

# LOCAL TARIFF APPLYING ON CRUDE PETROLEUM AND NATURAL GAS LIQUIDS

**FROM** 

THE INTERNATIONAL BOUNDARY NEAR NECHE, NORTH DAKOTA AND POINTS IN THE STATES OF ILLINOIS, INDIANA, MICHIGAN, AND MINNESOTA

TC

POINTS IN THE STATES OF ILLINOIS, INDIANA, MICHIGAN, MINNESOTA, WISCONSIN AND THE INTERNATIONAL BOUNDARY NEAR MARYSVILLE, MICHIGAN

The rates listed in this tariff are for the transportation of Crude Petroleum and Natural Gas Liquids by the Carrier. The transportation rates listed in this tariff are subject to the Rules and Regulations published in the Carrier's Tariffs FERC Nos. **[W]** 41.17.0 41.16.0 and 42.5.0, and reissues thereof.

The rates listed in this tariff are payable in United States currency and are applicable on the United States movement of Crude Petroleum and Natural Gas Liquids tendered to the Carrier at established receiving points in the United States for delivery to established delivery points in the United States.

Issued pursuant to the Federal Energy Regulatory Commission letter order dated December 21, 1998, in Docket No. OR99-2-000, and Federal Energy Regulatory Commission letter order dated June 30, 2004, in Docket No. OR04-2-000. The Facilities Surcharge has since been supplemented and approved by the Commission to include additional projects under the following Docket Nos.: OR06-3-000, OR08-10-000, OR08-12-000, OR09-5-000, OR10-7-000, OR11-5-000, OR12-8-000, OR13-11-000, OR14-13-000, OR14-33-000, OR15-4-000, OR16-9-000, and OR17-3-000.

Issued in Compliance with 18 C.F.R. 341.3 Form of Tariff.

[C] Filed in Compliance with 18 C.F.R. 342.3 Indexing.

The provisions published herein will, if effective, not result in an effect on the quality of the human environment.

### ISSUED: March 1, 2021

### **ISSUED BY:**

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### **EFFECTIVE: April 1, 2021**

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### TRANSPORTATION RATES

Commodities shall be classified on the basis of the density and viscosity of such commodities at the earlier time of receipt by the Carrier or Enbridge Pipelines Inc. and assessed a transportation rate as listed in the transportation rate tables below. Density shall be based on 15°C. Viscosity shall be based on the Carrier's reference line temperature at the time of receipt. Where the density of a commodity falls within the density range of one commodity classification and the viscosity of the commodity falls within the viscosity range of another commodity classification, then the commodity shall be deemed to be in the commodity classification with the higher transportation rate.

**NATURAL GAS LIQUIDS** - A commodity having a maximum absolute vapor pressure of 1,250 kilopascals at 37.8°C and a density of up to but not including 600 kilograms per cubic meter (kg/m³) and a viscosity of up to but not including 0.4 square millimeters per second (mm²/s) will be classified as **Natural Gas Liquids (NGL)**.

**LIGHT CRUDE PETROLEUM** - A commodity having a density from 600 kg/m³ up to but not including 876 kg/m³ and a viscosity from 0.4 mm²/s up to but not including 20 mm²/s will be classified as **Light Crude Petroleum**.

**MEDIUM CRUDE PETROLEUM** - A commodity having a density from 876 kg/m³ up to but not including 904 kg/m³ and a viscosity from 20 mm²/s up to but not including 100 mm²/s will be classified as **Medium Crude Petroleum**.

**HEAVY CRUDE PETROLEUM** - A commodity having a density from 904 kg/m³ to 940 kg/m³ inclusive and a viscosity from 100 to 350 mm²/s will be classified as **Heavy Crude Petroleum**.

### **NATURAL GAS LIQUIDS**

TABLE OF TRANSPORTATION RATES FOR NGL IN US DOLLARS PER CUBIC METER					
FROM	то	RATE			
	Superior, Wisconsin	(c), (i)	5.1607		
International Boundary near Neche, North Dakota	Rapid River, Michigan	(c), (g), (i)	8.5420		
	International Boundary near Marysville, Michigan	(g), (i)	13.2969		

# LIGHT CRUDE PETROLEUM

TABLE OF TRANSPORTA	TION RATES FOR LIGHT CRUDE F CUBIC METER	PETROLEUM IN US DO	OLLARS PER
FROM	ТО		RATE
	Clearbrook, Minnesota	(c), (i), (j)	2.8213
	Superior, Wisconsin	(c), (d), (i)	5.8284
	Lockport, Illinois	(c), (i)	12.6087
	Mokena, Illinois	(c), (i)	12.6087
International Boundary near	Flanagan, Illinois	(c), (e), (i)	12.6087
Neche, North Dakota	Griffith, Indiana	(c), (e), (i)	12.6087
	Stockbridge, Michigan	(c), (i)	15.1657
	Marysville, Michigan	(c), (i)	15.1657
	International Boundary near Marysville, Michigan	(i)	14.8364
	Clearbrook, Minnesota	(c), (j)	<b>[U]</b> 0.7361
	Superior, Wisconsin	(c), (d), (i), (j)	4.4938
	Lockport, Illinois	(c), (i), (j)	11.2727
	Mokena, Illinois	(c), (i), (j)	11.2727
Clearbrook, Minnesota	Flanagan, Illinois	(c), (e), (i), (j)	11.2727
(a),(b)	Griffith, Indiana	(c),(e), (i), (j)	11.2727
	Stockbridge, Michigan	(c), (i), (j)	13.8270
	Marysville, Michigan	(c), (i), (j)	13.8270
	International Boundary near Marysville, Michigan	(i), (j)	13.5002
	Griffith, Indiana	(c), (e), (i)	1.7069
Mokena, Illinois	Stockbridge, Michigan	(c), (i)	4.0685
(b)	Marysville, Michigan	(c), (i)	5.5170
(2)	International Boundary near Marysville, Michigan	(i)	5.2340
	Griffith, Indiana	(c), (e)	<b>[U]</b> 1.2936
Griffith, Indiana	Stockbridge, Michigan	(c), (i)	4.0685
(b),(h)	Marysville, Michigan	(c), (i)	5.5170
(3),(11)	International Boundary near Marysville, Michigan	(i)	5.2340
Stockbridge, Michigan	Marysville, Michigan	(c), (i)	2.7535
(b)	International Boundary near Marysville, Michigan	(i)	2.4679
Lewiston, Michigan	Marysville, Michigan	(c), (i)	3.9812
(b),(f)	International Boundary near Marysville, Michigan	(i)	3.6812

# MEDIUM CRUDE PETROLEUM

TABLE OF TRANSPORTATI	ON RATES FOR MEDIUM CRUDE CUBIC METER	PETROLEUM IN US I	DOLLARS PER
FROM	то		RATE
	Clearbrook, Minnesota	(c), (i), (j)	2.9821
	Superior, Wisconsin	(c), (d), (i)	6.2165
	Lockport, Illinois	(c), (i)	13.5523
	Mokena, Illinois	(c), (i)	13.5523
International Boundary near	Flanagan, Illinois	(c), (e), (i)	13.5523
Neche, North Dakota	Griffith, Indiana	(c), (e), (i)	13.5523
	Stockbridge, Michigan	(c), (i)	16.3136
	Marysville, Michigan	(c), (i)	16.3136
	International Boundary near Marysville, Michigan	(i)	15.9863
	Clearbrook, Minnesota	(c), (j)	<b>[U]</b> 0.7361
	Superior, Wisconsin	(c), (d), (i), (j)	4.7188
	Lockport, Illinois	(c), (i), (j)	12.0548
	Mokena, Illinois	(c), (i), (j)	12.0548
Clearbrook, Minnesota	Flanagan, Illinois	(c), (e), (i), (j)	12.0548
(a),(b)	Griffith, Indiana	(c), (e), (i), (j)	12.0548
	Stockbridge, Michigan	(c), (i). (j)	14.8145
	Marysville, Michigan	(c), (i), (j)	14.8145
	International Boundary near Marysville, Michigan	(i), (j)	14.4869
	Griffith, Indiana	(c), (e), (i)	1.7391
Mokena, Illinois	Stockbridge, Michigan	(c), (i)	4.2894
(b)	Marysville, Michigan	(c), (i)	5.8543
(=)	International Boundary near Marysville, Michigan	(i)	5.5732
	Griffith, Indiana	(c), (e)	<b>[U]</b> 1.2936
Griffith, Indiana	Stockbridge, Michigan	(c), (i)	4.2894
(b),(h)	Marysville, Michigan	(c), (i)	5.8543
<i>、</i>	International Boundary near Marysville, Michigan	(i)	5.5732
Stockbridge, Michigan	Marysville, Michigan	(c), (i)	2.8689
(b)	International Boundary near Marysville, Michigan	(i)	2.5898
Lewiston, Michigan	Marysville, Michigan	(c), (i)	4.1965
(b),(f)	International Boundary near Marysville, Michigan	(i)	3.8963

# **HEAVY CRUDE PETROLEUM**

	CUBIC METER		
FROM	ТО		RATE
	Clearbrook, Minnesota	(c), (i), (j)	3.2656
	Superior, Wisconsin	(c), (d), (i)	6.8940
	Lockport, Illinois	(c), (i)	15.2076
	Mokena, Illinois	(c), (i)	15.2076
nternational Boundary near	Flanagan, Illinois	(c), (e), (i)	15.2076
Neche, North Dakota	Griffith, Indiana	(c), (e), (i)	15.2076
	Stockbridge, Michigan	(c), (i)	18.3286
	Marysville, Michigan	(c), (i)	18.3286
	International Boundary near Marysville, Michigan	(i)	17.9967
	Clearbrook, Minnesota	(c), (j)	<b>[U]</b> 0.7361
	Superior, Wisconsin	(c), (d), (i), (j)	5.1171
	Lockport, Illinois	(c), (i), (j)	13.4274
	Mokena, Illinois	(c), (i), (j)	13.4274
Clearbrook, Minnesota (a),(b)	Flanagan, Illinois	(c), (e), (i), (j)	13.4274
	Griffith, Indiana	(c), (e), (i), (j)	13.4274
	Stockbridge, Michigan	(c), (i), (j)	16.5455
	Marysville, Michigan	(c), (i), (j)	16.5455
	International Boundary near Marysville, Michigan	(i), (j)	16.2160
	Griffith, Indiana	(c), (e), (i)	1.7954
Mokena, Illinois	Stockbridge, Michigan	(c), (i)	4.6771
(b)	Marysville, Michigan	(c), (i)	6.4452
	International Boundary near Marysville, Michigan	(i)	6.1738
	Griffith, Indiana	(c), (e)	<b>[U]</b> 1.2936
Griffith, Indiana	Stockbridge, Michigan	(c), (i)	4.6771
(b),(h)	Marysville, Michigan	(c), (i)	6.4452
,	International Boundary near Marysville, Michigan	(i)	6.1738
Stockbridge, Michigan	Marysville, Michigan	(c), (i)	3.0733
(b)	International Boundary near Marysville, Michigan	(i)	2.7966
Lewiston, Michigan	Marysville, Michigan	(c), (i)	4.5719
(b),(f)	International Boundary near Marysville, Michigan	(i)	4.2755

