	Exhibit No	(JSS-3)
BEFORE THE WASHINGTON UTILITIES AND TRANSPORTAT	TION COMMISS	SION
DOCKET NO. UG-16		
EVIDIT NO (ISS 2)		
EXHIBIT NO(JSS-3)  JENNIFER S. SMITH		
REPRESENTING AVISTA CORPORATION		
REPRESENTING AVISTA CORPORATION		

WASHINGTON NATURAL GAS - PRO FORMA STUDY AND

CROSS CHECK STUDIES

TWELVE MONTHS ENDED SEPTEMBER 30, 2015

	S OF DOLLARS)	2017								
	T.T.		TH PRESENT RATES		WITH 2017 PRO					
		Actual Per		2017	Proposed	2017				
Line		Results	Total	Adjusted	Revenues &	Proposed				
No.	DESCRIPTION	Report b	Adjustments c	Total (1)	Related Exp	Total				
	a	D	c	а	e	f				
	REVENUES									
1	Total General Business	\$152,492	\$ (68,435)	\$84,057	\$4,397	\$88,454				
2	Total Transportation	4,114	302	\$4,416		4,416				
3	Other Revenues	105,088	(104,805)	\$283	1 207	283				
4	Total Gas Revenues	261,694	(172,938)	88,756	4,397	93,153				
	EXPENSES									
	Production Expenses									
5	City Gate Purchases	164,944	(164,944)	-		-				
6	Purchased Gas Expense	810	7	817		817				
7	Net Nat Gas Storage Trans	8,665	(8,665)	- 017		- 017				
8	Total Production	174,419	(173,602)	817	-	817				
	Underground Storage									
9	Operating Expenses	833	(0)	833		833				
10	Depreciation	429	22	451		451				
11	Taxes	292	20	312		312				
12	Total Underground Storage	1,554	42	1,596	-	1,596				
	Distribution									
13	Operating Expenses	11,531	620	12,151		12,151				
14	Depreciation	8,931	1,734	10,665		10,665				
15	Taxes	14,014	(7,765)	6,249	168	6,417				
16	Total Distribution	34,476	(5,411)	29,065	168	29,233				
17	Customer Accounting	6,595	(520)	6,075	26	6,101				
18	Customer Service & Information	5,790	(4,901)	889		889				
19	Sales Expenses	· -	0	0		0				
	Administrative & General									
20	Operating Expenses	13,388	(637)	12,751	9	12,760				
21	Depreciation/Amortization	5,206	3,596	8,802	,	8,802				
22	Regulatory Amortizations	3,200	1,079	1,079		1,079				
23	Taxes	_	1,075	-		1,075				
24	Total Admin. & General	18,594	4,038	22,632	9	22,641				
25	Total Gas Expense	241,428	(180,354)	61,074	203	61,277				
						***				
26	OPERATING INCOME BEFORE FIT	20,266	7,416	27,682	4,194	31,876				
	FEDERAL INCOME TAX									
27	Current Accrual	(6,651)	2,287	(4,364)	1,468	(2,896)				
28	Debt Interest	-	(387)	(387)	-	(387)				
29	Deferred FIT	12,388	-	12,388		12,388				
30	Amort ITC	(20)	-	(20)		(20)				
31	NET OPERATING INCOME	14,549	5,516	20,065	2,726	22,791				
				-,	,; · ·					
	RATE BASE: PLANT IN SERVICE									
32	Underground Storage	25,622	1,730	27,352		27,352				
33	Distribution Plant	354,360	55,655	410,015		410,015				
34	General Plant	69,725	24,512	94,237		94,237				
35	Total Plant in Service	449,707	81,897	531,604	-	531,604				
	ACCUMULATED DEPREC/AMORT									
36	Underground Storage	(9,824)	(971)	(10,795)		(10,795)				
37	Distribution Plant	(119,790)	(16,397)	(136,187)		(136,187)				
38	General Plant	(19,460)	(8,155)	(27,615)		(27,615)				
39	Total Accum. Depreciation/Amort.	(149,074)	(25,523)	(174,597)	-	(174,597)				
40	NET PLANT	300,633	56,374	357,007	-	357,007				
41	DEFERRED FIT	(65,675)	(12,756)	(78,431)		(78,431)				
42	Net Plant After DFIT	234,958	43,618	278,576	-	278,576				
43	GAS INVENTORY	15,143	-	15,143		15,143				
44	GAIN ON SALE OF BUILDING	(500)	(7.520)	(0.000)		(0.020)				
45	OTHER WORKING CARITAL	(509)	(7,520)	(8,029)		(8,029)				
46	WORKING CAPITAL	9,797	2,828	12,625		12,625				
47	TOTAL RATE BASE	259,389	46,446	298,315	0	298,315				
48	RATE OF RETURN	5.61%		6.73%		7.64%				

<sup>(1)</sup> The 2017 Adjusted Total column, Column "d" developed by the Company's Attrition Study is used for the final adjusted results and revenue requirement on an attrition adjusted basis (see Andrews' Exhibit No. \_(EMA-3). However, the values shown in the Adjusted Total column, lines 1-50 above, were used for the limited purpose of preparing the cost-of-service study that is presented by Company witness Mr. Miller, as these values more readily lend themselves to Mr. Miller's cost-of-service analysis.

