

**State of Tennessee**  
**Underground Storage Tank Fund**

Cash Flow Analysis  
as of March 1, 2018

September 2019



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*Commitment Beyond Numbers*



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September 18, 2019

Stan Boyd, Director  
Division of Underground Storage Tanks  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 12th Floor  
Nashville, TN 37243

SENT VIA E-MAIL

Dear Stan:

Enclosed is our cash flow report based on Pinnacle Actuarial Resources' actuarial study of the State of Tennessee Underground Storage Tank Fund as of March 1, 2018 and dated July 5, 2018.

This report is provided to the State of Tennessee, Division of Underground Storage Tanks by Laura A. Maxwell, FCAS, MAAA, CSPA and John Wade, ACAS, MAAA who meet the basic education standards of the Casualty Actuarial Society and the American Academy of Actuaries and the continuing education standards of the American Actuaries to make this statement of actuarial opinion.

We have enjoyed working with you on this assignment and look forward to discussing any questions you may have with this report.

Best regards,

A handwritten signature in blue ink that reads "Laura A. Maxwell".

Laura A. Maxwell, FCAS, MAAA, CSPA  
Senior Consulting Actuary

A handwritten signature in blue ink that reads "John E. Wade".

John E. Wade, ACAS, MAAA  
Independent Consultant, R&A Risk Professionals

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# State of Tennessee

## Underground Storage Tank Fund

*Cash Flow*

*Actuarial Study as of March 1, 2018*

### ***Purpose & Scope***

Pinnacle Actuarial Resources Inc. (Pinnacle) has been retained by the State of Tennessee, Department of Finance and Administration to supplement our analysis of historic levels of outstanding liabilities of the Tennessee Underground Storage Tank Fund (Fund) with a cash-flow analysis incorporating total revenue and operational expenses to give a clearer prediction of any unobligated balance on a nominal basis. This analysis relies upon our report dated July 5, 2018 for future expected payments of the base scenario.

### ***Distribution & Use***

This study has been conducted at the request of Tennessee Finance and Administration officials. The exhibits attached in support of our findings are an integral part of this report. These sections have been prepared so that our actuarial assumptions and judgments are documented. Judgments about the conclusions drawn in this report should be made only after considering the report in its entirety. We remain available to answer any questions that may arise regarding this report. We assume that the user of this report will seek such explanation on any matter in question.

Our conclusions are predicated on a number of assumptions as to future conditions and events. Those assumptions, which are documented in subsequent sections of this report, must be understood in order to place our conclusions in their appropriate context. In addition, our estimates and projections are subject to inherent limitations, which are also discussed in this report.

### ***Background***

The Tennessee General Assembly established the Tennessee Petroleum Underground Storage Tank Fund, which is codified in Tennessee Code Annotated, Section 68-215-110 (“the Storage Tank Fund”). The purpose of the Fund is to provide the necessary funds for the investigation and identification as well as for the reasonable and safe cleanup of releases from petroleum underground storage tanks, including monitoring and maintenance of petroleum sites within the State of Tennessee. The Fund may also be used to provide a mechanism to assist with the financial responsibility requirements for owners/operators of petroleum underground storage tanks, including cleanup of contamination and third party claims due to bodily injury and/or property damage caused by leaking petroleum underground storage tanks. The Fund is supported by the fees, civil penalties and damages collected pursuant to Tennessee Code Annotated, Title 68, Chapter 215, Subsections 109, 110, and 121.

The Fund's fiscal year runs from July 1 to June 30. Therefore, for example, fiscal year ending 2017 refers to the twelve month period from July 1, 2016 through June 30, 2017.

### ***Data***

In our analysis, we relied on data provided for our 2018 Actuarial Study dated July 5, 2018 as well as additional data provided by the Tennessee Division of Underground Storage Tanks (Division) regarding revenue and expenses.

Please note that for the purposes of this report, the accounting date (the date used to separate the paid versus unpaid claim estimates) and the valuation date (the date through which transactions are included in the data used to estimate the unpaid claim estimates) were March 1, 2018 for the 2018 Actuarial Study. We also relied upon budget information as of June 30, 2018 and May 31, 2019. The review date (the cutoff date for including information to the actuary) was June 24, 2019.

### ***Methodology***

In order to determine the cash flow and equity balances for fiscal years 2018-19 through 2025-26, payments, administrative costs and revenues must be projected. As most of fiscal year 2018-19 has been completed, we relied upon the revenue and expense estimates provided by the Division.

### **General Overview of Exhibits**

Exhibit 1 summarizes results from the other exhibits and includes projected cash flow and equity balances for the base scenario.

Exhibits 2 and 3 develop revenue and expenses for future fiscal years based on review of historical data.

Exhibit 4 summarizes payouts of outstanding liabilities for claims with release dates on or before June 30, 2026.

Exhibit 5 calculates the ultimate payments for claims with release dates after June 30, 2018.

Exhibit 6 calculates frequency and severity for historical claims in order to develop claims with release dates after June 30, 2018.

Exhibits 7 and 8 calculate fiscal year projected payments by claim year for water and non-water claims.

**Current Claims**

Exhibit 4, Column (2) summarizes the fiscal year payments for claims that occurred prior to June 30, 2018 from our analysis dated July 5, 2018. This includes actual payments for fiscal year end June 30, 2018 and estimated payments for fiscal year end June 30, 2019 from the Division.

**Projection of Future Claims**

The projection of future claims starts with a review of historical frequency and severity as determined in the calculation of current claims.

Exhibit 6, Page 1 calculates historical frequency (number of claims per 1,000 tanks) separately for water claims, non-water claims and combined. From the historical frequency, we select frequency for the 2018-19 fiscal year and a trend to be applied for future fiscal years.

Similarly Exhibit 6, Page 2 calculates historical severity (ultimate loss divided by claims) separately for water claims, non-water claims and combined. From the historical severity, we select severity for the 2018-19 fiscal year and a trend to be applied for future fiscal years.

Exhibit 5 combines the projected frequency and severity selections from Exhibit 6 to determine ultimate loss for 2018-19. According to the Division, tank counts have been decreasing by 92 tanks per year. Based on the Division’s comment and our review of historical data, we have selected a negative trend for tank counts. The resulting tank counts are shown in Column (2). Frequency and severity trends are applied to the 2018-19 estimate to derive future frequency and severity for water and non-water claims.

Selected Annual Trends			
	Water	Non-Water	Total
Exposure (Tanks)			-0.5%
Frequency	3.0%	-2.0%	
Severity	0.5%	2.0%	

**Claim Payment Projections by Fiscal Year**

Exhibits 7 and 8 determine the projected payments for the selected ultimate loss described above. Exhibits 7.3 and 8.3 are from our report dated July 5, 2018. The selected payment patterns in these exhibits are presented by claim year in Exhibits 7.2 and 8.2. Ultimate losses by claim year are multiplied by the payment patterns to determine projected payments by fiscal year in Exhibits 7.1 and 8.1.

**Administrative Costs Projections by Fiscal Year**

Based on historical cost data shown on the top of Exhibit 3, future costs are selected by fiscal year.

### **Revenue Projections by Fiscal Year**

Based on historical revenue data shown on the top of Exhibit 2, future revenue is selected by fiscal year. For the interest on fund balance (Column 13), we need to multiply the selected annual interest rate by the average cash balance. The beginning cash balance is from the cash flow exhibit and differs slightly from the estimated prior fiscal year ending balance because the ending balance does not include investment income. The estimated ending cash balance is calculated as the sum of the beginning cash balance (Column 10) and the total revenue (Column 8) less projected administrative costs and projected claim payments.

### ***Discussion & Analysis***

#### **Cash Flow**

In order to determine the cash flow and equity balances for fiscal years 2018-19 through 2025-26, payments, administrative costs and revenues must be projected as discussed in the *Methodology* section.

The projected cash balance in Exhibit 1, Page 1 is calculated as the prior cash balance less fiscal year claim payments and administrative costs plus projected revenue and investment income.

#### **Equity Balance**

The projected equity balances in Exhibit 1, Page 2 determine the difference between the projected cash balance and claim liabilities.

#### ***Findings***

The results of our cash flow analysis are summarized in Exhibit 1. Exhibit 1, Page 1, Cash Flow, displays projected cash flows, accounting for estimated fiscal year remediation payments, administrative costs, revenue and investment income. It can be noted in the exhibit that the starting point is the cash balance of the Fund as of 6/30/18, which was \$52.4 million. The cash flow balance is projected to decrease as of 6/30/19 then start to grow assuming the projected revenues are based on a constant 0.4 cents per gallon throughput fee.

However, one must keep in mind that cash flow is only one important metric. A second metric should also be considered, which we define as the "Equity" Balance as displayed in Exhibit 1, Page 2. The equity balance takes into consideration not only the revenues coming in and expenses going out each year, but it also accounts for any projected outstanding liability based on our actuarial estimates of the Fund at each fiscal year-end. As noted in column (5) of Exhibit 1, Page 2, we have projected

outstanding liabilities for all incidents at \$30.8 million as of 6/30/18. In consideration of the cash balance as of that same time from Exhibit 1, Page 1, that implies an equity balance of \$21.6 million, as shown in column (6) of Exhibit 1, Page 2. This equity balance will decrease as of 6/30/19 and then grow at the constant 0.4 cents per gallon throughput fee.

### ***Reliances & Limitations***

We have prepared this report in conformity with its intended use by persons technically competent in the areas addressed and for the stated purposes only. Judgments as to conclusions, methods, and data contained in this report should be made only after studying the report in its entirety. Furthermore, we are available to explain any matter presented herein.

