STATE OF NEW JERSEY BOARD OF PUBLIC UTILITIES

IN THE MATTER OF THE REVISION OF RATES FILED BY MIDDLESEX WATER COMPANY BPU DOCKET NO. WR2305_____

PREFILED TESTIMONY

OF

MICHELE L. TILLEY DIRECTOR – BUDGETS & RATES

MAY 2023

1	Q.	Please state your name and business address.
2	А.	Michele L. Tilley, 485C Route One South, Suite 400, Iselin, New Jersey 08830.
3	Q.	Please state your professional qualifications and experience.
4	A.	I am the Director of Budget and Rates for Middlesex Water Company
5		("Middlesex", "MWC" or "the Company"). I have been employed with Middlesex
6		since July 2007. My present duties consist of preparing and assisting in all
7		regulatory and rate case planning related activities for Middlesex and its regulated
8		water and wastewater utilities. My responsibilities include the preparation and
9		review of financial statements, work papers, exhibits, pre-filed testimony and other
10		activities in support of regulatory rate filing activities and I have participated in
11		every rate matter for Middlesex and its subsidiaries since my employment began in
12		2007. My responsibilities also include managing the budget process and income tax
13		compliance filings for Middlesex and its subsidiaries. Prior to 2007, I held various
14		financial positions in publicly traded companies, primarily within the retail
15		industry. I earned a Bachelor of Science Degree in Accounting from Rutgers
16		University in 1989.
17	Q.	Have you ever testified before or submitted testimony to the New Jersey
18		Board of Public Utilities ("NJBPU" or "Board")?
19	А.	Yes. I submitted testimony and supporting exhibits in the Middlesex 2013, 2015,
20		2017 and 2021 base rate proceedings before the Board in BPU Docket Numbers
21		WR13111059, WR15030391, WR17101049 and WR21050813, the Pinelands

1		Water Company 2019 and 2022 base rate proceedings before the Board in BPU
2		Docket Numbers WR19030417 and WR22090555, the Pinelands Wastewater
3		Company 2019 and 2022 base rate proceeding before the Board in BPU Docket
4		Numbers WR19030418 and WR22090556. I also submitted testimony and
5		supporting exhibits in Middlesex's Purchased Water Adjustment Clause ("PWAC')
6		proceedings before the Board in BPU Docket Numbers WR16040306,
7		WR17050524, WR18080948, WR19111463, WR20110722 and WR22030138. I
8		also provided testimony on behalf of Tidewater Utilities, Inc. in its 2013 rate
9		application before the Delaware Public Service Commission.
10	Q.	What is the purpose of your testimony in this rate proceeding?
11	A.	I am specifically responsible for the adjustments and describing the reasons for the
11 12	A.	I am specifically responsible for the adjustments and describing the reasons for the adjustments that have been made to certain components of the Test Year pro forma
	A.	
12	A.	adjustments that have been made to certain components of the Test Year pro forma
12 13	А.	adjustments that have been made to certain components of the Test Year pro forma income statement identified as Exhibit F to the Petition and as Exhibit P-5 to the pre-
12 13 14	А.	adjustments that have been made to certain components of the Test Year pro forma income statement identified as Exhibit F to the Petition and as Exhibit P-5 to the pre- filed direct testimony of Robert J. Capko, who is the Controller and Principal
12 13 14 15	A.	adjustments that have been made to certain components of the Test Year pro forma income statement identified as Exhibit F to the Petition and as Exhibit P-5 to the pre- filed direct testimony of Robert J. Capko, who is the Controller and Principal Accounting Officer of Middlesex. I am also responsible for describing the
12 13 14 15 16	A.	adjustments that have been made to certain components of the Test Year pro forma income statement identified as Exhibit F to the Petition and as Exhibit P-5 to the pre- filed direct testimony of Robert J. Capko, who is the Controller and Principal Accounting Officer of Middlesex. I am also responsible for describing the development of the Company's rate base schedules in this filing, identified as Exhibit
12 13 14 15 16 17	Α.	adjustments that have been made to certain components of the Test Year pro forma income statement identified as Exhibit F to the Petition and as Exhibit P-5 to the pre- filed direct testimony of Robert J. Capko, who is the Controller and Principal Accounting Officer of Middlesex. I am also responsible for describing the development of the Company's rate base schedules in this filing, identified as Exhibit P-6 and included as part of my direct pre-filed testimony. As noted in both Mr. O'

