



**NORTH CAROLINA  
PUBLIC STAFF  
UTILITIES COMMISSION**

September 19, 2023

Ms. A. Shonta Dunston, Chief Clerk  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4300

Re: Docket Nos. W-1146, Sub 13 and W-1328, Sub 10 – Application by Red Bird Utility Operating Company, LLC, for Authority to Transfer the Lake Royale Subdivision Water and Wastewater Utility Systems and Public Utility Franchise in Franklin and Nash Counties, North Carolina, and for Approval of Rates

Dear Ms. Dunston,

Attached for filing on behalf of the Public Staff in the above-referenced dockets is the public version of the testimony of Lynn Feasel.

By copy of this letter, I am forwarding a copy of the redacted version to all parties of record by electronic delivery.

Sincerely,

Electronically submitted  
/s/ Megan Jost  
Staff Attorney  
[megan.jost@psncuc.nc.gov](mailto:megan.jost@psncuc.nc.gov)

cc: Parties of Record

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## CERTIFICATE OF SERVICE

I certify that a copy of this Public Staff testimony and exhibits have been served on all parties of record or their attorneys, or both, in accordance with Commission Rule R1-39, by United States mail, first class or better; by hand delivery; or by means of facsimile or electronic delivery upon agreement of the receiving party.

This the 19th day of September, 2023.

Electronically submitted  
/s/Megan Jost  
Staff Attorney

**BEFORE THE NORTH CAROLINA UTILITIES COMMISSION**

**DOCKET NO. W-1146, SUB 13**

**DOCKET NO. W-1328, SUB 10**

In the Matter of	)	
Application by Red Bird Utility Operating	)	
Company, LLC, 1650 Des Peres Road,	)	
Suite 303, St. Louis, Missouri 63131, and	)	
Total Environmental Solutions, Inc., P.O.	)	TESTIMONY OF
Box 14059, Baton Rouge, LA 70898, for	)	LYNN FEASEL
Authority to Transfer the Lake Royale	)	PUBLIC STAFF –
Subdivision Water and Wastewater Utility	)	NORTH CAROLINA
Systems and Public Utility Franchise in	)	UTILITIES COMMISSION
Franklin and Nash Counties, North	)	
Carolina, and for Approval of Rates	)	
	)	

**September 19, 2023**

1   **Q.   Please state your name, business address, and present**  
2       **position.**

3   A.   My name is Lynn Feasel. My business address is 430 North  
4       Salisbury Street, Dobbs Building, Raleigh, North Carolina. I am the  
5       Public Utilities Regulatory Supervisor of the Water, Sewer, and  
6       Telecommunications Sections with the Accounting Division of the  
7       Public Staff – North Carolina Utilities Commission (Public Staff).

8   **Q.   Briefly state your qualifications and experience.**

9   A.   My qualifications and experience are included in Appendix A.

10  **Q.   What is the purpose of your testimony?**

11  A.   The purpose of my testimony in this proceeding is to present the  
12       results of my investigation of the application filed by Total  
13       Environmental Solutions, Inc. (TESI), and Red Bird Utility Operating  
14       Company, LLC (Red Bird), for authority to transfer the water and  
15       wastewater systems and public utility franchise serving Lake Royale  
16       Subdivision (Lake Royale) in Franklin and Nash Counties from TESI  
17       to Red Bird and approval of rates. Specifically, I discuss (1) my  
18       calculation of original cost rate base for the TESI systems; (2) my  
19       calculation of the acquisition adjustment Red Bird seeks to include in  
20       rate base; (3) my calculation of the amounts for future improvements  
21       and due diligence expenses; and (4) the estimated revenue

1 requirements associated with the proposed acquisition adjustment,  
2 due diligence expenses, and future improvements.

3 In his testimony, Public Staff witness Evan Houser discusses  
4 anticipated increases in water and wastewater base rates that would  
5 result from the revenue requirements I calculated, as well as the  
6 Public Staff's recommendation regarding the proposed transfer.

7 **Q. Would you briefly describe the presentation of your testimony**  
8 **and exhibits?**

9 A. Yes. My testimony discusses each issue identified through my  
10 investigation, and my exhibits consist of schedules detailing the  
11 calculation of rate base, net operating income, return, and revenue  
12 requirement based on the Public Staff recommendations described  
13 later in my testimony. Schedules 1(a) and 1(b) represent the return  
14 calculated for water and wastewater operations, respectively;  
15 Schedule 2 and its associated sub schedules represent the rate base  
16 calculated for water and wastewater operations; Schedule 3 and its  
17 associated sub schedules, represent the net operating income  
18 calculated for water and wastewater operations. Revenue  
19 requirements for water and wastewater are also contained in  
20 Schedule 3 and its associated sub schedules.

1     **Q.     Please explain your calculation of original cost rate base and**  
2           **how it compares the amount calculated by Red Bird.**

3     A.     In order to calculate original cost rate base, I first reviewed the net  
4           book value approved in the proceedings regarding TESI's application  
5           for a Certificate for Public Convenience and Necessity and the most  
6           recent rate case and updated the accumulated depreciation with the  
7           approved rates through December 31, 2023. I then included  
8           additional plant added since the last rate case for which supporting  
9           documentation was provided, additional contributions in aid of  
10          construction (CIAC) the Company received in 2022 as  
11          recommended by Public Staff witness Houser, and updated  
12          accumulated depreciation through December 31, 2023, utilizing the  
13          depreciation rates recommended by witness Houser. Based on this  
14          calculation, the Public Staff's recommended original cost rate base  
15          is \$148,398 for water and \$18,908 for wastewater. My calculations  
16          are shown in Feasel Exhibit 1.

17           On page 24, lines 15-17 of his direct testimony, Red Bird witness  
18           Josiah Cox states that, based on Red Bird's audit team's review of  
19           TESI's supporting documentation and the Company's understanding  
20           of the Public Staff's valuation of the assets, Red Bird believes  
21           residual rate base in the TESI utility assets is \$271,502. The  
22           Company's valuation of \$271,502 differs from my valuation of

1           \$167,306 because, unlike the Company, I removed plant additions  
2           for which supporting documentation was not provided and I included  
3           additional CIAC received in 2022. My calculations are shown in  
4           Feasel Exhibit 1.