WASHINGTON NATURAL GAS - PRO FORMA STUDY AND

CROSS CHECK STUDIES

(000'S	OF DOLLARS)			•	Months)		
			WITH PRESE			WITH 2018 PROP	
		2017	2018	2018	2017 Proposed	2018 Proposed	2018 (6 months)
Line	DESCRIPTION	Pro Forma Total (1)	Total	Adjusted	Revenues &	Revenues &	Proposed
No.	DESCRIPTION  a	b	Adjustments c	Total d	Related Exp	Related Exp	Total g
						,	0
1	REVENUES Total General Business	\$84,057		\$84,057	\$4,397	\$941	\$89,395
2	Total Transportation	4,416	_	\$4,416	ψ <del>1</del> ,377	φ <b>/</b> +1	4,416
3	Other Revenues	283		\$283			283
	Total Gas Revenues	88,756	-	88,756	4,397	941	94,094
	TVD VADA						
	EXPENSES Production Expenses						
5	City Gate Purchases	_	_	_			_
6	Purchased Gas Expense	817	8	825			825
7	Net Nat Gas Storage Trans	-	-	-			-
8	Total Production	817	8	825	-	-	825
	W. J 10:						
9	Underground Storage Operating Expenses	833	-	833			83:
10	Depreciation	451	5	456			45
11	Taxes	312	-	312			31:
12	Total Underground Storage	1,596	5	1,601	-	-	1,60
13	Distribution Operating Expenses	12,151	(185)	11,966			11,96
14	Depreciation	10,665	765	11,430	160	26	11,43
15 16	Taxes Total Distribution	6,249 29,065	580	6,249 29,645	168 168	36 36	6,45 29,84
17	Customer Accounting	6,075	54	6,129	26	6	6,16
18	Customer Service & Information	889	4	893			89
19	Sales Expenses	-	0	0			(
	Administrative & General						
20	Operating Expenses	12,751	(901)	11,850	9	2	11,86
21	Depreciation/Amortization	8,802	1,223	10,025			10,02
22	Regulatory Amortizations	1,079	(540)	540			540
23	Taxes		-	-			-
24	Total Admin. & General	22,632	(218)	22,415	9	2	22,420
25	Total Gas Expense	61,074	434	61,507	203	44	61,75
26	OPERATING INCOME BEFORE FIT	27,682	(434)	27,249	4,194	897	32,339
	FEDERAL INCOME TAX						
27	Current Accrual	(4,364)	(152)	(4,516)	1,468	314	(2,734
28	Debt Interest	(387)	(45)	(432)	-	-	(43)
29	Deferred FIT	12,388	-	12,388			12,388
30	Amort ITC	(20)	-	(20)			(20
31	NET OPERATING INCOME	20,066	(237)	19,829	2,726	583	23,13
	RATE BASE: PLANT IN SERVICE		244	25.00			005 (0)
32	Underground Storage	\$ 27,352	346	27,698			\$27,698
33	Distribution Plant	410,015	17,704	427,719			427,719
34 35	General Plant Total Plant in Service	94,237 531,604	4,776 22,826	99,013 554,430			99,013 554,430
		, ,					, , ,
36	ACCUMULATED DEPREC/AMORT Underground Storage	(10,795)	(336)	(11,131)			(11,13
37 38	Distribution Plant General Plant	(136,187) (27,615)	(6,813) (4,607)	(143,000) (32,222)			(143,000
	Total Accum. Depreciation/Amort.	(174,597)	(11,756)	(186,353)	_	_	
39 40	NET PLANT	357,007	11,070	368,077	<u> </u>	<u> </u>	(186,35) 368,07
41	DEFERRED FIT	(78,431)	(5,457)	(83,888)	-	-	(83,88
42	Net Plant After DFIT	278,576	5,613	284,189	_	_	284,18
	GAS INVENTORY	15,143	5,015	15,143	-	-	15,14
44	GAIN ON SALE OF BUILDING	-	-	-5,1.5			-
45	OTHER	(8,029)	(1,069)	(9,098)			(9,09
46	WORKING CAPITAL	12,625	-	12,625			12,62
47	TOTAL RATE BASE	298,315	5,613	302,859	0	0	302,859
	RATE OF RETURN	6.73%	3,013	6.55%	0	0	7.64
-10	(1) See footnote (1) on page 1	0.7376		0.3370			7.04

(1) See footnote (1) on page 1.

## AVISTA UTILITIES CALCULATION OF GENERAL REVENUE REQUIREMENT WASHINGTON NATURAL GAS TWELVE MONTHS ENDED SEPTEMBER 30, 2015 PRO FORMA & CROSS CHECK STUDY

		2	017	2018	3 (6 Months)		nental in 2018
Line No.	Description	(000's of	Dollars)		(000's of Dollars)	(000's of	Dollars)
1	Pro Forma Rate Base	\$	298,315	\$	302,859		
2	Proposed Rate of Return		7.64%		7.64%		
3	Net Operating Income Requirement		\$22,791		\$23,138		
4	Pro Forma Net Operating Income	\$	20,065	\$	19,829		
5	Net Operating Income Deficiency		\$2,726		\$3,309		\$584
6	Conversion Factor		0.620003		0.620003		0.620003
7	Revenue Requirement - 2016		\$4,397		\$5,338		\$941
8	Total Base Distribution Revenues*	\$	88,474			\$	92,871
9	Percentage Base Distribution Revenue Incre		4.97%				1.80%
10	Total Present Billed Revenue	\$	158,581			\$	162,978
11	Percentage Billed Revenue Increase		2.77%				1.00%
* Line 8 "T	otal General Business Revenues" includes spe	cial contract	transportation r	evenue	s.		(1)
	Historical Pro Forma Study & Attriti	ion Adjustn	<u>nents</u>				
12	Pro Forma Study Rate Base			\$	286,493		
13	Pro Forma Study Net income		_	\$	22,602	-	
14	Pro Forma Study Revenue Requirement		· · · · · · · · · · · · · · · · · · ·	\$	(1,151)	Pro Forma	
15	Proposed Revenue Requirement 2017		- -			2017 Attrition	
16	2017 Attrition Allowance		<u>-</u>		\$5,548	2017 Attrition Alle	owance
17	2018 Incremental Attrition Allowance	e (6 months	s)		\$941	Jun-Jul 2018 Attri	tion Allowance

<sup>(1)</sup> Per Company witness Mr. Ehrbar, rate necessary to recover incremental revenue requirement over 6-month period January- June 2018.

## AVISTA UTILITIES PROPOSED COST OF CAPITAL WASHINGTON NATURAL GAS

Proposed Capital Structure*										
Component	Capital Structure	Cost	Weighted Cost							
Total Debt	51.5%	5.51%	2.84%							
Common Equity	48.5%	9.90%	4.80%							
Total	100.00%	- =	7.64%							

<sup>\*</sup> Based on 2017 estimated capital structure and cost of debt.