### [U] All rates on this page are unchanged

- (a) Receipt Tankage The transportation rates from this receiving point include a receipt tankage charge of \$0.1806 per cubic meter.
- **(b) Receipt Terminalling** The transportation rates from this receiving point include a receipt terminalling charge of \$0.4981 per cubic meter.
- **(c) Delivery Terminalling** The transportation rates to this delivery point include a delivery terminalling charge of \$0.3274 per cubic meter.
- (d) **Delivery Tankage** The transportation rates to this delivery point include a delivery tankage charge of \$0.1806 per cubic meter.
- (e) In addition to the transportation rate shown, a delivery tankage charge of \$0.1806 per cubic meter will be assessed if the Carrier's delivery tankage at Griffith, Indiana or Flanagan, Illinois is used by the shipper, except for deliveries into the facilities owned by Illinois Extension Pipeline Company L.L.C. (Southern Access Extension Pipeline).
- (f) Break-out Tankage Credit The transportation rates from this receiving point include a break-out tankage credit of 3.9554 cents per hundred cubic meter miles for light crude petroleum, 4.2709 cents per hundred cubic meter miles for medium crude petroleum, and 4.7454 cents per hundred cubic meter miles for heavy crude petroleum.
- (g) Break-out Tankage Credit The transportation rate to this delivery point includes a break-out tankage credit of 1.0742 cents per hundred cubic meter miles for natural gas liquids.
- (h) In addition to the transportation rate shown, a receipt tankage charge of \$0.1806 per cubic meter will be assessed if the Carrier's receipt tankage at Griffith, Indiana is used by the shipper.
- (i) Facilities Surcharge The transportation rates to this delivery point include a Facilities Surcharge calculated in accordance with the Settlement approved in Federal Energy Regulatory Commission letter order dated June 30, 2004, in Docket No. OR04-2-000. The Facilities Surcharge has since been supplemented and approved by the Federal Energy Regulatory Commission to include the recovery of costs associated with additional projects.
- (j) Clearbrook Nomination Option Shippers have the option to submit Nominations for transportation of Crude Petroleum on the Mainline to Clearbrook, Minnesota, without a physical delivery at Clearbrook, MN, provided that for each such Nomination a Shipper submits in a given month, (i) a transfer of the nominated volume has been arranged in accordance with the Rules and Regulations for transportation of Crude Petroleum and (ii) the transferee has submitted a Nomination of an equal volume of the same commodity from Clearbrook to a Regular Delivery Point that is at, or downstream of Clearbrook. In the event this option is selected, the transferor will pay the applicable tariff rate for service to Clearbrook under Enbridge Pipelines Inc. in connection with Enbridge Energy, Limited Partnership's International Joint Rate Tariff and the transferee will pay the applicable tariff rate for service from Clearbrook to the selected Regular Delivery Point under Enbridge Energy, Limited Partnership's Local Tariff. All aforementioned Nominations must be made in accordance with the Rules and Regulations for transportation of Crude Petroleum.

### Symbols:

[C] - Cancel

[I] - Increase

[N] - New

[U] – Unchanged Rate

[W] - Change in wording only



# **ENBRIDGE ENERGY, LIMITED PARTNERSHIP**

# **APPENDIX A**

# **WORKSHEET SUPPORTING RATES**

		Transpor	tation Rates in	Dollars per Cul	bic Meter
From	То	Previous FERC No. 43.38.0	Indexed Base Rate	Facilities Surcharge	Proposed FERC No 43.39.0
	Turan and attack to a	f N.C.			
International Boundary near	Transportation R		2.0002	2 2004	F 1C07
·	Superior, Wisconsin	4.6869	2.9603	2.2004	5.1607
Neche, North Dakota	Rapid River, Michigan International Boundary near	7.6895	4.5826	3.9594	8.5420
	Marysville, Michigan	11.8917	6.7704	6.5265	13.2969
	Transportation Rates for I	ight Crude Petro	eum		
	Clearbrook, Minnesota	2.6020	1.8026	1.0187	2.8213
	Superior, Wisconsin	5.3020	3.3835	2.4449	5.8284
	Lockport, Illinois	11.3252	6.6474	5.9613	12.6087
	Mokena, Illinois	11.3252	6.6474	5.9613	12.6087
International Boundary near	Flanagan, Illinois	11.3252	6.6474	5.9613	12.6087
Neche, North Dakota	Griffith, Indiana	11.3252	6.6474	5.9613	12.6087
	Stockbridge, Michigan	13.6044	7.9140	7.2517	15.1657
	Marysville, Michigan	13.6044	7.9140	7.2517	15.1657
	International Boundary near Marysville, Michigan	13.2751	7.5847	7.2517	14.8364
	Clearbrook, Minnesota	0.7361	0.7361	0.0000	0.7361
	Superior, Wisconsin	4.1867	3.0676	1.4262	4.4938
	Lockport, Illinois	10.2085	6.3301	4.9426	11.2727
	Mokena, Illinois	10.2085	6.3301	4.9426	11.2727
Clearbrook, Minnesota	Flanagan, Illinois	10.2085	6.3301	4.9426	11.2727
	Griffith, Indiana	10.2085	6.3301	4.9426	11.2727
	Stockbridge, Michigan	12.4850	7.5940	6.2330	13.8270
	Marysville, Michigan	12.4850	7.5940	6.2330	13.8270
	International Boundary near Marysville, Michigan	12.1582	7.2672	6.2330	13.5002
	Griffith, Indiana	1.6631	1.5032	0.2037	1.7069
Mokena, Illinois	Stockbridge, Michigan	3.7679	2.6725	1.3960	4.0685
	Marysville, Michigan	5.0588	3.3890	2.1280	5.5170
	International Boundary near Marysville, Michigan	4.7710	3.0834	2.1506	5.2340
	Griffith, Indiana	1.2936	1.2936	0.0000	1.2936
Griffith, Indiana	Stockbridge, Michigan	3.7679	2.6725	1.3960	4.0685
	Marysville, Michigan	5.0588	3.3890	2.1280	5.5170
	International Boundary near Marysville, Michigan	4.7710	3.0834	2.1506	5.2340

		Transpor	tation Rates in	Dollars per Cul	oic Meter
From	То	Previous FERC No. 43.38.0	Indexed Base Rate	Facilities Surcharge	Proposed FERC No 43.39.0
	Transportation Rates for Light C	rude Petroleum -	Continued		
Stockbridge, Michigan	Marysville, Michigan	2.5959	2.0215	0.7320	2.7535
	International Boundary near Marysville, Michigan	2.3054	1.7133	0.7546	2.4679
Lewiston, Michigan	Marysville, Michigan	3.6806	2.5852	1.3960	3.9812
	International Boundary near Marysville, Michigan	3.3790	2.2776	1.4036	3.6812
	Transportation Rates for Me	edium Crude Petr	oleum		
	Clearbrook, Minnesota	2.7452	1.8819	1.1002	2.9821
	Superior, Wisconsin	5.6480	3.5760	2.6405	6.2165
	Lockport, Illinois	12.1661	7.1141	6.4382	13.5523
International Boundary near	Mokena, Illinois	12.1661	7.1141	6.4382	13.5523
Neche, North Dakota	Flanagan, Illinois	12.1661	7.1141	6.4382	13.5523
	Griffith, Indiana	12.1661	7.1141	6.4382	13.5523
	Stockbridge, Michigan	14.6274	8.4818	7.8318	16.3136
	Marysville, Michigan	14.6274	8.4818	7.8318	16.3136
	International Boundary near Marysville, Michigan	14.3001	8.1545	7.8318	15.9863
	Clearbrook, Minnesota	0.7361	0.7361	0.0000	0.7361
	Superior, Wisconsin	4.3872	3.1785	1.5403	4.7188
	Lockport, Illinois	10.9055	6.7168	5.3380	12.0548
	Mokena, Illinois	10.9055	6.7168	5.3380	12.0548
Clearbrook, Minnesota	Flanagan, Illinois	10.9055	6.7168	5.3380	12.0548
	Griffith, Indiana	10.9055	6.7168	5.3380	12.0548
	Stockbridge, Michigan	13.3652	8.0829	6.7316	14.8145
	Marysville, Michigan	13.3652	8.0829	6.7316	14.8145
	International Boundary near Marysville, Michigan	13.0376	7.7553	6.7316	14.4869

		Transpor	tation Rates in	Dollars per Cub	oic Meter
From	То	Previous FERC No. 43.38.0	Indexed Base Rate	Facilities Surcharge	Proposed FERC No 43.39.0
	Transportation Rates for Medium	Crude Petroleum	- Continued		
	Griffith, Indiana	1.6918	1.5191	0.2200	1.7391
Mokena, Illinois	Stockbridge, Michigan	3.9648	2.7817	1.5077	4.2894
,	Marysville, Michigan	5.3595	3.5561	2.2982	5.8543
	International Boundary near	5.0731	3.2505	2.3227	5.5732
	Marysville, Michigan	1 2026	1 2026	0.0000	1 2026
Criffith Indiana	Griffith, Indiana	1.2936	1.2936	0.0000	1.2936
Griffith, Indiana	Stockbridge, Michigan	3.9648 5.3595	2.7817	1.5077	4.2894
	Marysville, Michigan International Boundary near Marysville, Michigan	5.3595	3.5561 3.2505	2.2982	5.8543 5.5732
Stockbridge, Michigan	Marysville, Michigan	2.6987	2.0784	0.7905	2.8689
	International Boundary near Marysville, Michigan	2.4143	1.7748	0.8150	2.5898
Lewiston, Michigan	Marysville, Michigan	3.8719	2.6888	1.5077	4.1965
	International Boundary near Marysville, Michigan	3.5700	2.3805	1.5158	3.8963
	Transportation Rates for H	eavy Crude Petro	leum		
	Clearbrook, Minnesota	2.9980	2.0228	1.2428	3.2656
	Superior, Wisconsin	6.2518	3.9112	2.9828	6.8940
	Lockport, Illinois	13.6417	7.9348	7.2728	15.2076
International Boundary near	Mokena, Illinois	13.6417	7.9348	7.2728	15.2076
Neche, North Dakota	Flanagan, Illinois	13.6417	7.9348	7.2728	15.2076
	Griffith, Indiana	13.6417	7.9348	7.2728	15.2076
	Stockbridge, Michigan	16.4237	9.4815	8.8471	18.3286
	Marysville, Michigan	16.4237	9.4815	8.8471	18.3286
	International Boundary near Marysville, Michigan	16.0918	9.1496	8.8471	17.9967