Throughout our analysis we have, without audit or verification, relied on historical data and qualitative information provided by TN UST. We reviewed this data for consistency among data elements and with the data provided for our 2016 analysis. Ricky Cathey of the Division informed us that certain facilities in the data are not the responsibility of the Tennessee Underground Storage Tank Fund and thus need to be excluded from the analysis. We removed any facility ID beginning with a zero. Two examples are Tennessee Department of Transportation and National Guard facilities. Also, any federal funded sites were removed from the data. We believe the data to be reasonable and accurate. The accuracy of our results is dependent upon the accuracy and completeness of this underlying data. Therefore, any material discrepancies discovered in this data by TN UST or its auditor should be reported to us and this report amended accordingly, if warranted.

There is a limitation upon the accuracy of these estimates and projections in that there is an inherent uncertainty in any estimate of unpaid claims and financial projections. This uncertainty is due to the fact that the ultimate liability for claims is subject to the outcome of events yet to occur, e.g., the likelihood of claimants bringing suit, the size of awards, changes in the standards of liability, and the attitudes of claimants toward settlement of their claims. Also our financial projections are subject to a high degree of uncertainty because they require prediction of future economic, legal, and judicial conditions which are not knowable in advance. In our judgment, we have employed techniques and assumptions that are appropriate, and the conclusions presented herein are reasonable, given the information currently available. However, it should be recognized that future financial results will likely deviate, perhaps materially, from our estimates.

Our estimate is characterized by a high degree of uncertainty in estimating unpaid claims. Specifically, the variability affecting unpaid claims is chiefly driven by future legislation in Tennessee and regulatory standards affecting cleanup costs. The probability that actual future loss and loss expense payments may develop to levels well outside our estimates must be considered material.



# Index of Exhibits

<b>Exhibit</b>	<b>Page</b>	<b>Description</b>
1	1	Cash Flow Analysis
	2	Projected Equity Balance
2		Revenue
3		Expenses
4		Projected Payments
5		Ultimate Loss
6	1	Frequency – Number of Claims Per 1,000 Tanks
	2	Severity – Ultimate Loss per Claim at \$20,000 Deductible
7.1		Projected Paid - Water
7.2		Payout Patterns - Water
7.3		Cost - Water
8.1		Projected Paid – Non-Water
8.2		Payout Patterns – Non-Water
8.3		Cost – Non-Water

**Tennessee Underground Storage Tank Fund**

Cash Flow Analysis

Based on Data as of 03/01/2018

Fiscal Year End	Beginning Cash Balance	Projected Revenue	Projected Investment Income	Projected Administrative Costs	Projected Claim Payments	Ending Cash Balance
(1)	(2)	(3)	(4)	(5)	(6)	(7)
6/30/2018						\$52,411,968
6/30/2019	\$52,411,968	\$24,748,049	\$1,053,532	\$12,830,892	\$16,506,215	48,876,442
6/30/2020	48,876,442	24,537,900	749,700	12,363,900	9,972,656	51,827,486
6/30/2021	51,827,486	24,834,000	786,700	12,734,800	10,864,778	53,848,608
6/30/2022	53,848,608	25,134,500	811,800	13,116,900	11,471,530	55,206,477
6/30/2023	55,206,477	25,439,500	834,900	13,510,500	11,020,846	56,949,531
6/30/2024	56,949,531	25,749,100	863,800	13,915,800	10,560,957	59,085,674
6/30/2025	59,085,674	26,063,300	901,800	14,333,300	9,663,318	62,054,156
6/30/2026	62,054,156	26,382,200	945,500	14,763,300	9,661,757	64,956,799

Columns

- (2) Prior Col (7)
- (3) Exhibit 2 Col (8)
- (4) Exhibit 2 Col (9)
- (5) Exhibit 3 Col (5)
- (6) Exhibit 4 Col (6)
- (7) Exhibit 2 Col (11) for fiscal year end 6/30/2018 whereas subsequent fiscal year ends are [Col (2) + Col (3) + Col (4)] - [Col (5) + Col (6)]

**Tennessee Underground Storage Tank Fund**

Cash Flow Analysis

Based on Data as of 03/01/2018

Projected Equity Balance

Fiscal Year <u>End</u> (1)	Ending Cash <u>Balance</u> (2)	Projected Claim Liability <u>Current Claims</u> (3)	Projected Claim Liability <u>Future Claims</u> (4)	Projected Claim Liability <u>Total</u> (5)	Projected Equity <u>Balance</u> (6)
6/30/2018	\$52,411,968	\$30,783,014	\$0	\$30,783,014	\$21,628,954
6/30/2019	48,876,442	24,281,705	8,387,458	32,669,163	16,207,279
6/30/2020	51,827,486	17,771,743	14,479,213	32,250,956	19,576,530
6/30/2021	53,848,608	12,072,160	18,742,111	30,814,271	23,034,337
6/30/2022	55,206,477	7,122,128	21,701,455	28,823,583	26,382,895
6/30/2023	56,949,531	3,665,543	23,732,997	27,398,539	29,550,992
6/30/2024	59,085,674	1,403,040	25,106,077	26,509,117	32,576,557
6/30/2025	62,054,156	548,515	26,097,646	26,646,161	35,407,995
6/30/2026	64,956,799	127,953	26,945,612	27,073,564	37,883,234

Columns

- (2) Exhibit 1 Page 1 Col (7)
- (3) FY End 6/30/2018 from Summary Exhibit 2 of the TN UST analysis as of 3/1/2018 by Pinnacle Actuarial Resources, Inc.  
Exhibit 7.3 + Exhibit 8.3
- (4) Exhibit 7.1 + Exhibit 8.1
- (5) Col (3) + Col (4)
- (6) Col (2) - Col (5)



**Tennessee Underground Storage Tank Fund**

Exhibit 2

Cash Flow Analysis

Based on Data as of 03/01/2018

Revenue

Fiscal Year <u>Start</u> (1)	Fiscal Year <u>End</u> (2)	Petroleum Environmental Assurance <u>Fee</u> (3)	Tank Fees and Late <u>Penalties</u> (4)	Civil <u>Penalties</u> (5)	Misc. <u>Revenue</u> (6)	Inter- Departmental and Federal <u>Revenue</u> (7)	Total <u>Revenue</u> (8)	Interest on Fund <u>Balance</u> (9)	Beginning Cash <u>Balance</u> (10)	Ending Cash <u>Balance</u> (11)	Average Cash <u>Balance</u> (12)	Interest on Fund <u>Balance</u> (13)
7/1/2013	6/30/2014	\$17,764,786	\$2,016,724	\$155,315	\$2,573	\$2,910,370	\$22,849,768	\$42,785	\$47,714,640	\$47,576,666	\$47,645,653	0.09%
7/1/2014	6/30/2015	18,050,313	2,049,610	388,525	155,572	1,731,839	22,375,859	36,610	47,576,666	47,248,226	47,412,446	0.08%
7/1/2015	6/30/2016	18,888,364	2,139,225	311,737	6,414	2,804,619	24,150,359	110,043	47,248,226	47,301,795	47,275,011	0.23%
7/1/2016	6/30/2017	19,160,926	1,943,870	53,912	26,230	2,173,929	23,358,867	219,629	47,301,795	50,544,507	48,923,151	0.45%
7/1/2017	6/30/2018	19,438,927	2,089,048	160,140	44,513	2,498,413	24,231,041	661,628	50,544,507	52,411,968	51,478,238	1.29%
7/1/2018	6/30/2019	19,446,249	2,013,799	323,300	191,819	2,772,882	24,748,049	1,053,532	52,411,968	47,822,910	50,117,439	2.10%
Selection		1.50%										1.50%
Estimated												
7/1/2019	6/30/2020	19,737,900	2,000,000	250,000	50,000	2,500,000	24,537,900	749,700	48,876,442	51,077,786	49,977,114	
7/1/2020	6/30/2021	20,034,000	2,000,000	250,000	50,000	2,500,000	24,834,000	786,700	51,827,486	53,061,908	52,444,697	
7/1/2021	6/30/2022	20,334,500	2,000,000	250,000	50,000	2,500,000	25,134,500	811,800	53,848,608	54,394,677	54,121,643	
7/1/2022	6/30/2023	20,639,500	2,000,000	250,000	50,000	2,500,000	25,439,500	834,900	55,206,477	56,114,631	55,660,554	
7/1/2023	6/30/2024	20,949,100	2,000,000	250,000	50,000	2,500,000	25,749,100	863,800	56,949,531	58,221,874	57,585,703	
7/1/2024	6/30/2025	21,263,300	2,000,000	250,000	50,000	2,500,000	26,063,300	901,800	59,085,674	61,152,356	60,119,015	
7/1/2025	6/30/2026	21,582,200	2,000,000	250,000	50,000	2,500,000	26,382,200	945,500	62,054,156	64,011,299	63,032,728	

Columns

- (3) - (7) FY 13/14 - FY 18/19 based on client provided data  
Estimated 18/19 based on FY End 4/30/2019 budget.  
Estimated 19/20 & subsequent based on prior FY data
- (8) Col (3) + Col (4) + Col (5) + Col (6) + Col (7)
- (9) FY 13/14 - FY 18/19 based on client provided data  
Estimated 18/19 based on FY End 4/30/2019 budget.  
Estimated 19/20 & subsequent = Col (12) x [Col (13) selection of 1.50%]
- (10) FY 13/14 - FY 18/19 based on client provided data  
Estimated 18/19 based on FY End 4/30/2019 budget.  
Estimated 19/20 & subsequent = Exhibit 1 Page 1 Col (2)
- (11) FY 13/14 - FY 18/19 based on client provided data  
Estimated = Col (10) + Col (8) - Exhibit 1 Page 1, Col (5) - Exhibit 1 Page 1, Col (6)
- (12) [Col (10) + Col (11) / 2 ]
- (13) Col (9) / Col (12)