1		responsible for specific schedules, they all relate to each other and are intended to be
2		consistent with each other.
3	Q.	Did Mr. Capko provide a description of Exhibit P-5 in his pre-filed direct
4		testimony?
5	A.	Yes he did.
6	Q.	What adjustments have you made to test year revenues on Exhibit P-5?
7	A.	Test Year revenues have been modified for the effect of resetting the Purchased Water
8		Adjustment Clause (PWAC) tariff rates to zero which according to our understanding
9		of the PWAC regulations, occurs in every base rate case. This allows the PWAC to
10		appropriately reflect changes in our purchased water costs during the periods between
11		rate cases Test Year consumption revenues were also adjusted to annualize the
12		impact of current volumetric tariff rates in effect as of January 1, 2023, the effective
13		date of Middlesex's last base rate change.
14	Q.	Can you describe the adjustment for Facilities Charge revenues?
15	A.	The first adjustment is to reflect the impact on test year Facilities Charges for the
16		current tariff rates that became effective January 1, 2023 and applied to actual active
17		customers. The next adjustment represents the effect of annualizing projected customer
18		growth in the test year based on historical patterns.
19	Q	Can you describe the adjustment to eliminate test year revenue for the City of
20		Rahway (Rahway)?

1	A.	Rahway contracted with Middlesex for a water supply agreement to purchase water
2		with a minimum purchase of 200,000 gallons per day whether the water is used by
3		Rahway or not i.e. a take-or-pay contract. In September 2021, the Company received a
4		Notice of Violation ("NOV") from the New Jersey Department of Environmental
5		Protection ("NJDEP") for exceeding a newly issued maximum contaminant level
6		(MCL) for Perfluorooctanoic Acid ("PFOA"). The NOV required Middlesex to issue
7		a public notification of the exceedance to all of its affected customers. The public
8		notice was issued timely per New Jersey Department of Environmental Protection
9		regulations in October 2021 and shortly thereafter, Rahway stopped taking the daily
10		minimum water required under the contract and has refused to pay its daily minimum
11		payment pursuant to its water supply contract with Middlesex. Rahway has indicated it
12		was now obtaining its supplemental water supply from another source. The Company
13		has received no indication from Rahway that they intend to resume taking water from
14		Middlesex through the expiration date of the take-or-pay contract of August 31, 2025.
15		Middlesex has taken legal steps to recover the revenue owed pursuant to the water
16		supply contract. Specifically, Middlesex has filed a lawsuit against Rahway in the
17		Superior Court of New Jersey, Law Division, Union County (Middlesex Water Co. v.
18		City of Rahway, Docket No. UNN-L-3503-22). It is unknown at this time what the
19		timing or outcome of this litigation will be, but since the revenues from Rahway were
20		included in our base rate revenues in the last case, and we are likely not to be receiving

those revenues during the life of the rates set in this case, an adjustment in this case to
deduct those revenues from base rate revenues was needed. Since by its terms, the
Rahway Water Supply contract ends in 2025, during the anticipated life of these rates
going forward, these revenues should not be included in rates to be set in this case. I
have made that adjustment to reflect this in my schedules.

6 Q. What adjustments have you proposed for source of supply?

7 Middlesex has a purchase water contract with New Jersey American Water Company A. 8 ("NJAWC") that requires a minimum purchase of 3.0 million gallons per day (mgd) of 9 treated water. Purchases from NJAWC are billed to Middlesex under three separate tariff rates identified as Rate Schedule G – Sales For Resale – Service to Other Systems 10 11 (Base Rate), Rate Schedule O-1 – Purchased Water Adjustment Clause (PWAC) and 12 Rate Schedule O-2 – Lead Service Line Replacement Charge (LSLRC) in the NJBPU approved NJAWC Tariff. The NJAWC Base Rate, PWAC and LSLRC shown on 13 14 Exhibit P-5, page 3 are the current tariff rates in effect. Middlesex has been an active intervening party in the more recent NJAWC Base Rate and PWAC matters, and has 15 consistently intervened in previous NJAWC Base Rate and PWAC filings to represent 16 and protect the interests of Middlesex's customers who would be directly impacted by 17 any increases in rates charged to Middlesex by NJAWC.. My adjustments were needed 18 to reflect the current charges in the NJAWC tariff to Middlesex. 19

