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Winnetka Village Council
STUDY SESSION
Village Hall
510 Green Bay Road
February 14, 2017

AGENDA

1) Call to Order

1) Electric Fund Rate Study 2

2) Public Comment

3) Closed Session

4) Adjournment

NOTICE

All agenda materials are available at villageofwinnetka.org (Government > Council Information > Agenda Packets & Minutes); the Reference Desk at the Winnetka Library; or in the Manager's Office at Village Hall (2nd floor). Webcasts of the meeting may be viewed on the Internet via a link on the Village's web site: http://www.villageofwinnetka.org/government/village-videos/.

The Village of Winnetka, in compliance with the Americans with Disabilities Act, requests that all persons with disabilities who require certain accommodations to allow them to observe and/or participate in this meeting or have questions about the accessibility of the meeting or facilities, contact the Village ADA Coordinator – Megan Pierce, at 510 Green Bay Road, Winnetka, Illinois 60093, 847-716-3543; T.D.D. 847-501-6041.

Agenda Item Executive Summary

Title: Electric Fund Rate Study

Presenter: Brian Keys, Director of Water & Electric

Agenda Date: 02/14/2017

Consent: ☐ YES ☑ NO

☐ Ordinance
☐ Resolution
☐ Bid Authorization/Award
☑ Policy Direction
☐ Informational Only

Item History:

In 2016, the Village Council requested an electric utility rate study after learning reserves in the Electric Fund were projected to be depleted based on the fund's Five Year Capital Improvement Plan. In March 2016, the Village contracted with Utility Financial Solutions, LLC (UFS) to perform the rate study. Last fall, UFS completed their review of the Electric Fund's financial data and rate structures, and calculated the projected revenue requirements for the fiscal years of 2017-2021. At the November 3, 2016 Regular Council meeting, the consultant presented their preliminary report.

Executive Summary:

At the November 3, 2016 Regular Council meeting, the consultant, UFS, presented a preliminary reported entitled, "Preliminary Report for Electric Cost of Service Study". The presentation generated extensive discussion, and the consultant was asked to re-evaluate various facets of the analysis. Areas of consensus included the following:

- Overall rate adjustment for 2017 set at 4.0% with a bandwidth of +/- 2.0%
- Retain the Village's Fund Balance Policy of four months' operating expenses (UFS proposed increasing the cash reserve policy).
- Revise the Power Cost Adjustment (PCA) methodology to bi-monthly calculations, based on the 12 month rolling average cost. Currently, the calculation is done annually.

Additional analysis and information was required in the following areas:

- Revised rate track(s) based on the Village's Fund Balance Policy
- Clarification on the financial information presented
- Clarification on the financial impact associated with continued power generation

Policy direction from the Council is required before proceeding with the development of proposed electric rates for 2018-2021. Each of the listed critical decisions will have an impact on the rate design. A representative from UFS will be at the February 14th Village Council Study Session to review the prepared information. Following the presentation, Village staff and the Consultant will address questions regarding the work completed to date and the next steps.

Recommendation:

Provide policy direction regarding the critical decisions outlined with respect to the electric utility.

Attachments:

Agenda Report dated February 7, 2017

AGENDA REPORT

SUBJECT:	Electric Fund Rate Study	
PREPARED BY:	Brian Keys, Director Water & Electric	
REF:	November 3, 2016	Council Meeting, pp. 153-186
	March 17, 2016	Council Meeting, pp. 183-344
DATE:	February 7, 2017	

<u>Background</u>

In 2016, the Village Council requested an electric utility rate study after learning reserves in the Electric Fund were projected to be depleted based on the fund's Five Year Capital Improvement Plan. In March 2016, the Village contracted with Utility Financial Solutions, LLC (UFS) to perform the required rate study.

Last fall, UFS completed their review of the Electric Fund's financial data and rate structures, and calculated the projected revenue requirements for the fiscal years of 2017-2021. UFS also completed a Cost of Service Study and developed preliminary recommendations on revenue rate tracks, cash reserves, diversification of the monthly customer charge categories and changes to the wholesale power cost adjustment calculation. At the November 3, 2016 Village Council meeting, the consultant presented a preliminary reported entitled, "*Preliminary Report for Electric Cost of Service Study*".

The presentation generated extensive discussion, and the consultant was asked to re-evaluate various facets of the analysis. Areas of consensus included the following:

- Overall rate adjustment for 2017 set at 4.0% with a bandwidth of +/- 2.0%
- Retain the Village's Fund Balance Policy (four months' operating expenses), UFS proposed increasing the cash reserve policy.
- Revise the Power Cost Adjustment (PCA) methodology to bi-monthly calculations, based on the 12 month rolling average cost. Currently, the calculation is done annually.

