipment	442,856.75
3960 Power Operated Equipment Total		442,856.75
3971 Misc. Comm Equip	3971 Misc. Comm Equip	7,282,907.83
3971 Misc. Comm Equip Total		7,282,907.83
3972 Comm & Microwave Equip	3972 Comm & Microwave Equip	5,744,938.61
3972 Comm & Microwave Equip Total		5,744,938.61
3980 Miscellaneous Equipment	3980 Miscellaneous Equipment	1,076,429.64
3980 Miscellaneous Equipment Total		1,076,429.64
Grand Total		1,945,939,374.27

1,951,389,628.56

(1,951,389,628.56)

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 53719

Response of: Entergy Texas, Inc. to the First Set of Data Requests of Requesting Party: CITIES	Prepared By: Dane A. Watson Sponsoring Witness: Dane A. Watson Beginning Sequence No. LC78 Ending Sequence No. LC78

Question No.: CITIES 1-7 Part No.: Addendum:

Question:

Please provide the theoretical reserve (aka "calculated accumulated depreciation") amounts for each account based on the parameters proposed in the depreciation study and support for such calculations. Please confirm the total amount of the difference between the theoretical reserve balance and actual book reserve balance.

Response:

Please refer to sub-folder "Appendices" located within Dane A. Watson's voluminous workpapers folder entitled "Watson Direct_WP_DAW-2," which was filed with Entergy Texas Inc.'s voluminous exhibits and workpapers to the Application. A comparison of the theoretical and actual book reserve at the function level is provided in Appendix F. Mr. Watson has not made the comparison requested at the plant account or generating unit level.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 53719

Response of: Entergy Texas, Inc. to the First Set of Data Requests of Requesting Party: CITIES	Prepared By: Dane A. Watson Sponsoring Witness: Dane A. Watson Beginning Sequence No. LC79 Ending Sequence No. LC79

Question No.: CITIES 1-8 Part No.: Addendum:

Question:

Please identify and describe any changes in the depreciation system / methodology between the previous depreciation study and the depreciation study filed in this case.

Response:

There are no depreciation system / methodology changes to the previous depreciation study filed in Docket No. 48371. The only difference in computations between the two depreciation studies is that no interim retirements were modeled in the current study for production units, whereas the depreciation study in Docket No. 48371 included interim retirements for Accounts 311-316.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 53719

Response of: Entergy Texas, Inc.
to the First Set of Data Requests
of Requesting Party: CITIES

Prepared By: Dane A. Watson
Sponsoring Witness: Dane A. Watson
Beginning Sequence No. LC80
Ending Sequence No. LC80

Question No.: CITIES 1-9 Part No.: Addendum:

Question:

Please provide a schedule showing the currently-approved and proposed survivor curves, net salvage rates, and depreciation rates, and depreciation accrual for each account.

Response:

Please refer to Exhibit DAW-2, Appendix B-Comparison of Approved vs Proposed Accrual Rates and Appendix C-Comparison of Depreciation Parameters, to the Direct Testimony of Dane A. Watson.

ENTERGY TEXAS, INC.
PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 53719

Response of: Entergy Texas, Inc. to the First Set of Data Requests of Requesting Party: CITIES	Prepared By: Matthew Shoemake Sponsoring Witness: Dane A. Watson Beginning Sequence No. LC110 Ending Sequence No. LC304

Question No.: CITIES 1-10 Part No.: Addendum:

Question:

Please provide a copy of the most recent, previously-filed depreciation study.

Response:

Please see the attachment (TP-53917-00CIT-001-X010) for Entergy Texas Inc.'s most recent, previously filed depreciation study (Docket No. 48371).

ENTERGY TEXAS, INC.

ELECTRIC PLANT

DEPRECIATION RATE STUDY

AT DECEMBER 31, 2017

ALLIANCE CONSULTING GROUP

http://www.utilityalliance.com

ENTERGY TEXAS, INC.
ELECTRIC PLANT
DEPRECIATION RATE STUDY
EXECUTIVE SUMMARY

Entergy Texas, Inc. ("ETI" or "Company") engaged Alliance Consulting Group to conduct a depreciation study of the Company's Electric Texas utility plant depreciable assets as of December 31, 2017.

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.

Currently utilized depreciation rates were approved in Docket No. 39896 based on year end 2010 data.

Based on the depreciation rate changes identified, this study recommends an overall increase of $31.2 million in annual depreciation expense for all accounts compared to the depreciation rates currently in effect. However, the ultimate impact on ETI's adjusted test year revenue requirement of the changes in depreciation rate recommended in this study is determined and sponsored by ETI witness Kristine T. Jackson. This study identifies the following changes: an increase of $29.7 million in annual depreciation expense for Production Assets, no change in annual depreciation expense for Hydro accounts, a decrease of $369 thousand in annual depreciation expense for transmission accounts, an increase of $805 thousand in annual depreciation expense for distribution plant accounts, an increase of $395 thousand for general plant accounts that are depreciated, an decrease of $4 hundred for general plant accounts that are amortized, and an increase of $660 thousand based on the general plant reserve difference that has occurred since rates were implemented in Docket No. 39896. There is no change in the reserve deficiency amortization for assets under general plant amortization from Docket No. 39896. There are four more years to accrue the deficiency (from 2018-2021) per the Final Order in Docket No. 39896.

Appendix A shows the computation of the proposed depreciation rates. Appendix B demonstrates the change in depreciation expense for the various accounts.

ENTERGY TEXAS, INC.

ELECTRIC PLANT

DEPRECIATION RATE STUDY

AT DECEMBER 31, 2017

Table of Contents

PURPOSE

The purpose of this study is to develop depreciation rates for the depreciable property as recorded on ETI's books at December 31, 2017. The account based depreciation rates were designed to recover the total remaining undepreciated investment, adjusted for net salvage, over the remaining life of ETI's property on a straight-line basis. Non-depreciable property (i.e., property that is amortized, such as intangible software and asset retirement obligation amounts) was excluded from this study.

ETI has approximately 425,000 electric customers across twenty-seven counties in Southeast Texas. It generates power from 335 substations and has 461,710 utility poles, 13,194 miles of distribution lines and 2,747 miles of transmission lines. ETI has five functional groups of property: Production, Hydro, Transmission, Distribution and General plant assets utilized to serve its customers.

STUDY RESULTS

Overall depreciation rates for all ETI depreciable property are shown in Appendix A. These rates translate into an annual depreciation accrual of $136.9 million based on ETI's depreciable investment at December 31, 2017. The annual equivalent depreciation expense calculated by the same method using the approved rates was $105.7 million. These rates translate into an annual depreciation accrual for Fossil and Hydro Production of $47.5 million, Transmission of $27.2 million, Distribution of $54.0 million, General Depreciated of $1.6 million, and General Plant Amortized of $3.9 million. An additional general plant reserve true-up for 10 years is included for $2.1 annually (which was approved in Docket No. 39896 and began in 2012) and an additional $660 thousand for the general plant reserve imbalance at December 31, 2017. The ultimate impact of the new depreciation rates on the Company's adjusted test year revenue requirement, however, is sponsored by Company witness Kristine T. Jackson.

Appendix A demonstrates the development of the annual depreciation rates and accruals. Appendix B presents a comparison of approved rates versus proposed rates by account. Appendix C presents a summary of mortality and net salvage estimates by account. Appendix D presents the terminal retirement dates for production facilities. Appendix E presents the net salvage analysis for all accounts. In addition, work papers are presented along with this study report that further details the basis for the development of the information in the report.

The overall increase in depreciation expense is driven primarily by the increased investment to be recovered in production plant. The increase in production plant was partially offset by longer average service lives being experienced by transmission and distribution assets. Another driver of the change in depreciation expense was the increased removal costs related to transmission and distribution plant. ETI proposes to continue Vintaged Group Amortization consistent with FERC Rule AR-15 for accounts 391-397.1 and account 398. This study develops depreciation expense for General Plant asset groups under this method. This process provides for the amortization of general plant over the same life as previously approved (with a separate amortization to allocate deficit or excess reserve as necessary). The increased expense in General Plant is due to the deficit in the reserve caused by the inadequacy of the account level rates in effect in prior periods. The study's workpapers include the amortization schedules for this approach.

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. On 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 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 functional 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.

PURPOSE

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Appendix A demonstrates the development of the annual depreciation rates and accruals. Appendix B presents a comparison of approved rates versus proposed rates by account. Appendix C presents a summary of mortality and net salvage estimates by account. Appendix D presents the terminal retirement dates for production facilities. Appendix E presents the net salvage analysis for all accounts. In addition, work papers are presented along with this study report that further details the basis for the development of the information in the report.

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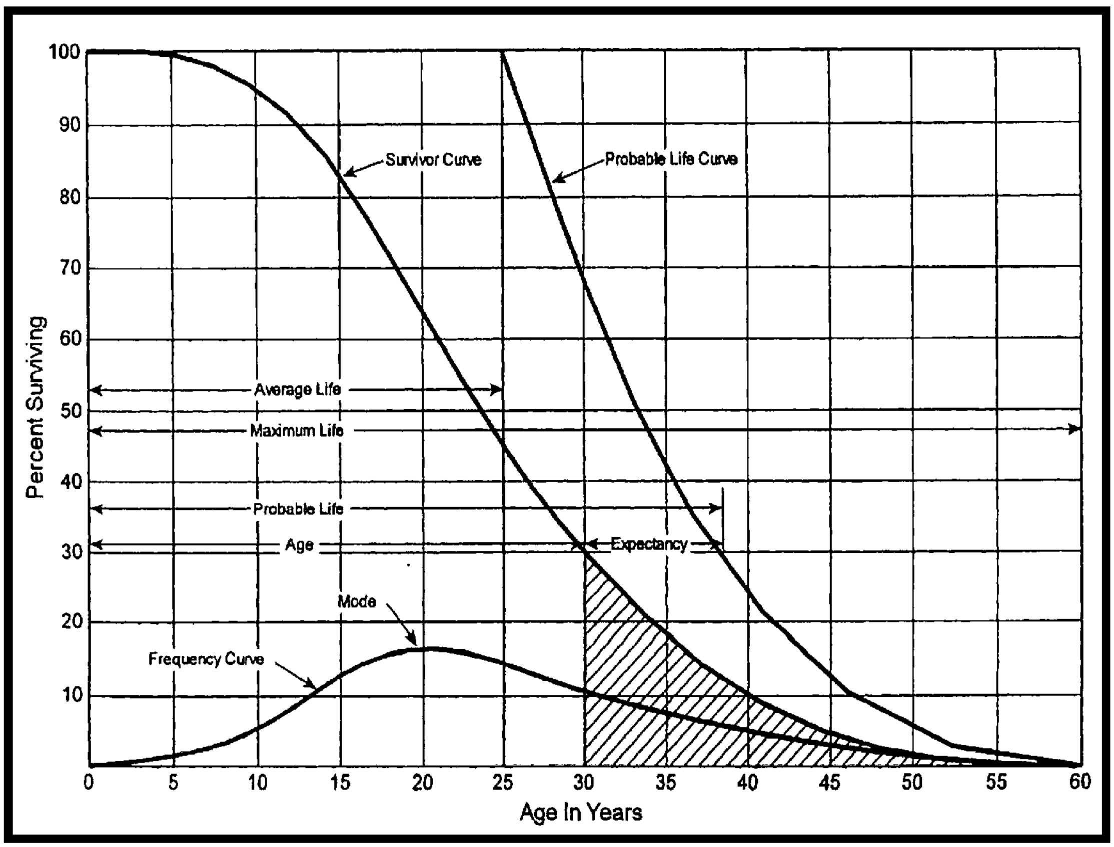
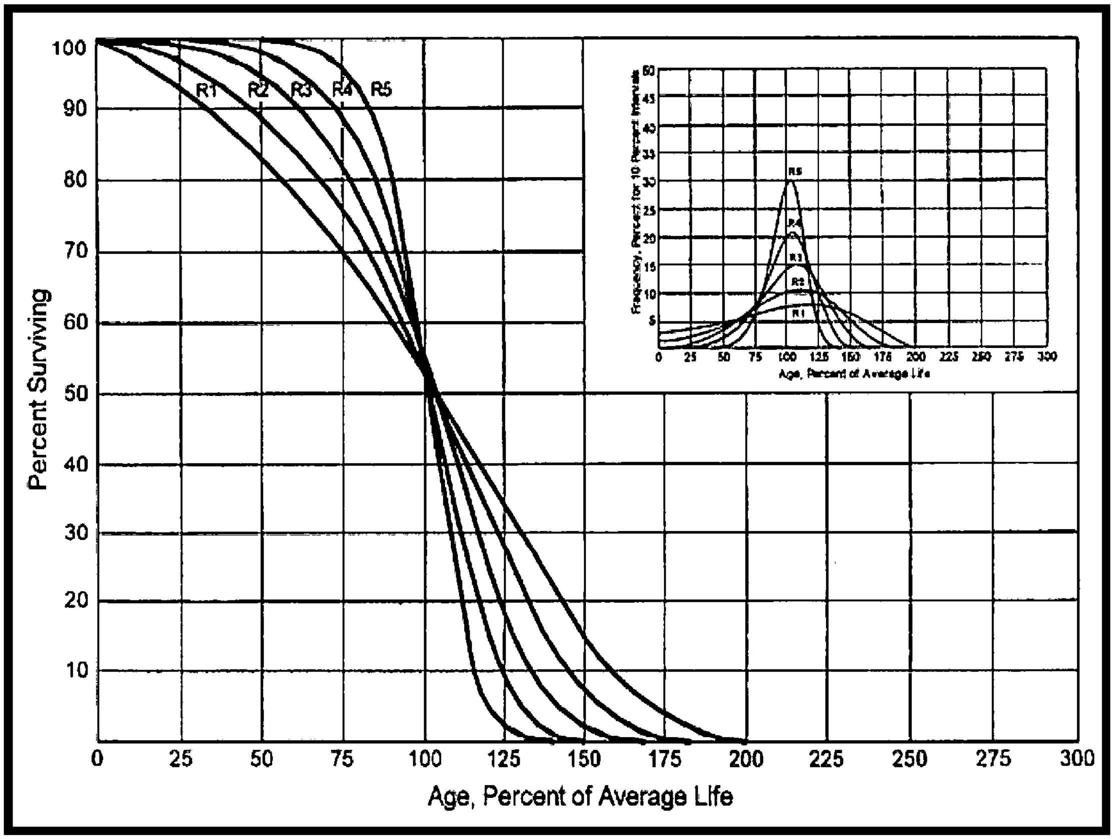
Actuarial analysis was used with each account within a function where sufficient data was available, and judgment was used to some degree on all accounts.

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 Iowa 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 20th century. Through common usage, revalidation and regulatory acceptance, these curves have become a descriptive standard for the life characteristics of industrial property. An example of an Iowa Curve is shown below.



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.



Similarly, an "S" designation (i.e., Symmetric modal) is used for the family whose mode age is symmetric about the average life. An "L" designation (i.e., Left modal) is used for the family whose mode age is less than the average life. A special case of left modal dispersion is the "O" or origin modal curve family. 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

The life span procedure was used for production facilities for which most components are expected to have a retirement date concurrent with the planned retirement date of the generating unit. The terminal retirement date refers to the year that each unit will cease operations. The terminal retirement date, along with the interim retirement characteristics of the assets that will retire prior to the facility ceasing operation; describe the pattern of retirement of the assets that comprise a generating unit. The estimated terminal retirement dates for the various generating units were determined based on consultation with Company management, financial, and engineering staff. Those estimated terminal retirement dates are shown in Appendix D and have been designated Highly Sensitive.

Interim Retirement Curves

Interim retirement curves were used to model the retirement of individual assets within primary plant accounts for each generating unit prior to the terminal retirement of the facility. The life span procedure assumes all assets are depreciated (straight-line) for the same number of periods and retire at the same time (the terminal retirement date). Adding interim retirement curves to the procedure reflects the fact that some of the assets at a power plant will not survive to the end of the life of the facility and should be depreciated (straight-line) more quickly and retired earlier than the terminal life of the facility. The goal of interim retirement curves is to project how many of the assets that are currently in service will retire each year in the future using historical analysis and judgment. These curves were chosen based primarily on an analysis of the historical retirement pattern of the Generation assets and consultation with Company personnel. Interim retirements for each plant account were modeled using Iowa Curves discussed above. By applying interim retirements, recognition is given to the obvious fact that generating units will have retirements of depreciable property before the end of their lives.

Although interim retirements have been recognized in the study, interim additions (i.e. future additions) have been excluded from the study. The estimated amount of future additions might or might not occur. However, there is no uncertainty as to whether the full level of interim retirements will happen. The assets that are being modeled for retirement are already in rate base. Depreciation rates using interim retirements are known and measurable in the same way that setting depreciation rates for transmission or distribution property using Iowa Curves is known and measurable. There is no depreciable asset that is expected to live forever. All assets at a power plant will retire at some point. Interim retirements simply model when those retirements will occur in the same way that is done for transmission or distribution assets.

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 of 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 of these analyses for those accounts that had data sufficient to be analyzed using this method are shown in the Life Analysis section of this report.

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, 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. The outcome in those cases would simply be a reflection of the specific facts applicable to the analysis. Where there are multiple factors, activities, actions, property characteristics, statistical inconsistencies, varying 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 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, in these instances there is no answer absent judgment. At the very least, for example, any analysis requires choosing the bands upon which to place the most evidence.

The establishment of appropriate average service lives and retirement dispersions for the Production, Transmission, Distribution, and General Plant accounts 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 in order for appropriate mortality characteristics to be chosen.

Average Life Group (ALG) Depreciation

The existing depreciation rates for ETI were approved in Docket No. 39896 by the PUC. At the request of ETI, this study used the ALG depreciation procedure to group the assets within each account, consistent with the existing depreciation rates.

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. ALGs are 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

The book depreciation reserve was derived from Company records on an account basis. 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:

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

For production assets, the accumulated book depreciation reserve by account was reallocated within each functional group based on the theoretical reserve model based on the proposed life and net salvage parameters. The theoretical reserve computations and details of the production function reserve reallocation are shown in Appendix F-1.

