Las Vegas Valley Water District
Rates and Rules
Citizens Advisory Committee

2016 RECOMMENDATIONS REPORT

LAS VEGAS VALLEY WATER DISTRICT

Rates and Rules Citizens Advisory Committee

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Recommendations Report

Executive Summary

The Las Vegas Valley Water District (LVVWD) provides water service to more than 1.2 million people in Southern Nevada. Its responsibilities include constructing and maintaining the facilities necessary to meet the water demands within its service area.

Since 2008, when its tiered water rates were last increased, the LVVWD's service area has undergone considerable changes and weathered an economic recession. In more recent years, development within the LVVWD's service area has begun to return to normal levels. With previously-deferred projects related to infrastructure management arising in the near future, as well as the need for facilities necessary to accommodate new services, the LVVWD sought community input to update its Service Rules and evaluate water rates.

The LVVWD has an established tradition of seeking community input on LVVWD-related initiatives with community impacts, and often uses advisory committees to seek recommendations to guide decision-making. Previous committees have made recommendations related to achieving conservation targets through rate setting, maintaining the lifeline water rate and adjusting rate thresholds.

On February 2, 2016, the LVVWD Board of Directors convened a new advisory committee to evaluate organizational initiatives and make recommendations regarding LVVWD Service Rules and water rates. The committee met nine times between February 17, 2016 and October 20, 2016, completing a process that consisted of education on LVVWD Service Rules, asset management and backflow prevention; evaluation of rate structure scenarios; and formulation of recommendations.

This report summarizes the activities and results of the committee process. Section I is an overview of the committee process. Section II reviews committee discussion topics. Section III provides the committee's 11 recommendations.

I. Advisory Committee Process

To coordinate and manage committee meetings, the LVVWD retained an independent, neutral facilitator, Lewis Michaelson of Katz & Associates, San Diego, California. Mr. Michaelson was responsible for encouraging dialogue and interaction among committee members, ensuring all perspectives were heard and considered, and suggesting appropriate process tools to assist the

committee members in problem-solving and other aspects of their deliberations. Members worked together to identify positions that were generally acceptable to the committee as a whole.

The committee consisted of nine (9) members selected by the LVVWD Board of Directors to represent diverse stakeholder groups within the District's service area. Below is a list of the committee members and the stakeholder groups they represented.

Committee Membership	Stakeholder Group
Ken Evans	Urban Chamber
Jennifer Lewis	Development
Paul Moradkhan	Business
Terry Murphy	Ratepayers
Phil Ralston	Industrial/Commercial Business
John Restrepo	Economist
Virginia Valentine	Hospitality/Gaming
Howard Watts III	Environmental
Nancy Wong	Ratepayers

To encourage public involvement, committee meetings were publicly posted in accordance with Nevada's Open Meeting Law. Presentations, audio recordings and written meeting summaries are available on www.lvvwd.com.

II. Discussion Topics

The committee process included an analysis of three major aspects of the LVVWD: its Service Rules, which outline how the LVVWD does business with its customers, its capital needs over the next 10 years, and its rates and fees, which fund the LVVWD's capital and operational activities.

To lay the foundation, the committee received information on the LVVWD's history, major responsibilities, governance, service area, water deliveries, system assets, and sources and uses of funds. The committee also evaluated how the Service Rules defined the roles between the customer and utility, and how the current environment can influence the Service Rules.

Many LVVWD rates and fees, such as the Facility Connection Charge and tiered water rates, have not been increased since 2007/2008, largely in response to significant downward economic pressure that affected much of Southern Nevada between 2008 and 2012. Today, the LVVWD requires more than $600 million over the next 10 years to maintain its water system, comply with state-mandated water quality regulations, and construct facilities to meet new system demands.

Addressing Issues of Equity in the Service Rules

Periodic evaluations of the LVVWD's Service Rules are important to improve processes by considering industry best practices, responding to changing conditions, improving customer understanding and promoting efficiencies. The last time the LVVWD Service Rules received a major update was in 2005, when the LVVWD's service area expanded rapidly.

The committee discussed the current practices and challenges associated with inactive services, the delinquency process, the recording of liens, and facility connection credits to ensure that incurred costs are fair and borne appropriately by those that utilize those services or generate the costs.

