BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF DELAWARE

IN THE MATTER OF THE APPLICATION OF ARTESIAN WATER COMPANY, INC. FOR AUTHORITY TO INCREASE RATES AND CHARGES FOR WATER SERVICE (Filed April 11, 2014)	PSC Docket No. 14-132

DIRECT TESTIMONY
OF
WILLIAM C. OLIVA
AS INTERVENOR
ON BEHALF OF THE

INDEPENDENCE HOMEOWNERS ASSOCIATION

Independence Homeowners Association
c/o Ms. Sarah Dutton
23767 Samuel Adams Circle
Millsboro, DE 19966

September 24, 2014

EXECUTIVE SUMMARY

My name is William C. Oliva, and I am Intervenor representing the Independence Homeowners Association on the application of Artesian Water Company, Inc. ("AWC") to increase rates and charges, filed April 11, 2014 ("Application"). AWC represents that this will increase water sale revenues by $9,859,005, or 15.71% over the pro forma test period present rates.[1]

The Independence community, located in Sussex County, is a 55 years and over active adult community of more than 150 homes with over 300 residents, and growing. Most are retired from fulltime employment and depend primarily on retirement income for living expenses.

As such, the 18.7% increase in **residential** monthly usage rates proposed by AWC would put significant strain on our HOA members. This is especially true given the two-step 13.3% increase in wastewater rates that will be fully phased in next month, as well as Governor Markell's proposed water tax.

As such, my final recommendations discussed herein are as follows:

Target ROE:	**9.25%**	
Target Rate of Return:	**6.42%**	
Water Sales Increase:	**2.62%**	**$1,643,909**
O&M Expense Reduction:	**2.62%**	**$894,796**

A. THE INDEPENDENCE COMMUNITY

Ours is a 55 and over community with 90% of the residents retired from fulltime work. About 85% depend upon fixed retirement income, e.g., social security, pension, 401(k) accounts, as the primary source of household income. Just over 88% moved to Independence from another state, with 73% from New Jersey, Maryland, New York and Pennsylvania.

Most interesting, 95% paid under $1,000 annually for combined water and wastewater at their previous residences, 86% under $800, and 73% under $600. For many of Artesian's customers, wastewater alone will cost $1,020 per year when the second half of the increase takes effect in a few weeks. For many residents, just their wastewater bill will exceed their school tax. The sewer and water increases will place an unfair and unsustainable burden on many retirees.

The increase proposed by AWC will put significant burden on our primarily fixed income retirement community, especially when combined with the already-decreed 13.3% wastewater increase and Governor Markell's proposed water tax. In aggregate the increases could average $250 annually.

[1] Supplemental testimony of Mr. Valcarenghi of AWC, June 30, 2014, hereinafter referred to as "DLV-S."

B. CONCERNS REGARDING THE APPLICATION

There are significant issues that AWC must address before the PSC decides on its Application.

1. **AWC's Proposed Water Rates are dramatically overstated.** AWC's requested $9.9m revenue increase actually provides it with a 13.18% return on equity ("ROE"). In fact, to obtain ***AWC's requested 10.90% ROE requires an overall revenue increase of 8.95%, not 15.71%. Its requested water sales increase is overstated by $4.2m***. Refer to Section I.

> **These errors are material such that AWC should refile its Application to correct the Statement of Operating Income and all requisite schedules, including and especially the corrections to each component of Water Sales.**

2. **The requested 10.90% ROE is indefensible,** being far too high as Artesian's own testimony before the Commission states explicitly. ***The appropriate ROE is 9.25%***. Adjusting for 9.25% ROE further reduces the increase in water sales from 8.95% to 4.05%, discussed in Section II.

3. **No attempt has been made by AWC to trim expenses,** thus squeezing its customers for every dollar to obtain its requested ROE. It seems that AWC wants a guaranteed ROE every year, not a target attainable over a number of years only if it runs its business efficiently. Any ROE granted by the PSC requiring an increase in Utility NOI should be attainable only through revenue increases **and** cost reductions. This way AWC and its customers share the benefits of AWC running an efficient operation. Section III recommends that the percentage revenue increase should equal the percentage expense reduction necessary to obtain the target ROE. This further reduces the increase in water sales from 4.05% to 2.62%, while maintaining target ROE at 9.25%.