For transmission, distribution, and general plant depreciated and amortized, the accumulated book depreciation reserve by account was reallocated within each functional group based on the theoretical reserve model based on the proposed life and net salvage parameters. Reserve reallocation is a common methodology in the industry to rebalance depreciation reserves within functions. Reserve reallocation leaves the total per book balance within each function unchanged, and transfers amounts between accounts within the function based on the depreciation parameters for each account. The theoretical reserve computations and details of reserve reallocation for transmission, distribution, general depreciated, and general amortized in are shown in Appendices F-2 and F-3, respectively.

DETAILED DISCUSSION

Depreciation Study Process

This depreciation study 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 was evaluated. Once the first three stages were complete, the fourth phase began. This phase involved the calculation of deprecation rates and the 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. 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. Adjustments were made to certain categories of per book data for consistency with accepted depreciation study standards and procedures. The categories of data adjusted are shown in the detailed discussion below and in the workpapers accompanying this study. The principal categories of adjustment included: the removal of activity related to sales of assets, activity related to reimbursements for relocations, activity related to major hurricanes such as Hurricane Ike, activity related to abnormal retirements, and securitization entries booked to the accumulated provision for depreciation. Further discussion on data review and adjustment is found in the Salvage Considerations Section of this study. Also as part of the Phase I 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 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 the Detailed Discussion of this study in the life analysis and salvage analysis sections and also in workpapers.

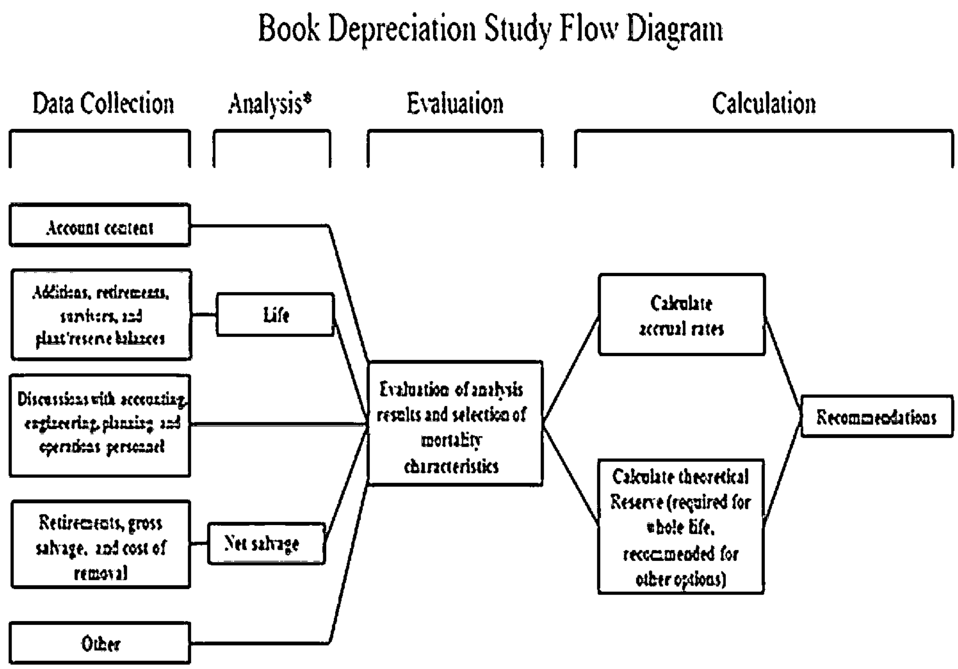
Phase 2 is where the actuarial analysis is performed. Phase 2 and 3 overlap to a significant degree. The detailed property records information is used in phase 2 to develop observed life tables for life analysis. These tables are visually compared to industry standard tables to determine historical life 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 as Figure 1[1] documents the steps used in conducting this study. Depreciation Systems[2], a well respected scholarly treatise on the topic of depreciation, documents the same basic processes in performing

[1] Introduction to Depreciation for Public Utilities and Other Industries, AGA EEI, 2013.
[2] Depreciation Systems, Iowa State University Press, 1994, by Drs. F.K. Wolf and WC Fitch, p. 289.

a depreciation study, including: Statistical analysis, evaluation of statistical analysis, discussions with management, forecast assumptions, and document recommendations.



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

ENTERGY TEXAS DEPRECIATION STUDY PROCESS

Depreciation Rate Calculation

Annual depreciation expense amounts for the depreciable accounts of ETI 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.

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 dispersion, remaining life was computed for each account. Theoretical depreciation reserve with zero net salvage was calculated using theoretical reserve ratios as defined in the theoretical reserve portion of the General Discussion section. The difference between plant balance and theoretical reserve was then spread over the ALG depreciation accruals. Remaining life computations are found for each account in workpapers.

Production Depreciation Calculation Process

Annual depreciation expense amounts for the Production and Hydro 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,

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

In the case of steam production facilities with a terminal life and no interim retirement curve, the average service life and remaining life coupled with the group's terminal life determined the annual accrual rate.

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 modeled with an SQ curve and terminal life,

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

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

With the straight line, remaining life, average life group system, composite remaining lives were calculated by computing a direct weighted average of each remaining life by vintage within the group. Within each group (plant account/ unit), 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.

$$\text{Annual Depreciation Expense} = \frac{\text{Original Cost} - \text{Book Reserve} - \text{Original Cost} * (1 - \text{Net Salvage}\%)}{\text{Remaining Life}}$$

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 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. For the production function excluding Big Cajun plant (which was reallocated between Big Cajun 2 Unit 3 and Common), book reserves came from Company records at the account, generating station, unit level.

Other Accounts Calculation Process

Annual depreciation expense amounts for accounts other than production were calculated by the straight line, average life group, and 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 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.

$$\text{Annual Depreciation Expense} = \frac{\text{Original Cost} - \text{Book Reserve} - (\text{Original Cost}) * (1 - \text{Net Salvage\%})}{\text{Composite Remaining Life}}$$

where the Net Salvage% 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 Appendix F. The composite remaining life was computed on a direct weighted basis using vintage investment and the proposed life for each property group.

Life Analysis

The retirement rate actuarial analysis method was applied to all accounts for ETI. 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 2017), approved survivor curves from PUC Docket No. 39896 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. Then, after looking at the overall experience band (1959-2017) for most accounts, different experience bands were plotted and analyzed: in smaller increments, for instance 1968-2017 and 1993-2017. Next placement bands of varying width were plotted with each experience band discussed above. 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.

Terminal Retirement Date

The terminal retirement date refers to the year in which a generating unit will be retired from service. The retirement can be for a number of reasons such as the physical end of the generating unit but will generally be driven by economic retirement of the unit. ETI's personnel provided their estimated retirement dates for each generating unit. These dates are based on the current plans and investment in the generating units. The proposed retirement dates are consistent with Alliance Consulting Group's experience with other electric utilities across the United States. Retirement dates for generating units can be found in Appendix D. As new investment is committed to these units or decisions made that units are not economically viable, these lives may change. At this time, these retirement dates are the best estimate of the current lives remaining in the generating assets.

Interim Retirement Curve

Historical data used to develop interim retirement curves represent an aggregate of many property units in a group. Some of those assets may be long lived, and others may have a short life. The average of those is represented by an interim retirement curve for the group. A group can be a plant account or a functional group. The interim retirement curve is "truncated" (i.e., cut off) at the age the unit will retire. In other words, if one finds through the analysis that 10 percent of the property in an account will be retired and replaced prior to the end of the life of the unit, the interim retirement curve will model those retirements across the rest of the life of the unit. If a pump is only going to last 10 years but the unit is projected to last 20 years, the shorter life of the pump should affect the depreciation expense charged over the next 10 years. When analyzing a large pool of assets like power plant accounts, these shorter lived items can be accurately modeled together statistically. Thus, given that interim retirements will occur, this statistical analysis enables one to measure the interim retirement curves applicable to property groups. Some examples of "long lived" property that are projected to last until the retirement of a unit are: Roads, Bridges, Railroad track, Intake/Discharge Structures, Structural Steel (and misc. steel), Cooling towers, Buildings, Cranes, Dams, Ponds, Basins, Canals, Foundations, Stacking and Reclaiming equipment, Surge Silos, Crushers, Transfer Towers, Fly Ash and Bottom Ash Systems, Precipitators, Bag Houses, Stack, Turbine (except blades) and Piping, Generator Cooling System, Vacuum Systems, Generator and

Main Leads, Station Transformers, Conduits and Ducts, Station Grounding System, Start-up Diesel Generators, and Stores Equipment.

Some examples of "shorter lived" property that are projected to retire prior to the retirement of the unit are: fences, signs, sprinkler systems, security systems, Intake screens, roofs, cooling fan units, air compressors, fuel oil heaters, heating, ventilation and air conditioners, piping, motors, pumps, conveyors, pulverizers, air preheaters, economizers, control equipment, feedwater heaters, boiler feedwater pumps, forced draft (FD) and induced draft (ID) fans, scrubbers, continuous emissions monitoring systems (CEM), turbine blades and buckets, turbine plant instruments, condensers, control equipment, station service switchgear, and universal power supply (UPS) batteries.

PRODUCTION PLANT

Production Accounts, FERC Accounts 311.0-316, 334.0 and 335.0

The company has four Fossil Production generating sites included in this study: Big Cajun 2 Unit 3, Lewis Creek, Nelson 6 Coal, and Sabine power plant. The study also includes unrecovered balances for the retired Neches plant. Additional facilities such as Spindletop Gas Storage support the Company's generation operations. Hydro facilities are located at Toledo Bend Reservoir. Currently, authorized depreciation rates do not recognize that any assets will retire prior to the end of the life of the generating units.

Historical data for all units was combined by account in accounts 311-316 to analyze historical activity and develop proposed interim retirement curves. This combined experience across various generating units was used as a representation of Entergy Texas' retirement history for fossil production to model future retirement activity. Proposed interim retirement lives and dispersion curves to reflect the recognition that some assets at each plant will retire prior to the end of the life of the unit were analyzed at an account level for all generating assets within each account.

The Company has made improvements at its generating facilities. At Lewis Creek, a reliability/sustainability program was completed in 2014. Given the location of the plant, significant capital improvements have been done over the more than four years program. The Company expects another 20 year life after the conclusion of the program.

Sabine Unit 2 was retired in 2016. There was a forced outage and there was significant work to bring it back on line. The amount of capital needed did not justify repairing the unit and putting it back in service. For smaller units (especially Unit 1), the cycling and age will have an impact on the life of the units, potentially shortening the life as compared to the current projection. A funding analysis and condition assessment impacted the retirement date for Sabine Unit 4.

Entergy joined Went on MISO December 2013. As a regional transmission organization, MISO provides grid management and open access among its members. At Nelson plant, significant amounts of investment have been added recently. Environmental rules are still a consideration. Nelson 6 is a large unit and strategically located, so it will likely continue to operate to the target 60 year life. Even though there is still uncertainty on EPA rules, the Company does not think they will have to retire the unit early, but they may be required to make a significant additional capital infusion at some point.

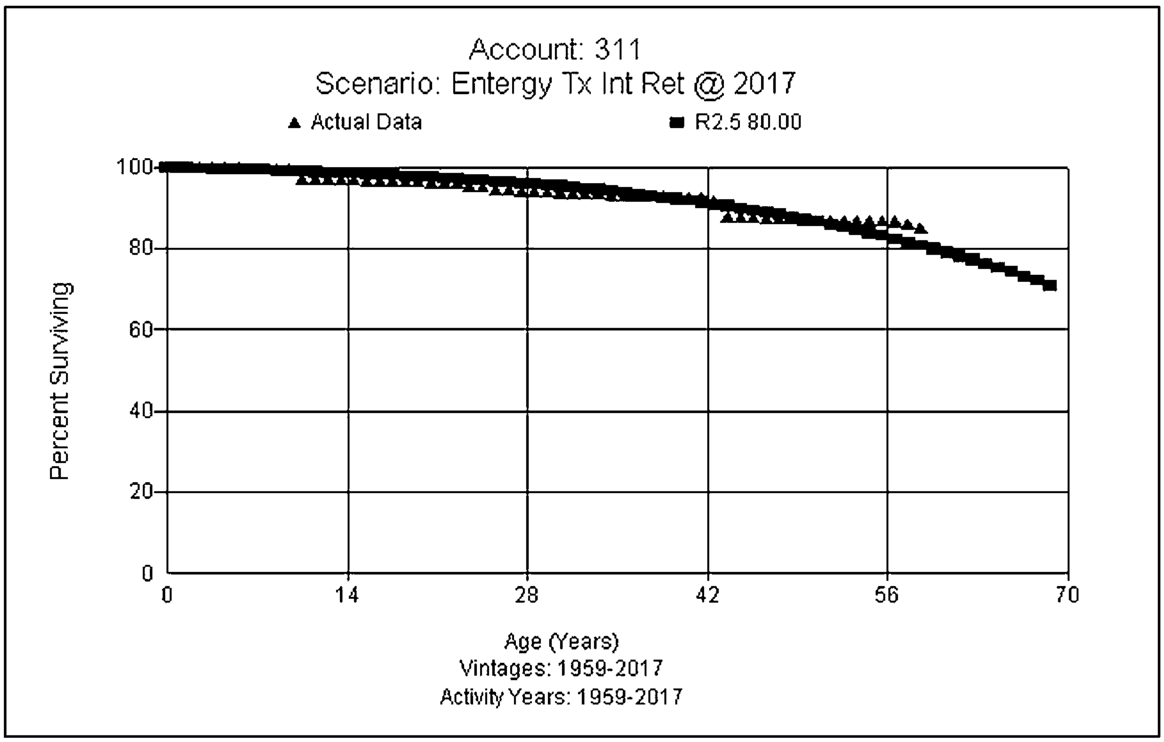
For the proposed deactivation dates for each plant, see Appendix D. These deactivation dates represent reasonable assumptions based on current expectations regarding unit supply role and economics; these factors may change over time, and actual deactivation decisions will be based on actual circumstances.

LIFE ANALYSIS

Steam Production

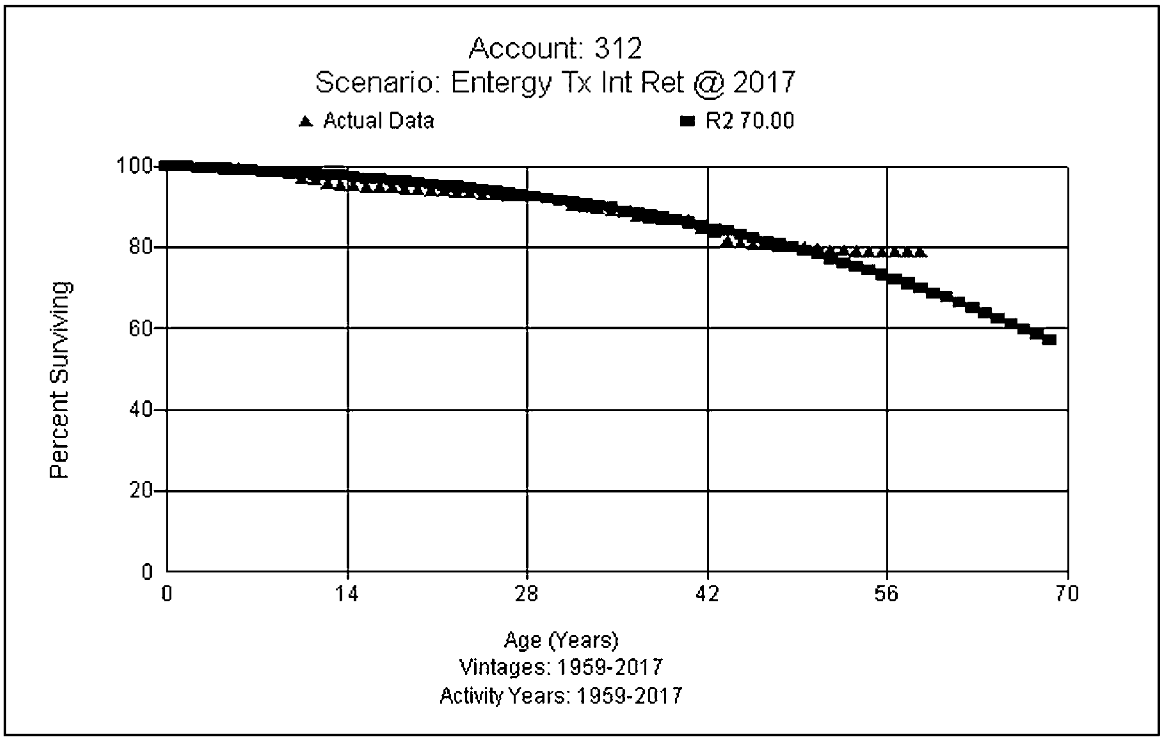
FERC Account 311.0 Structures and Improvements (80 R2.5)

This account consists of buildings, structures, fences, lighting systems, and other related assets at each power plant. Retirement dates for each unit are found in Appendix D. The current balance in this account is $183.6 million excluding the fully accrued portion of Spindletop. In examining the various placement and experience bands and considering the types of assets in this account, this study recommends an 80 R2.5 dispersion curve for interim retirements. A graph of the observed life table versus the proposed survivor curve is shown below.



FERC Account 312.0 Boiler Plant Equipment (70 R2)

This account consists of boiler plant equipment, bag houses, preheaters and other related equipment. Retirement dates for each unit are found in Appendix D. The current balance in this account is $457.6 million. In examining the various placement and experience bands and taking into consideration the types of assets in this account, this study recommends a 70 R2 dispersion curve for interim retirements. A graph of the observed life table versus the proposed survivor curve is shown below.