**Tennessee Underground Storage Tank Fund**

Exhibit 3

## Cash Flow Analysis

Based on Data as of 03/01/2018

## Expenses

<u>Fiscal</u> <u>Year</u> <u>Start</u> (1)	<u>Fiscal</u> <u>Year</u> <u>End</u> (2)	<u>Salaries</u> <u>and</u> <u>Benefits</u> (3)	<u>Operating</u> <u>Expenditures</u> (4)	<u>Total</u> <u>Expense</u> (5)
7/1/2013	6/30/2014	\$5,547,081	\$4,065,696	\$9,612,777
7/1/2014	6/30/2015	5,676,609	3,920,771	9,597,380
7/1/2015	6/30/2016	5,754,569	4,441,462	10,196,031
7/1/2016	6/30/2017	5,941,175	4,664,516	10,605,691
7/1/2017	6/30/2018	6,286,281	4,799,047	11,085,328
7/1/2018	6/30/2019	6,664,001	6,166,891	12,830,892
Estimated				
7/1/2019	6/30/2020	6,863,900	5,500,000	12,363,900
7/1/2020	6/30/2021	7,069,800	5,665,000	12,734,800
7/1/2021	6/30/2022	7,281,900	5,835,000	13,116,900
7/1/2022	6/30/2023	7,500,400	6,010,100	13,510,500
7/1/2023	6/30/2024	7,725,400	6,190,400	13,915,800
7/1/2024	6/30/2025	7,957,200	6,376,100	14,333,300
7/1/2025	6/30/2026	8,195,900	6,567,400	14,763,300

Columns

- (3) - (4) FY 13/14 - FY 18/19 based on client provided data  
Estimated 19/20 & subsequent based on prior FY data
- (5) Col (3) + Col (4)



**Tennessee Underground Storage Tank Fund**

Exhibit 4

Cash Flow Analysis

Based on Data as of 03/01/2018

Projected Payments

Fiscal Year End (1)	Current Claims (2)	Future Claims			Total Projected Payment (6)
		Water (3)	Non-Water (4)	Total (5)	
6/30/2018					\$10,118,760
6/30/2019					16,506,215
6/30/2020	\$5,521,913	\$3,993,735	\$457,009	\$4,450,744	9,972,656
6/30/2021	4,921,008	5,387,538	556,233	5,943,770	10,864,778
6/30/2022	4,392,973	6,436,270	642,288	7,078,558	11,471,530
6/30/2023	3,062,258	7,243,434	715,155	7,958,589	11,020,846
6/30/2024	1,984,358	7,801,696	774,904	8,576,600	10,560,957
6/30/2025	692,563	8,149,148	821,607	8,970,755	9,663,318
6/30/2026	356,163	8,450,261	855,334	9,305,595	9,661,757

Columns

- (2) Exhibit 7.3, Page 1 and Exhibit 8.3, Page 1 for accidents prior to 6/30/2018
- (3) Exhibit 7.1
- (4) Exhibit 8.1
- (5) Col (3) + Col (4)
- (6) Col (2) + Col (5)



Tennessee Underground Storage Tank Fund

Exhibit 5

Cash Flow Analysis

Based on Data as of 03/01/2018

Ultimate Loss

Claim Year (1)	Tanks (2)	Water			Non-Water		
		Projected Frequency (3)	Projected Severity (4)	Ultimate Loss (5)	Projected Frequency (6)	Projected Severity (7)	Ultimate Loss (8)
7/1/18 - 19	16,045	2.00	\$225,000	\$7,220,250	1.00	\$60,000	\$962,700
7/1/19 - 20	15,952	2.06	226,125	7,430,721	0.98	61,200	956,737
7/1/20 - 21	15,872	2.12	227,256	7,653,451	0.96	62,424	951,573
7/1/21 - 22	15,793	2.19	228,392	7,882,857	0.94	63,672	946,436
7/1/22 - 23	15,714	2.25	229,534	8,119,140	0.92	64,946	941,327
7/1/23 - 24	15,635	2.32	230,682	8,362,505	0.90	66,245	936,246
7/1/24 - 25	15,557	2.39	231,835	8,613,165	0.89	67,570	931,192
7/1/25 - 26	15,479	2.46	232,994	8,871,338	0.87	68,921	926,166
7/1/26 - 27	15,402	2.53	234,159	9,137,250	0.85	70,300	921,166
7/1/27 - 28	15,325	2.61	235,330	9,411,132	0.83	71,706	916,194
7/1/28 - 29	15,248	2.69	236,507	9,693,224	0.82	73,140	911,248
7/1/29 - 30	15,172	2.77	237,689	9,983,771	0.80	74,602	906,329
7/1/30 - 31	15,096	2.85	238,878	10,283,027	0.78	76,095	901,437
7/1/31 - 32	15,021	2.94	240,072	10,591,253	0.77	77,616	896,571
7/1/32 - 33	14,946	3.03	241,272	10,908,718	0.75	79,169	891,731
7/1/33 - 34	14,871	3.12	242,479	11,235,699	0.74	80,752	886,918
7/1/34 - 35	14,797	3.21	243,691	11,572,480	0.72	82,367	882,130
7/1/35 - 36	14,723	3.31	244,909	11,919,357	0.71	84,014	877,368
7/1/36 - 37	14,649	3.40	246,134	12,276,630	0.70	85,695	872,632
7/1/37 - 38	14,576	3.51	247,365	12,644,613	0.68	87,409	867,922
7/1/38 - 39	14,503	3.61	248,602	13,023,626	0.67	89,157	863,237
7/1/39 - 40	14,430	3.72	249,845	13,413,999	0.65	90,940	858,577
7/1/40 - 41	14,358	3.83	251,094	13,816,074	0.64	92,759	853,942
7/1/41 - 42	14,286	3.95	252,349	14,230,201	0.63	94,614	849,333
7/1/42 - 43	14,215	4.07	253,611	14,656,740	0.62	96,506	844,748
7/1/43 - 44	14,144	4.19	254,879	15,096,065	0.60	98,436	840,188
7/1/44 - 45	14,073	4.31	256,153	15,548,558	0.59	100,405	835,653
7/1/45 - 46	14,003	4.44	257,434	16,014,614	0.58	102,413	831,142

Columns

- (2) Exhibit 6 Page 1 Col (2) adjusted for -0.50% trend 18-19 and 19-20 provided by client
- (3) Exhibit 6 Page 1 Col (4) adjusted for trends of 3.00% (water) and -2.00% (non-water)
- (4) Exhibit 6 Page 2 Col (5) adjusted for trends of 0.50% (water) and 2.00% (non-water)
- (5) {[Col (2) x Col (3)] / 1,000} x Col (4)
- (6) Exhibit 6 Page 1 Col (6) adjusted for trend of -2.00%
- (7) Exhibit 6 Page 2 Col (9) adjusted for trend of 2.00%
- (8) {[Col (2) x Col (6)] / 1,000} x Col (7)

**Tennessee Underground Storage Tank Fund**

Cash Flow Analysis

Based on Data as of 03/01/2018

Frequency

Number of Claims Per 1,000 Tanks

Claim Year (1)	Tanks (2)	Water		Non-Water		Total	
		# of Claims with Payment (3)	Frequency (4)	# of Claims with Payment (5)	Frequency (6)	# of Claims with Payment (7)	Frequency (8)
7/1/90 - 91	31,703	34	1.07	8	0.25	42	1.32
7/1/91 - 92	29,418	102	3.47	26	0.88	128	4.35
7/1/92 - 93	27,456	232	8.45	44	1.60	276	10.05
7/1/93 - 94	26,085	268	10.27	36	1.38	304	11.65
7/1/94 - 95	25,047	198	7.91	23	0.92	221	8.82
7/1/95 - 96	24,064	170	7.06	28	1.16	198	8.23
7/1/96 - 97	23,120	188	8.13	36	1.56	224	9.69
7/1/97 - 98	21,399	206	9.63	54	2.52	260	12.15
7/1/98 - 99	19,555	111	5.68	41	2.10	152	7.77
7/1/99 - 00	18,669	127	6.80	50	2.68	177	9.48
7/1/00 - 01	18,499	90	4.87	20	1.08	110	5.95
7/1/01 - 02	18,356	91	4.96	31	1.69	122	6.65
7/1/02 - 03	18,140	121	6.67	26	1.43	147	8.10
7/1/03 - 04	17,918	58	3.24	17	0.95	75	4.19
7/1/04 - 05	17,697	74	4.18	34	1.92	108	6.10
7/1/05 - 06	17,577	14	0.80	23	1.31	37	2.11
7/1/06 - 07	17,338	14	0.81	25	1.44	39	2.25
7/1/07 - 08	17,250	9	0.52	16	0.93	25	1.45
7/1/08 - 09	17,005	20	1.18	11	0.65	31	1.82
7/1/09 - 10	16,843	18	1.07	13	0.77	31	1.84
7/1/10 - 11	16,703	16	0.96	15	0.90	31	1.86
7/1/11 - 12	16,578	10	0.60	5	0.30	15	0.90
7/1/12 - 13	16,465	12	0.73	15	0.91	27	1.64
7/1/13 - 14	16,423	16	0.97	15	0.91	31	1.89
7/1/14 - 15	16,368	15	0.92	13	0.79	28	1.71
7/1/15 - 16	16,304	17	1.04	9	0.55	26	1.59
7/1/16 - 17	16,184	23	1.42	7	0.43	30	1.85
7/1/17 - 3/1/18	16,219	22	1.36	7	0.43	29	1.79