5   **Q.   Please explain your calculations of the acquisition adjustment**  
6           **and due diligence expenses Red Bird seeks to recover.**

7   A.   As discussed above, the Public Staff's calculation of the original cost  
8           rate base is \$148,398 for water and \$18,908 for wastewater. Based  
9           on the 72/28 split of the purchase price between the water system  
10          and wastewater system, respectively, provided by Red Bird, I  
11          calculated the purchase price for the water system to be [BEGIN  
12          CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] and the  
13          purchase price for the wastewater system to be [BEGIN  
14          CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL], resulting in  
15          acquisition adjustments of [BEGIN CONFIDENTIAL] [REDACTED] [END  
16          CONFIDENTIAL] for the water system and [BEGIN  
17          CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] for the  
18          wastewater system. The associated accumulated amortization of the  
19          acquisition adjustment is [BEGIN CONFIDENTIAL] [REDACTED] [END  
20          CONFIDENTIAL] for the water system and [BEGIN  
21          CONFIDENTIAL] [REDACTED] [END CONFIDENTIAL] for the wastewater  
22          system. My calculations are shown in Confidential Feasel Exhibits I

1 and III. A comparison of the Public Staff's and Red Bird's acquisition  
2 adjustment calculations is shown in below:

**[BEGIN CONFIDENTIAL]**

	Red Bird	Public Staff	
	Combined	Water	Wastewater
Purchase Price	████████	████████	████████
Original Cost Rate Base	████████	████████	████████
Acquisition Adjustment, before accumulated amortization	████████	████████	████████

3 **[END CONFIDENTIAL]**

4 In regard to the due diligence expenses, the Public Staff changed  
5 two expenses to the amounts shown on invoices provided by the  
6 Company and removed expenses for which the Company was  
7 unable to provide supporting invoices. Based on this analysis, the  
8 Public Staff calculated the total due diligence expense incurred by  
9 Red Bird to be **[BEGIN CONFIDENTIAL]** ██████████ **[END**  
10 **CONFIDENTIAL]** for the water system and **[BEGIN**  
11 **CONFIDENTIAL]** ██████████ **[END CONFIDENTIAL]** for the wastewater  
12 system. The accumulated amortization of due diligence is **[BEGIN**



1           **CONFIDENTIAL** [REDACTED] **[END CONFIDENTIAL]** for the water  
2           system and **[BEGIN CONFIDENTIAL]** [REDACTED] **[END CONFIDENTIAL]**  
3           for the wastewater system, calculated based on the transaction  
4           commencing in 2021.

5   **Q.   Have you calculated the estimated revenue requirements**  
6           **associated with the acquisition adjustment and due diligence**  
7           **expenses?**

8   A.   Yes. If the acquisition adjustment as calculated by the Public Staff is  
9           included in rate base, the estimated revenue requirement is \$10,592  
10          for the water system and \$9,702 for the wastewater system.

11          If the due diligence expenses recommended by the Public Staff are  
12          included in rate base, the estimated revenue requirement is \$26,821  
13          for the water system and \$25 for the wastewater system. My  
14          calculations are shown in Feasel Exhibits I and III.

15          The Public Staff utilized a composite depreciation rate to calculate  
16          the estimated revenue requirement for both the acquisition  
17          adjustment and due diligence expenses.

18   **Q.   Have you calculated the estimated revenue requirement**  
19           **associated with future improvements to the TESI systems?**

1 A. Yes. McGill Associates, the engineering firm Red Bird engaged to  
2 assess the TESI systems, estimated the necessary future capital  
3 investment to be \$235,000 for the water production systems and  
4 \$457,900 for wastewater systems.

5 Based on these estimates, the revenue requirement associated with  
6 future improvements to the water system would be \$33,302, and the  
7 revenue requirement associated with future improvements to the  
8 wastewater system would be \$82,188. My calculations are shown in  
9 Feasel Exhibit II.

10 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

11 A. Yes, it does.

**QUALIFICATIONS AND EXPERIENCE**

LYNN FEASEL

I am a graduate of Baldwin Wallace University with a Master of Business Administration degree in Accounting. I am a Certified Public Accountant licensed in the State of North Carolina. Prior to joining the Public Staff, I was employed by Franklin International in Columbus, Ohio until June 2013. Additionally, I worked for ABB Inc. from September 2013 until October 2016. I joined the Public Staff as a Staff Accountant in November 2016, and I was promoted to Financial Manager in July 2022. Since joining the Public Staff, I have worked on rate cases involving water and sewer and natural gas companies, filed testimony and affidavits in various general rate cases, calculated quarterly earnings for Carolina Water Service, Inc. of North Carolina and Aqua North Carolina, Inc., calculated quarterly earnings for various natural gas companies, calculated refunds to consumers from AH4R and Progress Residential, and reviewed new franchise, transfer, and contiguous extension filings for multiple water and sewer companies.

**Total Environmental Solutions, Inc.**Docket No. W-1146, Sub 13  
ORIGINAL COST RATE BASEPublic Staff  
Feasel Exhibit 1  
Schedule 2**Combined Water and Sewer Operation**

Line No.	Item	Per	W-1146 Sub 13	W-1146 Sub 13	[1]
		W-1146 Sub 1 and Sub 3	Public Staff	After	
		(a)	Adjustments	Public Staff	
			(b)	Adjustments	(c)
1.	Plant in service	\$381,972	\$212,355	\$594,327	
2.	Accumulated depreciation	(44,714)	(362,598)	(407,312)	
3.	Contributions in aid of construction, net of amortization	(20,101)	391	(19,710)	
4.	Net plant in service	317,157	(149,851)	167,306	
5.	Unamortized rate case costs, net pf taxes	42,817	(42,817)	0	
6.	Unamortized acquisition costs, net pf taxes	58,527	(58,527)	0	
7.	Cash working capital	35,939	(35,939)	0	
8.	Average tax accruals	(4,905)	4,905	0	
9.	Original cost rate base	\$449,535	(\$282,229)	\$167,306	

