



Memorandum

To: Honorable Mayor and Members of the City Council
CC: Members of Administration and Public Works Committee
From: Paul Moyano, Senior Project Manager
CC: Lara Biggs, Acting Public Works Agency Director
Subject: Ordinance 112-O-23, Authorizing the City to Borrow Funds from the Illinois Environmental Protection Agency Public Water Supply Loan Program
Date: November 13, 2023

Recommended Action:

Staff recommends that the City Council adopt Ordinance 112-O-23, authorizing the City to borrow funds from the Illinois Environmental Protection Agency (IEPA) Public Water Supply Loan Program (PWSLP). This loan will fund the Water Plant Electrical System Reliability Project. *City Manager Stowe recommends suspending the City Council rules for introduction and action at the November 13, 2023, City Council meeting.*

Funding Source:

This ordinance authorizes the City to borrow up to \$18,900,000.00 from the Illinois Environmental Protection Agency (IEPA) State Revolving Fund (SRF) Public Water Supply Loan Program (PWSLP). The debt service will be paid from the Water Fund. Our wholesale water customers will fund most, if not all, of the debt service once the project is completed.

CARP:

Municipal Operations, Renewable Energy, Emergency Preparedness & Management

Council Action:

For Introduction and Action

Summary:

The Evanston Water Plant supports over 330 million gallons per day of pumping capacity that is primarily driven by a 4160 Volt electrical system. A portion of the switchgear that controls this system was installed in 1964. Two generators currently provide backup power to the water plant's electrical supply. These generators were installed in 1985/1999 and are undersized to meet current demands. This critical equipment is past its useful life and in need of replacement. A low-voltage system integrated with the medium voltage system is

also outdated and needs an upgrade to meet current safety and reliability standards. An expansion of the water plant building is needed to house the new equipment.

Design for this significant project began in September 2022 and is currently 90% complete. The design includes two new 500KW 4160 volt natural-gas generators, 4160-volt switchgear, 480-volt switchgear, miscellaneous reliability improvements throughout the water plant, and the capability to incorporate electric vehicle chargers and solar power in the future. Construction is anticipated to take 36 months over a 4-year period, and the schedule provides almost a year for procurement of the new electrical equipment.

Analysis:

The total debt ordinance authorization is \$18,900,000 and includes construction, engineering, and financing costs, as shown in the table below. Construction costs are based on a Class 2 Opinion of Probable Construction Cost. The construction cost estimate was developed by the design engineer, a Class 2 Opinion of Probable Construction Cost, and is based on the 90% design. A relatively high contingency is included in the budget to account for a number of variables, including a volatile construction market, rising cost of electrical gear, supply chain challenges that persist with this type of equipment, and Build America Buy America requirements of the loan.

Staff has been working to secure funding from the Illinois Environmental Protection Agency (IEPA) State Revolving Fund (SRF) Public Water Supply Loan Program (PWSLP) for more than a year.

Item	Amount
Design Engineering	\$935,834
Construction Engineering	\$1,600,000
Construction	\$14,000,000
Construction Contingency	\$2,000,000
Financing Costs	\$278,000
Total Project Costs	\$18,813,834
Debt Ordinance Authorization	\$18,900,000

The SRF loan is a 20-year loan with a current interest rate of 1.81%. The staff has obtained approval of the Project Plan from the IEPA pending public notification. The next step in the loan process is the preparation of the full financial application, which requires the passage of this debt authorization ordinance. The application must be submitted by the end of November, so staff is requesting introduction and action at the November 13th Council Meeting.

The project cost and debt service are included in the attached water fund financial analysis. While water rate increases prompted by increased lead service line and water main replacement are shown on the water fund analysis, the debt service related to this project will be covered by the City's wholesale water customers.

Because of the time sensitivity associated with applying for this funding, the staff is requesting that this ordinance be introduced and approved in one reading.

Legislative History:

On September 12, 2022, the City Council awarded the engineering services for the Water Plant 4160V Electrical System Reliability Project (RFP 22-30) to Greeley and Hansen, LLC.