Special Rate Classes

The committee considered other circumstances within Southern Nevada that may warrant a special rate class, such as lifeline rates, community gardens and manmade lakes. After considering issues of equity and potential revenue, the committee unanimously opted to not make any recommendations for those classes.

Aging Infrastructure

The District's water system requires continual reinvestment to maintain safe and reliable water delivery service. Because of ongoing proactive maintenance practices, the community's water system is in generally stable condition. However, various components are more than 50 years old and in need of replacement or repair as they near the end of their useful service lives.

Over the next few decades, the water system will require significant maintenance and/or replacement efforts to address aging infrastructure, including leaking water pipes and service laterals. The committee evaluated the risk of not addressing needed asset management projects and risking service interruptions or infrastructure failures. With the understanding that the community relies upon reliable water service, the committee supported the LVVWD's efforts in prioritizing asset management projects and maintaining reliable water service.

Meeting System Demands

The LVVWD continually assesses the needs of its service area and constructs new facilities to manage system demands. In many cases, developers propose new developments earlier than the LVVWD had planned to improve the area. In these cases - when development has significant impacts on capacity or opens up a new area of the distribution system - the LVVWD works with developers to recover the costs of design and construction of new facilities, and enters into a Developer Agreement, where cost-sharing activities are memorialized. Developers also participate in funding new facilities through established fees and charges related to the administration of plan approvals, inspections, installations and connections. The committee evaluated the consolidation of some developer fees.

Within the committee's 10-year planning horizon, it is expected that new facilities will be constructed to support new system demands, and the committee evaluated how developers participate in funding new facilities. The committee considered how Facility Connection Charges helped fund new facilities, but recognized the volatility of the revenue source. The committee also recognized that the charge has not been increased since 2007, despite other variable costs increasing, such as the cost of construction materials and labor.

Water Quality Issues

Maintaining a safe water supply is a priority and the principal responsibility for the LVVWD. To maintain compliance with a state mandate, the LVVWD requires approximately $10 million annually in new capital to retrofit existing meters with backflow prevention assemblies. When installed, backflow devices protect customers from water flow reversal back into the municipal system. Nevada state code requires all meters (other than single-family residential uses) be equipped with a backflow prevention

device. Approximately 40 percent of LVVWD meters are already equipped with a backflow device and the LVVWD requires additional funding to make progress on the remaining meters.

Financing Capital Expenditures

The committee discussed options for the LVVWD to fund future capital needs, including paying cash, issuing debt, or a combination of the two. During rate modeling evaluations, the committee found that paying cash for millions of dollars in construction projects would result in large and potentially volatile increases to water bills, while financing at least a portion of capital needs keeps rates lower as the debt is spread out over time. Also considered by the committee was the notion that financing capital projects is generally a standard practice for public water utilities and helps broaden the rate base for customers who would benefit from infrastructure with a useful life ranging between 50 to 100 years.

Maintaining Revenue Stability

Another issue that the committee spent considerable time discussing was the concept of long-term revenue stability and addressing volatile revenue sources, such as Facility Connection Charges. The committee recognized the LVVWD's recently-approved Reserve Policy, which establishes a target fund balance based upon four components that work together to maintain adequate reserves and help mitigate risks of unforeseen events.

As the committee considered different rate scenarios, they evaluated what the appropriate length of time should be to fully fund the reserve, and reviewed rate models to reach the target in both 5 and 10 years. They also evaluated scenarios that did not include revenue from Facility Connection Charges to meet long-term obligations, but ultimately concluded that Connection Charge revenue should be included in the model to fund new facilities.

III. Recommendations

After careful evaluation of the issues and options, the Committee reached consensus on several recommendations. As a result of its deliberations, the committee proposes the following 11 recommendations for consideration by the LVVWD Board of Directors.

SERVICE RULE EQUITY

1. **Implement a $10 turn-on fee to activate service.**
   Currently, the LVVWD does not charge customers for turning on service; however, the LVVWD responds to more than 800,000 requests to turn on and shut off services each year. The committee proposed a $10 turn-on fee to better reflect the cost to provide this service.

2. **Charge delinquent customers for third-party costs related to recording and releasing liens.**
   The LVVWD does not recoup the costs it incurs from recording or releasing a lien. It costs $19 to record a lien, $19 to release the lien and incurs 4 percent tax roll costs. The committee agreed that quantifiable third-party costs (recording and releasing the lien, and tax roll), should be recovered from the delinquent customer.