1		The fourth source of supply adjustment represents projected additional water purchases
2		from NJAWC above the contract minimum of 3.0 million gallons per day (mgd) based
3		on historical averages.
4		The next source of supply adjustment represents the projected increase in the rate for
5		the purchase of untreated water under contract from the New Jersey Water Supply
6		Authority ("NJWSA"). The current NJWSA contract base rate of \$336 per mg, has
7		been in effect since July 1, 2017, and per the notification of proposed rates for the
8		Raritan Basin System received from NJWSA are expected to increase by
9		approximately 8.6% to \$365 per mg, effective July 1, 2023., during the processing of
10		this case, and this adjustment is part of the 'zeroing out' of our PWAC charges by
11		placing the base costs into base rates.
12	Q.	What are the deferred purchased water costs adjustments?
13	A.	As described in detail above, the increase in the base rate charged by NJWSA is both
14		known and measurable during the test year proposed in this rate proceeding and the
15		NJAWC PWAC and LSLRC became effective February 13, 2023 and April 26, 2023,
16		respectively. Rather than seek recovery through a separate PWAC proceeding for the
17		increased PWAC and LSLRC costs during the period between the increase in rates
18		charged to Middlesex and the establishment of new rates to be charged by Middlesex,
19		Middlesex believes those charges should be calculated as part of base rates in rates
20		resulting from this proceeding.
21	Q.	What adjustments have you proposed for purchased power?

1	A.	The schedule on page 5 of Exhibit P-5 shows the cost of purchased power expected to
2		be incurred at each source of supply, production and pumping station. Mr. Robert K.
3		Fullagar, Vice President-Operations, provided the unit cost and water production
4		volumes which include a projected increase of 33% of usage used to operate the new
5		Park Avenue Water Treatment Plant (WTP). The projected volume increase is due to
6		the requirement of the new treatment process for a third pumping stage where in the
7		past there were only two pumping stages as described in Mr. Fullagar's pre-filed direct
8		testimony in this proceeding. I used that information to calculate the adjustment to test
9		year purchased power costs. I made an adjustment to the production volumes to reflect
10		the projected consumption growth associated with new customers shown in the test year
11		adjustments to revenues.
12	Q.	What adjustments have been proposed for chemicals used in the water treatment
13		process?
14	А.	As part of the budgeting process and to effectively manage expenses, Middlesex has
15		issued bid requests in the fourth quarter of its fiscal year for annual contracts from
16		chemical vendors. I have used water production information provided to me by Mr.

Fullagar to calculate the adjustment to test year chemical costs and as he has indicated, chemical cost pricing has been quite volatile recently. I made an adjustment to the production volumes to account for the projected consumption growth associated with

20 the projected new customers shown in the test year adjustments to revenues

1	Q.	What adjustments are you proposing to reflect the increased residuals disposal
2		costs resulting from the water treatment process as described in Mr. Fullagar's (or
3		Carr's?) testimony?
4	A.	Residuals removed from the water treated at the Carl J. Olsen ("CJO") Plant are
5		properly transferred into the Township of Edison ("Edison") sewer system for ultimate
6		treatment and disposal by the Middlesex County Utilities Authority ("MCUA"). The
7		rate charged by Edison for residual treatment is a combination of their cost to run their
8		collection system and fees charged by the MCUA to treat and dispose of those
9		residuals. The first adjustment on my schedule (identify schedule and line) represents
10		the projected annual amount charged by Edison and projected annual cost that will be
11		charged by South Plainfield to dispose of residuals from the upgraded Park Avenue
12		WTP. (which is located in that municipality) This information was provided by Mr.
13		Fullagar and is discussed in his pre-filed direct testimony. The second adjustment I
14		made was to account for the projected consumption growth associated with projected
15		new customers shown in the test year adjustments to revenues.
16	Q.	Please explain the adjustment you made for water treatment structures &
17		improvements (S&I)?
18	А.	The granular activated carbon ("GAC") media for the Park Avenue WTP filters needs
19		to be changed-out when it is no longer effective in removing the perflouroalkyl
20		chemicals the project was designed to remove. It is estimated that the GAC media in
21		each vessel will need to be changed-out each year at an estimated cost of \$60,000 per

