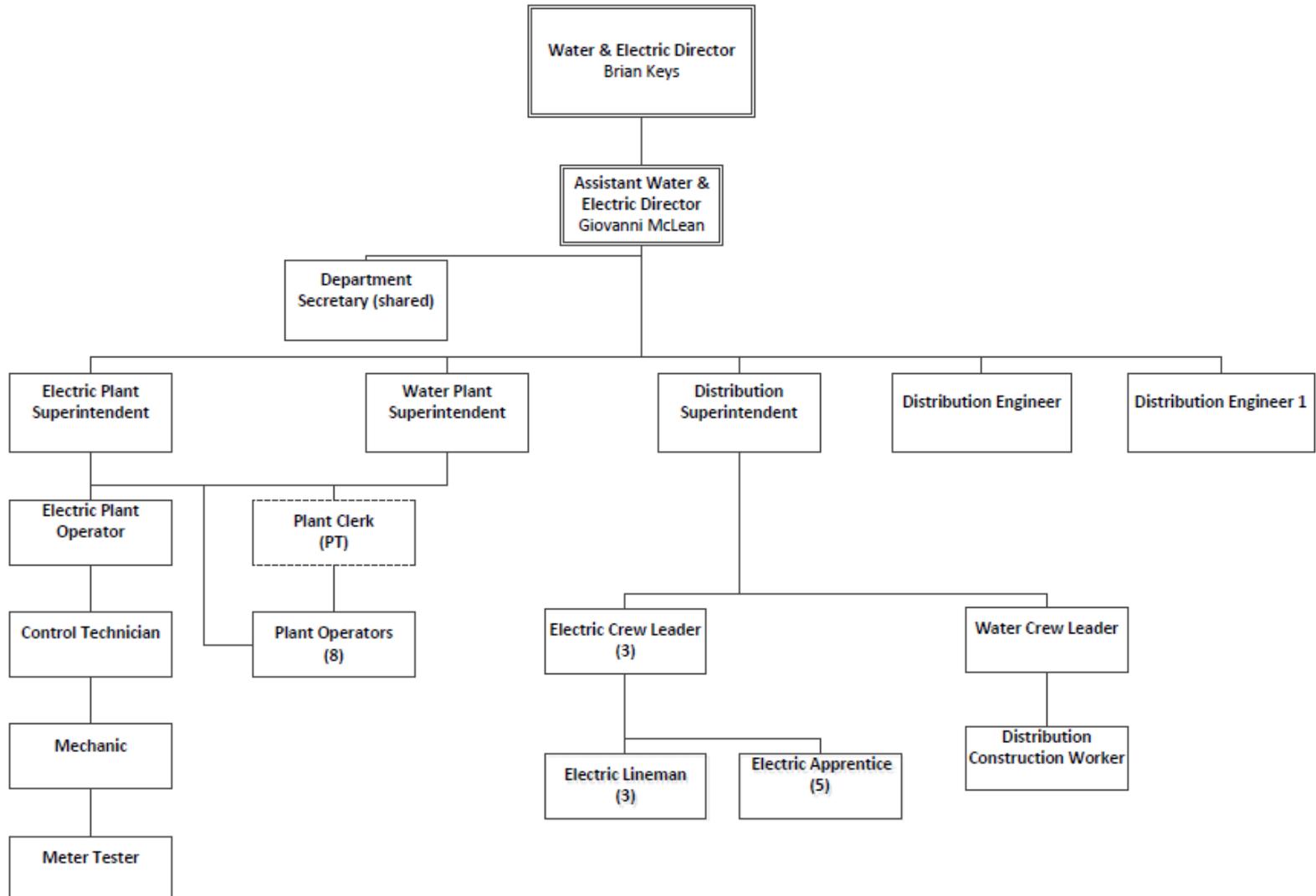

Water & Electric Department

FY 2016 Budget Review

October 27, 2015

Organizational Chart



Water Department

Fund: #520

Department Narrative: Budget Book Tab 9

Budget: Pages 149-167

Financial Summary

Water (in thousands \$'s)	Actual 2014	Budget 2015 A	Estimate 2015 B	Budget 2016 C	% Change A to C	% Change B to C
Operating						
Income	\$ 3,505	\$ 4,120	\$ 3,667	\$ 3,999	-3.0%	8.3%
Cash Expenses	\$ (2,933)	\$ (3,152)	\$ (3,169)	\$ (3,365)	6.3%	5.8%
Net Cash Operating Income (loss)	\$ 572	\$ 968	\$ 498	\$ 634	-52.7%	21.5%
Operating Expense Detail						
Salaries and Benefits	\$ 1,259	\$ 1,195	\$ 1,334	\$ 1,422	16.0%	6.2%
Services and Supplies	\$ 1,343	\$ 1,695	\$ 1,573	\$ 1,666	-1.7%	5.6%
Payment in Lieu of Taxes	\$ 331	\$ 262	\$ 262	\$ 277	5.4%	5.4%
	\$ 2,933	\$ 3,152	\$ 3,169	\$ 3,365	6.3%	5.8%
Capital Outlay	\$ 540	\$ 866	\$ 866	\$ 863	-0.3%	-0.3%
Depreciation	\$ 486	\$ 440	\$ 440	\$ 440	0.0%	0.0%
Total Fund Expense	\$ 3,959	\$ 4,458	\$ 4,475	\$ 4,668	4.5%	4.1%
Net Fund Income (loss)	\$ (454)	\$ (338)	\$ (808)	\$ (669)	49.5%	-20.8%