4. **Use of Requested Revenue Increase** 85% of the requested $9.9m increase in water sales will go to the shareholders of Artesian Resources Corporation ("Artesian") as cash dividends, and for additional tax expense (resulting from the proposed increase), and not remain in the business. Whatever the increase in water sales revenue, it is unfair that 85 cents of every additional dollar paid by ratepayers not remain in the business, discussed in Section IV.

> **AWC should address these issues prior to the PSC's decision on its Application.**

I. AWC'S PROPOSED WATER RATES ARE DRAMATICALLY OVERSTATED

In its Application, AWC has overstated by $4.24m the increased revenues needed to obtain a 10.90% ROE. In addition, Utility Net Operating Income ("NOI") is overstated by $2.54m, Rate of Return by 1.15% (8.40% vs. 7.25%), and ROE is actually 13.18% (overstated by 2.28%), shown in Table I-1 below.

Table I-1

CORRECTED AWC PROPOSED WATER SALES

	AWC's APPLICATION[i]	CORRECTIONS	CORRECTED APPLICATION
Water Sales	**$72,611,321**	**$(4,241,770)**	**$68,369,551**
Other Revenues	1,565,452	(8,725)	1,556,727
	74,176,772	(4,250,494)	69,926,278
Operating Expenses	47,162,228	(26,480)	47,135,748
Utility Operating IBT	27,014,545	(4,224,015)	22,790,530
Income Taxes	8,430,148	(1,678,708)	6,751,440
Utility NOI	**18,584,397**	**(2,545,307)**	**16,039,090**
Interest Expense, net[ii]	3,850,640	---	3,850,640
Utility Net Income	**$14,733,757**	**$(2,545,307)**	**$12,188,450**
Rate Base	$221,242,816		$221,242,816
Rate of Return[iii]	8.40%	(1.15%)	7.25%
Equity Base[iv]	$111,820,643		$111,820,643
ROE[v]	**13.18%**	**(2.28%)**	**10.90%**

[i] Sources: DLV-S Schedules DLV3-2-S and DLV-4A-S
[ii] Rate Base*49.46%*5.84%*(1-tax rate), tax rate = 39.742%
[iii] Utility NOI / Rate Base
[iv] Rate Base*50.54%
[v] Utility Net Income / Equity Base

What happened? When AWC calculated its Rate of Return (8.40%) on Schedule DLV-4A-S, it used the pre-tax cost of debt (5.84%) instead of the after-tax cost of debt (3.52%). However, Rate of Return and ROE are **after-tax** metrics. This error rippled through the entire schedule, making each category incorrect, causing the entire Application to be materially incorrect.

If we accept all of AWC's assumptions (which I do not) and only correct the errors detailed in Table I-1 above, AWC's requested revenue increase drops from 15.71% to 8.95%. See Table I-2 below.

Table I-2

CORRECTED AWC PROPOSED WATER SALES

WATER SALES	AWC'S APPLICATION[i]	CORRECTED APPLICATION[ii]
Requested	$72,611,321	$68,369,551
Present Rates[iii]	$62,752,316	$62,752,316
Increase		
Dollars	$9,859,005	$5,617,235
Percent	15.71%	8.95%

[i] DLV-S Schedule DLV3-2-S and Application.
[ii] Table I-1
[iii] Pro Forma Test Period

In summary, AWC's error *materially overstated* the following key metrics that form the bases of its Application:

Water Sales	**$4.2 million overstated**
Utility NOI	**$2.5 million overstated**
Rate of Return	**8.40% instead of 7.25%**
ROE	**13.18% instead of 10.90%**

As a result, Table I-1 will be the starting point of the remainder of this testimony.