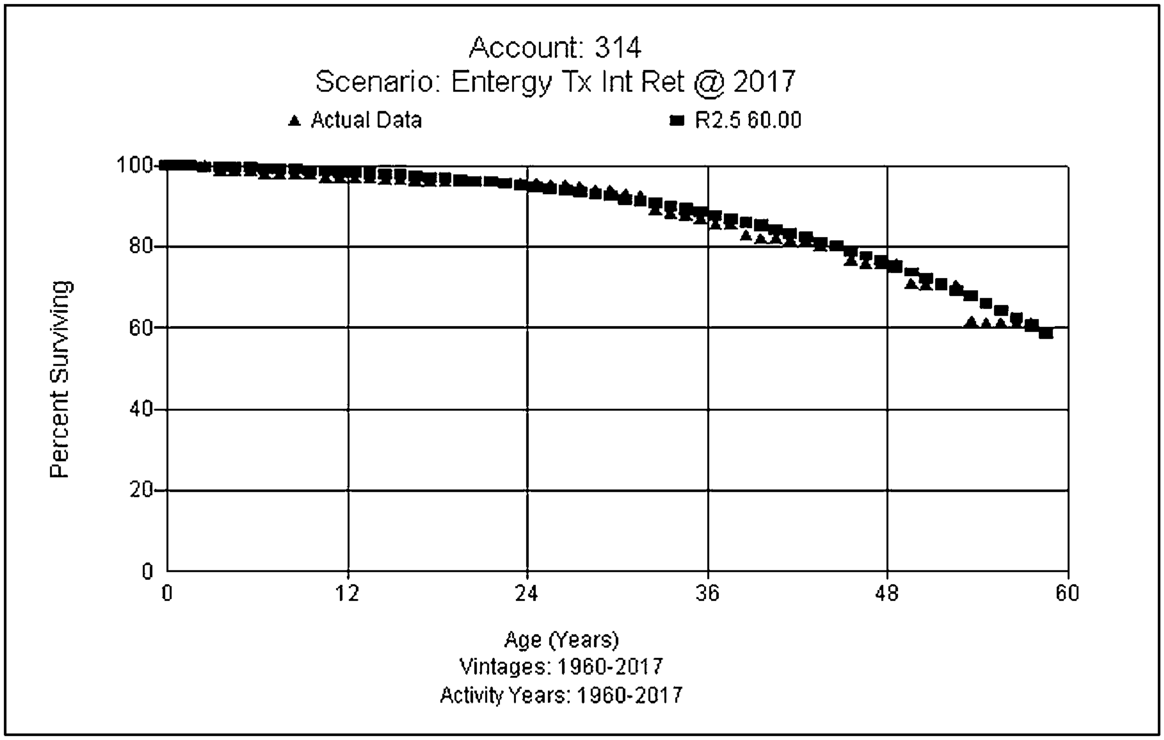


FERC Account 312.0 Rail Car Equipment (Life of Plant)

This account consists of rail cars at the Nelson plant. The current balance in this account is $256.8 thousand. These assets are expected to last the life of the plant, so there are no interim retirements projected for this account. The retirement data for this plant is found in Appendix D.

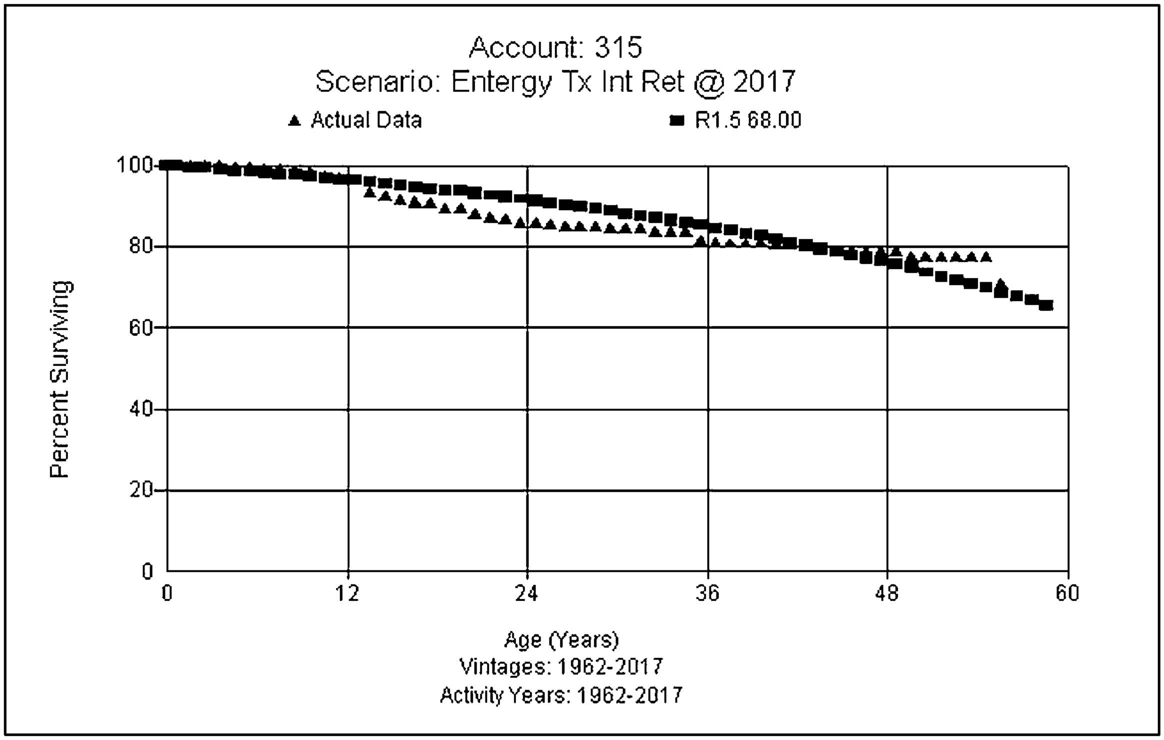
FERC Account 314.0 Turbogenerator Equipment (60 R2.5)

This account consists of turbogenerator equipment, stationary blades, turbine control systems, and other related assets at each power plant. Retirement dates for each unit are found in Appendix D. The current balance in this account is $294.9 million. In examining the various placement and experience bands and considering the characteristics of the assets in the account, this study recommends a 60 R2.5 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.



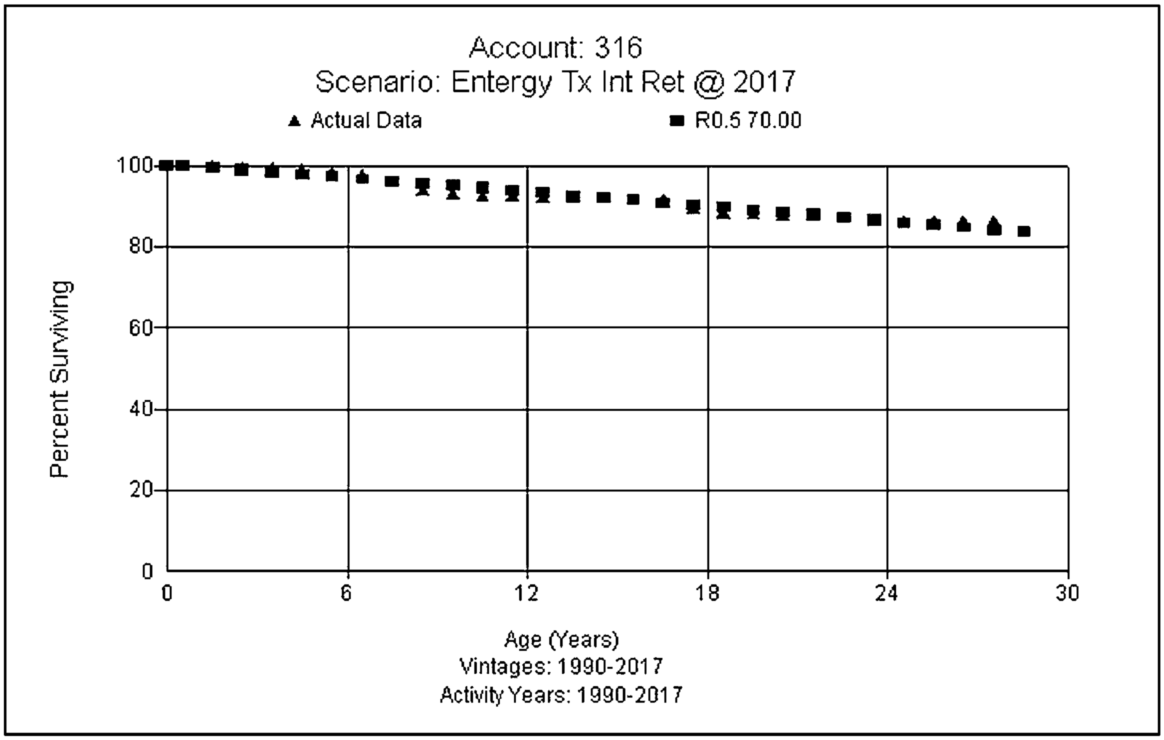
FERC Account 315.0 Accessory Electric Equipment (68 R1.5)

This account consists of power transformers, regulators and related assets at each power plant. Retirement dates for each unit are found in Appendix D. The current balance in this account is $105.7 million. In examining the various placement and experience bands with an understanding of the characteristics of the assets in this account, this study recommends a 68 R1.5 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.



FERC Accounts 316.0 Miscellaneous Power Plant Equipment (70 R0.5)

This account consists of tanks, pumps, work equipment, and other related assets at each power plant. Retirement dates for each unit are found in Appendix D. The current balance in this account is $14.3 million. In examining the various placement and experience bands and the types of assets in the account, this study recommends a 70 R0.5 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.



Hydraulic Production

FERC Account 334.0 Accessory Electrical Equipment

This account consists of generator controls, bus equipment, and other related assets at each power plant. Retirement dates for each unit are found in Appendix D. The current balance in this account is $218 thousand. All assets are assumed to retire at each plant's retirement date so no interim retirement curve was used for this account.

FERC Account 335.0 Miscellaneous Power Plant Equipment

This account consists of storage tanks, boats, test equipment and other related assets at each power plant. Retirement dates for each unit are found in Appendix D. The current balance in this account is $37 thousand. All assets are assumed to retire at each plant's retirement date so no interim retirement curve was used for this account.

TRANSMISSION PLANT

Transmission Accounts, FERC Accounts 350.2-359.0

Operations in transmission have been impacted by three significant hurricanes that hit their system: Rita in 2005, Ike in 2008, and Harvey in 2017. Such storms cause anomalies primarily in coastal areas when 19 miles of transmission assets were built and some assets were retired and replaced by hardened distribution line. Anything south of I-10 will be consists of hardened assets (engineered structure design) for Transmission, and no wood was used in replacements.

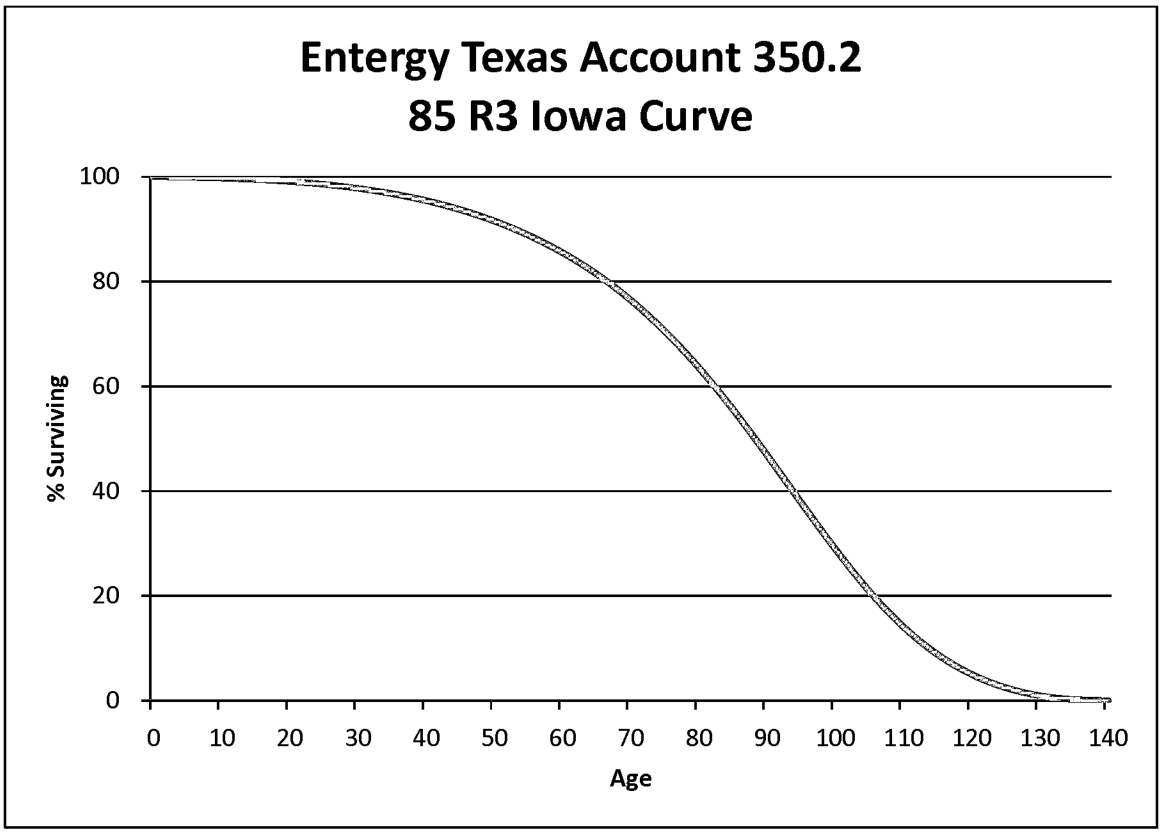
Transmission function assets moved to non-wood products for new construction or replacements approximately 10 years ago. Most of 138kV and 69kV are still wood based (around 75%-80%), and mostly steel poles and towers are found on 230kV. Company experts expect longer life for non-wood products. Any replacement structures will generally be steel or concrete for Transmission. While there is a program to change out wood poles, the Company still has approximately 20-25 thousand wood structures. Any new structure will be engineered.

From a spending side, capital budgets were depressed in the early 1980s to early 1990s. Spending increased in the mid-1990s until around 2005, with a slowdown between 2005 and 2010. Capital spending ramped up again in 2011 and continues to remain robust. There has been a large amount of new construction, especially in industrial areas. This growth in new construction has caused retirements for line upgrades and substations, which retired earlier than might have occurred had the new construction not occurred. The capital budget has increased to $1 billion for whole company transmission and projected capital spending is to remain at those levels.

The Company has an aggressive "catch-up" program in place now to replace aging infrastructure. Company experts expect that retirements will increase as infrastructures replacements create a newer average age for their transmission infrastructure transmission lines primarily – not in distribution line).

FERC Account 350.2 Rights of Way Easements (85 R3)

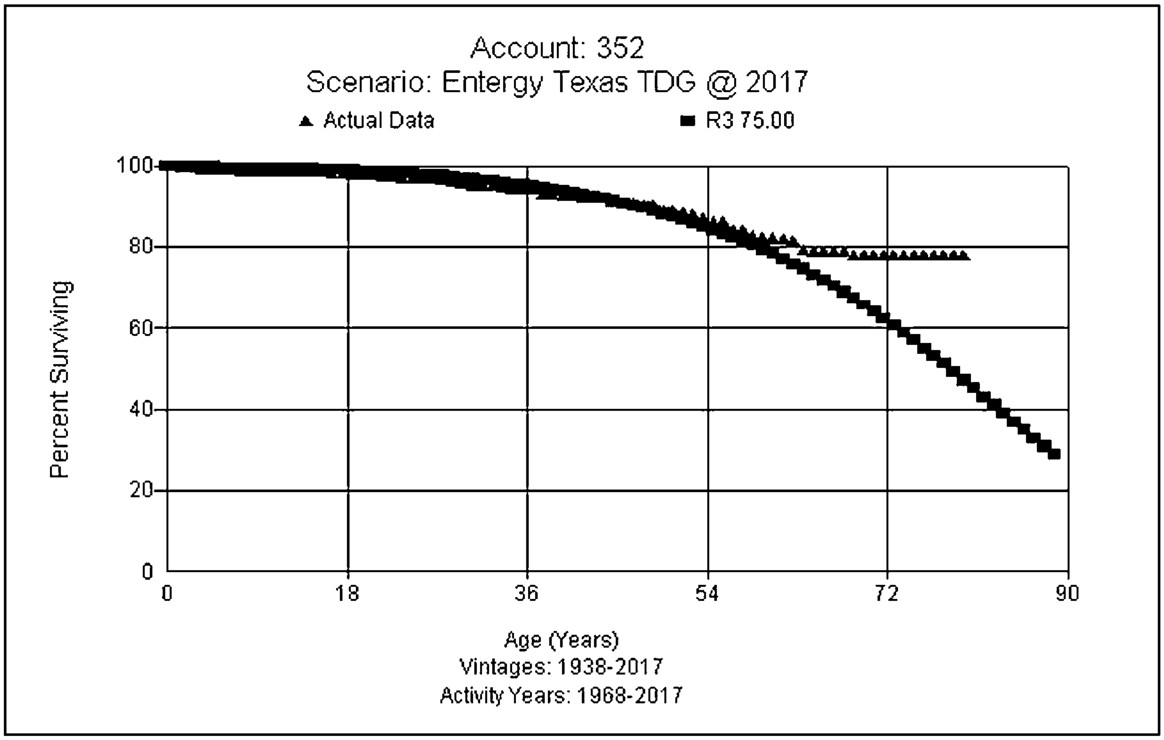
This account consists of land rights and easements used for transmission function assets. The current balance in this account is $44.4 million. The existing depreciation rate assumed an 85 R3 dispersion curve. There is limited history, so the proposed life for this account is retained. The life should be at least as long as or longer than the life of the Transmission Tower account (which is proposed at 75 years in this study). This study recommends retaining the existing 85 R3 dispersion curve. A graph showing the pattern of retirements for the selected curve is shown below.



FERC Account 352.0 Structures and Improvements (75 R3)

This account consists of structures and improvements in connection with buildings, security systems and fencing associated with transmission substations. The current balance in this account is $37.1 million. The existing depreciation rate assumed a 65 R3 dispersion curve. Today the Company uses composite or concrete type building, whereas about 20 years ago and prior metal sheet building were standard construction. Company experts expect that composite/concrete buildings would last longer than steel. Company experts state that 75% to 80% of buildings in substations will be metal. They anticipate the life of the steel buildings will range between 50-60 years for many of the steel buildings, and buildings in more environmentally unfriendly areas would not last as long. Other components in this account that will require replacement at an earlier age are lighting and fencing. Company experts support moving the life to 70+ years for this account.

The average age of surviving investment shows the infrastructure replacement efforts with an age of 13.20 years. In examining the various placement and experience bands and the characteristics of the assets in the account, this study recommends moving to a 75 year life but retaining the R3 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.