NOTE:

- Reference page 148 in Winnetka FY 2016 Budget
- Proposed budget contains: 2% rate increase for Winnetka
2% rate increase for Unincorporated

Financial Summary (continued)

Capital Plan

Budget FY 2015: \$867K

Estimate FY 2015: \$866K

Proposed Budget FY 2016: \$863K

Unrestricted Net Assets

01/01/14: \$1,265K

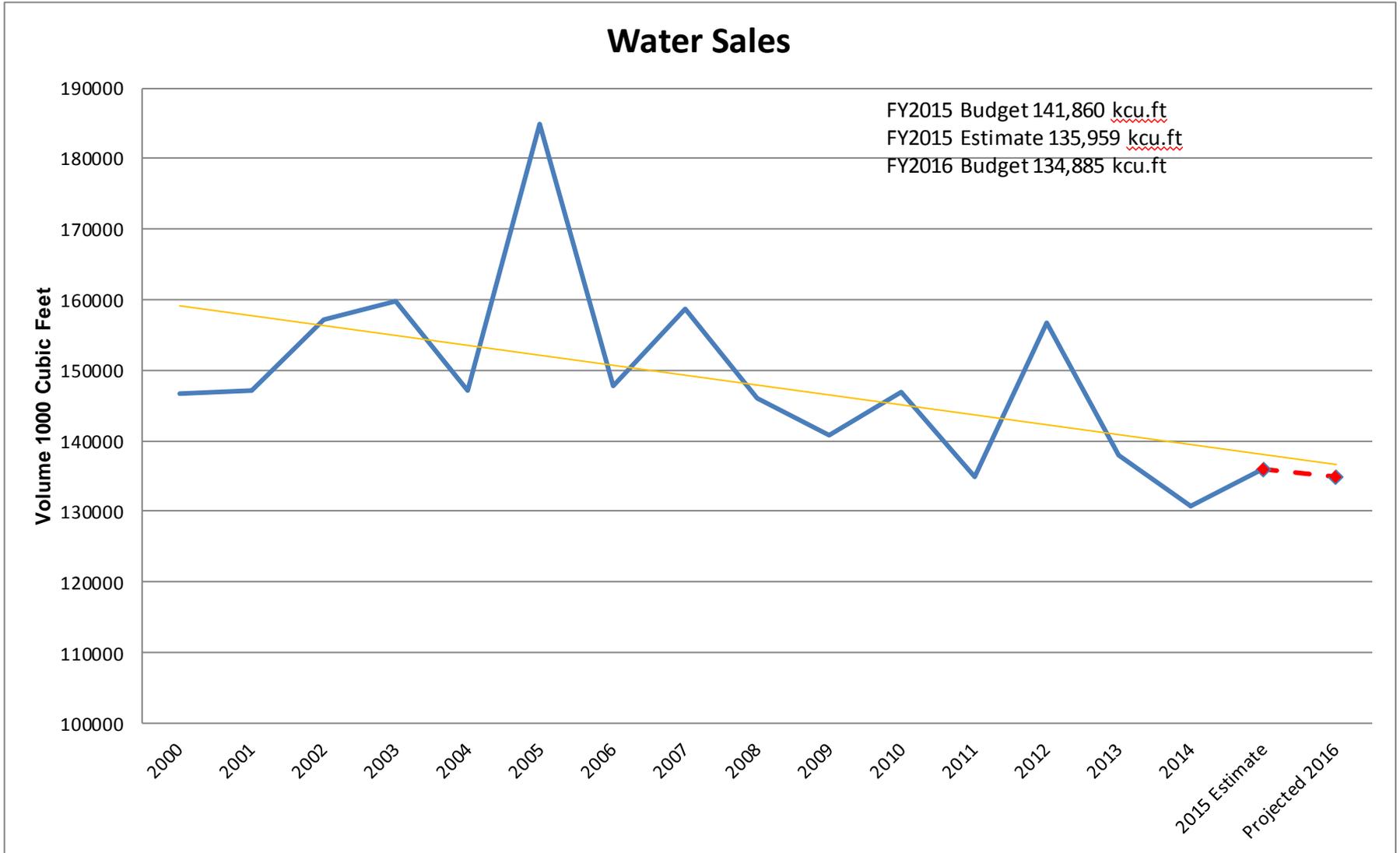
01/01/15: \$1,513K

01/01/16: \$1,115K

Minimum Fund Balance: \$1,160K

(Four months of operating funds)

Water Sales & Forecast



Water Rates

	Rate (1,000 cu. ft.)
Winnetka (FY 2015)	\$33.49
<i>Winnetka (Proposed 2016)</i>	\$34.16
Winnetka Unincorporated (FY 2015)	\$59.89
<i>Winnetka Unincorporated (2016)</i>	\$61.08

- FY 2016 financials are based on the following:
 - Winnetka: 2% increase
 - Unincorporated Areas: 2% increase

Rate Comparison

Community	Rate (1,000 cu. Ft.)
Highland Park	\$19.60
Wilmette	\$24.90
<i>Winnetka (Proposed 2016)</i>	\$34.16
Glencoe	\$34.54
Northbrook	\$36.65
Deerfield	\$40.80
Glenview ¹	\$42.26
Kenilworth	\$52.00
Northfield	\$52.30

Nine community average is \$37.47

Note (1): Incorporates both a fixed periodic fee and a consumption fee. Rate shown is consumption fee.

