

CONNECTIONS

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Financial Assessment for Sustainability



Speaker:

Dawn Lund

Vice President

Utility Financial Solutions,
LLC dlund@ufsweb.com




ELECTRICITIES
of NORTH CAROLINA, INC.

Utility Financial Solutions, LLC

- International consulting firm providing cost of service and financial plans and services to utilities across the country, Canada, Guam and the Caribbean
- Instructors for cost of service and financial planning for APPA, speakers for organizations across the country.
- Hometown Connections partner for Cost of Service and Financial Planning



Introduction

How's your
Financial
Health?



- ▶ Overview of basic indicators to determine overall financial health
- Concepts we talk about are what we repeatedly see working in the industry – there are exceptions to everything in this presentation
- Being out of the “range”, doesn’t necessarily mean you have a problem!
- Methodical review the same any size of utility
- Review can apply to other utility types



Do You Know What I'm Talking about?

- ▶ We haven't had a rate increase in XX years
 - ▶ Board/Council avoids rate adjustments
 - ▶ Operating at a loss
 - ▶ Spending down cash
 - ▶ Foregoing capital investment
 - ▶ System aging
 - ▶ Have to borrow for regular capital
 - ▶ Need major improvements
 - ▶ All this keeping rates artificially low
 - ▶ We want to be the lowest cost provider....



Where Do I Find the Information?

- ▶ Income Statement
 - ▶ Balance Sheet
 - ▶ Cash Flow Statement
 - ▶ Fixed Asset Listing
 - ▶ Debt Schedule
- ▶ Most of the time a pretty accurate picture of financial health can be determined from the financial statements after a quick review



Some Key Indicators



Days Cash on Hand

- Pay expenses
- Fund system improvements help ensure reliability
- Pay Debt Service
- Maintain stable rates for customers
 - Fund unanticipated cost contingencies
- Phase in large rate adjustment
- Keep utility healthy for future Management



Calculate Days Cash on Hand

	Cash On Hand							Comments:
	<u>Electric</u>							
A	\$ 33,945,391	O&M Expenses						
B	\$ 5,205,300	Cash on Hand (non-restricted)						
(A/B)	<u>6.52</u>	Factor						
365/Factor	56	Days Cash on Hand of Total O&M for Electric						LOW

Find this information on your income statement & balance sheet

Establish a Cash reserve policy for each utility

Typical Range 90-120+ days of O&M

High Bond Rating 200 Days+



Rate of Return %




- ▶ Adequate rate of return on investment to help ensure current customers are paying their fair share of the use of the infrastructure and not deferring the charge to future generations
- Typical range for a municipal 4-7%



Realized Rate of Return

	Rate of Return		<div>Comments:</div>
	<u>Electric</u>		
A	33,057,749	Net Book Value	
B	\$ (1,071,944)	Operating LOSS Year 1	
C	\$ 478,000	Operating Income Year 2	
(C/A)	1.45%	Year 2 ROR Percent	Very Low
Comments:			
NBV on Balance Sheet			
Operating Income on Income statement			
Divide Operating Income by NBV to get return %			
Cost of service study and/or financial projection to set a rate track to meet operating income			
Rate of Return (Typical range 4-7%)			



Debt Coverage Ratio

- Identifies cash generated from operations on a yearly basis above the debt service payment
- Debt coverage ratios mandated by covenants and established in bond ordinances
- Know your requirements with the yearly budget



ulate



Build in Safety Factor

- When setting rates a safety factor must be built into the coverage ratio for planning purposes
 - Electric sales dependent on weather
 - Unexpected expense can occur
- Potentially causes the utility to fall below coverage requirements
- Safety factor of 0.2 is typically added to Bond Coverage requirement

Bond Covenant Requirement	Safety Factor	Minimum Target Level for Planning Purposes
1.10	0.20	1.30
1.20	0.20	1.40
1.25	0.20	1.45



Not Meeting Debt Coverage

- Technically in default even if making payment but not meeting Debt Coverage Ratio



- DEFAULT

- Can affect ratings and ability to issue bonds in future
- Can affects interest rate in the future = higher risk