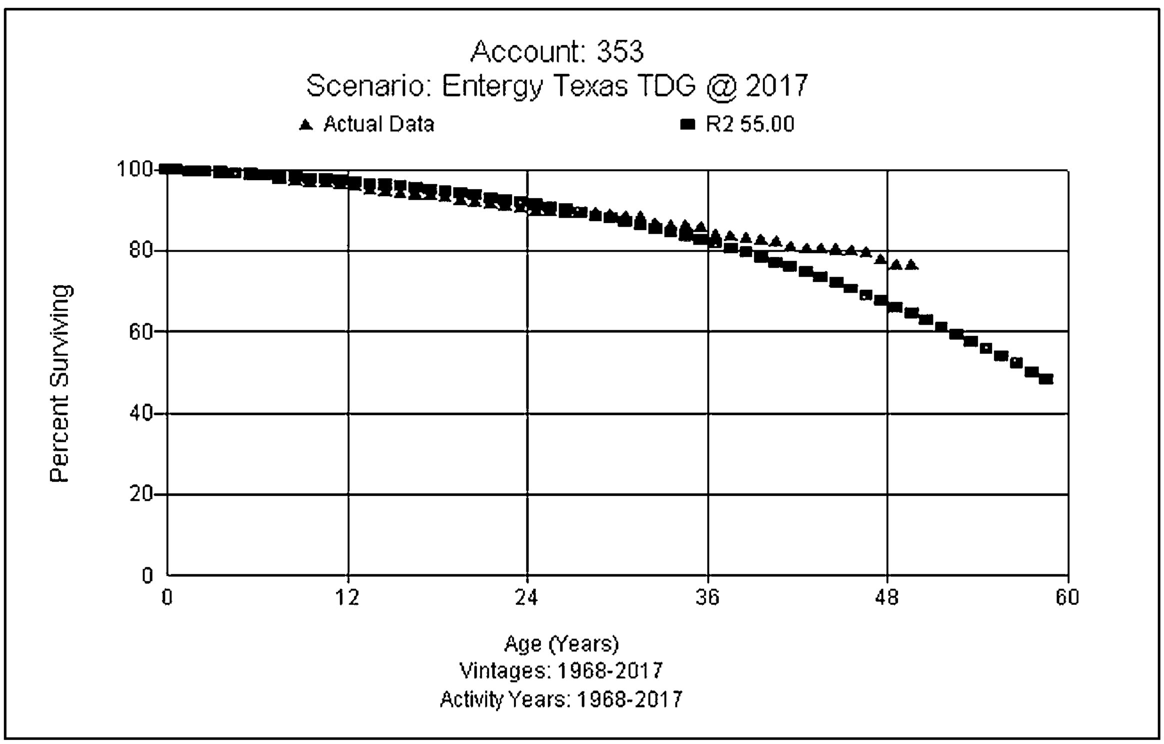

Account: 352
Scenario: Entergy Texas TDG @ 2017
▲ Actual Data
■ R3 75.00
Percent Surviving
100
80
60
40
20
0
0
18
36
54
72
90
Age (Years)
Vintages: 1938-2017
Activity Years: 1968-2017

FERC Account 353.0 Station Equipment (55 R2)

This account consists of capacitor banks, circuit breakers, cubicle switchgear, station controls and wiring for transmission plant. The current balance in this account is $668.6 million. The existing depreciation rate assumed a 55 R2 dispersion curve. Assets will be booked to the transmission function based being served by transmission lines or having no distribution load – will be transmission station, and "common" assets will be added to plant in the function where the substation is classified. Energy has moved more to a "condition-based" approach instead of time-based maintenance and replacements. Company experts report that transformers and breakers are two of the few devices where preventive maintenance is performed. All new breakers are SF6 but still have some of oil breakers (25% oil). The Company has an on-going long-term targeted replacement program for oil circuit breaker ("OCB") replacement. Company experts feel that the maximum life for oil breakers would be 50-70 years. Even though SF6 breakers are still fairly new, Company experts believe there may be a comparable life for SF6 breakers.

Other items in this account have varying lives according to Company subject matter experts. Arrestors which protect the high and low side of a substation are a high failure item with an estimated 20 years average life. Other substation assets are capacitor banks with a 10-15 year average life expectancy and devices switching the capacitor bank which have shorter life. Some control systems may be in Account 397, Communication Equipment. Batteries have an average 15-20 year life. Control systems contain transformers with different lives, potential transformers ("PT") which have a longer life and current transformers ("CT") that have a shorter life. The Company has a PT/CT replacement program. A portion of the system is still electro-mechanical with life expectancy of 40 years or longer. Electronic relays are replaced due to lack of vendor support as assets age and technology advancements, which produce a life of 10-20 years. SCADA becomes obsolete before failure. The average life of remote terminal units ("RTU") is 20 years. The Company is going to Wide Area network for SCADA, and they also have fiber connections between many stations. Company subject matter experts are seeing a shorter life on some of the transformers and circuit breakers in the transmission account than in the distribution account. The Company has performed some life extension projects on transformers. Based on the uncertainty of the life of SF6 breakers, significant addition of short-lived electronics in the substations and technology movement, Company experts do not anticipate an increase in the average life of transmission station equipment.

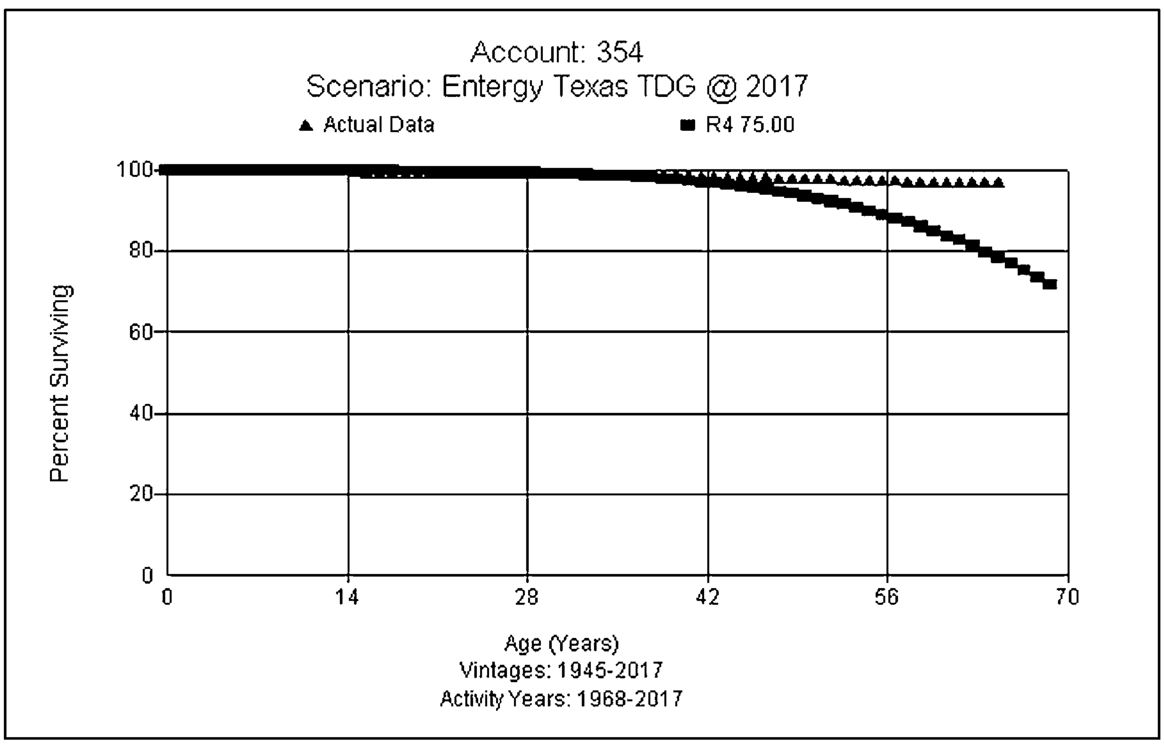
The average age of surviving investment shows the infrastructure replacement efforts with an age of 13.99 years. In examining the various placement and experience bands and the underlying assets, this study recommends retaining the 55 R2 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.



FERC Account 354.0 Towers and Fixtures (75 R4)

This account includes towers, non-wood poles, and equipment foundations for transmission plant. The current balance in this account is $34.0 million. The existing depreciation rate assumed a 70 R4 dispersion curve. Company subject matter experts anticipate a slightly a longer life. On 345kV and 230kV lines, some foundations have failed. A catastrophic event can cause failure. Upgrading voltage for line may also cause retirement of towers or poles. Have periodic inspection program to maintain reliability of towers. Only a couple towers have been replaced, due to damage from Hurricane Rita. There are some assets such as barricades that will have to be replaced soon but overall the towers are in good shape. The oldest investment in this account is 65 years old, and the average age of investment is 28.44 years. Company subject matter experts support a slight increase in life for this account and a comfortable with a slight change to 75 years.

In examining the various placement and experience bands, this study recommends moving to a 75 R4 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.

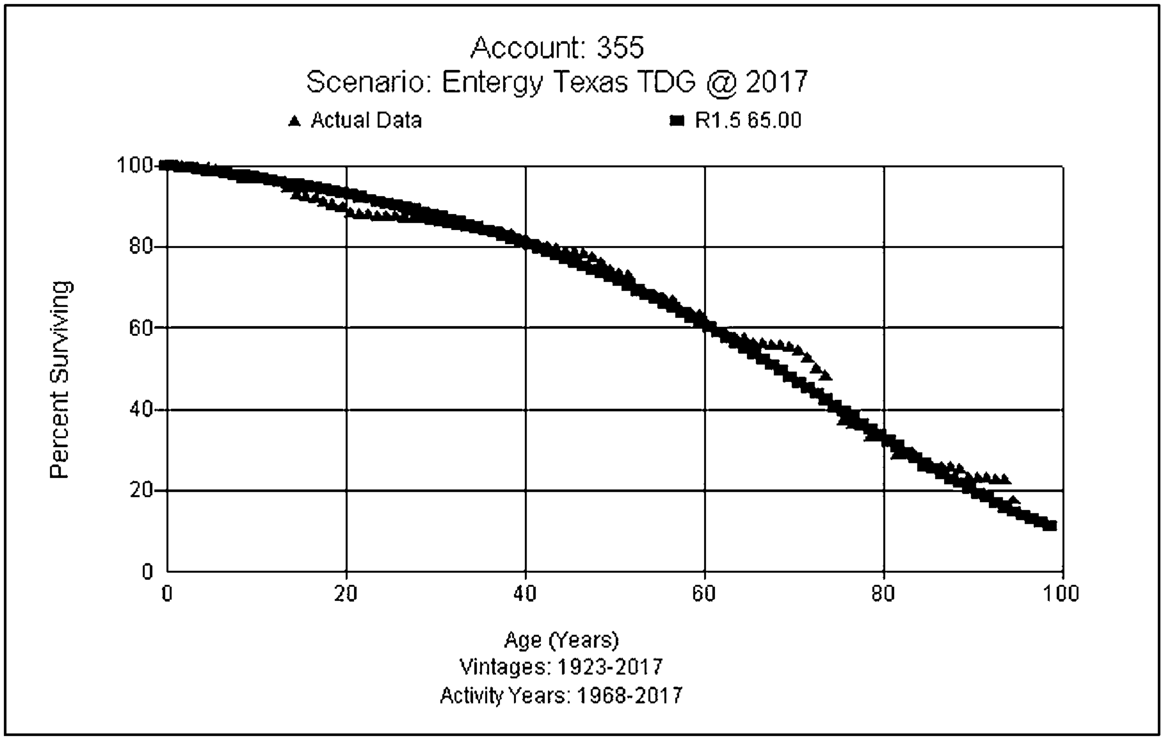


FERC Account 355.0 Poles and Fixtures (65 R1.5)

This account includes poles, insulators, cross arms, other related equipment, and foundations for transmission plant. The current balance in this account is $285.5 million. The existing depreciation rate assumed a 59 R2 dispersion curve. In most areas, the Company direct buries most transmission poles. The Company has had many types of components in this account over time. Originally, the primary component was a bare pole retirement unit (“RU”), down to pole-top pin and changed to a dressed pole RU until around 1998. Since 1998, more granular RUs have been created such as insulators or cross arms.

Company experts report that they use polymer insulators now, as opposed to porcelain insulators that were used 20 years ago. Polymers self-clean better than porcelain and are easier to handle. Earlier generations of polymer had a short life, and company experts do not expect as short a life for newer generations of polymers. There is not yet sufficient experience to project that polymer might last as long as porcelain. Company experts believe that polymer insulators would fail before the conductor. There is an insulator replacement program in place in the last few years that is replacing small components in this accounts. Another retirement unit in this account is cross-arms, an H-frame structure with wood arms. When cross arms are replaced, the Company will go back with steel tubular (engineered arm). In some cases, Entergy will replace cross arms prior to end of life of pole, for example if a tree falls on line breaking the cross arms. Another item in this account which will have a shorter life than the pole is anodes, which only have a life of 15-20 years. The Company recently accelerated the replacement of poles, as can be seen in the average age of investment for this account of 13.41 years.

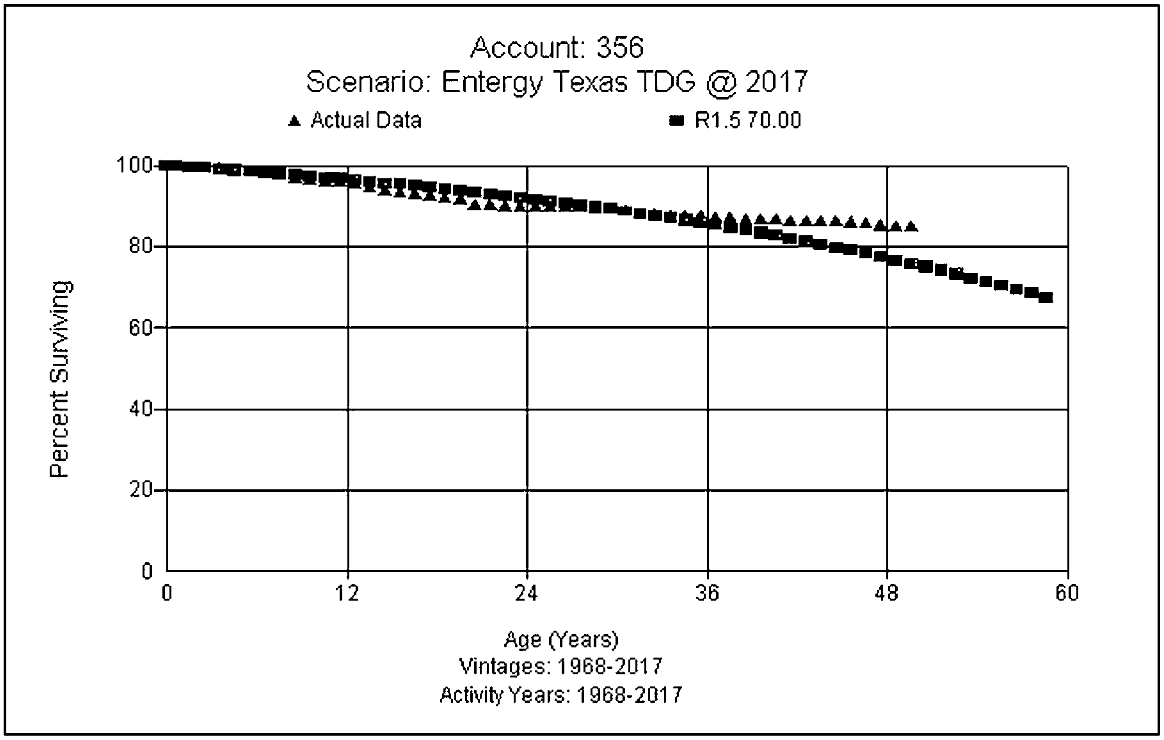
With the increasing levels of engineered structures (steel and concrete poles), Company subject matter experts expect the life to increase slightly longer to 65 years. After examining the various placement and experience bands and the underlying assets, this study recommends increasing the life slightly to 65 years and moving to a slightly flatter R1.5 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.



FERC Account 356.0 OH Conductors and Devices (70 R1.5)

This account includes overhead conductors and devices for transmission plant. The current balance in this account is $266.6 million. The existing depreciation rate assumed a 65 R2.5 dispersion curve. Subject matter experts report that ACSR conductor is generally installed now. There is a small amount of copper conductor left on 69kV system. Company experts expect transmission conductor to generally as long as the poles in Account 355, (especially wood poles). There is some reconductoring in transmission, but much more in the distribution function. Reconductoring could decrease life of conductor as compared to structures. However, the Company is more likely to rebuild than reconductor (especially if the poles are not engineered). They also will leave the conductor if moving to engineered poles. Company experts do not expect conductor to last any longer than towers in Account 354. Company experts report that 1970s vintage conductor with spacers is showing deterioration. Little conductor change-out occurs, except for capacity/power increases. The Company also would change out static wire prior to the replacement of conductor (at approximately 45-50 years). The Company has a targeted program to replace shield wire. Away from coastal and industrial areas, shield wire will last longer, but with Entergy's service area in coastal and industrial areas shield wire has a shorter life. Everything installed or replaced now is optical ground wire ("OPGW"), which has around the same life as OPGW static wire.