## AVISTA UTILITIES REVENUE CONVERSION FACTOR WASHINGTON NATURAL GAS TWELVE MONTHS ENDED SEPTEMBER 30, 2015

Line No.	Description	Factor
1	Revenues	1.000000
	Expense:	
2	Uncollectibles	0.005855
3	Commission Fees	0.002000
4	Washington Excise Tax	0.038294
6	Total Expense	0.046150
7	Net Operating Income Before FIT	0.953850
8	Federal Income Tax @ 35%	0.333848
9	REVENUE CONVERSION FACTOR	0.620003

(Per Order No. 6; UE-120437, dated 6/20/2012 - "hard" CF rounded to 6 digits)

## RESTATEMENT ADJUSTMENTS

Line No.	DESCRIPTION	Per Results Report	Deferred FIT Rate Base	Deferred Debits and Credits	Working Capital	F	Eliminate B & O Taxes	Restate Property Tax	Uncollectible Expense
	Adjsutment Number	1.00	1.01	1.02	1.03		2.01	2.02	2.03
	Workpaper Reference	G-ROO	G-DFIT	G-DDC	G-WC		G-EBO	G-RPT	G-UE
1	REVENUES Total General Business	\$ 152,492	¢	- \$ -	\$	- \$	(5,520) \$		\$ -
2	Total Transportation	4,114	φ	- p -	.p	- ø	(106)	-	- -
3	Other Revenues	105,088				-	-	-	-
4	Total Gas Revenues	261,694				-	(5,626)	-	-
	EXPENSES								
	Production Expenses								
5	City Gate Purchases	164,944				-	-	-	-
6	Purchased Gas Expense	810				-	-	-	-
7 8	Net Nat Gas Storage Trans Total Production	8,665 174,419	<u> </u>			-	-		
0	Total Froduction	174,417				_	_	_	_
	Underground Storage								
9	Operating Expenses	833		-		-	-	-	-
10 11	Depreciation/Amortization Taxes	429 292		-		_	-	(14)	-
12	Total Underground Storage	1,554				_	-	(14)	_
10	Distribution	** ***							
13	Operating Expenses	11,531		-		-	-	-	-
14 15	Depreciation/Amortization Taxes	8,931 14,014		- -		-	(5,612)	(174)	-
16	Total Distribution	34,476				-	(5,612)	(174)	
10	Total Distribution	34,470					(3,012)	(174)	
17	Customer Accounting	6,595		- 1		-	-		(313)
18	Customer Service & Information	5,790				-	-	-	-
19	Sales Expenses	-				-	-	-	-
	Administrative & General								
20	Operating Expenses	13,388				-	-	_	-
21	Depreciation/Amortization	5,206				-	-	-	=
22	Regulatory Amortizations	-							
23 24	Taxes Total Admin. & General	18,594		<u> </u>				-	
25	Total Gas Expense	241,428		- 1		-	(5,612)	(188)	(313)
26	OPERATING INCOME BEFORE FIT	20,266		- (1	)	-	(14)	188	313
27	FEDERAL INCOME TAX	(6.651)		(0)			(5)		110
27 28	Current Accrual Debt Interest	(6,651)	((	- (0		(28)	(5)	66	110
29	Deferred FIT	12,388		·/ 		-	=	=	=
30	Amort ITC	(20)					-	-	-
31	NET OPERATING INCOME	\$ 14,549	\$ (	) \$ (1	) \$	28 \$	(9) \$	122	\$ 203
31		\$ 14,547	Ψ (	γ ψ (1	) ¥	20 g	(2) \$	122	3 203
	RATE BASE PLANT IN SERVICE								
32	Underground Storage	\$ 25,622	\$	- \$ -	\$	- \$	- \$	_	\$ -
33	Distribution Plant	354,360				- '	-	-	-
34	General Plant	69,725				-	=	-	
35	Total Plant in Service	449,707				-	-	-	-
	ACCUMULATED DEPRECIATION/AMORT								
36	Underground Storage	(9,824)				-	-	-	-
37	Distribution Plant	(119,790)				-	=	=	=
38 39	General Plant Total Accumulated Depreciation/Amortization	(19,460) (149,074)		<u> </u>					
40	NET PLANT	300,633		-		-	-	-	_
41	DEFERRED TAXES	(65,675)	50	) -		-	-	_	
42	Net Plant After DFIT	234,958	50	) -		_	_	_	_
43	GAS INVENTORY	15,143	50			-	-	-	-
44	GAIN ON SALE OF BUILDING	=				-	-	-	=
45	OTHER	(509)		-	2.6	20			
46	WORKING CAPITAL	9,797		-	2,8	28	-	-	-
47	TOTAL RATE BASE	\$ 259,389	\$ 50	) \$ -	\$ 2,8	328 \$	- \$		\$ -
48	RATE OF RETURN	5.61%				· +	Ψ		
50	REVENUE REQUIREMENT	8,497		5		303	15	-197	-328
	Pro Forma Rate of Return	7.64%							
	Revenue Conversion Factor	0.620003							

Line No.	DESCRIPTION	Regulatory Expense	Injuries and Damages	FIT / DFIT Expense	Office Space Charges to Subs	Restate Excise Taxes	Net Gains/Losses
	Adjsutment Number Workpaper Reference	2.04 G-RE	2.05 G-ID	2.06 G-FIT	2.07 G-OSC	2.08 G-RET	2.09 G-NGL
	REVENUES						
1	Total General Business	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	Total Transportation	-	-	-	-	-	-
3	Other Revenues Total Gas Revenues					-	<del>-</del>
4		_		_			
	EXPENSES Production Expenses						
5	City Gate Purchases	=	-	=	-	=	-
6 7	Purchased Gas Expense Net Nat Gas Storage Trans	=	-	=	-	=	-
8	Total Production	-	-	-	-	-	
	Underground Storage						
9	Operating Expenses	=	-	=	-	=	-
10	Depreciation/Amortization	-	-	-	-	-	-
11 12	Taxes Total Underground Storage	-	-	-	-	-	-
	Distribution						
13	Operating Expenses	-	=	=	Ē	=	Ē
14	Depreciation/Amortization	-	-	-	-	-	(6)
15	Taxes	=	=	=	=	(5)	
16	Total Distribution	-	-	-	-	(5)	(6)
17	Customer Accounting	-	-	-	_	_	_
18	Customer Service & Information	-	-	-	-	-	-
19	Sales Expenses	-	-	-	-	-	-
	Administrative & General						
20	Operating Expenses	(12)	231	-	(9)	-	-
21 22	Depreciation/Amortization Regulatory Amortizations	-	-	-	-	-	-
23	Taxes	-	-	-	-	-	-
24	Total Admin. & General	(12)	231	=	(9)	-	
25	Total Gas Expense	(12)	231	=	(9)	(5)	(6)
26	OPERATING INCOME BEFORE FIT	12	(231)	-	9	5	6
	FEDERAL INCOME TAX						
27	Current Accrual	4	(81)	(223)	3	2	2
28 29	Debt Interest Deferred FIT	=	-		-	=	-
30	Amort ITC	<u> </u>	-	-	-	-	-
31	NET OPERATING INCOME	\$ 8	\$ (150)	\$ 223	\$ 6	\$ 3	\$ 4
	RATE BASE						
	PLANT IN SERVICE						
32	Underground Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
33 34	Distribution Plant General Plant	-	-	-	-	-	-
35	Total Plant in Service	-		-	-		
	ACCUMULATED DEPRECIATION/AMORT						
36 37	Underground Storage Distribution Plant	-	-	-	-	-	-
38	General Plant	-	-	_	-	-	-
39	Total Accumulated Depreciation/Amortization		-	-	-	-	
40	NET PLANT	-	-	-	-	-	-
41	DEFERRED TAXES		-	-	-	-	<u>-</u>
42	Net Plant After DFIT	-	-	-	-	-	-
43	GAS INVENTORY	-	-	-	-	-	-
44	GAIN ON SALE OF BUILDING	-	-	-	=	-	=
45 46	OTHER WORKING CAPITAL		<u>-</u>	<u>-</u>	=	<u>-</u>	<u>=</u>
47	TOTAL RATE BASE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
48	RATE OF RETURN						·
50	REVENUE REQUIREMENT	-13	242	-360	-9	-5	-6