[1] Feasel Exhibit 1, Schedule 2 (a) plus Schedule 2 (b)

**Total Environmental Solutions, Inc.**  
Docket No. W-1146, Sub 13  
ORIGINAL COST RATE BASE

Public Staff  
Feasel Exhibit 1  
Schedule 2(a)

**Water Operation**

Line No.	Item	Per	W-1146 Sub 13	W-1146 Sub 13
		W-1146 Sub 1	Public Staff Adjustments [1]	After Public Staff Adjustments
		(a)	(b)	(c)
1.	Plant in service	\$289,329	\$186,412	\$475,741 [2]
2.	Accumulated depreciation	(30,203)	(277,430)	(307,633) [2]
3.	Contributions in aid of construction, net of amortization	<u>(20,101)</u>	<u>391</u>	<u>(19,710)</u>
4.	Net plant in service (Sum line)	239,025	(90,627)	148,398
5.	Unamortized rate case costs, net of taxes	42,817	(42,817)	0
6.	Unamortized acquisition costs, net of taxes	58,527	(58,527)	0
7.	Cash working capital	27,856	(27,856)	0
8.	Average tax accruals	<u>(4,895)</u>	<u>4,895</u>	<u>0</u>
9.	Original cost rate base	<u><u>\$363,330</u></u>	<u><u>(\$214,932)</u></u>	<u><u>\$148,398</u></u>

[1] Column (c) minus Column (a)

[2] Feasel Exhibit 1, Schedule 2-1

**Total Environmental Solutions, Inc.**  
Docket No. W-1146, Sub 13  
ORIGINAL COST RATE BASE

Public Staff  
Feasel Exhibit 1  
Schedule 2(b)

**Sewer Operation**

Line No.	Item	Per W-1146 Sub 3 (a)	W-1146 Sub 13 Public Staff Adjustments (b)	W-1146 Sub 13 After Public Staff Adjustments (c)	
1.	Plant in service	\$92,643	\$25,944	\$118,587	[2]
2.	Accumulated depreciation	(14,511)	(85,168)	(99,679)	[2]
3.	Contributions in aid of construction, net of amortization	0	0	0	
4.	Net plant in service	78,132	(59,224)	18,908	
5.	Cash working capital	8,083	(8,083)	0	
6.	Average tax accruals	(10)	10	0	
7.	Original cost rate base	\$86,205	(\$67,297)	\$18,908	

[1] Column (c) minus Column (a)

[2] Feasel Exhibit 1, Schedule 2-1

**Total Environmental Solutions, Inc.**  
Docket No. W-1146, Sub 13  
CALCULATION OF PLANT IN SERVICE, ACCUMULATED DEPRECIATION,  
AND DEPRECIATION EXPENSE

Public Staff  
Feasel Exhibit 1  
Schedule 2-1

Line No.	Item	Plant In Service Per Public Staff	Depreciable Plant		Year Placed In Service		Life		Years in Service	[2]	Annual Depreciation	[3]	Accumulated Depreciation	[4]
		(a)		CIAC (b)	In Service (c)	In Service (d)	(e)	(f)		(g)		(h)		
Per Sub 1 rate case Proceeding-Water:														
1.	Miscellaneous materials and supplies	\$1,072	[1]		\$1,072	1994	[1]	25	[1]	29.5		0	1,072	water
2.	Engineering costs	4,883	[1]		\$4,883	1994	[1]	25	[1]	29.5		0	4,883	water
3.	Travel and meals	1,120	[1]		\$1,120	1994	[1]	25	[1]	29.5		0	1,120	water
4.	22 Taps	6,560	[1]		\$6,560	1993	[1]	25	[1]	30.5		0	6,560	water
5.	50 Taps	14,909	[1]		\$14,909	1994	[1]	25	[1]	29.5		0	14,909	water
6.	65 Taps	19,382	[1]		\$19,382	1995	[1]	25	[1]	28.5		0	19,382	water
7.	7 Blowoffs	1,883	[1]		\$1,883	1995	[1]	25	[1]	28.5		0	1,883	water
8.	Meters	36,100	[1]		\$36,100	1999	[1]	15	[1]	24.5		0	36,100	water
9.	Meters	115,420	[1]		\$115,420	2000	[1]	15	[1]	23.5		0	115,420	water
10.	Vehicle	2,500	[1]		\$2,500	2000	[1]	3	[1]	23.5		0	2,500	water
11.	Meters	85,500	[1]		\$85,500	2001	[1]	15	[1]	22.5		0	85,500	water
Per Sub 3 CPCN Proceeding-Sewer:														
12.	pumping equipment-lift station	\$33,384	[1]		\$33,384	2001	[1]	20	[1]	22.5		0	33,384	sewer
13.	pumping equipment-lift station	\$1,337	[1]		\$1,337	2004	[1]	20	[1]	19.5		67	1,304	sewer
14.	treatment and disposal equipment	\$4,423	[1]		\$4,423	2003	[1]	20	[1]	20.5		0	4,423	sewer
15.	treatment and disposal equipment	\$646	[1]		\$646	2004	[1]	6	[1]	19.5		0	646	sewer
16.	tools shop and garage equipment	\$390	[1]		\$390	2001	[1]	10	[1]	22.5		0	390	sewer
17.	laboratory equipment	1,805	[1]		\$1,805	2002	[1]	6	[1]	21.5		0	1,805	sewer
18.	laboratory equipment	821	[1]		\$821	2004	[1]	6	[1]	19.5		0	821	sewer
19.	power operated equipment	1,844	[1]		\$1,844	2001	[1]	5	[1]	22.5		0	1,844	sewer
20.	purchase price	28,031	[1]		\$28,031	2000	[1]	25	[1]	23.5		1,121	26,349	sewer
21.	franchise cost	19,962	[1]		\$19,962	2005	[1]	25	[1]	18.5		798	14,772	sewer
22.	total plant additions since W 1146 Sub 1-water	186,412	[5]		\$186,412	various				various		12,427	18,304	[5] water
23.	total plant additions since W 1146 Sub 3-sewer	25,944	[5]		\$25,944	various				various		2,965	13,941	[5] sewer
24.	total CIAC additions since W 1146 Sub 1-water			(21,900)	(21,900)	2022	[5]	15		1.5		(1,460)	(2,190)	
25.	Total Plant in Service (Sum line 1 thru line 24)	\$594,327		(\$21,900)	\$572,427							\$15,919	\$405,122	

- [1] Based on last general rate case, Docket No. W-1146, Sub 1 and W-1146, Sub 3.  
[2] Based on year placed in service using half year convention.  
[3] Column (c) divided by Column (e), unless fully depreciated.  
[4] Column (f) x Column (g), unless fully depreciated.  
[5] Per examination of the Company's financial record.