1,000 cu. ft. = 7,480 gallons

Operating Expenditures (key priorities)

- Contractor resources to assist with maintenance and repair activities.
 - Repair of water services / valves [\$40K]
 - Valve maintenance and water main breaks [\$40K]

- Professional Services:
 - Design of additional surge tank capacity for high lift pumps. [\$52.7K]
 - Water main replacement / rate study to develop strategy for aging water distribution system. [\$20K]

- Water Meters: Purchase water meters for new services and periodic change-outs. [\$37K]

- Leak Detection Services: Contracted resources to perform leak detection on water distribution system. [\$16K]

- Hydrant Painting: Paint 170 hydrants as part of cyclic maintenance program. [\$13.8K]

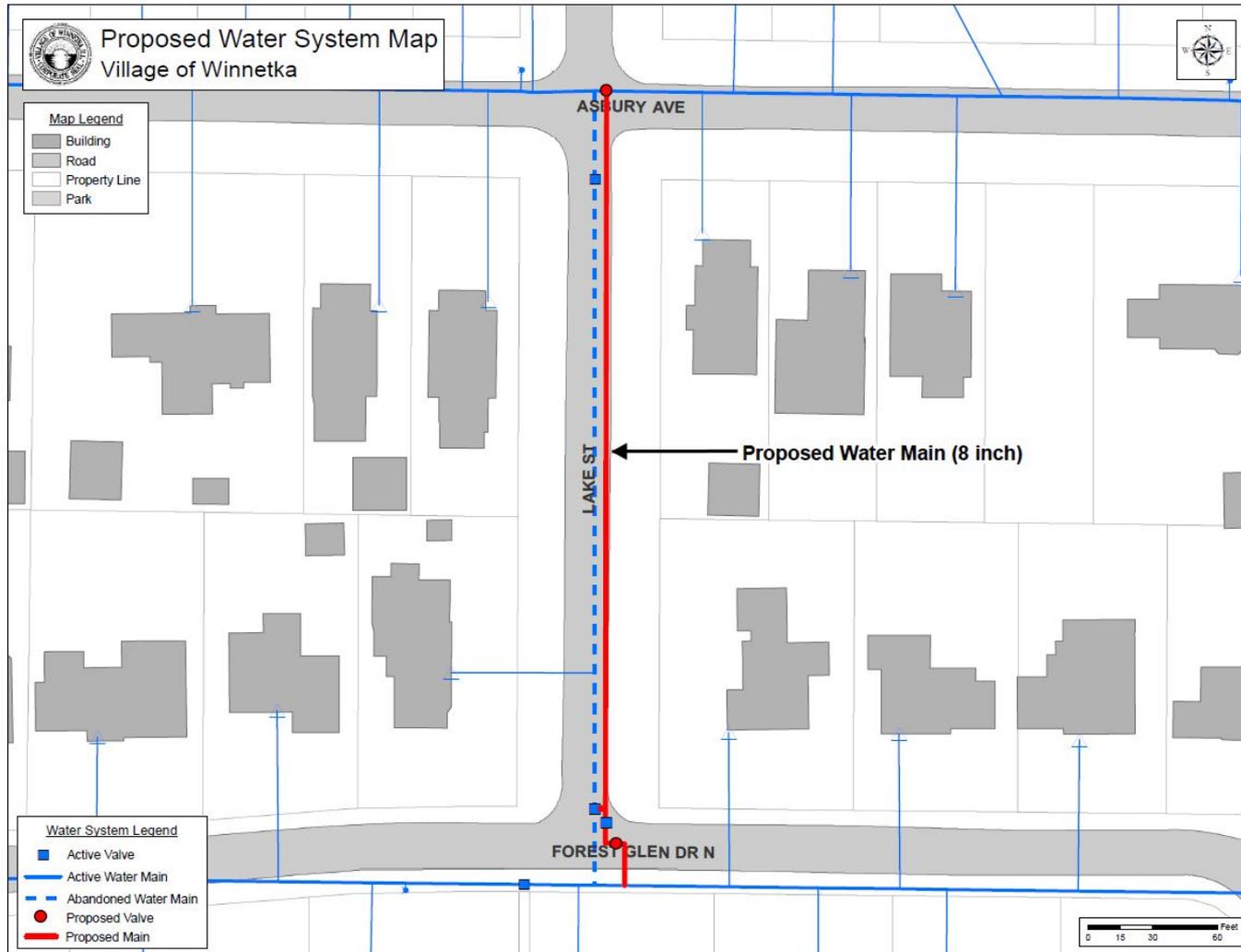
- Security upgrade of hatch at reservoir. [\$10K]