Pro Forma Rate of Return Revenue Conversion Factor

Line No.	DESCRIPTION	Weather Normalization / Gas Cost Adjust	Eliminate Adder Schedules	Misc Restating Adjustments	Restate Debt Interest	Restating Incentive Adjustment	Project Compass Deferral	Restated TOTAL
	Adjsutment Number	2.10	2.11	2.12 C.MD	2.13	2.14 C. DI	2.15	D Tril
	Workpaper Reference	G-WNGC	G-EAS	G-MR	G-DI	G-RI	G-CD	R-Ttl
1	REVENUES Total General Business	\$ 12,984	\$ (3,325)	s -	\$ -	\$ -	\$ -	\$ 156,631
2	Total Transportation	3 12,764	(3,323)	-	ψ - -	φ - -		4,008
3	Other Revenues		(99,392)	-	-	-	-	5,696
4	Total Gas Revenues	12,984	(102,717)	-	-	-	-	166,335
	EXPENSES							
	Production Expenses							
5	City Gate Purchases	10,600	(88,985)	-	-	-	-	86,559
6	Purchased Gas Expense	9	=	-	-	(16)	-	803
7	Net Nat Gas Storage Trans		(8,665)	-	-		-	
8	Total Production	10,609	(97,650)	-	-	(16)	=	87,362
	Underground Storage							
9	Operating Expenses	-	=	-	-	=	-	833
10	Depreciation/Amortization	=	=	-	-	-	-	429
11	Taxes	-	<u> </u>	-	-	-	-	278
12	Total Underground Storage	-	-	-	-	-	-	1,540
	Distribution							
13	Operating Expenses	=	-	-	-	(218)	-	11,313
14	Depreciation/Amortization	=	=	-	-	-	-	8,925
15	Taxes	497	(127)	=	-	-	-	8,593
16	Total Distribution	497	(127)	-	-	(218)	-	28,831
17	Customer Accounting	76	(19)		_	(114)	_	6,226
18	Customer Service & Information	-	(4,914)	-	-	(9)	-	867
19	Sales Expenses	-	-	-	-	-	-	
20	Administrative & General Operating Expenses	26	(7)	(222)		(132)		13,263
21	Depreciation/Amortization	20	(7)	(222)	-	(132)	-	5,206
22	Regulatory Amortizations	-	-	-	-	-	(1,505)	
23	Taxes		-	-	-	-	-	<u> </u>
24	Total Admin. & General	26	(7)	(222)	-	(132)	(1,505)	16,964
25	Total Gas Expense	11,208	(102,717)	(222)	-	(489)	(1,505)	141,790
26	OPERATING INCOME BEFORE FIT	1,776	-	222	-	489	1,505	24,545
	FEDERAL INCOME TAX							
27	Current Accrual	622	=	78	(86)	171	527	(5,462)
28	Debt Interest	=	=	-		-	-	(29)
29 30	Deferred FIT Amort ITC	=	-	=	-	-	-	12,388
30	Amortife	<u>-</u> _	<del>-</del>	<del>-</del>				(20)
31	NET OPERATING INCOME	\$ 1,154	\$ -	\$ 144	\$ 86	\$ 318	\$ 978	\$ 17,668
	RATE BASE							
	PLANT IN SERVICE							
32	Underground Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,622
33 34	Distribution Plant General Plant	-	=	-	-	-	•	354,360 69,725
					-		-	
35	Total Plant in Service	-	-	-	-	-	-	449,707
36	ACCUMULATED DEPRECIATION/AMORT Underground Storage							(9,824)
37	Distribution Plant	-	-	-	-	_	-	(119,790)
38	General Plant	=	=	-	-	-	-	(19,460)
39	Total Accumulated Depreciation/Amortization	-	3	5	-	=	-	(149,074)
40	NET PLANT	-	-	-	-	-	-	300,633
41	DEFERRED TAXES		-	-	-	-	-	(65,625)
42	Net Plant After DFIT	-	-	-	-	-	-	235,008
43	GAS INVENTORY	-	-	-	-	-	-	15,143
44	GAIN ON SALE OF BUILDING	-	-	-	-	-	-	-
45 46	OTHER WORKING CAPITAL	_	_			_	_	(509) 12,625
+0	WORKEN CALITAL				-	-	-	12,023
47	TOTAL RATE BASE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 262,267
48	RATE OF RETURN				<u> </u>			(1)
50	REVENUE REQUIREMENT	-1,862	0	-233	-139	-513	-1,578	3,821

Pro Forma Rate of Return Revenue Conversion Factor (1) The Restated TOTAL column does not represent 9/30/2015 Test Period results of operation on a normalized basis, due to variances between certain restating adjustments included in the normalized commission basis reports (CBRs) versus those included here, such as inclusion of pro forma debt interest. Normalized CB results of operations at 09/30/2015 was 6.49% as shown on Exhibit No. \_(EMA-3) page 5.