		Transpor	tation Rates in	Dollars per Cul	oic Meter
From	То	Previous FERC No. 43.38.0	Indexed Base Rate	Facilities Surcharge	Proposed FERC No 43.39.0
	Transportation Rates for Heavy (				
	Clearbrook, Minnesota	0.7361	0.7361	0.0000	0.7361
	Superior, Wisconsin	4.7424	3.3771	1.7400	5.1171
	Lockport, Illinois	12.1291	7.3974	6.0300	13.4274
Clearbrook, Minnesota	Mokena, Illinois	12.1291	7.3974	6.0300	13.4274
	Flanagan, Illinois	12.1291	7.3974	6.0300	13.4274
	Griffith, Indiana	12.1291	7.3974	6.0300	13.4274
	Stockbridge, Michigan	14.9083	8.9413	7.6042	16.5455
	Marysville, Michigan	14.9083	8.9413	7.6042	16.5455
	International Boundary near	14.5788	8.6118	7.6042	16.2160
	Marysville, Michigan	14.5788	8.0118	7.0042	10.2100
	Griffith, Indiana	1.7418	1.5468	0.2486	1.7954
Mokena, Illinois	Stockbridge, Michigan	4.3104	2.9740	1.7031	4.6771
	Marysville, Michigan	5.8863	3.8491	2.5961	6.4452
	International Boundary near Marysville, Michigan	5.6089	3.5501	2.6237	6.1738
	Griffith, Indiana	1.2936	1.2936	0.0000	1.2936
Griffith, Indiana	Stockbridge, Michigan	4.3104	2.9740	1.7031	4.6771
	Marysville, Michigan	5.8863	3.8491	2.5961	6.4452
	International Boundary near Marysville, Michigan	5.6089	3.5501	2.6237	6.1738
Stockbridge, Michigan	Marysville, Michigan	2.8810	2.1803	0.8930	3.0733
	International Boundary near Marysville, Michigan	2.5984	1.8760	0.9206	2.7966
Lewiston, Michigan	Marysville, Michigan	4.2052	2.8688	1.7031	4.5719
	International Boundary near Marysville, Michigan	3.9069	2.5632	1.7123	4.2755



# **ENBRIDGE ENERGY, LIMITED PARTNERSHIP**

# **APPENDIX B**

# REVENUE REQUIREMENT CALCULATION FOR FACILITIES SURCHARGE

Appendix B Page 1 of 15

### Schedule 1 (Summary of Facilities Surcharge (FS) Revenue Requirement)

Line No.	<u>Description</u>	Source	Projected 2020	Actual 2020	Projected 2021
1 2 3 4 5 6 7	FS Projects: 1, 3, 4, 6-8, 13-17 Return on Rate Base Income Taxes Amortization of Deferred Earnings Depreciation Amortization of Allowance of Funds Used During Construction (AFUDC) Operating Costs Subtotal	Input Input Input Input Input Input Input Sum Lns. (1 - 6)	39,476 11,786 1,759 21,367 504 7,466 82,357	41,730 12,829 1,633 21,367 504 7,406 85,468	46,426 15,026 1,846 21,367 504 7,466 92,634
8 9 10 11 12 13 14 15 16	FS Projects: 5, 12, 18-26 Southern Access Mainline Expansion (Project 5) Alberta Clipper (Project 12) Eastern Access Mainline Expansion Phase 1 and 2 (Projects 18, 19) 2014 - 2016 Mainline Expansions (Projects 20, 24) Line 14 (Project 21) Agreed-Upon Legacy Integrity (Projects 22) Agreed-Upon Future Integrity (Project 23) Interim Lakehead Operational Tank Service (Project 25) Revenue Credit Subtotal	Pg. 3, Sch. 8, Ln. 4 Pg. 4, Sch. 2, Ln. 7 Pg. 7, Sch. 8, Ln. 5 Pg. 8, Sch. 2, Ln. 7 Pg. 11, Sch. 8, Ln. 6 Pg. 12, Sch. 2, Ln. 7 Pg. 14, Sch. 2, Ln. 7 Input Input, Note 1 Sum Lns. (8 - 16)	222,340 222,627 248,995 311,404 35,630 41,366 48,969 18,000 (330,392) 818,938	201,338 209,866 267,211 315,655 29,266 42,859 50,229 18,000 (287,034) 847,390	200,524 201,572 305,190 384,895 (3,327) 45,861 54,839 8,926 (330,692) 867,787
18	Total FS Revenue Requirement	Sum Lns. (7 & 17)	901,294	932,858	960,421
Schedule 2	(Adjustments to FS Revenue Requirement)				
Line No.	Description	Source	Projected 2020	Actual 2020	Projected 2021
1 2 3	Total FS Revenue Requirement True-Up of (Over) / Under Collection of Previous Year's FS Revenue Requirement Interest on True-Up of (Over) / Under Collection of Previous Year's FS Revenue Requirement	Sch. 1, Ln. 18 Input Input * (Average Quarterly T-Bill Rate), Note 2	901,294 (6,006) (354)	932,858 (6,006) (354)	960,421 91,345 88
4	Interest on True-up of (Over) / Under Collection of Previous Year's ABC Revenue Requirement	Input * (Average Monthly 2018 BoC Bank Rate)	241	241	28
5 6 7	Total FS Adjusted Revenue Requirement Transmission FS Revenue Requirement - Adjusted For Annual Revenue Collection Actual Revenue Collected	Sum Lns. (1 - 4) Input, Note 3 Input	895,175	926,738 835,394	1,051,881 1,109,816
Schedule 3	(System Deliveries and Light Crude Equivalent Unit Transmission Rate)				Projected
Line No.	Description	Source			2021
1 2	Total System Deliveries [m3 per day] Light Crude Equivalent (LCE) [000 m3.miles per day]	Input Input			468,112 402,941
	Calculation of LCE Unit Transmission Rate				
3	Times Days From January 1 - December 31 (Days)	Input			365
4	Total LCE [000 m3.miles]	Lns. 2 * 3			147,073,602
5	LCE Unit Transmission Rate [cents/100 m3.mile]	(Sch. 2, Ln. 6 / Sch. 3. Ln. 4) *10,000			75.459891

- Revenue Credit includes Qualifying Volumes in accordance with the Alberta Clipper U.S. Term Sheet at paragraph 13 as well as the incremental revenue generated by incremental volumes associated with the Line 3 Replacement Canada Project (Q1 Q3 2021) and the full Line 3 Replacement Project (Q4 2021).
   The Average Quarterly U.S. T-Bill Rate is based on the following dates: (3/31/20, 06/30/20, 09/30/20, 12/31/20).
   Revenue Requirement adjusted to collect the Total FS Adjusted Revenue Requirement within the calendar year.
   Totals may not add due to rounding.