Averages

All Years			3.74		1.16		4.90
Last 10 years			1.02		0.67		1.69
Last 5 years			1.14		0.62		1.77
Selected			2.00		1.00		3.00

Trends

All Years	-2.2%		-8.6%		-2.9%		-6.9%
Last 10 years	-0.5%		3.2%		-4.3%		0.7%
Last 5 years	-0.4%		11.6%		-19.0%		-0.3%
Selected	-0.5%		3.0%		-2.0%		1.0%

Columns

- (2) Table 1a Col (4) of the TN UST analysis as of 3/1/2018 by Pinnacle Actuarial Resources, Inc.
- (3) Sum of Table 7b-1 Col (1) and Table 7b-2 Col (1) of the TN UST analysis as of 3/1/2018 by Pinnacle Actuarial Resources, Inc.
- (4) Col (3) / Col (2) x 1,000
- (5) Sum of Table 7b-3 Col (1) and Table 7b-4 Col (1) of the TN UST analysis as of 3/1/2018 by Pinnacle Actuarial Resources, Inc.
- (6) Col (5) / Col (2) x 1,000
- (7) Col (3) + Col (5)
- (8) Col (7) / Col (2) x 1,000



**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Severity Per Claim  
Current \$20,000 Deductible

Claim Year (1)	Water				Non-Water			
	# of Claims with Payment (2)	Paid + Pending (3)	Future Payments (4)	Average Severity (5)	# of Claims with Payment (6)	Paid + Pending (7)	Future Payments (8)	Average Severity (9)
7/1/90 - 91	34	\$12,378,176	\$0	\$364,064	8	\$313,727	\$0	\$39,216
7/1/91 - 92	102	25,966,751	0	254,576	26	2,186,870	0	84,110
7/1/92 - 93	232	57,293,602	0	246,955	44	3,293,398	0	74,850
7/1/93 - 94	268	52,059,185	364,233	195,610	36	1,700,611	0	47,239
7/1/94 - 95	198	33,273,037	0	168,046	23	421,865	0	18,342
7/1/95 - 96	170	25,619,369	0	150,702	28	815,671	0	29,131
7/1/96 - 97	188	30,537,609	816,667	166,778	36	247,422	0	6,873
7/1/97 - 98	206	23,653,758	408,333	116,806	54	607,344	0	11,247
7/1/98 - 99	111	13,454,406	816,667	128,568	41	696,757	0	16,994
7/1/99 - 00	127	17,587,382	408,333	141,699	50	409,986	0	8,200
7/1/00 - 01	90	10,626,282	816,667	127,144	20	112,183	0	5,609
7/1/01 - 02	91	12,080,000	2,041,667	155,183	31	237,315	0	7,655
7/1/02 - 03	121	13,280,369	0	109,755	26	174,790	0	6,723
7/1/03 - 04	58	6,403,079	0	110,398	17	1,329,665	0	78,216
7/1/04 - 05	74	4,373,854	408,333	64,624	34	1,203,941	0	35,410
7/1/05 - 06	14	3,797,139	0	271,224	23	1,632,827	0	70,992
7/1/06 - 07	14	3,292,999	816,667	293,548	25	1,163,195	0	46,528
7/1/07 - 08	9	1,167,379	408,333	175,079	16	281,967	0	17,623
7/1/08 - 09	20	2,622,532	816,667	171,960	11	773,269	18,020	71,935
7/1/09 - 10	18	3,663,183	1,633,333	294,251	13	309,285	0	23,791
7/1/10 - 11	16	3,083,194	1,225,000	269,262	15	173,164	55,760	15,262
7/1/11 - 12	10	913,010	408,333	132,134	5	795,721	51,850	169,514
7/1/12 - 13	12	1,986,088	2,041,667	335,646	15	1,563,625	80,240	109,591
7/1/13 - 14	16	1,625,422	1,633,333	203,672	15	910,785	164,560	71,690
7/1/14 - 15	15	1,543,734	2,450,000	266,249	13	547,996	99,110	49,777
7/1/15 - 16	17	789,127	1,633,333	142,498	9	154,916	0	17,213
7/1/16 - 17	23	1,142,743	4,900,000	262,728	7	101,056	139,315	34,339
7/1/17 - 3/1/18	22	391,209	4,910,535	240,988	7	141,129	485,403	89,504
<u>Averages</u>								
All Years				\$198,577				\$44,913
Last 10 years				231,939				65,262
Last 5 years				223,227				52,505
Selected				\$225,000				\$60,000
<u>Trends</u>								
All Years				0.7%				3.2%
Last 10 years				0.4%				0.6%
Last 5 years				3.3%				0.7%
Selected				0.5%				2.0%
<u>Columns</u>								
(2)	Exhibit 6 Page 1 Col (3)							
(3)	Sum of Table 7b-1 Col (3) and Table 7b-2 Col (3) of the TN UST analysis as of 3/1/2018 by Pinnacle Actuarial Resources, Inc.							
(5)	[Col (3) + Col (4)] / Col (2)							
(6)	Exhibit 6 Page 1 Col (5)							
(7)	Sum of Table 7b-3 Col (3) and Table 7b-4 Col (3) of the TN UST analysis as of 3/1/2018 by Pinnacle Actuarial Resources, Inc.							
(8)	Table 10-2 - Base Col (2) of the TN UST analysis as of 3/1/2018 by Pinnacle Actuarial Resources, Inc.							
(9)	Col (7) / Col (6)							

**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Projected Paid  
Water

Claim Year	Liability	Fiscal Year																			
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
7/1/18 - 19	\$7,220,250	\$2,220,739	\$1,708,261	\$1,275,502	\$888,296	\$614,974	\$341,652	\$113,884	\$56,942	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/19 - 20	7,430,721		2,285,474	1,758,057	1,312,683	914,190	632,901	351,611	117,204	58,602	0	0	0	0	0	0	0	0	0	0	0
7/1/20 - 21	7,653,451			2,353,979	1,810,753	1,352,029	941,592	651,871	362,151	120,717	60,358	0	0	0	0	0	0	0	0	0	0
7/1/21 - 22	7,882,857				2,424,538	1,865,029	1,392,555	969,815	671,411	373,006	124,335	62,168	0	0	0	0	0	0	0	0	0
7/1/22 - 23	8,119,140					2,497,212	1,920,932	1,434,296	998,885	691,536	384,186	128,062	64,031	0	0	0	0	0	0	0	0
7/1/23 - 24	8,362,505						2,572,064	1,978,511	1,477,288	1,028,826	712,264	395,702	131,901	65,950	0	0	0	0	0	0	0
7/1/24 - 25	8,613,165							2,649,160	2,037,815	1,521,569	1,059,664	733,613	407,563	135,854	67,927	0	0	0	0	0	0
7/1/25 - 26	8,871,338								2,728,566	2,098,897	1,567,176	1,091,426	755,603	419,779	139,926	69,963	0	0	0	0	0
7/1/26 - 27	9,137,250									2,810,353	2,161,810	1,614,151	1,124,141	778,252	432,362	144,121	72,060	0	0	0	0
7/1/27 - 28	9,411,132										2,894,591	2,226,609	1,662,534	1,157,836	801,579	445,322	148,441	74,220	0	0	0
7/1/28 - 29	9,693,224											2,981,354	2,293,350	1,712,368	1,192,542	825,606	458,670	152,890	76,445	0	0
7/1/29 - 30	9,983,771												3,070,718	2,362,091	1,763,695	1,228,287	850,353	472,418	157,473	78,736	0
7/1/30 - 31	10,283,027													3,162,761	2,432,893	1,816,560	1,265,104	875,841	486,579	162,193	81,096
7/1/31 - 32	10,591,253														3,257,562	2,505,817	1,871,010	1,303,025	902,094	501,163	167,054
7/1/32 - 33	10,908,718															3,355,205	2,580,927	1,927,092	1,342,082	929,134	516,185
7/1/33 - 34	11,235,699																3,455,775	2,658,288	1,984,855	1,382,310	956,984
7/1/34 - 35	11,572,480																	3,559,359	2,737,969	2,044,350	1,423,744
7/1/35 - 36	11,919,357																		3,666,048	2,820,037	2,105,628
7/1/36 - 37	12,276,630																			3,775,935	2,904,566
7/1/37 - 38	12,644,613																				3,889,116
7/1/38 - 39	13,023,626																				
7/1/39 - 40	13,413,999																				
7/1/40 - 41	13,816,074																				
7/1/41 - 42	14,230,201																				
7/1/42 - 43	14,656,740																				
7/1/43 - 44	15,096,065																				
7/1/44 - 45	15,548,558																				
7/1/45 - 46	16,014,614																				
<b>Total</b>	<b>309,610,461</b>	<b>2,220,739</b>	<b>3,993,735</b>	<b>5,387,538</b>	<b>6,436,270</b>	<b>7,243,434</b>	<b>7,801,696</b>	<b>8,149,148</b>	<b>8,450,261</b>	<b>8,703,505</b>	<b>8,964,386</b>	<b>9,233,086</b>	<b>9,509,841</b>	<b>9,794,891</b>	<b>10,088,486</b>	<b>10,390,881</b>	<b>10,702,340</b>	<b>11,023,134</b>	<b>11,353,544</b>	<b>11,693,858</b>	<b>12,044,373</b>