Capital Expenditures

2016 Capital Budget: \$863,000

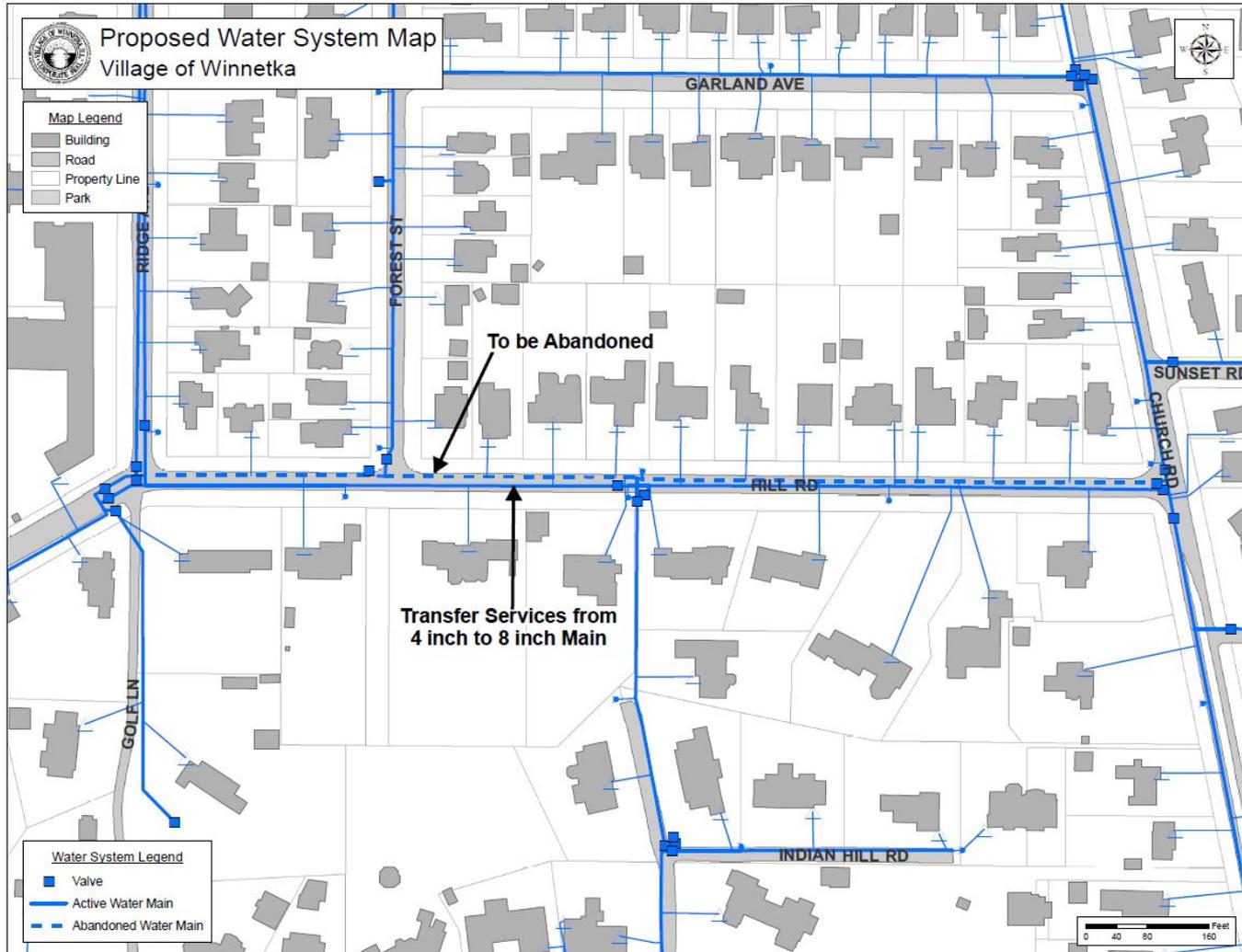
- **Water Main Replacement:** Replace 360 feet of 6” water main on Lake Street between Asbury Avenue and Forest Glen with 8” water main to improve service reliability. [\$160K]
- **Water Main Modifications:** Transfer 13 water services on Hill Road (Church to Ridge) from the 4” water main to the 8” water main to improve service reliability. [\$183K]
- **Water Main Modifications:** Transfer 23 water services on Oak Street (Locust to Birch) from the 4” water main to the 8” water main to improve service reliability. [\$108K]
- **Install sectionalizing valves at multiple locations for operating flexibility.** [\$51.5K]

Capital Expenditures (continued)