1		vessel or, \$600,000 per year. This information was provided by Mr. Fullagar and is
2		more fully described his pre-filed direct testimony.
3	Q.	Have you made an adjustment to the allowance for bad debt expense?
4	A.	Yes, an adjustment to the allowance for bad debt expense has been made which is more
5		fully described in the pre-filed direct testimony of Mr. Robert J. Capko.
6	Q.	What adjustments have been proposed for regulatory commission expenses?
7	A.	The regulatory commission expenses indicated are the estimated costs associated with
8		this rate proceeding. The estimate includes fees for outside counsel services and expert
9		witness advice, written and oral testimonies. These costs are being amortized over a
10		twenty-four month period, which is our best estimate at this time for the period the rates
11		established in the matter are expected to be in effect.
12	Q.	Have you included an adjustment for employee health benefits?
13		
тJ	А.	Yes. The Company's healthcare insurance policy period begins on January 1st of each
14	A.	
	A.	Yes. The Company's healthcare insurance policy period begins on January 1st of each
14	A.	Yes. The Company's healthcare insurance policy period begins on January 1st of each year. The adjustment reflects the expected cost of the various policy premiums that will
14 15	A.	Yes. The Company's healthcare insurance policy period begins on January 1st of each year. The adjustment reflects the expected cost of the various policy premiums that will be in effect as of January 1, 2024, net of employee contributions and capitalized
14 15 16	A.	Yes. The Company's healthcare insurance policy period begins on January 1st of each year. The adjustment reflects the expected cost of the various policy premiums that will be in effect as of January 1, 2024, net of employee contributions and capitalized benefits. I have included this adjustment since the renewals for the healthcare
14 15 16 17	A.	Yes. The Company's healthcare insurance policy period begins on January 1st of each year. The adjustment reflects the expected cost of the various policy premiums that will be in effect as of January 1, 2024, net of employee contributions and capitalized benefits. I have included this adjustment since the renewals for the healthcare insurance policies should be known and measurable prior to the conclusion of this rate

1		employees described in the pre-filed testimonies of Mr. Robert J. Capko, Mr. Brian F
2		Carr and Mr. Robert K. Fullagar.
3	Q.	What has Middlesex done to continue to attempt to mitigate the increase in health
4		care insurance costs?
5	A.	The Company continues to review benefits, costs and employee contributions on a
6		continuous basis. We also utilize an insurance broker to bid out our coverage
7		annually to ensure that we obtain the best overall rates possible while offering our
8		employees the most appropriate coverage we can. Middlesex also offers a lower
9		cost/higher deductible plan as an option for employees. Making this option
10		available to employees helps in controlling the Company cost of offering
11		competitive benefits to attract and retain our workforce. The employee
12		contribution rate was set lower for that plan option to incentivize employees to
13		choose the plan if it appropriate for them. Middlesex also offers an "opt-out"
14		incentive for employees to decline Middlesex sponsored health benefits, when the
15		employee has benefits available through other means thereby, eliminating the cost
16		to the employee and mitigating the cost to the Company and its customers.
17	Q.	Was an adjustment included for the Company's defined benefit pension ("DB")
18		and FAS 106 plans?
19	A.	Yes, the cost adjustments made to the Company's DB and FAS 106 plans are fully
20		described in the pre-filed direct testimony of Mr. Capko.
21	Q.	What is the business insurance adjustment?

1	А.	The test year adjustment represents a projected increase of approximately 11.8% in
2		business insurance costs when the policies are renewed on January 1, 2024. I have
3		included this adjustment since the renewals for the business insurance policy premiums
4		will likely be known and measurable prior to the conclusion of this rate matter. As
5		more accurate information becomes available, the Company will update its pro forma
6		business insurance expense.
7	Q.	What is the shared overhead adjustment?
8	A.	This adjustment represents an increase in overhead expenses that are allocated to the
9		subsidiaries of Middlesex. That effectively reduces this account's allocation to
10		Middlesex customers. The categories that are included in the pool of costs to be
11		allocated are related to services that are provided to by Middlesex employees to the
12		subsidiaries.
13	Q.	What is the Enterprise Resource Planning ("ERP") system support charge to the
14		Tidewater adjustment?
15	A.	This adjustment represents the allocated portion of this system to the Middlesex
16		subsidiary, Tidewater Utilities, Inc., of the annual cost to maintain the various licenses
17		for the use of the software to run the ERP system, as well as the on-going costs for
18		maintaining the ERP system and other Information Technology ("IT") components.
19		Also included in this cost allocation is a portion of IT related labor, payroll taxes and
20		employee benefits.
21	Q.	Can you explain the antenna revenue adjustment?