SERVICE RULE CLARIFICATIONS

3. **Approve proposed revisions to LVVWD Service Rules, which incorporate the Advisory Committee's recommendations to clarify definitions and improve usability.**
   The LVVWD Service Rules have not received a major review and update in more than 10 years. Clarifying and further defining terms will help improve understanding from LVVWD customers. Additionally, the consolidation of all LVVWD rates and charges into one appendix, rather than listed throughout the document, will be helpful for customers seeking specific fees and charges.

4. **Codify the current practice of offering redevelopment credits and update the Service Rules to explain how credits are offered.**
   The LVVWD maintains a practice to offer credits to developers for existing meters when they submit plans for new development. These credits include the connection fees that support the construction of major infrastructure. The committee considered the options of codifying the existing practice of giving the credit back, crediting only the amount paid or crediting the amount paid at present value. Ultimately, the committee agreed to make no changes to the existing practice, but to formally memorialize it in the LVVWD's Service Rules. No new revenue will be generated as a result of this recommendation, only clarification within the Service Rules.

UPDATES TO REFLECT CURRENT CONDITIONS

5. **Maintain existing Oversizing Charge rates and remove the non-oversizing area.**
   "Oversizing" or increasing the diameter of pipelines provides additional capacity for future demand and minimizes future construction in developed areas. The committee discussed oversizing fees, specifically how and where they are applied throughout the District service area and how they are governed by the Service Rules. Oversizing fees have not been updated since their implementation in 1992 and are currently limited to areas that were defined when the water system was growing in new areas. Because development is no longer limited to previously-undeveloped land on the valley's perimeter as new infill projects take place, the committee was asked to consider whether the Service Rules should be revised to apply oversizing fees valley-wide to ensure that development currently excluded from redevelopment fees see the benefits of oversizing and bolstering activities. The committee also considered the possibility of changing the oversizing fees. Ultimately, the committee concluded that the non-oversizing area should be removed, but not to increase the existing oversizing fees.

6. **Maintain existing Backflow Service Charge rates and implement the Backflow Service Charge to customers requiring installation of a backflow device.**
   The committee found that protecting water quality is an important initiative and supported an accelerated backflow installation program. To fund the shortfall, the committee considered three options: Increasing the backflow service charge for existing customers; charging the backflow service charge to those who need backflow protection but don't currently have a device; and funding the shortfall through water rates. Ultimately, the committee recommended no increases to existing backflow fees, but implementing the charge to all customers needing a device.

7. **Phase-in a 30 percent increase to the Facility Connection Charge over four years, and increase it annually based on the Engineering News Record Construction Cost Index (ENR) thereafter.**
   Facility Connection Charges are assessed to each new service to offset the costs of the facilities and assets needed to support new connections. Facility Connection Charges have not been adjusted since 2007. The committee agreed that Facility Connection Charges should increase by 30 percent, which will be phased in over four years (at 7.5 percent per year) beginning in 2017[1]. Thereafter, Facility Connection Charges will increase annually by the ENR Construction Cost Index.

ADDRESS ISSUES OF REVENUE STABILITY

8. **If Facility Connection Charges exceed $5 million annually, dedicate the excess amount toward achieving the reserve target.**
   To mitigate the volatility of Facility Connection Charge revenue, the committee recommended establishing a threshold of $5 million in annual collections when budgeting revenues. Revenues earned in excess of $5 million should be used first to fund reserves in an effort to expedite meeting the fund reserve target.

[1] Between January 2007 and March 2016, the ENR Construction Cost index increased by 30 percent.

9. Increase the tiered water rates and service charge by three percent for two years.
   The committee spent considerable time evaluating rate models, and evaluated 15 rate model scenarios that considered different variables such as when the rate was implemented, how quickly the reserve target was achieved, how capital was financed, and how the Facility Connection Charge was increased. Ultimately, the committee found the rate model best suited for the community, while still meeting LVVWD's future revenue needs, was one based on the following objectives:

   - Fund one-half of the LVVWD's 10-year capital needs by issuing debt
   - Fully fund the reserve target in 10 years
   - Phase the Facility Connection Charge increases over four years
   - Implement the rate increase earlier to avoid unnecessary rate shock in later years.