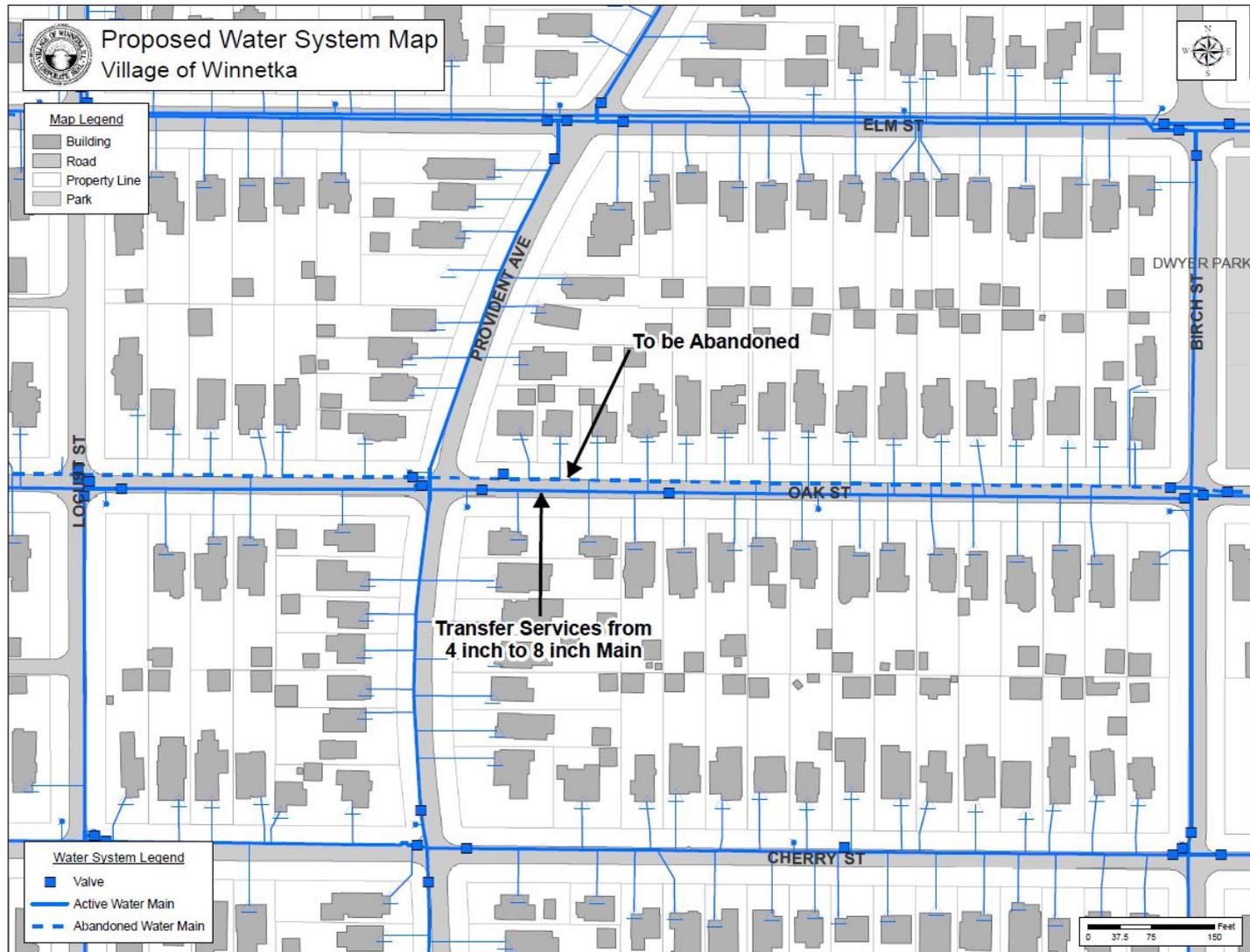
Water Main Project – Lake Street[\$160K]

Capital Expenditures (continued)



Water Main Project – Hill Road [\$183K]

Capital Expenditures (continued)



Water Main Project – Oak Street [\$108K]

Capital Expenditures (continued)

- Allocated Employee Salaries [\$85K]
- Perform concrete repairs in Clearwell #1 [\$75K]
- Perform concrete repairs in Clearwell #2 [\$75K]
- Replace section of pipe manifold in Clearwell #1 to eliminate hydraulic problem. Initiate engineering analysis to confirm that proposed solution from plant staff will address the problem. [\$90K]
- Purchase mini-excavator. Joint purchase with the Public Works Department. [\$35K]



Questions?