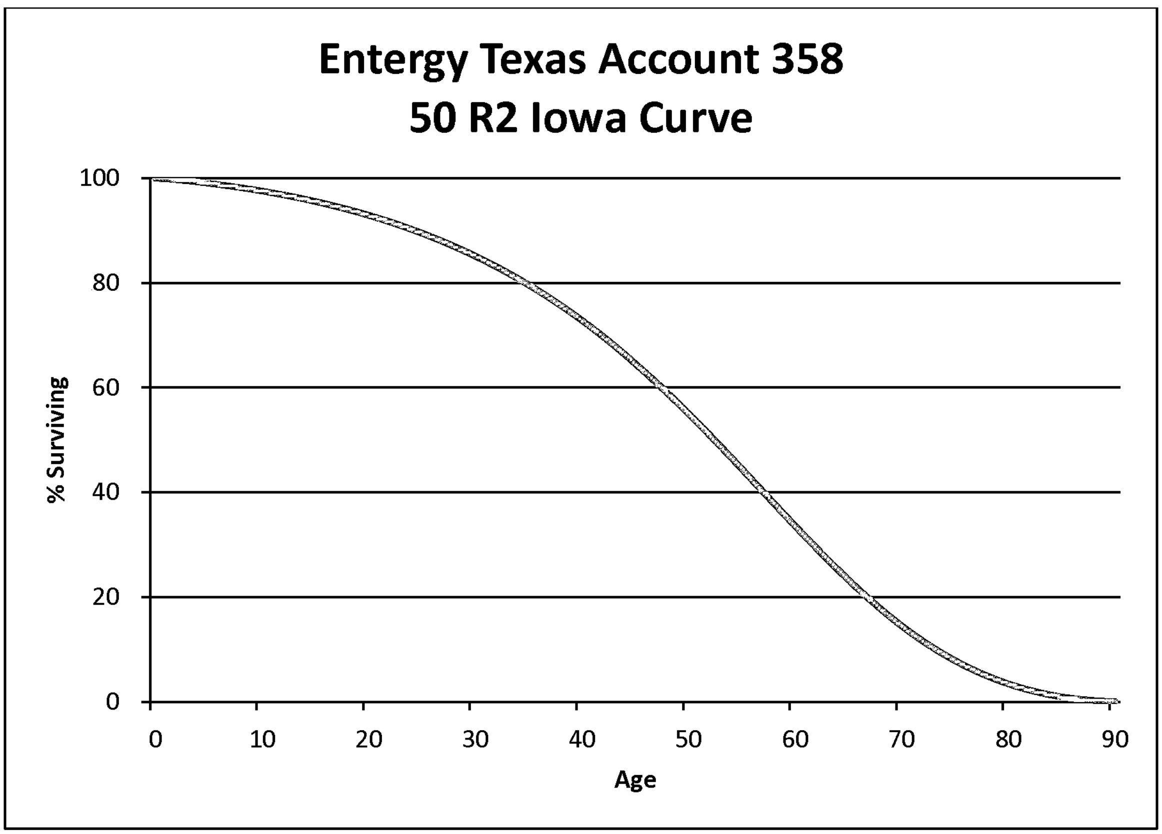
After reviewing the various forces of retirement for this account, Company experts recommend a slight increase in the life to 70 years. In examining the various placement and experience bands, this study recommends increasing the life to 70 years and moving to the R1.5 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.


Account: 356
Scenario: Entergy Texas TDG @ 2017
Actual Data
R1.5 70.00
100
80
60
40
20
0
Percent Surviving
0
12
24
36
48
60
Age (Years)
Vintages: 1968-2017
Activity Years: 1968-2017

FERC Account 358.0 Underground Conductors & Devices (50 R2)

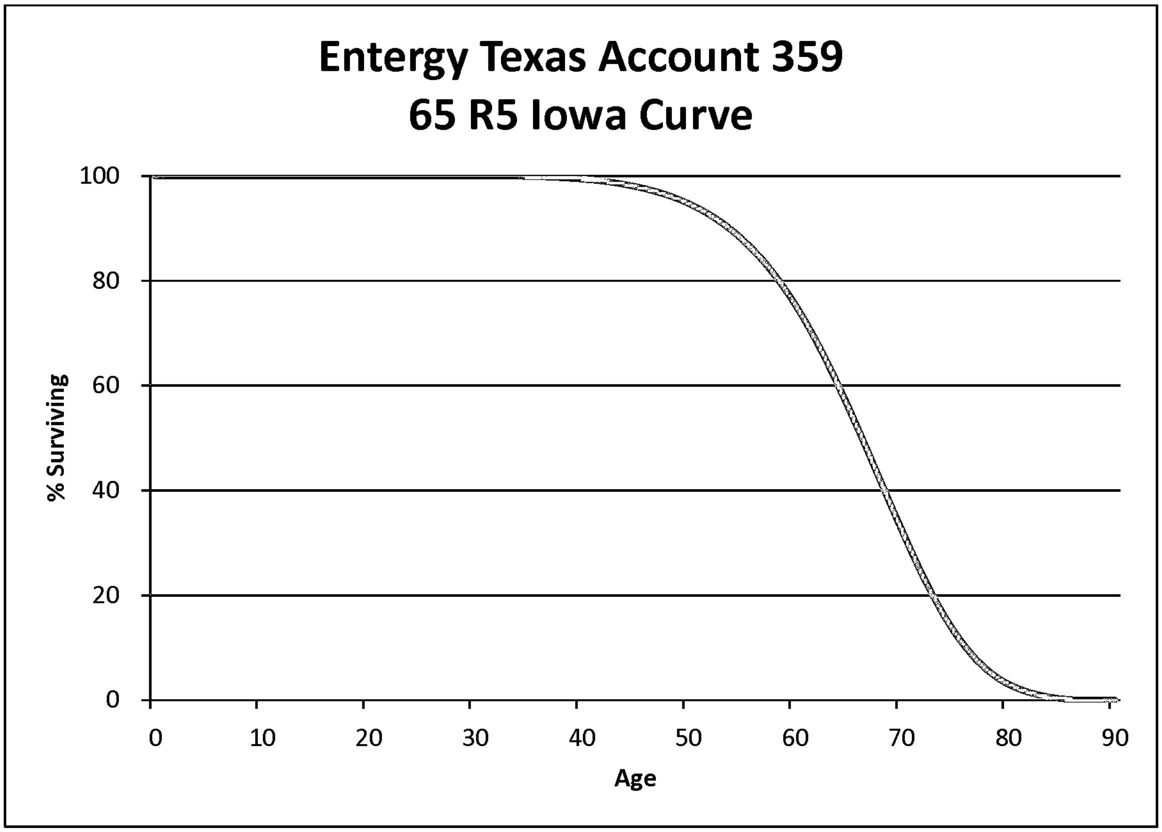
This account includes underground conductors and devices for transmission plant. This account includes underground conductor used in transmission operations. The current balance in this account is $322 thousand. The existing depreciation rate assumed a 50 R2 dispersion curve. Company subject matter experts state there is a small amount, maybe 800-900 feet, of solid dielectric in conduit. It was installed in 2005 and may last another 50 years or more.

There is limited history, so the proposed life for this account is based on a general understanding of the life characteristics of underground transmission conductor. This study recommends retention of the 50 R2 dispersion curve. A graph showing the pattern of retirements for the selected curve is shown below.



FERC Account 359.0 Roads and Trails (65 R5)

This account includes bridges, roads and yard improvements for transmission plant. The current balance in this account is $203 thousand. The existing depreciation rate assumed a 65 R5 dispersion curve. There is insufficient retirement experience to perform an actuarial analysis in this account. This study recommends retaining the 65 year life with the R5 dispersion. A graph showing the pattern of retirements for the selected curve is shown below.



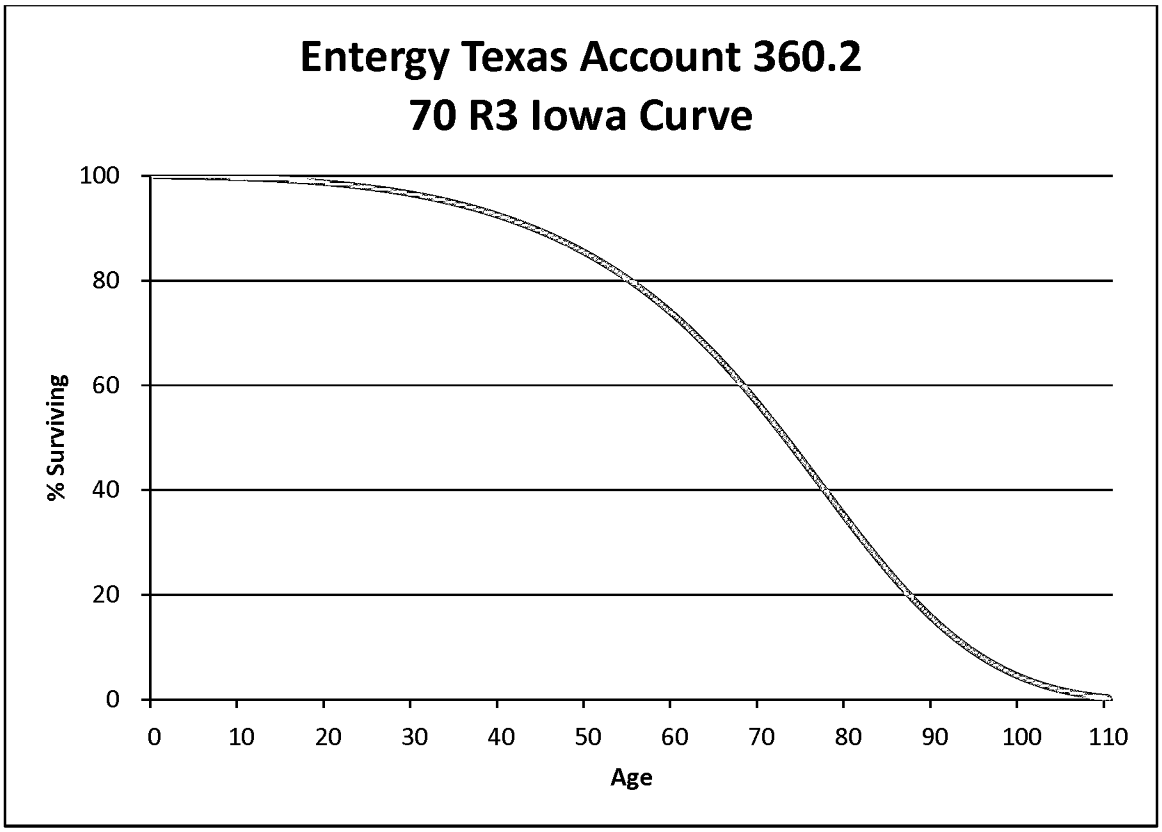
DISTRIBUTION PLANT

Distribution Accounts, FERC Accounts 360.2-373.2

For many years, weather extremes have impact distribution operations. Some of the storms that have occurred are: Audrey (1957), Bonnie (1986), Ice Storms (1978, 1991, 1997), Rita, Ike and Harvey. As discussed in the Transmission section, three hurricanes between the years 2005-2017 impacted distribution operations as the Company has taken measures to harden the system. However, lines were taken out by debris, etc. so hardening might not have helped during Ike in 2008. The company has a "hardening plan" that is updated each year with the Commission. In addition to the storm areas, the Company also adopted hardening for taller poles across the system and at evacuation road crossings (moving from wood to steel there). In 2017, Hurricane Harvey flooded a lot of property (many substations were rebuilt and UG equipment also had to be replaced). For distribution, 370 poles, 4,600 meters, 570 transformers, 506,000 feet of conductor and 2000 crossarms were replaced from Harvey.

FERC Account 360.2 Rights of Way (70 R3)

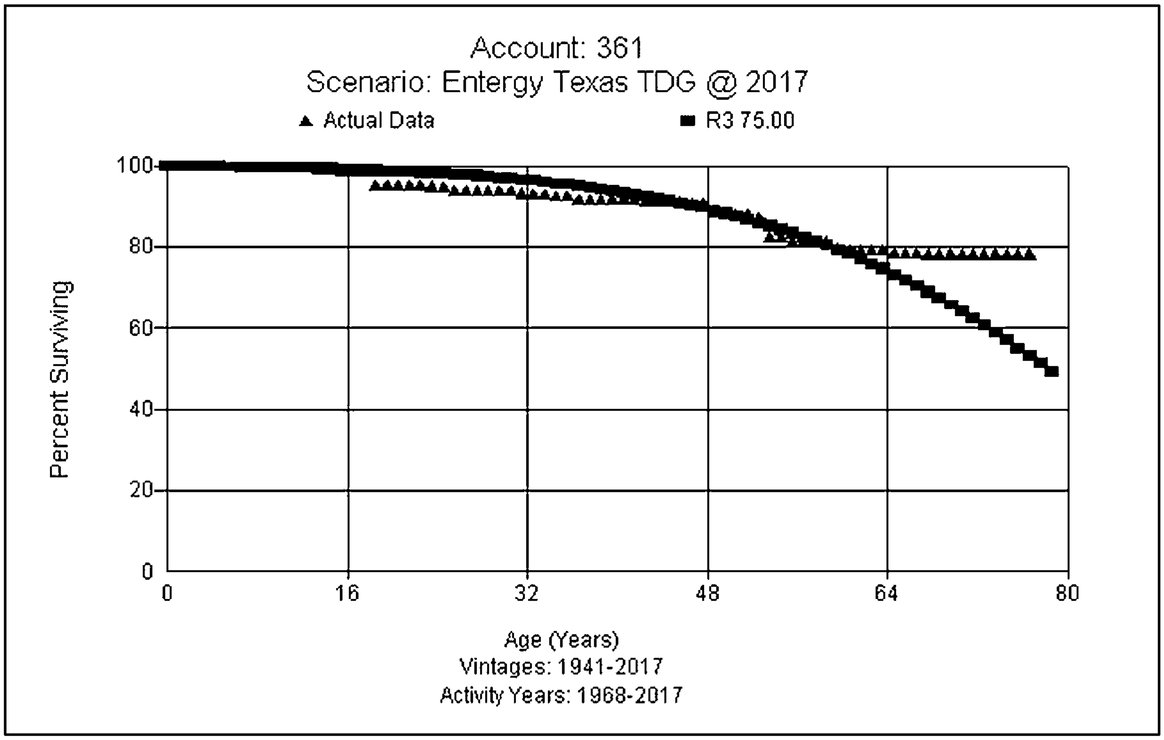
This contains land rights for distribution equipment. The current balance is $11.8 million for this account. The existing depreciation rate assumed a 65 R3 dispersion curve. There is insufficient retirement experience to perform an actuarial analysis in this account. Since there is a slight increase in life for substation and the pole account, a slight increase in life for this account is warranted. This study recommends extending the life to 70 years and retaining the R3 dispersion curve. A graph showing the pattern of retirements for the selected curve is shown below.



FERC Account 361.0 Structures & Improvements (75 R3)

This grouping contains facilities ranging from fencing, heating and cooling systems and other structures. The current balance is $18.6 million for this account. The approved curve and life is 65 R3. The same general concepts that impact the life in Account 352, Transmission Structures and Improvements are present in this account. The Company is now using composite type building (moved about 20 years ago); whereas they used to use metal sheet building prior to that. Company experts expect composite buildings to last longer than steel buildings. 75% to 80% of buildings in substations will be metal. Company personnel expect the life of steel buildings to be 50-60 years, but buildings in more environmentally unfriendly areas would not last as long. Some smaller components such as lighting and fencing are among the shorter lived assets in this account. Company personnel anticipate the life of this account would be similar to Account 352. Six substations flooded during Hurricane Harvey. Since the hurricane in 2017, Entergy has changed its design standards related to flood criteria and elevation of control houses.

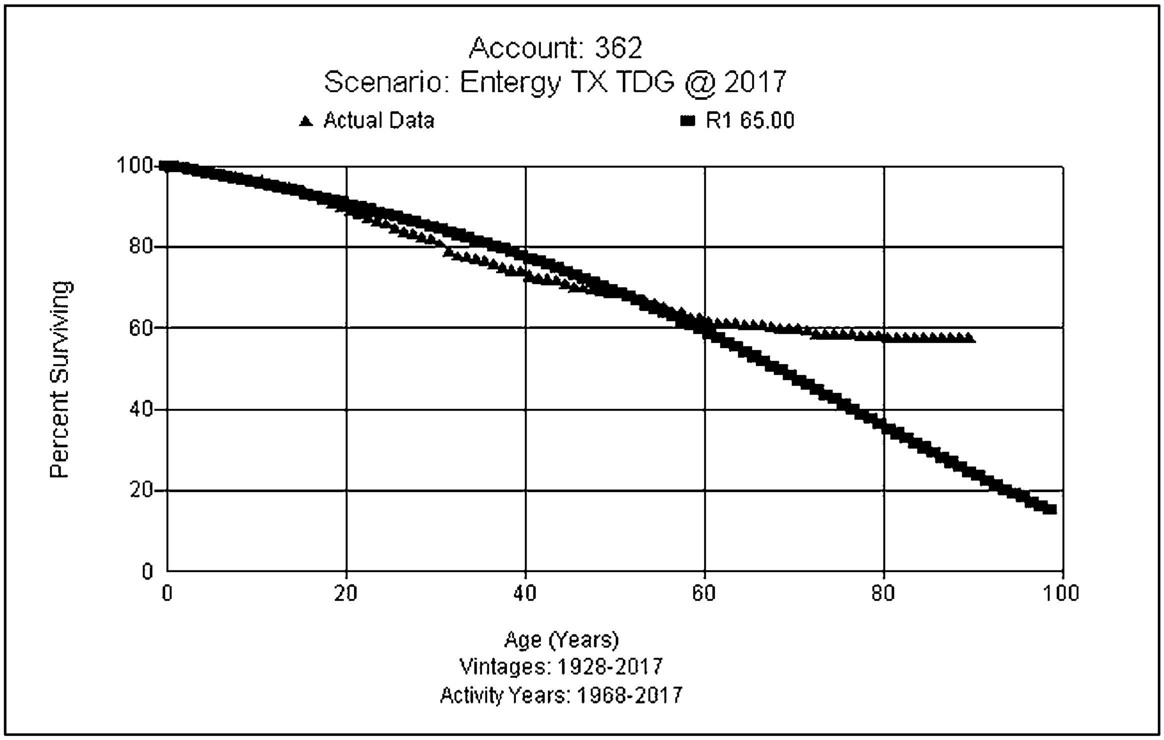
In examining the various placement and experience bands and the characteristic of the underlying assets in this account, this study recommends moving to a 70 R4 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.