Calculate Debt Coverage Ratio

					<u>Comments:</u>
	<u>Electric</u>				
A	\$ (1,071,944)	Net Income			
B	1,936,076	Depreciation			
C	<u>511,963</u>	Interest			
(Sum A-C)	\$ 1,376,095	Cash from operations to pay Debt			
D	\$ 760,000	Yearly Debt Payment			
Sum (A-C)/D	<u>1.81</u>	Debt Coverage Ratio			Acceptable

Comments:

Revenue Bonds 1.20 or Higher (GO recommended 1.0 minimum)

Know your specific requirements!

Not include PILOT - Really??

Info available on Balance Sheet, Income Statement, Cash Flow Statement



Debt % of NBV



- Identifies the amount of debt outstanding against the remaining Net Book Value
 - How “leveraged” is the system
- What we typically see:
 - Generation and distribution between 50 – 70 %; 70% MAX
 - Distribution only 30 to 50%
 - Obviously, we’ve seen utilities with no debt to highly leveraged



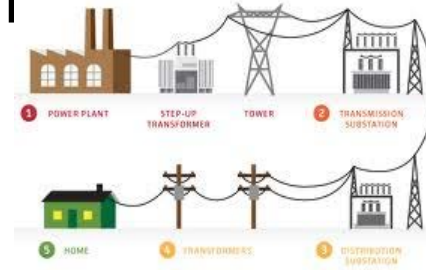
Calculate % Debt to NBV

	Outstanding Debt %			Comments:
	Electric			
A	\$	33,057,749	NBV	
B	\$	10,030,000	Principal	
(B/A)		30%		

<u>Comments:</u>				
(Distribution only less than 50%; Produce & Dist less than 70%)				
Find Info on your Balance Sheet				

Age of System

- Depends on accuracy of depreciation rates used
- Individual asset components can be different (trucks VS distribution system)
- Regular Investment in system?
- Ever cut capital to keep rates low?
- Over 60% watch for aging and check capital plan



Calculate Age of System

					Comments: Acceptable
	<u>Electric</u>				
A	\$ 63,263,861	Historical Investment			
B	\$ 29,370,067	Accum Depreciation			
(B/A)	46%	Percent Depreciated			

Comments:					
50% or less = Newer Over 65% should be watched for aging					
In general; Reinvest in Capital at least rate of depreciation					
Info Available on Balance Sheet					



Capital Investment

- “Pay as you go” for regular capital
- Future reinvesting in the system (at least depreciation, can be age dependent)
 - Accuracy of depreciation rates?
- Bonding for extra-ordinary capital



Calculate Investment Analysis

Electric Yearly Depreciation			Comments: Acceptable
\$ 1,863,509	Depreciation		
\$1,500,000	Average Capital		

Recommendation:

Yearly Capital Expenditure ON AVERAGE should mirror Depreciation (Some years will be more, some less)

This should be looked at in conjunction with the "Age of System" : Older may need to reinvest more than depreciation



PILOT Payment (Contribution to the City)



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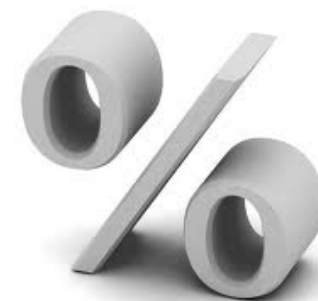
PILOT Payment

- Contribution to the City – Formula
 - Is it a percentage based on revenues?
 - Is it based on NBV?
 - Need to plan for those large investments
- Exposure to “one time” transfers
- What is the cost of “free services” to the city
- Are allocations for city provided services appropriate: Metering, Billing, Customer Services, Administration



Contribution to City

- National average of cash-only contributions approximately 3.9% of Revenues (APPA survey)
- National average including free service about 5.9% Revenues (APPA Survey)
- What we see: 7%
- Disguising a tax as a utility rate?