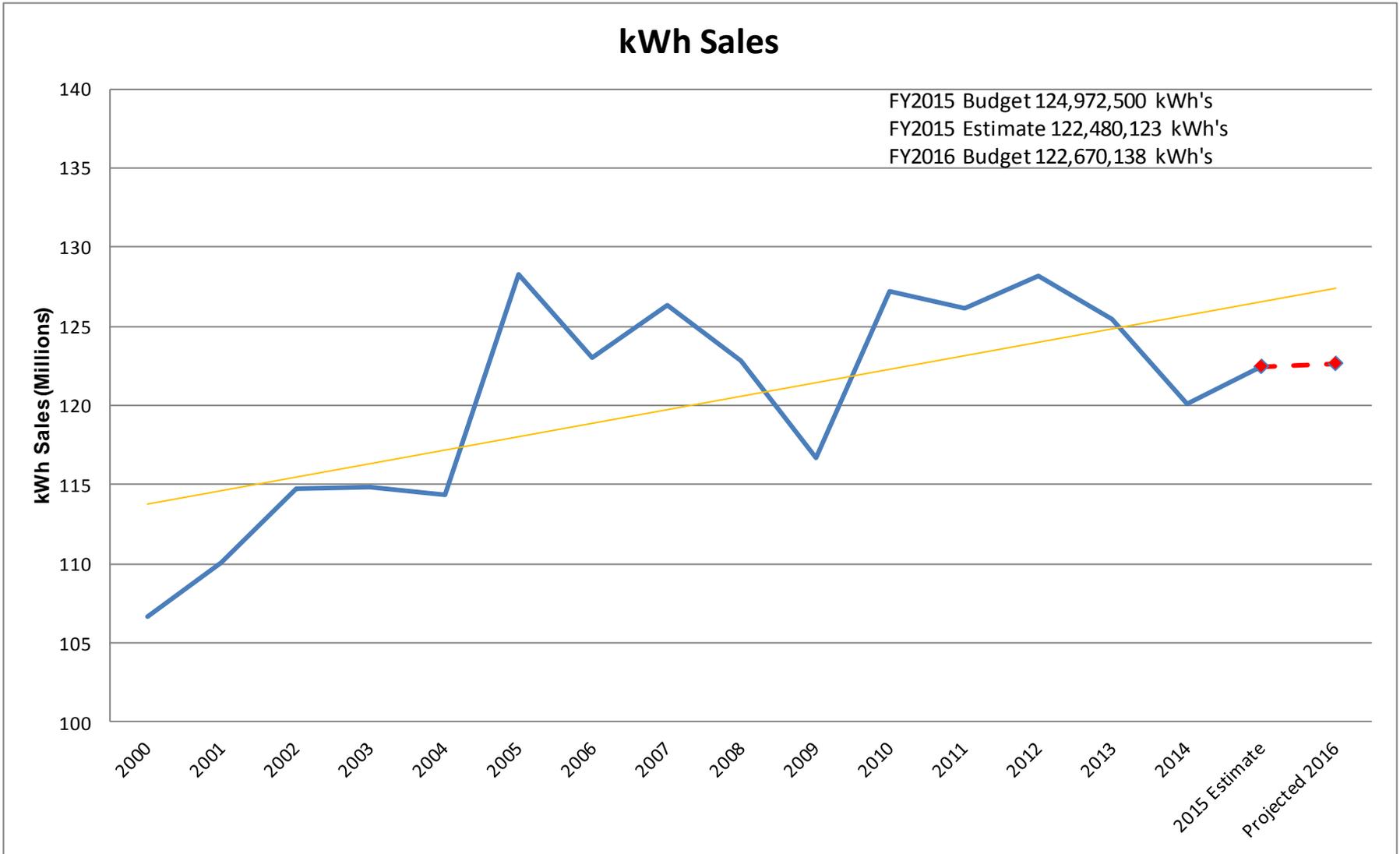
Electric Department

Fund: #500

Department Narrative: Budget Book Tab 8

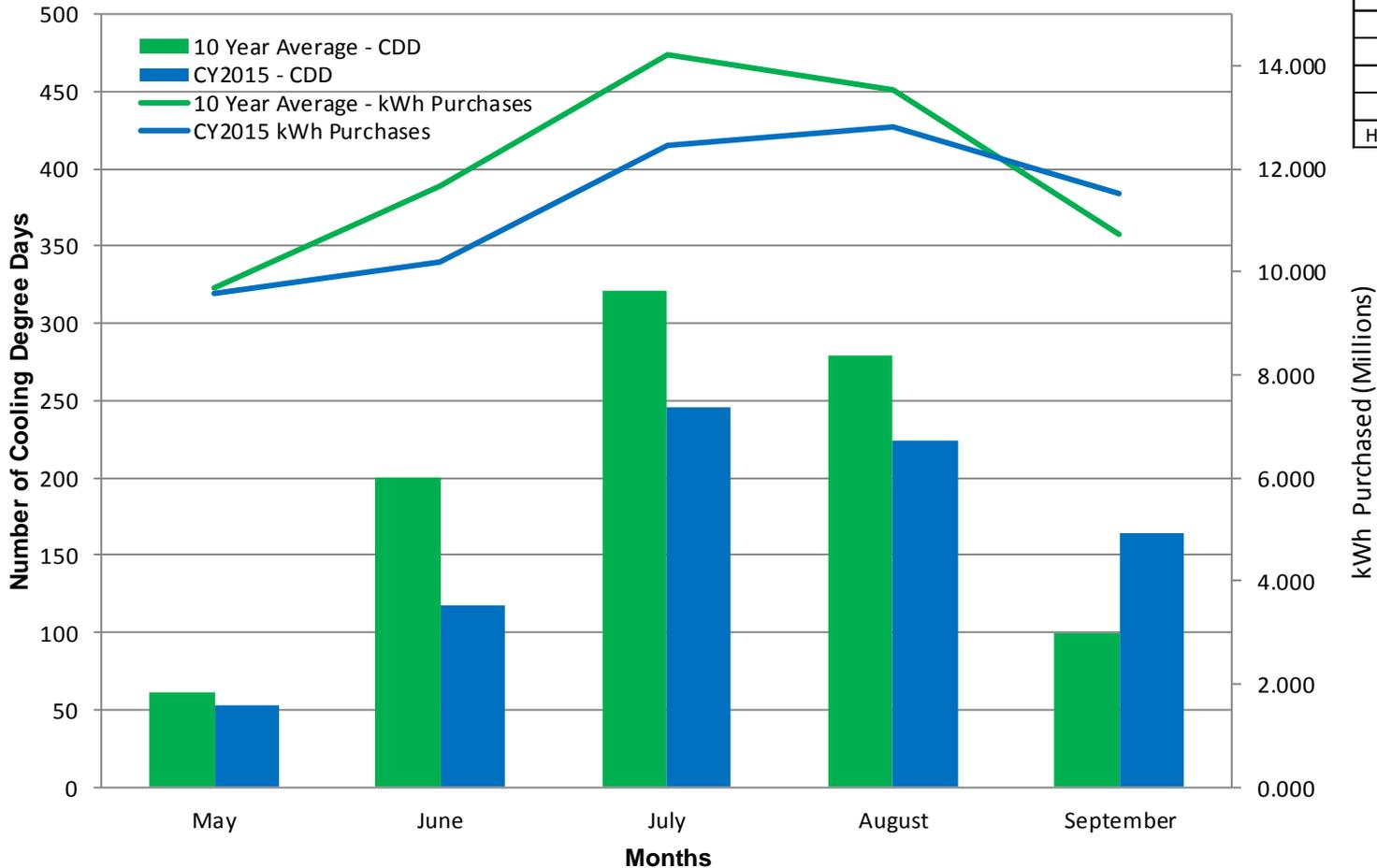
Budget: Pages 120 - 145

Electric Sales & Forecast



Electric Sales and Weather

Cooling Degree Days (CDD) vs. kWh Purchased



Number of Days with Daily High Temperature At/Or Above 90 Degrees	
2011	22
2012	49
2013	13
2014	3
2015	10
Historic Average	22

Sources:
NWS Forecast Office &
Weather.com

Financial Summary

Electric (in thousands \$'s)	Actual 2014	Budget 2015 A	Estimate 2015 B	Budget 2016 C	% Change A to C	% Change B to C
Operating						
Income	\$ 15,303	\$ 15,574	\$ 15,584	\$ 15,449	-0.8%	-0.9%
Cash Expenses	\$ (14,030)	\$ (14,646)	\$ (14,431)	\$ (14,554)	-0.6%	0.8%
Net Cash Operating Income (loss)	\$ 1,273	\$ 928	\$ 1,153	\$ 895	-3.7%	-28.8%
Operating Expense Detail						
Salaries and Benefits	\$ 3,099	\$ 3,013	\$ 3,091	\$ 2,819	-6.9%	-9.6%
Services and Supplies	\$ 2,238	\$ 2,302	\$ 2,208	\$ 2,519	8.6%	12.3%
Purchased Power	\$ 7,628	\$ 8,301	\$ 8,102	\$ 8,227	-0.9%	1.5%
Payment in Lieu of Taxes	\$ 1,065	\$ 1,030	\$ 1,030	\$ 989	-4.1%	-4.1%
	\$ 14,030	\$ 14,646	\$ 14,431	\$ 14,554		
Capital Outlay	\$ 1,747	\$ 2,453	\$ 2,263	\$ 2,557	4.1%	11.5%
Depreciation	\$ 1,648	\$ 1,600	\$ 1,600	\$ 1,600	0.0%	0.0%
Total Fund Expense	\$ 17,425	\$ 18,699	\$ 18,294	\$ 18,711	0.1%	2.2%