On April 24, 2023, the City Council approved Change Order No. 1 to the engineering services agreement with Greeley and Hansen, LLC.

On April 24, 2023, the City Council awarded the engineering services for the Retaining Wall Structural Design related to the Water Plant 4160V Electrical System Reliability Project to Greeley and Hansen, LLC.

Attachments:

[Ordinance 112-O-23](#)

[Financial Analysis](#)

112-O-23

AN ORDINANCE

**Authorizing the City to Borrow Funds from
the Illinois Environmental Protection Agency
Public Water Supply Loan Program**

WHEREAS, the City of Evanston, in the County of Cook, Illinois (the “City”) operates its public water supply system (“the System”) and in accordance with the provisions of the provisions of Section 6(a) of Article VII of the 1970 Constitution of the State of Illinois and the Local Government Debt Reform Act, 30 ILCS 350/1 et seq. (collectively “the Act”); and

WHEREAS, the Mayor and City Council of the City (the “Corporate Authorities”) have determined that it is advisable, necessary, and in the best interest of the public health, safety and welfare to improve the System including the following:

Reliability improvements to the Evanston Water Plant electrical system, including electrical generators, medium voltage switchgear, low voltage switchgear, miscellaneous electrical improvements, building expansion, and related civil, structural, architectural, mechanical, and instrumentation and control work.

together with any land or rights in land and all electrical, mechanical or other services necessary, useful or advisable to the construction and installation (the “Project”), all in accordance with the plans and specifications prepared by the consulting engineers of the City, which Project has a useful life of 35 years; and

WHEREAS, the estimated cost of constructing and installing the Project, including engineering, legal, financial, and other related expenses is Eighteen Million Nine Hundred Thousand dollars (\$18,900,000) and there are insufficient funds on hand and lawfully available to pay such costs; and

WHEREAS, the loan shall bear an interest rate as defined by 35 Ill. Adm. Code 662, which does not exceed the maximum rate authorized by the Bond Authorization Act, as amended, 30 ILCS 305/0.01 et seq., at the time of the issuance of the loan; and

WHEREAS, the principal and interest payment shall be payable semi-annually and the loan shall mature in twenty (20) years, which is within the period of useful life of the Project; and

WHEREAS, the costs are expected to be paid for with a loan to the City from the Public Water Supply Loan Program through the Illinois Environmental Protection Agency, the loan to be repaid from revenues from the System and the loan is authorized to be accepted at this time pursuant to the Act; and

WHEREAS, in accordance with the provisions of the Act, the City is authorized to borrow funds from the Public Waters Supply Loan Program in the aggregate principal amount of Eighteen Million Nine Hundred Thousand dollars (\$18,900,000) to provide funds to pay the costs of the Project and;

WHEREAS, the loan to the City shall be made pursuant to a Loan Agreement, including certain terms and conditions between the City and the Illinois Environmental Protection Agency;

NOW THEREFORE, BE IT ORDAINED BY THE CORPORATE AUTHORITIES OF THE CITY OF EVANSTON, COOK COUNTY, ILLINOIS AS FOLLOWS:

SECTION 1: The Corporate Authorities hereby find that the recitals contained in the preambles are true and correct, and incorporate them into this Ordinance by this reference.

SECTION 2: It is necessary and in the best interests of the City to construct the Project for the public health, safety and welfare, in accordance with the plans and specifications, as described; that the System continues to be operated in accordance with the provisions of the Illinois Environmental Protection Act, 415 ILCS 5/1 et seq.; and that for the purpose of constructing the Project, it is hereby authorized that funds be borrowed by the City in the aggregate principal amount (which can include construction period interest financed over the term of the loan) not to exceed Eighteen Million Nine Hundred Thousand dollars (\$18,900,000).