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Schedule 1	(Inputs)				
Line No.	Description	Source	Projected 2020	Actual 2020	Projected 2021
1	Carrier Plant In Service (CPIS) Additions	Input, Note 1	1,854,490	1,848,109	1,848,109
	Operating Expenses:				
2	Operating Expenses (Property Taxes)	Input	12,701	12,468	12,701
3	Operating Expenses (Power)	Input, Note 2	82,548	67,358	72,907
4	Operating Expenses (Other)	Input	19,286	12,717	18,829
Schedule 2	(Summary of Revenue Requirement)				
Line No.	<u>Description</u>	Source			
1	Overall Return on Rate Base	Sch. 5. Ln. 9	100,715	100,114	92.101
2	Income Tax Allowance	Sch. 6, Ln. 7	29,861	29,566	28,455
					104.437
3	Operating Expenses Excluding Depreciation	Sch. 1, Sum Lns. (2 - 4)	114,535	92,542	
4	Depreciation of Assets	Input	61,272	61,143	61,143
5	Depreciation on AFUDC	Input	3,136	3,128	3,128
6	Amortization of Deferred Earnings	Sch. 4, Ln (3)	6,313	6,050	6,476
7	Total Revenue Requirement	Sum Lns. (1 - 6)	315,832	292,544	295,740
Schedule 3	(Average Rate Base)				
			Projected	Actual	Projected
Line No.	Description	Source	<u>2020</u>	2020	<u>2021</u>
1	CPIS Additions	Input	1,854,490	1,848,109	1,848,109
2	Accumulated Depreciation	Input	(722,495)	(722,436)	(783,579)
3	Net AFUDC	Input	56,688	56,283	53,155
4	Accumulated Deferred Income Tax (ADIT)	Sch. 7, Ln (11)	(8,679)	(7,740)	(20,884)
5	Working Capital	Input	(0,073)	(1,140)	(20,004)
6	Average Rate Base	Sum Lns. (1 - 5)	1.180.004	1,174,216	1.096.801
		Sum Lis. (1 - 3)	1,100,004	1,174,210	1,030,001
Schedule 4	(Deferred Earnings)		Projected	Actual	Proiected
Line No.	<u>Description</u>	Source	2020	2020	<u>2021</u>
1	Deferred Earnings-Beginning of the Year (BOY)	Previous Year Ln. 4	135,708	135,708	139,321
2	Annual Deferred Earnings	Input	17,589	9,663	12,795
3	Amortization of Deferred Earnings	Input	(6,313)	(6,050)	(6,476)
4	Deferred Earnings-End of Year (EOY)	Sum Lns. (1 - 3)	146,984	139,321	145,640
5	Average Deferred Earnings	(Ln. 1 + Ln. 4) / 2	141,346	137,515	142,481
	(Return on Rate Base)	(51. 1 1 51. 4)/ 2	141,040	107,010	142,401
ochedule o	(Neturn on Nate Dase)		Projected	Actual	Projected
Line No.	Description	Source	2020	2020	2021
1	Equity Rate Base - Average	Sch. 3, Ln. 6 * 55% + Sch. 4, Ln. 5	790,348	783,334	745,722
2	Debt Rate Base - Average	Sch. 3, Ln. 6 * 45%	531.002	528,397	493,561
3	Total Rate Base - Average	Sum Lns. (1 - 2)	1,321,350	1,311,731	1,239,282
3	Total Rate Base - Average	Sum Lns. (1 - 2)	1,321,350	1,311,731	1,239,262
4	Adjusted Equity Ratio	Ln. 1 / Ln. 3	59.8%	59.7%	60.2%
5	Adjusted Debt Ratio	1 - Ln. 4	40.2%	40.3%	39.8%
6	Cost of Equity (Real)	Input	9.0%	9.0%	9.0%
7	Cost of Debt	Input	5.6%	5.6%	5.1%
		1 **			
8	Weighted Cost of Capital	Lns. (6 * 4 + 7 * 5)	7.6%	7.6%	7.4%
9	Total Return on Rate Base	Lns. 3 * 8	100,715	100,114	92,101
10	Interest Expense	Lns (2 * 7)	(29,701)	(29,614)	(24,986)
11	Equity Return on Rate Base	Sum Lns. (9 - 10)	71,015	70,500	67,115
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Schedule 6	(Income Tax Allowance)				
Line No.	Description	Source	Projected 2020	Actual 2020	Projected 2021
1 2 3 4	Equity Return on Rate Base Amortization of Allowance for Equity During Construction (AEDC) Amortization of Deferred Earnings Amortization of Over(Under) Funded ADIT	Sch. 5, Ln. 11 Input Sch. 4, Ln (3) Sch. 7, Ln. 7	71,015 2,191 6,313	70,500 2,185 6,050	67,115 2,185 6,476
5	Total Taxable Return	Sum Lns. (1 - 4)	79,519	78,735	75,776
6	Net to Tax Multiplier	Sch. 7, Ln. 5 / (1 - Sch. 7, Ln. 5)	37.6%	37.6%	37.6%
7	Tax Allowance	Lns. 4 plus Lns. (5 * 6)	29,861	29,566	28,455
Schedule 7	(ADIT)		Projected	Actual	Projected
Line No.	<u>Description</u>	Source	<u>2020</u>	2020	<u>2021</u>
1 2 3 4 5 6 7 8 9 10	MACRS Claim Depreciation AIDC Amortization Difference Income Tax Rate Deferred Income Tax Expense Amortization of Over(Under) Funded ADIT Adjusted Deferred Income Tax Expense Previous ADIT Year End ADIT Average ADIT	Input Sch. 2, Ln. 4 Input Ln. 1 - Sum Lns. (2 - 3) Input Ln. 4 * Ln. 5 Input Sum Lns. (6 - 7) Input Sum Lns. (6 - 9) Average Lns. 9 and 10	123,044 61,272 945 60,827 27,3% 16,606 	116,034 61,143 943 53,948 27,3% 14,728 - 14,728 376 15,104 7,740	104,431 61,143 943 42,344 27.3% 11,560 - 11,560 15,104 26,664 20,884
Schedule 8	(Adjustments to Revenue Requirement)				
Line No.	Description	Source	Projected 2020	Actual 2020	Projected 2021
1 2 3 4	Total Revenue Requirement 50% of Qualifying Volume Credits Tankage Credits Total Revenue Requirement - Adjusted	Sch. 2, Ln. 7 Input Input Sum Lns. (1, 2 and 3)	315,832 (86,879) (6,613) 222,340	292,544 (86,619) (4,587) 201,338	295,740 (87,815) (7,401) 200,524

- CPIS Additions represent average cumulative gross plant for a calendar year.
   Reflects power costs related to Southern Access Mainline Expansion (Project 5) and subsequent expansions related to Southern Access Mainline Expansion.

Amounts in	n Thousands of U.S. Dollars				
					Appendix B Page 4 of 15
Schedule 1	(Inputs)		Positivity I	Actual	Bullioted
Line No.	Description	Source	Projected 2020	Actual 2020	Projected 2021
1	CPIS Additions	Input, Note 1	1,203,532	1,203,532	1,204,301
	Operating Expenses:				
2	Operating Expenses (Property Taxes)	Input, Note 2	15,248	15,239	18,023
3	Operating Expenses (Power)	Input, Note 3	80,040	59,886	60,196
4	Operating Expenses (Other)	Input, Note 2	16,313	16,304	14,160
Schedule 2	2 (Summary of Revenue Requirement)		Projected	Actual	Projected
Line No.	Description	Source	2020	2020	2021
1	Overall Return on Rate Base	Sch. 5, Ln. 9	57,708	63,290	55,738
2	Income Tax Allowance	Sch. 6, Ln. 7	15,895	17,881	15,913
3	Operating Expenses Excluding Depreciation	Sch. 1, Sum Lns. (2 - 4)	111,601	91,429	92,379
4	Depreciation of Assets	Input	32,658	32,658	32,678
5	Depreciation on AFUDC	Input	1,584	1,584	1,584
6	Amortization of Deferred Earnings	Sch. 4, Ln (3)	3,179	3,023	3,279
7	Total Revenue Requirement	Sum Lns. (1 - 6)	222,627	209,866	201,572
Schedule 3	3 (Average Rate Base)				
Line No.	Description	Source	Projected 2020	Actual 2020	Projected 2021
<u> </u>	<del></del>	<del></del>			
1	CPIS Additions	Input	1,203,532	1,203,532	1,204,301
2	Accumulated Depreciation	Input	(370,682)	(370,682)	(403,351)
3	Net AFUDC	Input	39,974	39,974	38,390
4	ADIT	Sch. 7, Ln (11)	(10,496)	(10,496)	(23,583)
5	Working Capital	Input	9,008	8,167	7,576
6	Average Rate Base	Sum Lns. (1 - 5)	871,336	870,495	823,333
Schedule 4	(Deferred Earnings)				
Line No.	<u>Description</u>	Source	Projected 2020	Actual 2020	Projected 2021
1	Deferred Earnings-BOY	Previous Year Ln. 4	87,596	87,596	91,583
2	Annual Deferred Earnings	Input	12,742	7,011	9,394
3	Amortization of Deferred Earnings	Input	(3,179)	(3,023)	(3,279)
4	Deferred Earnings-End of Year	Sum Lns. (1 - 3)	97,158	91,583	97,698
5	Average Deferred Earnings	(Ln. 1 + Ln. 4) / 2	92.377	89.589	94,641
		(LII. 1 + LII. 4) / Z	92,311	69,369	94,041
	6 (Return on Rate Base)				
Line No.	Description	<u>Source</u>			
1	Equity Rate Base - Average	Sch. 3, Ln. 6 * 55% + Sch. 4, Ln. 5	571,612	568,362	547,474
2	Debt Rate Base - Average	Sch. 3, Ln. 6 * 45%	392,101	391,723	370,500
3	Total Rate Base - Average	Sum Lns. (1 - 2)	963,713	960,085	917,974
4	Adjusted Equity Ratio	Ln. 1 / Ln. 3	59.3%	59.2%	59.6%
5	Adjusted Debt Ratio	1 - Ln. 4	40.7%	40.8%	40.4%
ວ	Aujusteu Deut Ratio	1 - LII. 4	40.7%	40.0%	40.4%
6	Cost of Equity (Real)	Input	6.7%	7.6%	6.9%
7	Cost of Debt	Input	5.0%	5.1%	4.8%
8	Weighted Cost of Capital	Lns. (6 * 4 + 7 * 5)	6.0%	6.6%	6.1%
9	Total Return on Rate Base	Lns. 3 * 8	57,708	63,290	55,738
10	Interest Expense	Lns (2 * 7)	(19,691)	(19,831)	(17,776)
11	Equity Return on Rate Base	Sum Lns. (9 - 10)	38,017	43,459	37,963
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Line No.	Description	Source	Projected 2020	Actual 2020	Projected 2021
1 2 3 4 5	Equity Return on Rate Base Amortization of AEDC Amortization of Deferred Earnings Amortization of Over(Under) Funded ADIT Total Taxable Return	Sch. 5, Ln. 11 Input Sch. 4, Ln (3) Sch. 7, Ln. 7 Sum Lns. (1 - 4)	38,017 1,133 3,179 - 42,330	43,459 1,133 3,023 - 47,616	37,963 1,133 3,279 - 42,375
6	Net to Tax Multiplier	Sch. 7, Ln. 5 / (1 - Sch. 7, Ln. 5)	37.6%	37.6%	37.6%
7	Tax Allowance	Lns. 4 plus Lns. (5 * 6)	15,895	17,881	15,913
Schedule 7	(ADIT)				
Line No.	Description	Source	Projected 2020	Actual 2020	Projected 2021
1 2 3 4 5 6 7 8 9	MACRS Claim Depreciation AIDC Amortization Difference Income Tax Rate Deferred Income Tax Expense Amortization of Over(Under) Funded ADIT Adjusted Deferred Income Tax Expense Previous ADIT	Input Sch. 2, Ln. 4 Input Ln. 1 - Sum Lns. (2 - 3) Input Ln. 4 * Ln. 5 Input Sum Lns. (6 - 7) Input Co. 4 - Co. (2 - 2)	85,587 32,658 451 52,478 27,3% 14,327 - 14,327 3,333	85,587 32,658 451 52,478 27,3% 14,327 - 14,327 3,333	76,523 32,678 451 43,394 27.3% 11,847 
10 11	Year End ADIT Average ADIT	Sum Lns. (8 - 9) Average Lns. 9 and 10	17,660 10,496	17,660 10,496	29,506 23,583

- CPIS Additions represent average cumulative gross plant for a calendar year.
   Property Taxes and Operating Expenses (Other) are adjusted in accordance with Alberta Clipper U.S. Term Sheet at paragraph 3(f)(i).
   Reflects power costs related to Albert Clipper (Project 12) and subsequent expansions related to Alberta Clipper.