CONFIDENTIAL

Docket No. W-1146, Sub 13

and

Docket No. W-1328, Sub 10

Public Staff Confidential Feasel Exhibit I



**Total Environmental Solutions, Inc. (TESI)**

Docket No. W-1146, Sub 13

**RETURN ON ORIGINAL COST RATE BASE**Public Staff  
Feasel Exhibit II  
Schedule 1(a)**TESI - Water Operations**

Line No.	Item	Capital-ization Ratio [1] (a)	Original Cost Rate Base [2] (b)	Embedded Cost [3] (c)	Overall Cost Rate [7] (d)	Net Operating Income [8] (e)
<u>Present rates:</u>						
1.	Debt	50.00%	\$110,125 [2]	4.60% [1]	2.30%	\$5,066 [8]
2.	Equity	50.00%	110,125 [2]	-17.99% [6]	-9.00%	(19,816) [9]
3.	Total	100.00%	\$220,250 [3]		-6.70%	(\$14,750) [10]
<u>Company proposed rates:</u>						
4.	Debt	50.00%	\$110,125 [4]	4.60% [1]	2.30%	\$5,066 [8]
5.	Equity	50.00%	110,125 [4]	-17.99% [6]	-9.00%	(19,816) [11]
6.	Total	100.00%	\$220,250 [3]		-6.70%	(\$14,750) [12]
<u>Public Staff recommended rates:</u>						
7.	Debt	50.00%	\$110,125 [5]	4.60% [1]	2.30%	\$5,066 [8]
8.	Equity	50.00%	110,125 [5]	9.40% [6]	4.70%	10,352 [13]
9.	Total	100.00%	\$220,250 [3]		7.00%	\$15,418 [14]

[1] Per Public Staff recommendation

[2] Column (a) x Line 3, Column (b).

[3] Public Staff Exhibit II, Schedule 2(a), Line 7, Column (c).

[4] Column (a) x Line 6, Column (b).

[5] Column (a) x Line 9, Column (b).

[6] Column (e) divided by Column (b).

[7] Column (a) x Column (c).

[8] Column (b) x Column (c).

[9] Line 3 - Line 1, Column (e).

[10] Public Staff Exhibit II, Schedule 3(a), Line 28, Column (c).

[11] Line 6 - Line 4, Column (e).

[12] Public Staff Exhibit II, Schedule 3(a), Line 28, Column (e).

[13] Line 9 - Line 7, Column (e).

[14] Column (b) x Column (d), Line 9.

**Total Environmental Solutions, Inc. (TESI)**  
Docket No. W-1146 Sub 13  
**RETURN ON ORIGINAL COST RATE BASE**

Public Staff  
Feasel Exhibit II  
Schedule 1(b)

**TESI - Sewer Operations**

Line No.	Item	Capital-ization Ratio (a)	Original Cost Rate Base (b)	Embedded Cost (c)	Overall Cost Rate (d)	Net Operating Income (e)
	<u>Present rates:</u>					
1.	Debt	50.00%	\$205,150 [2]	4.60% [1]	2.30%	\$9,437 [8]
2.	Equity	50.00%	205,150 [2]	-27.80% [6]	-13.90%	(57,037) [9]
3.	Total	<u>100.00%</u>	<u>\$410,300</u> [3]		<u>-11.60%</u>	<u>(\$47,600)</u> [10]
	<u>Company proposed rates:</u>					
4.	Debt	50.00%	\$205,150 [4]	4.60% [1]	2.30%	\$9,437 [8]
5.	Equity	50.00%	205,150 [4]	-27.80% [6]	-13.90%	(57,037) [11]
6.	Total	<u>100.00%</u>	<u>\$410,300</u> [3]		<u>-11.60%</u>	<u>(\$47,600)</u> [12]
	<u>Public Staff recommended rates:</u>					
7.	Debt	50.00%	\$205,150 [5]	4.60% [1]	2.30%	\$9,437 [8]
8.	Equity	50.00%	205,150 [5]	9.40% [6]	4.70%	19,284 [13]
9.	Total	<u>100.00%</u>	<u>\$410,300</u> [3]		<u>7.00%</u>	<u>\$28,721</u> [14]

[1] Per Public Staff recommendation

[2] Column (a) x Line 3, Column (b).

[3] Public Staff Exhibit II, Schedule 2(b), Line 7, Column (c).

[4] Column (a) x Line 6, Column (b).

[5] Column (a) x Line 9, Column (b).

[6] Column (e) divided by Column (b).

[7] Column (a) x Column (c).

[8] Column (b) x Column (c).

[9] Line 3 - Line 1, Column (e).

[10] Public Staff Exhibit II, Schedule 3(b), Line 30, Column (c).

[11] Line 6 - Line 4, Column (e).

[12] Public Staff Exhibit II, Schedule 3(b), Line 30, Column (e).

[13] Line 9 - Line 7, Column (e).

[14] Column (b) x Column (d), Line 9.