Additional analysis and information was required in the following areas:

- Revised rate track(s) based on the Village's Fund Balance Policy
- Clarification on the financial information presented
- Clarification on the financial impact associated with continued power generation

2017 Rate Adjustments

An overall rate adjustment of 4.0% was established for 2017 with a bandwidth of +/- 2.0% by revising the Customer Charge, Demand Charge, and Energy Charge. The Customer Charge is a fixed charge based on the type of service rather than the amount of electricity used. The Demand Charge is based on the rate at which electricity is delivered, expressed in average kilowatts (kW) used over a 30 minute period. The Energy Charge is based on the volume of energy used, expressed in kilowatt hours (kWh).

The rates were adjusted based on disparities identified in the cost of service study, which revealed that some customer classes are subsidizing the electric costs of other customers. A summary of the 2017 electric rate increases by customer class has been included for reference.

Summary of 2017 Electric Rate Adjustments

Customer Class	Percent Adjustment (%)
Space Heat	3.0
Residential	3.7
Large Residential	3.9
Commercial	4.2
School & Government (>1000 kW)	5.0
School & Government (<1000 kW)	5.2
Street Lights	5.5
Water Heat	5.7

Fund Balance Policy

The Electric Fund Balance Policy is currently set at four months (120 days) of operating expenses. For 2017, the targeted amount is $4.4 million. Based on their review of Operating & Maintenance (O&M) expenditures (less depreciation), the historical rate base, billing cycles and the Five Year Capital Improvement Plan, UFS initially recommended the cash reserves be increased to $7.1 million, which is approximately 194 days of "cash on hand". Sufficient cash reserves ensure adequate funds for the timely completion of capital improvements and enables funding of unexpected emergencies. Rationales to retain the existing Fund Balance Policy include the positive financial health of the General Fund, the Electric Fund's demonstrated capacity to fund restoration work following past storm events, no outstanding debt service for the utility, and the potential impact of a higher fund balance policy on customer rates.

Power Cost Adjustment Methodology

The Power Cost Adjustment is a means to account for variability in the wholesale cost of power, and is currently calculated on an annual basis. UFS recommended the Electric Fund adopt a 12 month rolling average calculation, computed each bi-monthly billing cycle. Any shortfalls and/or overages would be applied and collected or credited in the next two month period. This method is preferred as it provides revenue stability in times when the power supply varies from annual projections, and reduces the customer bill impact between each annual adjustment. This approach is being implemented in 2017.

Rate Tracks

The primary purpose of the rate study is to identify the revenue needs and the corresponding revenue adjustments required to ensure funds are available for the electric utility to complete identified capital projects and to meet an established cash reserve policy. In the absence of any revenue increases, the Electric Fund is expected to have a $2.2 million cash reserve deficit in the Year 2021.

Based on discussion at the November 3, 2016 Study Session, UFS has revised its proposed rate track for years 2018-2021 which delivers compliance with Winnetka's Fund Balance Policy by the Year 2021, funds the scheduled projects in the Five Year Capital Improvement Plan, and provides level rate adjustments of 2.4% annually until 2021.

Proposed Rate Track (based on Winnetka Fund Balance Policy)

Fiscal Year	Projected Rate Adjustments	With PCA Annual Adjustment	Projected Revenues	Projected Expenses (with transfer)	Operating Income (with transfer)	Projected Cash Balances	Capital Improvements
2017	**4.00%**	4.20%	$16,439,137	$15,939,952	$ 499,184	$4,379,200	$ 2,589,380
2018	**2.40%**	3.20%	16,930,094	16,314,054	616,039	3,844,421	2,804,557
2019	**2.40%**	6.10%	17,535,458	16,874,274	661,184	3,683,780	2,583,321
2020	**2.40%**	3.50%	18,660,118	17,246,572	1,413,546	4,178,709	2,787,529
2021	**2.40%**	3.50%	19,384,945	17,635,595	1,749,351	4,886,075	3,027,192
Winnetka Cash Policy Requirement in 2017						**$ 4,409,879**	
Winnetka Cash Policy Requirement in 2021						**$ 4,811,428**	

The proposed rate track has been constructed assuming that generating turbines remain in production and the Village continues to receive capacity credits from the Illinois Municipal Electric Agency (IMEA) totaling $1.4 million per year.

The projected rate increases of 2.4% are lower than the previous rate tracks presented in November 2016. This is primarily attributed to basing revenue requirements on the current cash reserve policy, rather than targeting operating income to fully fund depreciation expenses and inflationary increases on the system's assets. Rate tracks presented in November 2016 are summarized below.