Account: 361
Scenario: Entergy Texas TDG @ 2017
Actual Data
R3 75.00
Percent Surviving
100
80
60
40
20
0
0
16
32
48
64
80
Age (Years)
Vintages: 1941-2017
Activity Years: 1968-2017

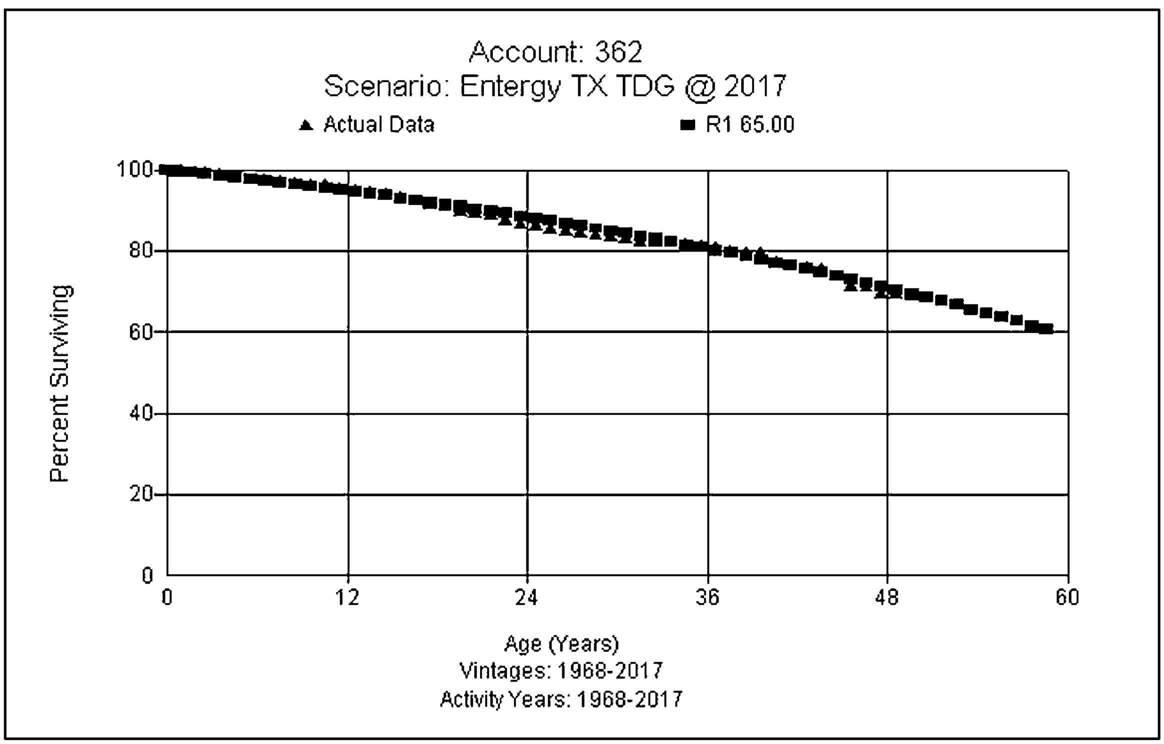
FERC Account 362.0 Station Equipment (65 R1)

This grouping contains switchboards, station wiring, transformers and a wide variety of other equipment, from circuit breakers to switchgear. The current balance is $225.9 million for this account. The existing approved life is 55 years with an R1.5 dispersion curve. This account contains many more power transformers than Transmission Account 353. The percentage of oil breakers at distribution voltages will be less than in transmission and have been replaced with gas or vacuum. In last 20-25 years, the Company has upgraded facilities and continues those efforts. Company experts expect the life of this account to increase. Six substations were flooded during Hurricane Harvey. Since then, the Company has changed its design standards related to flood criteria and elevation of control houses. Company experts report that a 60-65 year for this account is reasonable.

In examining the various placement and experience bands and the underlying assets in the account, this study recommends moving to a 65 year life and moving to a flatter R1 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.



This curve shows a narrower band which also fits the proposed curve well.



FERC Account 364.0 Poles, Towers & Fixtures (43 R1)

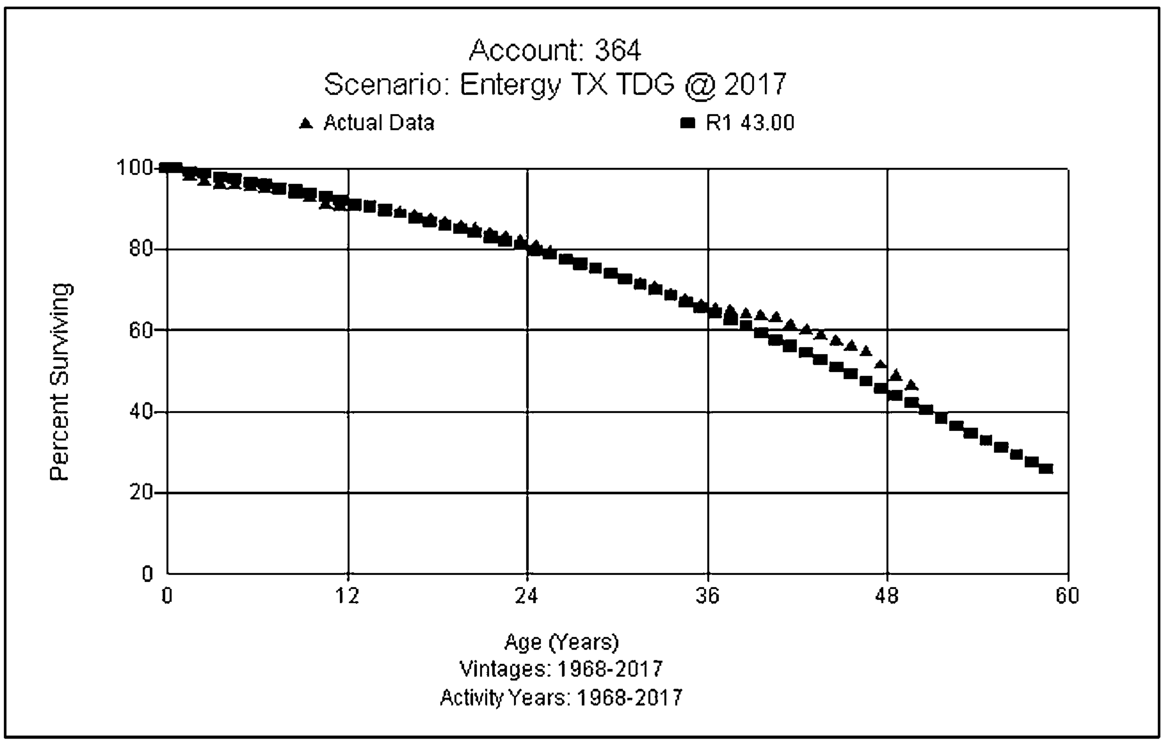
This account includes poles, towers and fixtures generally made of wood or steel. The investment balance is $264.2 million for this account. The approved average service life is 40 years with an R1 dispersion pattern. Currently the Company uses Penta-treated poles North of I-10 and CCA-treated poles south of I-10 or in any wet location. Historically, creosote was the treatment for many of the poles currently in service (estimated at nearly 90 percent of the total distribution poles). The Company changed type of distribution poles when they moved from creosote to CCA poles a few years ago. The latest installations are Penta which is easier to climb and less hazardous when burned. CCA/Penta poles may be more prone to rot than creosote. Company experts anticipate that creosote poles to not last more than 35 years. Farm raised poles don't retain creosote well. The Company made the change to CCA in 2012. Today 90% of the poles are still creosote, and farm raised poles began to impact the system 15 years ago. Company experts expect the life of poles to be shorter in Texas, because the high water table does not promote a long life for wood poles.

South of I-10, the Company installed in a more "hardened" pole for past 6-7 years or more. Two years ago the Company started hardening all poles when replaced. Steel poles were installed on evacuation routes, and hardened designs were used for higher wind loading. This will make the pole more likely to survive a medium and smaller type of storm. Relocations will also affect the life of poles. Company experts speculate that the life of poles may increase as more hardened poles are placed on the system.

Company experts began a more in-depth inspection program 2 years ago. They will look at a smaller population per year as compared to the past, with about 10% of the annual inspections compared to the past. However, the inspections will be much more in-depth. The Company will dig down around the poles to check and treat.

Also included in this account are the cross arms on distribution poles which would be expected to have a shorter life than the poles. In examining history over many different bands, the current 40 year life is shorter than current Company history indicates. The average age of current plant in service is 18.06 years. While all bands reflect a longer life than the approved 40 years, the young age of the asset in this account would point to giving more weight to more recent bands for life selection. The shorter bands would also reflect more of the poles treated with Penta and CCA.

In examining the various placement and experience bands and the characteristics of the underlying assets in the account, this study recommends moving to a 43 R1 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.

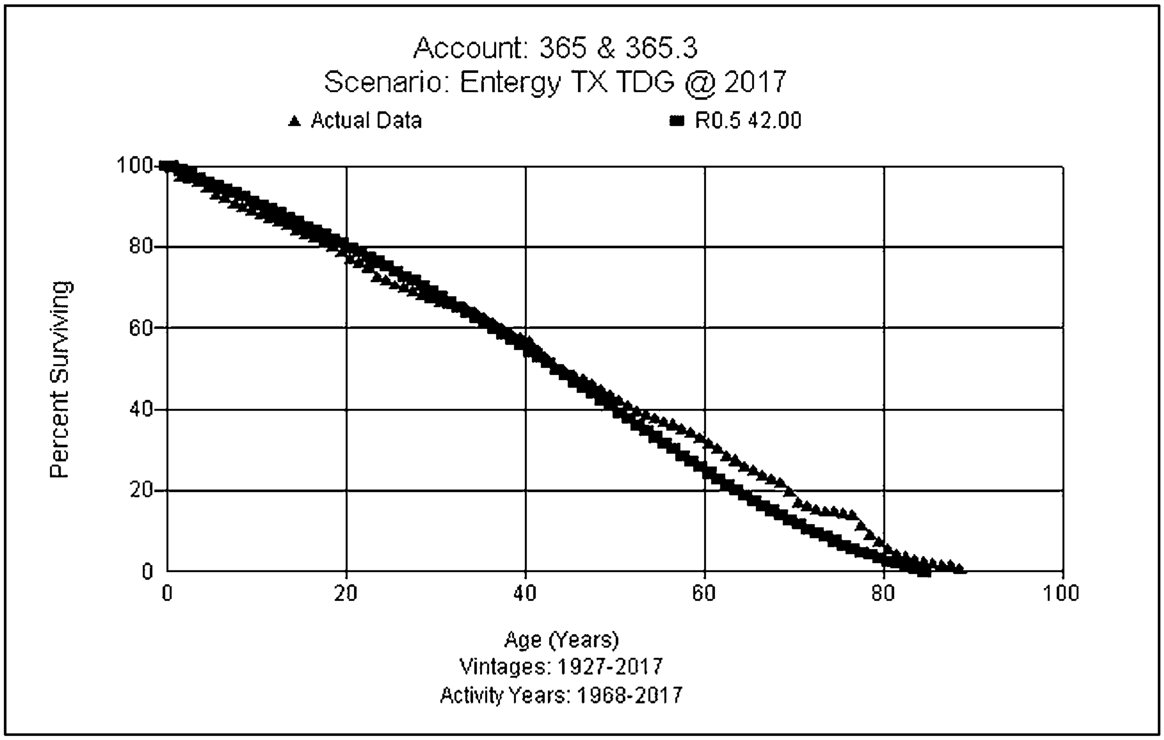


FERC Account 365.0 Overhead Conductor & Devices (42 R0.5)

This account consists of overhead conductor of various thickness, as well as various switches and reclosers. The account balance is $309.5 million for this account. The current approved average service life is the 39 R0.5. The current analysis indicates the existing 39 year life is shorter than Company history indicates. The average age of current plant in service is 14.51 years, so the life selection was weighted more toward recent bands.

Company experts report that if poles and cross arms are in reasonable shape, they will simply replace conductor. Reconductoring is done to increase capacity in most cases. The Company has not historically build distribution feeders to anticipate maximum future load. Sometime the Company can "convert" to a higher voltage instead of reconductoring – triggering retirements in assets other than conductor. Storms are a force of retirement for this account, not just biggest storms only. Company experts anticipate a life between 40-50 years.

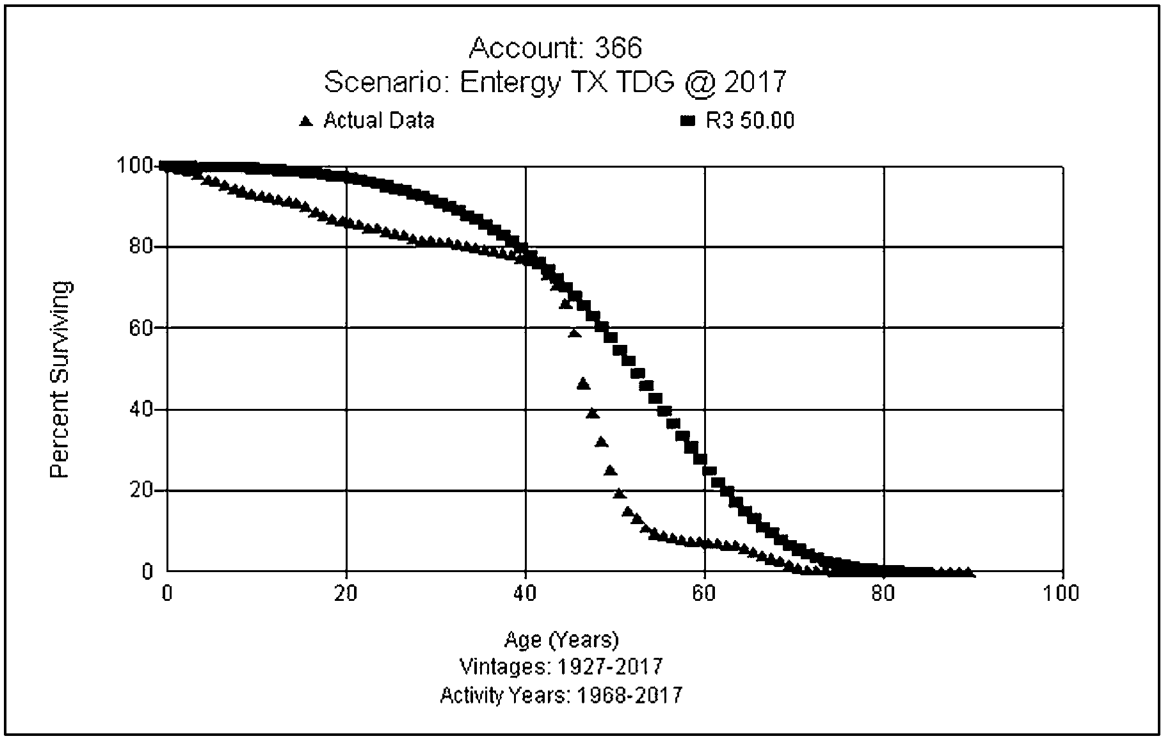
Operations personnel indicate that there is more reconductoring than rebuilding and this was expected to continue. The Company's standard way of building distribution will accommodate most types of conductor. If poles and cross arms are in reasonable shape, they will simply replace conductor. Reconductoring is done to increase capacity in most cases. Most reconductoring is done on trunk feeders, not lateral. Distribution conductor will not last as long as transmission conductor and has a more dynamic profile than transmission. In examining the various placement and experience bands, this study recommends moving to a 42 R0.5 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.


Account: 365 & 365.3
Scenario: Entergy TX TDG @ 2017
Actual Data
R0.5 42.00
Percent Surviving
100
80
60
40
20
0
0
20
40
60
80
100
Age (Years)
Vintages: 1927-2017
Activity Years: 1968-2017

FERC Account 366.0 Underground Conduit (50 R3)

This account consists of underground conduit, duct banks, vaults, manholes, and ventilating system equipment. The account balance is $50.2 million for this account. The existing rate is based on a life estimate of 60 years with an R3 dispersion pattern. Woodlands is predominantly underground with Conroe and Port Arthur the second and third largest. Especially in Woodlands, most installations are direct buried in rear lots with no rear alley. Conduit standard has gone backwards and forwards. Today the standard is that all new subdivisions will be in conduit. Generally, the preference is to install in conduit when possible. Developer will install conduit in the future.

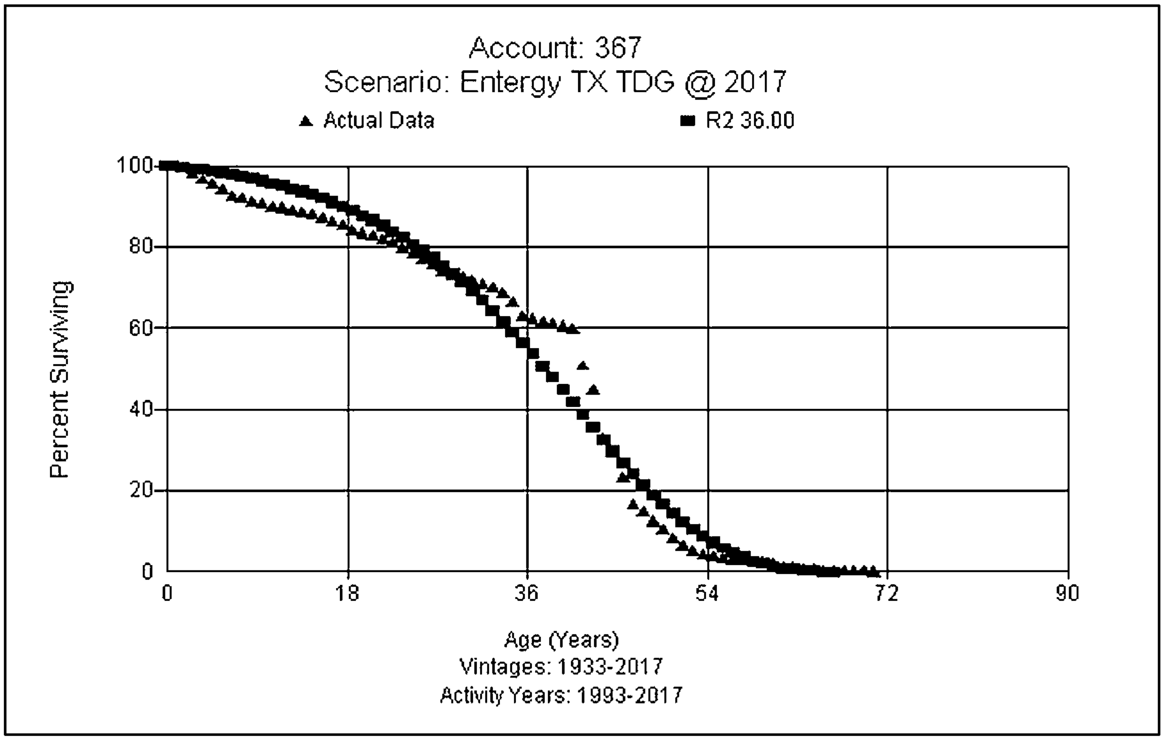
In examining the various placement and experience bands, historical life analysis reflected a shorter life than existing. Based on discussions with Company personnel and range of life expectation for this type of asset, this study recommends moving to a slightly shorter life of 50 years and changing from the steeper R3 dispersion to the R0.5 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.