Amounts i	n Thousands of U.S. Dollars				
					Appendix B Page 6 of 15
Schedule	1 (Inputs)		Projected	Actual	Projected
Line No.	Description	Source	2020	2020	2021
1	CPIS Additions	Input, Note 1	2,140,692	2,141,969	2,142,142
	Operating Expenses:				
2	Operating Expenses (Property Taxes)	Input	34,801	34,481	34,801
3	Operating Expenses (Power)	Input	8,490	1,298	7,446
4	Operating Expenses (Other)	Input	27,210	27,156	29,596
Schedule :	2 (Summary of Revenue Requirement)		Projected	Actual	Projected
Line No.	Description	Source	<u>2020</u>	2020	2021
1	Overall Return on Rate Base	Sch. 5, Ln. 9	148,405	158,741	172,571
2	Income Tax Allowance	Sch. 6, Ln. 7	41,101	44,842	52,729
3	Operating Expenses Excluding Depreciation	Sch. 1, Sum Lns. (2 - 4)	70,501	62,935	71,843
4	Depreciation of Assets	Input	68,124	68,168	68,170
5	Depreciation on AFUDC	Input	3,278	3,278	3,278
6	Amortization of Deferred Earnings	Sch. 4, Ln (3)	3,910	3,564	4,132
7	Total Revenue Requirement	Sum Lns. (1 - 6)	335,320	341,529	372,724
Schedule	3 (Average Rate Base)		Projected	Actual	Projected
Line No.	Description	Source	2020	2020	2021
1	CPIS Additions	Input	2,140,692	2,141,969	2,142,142
2	Accumulated Depreciation	Input	(413,649)	(413,670)	(481,840)
3	Net AFUDC	Input	82,541	82,541	79,263
4	ADIT	Sch. 7, Ln (11)	(20,459)	(20,651)	(47,623)
5	Working Capital	Input	(==, :==,	-	(,===)
6	Average Rate Base	Sum Lns. (1 - 5)	1,789,125	1,790,188	1,691,941
Schedule	4 (Deferred Earnings)				
Line No.	Description	Source	Projected 2020	Actual 2020	Projected 2021
	Deferred Earnings-BOY	Previous Year Ln. 4	90,660	90,660	100,421
1				90,660	
2	Annual Deferred Earnings Amortization of Deferred Earnings	Input	24,182 (3,910)	(3,564)	17,807 (4,132)
4	Deferred Earnings-End of Year	Input Sum Lns. (1 - 3)	110,932	100.421	114,096
5	Average Deferred Earnings	(Ln. 1 + Ln. 4) / 2	100,796	95,540	107,258
Schedule	5 (Return on Rate Base)				
			Projected	Actual	Projected
Line No.	Description	Source	<u>2020</u>	2020	<u>2021</u>
1	Equity Rate Base - Average	Sch. 3, Ln. 6 * 55% + Sch. 4, Ln. 5	1,084,815	1,080,144	1,037,826
2	Debt Rate Base - Average	Sch. 3, Ln. 6 * 45%	805,106	805,585	761,374
3	Total Rate Base - Average	Sum Lns. (1-2)	1,889,921	1,885,729	1,799,200
4	Adjusted Equity Ratio	Ln. 1 / Ln. 3	57.4%	57.3%	57.7%
5	Adjusted Debt Ratio	1 - Ln. 4	42.6%	42.7%	42.3%
5	Adjusted Debt Ratio	1 - LII. 4	42.0%	42.176	42.3%
6	Cost of Equity (Real)	Input	9.5%	10.5%	12.9%
7	Cost of Debt	Input	5.6%	5.6%	5.1%
8	Weighted Cost of Capital	Lns. (6 * 4 + 7 * 5)	7.9%	8.4%	9.6%
9	Total Return on Rate Base	Input	148,405	158,741	172,571
10	Interest Expense	Input	(45,122)	(45,149)	(38,544)
11	Equity Return on Rate Base	Sum Lns. (9-10)	103,283	113,592	134,027

ochedule 0	(income rax Allowance)				
Line No.	Description	Source	Projected 2020	Actual 2020	Projected 2021
1	Equity Return on Rate Base	Sch. 5, Ln. 11	103,283	113,592	134,027
2	Amortization of AEDC	Input	2,259	2,259	2,259
3	Amortization of Deferred Earnings	Sch. 4, Ln (3)	3,910	3,564	4,132
4	Amortization of Over(Under) Funded ADIT	Sch. 7, Ln. 7	-	-,	.,
5	Total Taxable Return	Sum Lns. (1 - 4)	109,453	119,415	140,417
6	Net to Tax Multiplier	Sch. 7, Ln. 5 / (1 - Sch. 7, Ln. 5)	37.6%	37.6%	37.6%
7	Tax Allowance	Lns. 4 plus Lns. (5 * 6)	41,101	44,842	52,729
Schedule 7	(ADIT)				
		_	Projected	Actual	Projected
Line No.	Description	Source	2020	<u>2020</u>	<u>2021</u>
1	MACRS Claim	Input	176,065	177,515	158,458
2	Depreciation	Sch. 2, Ln. 4	68,124	68,168	68,170
3	AIDC Amortization	Input	1,020	1,020	1,020
4	Difference	Ln. 1 - Sum Lns. (2 - 3)	106,921	108,327	89,269
5	Income Tax Rate	Input	27.3%	27.3%	27.3%
6	Deferred Income Tax Expense	Ln. 4* Ln. 5	29,190	29,573	24,370
7	Amortization of Over(Under) Funded ADIT	Input	-	-	-
8	Adjusted Deferred Income Tax Expense	Sum Lns. (6 - 7)	29,190	29,573	24,370
9	Previous ADIT	Input	5,864	5,864	35,438
10	Year end ADIT	Sum Lns. (8 - 9)	35,054	35,438	59,808
11	Average ADIT	Average Lns. 9 and 10	20,459	20,651	47,623
Schedule 8	(Adjustments to Revenue Requirement)				
			Projected	Actual	Projected
Line No.	<u>Description</u>	Source	2020	<u>2020</u>	2021
1	Total Revenue Requirement	Sch. 2, Ln. 7	335,320	341,529	372,724
2	Index Revenue Credits	Input	(26,771)	(11,629)	(30,074)
3	Capital Cost Risk Sharing	Input	(23,420)	(24,713)	(13,352)
4	Line 6B Integrity Credits	Input	(36,134)	(37,975)	(24,108)
5	Total Revenue Requirement - Adjusted	Sum Lns. (1 - 4)	248,995	267,211	305,190

<sup>1.</sup> CPIS Additions represent average cumulative gross plant for a calendar year.

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Schedule 1	(Inputs)				
		0	Projected	Actual	Projected
Line No.	Description	<u>Source</u>	<u>2020</u>	2020	2021
1	CPIS Additions	Input, Note 1	2,043,333	2,009,208	2,225,704
	Operating Expenses:				
2	Operating Expenses (Property Taxes) Operating Expenses (Power)	Input Input	22,927	20,793	22,927
4	Operating Expenses (Other)	Input	34,076	31,830	33,221
Schedule 2	2 (Summary of Revenue Requirement)				
Disco Nic	Provide to	0	Projected	Actual	Projected
Line No.	Description	Source	<u>2020</u>	2020	2021
1	Overall Return on Rate Base	Sch. 5, Ln. 9	139,599	146,004	186,509
2	Income Tax Allowance	Sch. 6, Ln. 7	40,629	43,914	59,350
3	Operating Expenses Excluding Depreciation	Sch. 1, Sum Lns. (2 - 4)	57,003	52,623	56,148
4	Depreciation of Assets	Input	66,937	66,277	73,298
5	Depreciation on AFUDC	Input	3,770	3,729	5,804
6	Amortization of Deferred Earnings	Sch. 4, Ln (3)	3,466	3,109	3,786
7	Total Revenue Requirement	Sum Lns. (1 - 6)	311,404	315,655	384,895
Schedule 3	B (Average Rate Base)		Bullion	Actual	Desired 4
Line No.	Description	Source	Projected 2020	Actual 2020	Projected 2021
	·				
1	CPIS Additions	Input	2,043,333	2,009,208	2,225,704
2	Accumulated Depreciation	Input	(305,702)	(305,396)	(381,966)
3	Net AFUDC	Input	97,633	95,826	154,023
4	ADIT	Sch. 7, Ln (11)	(26,030)	(20,998)	(54,320)
5 6	Working Capital Average Rate Base	Input Sum Lns. (1 - 5)	1,809,234	1,778,640	1,943,441
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Schedule 4	4 (Deferred Earnings)		Projected	Actual	Projected
Line No.	<u>Description</u>	Source	2020	2020	2021
4	Deferred Ferriage DOV	Previous Year Ln. 4	75.004	75.004	07.057
1 2	Deferred Earnings-BOY Annual Deferred Earnings		75,604 23,933	75,604 13,062	87,357 19,962
3		Input			
4	Amortization of Deferred Earnings	Input Sum Lns. (1 - 3)	(3,466) 96,071	(3,109)	(3,786)
5	Deferred Earnings-End of Year Average Deferred Earnings	(Ln. 1 + Ln. 4) / 2	85,837	85,556 80,580	103,533 95,445
5	Average Deferred Earnings	(Ln. 1 + Ln. 4) / 2	65,637	80,580	95,445
Schedule 5	(Return on Rate Base)				
			Projected	Actual	Projected
Line No.	Description	<u>Source</u>	<u>2020</u>	<u>2020</u>	<u>2021</u>
1	Equity Rate Base - Average	Sch. 3, Ln. 6 * 55% + Sch. 4, Ln. 5	1,080,916	1,058,833	1,164,338
2	Debt Rate Base - Average	Sch. 3, Ln. 6 * 45%	814,155	800,388	874,549
3	Total Rate Base - Average	Sum Lns. (1-2)	1,895,071	1,859,221	2,038,886
4	Adjusted Equity Ratio	Ln. 1 / Ln. 3	57.0%	57.0%	57.1%
5	Adjusted Debt Ratio	1 - Ln. 4	43.0%	43.0%	42.9%
6	Cost of Equity (Real)	Input	9.5%	10.5%	12.9%
7	Cost of Debt	Input	4.6%	4.3%	4.1%
8	Weighted Cost of Capital	Lns. (6 * 4 + 7 * 5)	7.4%	7.9%	9.2%
9	Total Return on Rate Base	Input	139,599	146,004	186,509
10	Interest Expense	Input	(37,380)	(34,652)	(36,264)
11	Equity Return on Rate Base	Sum Lns. (9-10)	102,219	111,351	150,245
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Appendix B