November 2016 - Proposed Rate Tracks (based on targeted operating income)

Fiscal Year	Proposed Rate Adjustment (Option A)	Proposed Rate Adjustment (Option B)	Proposed Rate Adjustment (Option C)
2017	4.0%	3.7%	4.8%
2018	3.5%	3.7%	4.2%
2019	3.5%	3.7%	1.3%
2020	3.5%	3.7%	3.9%
2021	3.5%	3.7%	3.9%

Projected Rate Track Associated Without Steam Turbine Generation

The Village operates three steam turbines and two diesel generators. The generating units are dispatched by the IMEA with the exception of periodic maintenance runs scheduled by the Village to ensure plant staff is trained and the units are functioning. The diesel generators also serve as emergency power sources to the Village's water distribution system. In most instances, the units are only used during summer months during periods of peak electrical demand. The contract with IMEA credits $1.4 million on the Village's annual wholesale electric bill, provided that the units meet periodic tests and perform in accordance with dispatch requests. The Village is also reimbursed for fuel and credited $0.003 per generated kWh.

UFS has developed an alternate financial projection based on removal of the Village's steam turbines from production, with a corresponding removal from depreciation and elimination of the capacity credits for steam generation from IMEA. This new projection indicates that rate adjustments of 4.35% are required in the years 2018-2021 to fund the projects scheduled in the Five Year Capital Improvement Plan and meet the Fund Balance Policy by 2021. The projected rate track shown below assumes the Village continues to operate the diesel generators required to support the Water Plant and receives IMEA capacity credits for the diesel operations.

Fiscal Year	Projected Rate Adjustments	With PCA Annual Adjustment	Projected Revenues	Projected Expenses (with transfer)	Operating Income (with transfer)	Projected Cash Balances	Capital Improvements
2017	**4.00%**	4.20%	$16,439,137	$16,639,547	$ (200,410)	$4,016,470	$ 2,589,380
2018	**4.35%**	5.15%	17,235,600	17,007,603	227,997	3,093,648	2,804,557
2019	**4.35%**	8.05%	18,175,330	17,597,300	578,030	2,849,852	2,583,321
2020	**4.35%**	5.45%	19,694,205	17,966,884	1,727,321	3,658,557	2,787,529
2021	**4.35%**	5.45%	20,833,231	18,352,843	2,480,388	5,096,960	3,027,192
Winnetka Cash Policy Requirement in 2017						**$ 4,639,882**	
Winnetka Cash Policy Requirement in 2021						**$ 5,047,236**	

UFS is tasked with developing new rates for the Village's Electric Fund. In addition to selecting the agreed-upon rate adjustment, the Council also needs to provide direction on the acceptable bandwidth for the rates proposed. As noted in the Cost of Service Study, some customer classes are subsidizing the costs of other classes. It is therefore recommended that a bandwidth of +/- 1.0% be used in the rate design. Based on a proposed rate adjustment of 2.4%, rate changes for each of the customer classes would range from 1.4% to 3.4%.

Monthly Service Charges

As previously noted, UFS has completed the Cost of Service Study for the Electric Fund. One component analyzed in the study is the "customer charge". This is a fixed charge based on the type of service, rather than the amount of electricity used. With the exception of street lights, the Village has only two classifications for assessing a monthly customer charge. Customers receiving single phase service pay $11.46 per month and customers receiving three-phase service pay $17.76 per month. There is no differentiation between the customer classes, and the Cost of Service Study indicates that most customer classes are paying below the cost of service. Therefore, UFS recommends creation of a separate monthly service charge for each class of customer including: Residential, Large Residential, Water Heating, Space Heating, Commercial, School & Government (<1,000 kW) and School & Government (> 1,000 kW).

Policy Considerations

Critical Decision #1: Is the proposed rate track of 2.4% acceptable for development of rates for years 2018-2021?

And

Critical Decision #2: Is a proposed plus or minus 1.0% bandwidth for each class of customer acceptable for new rates based on the Cost of Service Study?

Critical Decision #3: The Cost of Service Study indicates that customers are paying charges below the cost of service. The consultant recommends a monthly customer charge be developed for each customer class (Residential, Large Residential, Water Heating, Space Heating, Commercial, School & Government) and adjusted accordingly. Should the consultant proceed with development of a monthly customer charge for each proposed class?

Next Steps
Policy direction from the Council is required before proceeding with the development of proposed electric rates for 2018-2021. Each of the listed critical decisions will have an impact on the rate design.

Based on direction from the Village Council, UFS will make the required changes to their financial analysis and proceed with the development of four years of electric rates. The proposed rates will be presented to the Village Council for their consideration at a future meeting.

A representative from UFS will be at the February 14th Village Council Study Session to review the prepared information. Village staff and the Consultant will address questions regarding the work completed to date and the next steps.

Recommendation:
Provide policy direction regarding the critical decisions outlined with respect to the electric utility.