**Total Environmental Solutions, Inc. (TESI)**

Docket No. W-1146 Sub 13  
**ORIGINAL COST RATE BASE**

Public Staff  
 Feasel Exhibit II  
 Schedule 2

**Water and Sewer Combined**

Line No.	Item	Per W-1146 Sub 13 [1] (a)	Public Staff Adjustments [2] (b)	After Public Staff Adjustments [3] (c)
1.	Plant in service	\$0	\$0	\$0
2.	Accumulated depreciation	0	0	0
3.	Contributions in aid of construction	0	0	0
4.	Future Improvement	692,900	630,550	630,550
5.	Cash working capital	0	0	0
6.	Average tax accruals	0	0	0
7.	Original cost rate base (Sum of L1 thru L6)	<u>\$692,900</u>	<u>\$630,550</u>	<u>\$630,550</u>

[1] Public Staff Exhibit II, Schedule 2(a) plus 2(b), Column (a).

[2] Public Staff Exhibit II, Schedule 2(a) plus 2(b), Column (b).

[3] Public Staff Exhibit II, Schedule 2(a) plus 2(b), Column (c).

**Total Environmental Solutions, Inc. (TESI)**

Docket No. W-1146 Sub 13

**ORIGINAL COST RATE BASE**Public Staff  
Feasel Exhibit II  
Schedule 2(a)**TESI - Water Operations**

Line No.	Item	Per W-1146 Sub 13 (a)	Public Staff Adjustments [1] (b)	After Public Staff Adjustments (c)
1.	Plant in service		\$0	\$0
2.	Accumulated depreciation		0	0
3.	Contributions in aid of construction		0	0
4.	Future Improvement	235,000	(14,750)	220,250 [2]
5.	Cash working capital		0	0
6.	Average tax accruals		0	0
7.	Original cost rate base (Sum of L1 thru L6)	<u>\$235,000</u>	<u>(\$14,750)</u>	<u>\$220,250</u>

[1] Column (c) minus Column (a).

[2] Public Staff Exhibit II, Schedule 2-1(a), Column (a) plus Column (f).

**Total Environmental Solutions, Inc. (TESI)**

Docket No. W-1146 Sub 13

**ORIGINAL COST RATE BASE**Public Staff  
Feasel Exhibit II  
Schedule 2(b)**TESI - Sewer Operations**

<u>Line No.</u>	<u>Item</u>	<u>Per W-1146 Sub 13 (a)</u>	<u>Public Staff Adjustments [1] (b)</u>	<u>After Public Staff Adjustments (c)</u>
1.	Plant in service		\$0	\$0
2.	Accumulated depreciation		0	0
3.	Contributions in aid of construction		0	0
4.	Future Improvement	457,900	(47,600)	410,300 [2]
5.	Cash working capital		0	0
6.	Average tax accruals		0	0
7.	Original cost rate base (Sum of L1 thru L6)	<u>\$457,900</u>	<u>(\$47,600)</u>	<u>\$410,300</u>

[1] Column (c) minus Column (a).

[2] Public Staff Exhibit II, Schedule 2-1(b), Column (a) plus Column (f).

**Total Environmental Solutions, Inc. (TESI)**  
Docket No. W-1146 Sub 13  
**CALCULATION OF PLANT IN SERVICE, ACCUMULATED  
DEPRECIATION AND DEPRECIATION EXPENSE**

Public Staff  
Feasel Exh bit II  
Schedule 2-1(a)

**TESI - Water Operations**

Line No.	Item	Plant In Service [1] (a)	Year Acquired [1] (b)	Life [2] (c)	Years In Service [3] (d)	Annual Depreciation [4] (e)	Accumulated Depreciation [5] (f)
1.	Demolish Existing Elevated Storage Tank	\$55,000	2024	20	1	\$2,750	(\$2,750)
2.	Install New Booster Pump Station with Backup Generator	180,000	2024	15	1	12,000	(12,000)
3.	Total future improvement (L1 + L2)	<u>\$235,000</u>				<u>\$14,750</u>	<u>(\$14,750)</u>

- [1] Per examination of Company's financial records.  
[2] Provided by Public Staff Engineer Houser.  
[3] Calculated based on year placed in service using half year convention.  
[4] Column (a) divided by Column (c), unless fully depreciated.  
[5] Column (d) multiplied by Column (e), unless fully depreciated.



**Total Environmental Solutions, Inc. (TESI)**

Docket No. W-1146 Sub 13

**CALCULATION OF PLANT IN SERVICE, ACCUMULATED  
DEPRECIATION AND DEPRECIATION EXPENSE**Public Staff  
Feasel Exh bit II  
Schedule 2-1(b)**TESI - Sewer Operations**

Line No.	Item	Plant In Service [1] (a)	Year Acquired [1] (b)	Depreciation Life In Years [2] (c)	Years In Service [3] (d)	Annual Depreciation [4] (e)	Accumulated Depreciation [5] (f)
1.	duplex pumps and related equipment LS1	\$100,000	2024	7	1	\$14,286	(\$14,286)
2.	transfer switch	7,100	2024	15	1	473	(473)
3.	Portable Generator	36,600	2024	15	1	2,440	(2,440)
4.	Telemetry System	20,000	2024	15	1	1,333	(1,333)
5.	Rehabilitate Wet Well	20,000	2024	20	1	1,000	(1,000)
6.	Demolish Wet Well	8,000	2024	20	1	400	(400)
7.	new Simplex Pumps and related equipment LS9	25,000	2024	7	1	3,571	(3,571)
8.	Demolish existing holding tank and reroute to new wet well	5,000	2024	20	1	250	(250)
9.	Replace ARVs	37,500	2024	10	1	3,750	(3,750)
10.	Rehabilitate two Aeration Chambers and replace piping difusers	30,000	2024	20	1	1,500	(1,500)
11.	Rehabilitate two settling tanks	25,000	2024	20	1	1,250	(1,250)
12.	Rehabilitate Digester and Replace Piping/Diffusers	15,000	2024	20	1	750	(750)
13.	Replace Sand Media in Tertiary Filters	12,000	2024	5	1	2,400	(2,400)
14.	Replace and Reroute Plant Piping	15,000	2024	20	1	750	(750)
15.	100 CFM Blowers, Motors and Control Panel	50,000	2024	5	1	10,000	(10,000)
16.	Install New Permanent Backup Generator and Automatic Transfer Switch	51,700	2024	15	1	3,447	(3,447)
17.	Total future improvement (Sum L1 thru L16)	<u>\$457,900</u>				<u>\$47,600</u>	<u>(\$47,600)</u>

[1] Per examination of Company's financial records.