			Projected	Actual	Projected
Line No.	<u>Description</u>	Source	<u>2020</u>	2020	<u>2021</u>
1	Equity Return on Rate Base	Sch. 5, Ln. 11	102,219	111,351	150,245
2	Amortization of AEDC	Input	2,511	2,482	4,019
3	Amortization of Deferred Earnings	Sch. 4, Ln (3)	3,466	3,109	3,786
4	Amortization of Over(Under) Funded ADIT	Sch. 7, Ln. 7		-	-
5	Total Taxable Return	Sum Lns. (1 - 4)	108,196	116,942	158,050
6	Net to Tax Multiplier	Sch. 7, Ln. 5 / (1 - Sch. 7, Ln. 5)	37.6%	37.6%	37.6%
7	Tax Allowance	Lns. 4 plus Lns. (5 * 6)	40,629	43,914	59,350
Schedule 7	(ADIT)				
			Projected	Actual	Projected
Line No.	Description	Source	<u>2020</u>	2020	<u>2021</u>
1	MACRS Claim	Input	212,461	174,926	206,409
2	Depreciation	Sch. 2, Ln. 4	66,937	66,277	73,298
3	AIDC Amortization	Input	1,259	1,247	1,785
4	Difference	Ln. 1 - Sum Lns. (2 - 3)	144,266	107,403	131,326
5	Income Tax Rate	Input	27.3%	27.3%	27.3%
6	Deferred Income Tax Expense	Ln. 4* Ln. 5	39,385	29,321	35,852
7	Amortization of Over(Under) Funded ADIT	Input		•	-
8	Adjusted Deferred Income Tax Expense	Sum Lns. (6 - 7)	39,385	29,321	35,852
9	Previous ADIT	Input	6,337	6,337	36,394
10	Year End ADIT	Sum Lns. (8 - 9)	45,722	35,658	72,246
11	Average ADIT	Average Lns. 9 and 10	26,030	20,998	54,320

<sup>1.</sup> CPIS Additions represent average cumulative gross plant for a calendar year.

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Schedule 1 (	(Innute)

Line No.	Description	Source	Projected 2020	Actual 2020	Projected 2021
Line 140.	<u>Description</u>	<u>ocuree</u>	2020	2020	2021
1	CPIS Additions	Input, Note 1	661,710	657,863	661,579
	Operating Expenses:				
2	Operating Expenses (Property Taxes)	Input	389	353	389
3	Operating Expenses (Power)	Input	(4,500)	(4,500)	(4,500)
4	Operating Expenses (Other)	Input	14,685	10,586	11,815
Schedule 2	(Summary of Revenue Requirement)		Desirated	Actual	Desirated
Line No.	Description	Source	Projected 2020	2020	Projected 2021
1	Overall Return on Rate Base	Sch. 5, Ln. 9	10,768	11,222	11,395
2	Income Tax Allowance	Sch. 6, Ln. 7	5,891	6,073	3,633
3	Operating Expenses Excluding Depreciation	Sch. 1, Sum Lns. (2 - 4)	10,574	6,439	7,704
4	Depreciation of Assets	Input	31,016	30,883	5,876
5	Depreciation on AFUDC	Input	425	425	5
6	Amortization of Deferred Earnings	Sch. 4, Ln (3)	7,314	7,125	486
7	Total Revenue Requirement	Sum Lns. (1 - 6)	65,988	62,167	29,100
Schedule 3	(Average Rate Base)				
			Projected	Actual	Projected
Line No.	Description	Source	<u>2020</u>	<u>2020</u>	<u>2021</u>
1	CPIS Additions	Input	661,710	657,863	661,579
2	Accumulated Depreciation	Input	(531,976)	(531,941)	(550,305)
3	Net AFUDC	Input	329	330	143
4	ADIT	Sch. 7, Ln (11)	5,207	6,912	6,831
5	Working Capital	Input	-,	-,	-,
6	Average Rate Base	Sum Lns. (1 - 5)	135,270	133,163	118,248
Schedule 4	(Deferred Earnings)				
			Projected	Actual	Projected
Line No.	Description	Source	<u>2020</u>	2020	2021
1	Deferred Earnings-BOY	Input	11,856	11,856	5,744
2	Annual Deferred Earnings	Input	1,862	1,012	1,221
3	Amortization of Deferred Earnings	Input	(7,314)	(7,125)	(486)
4	Deferred Earnings-End of Year	Sum Lns. (1 - 3)	6,404	5,744	6,478
5	Average Deferred Earnings	(Ln. 1 + Ln. 4) / 2	9,130	8,800	6,111
		(=, =,, =	2,122	2,000	2,
Schedule 5	(Return on Rate Base)		Projected	Actual	Projected
Line No.	Description	Source	2020	2020	2021
1	Equity Rate Base - Average	Sch.3, Ln. 6 * 55% + Sch. 4, Ln. 5	83,529	82,040	71,147
2	Debt Rate Base - Average	Sch.3, Ln. 6 * 45%	60,871	59,924	53,211
3	Total Rate Base - Average	Sum Lns. (1 - 2)	144,400	141,963	124,358
3	Total Rate base - Average	Suili Liis. (1 - 2)	144,400	141,903	124,336
4	Adjusted Equity Ratio	Ln. 1 / Ln. 3	57.8%	57.8%	57.2%
5	Adjusted Debt Ratio	1 - Ln. 4	42.2%	42.2%	42.8%
	•				
6	Cost of Equity (Real)	Input	9.5%	10.5%	12.9%
7	Cost of Debt	Input	4.6%	4.3%	4.1%
8	Weighted Cost of Capital	Lns. (6 * 4 + 7 * 5)	7.5%	7.9%	9.2%
			40.700	44.000	44.005
9	Total Return on Rate Base	Input	10,768	11,222	11,395
10	Interest Expense	Input	(2,815)	(2,594)	(2,207)
11	Equity Return on Rate Base	Sum Lns. (9 - 10)	7,953	8,628	9,188