1	A.	This negative expense adjustment represents the scheduled annual increase effective
2		December 1, 2023 for cell tower contracts between the Company and wireless phone
3		service providers.
4	Q.	What is the customer deposit interest adjustment?
5	A.	This adjustment represents the interest that is expensed "below-the-line" for customer
6		deposits that are a negative component of rate base.
7	Q.	Can you please explain the adjustments for payroll in Exhibit P-5, page 11?
8	A.	The first adjustment is for planned wage increases for employees who are on a wage
9		progression schedule. These increases are designed to bring an entry level employee to
10		pay parity with other employees performing similar jobs over a 36-month period,
11		assuming acceptable job performance. The second and third adjustments represent the
12		annualized effect of the March 2023 average wage increase of 4.25% and a projected
13		March 2024 average wage increase of 3.5% on base payroll and overtime payroll. The
14		fourth payroll adjustment represents the effect of applying the expected capitalized
15		payroll and subsidiary labor allocation percentages to the adjusted test year payroll.
16		The fifth adjustment is to reflect the full complement of employee positions as
17		described by Mr. Capko, Mr. Carr ,and Mr. Fullagar in their respective pre-filed direct
18		testimonies. These adjustments are also expected in the context of the testimonies
19		regarding the pressures Middlesex is and will continue to face in the context of the
20		changing demographics of our employees. As those testimonies indicate, it is clear that

1		both salaries and benefits are critical factors in the Company's efforts to hire, retain,
2		and train employees for the benefit of our customers.
3	Q.	Can you explain the depreciation expense adjustment on page 12 of Exhibit P-5?
4	A.	The adjustment brings the test year depreciation expense to the pro forma depreciation
5		expense based on the projected Utility Plant in Service ("UPIS") balance used to set
6		rates. Depreciation expense is calculated by applying the NJBPU-approved
7		depreciation rate by sub account, in all but one instance, to the pro forma UPIS
8		balances. This is effectively a 'flow through' adjustment which will be impacted by
9		whatever is determined to be plant in service.
10	Q.	Why have you used a depreciation rate in one instance that differs from the
11		NJBPU approved depreciation rate?
12	A.	The approved depreciation rate for sub account 391, office furniture and fixtures, is
13		
тU		11.91%. This category also includes all of the Company-owned computer-related
14		11.91%. This category also includes all of the Company-owned computer-related equipment and systems used to administer the business. ERP has historically been
14		equipment and systems used to administer the business. ERP has historically been
14 15		equipment and systems used to administer the business. ERP has historically been included in the UPIS balance on which depreciation expense has been calculated.
14 15 16		equipment and systems used to administer the business. ERP has historically been included in the UPIS balance on which depreciation expense has been calculated. Middlesex currently anticipates that the projected life of the core ERP system will be
14 15 16 17		equipment and systems used to administer the business. ERP has historically been included in the UPIS balance on which depreciation expense has been calculated. Middlesex currently anticipates that the projected life of the core ERP system will be longer than the implied life of UPIS under sub account 391 (an 11.91% depreciation
14 15 16 17 18		equipment and systems used to administer the business. ERP has historically been included in the UPIS balance on which depreciation expense has been calculated. Middlesex currently anticipates that the projected life of the core ERP system will be longer than the implied life of UPIS under sub account 391 (an 11.91% depreciation rate implies an 8.40 year life). During the anticipated 2 year life of the rates set in this

1		of 25 years) is currently appropriate and has the benefit of eliminating the need to
2		perform a full depreciation study in this rate proceeding (which avoids that substantial
3		cost). The same 4% rate for this account was used in the last five Middlesex base rate
4		proceedings. This is just another example of Middlesex trying to match the most
5		reasonable cost to provide service with what we expect to be the underlying service
6		period.
7	Q.	How does the social security tax adjustment on page 13 of Exhibit P-5
8		correlate to the payroll increase?
9	A.	The payroll tax adjustment details the calculation of the social security tax increase
10		on the taxable portion of the adjusted test year payroll. I have excluded from the
11		tax calculation the payroll increase that exceeds the current social security taxable
12		base. I have not made any allowance at this time for increases in the effect of
13		unemployment or disability taxes since substantially all of the payroll increase is
14		above the taxable wage base for those taxes.
15	Q.	Can you explain the revenue tax adjustments on Exhibit P-5, page 14?
16	A.	This tax adjustment sets forth the calculation of gross receipts and franchise taxes at
17		present and proposed rates. Column one represents the effect of the revenue
18		adjustments to Test Year amounts. Column two represents the increase in revenue
19		taxes based upon the proposed revenue increase.
20	Q.	Can you explain the real estate tax adjustments shown on page 15 of Exhibit
21		P-5?