Notes  
Liability Exhibit 5 Col (5)  
Paid Amts Liability x Exhibit 7.2

Tennessee Underground Storage Tank Fund  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Projected Paid  
Water

Claim Year	Liability	Fiscal Year																			
		2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058
7/1/18 - 19	\$7,220,250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/19 - 20	7,430,721	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/20 - 21	7,653,451	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/21 - 22	7,882,857	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/22 - 23	8,119,140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/23 - 24	8,362,505	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/24 - 25	8,613,165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/25 - 26	8,871,338	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/26 - 27	9,137,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/27 - 28	9,411,132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/28 - 29	9,693,224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/29 - 30	9,983,771	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/30 - 31	10,283,027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/31 - 32	10,591,253	83,527	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/32 - 33	10,908,718	172,062	86,031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/33 - 34	11,235,699	531,658	177,219	88,610	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/34 - 35	11,572,480	985,669	547,594	182,531	91,266	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/35 - 36	11,919,357	1,466,419	1,015,213	564,007	188,002	94,001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/36 - 37	12,276,630	2,168,742	1,510,374	1,045,644	580,913	193,638	96,819	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/37 - 38	12,644,613	2,991,628	2,233,749	1,555,646	1,076,986	598,326	199,442	99,721	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/38 - 39	13,023,626	4,005,689	3,081,300	2,300,704	1,602,276	1,109,268	616,260	205,420	102,710	0	0	0	0	0	0	0	0	0	0	0	0
7/1/39 - 40	13,413,999		4,125,757	3,173,659	2,369,666	1,650,303	1,142,517	634,732	211,577	105,789	0	0	0	0	0	0	0	0	0	0	0
7/1/40 - 41	13,816,074			4,249,423	3,268,787	2,440,694	1,699,769	1,176,763	653,757	217,919	108,960	0	0	0	0	0	0	0	0	0	0
7/1/41 - 42	14,230,201				4,376,797	3,366,767	2,513,852	1,750,719	1,212,036	673,353	224,451	112,226	0	0	0	0	0	0	0	0	0
7/1/42 - 43	14,656,740					4,507,988	3,467,683	2,589,203	1,803,195	1,248,366	693,537	231,179	115,589	0	0	0	0	0	0	0	0
7/1/43 - 44	15,096,065						4,643,111	3,571,624	2,666,813	1,857,245	1,285,785	714,325	238,108	119,054	0	0	0	0	0	0	0
7/1/44 - 45	15,548,558							4,782,285	3,678,681	2,746,748	1,912,914	1,324,325	735,736	245,245	122,623	0	0	0	0	0	0
7/1/45 - 46	16,014,614								4,925,631	3,788,947	2,829,080	1,970,252	1,364,021	757,789	252,596	126,298	0	0	0	0	0
Total	309,610,461	12,405,394	12,777,236	13,160,225	13,554,692	13,960,984	14,379,454	14,810,468	15,254,400	10,638,367	7,054,726	4,352,307	2,453,455	1,122,089	375,219	126,298	0	0	0	0	0

Notes  
Liability Exhibit 5 Col (5)  
Paid Amts Liability x Exhibit 7.2

**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Projected Paid  
Water

Claim Year	Liability	Fiscal Year																				
		2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	
7/1/18 - 19	\$7,220,250																					
7/1/19 - 20	7,430,721																					
7/1/20 - 21	7,653,451																					
7/1/21 - 22	7,882,857																					
7/1/22 - 23	8,119,140																					
7/1/23 - 24	8,362,505																					
7/1/24 - 25	8,613,165																					
7/1/25 - 26	8,871,338																					
7/1/26 - 27	9,137,250																					
7/1/27 - 28	9,411,132																					
7/1/28 - 29	9,693,224																					
7/1/29 - 30	9,983,771																					
7/1/30 - 31	10,283,027	0																				
7/1/31 - 32	10,591,253	0	0																			
7/1/32 - 33	10,908,718	0	0	0																		
7/1/33 - 34	11,235,699	0	0	0	0																	
7/1/34 - 35	11,572,480	0	0	0	0	0																
7/1/35 - 36	11,919,357	0	0	0	0	0	0															
7/1/36 - 37	12,276,630	0	0	0	0	0	0	0														
7/1/37 - 38	12,644,613	0	0	0	0	0	0	0	0													
7/1/38 - 39	13,023,626	0	0	0	0	0	0	0	0	0												
7/1/39 - 40	13,413,999	0	0	0	0	0	0	0	0	0	0											
7/1/40 - 41	13,816,074	0	0	0	0	0	0	0	0	0	0	0										
7/1/41 - 42	14,230,201	0	0	0	0	0	0	0	0	0	0	0	0									
7/1/42 - 43	14,656,740	0	0	0	0	0	0	0	0	0	0	0	0	0								
7/1/43 - 44	15,096,065	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
7/1/44 - 45	15,548,558	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
7/1/45 - 46	16,014,614	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
<b>Total</b>	<b>309,610,461</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Notes  
Liability Exhibit 5 Col (5)  
Paid Amts Liability x Exhibit 7.2

**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Payout Patterns  
Water

Claim Year	Fiscal Year																			
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
7/1/18 - 19	30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/19 - 20		30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/20 - 21			30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/21 - 22				30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/22 - 23					30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/23 - 24						30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/24 - 25							30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/25 - 26								30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/26 - 27									30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%
7/1/27 - 28										30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%
7/1/28 - 29											30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%
7/1/29 - 30												30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%
7/1/30 - 31													30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%
7/1/31 - 32														30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%
7/1/32 - 33															30.76%	23.66%	17.67%	12.30%	8.52%	4.73%
7/1/33 - 34																30.76%	23.66%	17.67%	12.30%	8.52%
7/1/34 - 35																	30.76%	23.66%	17.67%	12.30%
7/1/35 - 36																		30.76%	23.66%	17.67%
7/1/36 - 37																			30.76%	23.66%
7/1/37 - 38																				30.76%
7/1/38 - 39																				
7/1/39 - 40																				
7/1/40 - 41																				
7/1/41 - 42																				
7/1/42 - 43																				
7/1/43 - 44																				
7/1/44 - 45																				
7/1/45 - 46																				

Notes  
Exhibit 7.3 Row (3) Incremental Paid % / Exhibit 7.3 Row (4) Cumulative UnPaid %

**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Payout Patterns  
Water

Claim Year	Fiscal Year																			
	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058
7/1/18 - 19	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%										
7/1/19 - 20	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%									
7/1/20 - 21	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%								
7/1/21 - 22	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%							
7/1/22 - 23	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%						
7/1/23 - 24	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					
7/1/24 - 25	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
7/1/25 - 26	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
7/1/26 - 27	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
7/1/27 - 28	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
7/1/28 - 29	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/29 - 30	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/30 - 31	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/31 - 32	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/32 - 33	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/33 - 34	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/34 - 35	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/35 - 36	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/36 - 37	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/37 - 38	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/38 - 39	30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/39 - 40		30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/40 - 41			30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/41 - 42				30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/42 - 43					30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/43 - 44						30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/44 - 45							30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/45 - 46								30.76%	23.66%	17.67%	12.30%	8.52%	4.73%	1.58%	0.79%	0.00%	0.00%	0.00%	0.00%	0.00%

Notes  
Exhibit 7.3 Row (3) Incremental Paid % / Exhibit 7.3 Row (4) Cumulative UnPaid %

**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Payout Patterns  
Water

Claim Year	Fiscal Year																				
	<u>2059</u>	<u>2060</u>	<u>2061</u>	<u>2062</u>	<u>2063</u>	<u>2064</u>	<u>2065</u>	<u>2066</u>	<u>2067</u>	<u>2068</u>	<u>2069</u>	<u>2070</u>	<u>2071</u>	<u>2072</u>	<u>2073</u>	<u>2074</u>	<u>2075</u>	<u>2076</u>	<u>2077</u>	<u>2078</u>	
7/1/18 - 19																					
7/1/19 - 20																					
7/1/20 - 21																					
7/1/21 - 22																					
7/1/22 - 23																					
7/1/23 - 24																					
7/1/24 - 25																					
7/1/25 - 26																					
7/1/26 - 27																					
7/1/27 - 28																					
7/1/28 - 29																					
7/1/29 - 30																					
7/1/30 - 31	0.00%																				
7/1/31 - 32	0.00%	0.00%																			
7/1/32 - 33	0.00%	0.00%	0.00%																		
7/1/33 - 34	0.00%	0.00%	0.00%	0.00%																	
7/1/34 - 35	0.00%	0.00%	0.00%	0.00%	0.00%																
7/1/35 - 36	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%															
7/1/36 - 37	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%														
7/1/37 - 38	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%													
7/1/38 - 39	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%												
7/1/39 - 40	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%											
7/1/40 - 41	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%										
7/1/41 - 42	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%									
7/1/42 - 43	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%								
7/1/43 - 44	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%							
7/1/44 - 45	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%						
7/1/45 - 46	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					

Notes  
Exhibit 7.3 Row (3) Incremental Paid % / Exhibit 7.3 Row (4) Cumulative UnPaid %