[2] Provided by Public Staff Engineer Houser.

[3] Calculated based on year placed in service using half year convention.

[4] Column (a) divided by Column (c), unless fully depreciated.

[5] Column (d) multiplied by Column (e), unless fully depreciated.

**Total Environmental Solutions, Inc. (TESI)**  
Docket No. W-1146 Sub 13  
**NET OPERATING INCOME FOR A RETURN**

Public Staff  
Feasel Exhibit II  
Schedule 3

Water and Sewer Combined		Present Rates			Company Proposed Rates		Public Staff Recommended Rates	
Line No.	Item	Amount Per Application (a)	Public Staff Adjustments (b)	Per Public Staff [1] (c)	Net Company Increase (d)	Operations After Rate Increase [2] (e)	Net Public Staff Decrease (f)	Operations After Rate Decrease [3] (g)
<b><u>Operating Revenues</u></b>								
1.	Service revenues	\$0	\$0	\$0	\$0	\$0	\$115,490	\$115,490
2.	Miscellaneous revenues	0	0	0	0	0	0	0
3.	Uncollectible accounts	0	0	0	0	0	0	0
4.	Total operating revenues	0	0	0	0	0	115,490	115,490
<b><u>Operating Expenses</u></b>								
5.	Loss from disposal of equipment	0	0	0	0	0	0	0
6.	Salaries expense	0	0	0	0	0	0	0
7.	Administrative and office expense	0	0	0	0	0	0	0
8.	Purchased power	0	0	0	0	0	0	0
9.	Chemicals	0	0	0	0	0	0	0
10.	Testing	0	0	0	0	0	0	0
11.	Maintenance and repair	0	0	0	0	0	0	0
12.	Permit fees	0	0	0	0	0	0	0
13.	Insurance expense	0	0	0	0	0	0	0
14.	Contract management	0	0	0	0	0	0	0
15.	Other expenses - bank & late charges	0	0	0	0	0	0	0
16.	Legal fees	0	0	0	0	0	0	0
17.	Bad debts expense	0	0	0	0	0	0	0
18.	Sludge removal							
19.	Rate case expense							
20.	Total operating expenses	0	0	0	0	0	0	0
<b><u>Depreciation and Taxes</u></b>								
21.	Depreciation	0	62,350	62,350	0	62,350	0	62,350
22.	Property tax	0	0	0	0	0	0	0
23.	Payroll tax	0	0	0	0	0	0	0
24.	Regulatory fee - other taxes	0	0	0	0	0	162	162
25.	Gross receipts tax	0	0	0	0	0	0	0
26.	State income tax	0	0	0	0	0	962	962
27.	Federal income tax	0	0	0	0	0	7,878	7,878
28.	Total depreciation and taxes	0	62,350	62,350	0	62,350	9,002	71,352
29.	Total operating revenue deductions	0	62,350	62,350	0	62,350	9,002	71,352
30.	Net operating income for return	\$0	(\$62,350)	(\$62,350)	\$0	(\$62,350)	\$106,488	\$44,138

[1] Public Staff Exhibit II, Schedule 3(a) plus Schedule 3(b), Column (c).

[2] Public Staff Exhibit II, Schedule 3(a) plus Schedule 3(b), Column (e).

[3] Public Staff Exhibit II, Schedule 3(a) plus Schedule 3(b), Column (g).

**Total Environmental Solutions, Inc. (TESI)**

Docket No. W-1146 Sub 13

**NET OPERATING INCOME FOR A RETURN**Public Staff  
Feasel Exhibit II  
Schedule 3(a)  
Page 1 of 2**TESI - Water Operations**

TESI - Water Operations		Public Staff						
Line No.	Item	Present Rates		Company Proposed Rates		Recommended Rates		
		Amount Per	Public Staff	Net Company	Operations After Rate	Net Public Staff	Operations After Rate	
		Application	Adjustments [1]	Staff [2]	Increase [4]	Increase [5]	Increase [6]	Increase [7]
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
<b><u>Operating Revenues:</u></b>								
1.	Service revenues		\$0		\$0		\$33,302	\$33,302 [8]
2.	Miscellaneous revenues		0		0		0	0
3.	Uncollectible accounts	0	0	0	0	0	0	0
4.	Total operating revenues (Sum of L1 thru L3)	0	0	0	0	0	33,302	33,302
<b><u>Operating Expenses:</u></b>								
5.	Salaries and wages		0		0	0	0	0
6.	Contractor operator - labor		0		0	0	0	0
7.	Administrative and office expense		0		0	0	0	0
8.	Sludge removal & treatment		0		0	0	0	0
9.	Maintenance and repair		0		0	0	0	0
10.	Transportation		0		0	0	0	0
11.	Electric power		0		0	0	0	0
12.	Testing		0		0	0	0	0
13.	Chemicals		0		0	0	0	0
14.	Permit and license		0		0	0	0	0
15.	Rate case expense		0		0	0	0	0
16.	Office rent		0		0	0	0	0
17.	Insurance		0		0	0	0	0
18.	Total operating expenses (Sum of L5 thru L17)	0	0	0	0	0	0	0
<b><u>Depreciation and Taxes:</u></b>								
19.	Depreciation		14,750	14,750 [3]	0	14,750 [3]	0	14,750 [3]
20.	Property taxes		0		0	0	0	0
21.	Payroll taxes		0		0	0	0	0
22.	Regulatory fee - other taxes		0		0	0	47	47 [9]
23.	Gross receipts tax		0		0	0	0	0
24.	State income tax		0		0	0	336	336 [10]
25.	Federal income tax		0		0	0	2,752	2,752 [11]
26.	Total depreciation and taxes (Sum of L19 thru L25)	0	14,750	14,750	0	14,750	3,135	17,885
27.	Total operating revenue deductions (L18+L26)	0	14,750	14,750	0	14,750	3,135	17,885
28.	Net operating income for return (L4-L27)	\$0	(\$14,750)	(\$14,750)	\$0	(\$14,750)	\$30,167	\$15,417