Account: 366
Scenario: Entergy TX TDG @ 2017
Actual Data
R3 50.00
Percent Surviving
100
80
60
40
20
0
0
20
40
60
80
100
Age (Years)
Vintages: 1927-2017
Activity Years: 1968-2017

FERC Account 367.0 Underground Conductor & Devices (36 R2)

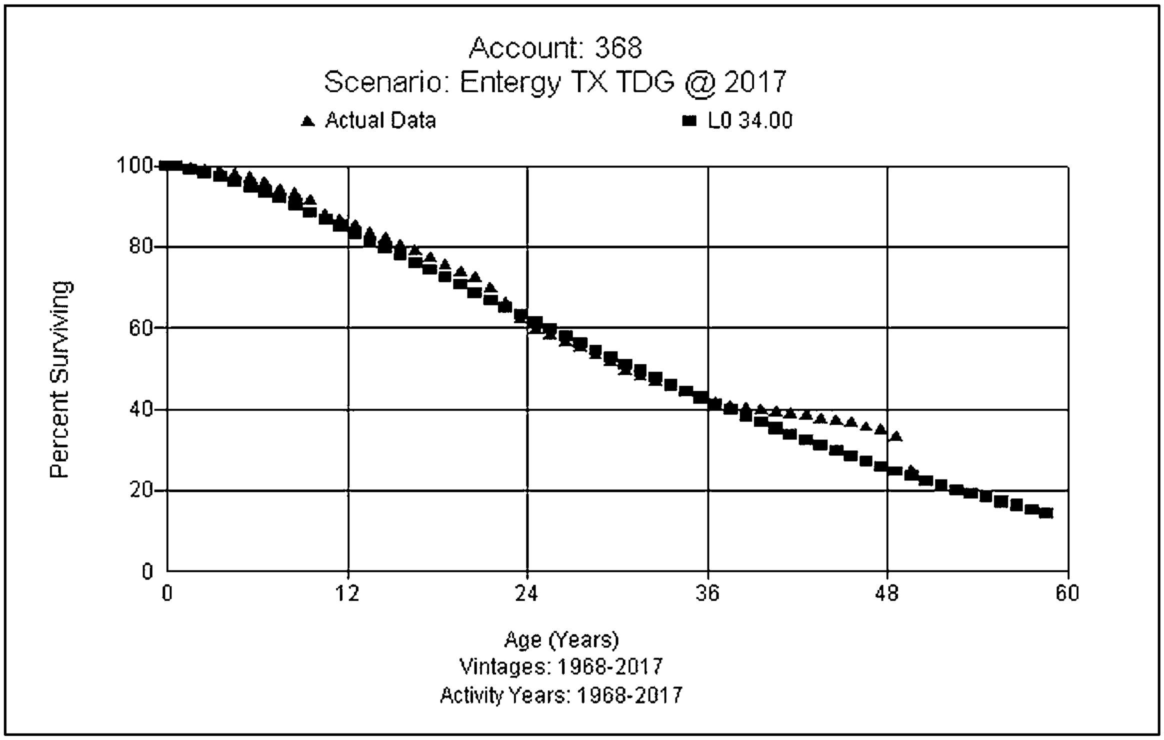
This account consists of underground conductor, switches, and switchgear. The account balance is $135.5 million for this account. The current approved life estimate is 35 years with an R1.5 dispersion curve. Most underground conductor is in the western part of the Company's service territory. Operations personnel note the Company used to use XLP ("Cross-Linked Polyethylene"), and now use EPR (although they still use XLP for 15kV conductor). Over the years there have been many improvements to conductor with many retirements of earlier generations of conductor since the mid to late 1970s. Especially in the Woodlands, most direct conductor is buried with rear lots having no rear alley. Other than the Woodlands, there are a number of other subdivisions across the system with underground systems. UG cable life (according to company engineers, manufacturers say UG cable lasts 30 years) is in the range of 30 years for 15kV (XLP), with EPR (20 kV) perhaps lasting 40-50 years.

In mid 2017, the Company began a proactive cable replacement program, targeting direct buried conductor (from $700K to $3M per year in cable replacement). Company personnel anticipate that the life of this account will increase over time as more EPR is on the system and the old XLP direct buried is replaced. In examining the various placement and experience bands, this study recommends moving to a 36 R2 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.


Account: 367
Scenario: Entergy TX TDG @ 2017
Actual Data
R2 36.00
Percent Surviving
100
80
60
40
20
0
0
18
36
54
72
90
Age (Years)
Vintages: 1933-2017
Activity Years: 1993-2017

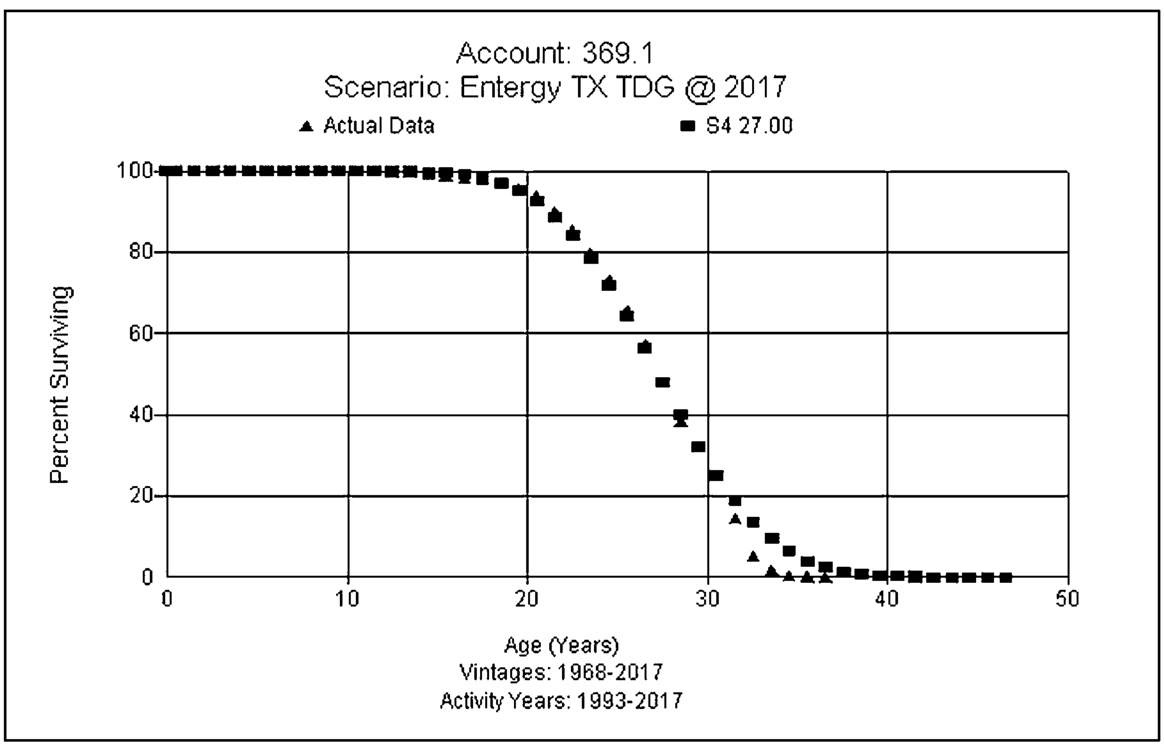
FERC Account 368.0 Line Transformers (34 L0)

This account consists of line transformers, regulators, and capacitors. The account balance is $473.2 million for this account. The current approved life for this account is 33 years with an L0.5 dispersion pattern. The ETI service area is a high lightning area which will affect the life of overhead transformers. Operations personnel note that pad mount transformers last longer than pole transformers since they are not subject to the same forces of retirement like weather, lighting, and animal disturbance. Operations personnel estimate average life for pole mounted transformers at 25-35 years. Pad mount average life estimated at 30-40 years. Company will not repair line transformers – instead they will junk or sell to third party. Because of the flooding from Harvey, there will be a high level of pad mount replacement in 2017. In 2016, the Company started a higher focus on increasing basic impulse level ("BIL") producing more separation than in the past. This may help increase life some in the future (transformers as well as other assets on poles). This study recommends a slight change to a 34 year life with a L0 dispersion curve, which is the best life and curve combination from the actuarial analysis. A graph of the observed life table versus the proposed survivor curve is shown below.


Account: 368
Scenario: Entergy TX TDG @ 2017
Actual Data
L0 34.00
Percent Surviving
100
80
60
40
20
0
0
12
24
36
48
60
Age (Years)
Vintages: 1968-2017
Activity Years: 1968-2017

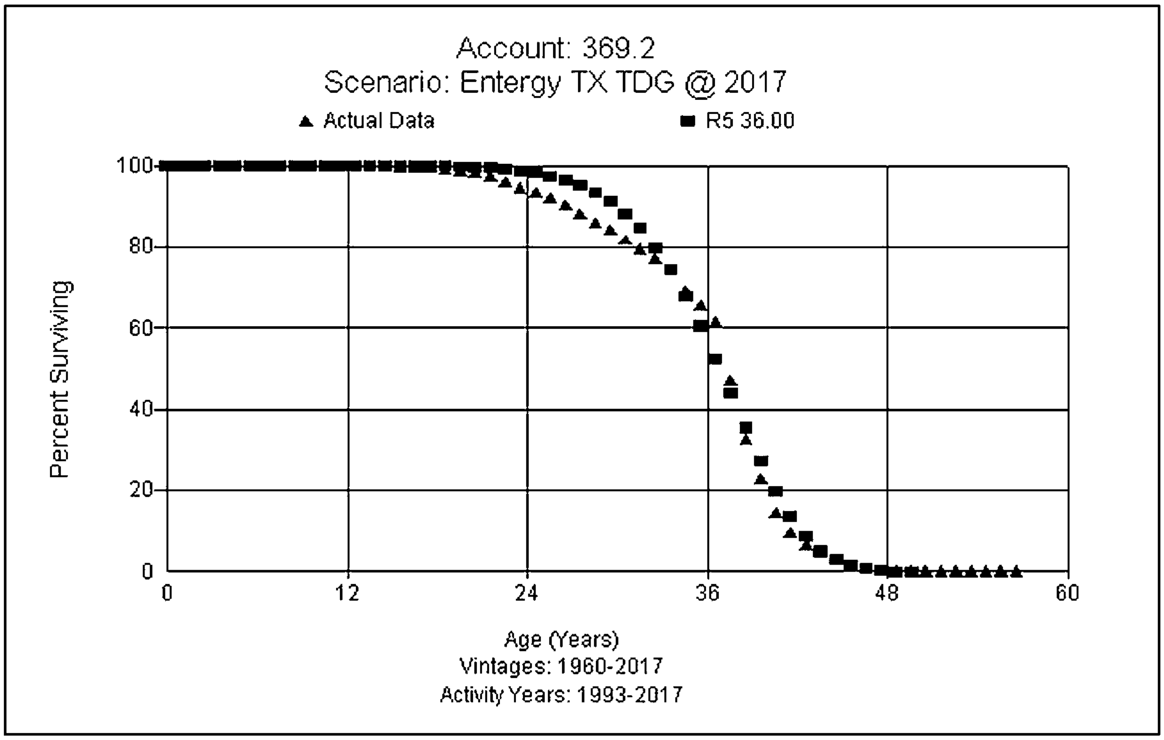
FERC Account 369.1 Services – Overhead (27 S4)

This account includes overhead services with a balance of $91.3 million. The current approved life for this account is 26 years with an L4 dispersion pattern. Overhead services may be replaced due to changing load requirements or removal of facilities. The Company does not maintain vegetation around services, so Company experts believe that overhead services would have a shorter life than underground services in Account 369.2. In Beaumont, over 1K services have been replaced recently due to height requirements. The analysis indicates overhead assets have typically retired between 25-30 years, which is also evidenced in the average age of retirements of 26.04 years. Assets have been replaced more frequently and the average age of current investment in this account is 10.36 years. In examining the various placement and experience bands, this study recommends increasing the life slightly to 27 years and changing from the L4 dispersion to the S4 dispersion curve for this account. A graph of the observed life table versus the proposed survivor curve is shown below.



FERC Account 369.2 Services – Underground (36 R5)

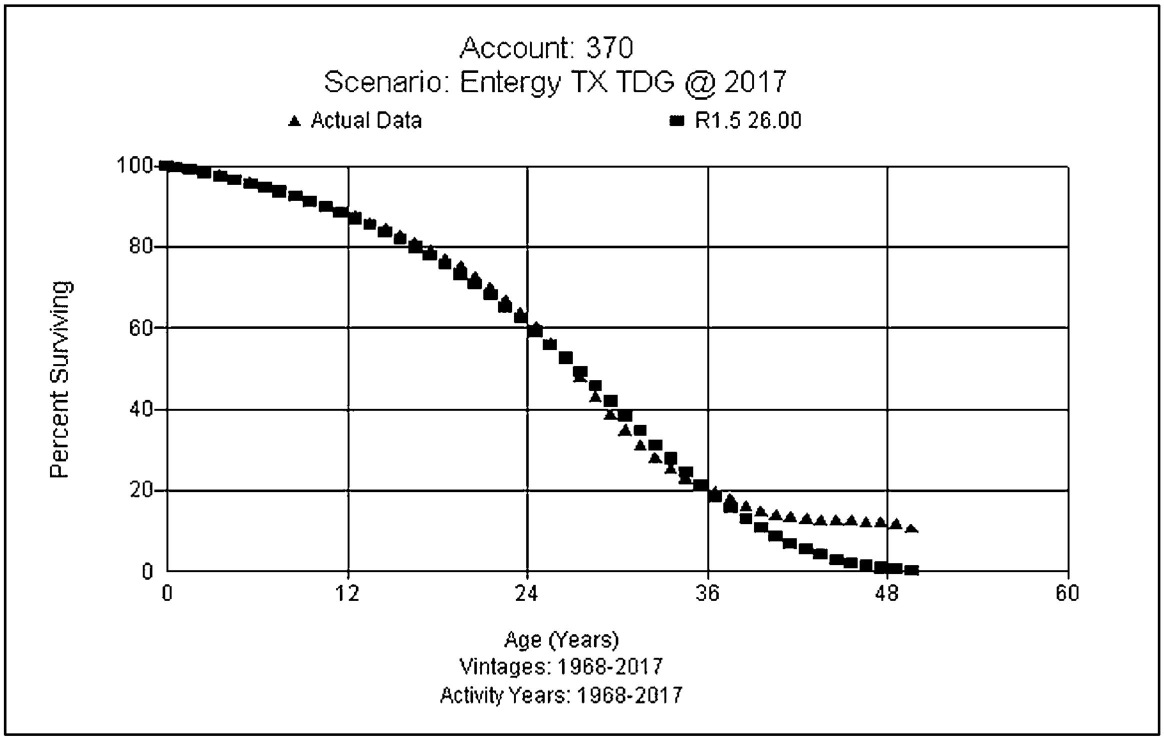
This account includes underground services and has a current balance of $72.9 million. The current approved life for this account is 33 years with an S4 dispersion pattern. Company personnel report that underground services may be replaced/ removed due to failure, dig-ins, or a catastrophic event such as a house fire. No major changes have occurred that would cause a significant change in life. In examining the various placement and experience bands, this study recommends using a 36 R5 dispersion curve for this account. A graph of the observed life table versus the proposed survivor curve is shown below.



FERC Account 370.0 Meters (Customer) (26 R1.5)

This account includes all distribution customer meters and has a current balance of $46.4 million. The current approved life is 28 years with an R1.5 dispersion curve. The Company is currently buying electronic meters. They started using poly-phase meters around 2000, the standard changed for residential around the same time. As Company replaces meters, they will put in electronic ones. Company personnel believe more than 10% electronic meters are used in residential settings, with nearly 100% for commercial. Electromechanical meters may last an average of 40-50 years. Electronic meters are more susceptible to failure due to faults, lightning, display issues, and housing issues (UV). Company would expect a shorter life of electronic meters in the range of 20 years. More than 4600 meters were replaced due to Hurricane Harvey.

Life analysis indications are consistent across the bands, with majority of good fits around 26 years. In examining the various placement and experience bands, this study recommends moving to a 26 R1.5 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.


Account: 370
Scenario: Entergy TX TDG @ 2017
Actual Data
R1.5 26.00
100
80
60
40
20
0
Percent Surviving
0
12
24
36
48
60
Age (Years)
Vintages: 1968-2017
Activity Years: 1968-2017

FERC Account 370.1 Meters (Substation) (26 R1.5)

This account includes all distribution substation meters and has a current balance of $5.3 million. The current approved life is 28 years with an R1.5 dispersion curve. Due to similarity of assets between this account and Account 370, the result from Account 370 is used for this account. This study recommends moving to a 26 R1.5 dispersion curve.