II. RETURN ON EQUITY

A. AWC'S REQUESTED 10.90% ROE IS INDEFENSIBLE: INTERNAL ANALYSIS

We can compare the appropriate returns on equity for AWC and Artesian Wastewater Management, Inc. (AWMI"). This is ideal because management and employees are the same for both companies, and management has significant testimony on both companies filed with the PSC.

In comparing the risks of AWMI with **water utilities** in order to determine an appropriate ROE for AWMI, Mr. Valcarenghi of Artesian stated that

"***A wastewater utility is a much riskier business*** as evidenced by the larger amount of capital needed for operations. Indeed, a wastewater utility not managed properly becomes a health hazard.[2]" (emphasis added)

Since the wastewater business is "much riskier" than the water business, Artesian is saying that the appropriate ROE for its water business must be considerably lower than that for its wastewater business. Since Artesian, the PSC and the Delaware Public Advocate ("DPA") all agree that the appropriate ROE for AWMI is 10%, it stands to reason that the appropriate ROE for AWC is considerably below 10%.

There are a number of factors in determining the relative return on equity among businesses, and Table II.A-1 below compares AWC and AWMI in a several key areas. In all areas I concur with Mr. Valcarenghi that AWC is a less risky business than AWMI.

Table II.A-1

KEY FACTORS IN EVALUATING RELATIVE BUSINESS INVESTMENT RISK

Risk	Lower Risk: AWC vs. AWMI	Comments
Nature of Business	AWC	Artesian testimony referenced above
Operating Leverage	AWC	Artesian testimony referenced above
Financial Leverage	AWC	AWC 50% equity AWMI 41% equity
Management Experience	AWC	AWC: in business > 100 years AWMI: in business < 10 years
Scale of Operations	AWC	AWC is 90% of Artesian by revenues
Capital Markets Access	AWC	As independent business AWMI would have limited access

[2] PSC Docket No. 13-27WW, *Rebuttal Testimony of David L. Valcarenghi on behalf of Artesian Wastewater Management, Inc.*, July 16, 2013, page 24, lines 17-19. Mr. Spacht, CFO of Artesian, adopted this testimony at the AWMI evidentiary hearing on August 6, 2013. See hearing transcript, page 122, lines 9-13.

B. AWC'S REQUESTED 10.90% ROE IS INDEFENSIBLE: CAPITAL MARKETS ANALYSIS

All companies deserve the opportunity to earn an appropriate ROE based on the risk profile of the business, and AWC is no exception to that. The key question is how to determine that appropriate ROE. Fortunately, Artesian's stock ("ARTNA") is publicly traded, and we can calculate its cost of equity ("COE") based on capital markets data, and then impute a cost of equity to AWC. Appropriate ROE should be related to the company's COE, not just 10.90% taken out of the air.

1. COST OF EQUITY

Herein we use the dividend growth model. As with any models (including AWMI's model to calculate its erroneous 15.71% increase in water revenues), inputs are critical and must be scrutinized carefully. Fortunately, and unlike AWC's assumptions, those used in the calculations of ARTNA's COE are based on arm's length investors, market analysts, and rich historical data.

ARTNA has paid dividends to its shareholders for 88 consecutive quarters, and increased its dividend to shareholders every year for the past 18 years. As such, the dividend growth model is an appropriate way to calculate ARTNA's COE. The formula is:

$$COE = d/p + g, \text{ where}$$

d = one-year forward dividend; p = stock price net of floatation costs; g = dividend growth rate.

As of June 30th, 2014 this formula calculates the COE of ARTNA to be 8.00%-8.25%[3]. Given that about 90% of Artesian's equity is invested in AWC, it is not unreasonable to assume that AWC's cost of equity is in the 8.00%-8.25% range as well.

2. RETURN ON EQUITY

As stated above, the ROE should be related to the COE. And we know from Section II.A. above that the ROE of AWC must be significantly lower than the 10% of AWMI, but somewhat above the 8.00%-8.25% COE to permit Artesian the opportunity to add value through its operations.