Description   Source   Sourc	00110000	(income rax raio nance)		Projected	Actual	Projected
	Charles No.	December 2	0			
2   Amontization of AEDC         Input         420         420         4           3   Amontization of Deferred Earnings         Sch. 4, Ln. 7(3)         7, 314         7,125         48           4   Amontization of Over(Under) Funded ADIT         Sch. 7, Ln. 7         -	Line No.	Description	Source	<u>2020</u>	2020	2021
2   Amontization of AEDC         Input         420         420         4           3   Amontization of Deferred Earnings         Sch. 4, Ln. 7(3)         7, 314         7,125         48           4   Amontization of Over(Under) Funded ADIT         Sch. 7, Ln. 7         -	1	Equity Return on Rate Base	Sch 5 In 11	7 953	8 628	9 188
Amortization of Deferred Earnings   Sch. 4, Ln (3)   7,134   7,125   488   4   Amortization of Over(Funder) Funded ADIT   Sum Lns. (1 - 4)   15,687   16,173   9,675   5   Total Taxable Return   Sum Lns. (1 - 4)   15,687   16,173   9,675   6   Net to Tax Multiplier   Sch. 7, Ln. 5 / (1 - Sch. 7, Ln. 5)   37,6%   37,6%   37,6%   7   Tax Allowance   Ln. 4 + Lns. (5 ° 6)   5,891   6,073   3,633						1
Amortization of Over(Under) Funded ADIT   Sum Lns. (1-4)   15,687   16,173   9,675						486
5         Total Taxable Return         Sum Lns. (1-4)         15,687         16,173         9,675           6         Net to Tax Multiplier         Sch. 7, Ln. 5 / (1 - Sch. 7, Ln. 5)         37,6%         37,6%         37,6%           7         Tax Allowance         Ln. 4 + Lns. (5 * 6)         5,891         6,073         3,633           Schedule 7 (ADIT)           Line No.         Description         Source         2020         2020         2021           1         MACRS Claim         Input         29,221         16,597         20,764           2         Depreciation         Sch. 2, Ln. 4,         31,016         30,883         5,876           3         AIDC Amortization         Input         4         4         5           4         Difference         Ln. 1 - Ln. 2         (1,799)         (14,280)         14,884           5         Income Tax Rate         Input         27,3% <t< td=""><td></td><td></td><td></td><td>7,514</td><td></td><td></td></t<>				7,514		
6         Net to Tax Multiplier         Sch. 7, Ln. 5 / (1 - Sch. 7, Ln. 5)         37.6%         37.6%         37.6%           7         Tax Allowance         Ln. 4 + Lns. (5 * 6)         5,891         6,073         3.68%           Schedule 7 (ADIT)         Projected         Actual Projected           Line No.         Description         Source         Projected         Actual Projected           Line No.         Description         Source         2020         2021         16.597         20.764           1         MACRS Claim         Input         29.221         16.597         20.764         2         2         2020         2021         16.597         20.764         2         2         2         2021         16.597         20.764         3         3.105         3.083         5.876         3         4.10         4 <t< td=""><td></td><td></td><td></td><td>15 697</td><td></td><td>0.675</td></t<>				15 697		0.675
Tax Allowance   Ln. 4 + Lns. (5 * 6)   5,891   6,073   3,633   3,633   3,634	3	Total Taxable Netam	oun Ens. (1 4)	10,007	10,175	3,073
Schedule 7 (ADIT)         Source         Projected Actual Projected 2020 2020 2020 2020           Line No.         Description         Source         Projected 2020         Actual Projected 2020         Projected 2020         2020 2020         20201           1         MACRS Claim         Input         29,221         16,597         20,764         20,778         27,366         27,366         27,366         27,366         27,366         27,366         27,366         27,366         27,366         27,366	6	Net to Tax Multiplier	Sch. 7, Ln. 5 / (1 - Sch. 7, Ln. 5)	37.6%	37.6%	37.6%
Line No.         Description         Source         Projected 2020         Actual 2020         Projected 2020           1         MACRS Claim         Input         29,221         16,597         20,764           2         Depreciation         Sch. 2, Ln. 4,         31,016         30,883         5,876           3         AIDC Amortization         Input         4         4         4         5           4         Difference         Ln. 1 - Ln. 2         (1,799)         114,290         14,884           5         Income Tax Rate         Input         27,3%         27,3%         27,3%         27,3%           6         Deferred Income Tax Expense         Ln. 4 - Ln. 5         (491)         (3,901)         4,063           7         Amortization of Over(Under) Funded ADIT         Input         -         -         -         -           8         Adjusted Deferred Income Tax Expense         Sum Lns. (6 - 7)         (491)         (3,901)         4,063         9,062         1         4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,962)         (4,799)         (5,452)         (8,862)	7	Tax Allowance	Ln. 4 + Lns. (5 * 6)	5,891	6,073	3,633
Line No.         Description         Source         Projected 2020         Actual 2020         Projected 2020           1         MACRS Claim         Input         29,221         16,597         20,764           2         Depreciation         Sch. 2, Ln. 4,         31,016         30,883         5,876           3         AIDC Amortization         Input         4         4         4         5           4         Difference         Ln. 1 - Ln. 2         (1,799)         114,290         14,884           5         Income Tax Rate         Input         27,3%         27,3%         27,3%         27,3%           6         Deferred Income Tax Expense         Ln. 4 - Ln. 5         (491)         (3,901)         4,063           7         Amortization of Over(Under) Funded ADIT         Input         -         -         -         -           8         Adjusted Deferred Income Tax Expense         Sum Lns. (6 - 7)         (491)         (3,901)         4,063         9,062         1         4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,961)         (4,962)         (4,799)         (5,452)         (8,862)	Cobodulo 7	(ADIT)				
Description   Source   2020   2020   2021     MACRS Claim	ochedule /	(ADII)		Projected	Actual	Projected
1 MACRS Claim	Line No.	Description	Source			
2         Depreciation         Sch. 2, Ln. 4,         31,016         30,883         5,876           3         AIDC Amortization         Input         4         4         4         5           4         Difference         Ln. 1 - Ln. 2         (1,799)         (14,290)         14,884           5         Income Tax Rate         Input         27.3%         27.3%         27.3%           6         Deferred Income Tax Expense         Ln. 4 * Ln. 5         (491)         (3,901)         4,063           7         Amortization of Over(Under) Funded ADIT         Input         -         <						
Input		MACRS Claim			16,597	20,764
A Difference	2		Sch. 2, Ln. 4,	31,016	30,883	5,876
5         Income Tax Rate         Input         27.3%	3					
Company	4	Difference	Ln. 1 - Ln. 2	(1,799)	(14,290)	14,884
7         Amortization of Over(Under) Funded ADIT         Input         - <td></td> <td>Income Tax Rate</td> <td></td> <td></td> <td></td> <td></td>		Income Tax Rate				
8         Adjusted Deferred Income Tax Expense         Sum Lns. (6 - 7)         (491)         (3,901)         4,063           9         Previous ADIT         Input         (4,961)         (4,961)         (4,961)         (8,662)           10         Year End ADIT         Sum Lns. (8 - 9)         (5,452)         (8,662)         (4,799)           11         Average ADIT         Average Lns. 9 and 10         (5,207)         (6,912)         (6,831)           Schedule 8 (Adjustments to Revenue Requirement)         Projected         Actual Projected           Line No.         Description         Source         2020         2020         2021           1         Total Revenue Requirement         Sch. 2, Ln. 7         65,988         62,167         29,100           2         Index Revenue Credits         Input         (38,796)         38,786)         (38,959)           3         \$30 mm Credit         Input         (635)         (635)         12           4         Line 1/13 Swap for Terrace         Input         5,104         4,950         4,950           5         350 Centistoke (Reference Temperature Increase)         Input         3,968         1,570         1,570	6		Ln. 4 * Ln. 5	(491)	(3,901)	4,063
9 Previous ADIT         Input         (4,961)         (4,961)         (8,862)           10 Year End ADIT         Sum Lns. (8 - 9)         (5,452)         (8,662)         (4,799)           11 Average ADIT         Average Lns. 9 and 10         (5,207)         (6,912)         (6,831)           Schedule 8 (Adjustments to Revenue Requirement)           Line No. Description         Source         Projected Actual Projected 2020         2020         2021           1 Total Revenue Requirement         Sch. 2, Ln. 7         65,988         62,167         29,100           2 Index Revenue Credits         Input         (38,796)         (38,786)         (38,786)           3 S30 mm Credit         Input         (635)         (635)         12           4 Line 1/13 Swap for Terrace         Input         5,104         4,950         4,950           5 350 Centistoke (Reference Temperature Increase)         Input         3,968         1,570         1,570	7	Amortization of Over(Under) Funded ADIT	Input		-	
10         Year End ADIT (Average ADIT)         Sum Lns. (8 - 9)         (5,452)         (8,862)         (4,799)           11         Average ADIT         Average Lns. 9 and 10         (5,207)         (6,912)         (6,831)           Schedule 8 (Adjustments to Revenue Requirement)           Line No.         Description         Source         Projected Actual Projected 2020         Projected 2020         2021         2020         2021         2021         2021         10 (38,796)         38,796         38,796         38,796         38,796         38,796         38,796         38,796         10 (38,796)         4,950 </td <td>8</td> <td></td> <td>Sum Lns. (6 - 7)</td> <td>(491)</td> <td>(3,901)</td> <td>4,063</td>	8		Sum Lns. (6 - 7)	(491)	(3,901)	4,063
11         Average ADIT         Average Lns. 9 and 10         (5,207)         (6,912)         (6,831)           Schedule 8 (Adjustments to Revenue Requirement)           Line No.         Description         Source         Projected         Actual Projected 2020         2020         2021           1         Total Revenue Requirement         Sch. 2, Ln. 7         65,988         62,167         29,100           2         Index Revenue Credits         Input         (38,796)         38,786)         (38,859)           3         \$30 mm Credit         Input         (635)         (635)         12           4         Line 1/13 Swap for Terrace         Input         5,104         4,950         4,950           5         350 Centistoke (Reference Temperature Increase)         Input         3,968         1,570         1,570	9	Previous ADIT	Input	(4,961)	(4,961)	(8,862)
Schedule 8 (Adjustments to Revenue Requirement)           Line No.         Description         Source         Projected 2020         Actual 2020         Projected 2020           1         Total Revenue Requirement         Sch. 2, Ln. 7         65,988         62,167         29,100           2         Index Revenue Credits         Input         (38,796)         (38,786)         (38,959)           3         \$30 mm Credit         Input         (635)         (635)         12           4         Line 1/13 Swap for Terrace         Input         5,104         4,950         4,950           5         350 Centistoke (Reference Temperature Increase)         Input         3,968         1,570         1,570	10	Year End ADIT	Sum Lns. (8 - 9)	(5,452)	(8,862)	(4,799)
Line No.         Description         Source         Projected 2020         Actual Projected 2020         Projected 2020 <td>11</td> <td>Average ADIT</td> <td>Average Lns. 9 and 10</td> <td>(5,207)</td> <td>(6,912)</td> <td>(6,831)</td>	11	Average ADIT	Average Lns. 9 and 10	(5,207)	(6,912)	(6,831)
Line No.         Description         Source         Projected 2020         Actual Projected 2020         Projected 2020 <td>Schedule 8</td> <td>(Adjustments to Revenue Requirement)</td> <td></td> <td></td> <td></td> <td></td>	Schedule 8	(Adjustments to Revenue Requirement)				
Line No.         Description         Source         2020         2020         2021           1         Total Revenue Requirement         Sch. 2, Ln. 7         65,988         62,167         29,100           2         Index Revenue Credits         Input         (38,796)         (38,786)         (38,959)           3         \$30 mm Credit         Input         (635)         (635)         12           4         Line 1/13 Swap for Terrace         Input         5,104         4,950         4,950           5         350 Centistoke (Reference Temperature Increase)         Input         3,968         1,570         1,570		(·,		Projected	Actual	Projected
1         Total Revenue Requirement         Sch. 2, Ln. 7         65,988         62,167         29,100           2         Index Revenue Credits         Input         (38,796)         (38,786)         (38,989)           3         \$30 mm Credit         Input         (635)         (635)         12           4         Line I/13 Swap for Terrace         Input         5,104         4,950         4,950           5         350 Centistoke (Reference Temperature Increase)         Input         3,968         1,570         1,570	Line No.	Description	Source			
2         Index Revenue Credits         Input         (38,796)         (38,786)         (38,959)           3         \$30 mm Credit         Input         (635)         (635)         12           4         Line 1/13 Swap for Terrace         Input         5,104         4,950         4,950           5         350 Centistoke (Reference Temperature Increase)         Input         3,968         1,570         1,570			<del></del>	· <u></u>	<u> </u>	· <u></u>
3 \$30 mm Credit Input (635) (635) 12 4 Line 1/13 Swap for Terrace Input 5,104 4,950 4,950 5 350 Centistoke (Reference Temperature Increase) Input <u>3,968</u> 1,570 1,570	1		Sch. 2, Ln. 7	65,988	62,167	29,100
4 Line 1/13 Swap for Terrace Input 5,104 4,950 4,950 5 350 Centistoke (Reference Temperature Increase) Input 3,968 1,570 1,570			Input	(38,796)	(38,786)	(38,959)
5 350 Centistoke (Reference Temperature Increase) Input <u>3,968 1,570 1,570</u>	3		Input	(635)	(635)	12
	4		Input		4,950	4,950
6 Total Revenue Requirement - Adjusted Sum Lns. (1 - 5) <u>35,630 29,266 (3,327)</u>						
	6	Total Revenue Requirement - Adjusted	Sum Lns. (1 - 5)	35,630	29,266	(3,327)

<sup>1.</sup> CPIS Additions represent average cumulative gross plant for a calendar year.