**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Cost  
Water

Claim Year	Fiscal Year																			
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
7/1/90 - 91	\$0	\$0	\$0																	
7/1/91 - 92	0	0	0	0																
7/1/92 - 93	0	0	0	0	0															
7/1/93 - 94	40,833	73,500	73,500	68,600	63,700	44,100														
7/1/94 - 95	0	0	0	0	0	0	0													
7/1/95 - 96	0	0	0	0	0	0	0	0												
7/1/96 - 97	81,667	147,000	147,000	137,200	127,400	88,200	58,800	19,600	9,800											
7/1/97 - 98	40,833	73,500	73,500	68,600	63,700	44,100	29,400	9,800	4,900	0										
7/1/98 - 99	81,667	147,000	147,000	137,200	127,400	88,200	58,800	19,600	9,800	0	0									
7/1/99 - 00	40,833	73,500	73,500	68,600	63,700	44,100	29,400	9,800	4,900	0	0	0								
7/1/00 - 01	81,667	147,000	147,000	137,200	127,400	88,200	58,800	19,600	9,800	0	0	0	0							
7/1/01 - 02	204,167	367,500	367,500	343,000	318,500	220,500	147,000	49,000	24,500	0	0	0	0	0						
7/1/02 - 03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
7/1/03 - 04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7/1/04 - 05	40,833	73,500	73,500	68,600	63,700	44,100	29,400	9,800	4,900	0	0	0	0	0	0	0	0			
7/1/05 - 06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/1/06 - 07	81,667	147,000	147,000	137,200	127,400	88,200	58,800	19,600	9,800	0	0	0	0	0	0	0	0	0	0	0
7/1/07 - 08	40,833	73,500	73,500	68,600	63,700	44,100	29,400	9,800	4,900	0	0	0	0	0	0	0	0	0	0	0
7/1/08 - 09	81,667	147,000	147,000	137,200	127,400	88,200	58,800	19,600	9,800	0	0	0	0	0	0	0	0	0	0	0
7/1/09 - 10	163,333	294,000	294,000	274,400	254,800	176,400	117,600	39,200	19,600	0	0	0	0	0	0	0	0	0	0	0
7/1/10 - 11	122,500	220,500	220,500	205,800	191,100	132,300	88,200	29,400	14,700	0	0	0	0	0	0	0	0	0	0	0
7/1/11 - 12	40,833	73,500	73,500	68,600	63,700	44,100	29,400	9,800	4,900	0	0	0	0	0	0	0	0	0	0	0
7/1/12 - 13	204,167	367,500	367,500	343,000	318,500	220,500	147,000	49,000	24,500	0	0	0	0	0	0	0	0	0	0	0
7/1/13 - 14	163,333	294,000	294,000	274,400	254,800	176,400	117,600	39,200	19,600	0	0	0	0	0	0	0	0	0	0	0
7/1/14 - 15	245,000	441,000	441,000	411,600	382,200	264,600	176,400	58,800	29,400	0	0	0	0	0	0	0	0	0	0	0
7/1/15 - 16	163,333	294,000	294,000	274,400	254,800	176,400	117,600	39,200	19,600	0	0	0	0	0	0	0	0	0	0	0
7/1/16 - 17	490,000	882,000	882,000	823,200	764,400	529,200	352,800	117,600	58,800	0	0	0	0	0	0	0	0	0	0	0
7/1/17 - 18	716,625	1,289,925	992,250	740,880	515,970	357,210	198,450	66,150	33,075	0	0	0	0	0	0	0	0	0	0	0
7/1/18 - 19		1,745,625	907,725	698,250	521,360	363,090	251,370	139,650	46,550	23,275	0	0	0	0	0	0	0	0	0	0
7/1/17 - 18 Payment Pattern		14.59%	40.86%	61.07%	76.16%	86.66%	93.94%	97.98%	99.33%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
7/1/18 - 19 Payment Pattern		37.17%	56.49%	71.36%	82.46%	90.19%	95.54%	98.51%	99.50%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Selected Payment Pattern		25.88%	48.68%	66.21%	79.31%	88.43%	94.74%	98.25%	99.42%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Unpaid		74.12%	51.32%	33.79%	20.69%	11.57%	5.26%	1.75%	0.58%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

**Notes**

Amounts from Table 9a of the TN UST analysis as of 3/1/2018 by Pinnacle Actuarial Resources, Inc.

- (1) In claim year 7/1/17 - 18, the cumulative sum of each Fiscal Year Cost divided by the Total Cost
- (2) In claim year 7/1/18 - 19, the cumulative sum of each Fiscal Year Cost divided by the Total Cost
- (3) Based on (1) and (2)
- (4) 1 - (3)



**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Cost  
Water

Claim Year	Fiscal Year											Total
	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	
7/1/90 - 91												\$0
7/1/91 - 92												0
7/1/92 - 93												0
7/1/93 - 94												364,233
7/1/94 - 95												0
7/1/95 - 96												0
7/1/96 - 97												816,667
7/1/97 - 98												408,333
7/1/98 - 99												816,667
7/1/99 - 00												408,333
7/1/00 - 01												816,667
7/1/01 - 02												2,041,667
7/1/02 - 03												0
7/1/03 - 04												0
7/1/04 - 05												408,333
7/1/05 - 06												0
7/1/06 - 07												816,667
7/1/07 - 08												408,333
7/1/08 - 09	0											816,667
7/1/09 - 10	0	0										1,633,333
7/1/10 - 11	0	0	0									1,225,000
7/1/11 - 12	0	0	0	0								408,333
7/1/12 - 13	0	0	0	0	0							2,041,667
7/1/13 - 14	0	0	0	0	0	0						1,633,333
7/1/14 - 15	0	0	0	0	0	0	0					2,450,000
7/1/15 - 16	0	0	0	0	0	0	0	0				1,633,333
7/1/16 - 17	0	0	0	0	0	0	0	0	0			4,900,000
7/1/17 - 18	0	0	0	0	0	0	0	0	0	0		4,910,535
7/1/18 - 19	0	0	0	0	0	0	0	0	0	0	0	4,696,895
7/1/17 - 18 Payment Pattern	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
7/1/18 - 19 Payment Pattern	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Selected Payment Pattern	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Unpaid	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Notes

Amounts from Table 9a of the TN UST analysis as of 3/1/2018 by Pinnacle Actuarial Resources, Inc.

- (1) In claim year 7/1/17 - 18, the cumulative sum of each Fiscal Year Cost divided by the Total Cost
- (2) In claim year 7/1/18 - 19, the cumulative sum of each Fiscal Year Cost divided by the Total Cost
- (3) Based on (1) and (2)
- (4) 1 - (3)

**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Projected Paid  
NonWater

Claim Year	Liability	Fiscal Year																			
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
7/1/18 - 19	\$962,700	\$229,214	\$229,214	\$101,873	\$89,139	\$76,405	\$63,671	\$50,937	\$38,202	\$38,202	\$25,468	\$12,734	\$2,547	\$2,547	\$2,547	\$0	\$0	\$0	\$0	\$0	\$0
7/1/19 - 20	956,737		227,795	227,795	101,242	88,587	75,932	63,276	50,621	37,966	37,966	25,311	12,655	2,531	2,531	2,531	0	0	0	0	0
7/1/20 - 21	951,573			226,565	100,696	88,109	75,522	62,935	50,348	37,761	37,761	25,174	12,587	2,517	2,517	2,517	2,517	0	0	0	0
7/1/21 - 22	946,436			225,342	225,342	100,152	87,633	75,114	62,595	50,076	37,557	37,557	25,038	12,519	2,504	2,504	2,504	0	0	0	0
7/1/22 - 23	941,327				224,126	224,126	99,611	87,160	74,709	62,257	49,806	37,354	37,354	24,903	12,451	2,490	2,490	2,490	0	0	0
7/1/23 - 24	936,246				222,916	222,916	99,074	86,689	74,305	61,921	49,537	37,153	37,153	24,768	12,384	2,477	2,477	2,477	2,477	0	0
7/1/24 - 25	931,192				221,712	221,712	98,539	86,221	73,904	61,587	49,269	36,952	36,952	24,635	12,317	2,463	2,463	2,463	2,463	2,463	2,463
7/1/25 - 26	926,166				220,516	220,516	98,007	85,756	73,505	61,254	49,003	36,753	36,753	24,502	12,251	2,450	2,450	2,450	2,450	2,450	2,450
7/1/26 - 27	921,166				219,325	219,325	97,478	85,293	73,108	60,924	48,739	36,554	36,554	24,369	12,185	2,437	2,437	2,437	2,437	2,437	2,437
7/1/27 - 28	916,194				218,141	218,141	96,952	84,833	72,714	60,595	48,476	36,357	36,357	24,238	12,119	2,423	2,423	2,423	2,423	2,423	2,423
7/1/28 - 29	911,248				216,964	216,964	96,428	84,375	72,321	60,268	48,214	36,161	36,161	24,107	12,053	2,409	2,409	2,409	2,409	2,409	2,409
7/1/29 - 30	906,329				215,793	215,793	95,908	83,919	71,931	60,003	48,003	36,003	36,003	24,003	11,987	2,395	2,395	2,395	2,395	2,395	2,395
7/1/30 - 31	901,437				214,628	214,628	95,390	83,466	71,543	59,619	47,695	35,771	35,771	23,876	11,921	2,381	2,381	2,381	2,381	2,381	2,381
7/1/31 - 32	896,571				213,469	213,469	94,875	83,016	71,156	59,297	47,347	35,442	35,442	23,751	11,855	2,367	2,367	2,367	2,367	2,367	2,367
7/1/32 - 33	891,731				212,317	212,317	94,363	82,568	70,772	58,977	47,018	35,113	35,113	23,626	11,789	2,353	2,353	2,353	2,353	2,353	2,353
7/1/33 - 34	886,918				211,171	211,171	93,854	82,122	70,386	58,648	46,689	34,784	34,784	23,501	11,723	2,339	2,339	2,339	2,339	2,339	2,339
7/1/34 - 35	882,130				210,031	210,031	93,347	81,679	69,991	58,319	46,360	34,455	34,455	23,376	11,657	2,325	2,325	2,325	2,325	2,325	2,325
7/1/35 - 36	877,368				208,897	208,897	92,830	81,190	69,642	57,950	46,031	34,126	34,126	23,251	11,591	2,311	2,311	2,311	2,311	2,311	2,311
7/1/36 - 37	872,632				207,770	207,770	92,323	80,701	69,295	57,561	45,702	33,797	33,797	23,126	11,525	2,297	2,297	2,297	2,297	2,297	2,297
7/1/37 - 38	867,922				206,648	206,648	91,794	80,212	68,850	57,172	45,373	33,468	33,468	23,001	11,459	2,283	2,283	2,283	2,283	2,283	2,283
7/1/38 - 39	863,237				205,526	205,526	91,287	79,723	68,401	56,743	45,044	33,139	33,139	22,876	11,393	2,269	2,269	2,269	2,269	2,269	2,269
7/1/39 - 40	858,577				204,404	204,404	90,780	79,234	67,932	56,314	44,715	32,810	32,810	22,751	11,327	2,255	2,255	2,255	2,255	2,255	2,255
7/1/40 - 41	853,942				203,282	203,282	90,273	78,745	67,463	55,885	44,386	32,481	32,481	22,626	11,261	2,241	2,241	2,241	2,241	2,241	2,241
7/1/41 - 42	849,333				202,160	202,160	89,766	78,256	67,014	55,456	44,057	32,152	32,152	22,501	11,195	2,227	2,227	2,227	2,227	2,227	2,227
7/1/42 - 43	844,748				201,038	201,038	89,259	77,767	66,565	55,027	43,728	31,823	31,823	22,376	11,129	2,213	2,213	2,213	2,213	2,213	2,213
7/1/43 - 44	840,188				200,000	200,000	88,750	77,278	66,076	54,598	43,399	31,494	31,494	22,251	11,063	2,199	2,199	2,199	2,199	2,199	2,199
7/1/44 - 45	835,653				198,962	198,962	88,243	76,789	65,585	54,169	43,070	31,165	31,165	22,126	11,000	2,185	2,185	2,185	2,185	2,185	2,185
7/1/45 - 46	831,142				197,924	197,924	87,736	76,300	65,096	53,740	42,741	30,836	30,836	22,001	10,934	2,171	2,171	2,171	2,171	2,171	2,171
<b>Total</b>	<b>25,060,841</b>	<b>229,214</b>	<b>457,009</b>	<b>556,233</b>	<b>642,288</b>	<b>715,155</b>	<b>774,904</b>	<b>821,607</b>	<b>855,334</b>	<b>888,889</b>	<b>909,528</b>	<b>917,332</b>	<b>914,917</b>	<b>912,523</b>	<b>910,142</b>	<b>905,227</b>	<b>900,341</b>	<b>895,481</b>	<b>890,647</b>	<b>885,839</b>	<b>881,058</b>