1	A.	The first adjustment is for the regular assessment of real estate taxes from the various			
2		municipalities. Real estate taxes are assessed for a fiscal period that begins on July 1 st			
3		and ends on June 30^{th} of the following year. The Company has not received the 2023 -			
4		2024 tax bills from the various municipalities in which it owns real property and so has			
5		projected an average increase of 0.91% based on the year-over-year overall increase in			
6		1 st quarter 2023 real estate taxes. When the new fiscal year real estate tax bills are			
7		received by the Company, the adjustment will be updated as part of this proceeding.			
8		The second adjustment represents a pro forma increase in real estate taxes due to an			
9		expected change in the assessed property value of the Company's CJO Plant. A higher			
10		assessed value is based on a property reassessment performed by the Township of			
11		Edison after the completion of CJO Plant improvements, which was used to calculate			
12		the Non-Residential Development Fee imposed upon the Company by the Township of			
13		Edison.			
14	Q.	What is the regulatory assessment adjustment on page 15 of Exhibit P-5?			
15	А.	This first adjustment is the result of the change in NJBPU and Division of Rate			
16		Counsel assessment rates, as indicated on the 2023 assessment invoices applied to			
17		adjusted Test Year revenue. The second adjustment reflects the proposed revenue			
18		increase effect on the NJBPU and Division of Rate Counsel assessments.			

Q. Can you explain the adjustment for deferred Covid-19 costs – BPU Docket No. AO20060471 on page 16 of Exhibit P-5?

1	А	In the July 2, 2020 Order under Docket No. AO20060471, the Board directed all			
2		affected utilities to file a petition for any potential rate recovery of deferred Covid-19			
3		costs with the Board by December 31, 2021, or within 60 days of the close of the			
4		Regulatory Asset period, whichever is later. By Order dated December 21, 2022 in BPU			
5		Docket No. AO20060471, the Board extended the Regulatory Asset period to March			
6		15, 2023. As such, the Company is seeking recovery of prudently incurred Covid-19			
7		costs as part of this rate matter as more fully described in the pre-filed direct testimony			
8		of Mr. A. Bruce O'Connor.			
9	Q.	What is the adjustment for deferred production costs - PFAS mitigation –			
10		BPU Docket No. WR22010009 on page 17 of Exhibit P-5?			
11	А	On January 13, 2022, the Company filed a petition (BPU Docket No. WR22010009)			
12		requesting authority from the Board to defer on its books certain extraordinary expenses			
13		related to the environmental remediation of its wells contaminated with Per- and			
14		Polyfluoralkyl Substances ("PFAS"). As part of this rate matter, the Company is			
15		seeking recovery of these extraordinary costs which are more fully described in the pre-			
16		filed direct testimony of Mr. O'Connor.			
17	Q.	What is the federal income tax adjustment on Exhibit P-5, page 18?			
18	А.	The federal income tax adjustment sets forth the income tax calculation adjusted at			
19		present and proposed rates. Mr. O'Connor provides the specific details of the			
20		calculations in his pre-filed direct testimony.			
21	Q.	What is the tax gross-up calculation shown on Exhibit P-5, page 20?			