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[3] The 8.25% assumes a 5% floatation cost for new equity issuance; d = $0.89; p = $21.36 ($22.48*.95); g = 4.0%.

C. The Appropriate ROE is 9.25%, a Revenue increase of 4.05%

The 9.00% - 9.25% ROE would provide AWC a generous 100bp spread over its COE, and be significantly lower than 10%, as required by Artesian in its own testimony. For the purposes of the subsequent analysis, I will give Artesian the benefit and use the 9.25% ROE.

The ROE-Adjusted Pro Forma Test Period with Proposed Rates would then look as shown in Table II.C-1 below:

Table II.C-1

ROE-ADJUSTED AWC PROPOSED WATER SALES

	Corrected Application[i]	ROE Adjustments	ROE-Adjusted Application
Water Sales	**$68,369,551**	**$(3,074,769)**	**$65,294,782**
Other Revenues	1,556,727	(6,325)	1,550,402
	69,926,278	(3,081,094)	66,845,184
Operating Expenses	47,135,748	(19,192)	47,116,556
Utility Operating IBT	22,790,530	(3,061,902)	19,728,628
Income Taxes	6,751,440	(1,216,861)	5,534,579
Utility NOI	**16,039,090**	**(1,845,041)**	**14,194,049**
Interest Expense, net[ii]	3,850,640	---	3,850,640
Utility Net Income	**$12,188,450**	**$(1,845,041)**	**$10,343,409**
Rate Base	$221,242,816		$221,242,816
Rate of Return[iii]	7.25%	(0.83%)	6.42%
Equity Base[iv]	$111,820,643		$111,820,643
ROE[v]	**10.90%**	**(1.65%)**	**9.25%**

[i] Source: Table I-1
[ii] Rate Base*49.46%*5.84%*(1-tax rate), tax rate = 39.742%
[iii] Utility NOI / Rate Base
[iv] Rate Base*50.54%
[v] Utility Net Income / Equity Base

If we accept all of AWC's remaining assumptions (which I do not) and stop with the ROE adjustments detailed in Table II.C-1 above, AWC's corrected requested revenue increase drops from 8.95% to 4.05%. See Table II.C-2 below.

Table II.C-2

CORRECTED AWC PROPOSED WATER SALES

Water Sales	**Corrected Application**[i]	**ROE Adjusted Application**[ii]
Requested	$68,369,551	$65,294,782
Present Rates[iii]	$62,752,316	$62,752,316
Increase		
Dollars	$5,617,235	$2,542,466
Percent	8.95%	4.05%

[i] Table I-2
[ii] Table II.C-1
[iii] Pro Forma Test Period

In summary, reducing ROE to a more defensible 9.25% *further reduces* the following key metrics that form the bases of AWC's Application:

Water Sales	**$3.1 million reduction**
Utility NOI	**$1.8 million reduction**
Rate of Return	**6.42% instead of 7.25%**
ROE	**9.25% instead of 10.90%**

III. INCREASE UTILITY NOI: REVENUE INCREASES AND COST REDUCTIONS

A. No Attempt by AWC to Reduce Expenses

No attempt has been made by AWC to trim expenses, thus squeezing its customers for every dollar to obtain its requested ROE. It seems that AWC wants a guaranteed ROE every year from its customers, not the opportunity to earn an appropriate return over a number of years only if it runs its business efficiently. Any ROE granted by the PSC requiring an increase in Utility NOI should be through both revenue increases **and** cost reductions. This way AWC and its customers share in the benefits of an efficient operation.

If AWC runs an efficient operation then it can earn higher than its target return, which will benefit its shareholders. The Application is crafted as basically cost plus, i.e., add whatever additional revenues are needed to the cost base to obtain the desired NOI. This is counter to virtually every business in the US that has been forced to do more with less, improving efficiencies through cost cutting and operational changes.