AVISTA UTILITIES
WASHINGTON NATURAL GAS - PRO FORMA STUDY ANDPRO FORMA ADJUSTMENTS
CROSS CHECK STUDIES
TWELVE MONTHS ENDED SEPTEMBER 30, 2015
(000'S OF DOLLARS)

Line No.	DESCRIPTION	Pro Forma Labor Non-Exec	Pro Forma Labor Exec	Pro Forma Employee Benefits	Pro Forma Pipeline Safety Labor	Pro Forma Property Tax	Pro Forma Revenue Normalization	Pro Forma Atmospheric Testing
	Adjsutment Number Workpaper Reference	3.00 G-PLN	3.01 G-PLE	3.02 G-PEB	3.03 G-PPS	3.04 G-PPT	3.05 G-PREV	3.06 G-PAT
	REVENUES							
1	Total General Business	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (72,574)	\$ -
2	Total Transportation	-	-	-	-	=	408	-
3	Other Revenues		-	-	-	9	(5,413)	-
4	Total Gas Revenues	-	-	-	-	-	(77,579)	-
	EXPENSES Production Expenses							
5	City Gate Purchases	-	-	-	-	=	(86,559)	-
6	Purchased Gas Expense	21	(25)	12	-	=	=	=
7	Net Nat Gas Storage Trans		-	-	-	9	-	-
8	Total Production	21	(25)	12	-	-	(86,559)	=
0	Underground Storage			(0)				
9 10	Operating Expenses Depreciation/Amortization	=	-	(0)	=	=	-	=
11	Taxes	-	-	-	-	15	-	-
12	Total Underground Storage	-	=	(0)	-	15	-	-
	Distribution							
13	Operating Expenses	284		144	104	=	=	236
14	Depreciation/Amortization	-	-	-	-	=	-	-
15	Taxes		-	=	=	181	(2,764)	<u> </u>
16	Total Distribution	284	-	144	104	181	(2,764)	236
17	Customer Accounting	151	-	82			(423)	-
18	Customer Service & Information	12	-	7	-	-	-	-
19	Sales Expenses	0	-	-	-	-	-	-
	Administrative & General							
20	Operating Expenses	176	12	100	-	-	(144)	-
21 22	Depreciation/Amortization	=	-	=	=	=	-	=
23	Regulatory Amortizations Taxes	=	_	_	=	_	-	_
24	Total Admin. & General	176	12	100	-	-	(144)	-
25	Total Gas Expense	644	(13)	345	104	196	(89,890)	236
26	OPERATING INCOME BEFORE FIT	(644)	13	(345)	(104)	(196)	12,311	(236)
	FEDERAL INCOME TAX							
27	Current Accrual	(225)	5	(121)	(36)	(69)	4,309	(83)
28	Debt Interest	-	-	-	-	-	-	-
29 30	Deferred FIT Amort ITC		-	-	-	-	-	<u> </u>
31	NET OPERATING INCOME	\$ (419)	\$ 8	\$ (224)	\$ (68)	\$ (127)	\$ 8,002	\$ (153)
	RATE BASE							
	PLANT IN SERVICE							
32	Underground Storage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
33	Distribution Plant	-	-	-	-	=	-	=
34	General Plant			<u>-</u>	-	=	-	
35	Total Plant in Service	-	-	-	=	-	-	-
36	ACCUMULATED DEPRECIATION/AMORT Underground Storage							
37	Distribution Plant	-	-	-	=	-	=	=
38	General Plant	-	-	-	-	-	-	-
39	Total Accumulated Depreciation/Amortization	-	-	-	-	-	=	
40	NET PLANT	-	-	-	=	-	-	=
41	DEFERRED TAXES				-	<del>-</del> _	-	
42 43	Net Plant After DFIT GAS INVENTORY	-	-	-	=	-	-	-
43 44	GAS INVENTORY GAIN ON SALE OF BUILDING				-	-	-	
45	OTHER				_	_	_	
46	WORKING CAPITAL				-	=	-	
47	TOTAL RATE BASE	<u>\$</u> -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
48	RATE OF RETURN							
50	REVENUE REQUIREMENT	675	-14	361	109	205	-12,907	247