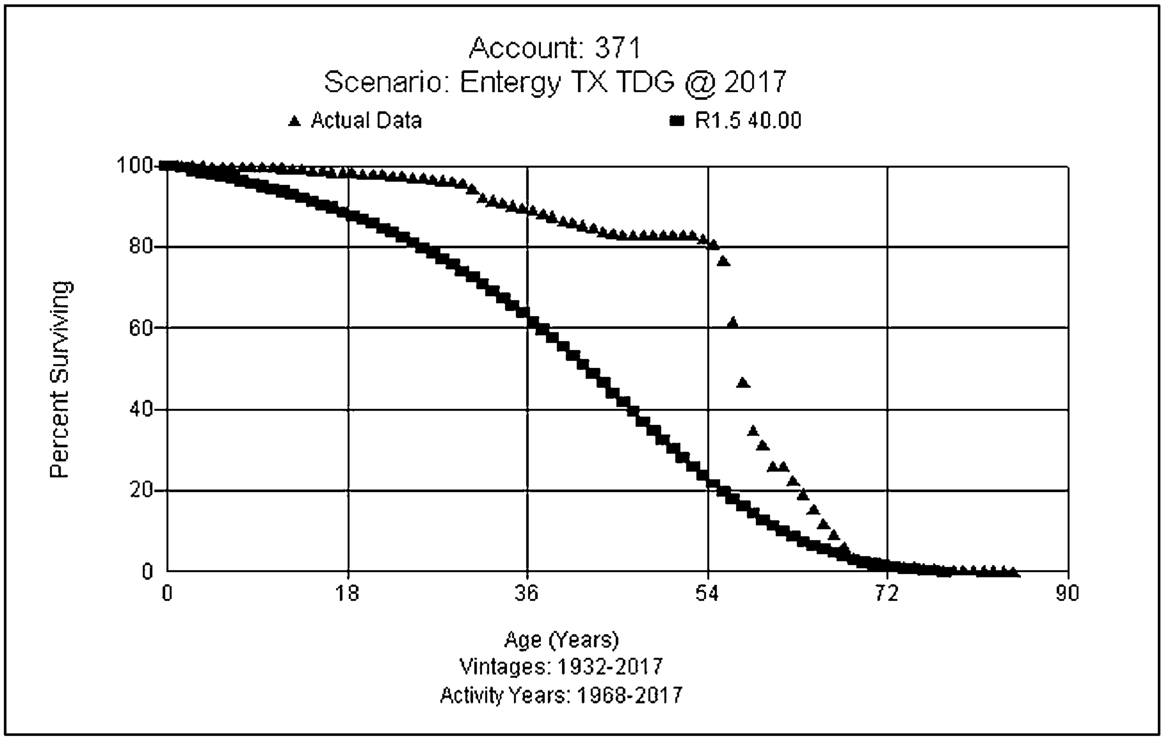
FERC Account 370.10 Meters (Smart Meters) (7 SQ)

This account includes all distribution smart meters and has a current balance of $492 thousand. Like all meter accounts, the current approved life is 28 years with an R1.5 dispersion curve. The Company will begin a deployment of smart meters across the system, as approved in Docket No. 47416. In January 2019, the company will start using AMI meters and will start building the communication infrastructure in 2018). Deployment will occur 2019-2021. In the Final Order from Docket No. 47416, a seven year life is approved for all smart meters (F0F 46).

FERC Account 371.0 Installation on Customer Premises (40 R1.5)

This account consists of guard lights and guard light standards. The current account balance is $33.2 thousand for this account. The current approved life for this account is 45 year with an R1.5 dispersion pattern.

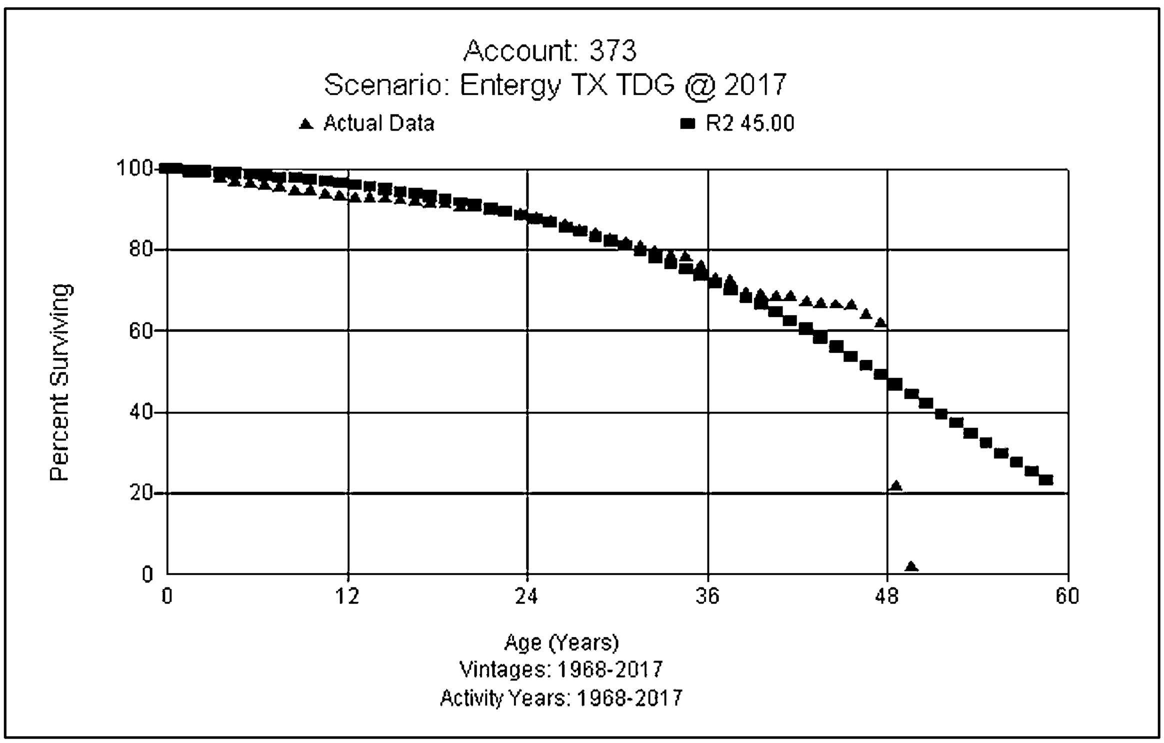
Assets in this account are security lights, PAL (Private Area Lighting), flood lights, night watchmen, etc. Ballast failure would cause replacement of the property unit, and eyes and bulbs would be replaced as expense. When customers stop using the light, light will be pulled, retired and discarded. Company exports report that 40-45 years would be the estimated life if not removed earlier. The Company just received approval for a PAL LED lighting tariff. The LED PAL is a single integrated fixture so the overall electronics will not last as long as the older style since ballasts and bulbs cannot be replaced on LED lighting. To the degree that customers want to retrofit lights to LED, the life will go down for existing technology. In examining the various placement and experience bands, this study recommends moving to a 40 R1.5 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.


Account: 371
Scenario: Entergy TX TDG @ 2017
Actual Data
R1.5 40.00
Percent Surviving
100
80
60
40
20
0
0
18
36
54
72
90
Age (Years)
Vintages: 1932-2017
Activity Years: 1968-2017

FERC Account 373.0 Street Lighting (45 R2)

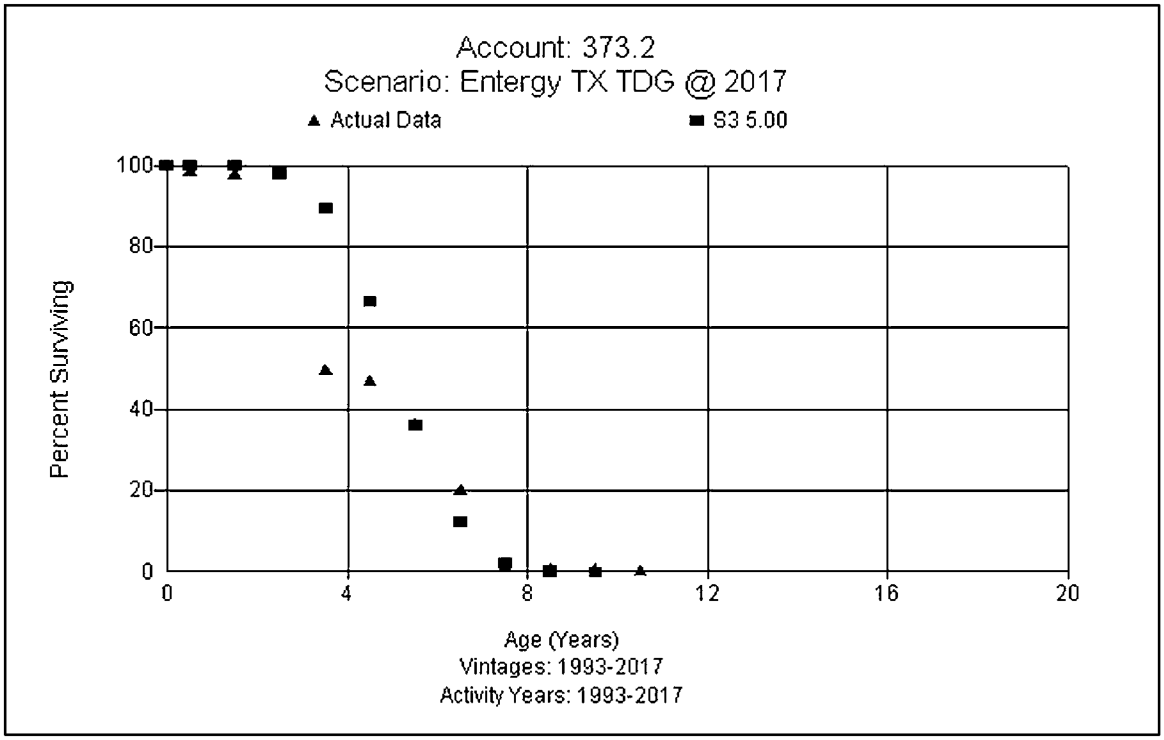
This account includes all distribution streetlights, conductor, conduit, luminaire, and standards. The current account balance is $18.1 million for this account. The current approved life for this account is 48 years with an R2 dispersion curve. Retirement of items in this account could be triggered by car hitting pole or a ballast failure (would retire and replace head). Company personnel estimate a 15-25 year average life (10-15 for head and longer for pole and conductor). A life of 48 years or over seems out of range. If a municipality requests retrofitting to LED, the company will replace the streetlights.

This study recommends a slight reduction of the life to 45 years while retaining the existing R2 dispersion. A graph of the observed life table versus the proposed survivor curve is shown below.



FERC Account 373.2 Non-Road Way Lighting (5 S3)

This account includes all non-roadway lighting with equipment similar to distribution streetlights, conductor, conduit, luminaire, and standards. The current account balance is $0 for this account. The current approved life for this account is 6 years with an S3 dispersion curve. In examining the various placement and experience bands, this study recommends moving to an 5 year life and retaining the S3 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.

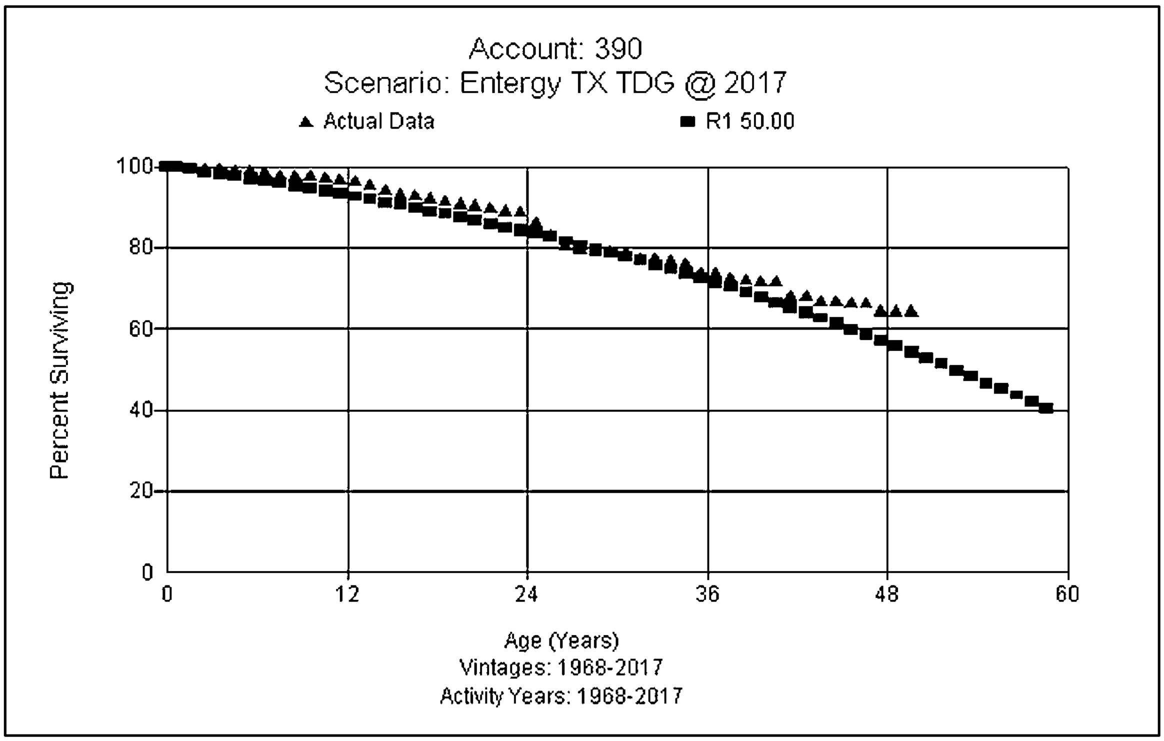


GENERAL PLANT

General Plant Accounts Depreciated, FERC Accounts 390.0 and 397.2

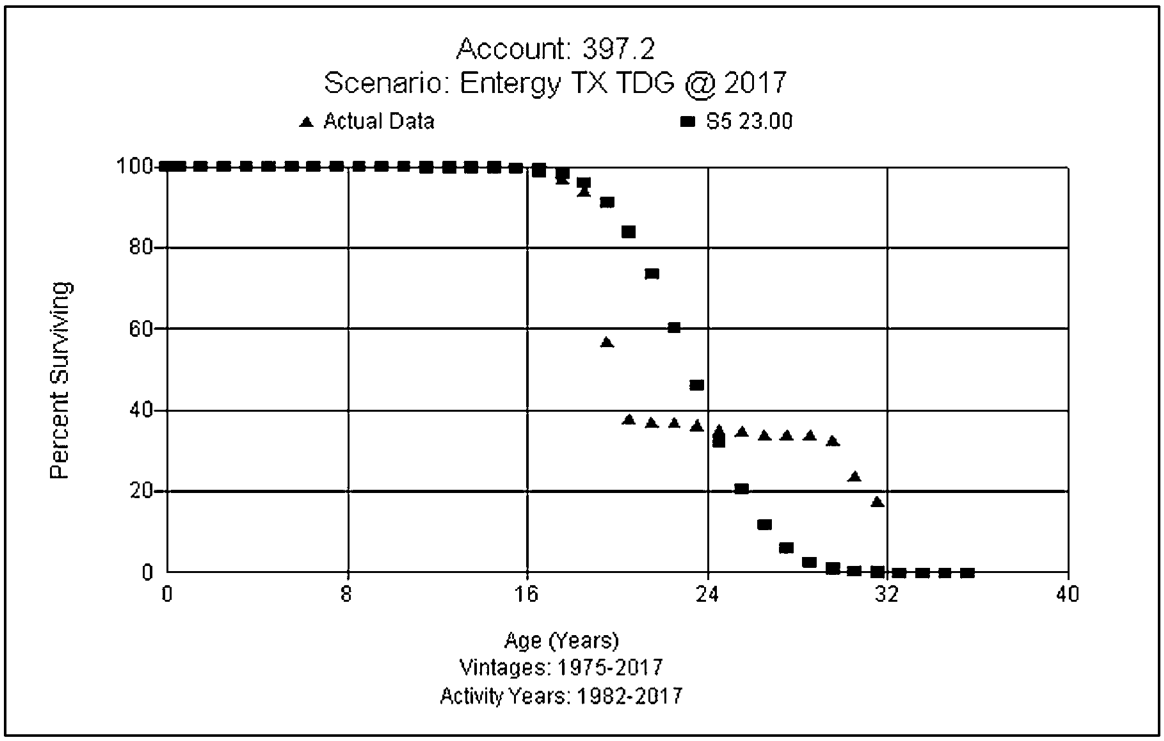
FERC Account 390.0 Structures & Improvements (50 R1)

This account includes the cost of general structures and improvements used for utility service. There is approximately $55.4 million in this account. The approved life for this account is 45 years and the R2 dispersion. In examining the various placement and experience bands, this study recommends lengthening the life to 50 years and moving to a R1 dispersion curve. A graph of the observed life table versus the proposed survivor curve is shown below.



FERC Account 397.2 Other Communication Equipment (23 S5)

This account consists of other communication equipment such as microwave equipment and fiber optic equipment used in general utility service. There is approximately $13.2 million in this account. This account currently has an S5 curve and life of 25 years. Given that these assets are different in scope than account 397.1, which contains smaller components like telephone systems and portable radios, the assets are best suited to depreciation rather than general plant amortization. There has been limited retirement activity in this account. Based on the life characteristics of the assets in this account, this study recommends reducing the life to 23 years and retaining the S5 dispersion curve for this account. A graph of the observed life table versus the proposed survivor curve is shown below.



GENERAL PLANT

General Plant Accounts Amortized, FERC Accounts 390.1-397.1 and 398.0

FERC Account 390.1 Leasehold Improvements (Amortize over lease term)

This account consists of leasehold improvements used for general utility service. There is approximately $346 thousand in this account. Currently, these assets are amortized over the lease term for each facility. This study recommends general plant amortization for this account. Thus, this study recommends retaining the current methodology of amortizing assets over the lease term.

FERC Account 391.1 Office Furniture and Equipment (15 year amortization)

This account consists of miscellaneous office furniture such as desks, chairs, filing cabinets, and tables used for general utility service. There is approximately $840 thousand in this account. This account currently is recovered through general plant amortization over a 15 year period. This study recommends retention of a 15 year amortization period for this account.

FERC Account 391.2 Computer Equipment (5 year amortization)

This account consists of computer equipment used for general utility service. There is approximately $7.8 million in this account. This account currently is recovered through general plant amortization over a 5 year period. This study recommends retention of a 5 year amortization period for this account.

FERC Account 391.3 Data Handling Equipment (15 year amortization)

This account consists of data equipment used for general utility service. There is approximately $864 thousand in this account. This account currently is recovered through general plant amortization over a 15 year period. This study recommends retention of a 15 year amortization period for this account.

FERC Account 392.0 Transportation Equipment (15 year amortization)

This account consists of transportation equipment. In ETI's case, the $30 thousand plant balance contains an automobile and equipment trailer. This account currently is recovered through general plant amortization over a 15 year period. This study recommends retention of a 15 year amortization period for this account.

FERC Account 393.0 Stores Equipment (15 year amortization)

This account consists of miscellaneous tools such as forklifts, scales, and lifts used for general utility service. There is approximately $746 thousand million in this account. This account currently is recovered through general plant amortization over a 15 year period. This study recommends retention of a 15 year amortization period for this account.

FERC Account 394.0 Tools, Shop, and Garage Equipment (15 year amortization)

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 $11.9 million in this account. This account currently is recovered through general plant amortization over a 15 year period. This study recommends retention of a 15 year amortization period for this account.

FERC Account 395.0 Laboratory Equipment (10 year amortization)

This account consists of laboratory equipment used in general utility service. There is approximately $616 thousand in this account. This account currently is recovered through general plant amortization over a 10 year period. This study recommends retention of a 10 year amortization period for this account.