**Total Environmental Solutions, Inc. (TESI)**

Docket No. W-1146 Sub 13

**FOOTNOTES TO SCHEDULE 3(a)**

Public Staff  
Feasel Exhibit II  
Schedule 3(a)  
Page 2 of 2

**TESI - Water Operations**

- [1] Column (c) minus Column (a), unless otherwise footnoted.
- [2] Column (a) plus Column (b), unless otherwise footnoted.
- [3] Public Staff Exhibit II, Schedule 2-1(a), Column (e), Line 3.
- [4] Column (e) minus Column (c), unless otherwise footnoted.
- [5] Column (c) plus Column (d), unless otherwise footnoted.
- [6] Column (g) minus Column (c), unless otherwise footnoted.
- [7] Column (c) plus Column (f), unless otherwise footnoted.
- [8] Revenue requirement as calculated by the Public Staff.
- [9] Calculated by the Public Staff.
- [10] Public Staff Exhibit II, Schedule 3-1(a), Column (c), Line 12.
- [11] Public Staff Exhibit II, Schedule 3-1(a), Column (c), Line 14.

**Total Environmental Solutions, Inc. (TESI)**  
Docket No. W-1146 Sub 13  
**NET OPERATING INCOME FOR A RETURN**

Public Staff  
Feasel Exhibit II  
Schedule 3(b)  
Page 1 of 2

**TESI - Sewer Operations**

		Present Rates			Company Proposed Rates			Public Staff Recommended Rates		
Line No.	Item	Amount Per Application (a)	Public Staff Adjustments [1] (b)	Per Public Staff [2] (c)	Net Company Increase [4] (d)	Operations After Rate Increase [5] (e)	Net Public Staff Increase [6] (f)	Operations After Rate Increase [7] (g)		
<b><u>Operating Revenues:</u></b>										
1.	Service revenues		\$0		\$0		\$82,188	\$82,188 [8]		
2.	Miscellaneous revenues		0		0		0	0		
3.	Uncollectible accounts	0	0	0	0	0	0	0		
4.	<b>Total operating revenues (Sum of L1 thru L3)</b>	0	0	0	0	0	82,188	82,188		
<b><u>Operating Expenses:</u></b>										
5.	Salaries and wages		0		0	0	0	0		
6.	Contractor operator - labor		0		0	0	0	0		
7.	Administrative and office expense		0		0	0	0	0		
8.	Sludge removal & treatment		0		0	0	0	0		
9.	Maintenance and repair		0		0	0	0	0		
10.	Transportation		0		0	0	0	0		
11.	Electric power		0		0	0	0	0		
12.	Testing		0		0	0	0	0		
13.	Chemicals		0		0	0	0	0		
14.	Permit and license		0		0	0	0	0		
15.	Rate case expense		0		0	0	0	0		
16.	Office rent		0		0	0	0	0		
17.	Insurance		0		0	0	0	0		
18.	<b>Total operating expenses (Sum of L5 thru L17)</b>	0	0	0	0	0	0	0		
<b><u>Depreciation and Taxes:</u></b>										
19.	Depreciation		47,600	47,600 [3]	0	47,600 [3]	0	47,600 [3]		
20.	Property tax		0		0	0	0	0		
23.	Payroll tax		0		0	0	0	0		
24.	Regulatory fee - other taxes		0		0	0	115	115 [9]		
25.	Gross receipts tax		0		0	0	0	0		
26.	State income tax		0		0	0	626	626 [10]		
27.	Federal income tax		0		0	0	5,126	5,126 [11]		
28.	<b>Total depreciation and taxes (Sum of L19 thru L27)</b>	0	47,600	47,600	0	47,600	5,867	53,467		
29.	Total operating revenue deductions (L18+L26)	0	47,600	47,600	0	47,600	5,867	53,467		
30.	<b>Net operating income for return (L4-L27)</b>	\$0	(\$47,600)	(\$47,600)	\$0	(\$47,600)	\$76,321	\$28,721		

**Total Environmental Solutions, Inc. (TESI)**

Docket No. W-1146 Sub 13

**FOOTNOTES TO SCHEDULE 3(b)**

Public Staff  
Feasel Exhibit II  
Schedule 3(b)  
Page 2 of 2

**TESI - Sewer Operations**

- [1] Column (c) minus Column (a), unless otherwise footnoted.
- [2] Column (a) plus Column (b), unless otherwise footnoted.
- [3] Public Staff Exhibit II, Schedule 2-1(b), Column (e), Line 17.
- [4] Column (e) minus Column (c), unless otherwise footnoted.
- [5] Column (c) plus Column (d), unless otherwise footnoted.
- [6] Column (g) minus Column (c), unless otherwise footnoted.
- [7] Column (c) plus Column (f), unless otherwise footnoted.
- [8] Revenue requirement as calculated by the Public Staff.
- [9] Calculated by the Public Staff.
- [10] Public Staff Exhibit II, Schedule 3-1(b), Column (c), Line 12.
- [11] Public Staff Exhibit II, Schedule 3-1(b), Column (c), Line 14.