SECTION 3: The Corporate Authorities may adopt additional ordinances or proceedings supplementing or amending this Ordinance, providing for entering into the Loan Agreement with the Illinois Environmental Protection Agency, prescribing all the details of the Loan Agreement, and providing for the collection, segregation and distribution of the revenues of the System, so long as the maximum amount of the Loan Agreement as set forth in this Ordinance is not exceeded and there is no material change in the project or purposes described herein. Any additional ordinances or proceedings shall in all instances become effective in accordance with the Act or other applicable laws. This Ordinance, together with such additional ordinances or proceedings, shall constitute complete authority for entering into the Loan Agreement under applicable law.

However, notwithstanding the above, the City may not adopt additional ordinances or amendments which provide for any substantive or material change in the

scope and intent of this Ordinance, including but not limited to interest rate, preference or priority of any other ordinance with this Ordinance, parity of any other ordinance with this Ordinance, or otherwise alter or impair the obligation of the City to pay the principal and interest due to the Public Water Supply Loan Program without the written consent of the Illinois Environmental Protection Agency.

SECTION 4: Repayment of the loan to the Illinois Environmental Protection Agency by the City pursuant to this Ordinance is to be solely from the revenue derived from revenues of the System, and the loan does not constitute an indebtedness of the City within the meaning of any constitutional or statutory limitation.

SECTION 5: The City Manager is hereby authorized to make an application to the Illinois Environmental Protection Agency for a loan through the Public Water Supply Loan Program, in accordance with the loan requirements set out in 35 Ill. Adm. Code 662.

SECTION 6: The Corporate Authorities hereby authorize acceptance of the offer of a loan through the Public Water Supply Loan Program, including all terms and conditions of the Loan Agreement as well as all special conditions contained therein and made a part thereof by reference. The Corporate Authorities further agree that the loan funds awarded shall be used solely for the purposes of the project as approved by the Illinois Environmental Protection Agency in accordance with the terms and conditions of the Loan Agreement.

SECTION 7: The City has outstanding bonds, payable from revenues of the system, that are senior to the loan authorized by this Ordinance, and the City establishes an account, coverage, and reserves equivalent to the account(s), coverage(s) and

reserve(s) as the senior lien holders in accordance with 35 Ill. Adm. Code 662.350(a)(9)(C)(PWS).

SECTION 8: The City Manager is hereby authorized and directed to execute the Loan Agreement with the Illinois Environmental Protection Agency. The Corporate Authorities may authorize by resolution a person other than the City Manager for the sole purpose of authorizing or executing any documents associated with payment requests or reimbursements from the Illinois Environmental Protection Agency in connection with this loan.

SECTION 9: If any section, paragraph, clause or provision of this Ordinance is held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this Ordinance.

SECTION 10: All ordinances, resolutions, orders, or parts thereof, which conflict with the provisions of this Ordinance, to the extent of such conflict, are hereby repealed.

Introduced: _____, 2023

Approved:

Adopted: _____, 2023

_____, 2023

Daniel Biss, Mayor

Attest:

Approved as to form:

Stephanie Mendoza, City Clerk

Alexandra B. Ruggie, Interim Corporation Counsel

**City of Evanston
Water Plant Electrical System Reliability Project
L17-6577
Six-Year Projection of Revenues, Operations, Maintenance, and Debt Service**