10. After the first two years, increase the water rates and Service Charge annually in accordance with the Consumer Price Index (CPI), with the increase not exceeding 4.5 percent or falling below 1.5 percent. The specific index recommended was the Consumer Price Index, All Items, All Urban Customers (CPI-U), Pacific Cities, West Size Class A.
    The committee recognized the volatility of tying water rate increases to economic indexes and considered methods to reduce the volatility while ensuring rate increases reflected actual costs. After reviewing historic trends, the committee recommended bracketing the CPI-indexed rate adjustment to ensure that rates and charges do not increase by more than 4.5 percent or less than 1.5 percent in any given year.

11. Use advisory committees as needed to evaluate future rate changes and funding strategies.
    The committee discussed recommending a revenue review mechanism to ensure that the approved rates were performing as modeled. The committee discussed what factors should trigger future rate reviews, such as: achieving the Reserve Target earlier than scheduled; a significant increase or decrease in CPI; or a set time frame. Ultimately, the committee concluded that future conditions would determine the need for an advisory committee and did not define specific triggers. The committee supports using public processes to consider rate adjustments in the future.

APPENDIX A

2016 Rates and Rules Citizen Advisory Committee Meeting Synopsis

The following provides a brief synopsis of discussion topics for each committee meeting. A summary was developed for each meeting and is available on www.lvvwd.com or by contacting the LVVWD.

Meeting 1 – February 17, 2016: Introduction of committee members, facilitator and key LVVWD staff. Review Committee purpose, process and principles of participation. Overview of LVVWD activities and operations.

Meeting 2 – March 30, 2016: Overview of the LVVWD water system and Service Rules.

Meeting 3 – April 27, 2016: Discussion of Service Rules issues, LVVWD capital planning efforts, and new facility funding.

Meeting 4 – May 25, 2016: Discussion of LVVWD's 10-year capital projections, including new facilities, asset management and Backflow Prevention Program.

Meeting 5 – June 08, 2016: Overview of LVVWD uses of funds and rate structure. Discussion of rate-setting considerations and rate model assumptions.

Facility Tour – June 10, 2016: Tour of the District's SCADA operations, large meter vault and backflow prevention, reservoir, well site, and service line replacements.

Meeting 6 – June 22, 2016: Review rate assumptions and sample customers. Review and discuss revenue requirements and rate scenarios 1 through 4.

Meeting 7 – July 20, 2016: Review and discuss funding scenarios, propose new scenarios, and receive and discuss a community outreach presentation.

Meeting 8 – September 21, 2016: Discuss outreach presentations, review rate models, propose revisions to the District's Service Rules, and make final recommendations.

Meeting 9 – October 20, 2016: Consider final recommendations report.