Net Fund Income (loss)	\$ (2,122)	\$ (3,125)	\$ (2,710)	\$ (3,262)	4.2%	16.9%

NOTES:

- Proposed budget contains 2% increase on base rates.
- Reference page 119 in Winnetka FY 2016 Budget

Financial Summary (continued)

Capital Plan

Budget FY 2015: \$2.45M

Estimate FY 2015: \$2.26M

Proposed Budget FY 2016: \$2.6M

Unrestricted Net Assets

01/01/14: \$5.932M

01/01/15: \$5.370M

01/01/16: \$4.658M

Fund Balance: \$5.32M

(Four months of operating funds)

Note:

Proposed capital projects in 2016-2019 for fire protection and Northfield Substation expansion will likely require borrowing.

Five year Capital Plan proposes loan from General Fund in 2019.

Purchased Power Cost & Electric Rates

- FY 2015 wholesale purchase power rate: \$0.0628/kWh
 - Unit price has varied from \$0.0573 to \$0.0697
 - YTD under-collected by \$52,863
 - Projected amount for year end: ~\$0

- FY 2016
 - Wholesale purchase power rate: \$0.06374/kWh
 - Estimated Sales: 122,670,138 kWh
 - Purchased Power Adjustment (PPA): \$0
 - 2.0% increase in base electric rates.

FY 2015	Base Rate (per kWh)	PPA	Effective Rate (per kWh)
Residential (Summer)	\$0.1251	-\$0.000821	\$0.1243
Residential (Winter)	\$0.1099	-\$0.000821	\$0.1091

FY 2016			
Residential (Summer)	\$0.1276	\$0.00	\$0.1276
Residential (Winter)	\$0.1121	\$0.00	\$0.1121

Average residential customer will see an annual increase in electric costs of \$42.09