Pro Forma Rate of Return

Revenue Conversion Factor

Line No.	DESCRIPTION	Pro Forma Regulatory Amortization	Pro Forma Capital Add Dec 2015 AMA	Pro Forma 2016 Limited Capital Adds	Pro Forma O&M Offsets		Pro Forma Sub-Total
	Adjsutment Number Workpaper Reference	3.07 G-PRA	3.08 G-PCAP15	3.09 G-PCAP16	3.10 G-POFF		PF-STtl
	REVENUES		0 - 0	0 - 0	0.1011		
1	Total General Business	\$	- \$ -	\$ -	\$ -	\$	84,057
2	Total Transportation		-	-	-		4,416
3	Other Revenues		-	-	-		283
4	Total Gas Revenues	-	-	-	-		88,756
	EXPENSES						
5	Production Expenses						
6	City Gate Purchases Purchased Gas Expense	•	- -	-	-		811
7	Net Nat Gas Storage Trans			-	-		-
8	Total Production	-	= =	=	-		811
	Underground Storage						
9	Operating Expenses	-		-	-		833
10	Depreciation/Amortization	-	- (2)	-	-		427
11 12	Taxes Total Underground Storage		- (2)	-	<u> </u>		293 1,553
12			(2)				1,555
13	Distribution Operating Expenses						12,081
13		•	- 126	184	-		9,235
15	Depreciation/Amortization Taxes		- 126	184	-		6,010
16	Total Distribution	-	126	184	-		27,326
17	Customer Association						6,036
18	Customer Accounting Customer Service & Information	•	- -	-	-		886
19	Sales Expenses	-		-	-		0
	Administrative & General						
20	Operating Expenses		_	_	(56)		13,351
21	Depreciation/Amortization		452	291	-		5,949
22	Regulatory Amortizations	2,584	ŀ				1,079
23 24	Taxes Total Admin. & General	2,584	452	291	(56)		20,379
25	Total Gas Expense	2,584		475	(56)		56,991
		-					
26	OPERATING INCOME BEFORE FIT	(2,584	1) (576)	(475)	56		31,765
	FEDERAL INCOME TAX						
27	Current Accrual	(904		(166)	20		(2,935)
28 29	Debt Interest Deferred FIT	•	(61)	(180)	-		(269) 12,388
30	Amort ITC		- 	-			(20)
31	NET OPERATING INCOME	\$ (1,680	)) \$ (314)	\$ (129)	\$ 36	\$	22,602
31		\$ (1,000	)) \$ (314)	\$ (129)	\$ 50	Φ	22,002
	RATE BASE PLANT IN SERVICE						
32	Underground Storage	\$	\$ 163	\$ -	\$ -	\$	25,785
33	Distribution Plant		5,261	16,375	-		375,996
34	General Plant		3,449	5,891	=		79,065
35	Total Plant in Service	-	8,873	22,266	=		480,846
2.5	ACCUMULATED DEPRECIATION/AMORT		// //				(0.04=)
36 37	Underground Storage Distribution Plant	•	(103) (1,320)	(391)	=		(9,927) (121,501)
38	General Plant		612	(632)	-		(121,501)
39	Total Accumulated Depreciation/Amortization		(811)	(1,023)	-		(150,908)
40	NET PLANT	-	8,062	21,243	-		329,938
41	DEFERRED TAXES		(1,956)	(3,123)			(70,704)
42	Net Plant After DFIT		6,106	18,120	-		259,234
43 44	GAIN ON SALE OF BUILDING		-	-			15,143
44 45	GAIN ON SALE OF BUILDING OTHER						(509)
46	WORKING CAPITAL						12,625
47	TOTAL RATE BASE	\$	- \$ 6,106	\$ 18,120	s -	\$	286,493
48	RATE OF RETURN	φ .	φ 0,100	Ψ 10,120	Ψ -	Ψ	200,493
50	REVENUE REQUIREMENT	2,70	9 1,258	2,440	-59		-1,151

Pro Forma Rate of Return Revenue Conversion Factor

WASHINGTON NATURAL GAS - PRO FORMA STUDY AND  $\underline{2017}$  CROSS CHECK ADJUSTMENTS

CROSS CHECK STUDIES
TWELVE MONTHS ENDED SEPTEMBER 30, 2015
(000'S OF DOLLARS)

Line No.	DESCRIPTION	Cross Check Labor Non-Exec	Cross Check Capital Add 2016 AMA	Cross Check Capital Add 2017 AMA	Cross Check 2017 AMI Capital & Expense	Cross Check Information Tech/Serv Exp	Cross Check Insurance Expense	Cross Check Property Tax Exp
	Adjsutment Number Workpaper Reference	4.00 G-CLN	4.01 G-CCAP16	4.02 G-CCAP17	4.03 G-CAMI	4.04 G-CIS	4.05 G-CI	4.06 G-CPT
	REVENUES							
1	Total General Business	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	Total Transportation	-	-	-	-	-	-	-
3	Other Revenues		-	-	-	-	=	
4	Total Gas Revenues	=	-	-	-	=	-	-
	EXPENSES Production Expenses							
5	City Gate Purchases	-	-	-	-	-	-	-
6	Purchased Gas Expense	6	-	-	-	-	-	-
7	Net Nat Gas Storage Trans		-	-	-	-	-	
8	Total Production	6	-	-	-	-	-	-
	Underground Storage							
9 10	Operating Expenses Depreciation/Amortization	-	13	- 11	-	-	-	-
11	Taxes	-	-	-	=	-	-	19
12	Total Underground Storage	-	13	11	-	-	-	19
	Distribution							
13	Operating Expenses	70	-	-	-	-	-	-
14	Depreciation/Amortization	-	407	468	555	-	-	-
15	Taxes	-	-	-	-	-	-	239
16	Total Distribution	70	407	468	555	=	=	239
17	Customer Accounting	39	=	=				
18 19	Customer Service & Information Sales Expenses	3 -	-	-	-	-	-	<del>-</del> -
	Administrative & General							
20	Operating Expenses	48	-	-	-	459	22	-
21	Depreciation/Amortization	-	1,056	1,197	600	-	-	-
22 23	Regulatory Amortizations Taxes							
24	Total Admin. & General	48	1,056	1,197	600	459	22	<u> </u>
25	Total Gas Expense	166	1,476	1,676	1,155	459	22	258
26	OPERATING INCOME BEFORE FIT	(166)	(1,476)	(1,676)	(1,155)	(459)	(22)	(258)
	FEDERAL INCOME TAX							
27	Current Accrual	(58)	(517)		(404)		(8)	(90)
28 29	Debt Interest Deferred FIT	-	(14)		(89)	-	-	=
30	Amort ITC	-	=	=	- -	-	-	<u> </u>
31	NET OPERATING INCOME	\$ (108)	\$ (946)	\$ (1,000)	\$ (661)	\$ (298)	\$ (14)	\$ (168)
	RATE BASE							
	PLANT IN SERVICE							
32	Underground Storage					\$ -	\$ -	\$ -
33	Distribution Plant	-	7,104	18,576	8,339	-	-	-
34 35	General Plant Total Plant in Service		4,492 12,469	8,073 27,343	2,607 10,946	<u> </u>		
55	ACCUMULATED DEPRECIATION/AMORT		12,.37	2,,575	10,740			
36	Underground Storage	-	(428)	(440)	-	-	-	-
37	Distribution Plant	-	(6,684)		(278)	-	-	-
38	General Plant		(3,124)	(4,711)	(300)		-	
39	Total Accumulated Depreciation/Amortization		(10,236)	(12,875)	(578)		-	<u> </u>
40 41	NET PLANT DEFERRED TAXES	-	2,233 (850)	14,468 (5,512)	10,368 (1,365)	-	-	-
42	Net Plant After DFIT	-	1,383	8,956	9,003	-	-	-
43	GAS INVENTORY				=	=	=	=
44	GAIN ON SALE OF BUILDING				=	=	=	=
45 46	OTHER WORKING CAPITAL	-			<u> </u>	-	=	<u>-</u>
47	TOTAL RATE BASE	\$ -	\$ 1,383	\$ 8,956	\$ 9,003	\$ -	\$ -	\$ -
48	RATE OF RETURN							
50	REVENUE REQUIREMENT	174	1,696	2,717	2,176	481	23	270