To do otherwise smacks of entitlement. That is certainly a consistent message in the Application, starting with an erroneous 13.17% ROE which, when corrected, still is an unjustified 10.90%. And this 10.90% is presumed obtained completely from the ratepayers, another seeming entitlement. What makes this more egregious is that no more than 15% will be used in the business, with at least 45% going to shareholders and 40% to income tax expense, discussed in Section IV.

B. Obtain Target ROE Through Revenue Increase and Cost Reductions

Therefore I recommend that AWC and the ratepayers share the needed increase in Utility NOI, whether in dollars or percentage, whichever the PSC believes is fairer. I would recommend that the percentage increase in Water Sales equal the percentage reduction in Operation and Maintenance expenses, 2.62%, which maintains the 9.25% targeted ROE. Table III.B-1 below shows the results.

Table III.B-1

AWC FINAL ADJUSTED WATER SALES

	ROE Adjusted Application[i]	Rev./Cost Sharing Adj.	Final Adjusted Application
Water Sales	**$65,294,782**	**$(898,557)**	**$64,396,225**
Other Revenues	1,550,402	(1,848)	1,548,554
	66,845,184	(900,404)	65,944,780
Operating Expenses	47,116,556	(900,405)	46,216,151
Utility Operating IBT	19,728,628		19,728,628
Income Taxes	5,534,579		5,534,579
Utility NOI	**14,194,049**		**14,194,049**
Interest Expense, net[ii]	3,850,640		3,850,640
Utility Net Income	**$10,343,409**		**$10,343,409**
Rate Base	$221,242,816		$221,242,816
Rate of Return[iii]	6.42%		6.42%
Equity Base[iv]	$111,820,643		$111,820,643
ROE[v]	**9.25%**		**9.25%**

[i] Source: Table II.C-1
[ii] Rate Base*49.46%*5.84%*(1-tax rate), tax rate = 39.742%
[iii] Utility NOI / Rate Base
[iv] Rate Base*50.54%
[v] Utility Net Income / Equity Base

If we include the revenue and cost sharing adjustments detailed in Table III.B-1 above, AWC's corrected requested revenue increase further drops from 4.05% to 2.62%. See Table III.B-2 below.

Table III.B-2

RECOMMENDED AWC WATER SALES

WATER SALES	ROE ADJUSTED APPLICATION[i]	FINAL ADJ. APPLICATION[ii]
Requested	$65,294,782	$64,396,225
Present Rates[iii]	$62,752,316	$62,752,316
Increase		
Dollars	$2,542,466	$1,643,909
Percent	4.05%	2.62%

[i] Table II.C-2
[ii] Table III.B-1
[iii] Pro Forma Test Period

My final recommendations are as follows:

Target ROE:	**9.25%**	
Target Rate of Return:	**6.42%**	
Water Sales Increase:[i]	**2.62%**	**$1,643,909**
O&M Expense Reduction:[i]	**2.62%**	**$894,796**[ii]

[i] Vs. Pro Forma Test Period Present Rates
[ii] Excludes $5,608 bad debt expense and PSC assessment.

These correct for the errors in the Application, provide AWC the opportunity to earn an appropriate ROE, and share the benefits of an efficient operation between AWC and its customers. The final operating statement adjustments vs. the Present Rates case is shown in Table III.B-3 below.

Table III.B-3

AWC FINAL ADJUSTED WATER SALES VS. PRESENT RATES

	PRESENT RATES[i]	TOTAL ADJUSTMENTS	PROPOSED RATES
Water Sales	**$62,752,316**	**$1,643,909**	**$64,396,225**
Other Revenues	1,545,173	3,381	1,548,554
	64,297,489	1,647,290	65,944,780
Operating Expenses	47,100,686	(884,535)[vi]	46,216,151
Utility Operating IBT	17,196,803	2,531,825	19,728,628
Income Taxes	4,528,381	1,006,198	5,534,579
Utility NOI	**12,668,422**	**1,525,627**	**14,194,049**
Interest Expense, net[ii]	3,850,640		3,850,640
Utility Net Income	**$8,817,782**	**$1,525,627**	**$10,343,409**
Rate Base	$221,242,816		$221,242,816
Rate of Return[iii]	5.73%	0.69%	6.42%
Equity Base[iv]	$111,820,643		$111,820,643
ROE[v]	**7.89%**	**1.36%**	**9.25%**