1	A.	The tax gross-up calculation is used to account for the impact of additional tax and
2		other expenses that will be incurred on the proposed revenue increase. The gross-up
3		factor is applied to the proposed operating income deficiency shown on Exhibit P-5,
4		page 20 to determine the total revenue requirement.
5	Q.	Have you prepared an Exhibit entitled rate base calculation?
6	A.	Yes, an Exhibit entitled Rate Base Calculation, designated as Exhibit P-6, was prepared
7		by me, under the direct supervision of Mr. Capko.
8	Q.	Please describe how the rate base was calculated as shown on Exhibit P-6.
9	A.	The beginning point of the rate base calculation is actual UPIS as of December 31,
10		2022. The detail of the additions and retirements for the Test Year and post-Test Year
11		UPIS is shown in Exhibit P-2 and is addressed in pre-filed direct testimony sponsored
12		by Mr. Brian F. Carr. From the UPIS balance brought forward from Exhibit P-2, an
13		ERP-related amount, attributable and allocable to Middlesex affiliates, is subtracted to
14		arrive at projected UPIS as of March 31, 2024. Next, I calculated the accumulated
15		depreciation reserve. Beginning with the Reserve for Depreciation balance as of
16		December 31, 2022, I next added nine months of Test Year Depreciation Expense.
17		Annual depreciation expense can be found in Exhibit P-5, page 12. Next, I subtracted
18		retirements as shown on Exhibit P-2 to arrive at a the Reserve for Depreciation.
19	Q.	Please explain the Bayview acquisition adjustment as shown on Exhibit P-6.
20	A.	This component of the Company's rate base represents the unamortized balance of
21		costs associated with Middlesex's acquisition of the Fortescue Island public water

1		utility in 2001. Prior to the acquisition by Middlesex of this troubled small water
2		system, and at the 'request' of the NJBPU, Middlesex operated the system as an interim
3		custodial receiver for nearly four years. This is a clear example of where a private
4		entity (Middlesex) assisted the State of New Jersey in solving a significant problem
5		involving a troubled water system. In conjunction with the Middlesex 2005 base rate
6		case, BPU Docket No. WR05050451, and with the cooperation of all the parties to that
7		case, the Fortescue ("Bayview") operations were merged into, and made part of, the
8		Middlesex rate setting process. Bayview customers served by Middlesex continue to
9		receive the benefit of quality water service and have had their rates stabilized as part of
10		the rates of Middlesex. The acquisition adjustment treatment included in the financial
11		statements submitted in this base rate proceeding merely continues the treatment that
12		has been supported by the NJBPU since the acquisition by Middlesex in 2001.
13	Q.	Please explain the adjustment for regulatory liability.
14	А.	This component of rate base represents the projected unamortized balance as of
15		September 30, 2023 of the Regulatory Liability which was established following the
16		enactment of the Tax Cuts and Jobs Act of 2017 ("2017 TCJA"). The Regulatory
17		Liability represents the portion of accumulated deferred income taxes collected at the
18		higher pre-2017 TCJA tax rate at the time the customer rates were approved prior to the
19		2017 TCJA. The annual amortization of the Regulatory Liability is reflected as a
20		reduction in Federal Income Tax expense shown on Exhibit P-5, page 18. This
21		adjustment is further described in the pre-filed testimony of Mr. O'Connor.

1	Q.	What is the adjustment for the Tangible Property Regulations ("TPR") regulatory			
2		asset?			
3	A.	This component of rate base represents the projected unamortized balance as of			
4		September 30, 2023 of the Regulatory Assets established to execute the special			
5		accounting treatment approved for the adoption by Middlesex of the final TPR issued			
6		by the Internal Revenue Service which was approved by the Board in BPU Docket No.			
7		WR17101049. Please refer to the pre-filed testimony of Mr. O'Connor for information			
8		pertaining to the adoption of the TPR and its operation.			
9	Q.	Can you describe the remaining rate base adjustments?			
10	A.	Yes. Deferred Income Taxes (Property Related) pertains to the Company's use of			
11		accelerated tax depreciation. This amount has been adjusted to reflect the			
12		anticipated additions to UPIS during the Test Year. Customer Advances for			
13		Construction ("CAC") and Contributions in Aid of Construction ("CIAC")			
14		amounts, which are deducted from utility plant to arrive at rate base, represent the			
15		estimated balance per books as of September 30, 2023, the end of the proposed			
16		Test Year in this case. The deferred income taxes related to Bond Redemption			
17		Expenses and Gross Receipts and Franchise Taxes, as well as the Retirement Plan			
18		Reserve, Injuries and Damages Reserve, Road Opening Permit Deposits and			
19		Customer Deposits have been recorded as adjustments to rate base consistent with			
20		prior approved treatment. These amounts represent the projected balances as of			