Calculate PILOT

				<u>Comments:</u> Acceptable to High
	<u>Electric</u>			
A	\$ 25,835,700	Revenues		
B	\$ 2,354,800	Pilot Payment		
(B/A)	9.1%	Pilot Percent		

Cost of Service and Rate Structure



When was the last time your utility had a COS?

- Was the study used?
- Key indicator can be the monthly customer charge



Cost of Service Studies

- Cost of Service studies should be completed every three to five years or when substantial changes in costs occur
 - Change in power supply contract,
 - Adding additional generation resources
 - Major distribution or transmission upgrade or investment



Customer Charge



Customer Charges

- Costs that do not vary with usage:
 - Meter operation, maintenance and replacement costs
 - AMR installation costs
 - Meter reading
 - Billing Costs
 - Customer Service
 - Portion of Distribution System (35-50%)



Typical Residential Cost Based Customer Charge

- Typical cost based residential customer charges:
 - Typical Municipal System - \$12 - \$17/Month
 - Rural Utilities - \$15 - \$25/Month
- Density of the service territory can affect the monthly custom



Customer Charges

- Increasing customer charges helps stabilize revenues
 - Declining sales
- Reduces subsidy between year-round customers and seasonal customers
- Low income not necessarily the same as low use
 - *At most utilities, low income customers tend to be higher than average users. A higher customer charge may benefit low income (depends on housing mix - calculate for your utility)*



Importance of Demand Charges



Correction of Demand Charges Distribution Recovery

- For demand rate customers, most inaccurate method of distribution cost recovery is through a kWh charge
- Economic Development



Distribution Cost Recovery

Method of Distribution Recovery						
Demand Rate	\$	5.90				
kWh Charge		0.0223				
Load Factor		20.0%	30.0%	40.0%	50.0%	60.0%
Peak Demand		1,000	1,000	1,000	1,000	1,000
kWh's Used by Customer		146,000	219,000	292,000	365,000	438,000
Demand Rate		5,899	5,899	5,899	5,899	5,899
Energy Rate		3,259	4,888	6,517	8,147	9,776
Difference		(2,640)	(1,011)	619	2,248	3,877

Rate Adjustments Assessment



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Consequences of Avoiding Increase

- Need doesn't go away
- Decline in Cash
- Larger future increases
- Don't push off capital improvements
- (at least depreciation for)
- “Pay as you go” for regular capital
- Bond for extra-ordinary capital
 - Financially burdened when improvements are needed



Need Doesn't go Away = COMPOUNDS

Fiscal Year	Projected Rate Adjustments	Projected Revenues	Projected Expenses	Operating Income	Projected Cash Balances	Capital Improvements	Bond Issues	Debt Coverage Ratio
2008	3.5%	26,613,448	25,481,830	(593,382)	11,894,226	1,700,000	-	1.70
2009	3.5%	27,100,028	27,262,643	(162,615)	9,901,550	2,419,692	-	0.88
2010	3.5%	27,537,303	26,930,109	607,194	11,277,991	1,907,039	-	-
2011	0.0%	29,046,768	28,029,914	1,016,854	15,804,097	5,743,381	6,950,000	-
2012	0.0%	30,884,443	30,944,182	(59,739)	12,406,020	5,151,597	-	2.82
2013	0.0%	\$ 31,276,116	\$ 32,310,794	\$ (1,034,678)	\$ 7,026,799	\$ 5,997,171	\$ -	1.60
2014	8.5%	34,230,179	34,265,896	(35,717)	6,911,091	1,859,500	-	2.70
2015	8.5%	37,646,341	35,404,131	2,242,210	8,863,022	2,131,000	-	4.98
2016	8.5%	41,348,948	36,647,148	4,701,801	12,226,141	3,279,000	-	7.46
Recommended Target in 2014				\$ 2,835,680				
Recommended Target in 2016				\$ 2,840,329				
Recommended MINIMUM Target in 2014					\$ 11,419,203			1.45
Recommended MINIMUM Target in 2016					\$ 11,857,050			1.45