APPENDIX B

Approved Rate Model

Committee-Recommended Rate Model										
	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27
Revenues and Revenue Requirements											
Sources of Funds											
Tiered Consumption	255,219	258,453	261,972	265,333	268,315	271,145	273,603	275,804	277,751	279,339	280,680
Service Charge	62,518	63,778	64,954	66,101	67,165	68,201	69,153	70,049	70,889	71,645	72,345
Water Rate Revenue Adjustments	2,860	12,606	22,155	30,995	40,157	49,644	59,454	69,587	80,043	90,818	101,915
Facilities Connection Charge	9,702	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Facilities Connection Charge Adjustment	303	701	1,128	1,588	1,937	2,152	2,374	2,603	2,838	3,081	3,332
Other Revenues (Backflow, Recl. Water, etc.)	30,177	34,210	34,712	35,202	35,660	36,107	36,521	36,913	37,283	37,622	37,938
Interest Income	1,529	1,605	2,595	2,737	3,192	4,794	6,129	6,993	9,579	11,393	11,502
Subtotal	362,307	376,352	392,516	406,958	421,426	437,044	452,234	466,949	483,384	498,898	512,711
Debt Proceeds	18,405	117,687	26,094	-	59,474	29,981	-	61,727	89,878	-	-
Total Sources of Funds	380,713	494,039	418,610	406,958	480,900	467,025	452,234	528,676	573,262	498,898	512,711
Uses of Funds											
Purchased Water	87,232	88,781	91,676	94,595	97,455	100,335	103,151	105,940	108,701	111,388	114,039
Energy	11,777	11,836	12,061	12,290	12,523	12,761	13,004	13,251	13,503	13,759	14,021
Payroll & Related	111,988	118,357	123,091	128,015	133,136	138,461	143,999	149,759	155,750	161,980	168,459
Operating Expenses	49,601	49,849	50,797	51,762	52,745	53,747	54,768	55,809	56,869	57,950	59,051
Oversizing Expenditures	625	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Capital Expenditures	62,701	117,687	54,784	92,485	59,474	59,079	60,356	61,727	124,796	58,722	57,964
Debt Service	59,679	60,493	70,520	72,066	73,336	79,422	79,575	79,567	89,797	89,982	81,035
Total Uses of Funds	383,603	448,503	404,429	452,713	430,170	445,305	456,354	467,553	550,916	495,281	496,068
Annual Surplus/(Deficit)	(2,890)	45,537	14,181	(45,755)	50,731	21,720	(4,120)	61,122	22,345	3,617	16,643
Unrestricted Fund Balance	214,009	259,546	273,727	227,972	278,702	300,422	296,303	357,425	379,770	383,388	400,030
Recommended Fund Balance per Reserve Policy	301,850	312,032	320,388	325,744	340,373	349,517	358,934	378,711	383,183	394,028	396,454
Fund Balance Surplus/(Deficit)	(87,841)	(52,487)	(46,662)	(97,773)	(61,671)	(49,095)	(62,631)	(21,286)	(3,413)	(10,640)	3,576
Fund Balance as % of Reserve Policy Target	70.9%	83.2%	85.4%	70.0%	81.9%	86.0%	82.6%	94.4%	99.1%	97.3%	100.9%
Debt Service Coverage											
Actual Coverage	1.69	1.75	1.61	1.65	1.69	1.64	1.71	1.77	1.64	1.69	1.92
Minimum Required	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*	*1.00*

**Amounts in million dollars*

APPENDIX C

Projected Average Monthly Bills for Sample Customers

Customer	Current 2017 Bill	2017	2018	2019	2020
5/8" Single Family Residential - Typical	$42.87	$43.62	$45.63	$46.35	$47.08
5/8" Single Family Residential - High	119.24	122.02	126.15	128.64	131.12
1" Single Family Residential - Typical	142.41	145.10	150.33	152.83	155.33
1" Single Family Residential – High	520.43	533.39	549.10	560.46	571.83
High Rise (Residential)	12,468.16	12,683.22	13,089.38	13,286.05	13,483.12
Office Park	1,867.32	1,890.79	1,920.36	1,941.12	1,961.90
Restaurant	2,015.24	2,045.26	2,085.81	2,112.90	2,140.02
Retail Complex (Enclosed)	25,025.53	25,563.49	26,296.41	26,782.21	27,268.35
School	14,172.98	14,478.10	14,862.18	15,135.92	15,409.79
Municipal Park	9,130.97	9,312.31	9,569.54	9,733.62	9,897.88
Hospital	29,322.66	29,978.42	30,799.45	31,387.50	31,975.82
Locals Hotel	27,563.54	28,094.69	28,929.54	29,410.94	29,892.93
Shopping Center	7,258.55	7,397.44	7,596.81	7,722.79	7,848.90
Apartment Complex	11,746.51	12,041.75	12,380.54	12,638.70	12,896.95
Warehouse	515.04	515.61	518.51	519.03	519.57
Downtown Hotel	10,986.93	11,185.99	11,502.74	11,683.73	11,865.03

APPENDIX D

Tiered Water Rates

Per 1,000 Gallons

	TODAY	2017	2018	2019*	2020*	2021*
Tier 1	$ 1.16	$ 1.19	$ 1.23	$ 1.26	$ 1.29	$ 1.32
Tier 2	2.08	2.14	2.20	2.26	2.32	2.38
Tier 3	3.09	3.18	3.28	3.36	3.44	3.53
Tier 4	4.58	4.72	4.86	4.98	5.10	5.23