Pro Forma Rate of Return

Revenue Conversion Factor

				FINAL	
		2017	Reconcile 2017	Attrition Adjusted	
Line		Cross Check	Cross Check	/ Cross Check	
No.	DESCRIPTION	Total	to Attrition	Total (2)	
	Adjsutment Number	17CC-Ttl	4.07	17AA/CC-Ttl	
	Workpaper Reference		G-CREC		
	REVENUES				
1	Total General Business	\$ 84,057	\$ -	\$ 84,057	
2	Total Transportation	4,416	-	4,416	
3	Other Revenues	283	-	283	
4	Total Gas Revenues	88,756	=	88,756	
	EXPENSES				
5	Production Expenses City Gate Purchases				
6	Purchased Gas Expense	817	_	817	
7	Net Nat Gas Storage Trans		_	•	
8	Total Production	817	-	817	
	Underground Storage				
9	Operating Expenses	833	=	833	
10	Depreciation/Amortization	451	-	451	
11	Taxes	312	-	312	
12	Total Underground Storage	1,596	-	1,596	
	The settle of				
12	Distribution	10.174		10.151	
13	Operating Expenses	12,151	-	12,151	
14	Depreciation/Amortization	10,665	-	10,665	
15	Taxes	6,249	-	6,249	
16	Total Distribution	29,065	=	29,065	
17	Customer Accounting	6,075	-	6,075	
18	Customer Service & Information	889	-	889	
19	Sales Expenses	0	-	0	
	Administrative & General				
20	Operating Expenses	13,880	(1,129)	12,751	
21	Depreciation/Amortization	8,802	(1,127)	8,802	
22	Regulatory Amortizations	1,079		1,079	
23	Taxes	-,	-	-,	
24	Total Admin. & General	23,761	(1,129)	22,632	
25	T. 10 F	(2.202	(1.120)	C1.074	
25	Total Gas Expense	62,203	(1,129)	61,074	
26	OPERATING INCOME BEFORE FIT	26,553	1,129	27,682	
		.,	, .	,	
	FEDERAL INCOME TAX				
27	Current Accrual	(4,760)	395	(4,364)	
28	Debt Interest	(462)	75	(387)	
29	Deferred FIT	12,388	-	12,388	
30	Amort ITC	(20)	-	(20)	
31	NET OPERATING INCOME	\$ 19,406	\$ 659	\$ 20,065	
	RATE BASE				
	PLANT IN SERVICE				
32	Underground Storage	\$ 27,352		\$ 27,352	
33	Distribution Plant	410,015		410,015	
34	General Plant	94,237		94,237	
35	Total Plant in Service	531,604		531,604	
55		331,004	_	331,004	
36	ACCUMULATED DEPRECIATION/AMORT	(10,795)		(10,795)	
30 37	Underground Storage Distribution Plant	(136,187)		(136,187)	
38	General Plant	(27,615)		(27,615)	
39	Total Accumulated Depreciation/Amortization	(174,597)	-	(174,597)	
40	NET PLANT	357,007	-	357,007	
41	DEFERRED TAXES	(78,431)		(78,431)	
42	Net Plant After DFIT	278,576	=	278,576	
43	GAS INVENTORY	15,143	-	15,143	
44	GAIN ON SALE OF BUILDING	(=00)	/A 5500	(0.000)	
45 46	OTHER WORKING CAPITAL	(509) 12 625	(7,520)		
40	WORKING CAPITAL	12,625		12,625	
47	TOTAL DATE DASE	\$ 305,835	¢ (7.530)	\$ 200.215	2017 A ###################################
47	TOTAL RATE BASE	\$ 305,835	\$ (7,520)		2017 Attrition Adjustment
48	RATE OF RETURN REVENUE REQUIREMENT	6,386	(1,990)	6.73% 4,397	Above Pro Forma Study 5,548
50					

Pro Forma Rate of Return Revenue Conversion Factor (2) The Attrition Adjusted Total revenue requirement of \$4.397 million on line 50 developed by the Company's Attrition Study is used for the adjusted results and revenue requirement on an attrition adjusted basis. However, the values shown elsewhere in the Attriti on Adjusted Total column, lines 1-47 above, were used for the limited purpose of preparing the cost-of-service study that is presented by Company witness Mr. Miller, because these values more readily lend themselves to Mr. Miller's cost-of-service analysis.

WASHINGTON NATURAL GAS - PRO FORMA STUDY AND 1/1/2018

Step 2 Increase (6 Months 2018: 1/1/2018-6/30/2018) 2018 CROSS CHECK ADJUSTMENTS

CROSS CHECK STUDIES

TWELVE MONTHS ENDED SEPTEMBER 30, 2015

2017 (000'S OF DOLLARS) FINAL Cross Check Cross Check Cross Check Cross Check Cross Check Attrition Adjusted / Cross Check Line Labor Planned Capital Regulatory Insurance Information No. DESCRIPTION Non-Exec Amortization Tech/Serv Exp Add 2018 AMA Total Expense 17AA/CC-Ttl Adisutment Number 18.01 18.02 18.03 18.04 18.05 Workpaper Reference G-CLN18 G-CRA18 G-CI18 G-CIS18 G-CCAP18 REVENUES 84,057 Total General Business \$ - \$ \$ - \$ Total Transportation 4,416 Other Revenues 283 Total Gas Revenues 88,756 EXPENSES Production Expenses City Gate Purchases Purchased Gas Expense 817 Net Nat Gas Storage Trans Total Production 817 Underground Storage 833 Operating Expenses 451 10 Depreciation/Amortization 5 11 Taxes 312 Total Underground Storage 1,596 12 13 Operating Expenses 12,151 101 14 Depreciation/Amortization 10.665 252 6,249 15 Taxes Total Distribution 252 16 29,065 101 17 Customer Accounting 6.075 54 18 Customer Service & Information 889 4 19 Sales Expenses Administrative & General 20 Operating Expenses 12,751 19 102 21 Depreciation/Amortization 8,802 569 22 Regulatory Amortizations 1,079 (540)23 Taxes Total Admin. & General 569 24 22,632 64 (540)19 102 61,074 102 Total Gas Expense 231 (540)19 826 OPERATING INCOME BEFORE FIT 27,682 (102) (231) 540 (19) (826) FFDERAL INCOME TAX 27 (4,364)(81) 189 (7) (36)(289)Current Accrual 28 Debt Interest (387) 20 Deferred FIT 12,388 Amort ITC (20) NET OPERATING INCOME 20,065 351 S (12) \$ (150) \$ (66) \$ (557) 31 RATE BASE PLANT IN SERVICE 32 Underground Storage 27,352 346 33 Distribution Plant 410.015 9,996 34 General Plant 94,237 1,932 35 531,604 12,274 ACCUMULATED DEPRECIATION/AMORT (336) 36 (10.795)Underground Storage (6.066) 37 Distribution Plant (136,187) 38 General Plant (27,615) (3,624) Total Accumulated Depreciation/Amortization (174,597) (10,026)2,248 NET PLANT 41 DEFERRED TAXES (4,284) (78,431 Net Plant After DFIT 42 278,576 (2,036)43 GAS INVENTORY 15,143 GAIN ON SALE OF BUILDING 44 OTHER (8,029) 45 WORKING CAPITAL 46 12,625 298,315 (2,036) 47 TOTAL RATE BASE RATE OF RETURN 48