**Total Environmental Solutions, Inc. (TESI)**  
Docket No. W-1146 Sub 13  
**CALCULATION OF INCOME TAXES**

Public Staff  
Feasel Exh bit II  
Schedule 3-1(a)

Line No.	TESI - Water Operations <u>Item</u>	Present Rates	Company Proposed Rates	Public Staff Recommended Rates
		(a) [1]	(b) [2]	(c) [3]
1.	Operating revenue	\$0	\$0	\$33,302
2.	Operating revenue deductions:			
3.	Operating expenses	0	0	0
4.	Depreciation expense	14,750	14,750	14,750
5.	Property taxes	0	0	0
6.	Other taxes	0	0	0
7.	Regulatory fee	0	0	47
8.	Gross receipts tax	0	0	0
9.	Interest expense	5,066 [4]	5,066 [4]	5,066 [4]
10.	Total deductions (Sum of L3 thru L9)	19,816	19,816	19,863
11.	State taxable income (L1 - L10)	(19,816)	(19,816)	13,439
12.	State income tax (L11 x 2.5%)	0	0	336
13.	Federal taxable income (L11 - L12)	(19,816)	(19,816)	13,103
14.	Federal income tax (L13 x 21%)	0	0	2,752
15.	Net amount (L13 - L14)	(19,816)	(19,816)	10,351
16.	Add: Interest expense (L9)	5,066	5,066	5,066
17.	Net income for return (L15 + L16)	<u>(\$14,750)</u>	<u>(\$14,750)</u>	<u>\$15,417</u>

- [1] Public Staff Exhibit II, Schedule 3(a), Column (c).  
[2] Public Staff Exhibit II, Schedule 3(a), Column (e).  
[3] Public Staff Exhibit II, Schedule 3(a), Column (g).  
[4] Public Staff Exhibit II, Schedule 1(a), Column (e), L7.

**Total Environmental Solutions, Inc. (TESI)**

Docket No. W-1146 Sub 13

**CALCULATION OF INCOME TAXES**Public Staff  
Feasel Exhibit II  
Schedule 3-1(b)

Line No.	TESI - Sewer Operations Item	Present Rates	[1]	Company Proposed Rates	[2]	Public Staff Recommended Rates	[3]
		(a)		(b)		(c)	
1.	Operating revenue	\$0		\$0		\$82,188	
2.	Operating revenue deductions:						
3.	Operating expenses	0		0		0	
4.	Depreciation expense	47,600		47,600		47,600	
5.	Property taxes	0		0		0	
6.	Other taxes	0		0		0	
7.	Regulatory fee	0		0		115	
8.	Gross receipts tax	0		0		0	
9.	Interest expense	9,437	[4]	9,437	[4]	9,437	[4]
10.	Total deductions (Sum of L3 thru L9)	57,037		57,037		57,152	
11.	State taxable income (L1 - L10)	(57,037)		(57,037)		25,036	
12.	State income tax (L11 x 2.5%)	0		0		626	
13.	Federal taxable income (L11 - L12)	(57,037)		(57,037)		24,410	
14.	Federal income tax (L13 x 21%)	0		0		5,126	
15.	Net amount (L13 - L14)	(57,037)		(57,037)		19,284	
16.	Add: Interest expense (L9)	9,437		9,437		9,437	
17.	Net income for return (L15 + L16)	(\$47,600)		(\$47,600)		\$28,721	

[1] Public Staff Exhibit II, Schedule 3(b), Column (c).

[2] Public Staff Exhibit II, Schedule 3(b), Column (e).

[3] Public Staff Exhibit II, Schedule 3(b), Column (g).

[4] Public Staff Exhibit II, Schedule 1(b), Column (e), L7.



**Total Environmental Solutions, Inc. (TESI)**  
Docket No. W-1146 Sub 13  
**CALCULATION OF REVENUE REQUIREMENT**

Public Staff  
Feasel Exhibit II  
Workpaper 4(a)

**Water Operations**

Line No.	Item	Rate Base Method (a)	Retention Factor (b)	Revenue Requirement [1] (c)	Operating Ratio Method (d)	Retention Factor (e)	Revenue Requirement [1] (f)	
	<b><u>Operating revenue deductions:</u></b>							
2.	General expenses	\$0			\$0			
3.	Depreciation expense	14,750			14,750			
4.	Property tax	0			0			
5.	Other tax	0			0			
6.	Total	14,750	0.9986000	\$14,771	14,750	0.9986000	\$14,771	
7.	<b>Adjustment for regulatory fee</b>							
	<b><u>Net operating income for return:</u></b>							
8.	Debt service return	5,066	0.9986000	5,073				
9.	Equity return:							
10.	REG @ .14%, SIT @ 2.5%, FIT @ 21%	10,352	0.7691717	13,458	1,033	0.7691717	1,343	
11.								
12.								
13.								
14.								\$15,418
								\$15,417
15.	Revenue requirement - both methods			<u>\$33,302</u>			<u>\$16,114</u>	\$15,417
16.	<b>Revenue requirement recommended by Public Staff</b>			<u>\$33,302</u>			<u>\$33,302</u>	

**Total Environmental Solutions, Inc. (TESI)**  
Docket No. W-1146 Sub 13  
**CALCULATION OF REVENUE REQUIREMENT**

Public Staff  
Feasel Exhibit II  
Workpaper 4(b)

**Sewer Operations**

Line No.	Item	Rate Base Method	Retention Factor	Revenue Requirement [1]	Operating Ratio Method	Retention Factor	Revenue Requirement [1]	
		(a)	(b)	(c)	(d)	(e)	(f)	
<b><u>Operating revenue deductions:</u></b>								
1.	Maintenance expenses	\$0			\$0			
3.	Depreciation expense	47,600			47,600			
4.	Property tax	0			0			
5.	Other tax	0			0			
6.	Total	47,600	0.9986000	\$47,667	47,600	0.9986000	\$47,667	
7.	<b>Adjustment for regulatory fee</b>							
<b><u>Net operating income for return:</u></b>								
8.	Debt service return	9,437	0.9986000	9,450				
9.	Equity return:							
10.	REG @ .14%, SIT @ 2.5%, FIT @ 21%	19,284	0.7691717	25,071	3,927	0.7691717	5,105	
11.		0	0.7264815	0	0	0.7264815	0	
12.		0	0.6393037	0	0	0.6393037	0	
13.		0	0.5908716	0	0	0.5908716	0	
14.		0	0.6393037	0	0	0.6393037	0	\$28,721
15.	Revenue requirement - both methods			<u>\$82,188</u>			<u>\$52,772</u>	\$28,721
16.	Revenue requirement recommended by Public Staff			<u>\$82,188</u>			<u>\$82,188</u>	\$28,721



CONFIDENTIAL

Docket No. W-1146, Sub 13

and

Docket No. W-1328, Sub 10

Public Staff Confidential Feasel Exhibit III