Notes  
Liability Exhibit 5 Col (8)  
Paid Amts Liability x Exhibit 8.2

**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Projected Paid  
NonWater

Claim Year	Liability	Fiscal Year																			
		2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058
7/1/18 - 19	\$962,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/19 - 20	956,737	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/20 - 21	951,573	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/21 - 22	946,436	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/22 - 23	941,327	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/23 - 24	936,246	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/24 - 25	931,192	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/25 - 26	926,166	2,450	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/26 - 27	921,166	2,437	2,437	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/27 - 28	916,194	2,424	2,424	2,424	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/28 - 29	911,248	12,054	2,411	2,411	2,411	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/29 - 30	906,329	23,977	11,988	2,398	2,398	2,398	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/30 - 31	901,437	35,771	23,848	11,924	2,385	2,385	2,385	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/31 - 32	896,571	35,578	35,578	23,719	11,859	2,372	2,372	2,372	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/32 - 33	891,731	47,182	35,386	35,386	23,591	11,795	2,359	2,359	2,359	0	0	0	0	0	0	0	0	0	0	0	0
7/1/33 - 34	886,918	58,659	46,927	35,195	35,195	23,463	11,732	2,346	2,346	2,346	0	0	0	0	0	0	0	0	0	0	0
7/1/34 - 35	882,130	70,010	58,342	46,674	35,005	35,005	23,337	11,668	2,334	2,334	2,334	0	0	0	0	0	0	0	0	0	0
7/1/35 - 36	877,368	81,238	69,632	58,027	46,422	34,816	34,816	23,211	11,605	2,321	2,321	2,321	0	0	0	0	0	0	0	0	0
7/1/36 - 37	872,632	92,342	80,799	69,257	57,714	46,171	34,628	34,628	23,086	11,543	2,309	2,309	2,309	0	0	0	0	0	0	0	0
7/1/37 - 38	867,922	206,648	91,844	80,363	68,883	57,402	45,922	34,441	34,441	22,961	11,480	2,296	2,296	2,296	0	0	0	0	0	0	0
7/1/38 - 39	863,237	205,533	205,533	91,348	79,929	68,511	57,092	45,674	34,255	34,255	22,837	11,418	2,284	2,284	2,284	0	0	0	0	0	0
7/1/39 - 40	858,577		204,423	204,423	90,855	79,498	68,141	56,784	45,427	34,071	34,071	22,714	11,357	2,271	2,271	2,271	0	0	0	0	0
7/1/40 - 41	853,942			203,320	203,320	90,364	79,069	67,773	56,478	45,182	33,887	33,887	22,591	11,296	2,259	2,259	2,259	0	0	0	0
7/1/41 - 42	849,333				202,222	202,222	89,876	78,642	67,407	56,173	44,938	33,704	33,704	22,469	11,235	2,247	2,247	2,247	0	0	0
7/1/42 - 43	844,748					201,130	201,130	89,391	78,217	67,043	55,870	44,696	33,522	33,522	22,348	11,174	2,235	2,235	2,235	0	0
7/1/43 - 44	840,188						200,045	200,045	88,909	77,795	66,682	55,568	44,454	33,341	33,341	22,227	11,114	2,223	2,223	2,223	0
7/1/44 - 45	835,653							198,965	198,965	88,429	77,375	66,322	55,268	44,214	33,161	33,161	22,107	11,054	2,211	2,211	2,211
7/1/45 - 46	831,142								197,891	197,891	87,952	76,958	65,964	54,970	43,976	32,982	32,982	21,988	10,994	2,199	2,199
Total	25,060,841	876,302	871,571	866,867	862,187	857,533	852,904	848,300	843,721	642,344	442,054	352,191	273,748	206,662	150,874	106,321	72,943	39,746	17,662	6,632	4,410

Notes  
Liability Exhibit 5 Col (8)  
Paid Amts Liability x Exhibit 8.2

**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Projected Paid  
NonWater

Claim Year	Liability	Fiscal Year																			
		2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078
7/1/18 - 19	\$962,700																				
7/1/19 - 20	956,737																				
7/1/20 - 21	951,573																				
7/1/21 - 22	946,436																				
7/1/22 - 23	941,327																				
7/1/23 - 24	936,246																				
7/1/24 - 25	931,192																				
7/1/25 - 26	926,166																				
7/1/26 - 27	921,166																				
7/1/27 - 28	916,194																				
7/1/28 - 29	911,248																				
7/1/29 - 30	906,329																				
7/1/30 - 31	901,437	0																			
7/1/31 - 32	896,571	0	0																		
7/1/32 - 33	891,731	0	0	0																	
7/1/33 - 34	886,918	0	0	0	0																
7/1/34 - 35	882,130	0	0	0	0	0															
7/1/35 - 36	877,368	0	0	0	0	0	0														
7/1/36 - 37	872,632	0	0	0	0	0	0	0													
7/1/37 - 38	867,922	0	0	0	0	0	0	0	0												
7/1/38 - 39	863,237	0	0	0	0	0	0	0	0	0											
7/1/39 - 40	858,577	0	0	0	0	0	0	0	0	0	0										
7/1/40 - 41	853,942	0	0	0	0	0	0	0	0	0	0	0									
7/1/41 - 42	849,333	0	0	0	0	0	0	0	0	0	0	0	0								
7/1/42 - 43	844,748	0	0	0	0	0	0	0	0	0	0	0	0	0							
7/1/43 - 44	840,188	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
7/1/44 - 45	835,653	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
7/1/45 - 46	831,142	2,199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total	25,060,841	2,199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Notes  
Liability Exhibit 5 Col (8)  
Paid Amts Liability x Exhibit 8.2

**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Payout Patterns  
NonWater

Claim Year	Fiscal Year																			
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
7/1/18 - 19	23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/19 - 20		23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/20 - 21			23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/21 - 22				23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%
7/1/22 - 23					23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.00%	0.00%	0.00%
7/1/23 - 24						23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.00%	0.00%
7/1/24 - 25							23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.00%
7/1/25 - 26								23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%
7/1/26 - 27									23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%
7/1/27 - 28										23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%
7/1/28 - 29											23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%
7/1/29 - 30												23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%
7/1/30 - 31													23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%
7/1/31 - 32														23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%
7/1/32 - 33															23.81%	23.81%	10.58%	9.26%	7.94%	6.61%
7/1/33 - 34																23.81%	23.81%	10.58%	9.26%	7.94%
7/1/34 - 35																	23.81%	23.81%	10.58%	9.26%
7/1/35 - 36																		23.81%	23.81%	10.58%
7/1/36 - 37																			23.81%	23.81%
7/1/37 - 38																				23.81%
7/1/38 - 39																				
7/1/39 - 40																				
7/1/40 - 41																				
7/1/41 - 42																				
7/1/42 - 43																				
7/1/43 - 44																				
7/1/44 - 45																				
7/1/45 - 46																				