4,397

242

-566

20

107

Pro Forma Rate of Return

REVENUE REQUIREMENT

50

Revenue Conversion Factor

648

	VE MONTHS ENDED SEPTEMBER 30, 2015 OF DOLLARS)				2018	INCREMENTAL	
	т		2010	D 11 4010	FINAL	2018 (I)	
Line		Cross Check 2018 AMI	2018 Cross Check	Reconcile 2018 Cross Check	Attrition Adjusted / Cross Check	Attrition Adjusted / Cross Check	
No.	DESCRIPTION	Capital & Expense	Total	to Attrition	Total	Total	
	Adjsutment Number	18.06	17CC-Ttl	18.07	18AA/CC-Ttl	18AA/CC-Ttl	
	Workpaper Reference	G-CAMI18		G-CREC18			
	REVENUES						
1	Total General Business	\$ -	\$ 84,057	\$ -	\$ 84,057	\$ -	
2	Total Transportation	-	4,416	-	4,416	-	
3	Other Revenues		283	-	283		
4	Total Gas Revenues	=	88,756	=	88,756	-	
	EXPENSES						
	Production Expenses						
5	City Gate Purchases	-		-	-		
6	Purchased Gas Expense	=	825	=	825	8	
7	Net Nat Gas Storage Trans		•	-	-	-	
8	Total Production	-	825	-	825	8	
	Undangerend Characa						
9	Underground Storage Operating Expenses		833		833		
10	Depreciation/Amortization	-	456	-	456	5	
11	Taxes	-	312	-	312		
12	Total Underground Storage	-	1,601	-	1,601	5	
	Distribution						
13	Operating Expenses	(286)	11,966	=	11,966	(185)	
14	Depreciation/Amortization	513	11,430	-	11,430	765	
15	Taxes		6,249	-	6,249	-	
16	Total Distribution	227	29,645	-	29,645	580	
17	Customer Accounting	-	6,129	-	6,129	54	
18	Customer Service & Information	Ξ	893	=	893	4	
19	Sales Expenses	-	0	-	0		
	Administrative & General						
20	Operating Expenses	-	12,936	(1,086)	11,850	(901)	
21	Depreciation/Amortization	654	10,025	-	10,025	1,223	
22	Regulatory Amortizations		540		540	(540)	
23	Taxes	-		-	-	-	
24	Total Admin. & General	654	23,501	(1,086)	22,415	(218)	
25	Total Gas Expense	881	62,593	(1,086)	61,507	434	
	-						
26	OPERATING INCOME BEFORE FIT	(881)	26,163	1,086	27,249	(434)	
27	FEDERAL INCOME TAX	(200)	(4.806)	200	(4.510)	(152)	
27 28	Current Accrual Debt Interest	(308) (76)	(4,896) (443)	380 11	(4,516) (432)	(152) (45)	
29	Deferred FIT	(70)	12,388	- 11	12,388	(43)	
30	Amort ITC	-	(20)	-	(20)		
		-	, , , , , , , , , , , , , , , , , , ,		( )		
31	NET OPERATING INCOME	\$ (497)	\$ 19,133	\$ 695	\$ 19,829	\$ (237)	
	RATE BASE						
	PLANT IN SERVICE						
32	Underground Storage	\$ -	\$ 27,698		\$ 27,698	\$ 346	
33	Distribution Plant	7,708	427,719		427,719	17,704	
34	General Plant	2,844	99,013		99,013	4,776	
35	Total Plant in Service	10,552	554,430	=	554,430	22,826	
55	ACCUMULATED DEPRECIATION/AMORT	10,552	334,430	_	334,430	22,020	
36	Underground Storage		(11,131)		(11,131)	(336)	
37	Distribution Plant	(747)	(143,000)		(143,000)	(6,813)	
38	General Plant	(983)	(32,222)		(32,222)	(4,607)	
39	Total Accumulated Depreciation/Amortization	(1,730)	(186,353)	-	(186,353)		
40	NET PLANT	8,822	368,077	-	368,077	11,070	
41	DEFERRED TAXES	(1,173)	(83,888)		(83,888)	(5,457)	
42	Net Plant After DFIT	7,649	284,189		284,189	5,613	
42	GAS INVENTORY	7,649	284,189 15,143	-	284,189 15,143	5,013	
44	GAIN ON SALE OF BUILDING		13,143	_	13,143		
45	OTHER		(8,029)	(1,069)	(9,098)	(1,069)	
46	WORKING CAPITAL		12,625		12,625		
47	TOTAL RATE BASE	\$ 7,649	\$ 303,928	\$ (1,069)			
	DATE OF DETUNA				( 550/	5.010/	Incremental 06.2018
48	RATE OF RETURN REVENUE REQUIREMENT		6,591		6.55% 5,338	-5.21%	incremental 06.2017

Pro Forma Rate of Return Revenue Conversion Factor (1) January to June 2018 Incremental Cross Check results in \$2.194 million prior to column (18.07) "Reconcile 2018 Cross Check to Attrition" (\$941 + \$1,253 = \$2,194).