Service Charge

	TODAY	2017	2018	2019*	2020*	2021*
5/8“	$ 0.3355	$ 0.3456	$ 0.3560	$ 0.3649	$ 0.3740	$ 0.3834
30-Day	$10.07	$10.37	$10.68	$10.95	$11.22	$11.50
3/4"	0.3863	0.3979	0.4098	0.4200	0.4305	0.4413
1"	0.4880	0.5026	0.5177	0.5306	0.5439	0.5575
1.5"	0.7419	0.7642	0.7871	0.8068	0.8270	0.8477
2"	1.0472	1.0786	1.1110	1.1388	1.1673	1.1965
3"	1.8609	1.9167	1.9742	2.0236	2.0742	2.1261
4"	2.7761	2.8594	2.9452	3.0188	3.0943	3.1717
6"	5.3186	5.4782	5.6425	5.7836	5.9282	6.0764
8"	8.3696	8.6207	8.8793	9.1013	9.3288	9.5620
10"	11.9289	12.2868	12.6554	12.9718	13.2961	13.6285
12"	17.5224	18.0481	18.5895	19.0542	19.5306	20.0189

*The Advisory Committee recommended that the tiered water rates and service charge would increase by 3 percent in 2017 and again in 2018. In 2019 and thereafter, water rates and service charges would be adjusted for inflation according to the CPI (collared between 1.5 percent and 4.5 percent). For modeling purposes, CPI was estimated at 2.5 percent.

APPENDIX E

Model Assumptions and Rate Model Scenarios

LVVWD staff initially prepared eight rate scenarios for the committee's consideration. Scenarios that achieved the Reserve Target in five years were requested by a committee member to eliminate some economic uncertainty. However, it was later determined that the bond markets and financial advisors are comfortable with the 10-year target, so the committee removed scenarios that achieved the Reserve Target in five years from consideration. Other scenarios were developed by staff to illustrate the impacts of changes to the various rate structure elements, including service charge, tier pricing, tier thresholds or seasonal rates. These scenarios are provided as background only and do not reflect the committee's final consensus as outlined by the recommendations.

MODEL ASSUMPTIONS

Item	Rate Model Assumption
Capital Needs	$616 million over 10 years, with annual inflation at 3.1% (25-year average of ENR CC)
Operating and Maintenance	Increasing 2.5 percent annually (25-year average of Western CPI)
Fund Balance Reserve Target	Meeting target in 10 years
Tiered Consumption	Account growth (CBER population projections)
Service Charge	Account growth (CBER population projections)
Reclaimed Water	Account growth (CBER population projections)
Other Charges and Fees	Account growth (CBER population projections)
Application & Inspection Fees	Account growth (CBER population projections)
Interest Income	Account growth (CBER population projections)
Price Elasticity	-0.51 coefficient

CONSIDERED RATE MODEL SCENARIOS

Model	Implementation	Years 1- 2 Increase	Year 3+ Increase	Pay-Go/Debt %	Reserve Target Met	Facilities Connection Charge
Baseline	N/A	None	None	None	Does not meet target	None
1A	January 2018	8.4%	3.5%	100% Pay-Go	10 years	30% increase in Year 1
1B	February 2017	5.5%	3.5%	100% Pay-Go	10 years	30% increase in Year 1
2A	January 2018	18.1%	3.5%	100% Pay-Go	5 years	30% increase in Year 1
2B	February 2017	12.5%	3.5%	100% Pay-Go	5 years	30% increase in Year 1
3A	January 2018	5.3%	2.5%	50/50	10 years	30% increase in Year 1
3B	February 2017	3.1%	2.5%	50/50	10 years	30% increase in Year 1
3C	January 2018	5.1%	2.5%	50/50	10 years	10% for 3 years; Indexed thereafter
3D	February 2017	2.9%	Collared CPI	50/50	10 years	10% for 3 years; indexed thereafter
3E	January 2018	6.7%	2.5%	50/50	10 years	Excluded from rate model
3F	February 2017	4.6%	2.5%	50/50	10 years	Excluded from rate model
3G	February 2017	3.0%	Collared CPI	50/50	10 years	7.5% for 4 years; Indexed thereafter
3H	January 2018	5.2%	Collared CPI	50/50	10 years	7.5% for 4 years; Indexed thereafter
4A	January 2018	8.6%	2.5%	50/50	5 years	30% increase in Year 1
4B	February 2017	5.4%	2.5%	50/50	5 years	30% increase in Year 1

The committee ultimately recommended Scenario 3G: a 3 percent increase in the tiered water rates and service charge in 2017 and 2018 and an annual CPI adjustment thereafter; and a 30 percent increase to the Facility Connection Charge phased in over four years (7.5 percent a year for four years) with an annual ENR index increase thereafter.