Power of Small Yearly Increases



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Financial Projection

Base Case – No Rate Increase

Fiscal Year	Projected Rate Adjustments	Projected Revenues	Projected Expenses	Adjusted Operating Income	Projected Cash Balances	Capital Improvements	Bond Issues	Debt Coverage Ratio
Year 1	0.00%	140,298,723	141,333,703	(1,034,980)	35,313,396	6,975,000	-	2.34
Year 2	0.00%	143,900,552	146,605,317	(2,704,765)	29,549,231	6,265,000	-	2.14
Year 3	0.00%	145,430,257	150,971,486	(5,541,229)	20,701,100	6,516,000	-	1.78
Year 4	0.00%	147,395,894	155,879,882	(8,483,988)	7,246,116	8,123,000	-	1.42
Year 5	0.00%	148,176,101	160,519,276	(12,343,175)	(7,718,630)	7,068,000	-	1.13
Recommended Operating Income Target – Year 1				\$ 10,887,198				
Recommended Operating Income Target – Year 5				\$ 10,273,763				
Recommended Minimums Year 1					\$ 40,304,223			1.40
Recommended Minimums Year 5					\$ 44,995,205			1.40

Financial Projection Recommended Rate Track

Fiscal Year	Projected Rate Adjustments	Projected Revenues	Projected Expenses	Adjusted Operating Income	Projected Cash Balances	Capital Improvements	Bond Issues	Debt Coverage Ratio
Year 1	2.80%	145,331,282	141,333,703	3,997,579	40,345,956	6,975,000	-	2.98
Year 2	2.80%	152,669,729	146,605,317	6,064,412	43,514,526	6,265,000	-	3.27
Year 3	2.80%	158,116,137	150,971,486	7,144,652	47,806,147	6,516,000	-	3.43
Year 4	2.80%	164,233,081	155,879,882	8,353,199	52,069,264	8,123,000	-	3.62
Year 5	2.80%	169,308,261	160,519,276	8,788,985	59,693,430	7,068,000	-	4.55
Recommended Operating Income Target – Year 1				\$ 10,887,198				
Recommended Operating Income Target – Year 5				\$ 10,273,763				
Recommended Minimums Year 1					\$ 40,304,223			1.40
Recommended Minimums Year 5					\$ 44,995,205			1.40

Best Practices – Rate Adjustments

- Small periodic increases to keep up with inflation
 - 0 - 4.9% - inflationary
 - 5 - 9% - a few large industrials
 - Double digits = complaints
- Phase in large increases over time
- When possible, implement Increases in the transition month = Transparent



Survey – They WILL Ask

- Survey of rates is NOT a guide to determine if an increase is needed
 - On a COS basis, it doesn't matter what the neighbor charges
 - Are you comparing yourself to a financially burdened utility
 - Do you really want to be like “them”?
 - “We can't get rate adjustments either”
- Surveys can be used to help guide rate design, not guide necessity for a rate adjustment



City	Monthly
Community 1	\$45.02
Community 2	\$49.01
Community 3	\$50.35
Community 4	\$54.25
Community 5	\$59.00
Community 6	\$63.46
Community 7	\$63.80
Community 8	\$65.36
Community 9	\$68.00
Community 10	\$69.67
Community 11	\$71.47
Community 12	\$71.75
Community 13	\$72.20
Community 14	\$78.77
Community 15	\$82.88
Community 16	\$95.00
Community 17	\$95.80
Community 18	\$98.98
Community 19	\$100.64
Community 20	\$101.10
Community 21	\$104.60
Community 22	\$109.63
Community 23	\$113.30
Community 24	\$117.10
Community 25	\$117.23
Community 26	\$120.40
Community 27	\$120.80
Community 28	\$121.10
Community 29	\$122.59
Community 30	\$134.90
Community 31	\$140.40



Educate your Board NOW

- Educate Board on importance of COS and financial targets
 - Critical they understand
 - Don't wait until an increase is needed – ongoing process
- Get input from them = “buy-in”
- Get Formal Approval on Targets
- More likely to act and support when needed



Questions?



Dawn Lund, Vice-President
Utility Financial Solutions, LLC
dlund@ufsweb.com



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