Residential Electric Rate History

History of Residential Electric Rates*

Effective Period	Summer Rate	% Change	Winter Rate	% Change
April 1, 2008 - March 31, 2009	\$0.1121		\$0.0974	
April 1, 2009 - March 31, 2010	\$0.1143	2.0%	\$0.0996	2.3%
April 1, 2010 - March 31, 2011	\$0.1209	5.8%	\$0.1062	6.6%
April 1, 2011 - March 31, 2012	\$0.1239	2.5%	\$0.1092	2.8%
April 1, 2012 - March 31, 2013	\$0.1264	2.0%	\$0.1114	2.0%
April 1, 2013 - December 31, 2013	\$0.1233	-2.5%	\$0.1083	-2.8%
January 1, 2014 - December 31, 2014	\$0.1233	0.0%	\$0.1083	0.0%
January 1, 2015 - December 31, 2015	\$0.1251	1.5%	\$0.1099	1.5%
January 1, 2016 – December 31, 2016	\$0.1276	2.0%	\$0.1121	2.0%

Note (*): Does not include Purchase Power Adjustment

Electric Rate Comparison

- Assumptions:
 - Annual residential consumption: 18,178 kWh
 - Proposed 2% increase on base rate
 - Power cost adjustment of \$0.0/kWh
 - ComEd regulated rates valid through December 2015
 - Average North Shore franchise fee and municipal tax included in ComEd cost.
 - No Purchased Electricity Adjustment used in calculation.

- Rate Comparison

Winnetka Proposed FY 2016 vs. ComEd Residential Rate		
<i>Winnetka</i>	<i>ComEd</i>	<i>Difference</i>
\$2,259.71	\$2,284.52	-24.81

Operating Expenditures (key priorities)

- Maintenance Programs:
 - Line clearance [\$150K]
 - 480 Volt breaker refurbishment [\$7.5K]
 - Energized switchgear Cleaning [\$13K]
 - Rebuild deteriorating manholes [\$3.5K]
 - Northfield Substation 15kV breaker refurbishment [\$12K]
 - Battery bank testing [\$8K]
 - Thermography of overhead power lines, substations and select underground sites [\$9K]
 - Oil analysis of substation transformers [\$4K]
 - Wood pole inspections [\$8K]

- Consulting Services:
 - Environmental CAAPP Permit [\$10K]
 - Engineering assistance [\$10K]
 - Environmental NPDES Permit [\$30K]
 - System protection & relaying [\$8K]
 - Cost of service study [\$55K]

- Differential Relays [\$33K]
 - Multi-year program to improve substation relaying protection

- Electric Plant roof repair/replacement, 3 projects [\$109K]

Operating Expenditures (key priorities)

- Replacement of 5kV station breaker at Plant Load Center [\$30K]
- Expansion of security system
 - Northfield Substation [\$9K]
 - South Load Center [\$4.3K]
- Diesel generator inspection & testing [\$15K]
- Interactive voice response (IVR) system for storm response [\$12K]
- Cable reel trailer [\$10.2K]
- Electric meters [\$10K]
- Street lighting:
 - Replace (50) street lights with energy efficient LED's [\$6K]
- Energy efficient lighting projects
 - South Load Center [\$5K]
 - W&E Garage [\$10K]
 - Electric Plant high bay [\$10K]

Electric Capital Expenditures

2016 Budget: \$2,557,000

- Electric Plant Fire Protection: Installation of fire protection system at Electric Plant for steam turbines and diesel generators. [\$814K]
- Allocated Employee Salaries [\$594K]
- New Business: Contracted Directional Boring and Cable Pulling. [\$441K]
- Conductors and Cable Pulling [\$404K]
 - Replace 3,500 feet of existing mainline conductor
 - Installation of new electric services
- System Upgrades: Conduit [\$120K]
 - Additional ties between Circuits G & K [\$20.7K]
- Transformers & Devices [\$125K]
- Cable Devices [\$59K]
 - Switchgear: Replacement of one existing switchgear due to vintage and condition [\$19K]
 - Splices and terminations [\$40K]

Snapshot View - Steam Turbine Cost vs. Credits

Assumptions:

- 24x7 Operator coverage is required at Water & Electric Plant.
- Diesel generators are required to provide backup generation for Water Plant.
- Most building expenses remain to support Water Plant, generators, and control functions of electric system.

IMEA Capacity Credits for Winnetka Steam Turbines:	\$1,291,200
Steam Turbine Avoided Costs	
Boilers & Turbines: Operation & Maintenance	- \$100,500
Professional Services: NPDES Permit (50%)	- \$15,000
Professional Services: CAAPP Permit (50%)	-\$5,000
Est. Salary and Benefit Cost:	<u>- \$256,743</u>
Financial Advantage to Continued Operations:	\$913,957

Notes:

- (1) Excludes any accounting effects related to depreciation.
- (2) Excludes any calculation for reliability / contingency benefit of owning backup generation for Village's infrastructure.

2017 Budget Note

Steam turbines at the Electric Plant are due for a major tear down inspection and overhaul. The units have been historically completed as one unit per fiscal year due to manpower and outage scheduling.

The planned outage schedule is as follows:

Unit 4:

December 2016:	Start to disassemble turbine & generator
January – April 2017:	Inspect, repair, reassemble, and test

Unit 7:

December 2017:	Start to disassemble turbine & generator
January – April 2018:	Inspect, repair, reassemble, and test

Unit 6:

December 2018:	Start to disassemble turbine & generator
January – April 2019:	Inspect, repair, reassemble, and test

Based on prior overhauls, the estimated cost for each unit is \$350K.

Questions?