Notes  
Exhibit 8.3 Row (3) Incremental Paid % / Exhibit 8.3 Row (4) Cumulative UnPaid %

**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Payout Patterns  
NonWater

Claim Year	Fiscal Year																			
	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058
7/1/18 - 19	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%										
7/1/19 - 20	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%									
7/1/20 - 21	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%								
7/1/21 - 22	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%							
7/1/22 - 23	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%						
7/1/23 - 24	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					
7/1/24 - 25	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
7/1/25 - 26	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
7/1/26 - 27	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
7/1/27 - 28	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
7/1/28 - 29	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/29 - 30	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/30 - 31	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/31 - 32	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/32 - 33	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/33 - 34	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/34 - 35	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/35 - 36	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/36 - 37	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/37 - 38	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/38 - 39	23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/39 - 40		23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%
7/1/40 - 41			23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%	0.00%
7/1/41 - 42				23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%	0.00%
7/1/42 - 43					23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%	0.00%
7/1/43 - 44						23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%	0.00%
7/1/44 - 45							23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%	0.26%
7/1/45 - 46								23.81%	23.81%	10.58%	9.26%	7.94%	6.61%	5.29%	3.97%	3.97%	2.65%	1.32%	0.26%	0.26%

Notes  
Exhibit 8.3 Row (3) Incremental Paid % / Exhibit 8.3 Row (4) Cumulative UnPaid %

**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Payout Patterns  
NonWater

Claim Year	Fiscal Year																				
	<u>2059</u>	<u>2060</u>	<u>2061</u>	<u>2062</u>	<u>2063</u>	<u>2064</u>	<u>2065</u>	<u>2066</u>	<u>2067</u>	<u>2068</u>	<u>2069</u>	<u>2070</u>	<u>2071</u>	<u>2072</u>	<u>2073</u>	<u>2074</u>	<u>2075</u>	<u>2076</u>	<u>2077</u>	<u>2078</u>	
7/1/18 - 19																					
7/1/19 - 20																					
7/1/20 - 21																					
7/1/21 - 22																					
7/1/22 - 23																					
7/1/23 - 24																					
7/1/24 - 25																					
7/1/25 - 26																					
7/1/26 - 27																					
7/1/27 - 28																					
7/1/28 - 29																					
7/1/29 - 30																					
7/1/30 - 31	0.00%																				
7/1/31 - 32	0.00%	0.00%																			
7/1/32 - 33	0.00%	0.00%	0.00%																		
7/1/33 - 34	0.00%	0.00%	0.00%	0.00%																	
7/1/34 - 35	0.00%	0.00%	0.00%	0.00%	0.00%																
7/1/35 - 36	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%															
7/1/36 - 37	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%														
7/1/37 - 38	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%													
7/1/38 - 39	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%												
7/1/39 - 40	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%											
7/1/40 - 41	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%										
7/1/41 - 42	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%									
7/1/42 - 43	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%								
7/1/43 - 44	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%							
7/1/44 - 45	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%						
7/1/45 - 46	0.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				

Notes  
Exhibit 8.3 Row (3) Incremental Paid % / Exhibit 8.3 Row (4) Cumulative UnPaid %

**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Cost  
NonWater

Claim Year	Fiscal Year																			
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
7/1/90 - 91	\$0	\$0	\$0																	
7/1/91 - 92	0	0	0	0																
7/1/92 - 93	0	0	0	0	0															
7/1/93 - 94	0	0	0	0	0	0														
7/1/94 - 95	0	0	0	0	0	0	0													
7/1/95 - 96	0	0	0	0	0	0	0	0												
7/1/96 - 97	0	0	0	0	0	0	0	0	0											
7/1/97 - 98	0	0	0	0	0	0	0	0	0	0										
7/1/98 - 99	0	0	0	0	0	0	0	0	0	0	0									
7/1/99 - 00	0	0	0	0	0	0	0	0	0	0	0	0								
7/1/00 - 01	0	0	0	0	0	0	0	0	0	0	0	0	0							
7/1/01 - 02	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
7/1/02 - 03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
7/1/03 - 04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7/1/04 - 05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7/1/05 - 06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7/1/06 - 07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/1/07 - 08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/08 - 09	4,250	7,650	3,825	765	765	765	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/09 - 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/10 - 11	4,250	12,750	12,750	12,750	8,288	1,658	1,658	1,658	0	0	0	0	0	0	0	0	0	0	0	0
7/1/11 - 12	8,500	12,750	9,563	9,563	6,375	3,188	638	638	638	0	0	0	0	0	0	0	0	0	0	0
7/1/12 - 13	4,250	12,750	12,750	12,750	12,750	12,750	7,650	1,530	1,530	1,530	0	0	0	0	0	0	0	0	0	0
7/1/13 - 14	8,500	25,500	25,500	25,500	24,863	24,863	16,575	8,288	1,658	1,658	1,658	0	0	0	0	0	0	0	0	0
7/1/14 - 15	4,250	12,750	12,750	12,750	12,750	12,750	12,750	10,200	5,100	1,020	1,020	1,020	0	0	0	0	0	0	0	0
7/1/15 - 16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/16 - 17	8,500	25,500	12,750	12,750	12,750	12,750	12,750	12,750	12,750	8,925	4,463	893	893	893	0	0	0	0	0	0
7/1/17 - 18	51,648	103,275	103,275	45,900	40,163	34,425	28,688	22,950	17,213	17,213	11,475	5,738	1,148	1,148	1,148	0	0	0	0	0
7/1/18 - 19		80,325	80,325	80,325	35,700	31,238	26,775	22,313	17,850	13,388	13,388	8,925	4,463	893	893	893	0	0	0	0
(1) 7/1/17 - 18 Payment Pattern		10.64%	31.92%	53.19%	62.65%	70.92%	78.01%	83.92%	88.65%	92.20%	95.74%	98.11%	99.29%	99.53%	99.76%	100.00%	100.00%	100.00%	100.00%	100.00%
(2) 7/1/18 - 19 Payment Pattern		19.23%	38.46%	57.69%	66.24%	73.72%	80.13%	85.47%	89.74%	92.95%	96.15%	98.29%	99.36%	99.57%	99.79%	100.00%	100.00%	100.00%	100.00%	100.00%
(3) Selected Payment Pattern		14.94%	35.19%	55.44%	64.44%	72.32%	79.07%	84.70%	89.20%	92.57%	95.95%	98.20%	99.32%	99.55%	99.77%	100.00%	100.00%	100.00%	100.00%	100.00%
(4) Unpaid		85.06%	64.81%	44.56%	35.56%	27.68%	20.93%	15.30%	10.80%	7.43%	4.05%	1.80%	0.68%	0.45%	0.23%	0.00%	0.00%	0.00%	0.00%	0.00%

Notes

Amounts from Table 9b of the TN UST analysis as of 3/1/2018 by Pinnacle Actuarial Resources, Inc.

- (1) In claim year 7/1/17 - 18, the cumulative sum of each Fiscal Year Cost divided by the Total Cost
- (2) In claim year 7/1/18 - 19, the cumulative sum of each Fiscal Year Cost divided by the Total Cost
- (3) Based on (1) and (2)
- (4) 1 - (3)



**Tennessee Underground Storage Tank Fund**  
Cash Flow Analysis  
Based on Data as of 03/01/2018  
Cost  
NonWater

Claim Year	Fiscal Year											Total
	<u>2038</u>	<u>2039</u>	<u>2040</u>	<u>2041</u>	<u>2042</u>	<u>2043</u>	<u>2044</u>	<u>2045</u>	<u>2046</u>	<u>2047</u>	<u>2048</u>	
7/1/90 - 91												\$0
7/1/91 - 92												0
7/1/92 - 93												0
7/1/93 - 94												0
7/1/94 - 95												0
7/1/95 - 96												0
7/1/96 - 97												0
7/1/97 - 98												0
7/1/98 - 99												0
7/1/99 - 00												0
7/1/00 - 01												0
7/1/01 - 02												0
7/1/02 - 03												0
7/1/03 - 04												0
7/1/04 - 05												0
7/1/05 - 06												0
7/1/06 - 07												0
7/1/07 - 08												0
7/1/08 - 09	0											18,020
7/1/09 - 10	0	0										0
7/1/10 - 11	0	0	0									55,760
7/1/11 - 12	0	0	0	0								51,850
7/1/12 - 13	0	0	0	0	0							80,240
7/1/13 - 14	0	0	0	0	0	0						164,560
7/1/14 - 15	0	0	0	0	0	0	0					99,110
7/1/15 - 16	0	0	0	0	0	0	0	0				0
7/1/16 - 17	0	0	0	0	0	0	0	0	0			139,315
7/1/17 - 18	0	0	0	0	0	0	0	0	0	0		485,403
7/1/18 - 19	0	0	0	0	0	0	0	0	0	0	0	417,690
(1) 7/1/17 - 18 Payment Patter	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
(2) 7/1/18 - 19 Payment Patter	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
(3) Selected Payment Pattern	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
(4) Unpaid	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Notes  
Amounts from Table 9b of the TN UST analysis as of 3/1/2018 by Pinnacle Actuarial Resources, Inc.

- (1) In claim year 7/1/17 - 18, the cumulative sum of each Fiscal Year Cost divided by the Total Cost
- (2) In claim year 7/1/18 - 19, the cumulative sum of each Fiscal Year Cost divided by the Total Cost
- (3) Based on (1) and (2)
- (4) 1 - (3)