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Schedule 1	(Inputs)		Projected	Actual	Projected
Line No.	<u>Description</u>	Source	<u>2020</u>	<u>2020</u>	<u>2021</u>
1	CPIS Additions	Input, Note 1	370,503	370,503	370,503
	Operating Expenses:	Local			
2	Operating Expenses (Property Taxes)	Input	-	-	-
3	Operating Expenses (Power)	Input	-	-	-
4	Operating Expenses (Other)	Input	-	-	-
Schedule 2	(Summary of Revenue Requirement)		Projected	Actual	Projected
Line No.	Description	Source	<u>2020</u>	<u>2020</u>	2021
1	Overall Return on Rate Base	Sch. 5, Ln. 9	19,093	20,185	22,066
2	Income Tax Allowance	Sch. 6, Ln. 7	5,810	6,303	7,266
3	Operating Expenses Excluding Depreciation	Sch. 1, Sum Lns. (2 - 4)	-	-	-
4	Depreciation of Assets	Input	15,141	15,141	15,141
5	Depreciation on AFUDC	Input	27	27	27
6	Amortization of Deferred Earnings	Sch. 4, Ln (3)	1,295	1,202	1,361
7	Total Revenue Requirement	Sum Lns. (1 - 6)	41,366	42,859	45,861
Schedule 3	(Average Rate Base)				
			Projected	Actual	Projected
Line No.	<u>Description</u>	Source	<u>2020</u>	2020	<u>2021</u>
1	CPIS Additions	Input	370,503	370.503	370,503
2	Accumulated Depreciation	Input	(135,815)	(135,815)	(150,956)
3	Net AFUDC	Input	416	416	389
4	ADIT	Sch. 7, Ln (11)	1,852	1,852	(611)
5	Working Capital		1,002	1,002	(011)
		Input			
6	Average Rate Base	Sum Lns. (1 - 5)	236,957	236,957	219,326
Schedule 4	(Deferred Earnings)		Projected	Actual	Projected
Line No.	Description	Source	<u>2020</u>	2020	2021
1	Deferred Earnings-BOY	Previous Yr, Ln. 4	17,405	17.405	18,030
2	Annual Deferred Earnings	Input	3,316	1,826	2,388
3	Amortization of Deferred Earnings	Input	(1,295)	(1,202)	(1,361)
4	Deferred Earnings-End of Year	Sum Lns. (1 - 3)	19,426	18,030	19,056
5	Average Deferred Earnings	(Ln. 1 + Ln. 4) / 2	18,416	17,717	18,543
		(LII. 1 + LII. 4) / 2	10,410	17,717	10,343
Schedule 5	i (Return on Rate Base)		Projected	Actual	Projected
Line No.	<u>Description</u>	Source	2020	2020	2021
1	Equity Rate Base - Average	Sch.3, Ln. 6 * 55% + Sch. 4, Ln. 5	148,742	148,044	139,172
2	Debt Rate Base - Average	Sch.3, Ln. 6 * 45%	106,631	106,631	98,697
3	Total Rate Base - Average	Sum Lns. (1 - 2)	255,373	254,675	237,869
4	Adjusted Equity Ratio	Ln. 1 / Ln. 3	58.2%	58.1%	58.5%
5	Adjusted Debt Ratio	1 - Ln. 4	41.8%	41.9%	41.5%
6	Cost of Equity (Real)	Input	9.5%	10.5%	12.9%
7	Cost of Debt	Input	4.6%	4.3%	4.1%
,	OOSE OF DEDIC	прис	4.070	4.376	4.170
8	Weighted Cost of Capital	Lns. (6 * 4 + 7 * 5)	7.5%	7.9%	9.3%
9	Total Batura on Bata Basa	Lns. 3 * 8	10.003	20,185	22,066
10	Total Return on Rate Base		19,093		
	Interest Expense	Lns (2 * 7)	(4,932)	(4,617)	(4,093)
11	Equity Return on Rate Base	Sum Lns. (9 - 10)	14,161	15,569	17,973

Line No.	<u>Description</u>	Source	Projected 2020	Actual 2020	Projected 2021
1 2	Equity Return on Rate Base Amortization of AEDC	Sch. 5, Ln. 11 Input	14,161 15	15,569 15	17,973 15
3	Amortization of Deferred Earnings	Sch. 4, Ln (3)	1,295	1,202	1,361
4	Amortization of Over(Under) Funded ADIT	Sch. 7, Ln. 7	-	-	-
5	Total Taxable Return	Sum Lns. (1 - 4)	15,471	16,786	19,349
6	Net to Tax Multiplier	Sch. 7, Ln. 5 / (1 - Sch. 7, Ln. 5)	37.6%	37.6%	37.6%
7	Tax Allowance	Ln. 4 + Lns. (5 * 6)	5,810	6,303	7,266
Schedule 7	(ADIT)				
			Projected	Actual	Projected
Line No.	Description	Source	<u>2020</u>	2020	<u>2021</u>
1	MACRS Claim	Input	25,451	25,451	22,901
2	Depreciation	Sch. 2, Ln. 4,	15,141	15,141	15,141
3	AIDC Amortization	Input	12	12	12
4	Difference	Ln. 1 - Sum Lns. (2 - 3)	10,298	10,298	7,748
5	Income Tax Rate	Input	27.3%	27.3%	27.3%
6	Deferred Income Tax Expense	Ln. 4 * Ln. 5	2,811	2,811	2,115
7	Amortization of Over(Under) Funded ADIT	Input	-	-	
8	Adjusted Deferred Income Tax Expense	Sum Lns. (6 - 7)	2,811	2,811	2,115
9	Previous ADIT	Input	(3,258)	(3,258)	(446)
10	Year End ADIT	Sum Lns. (8 - 9)	(446)	(446)	1,669
11	Average ADIT	Average Lns. 9 and 10	(1,852)	(1,852)	611

<sup>1.</sup> CPIS Additions represent average cumulative gross plant for a calendar year.

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Schedule '	1 (Inputs)	
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Lina Na	Description	Source	Projected	Actual	Projected
Line No.	<u>Description</u>	Source	<u>2020</u>	2020	2021
1	CPIS Additions	Input, Note 1	352,535	352,535	352,535
	Operating Expenses:				
2	Operating Expenses (Property Taxes)	Input	7,376	6,800	7,195
3 4	Operating Expenses (Power) Operating Expenses (Other)	Input Input	-	-	-
		mpat		_	-
Schedule 2	(Summary of Revenue Requirement)		Projected	Actual	Projected
Line No.	Description	Source	<u>2020</u>	2020	2021
1	Overall Return on Rate Base	Sch. 5, Ln. 9	23,214	24,496	27,317
2	Income Tax Allowance	Sch. 6, Ln. 7	6,558	7,168	8,468
3	Operating Expenses Excluding Depreciation	Sch. 1, Sum Lns. (2 - 4)	7,376	6,800	7,195
4	Depreciation of Assets	Input	11,316	11,316	11,316
5	Depreciation on AFUDC	Input		÷	
6	Amortization of Deferred Earnings	Sch. 4, Ln (3)	506	448	542
7	Total Revenue Requirement	Sum Lns. (1 - 6)	48,969	50,229	54,839
Schedule 3	(Average Rate Base)		Projected	Actual	Projected
Line No.	Description	Source	<u>2020</u>	2020	2021
1	CPIS Additions	Input	352,535	352,535	352,535
2	Accumulated Depreciation	Input	(47,999)	(47,999)	(59,315)
3	Net AFUDC	Input	(11,000)	-	-
4	ADIT	Sch. 7, Ln (11)	(3,924)	(3,924)	(8,756)
5	Working Capital	Input		-	
6	Average Rate Base	Sum Lns. (1 - 5)	300,612	300,612	284,464
Schedule 4	(Deferred Earnings)		Designated	Antoni	Desirated
Line No.	Description	Source	Projected	Actual	Projected
LITTE INU.	<u>Description</u>	Source	<u>2020</u>	<u>2020</u>	<u>2021</u>
1	Deferred Earnings-BOY	Previous Yr, Ln. 4	11,036	11,036	12,774
2	Annual Deferred Earnings	Input	3,970	2,186	2,924
3	Amortization of Deferred Earnings	Input	(506)	(448)	(542)
4	Deferred Earnings-End of Year	Sum Lns. (1 - 3)	14,501	12,774	15,156
5	Average Deferred Earnings	(Ln. 1 + Ln. 4) / 2	12,769	11,905	13,965
Schedule 5	i (Return on Rate Base)		Projected	Actual	Projected
Line No.	Description	Source	2020	2020	2021
	·				
1	Equity Rate Base - Average	Sch.3, Ln. 6 * 55% + Sch. 4, Ln. 5	178,105	177,242	170,421
2	Debt Rate Base - Average	Sch.3, Ln. 6 * 45%	135,276	135,276	128,009
3	Total Rate Base - Average	Sum Lns. (1 - 2)	313,381	312,518	298,429
4	Adjusted Equity Ratio	Ln. 1 / Ln. 3	56.8%	56.7%	57.1%
5	Adjusted Debt Ratio	1 - Ln. 4	43.2%	43.3%	42.9%
	•				
6	Cost of Equity (Real)	Input	9.5%	10.5%	12.9%
7	Cost of Debt	Input	4.6%	4.3%	4.1%
8	Weighted Cost of Capital	Lns. (6 * 4 + 7 * 5)	7.4%	7.8%	9.2%
9	Total Return on Rate Base	Lns. 3 * 8	23,214	24,496	27,317
10	Interest Expense	Lns (2 * 7 )	(6,256)	(5,857)	(5,309)
11	Equity Return on Rate Base	Sum Lns. (9 - 10)	16,957	18,640	22,008
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Line No.	Description	Source	Projected 2020	Actual 2020	Projected 2021
1 2	Equity Return on Rate Base Amortization of AEDC	Sch. 5, Ln. 11	16,957	18,640	22,008
3	Amortization of Deferred Earnings	Sch. 4, Ln (3)	506	448	- 542
4	Amortization of Over(Under) Funded ADIT	Sch. 7, Ln. 7			-
5	Total Taxable Return	Sum Lns. (1 - 4)	17,463	19,088	22,551
6	Net to Tax Multiplier	Sch. 7, Ln. 5 / (1 - Sch. 7, Ln. 5)	37.6%	37.6%	37.6%
7	Tax Allowance	Ln. 4 + Lns. (5 * 6)	6,558	7,168	8,468
Schedule 7 (ADIT)					
			Projected	Actual	Projected
Line No.	<u>Description</u>	Source	<u>2020</u>	2020	<u>2021</u>
1	MACRS Claim	Input	30,544	30,544	27,489
2	Depreciation	Sch. 2, Ln. 4	11,316	11,316	11,316
3	AIDC Amortization	Input		-	-
4	Difference	Ln. 1 - Ln. 2	19,227	19,227	16,173
5	Income Tax Rate	Input	27.3%	27.3%	27.3%
6	Deferred Income Tax Expense	Ln. 4 * Ln. 5	5,249	5,249	4,415
7	Amortization of Over(Under) Funded ADIT	Input		-	-
8	Adjusted Deferred Income Tax Expense	Sum Lns. (6 - 7)	5,249	5,249	4,415
9	Previous ADIT	Input	1,299	1,299	6,548
10	Year End ADIT	Sum Lns. (8 - 9)	6,548	6,548	10,963
11	Average ADIT	Average Lns. 9 and 10	3,924	3,924	8,756

<sup>1.</sup> CPIS Additions represent average cumulative gross plant for a calendar year.