[i] Source: DLV-S Schedule DLV3-2-S
[ii] Rate Base*49.46%*5.84%*(1-tax rate), tax rate = 39.742%
[iii] Utility NOI / Rate Base
[iv] Rate Base*50.54%
[v] Utility Net Income / Equity Base
[vi] $894,796 O&M reduction - $10,261 increase in bad debt expense and PSC assessment.

IV. USE OF REQUESTED REVENUE INCREASE

A. Significant Dividend Payments to Shareholders

An essential part of Artesian's financial strategy is to pay consistent, substantial and ever increasing cash dividends to its shareholders over the long term, and it has been quite successful. Just last week Artesian announced its 88th consecutive quarterly dividend, and 18th consecutive year of **increased** dividends.

For the past 10 years, Artesian paid out more than $51 million to shareholders in the form of cash dividends, shown in Table IV.A-1 below.

Table IV.A-1

Artesian Resources Corporation
10-Year Cash Dividend Payment History[1]
(Net Income and Dividends Paid in $000)

	Net Income	Dividends Paid	Payout Ratio[2]	Dividends Per Share
2013	$8,301	$7,207	86.8%	$0.82
2012	9,846	6,850	69.6%	0.79
2011	6,746	6,191	91.8%	0.76
2010	7,620	5,677	74.5%	0.75
2009	7,262	5,379	74.1%	0.72
2009-13	***$39,775***	***$31,304***	***78.7%***	
2008	6,418	5,193	80.9%	0.71
2007	6,263	4,455	71.1%	0.66
2006	6,071	3,714	61.2%	0.61
2005	5,035	3,470	68.9%	0.58
2004	4,400	3,267	74.3%	0.55
2004-08	***$28,187***	***$20,099***	***71.3%***	
2004-13	***$67,962***	***$51,403***	***75.6%***	

[1] Applicable to common shareholders.
[2] Dividends Paid divided by Net Income.
Sources: Artesian Resources Corp. 2005 - 2013 10-Ks.

Significant dividend payout is a valid strategy for a utility company to maintain and enhance shareholder value (and its stock price), and Artesian is committed to this methodology. It is so committed that its dividend payout increased to 79% of net income for the 2009-2013 period from 71% for the 2004-2008 period, a ratio of over 75% for the entire 10 years.

For the 6 months ended June 30, 2014 Artesian paid out 92.1% of net income as cash dividends, and Artesian has announced an increase in dividends per share to $0.86 for FY 2014.

It is clear that Artesian is under continuing pressure to maintain per share dividend growth and payout ratio. As such, it is logical to conclude that every penny of net income generated at every Artesian subsidiary (especially AWC which is 90% of Artesian) not absolutely necessary for operations will be sent to Artesian for the purpose of paying dividends to shareholders.

Therefore, it is reasonable to expect a 75% payout by AWC to Artesian.

B. Actual Revenue Increase That Accrues to AWC

According to AWC's own testimony, for every $100 of increased water sales, only $60 flows through to Operating Income.[4] In the previous Section we saw that historically Artesian has paid out more than 75% of its net income as dividends to common shareholders. This would leave only 15% for actual operations, as seen in Table IV.B-1 below.

Table IV.B-1

Water Sale Increase Retained by AWC

Water Sales Revenues	$100.00
Finance charge, net of bad debt expense	(0.12)
PSC Assessment	(0.30)
NOI before Income Tax	99.58
Income Tax @ 39.742%	39.58
Utility Operating Income	60.00
Less: Dividend Payout @ 75%	45.00
Retained at AWC	**$15.00**

With only 15 cents of every dollar even staying in the business, is it fair that the ratepayers pick up the entire increase? It is clear that the answer is no.

This concludes my testimony.

[4] DLV-S Schedule DLV-5-S