1		September 30, 2023, and will be updated as additional information becomes
2		available.
3		The amount shown for Materials and Supplies ("M&S") represents a 13-month average
4		account balance beginning with February, 2022 and ending with February, 2023. The
5		average M&S account balance will be updated during this rate proceeding as actual
6		information becomes available.
7	Q.	Did the Company perform a lead/lag study to determine the appropriate
8		working capital allowance?
9	A.	A lead/lag study for the twelve months ended December 31, 2022 ("2022 Lead/Lag
10		Study") was prepared in conjunction with this base rate case proceeding. The results of
11		the 2022 Lead/Lag Study were used to establish the cash working capital allowance as
12		shown on page 2 of 2 of Exhibit P-6 attached to my testimony.
13	Q.	Have you sponsored an Exhibit to the petition for a continued use of a PWAC?
14	A.	Yes, Middlesex is seeking to update its PWAC base line information to meet the
15		requirements set forth in N.J.A.C. 14:9-7.1. The information schedule has been
16		designated as Exhibit H to the Petition.
17	Q.	Does this conclude your testimony?
18	A.	Yes.

MIDDLESEX WATER COMPANY 2023 RATE CASE RATE BASE CALCULATION (5 Months Actual /7 Months Budget) BPU Docket No. WR2305XXXX

Less	Test Year Utility Plant in Service per Exhibit P-2 ERP UPIS Allocated to Affiliate	841,143,286 (8,109,861)	
	Adjusted Test Year Utility Plant in Service		\$ 833,033,425
(Less)/A	dd		
(2000)/11	Reserve for Depreciation		
	Balance as of December 31, 2022	\$ (169,314,501)	
	Test Year Depreciation Expense (01/01/23-09/30/23)	(14,805,830)	
	Test Year Retirements	1,761,329	
	Post Test Year Retirements	20,000	
	Reserve for Depreciation	(182,339,002)	
	ERP Accumulated Depreciation Allocated to Affiliate	4,258,417	
	Adjusted Test Year Reserve for Depreciation		\$ (178,080,585)
	Net Utility Plant in Service		654,952,840
Add:			
	Unamortized Bayview Acquisition Adjustment - 12/31/22	157,548	
	Test Year Amortization (Rate = 1.52%)	(2,580)	
	Test Year Bayview Acquisition Adjustment		154,967
(Less)/A		(18 461 420)	
	Regulatory Liability (Property Related) TPR Regulatory Asset (Property Related)	(18,461,429) 54,683,317	
	Deferred Income Taxes (Property Related)	(56,915,327)	
	Contributions in Aid of Construction	(20,654,600)	
	Customer Advances	(1,799,412)	
	Deferred Income Taxes- Bond Redemption Expenses	(17,233)	
	Deferred Income Taxes- Gross Receipts and Franchise Taxes	578,168	
	Materials and Supplies (13 month average)	5,285,674	
	Retirement Plan Reserve	(4,105,790)	
	Injuries and Damages Reserve	(31,834)	
	Road Opening Permits Deposits	241,602	
	Working Capital Allowance	11,173,271	
	Customer Deposits	(79,205)	
	•		(30,102,798)
	Adjusted Test Year Rate Base		\$ 625,005,009

MIDDLESEX WATER COMPANY LEAD/LAG SUMMARY AT PROPOSED RATES (5 Months Actual /7 Months Budget) BPU Docket No. WR2305XXXX

	AMOUNT	LEAD/LAG DAYS	WEIGHTED AMOUNT
TOTAL REVENUE LAG	\$ 142,313,596	78.34 (A)	
O&M EXPENSES	\$ 53,587,062	15.23	\$ 816,130,955
DEPRECIATION	19,744,547	-	-
OTHER TAXES	21,593,932	285.60	6,167,227,005
FEDERAL INCOME TAXES			-
FIT AMORTIZATION	717,221	-	-
FIT EXPENSE	2,357,980	37.00	87,245,278
INVESTED CAPITAL	44,312,853	-	
TOTAL REQUIREMENT	\$ 142,313,596	49.68 (B)	\$ 7,070,603,238
NET LEAD(LAG) DAYS		28.66 (A)-(B)

DAILY REQUIREMENTS (TOTAL REQUIREMENT/365 DAYS)

\$ 389,900 (C)

CASH WORKING CAPITAL REQUIREMENT

<u>\$ 11,173,271 (C)*((A)-(B))</u>