	Actual - Previous 3 Years			Estimated - Next 6 Years, Starting with Current Fiscal Year						
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Water Rate Increase	11.0%	5.4%	9.5%	5.0%	17.5%	23.3%	13.5%	13.5%	13.5%	13.5%
Operating Revenues										
User charge (system) revenue	8,529,573	8,771,787	9,638,911	9,722,616	11,424,073	14,088,167	15,990,070	18,148,729	20,598,808	23,379,647
Wholesale Revenue (Skokie, Northwest Water Commission, Morton Grove/Niles, Lincolnwood)	13,471,496	11,415,711	12,969,677	13,268,951	13,500,551	13,735,326	16,550,497	16,982,210	18,029,601	19,345,491
Misc. Fees and Revenue	850,418	1,224,892	889,328	3,738,930	5,962,650	1,828,053	844,120	1,210,883	1,228,370	1,257,115
Interest Income			8,299	2,461	2,032	2,943	2,920	2,951	2,960	2,956
Total Operating Revenues	22,851,487	21,412,390	23,506,215	26,732,958	30,889,307	29,654,489	33,387,607	36,344,772	39,859,739	43,985,210
Operating Expenses										
Salaries & Wages	4,115,656	4,306,380	3,845,689	5,225,600	5,448,182	5,533,136	5,671,465	5,813,251	5,958,583	6,107,547
Benefits	1,351,957	1,407,224	1,154,531	1,326,132	1,575,879	1,647,516	1,722,571	1,801,213	1,883,617	1,969,965
Engineering fees (Studies)	333,799	290,102	340,127	547,000	1,380,800	651,324	410,394	417,681	425,173	432,876
Utilities	1,097,323	1,109,871	909,510	1,082,700	1,055,633	1,087,302	1,119,921	1,153,519	1,188,124	1,223,768
Repairs and maintenance	258,586	287,409	206,410	471,900	539,600	555,788	572,462	589,635	607,325	625,544
Supplies	798,734	1,021,690	1,328,814	2,181,610	2,095,790	2,029,019	2,064,535	2,100,952	2,138,293	2,176,586
Miscellaneous	823,276	830,246	688,847	1,048,720	1,135,220	1,165,347	1,196,377	1,228,338	1,261,258	1,295,166
Total Operating Expenses	8,779,330	9,252,922	8,473,928	11,883,662	13,231,104	12,669,431	12,757,726	13,104,590	13,462,373	13,831,453
TOTAL OPERATING INCOME	14,072,156	12,159,468	15,032,287	14,849,295	17,658,203	16,985,058	20,629,881	23,240,182	26,397,366	30,153,757
Non Operating Revenues (Expenses)										
Debt Service (Principal and Interest) - Existing prior to this loan, GO Bonds and IEPA SRF Debt Service	(2,290,933)	(3,442,912)	(3,818,594)	(4,948,747)	(5,118,567)	(5,116,079)	(5,118,664)	(5,119,947)	(5,118,846)	(5,113,335)
Transfers (Other Fund, General Fund, Insurance Fund)	(5,313,514)	(5,589,212)	(5,600,005)	(5,732,501)	(5,868,861)	(6,009,200)	(6,153,635)	(5,302,286)	(5,461,354)	(5,625,195)
Minor Capital Outlay	(2,129)	(89,126)	(64,917)	(335,000)	(1,141,500)	(265,180)	(291,474)	(391,619)	(301,917)	(427,375)
New GO Bonds	5,013,000	5,495,000	5,618,256	-	18,181,000	13,551,000	19,404,000	21,452,120	22,515,362	17,369,730
WIFIA Proceeds - 36"/42" Intake Replacement					20,386,000					
IEPA SRF - Loan Proceeds										
36"/42" Intake Replacement			777,149	15,210,000	19,292,790					
Electrical Reliability Project					3,300,000	5,500,000	5,500,000	3,300,000		
East Filter Plant Reliability						5,500,000	5,500,000			
West Filter Plant Modifications									6,500,000	5,500,000
Annual LSLR					-	4,105,000	5,636,000	5,648,000	5,660,240	5,672,725
Annual Water Main Replacement					-	-	-	-	-	-
Small Diameter Water Main Lining (L17-5393)						1,300,000				
Large Diameter Water Main Lining									2,000,000	
Total Non-Operating Income (Loss)	(2,593,576)	(3,626,250)	(3,088,111)	4,193,752	53,135,862	20,096,540	24,488,227	19,598,508	25,805,970	15,593,825
Net Change in Position Before Capital Items	11,478,581	8,533,219	11,944,176	19,043,047	70,794,065	37,081,598	45,118,109	42,838,691	52,203,336	45,747,582
Capital Items										
Capital Projects Funded with Cash	(1,496,000)	(1,615,000)	(5,040,631)	(9,302,457)	(1,775,000)	(2,015,000)	(2,914,600)	(3,671,400)	(3,742,576)	(4,834,559)
Capital Projects Funded with GO Bonds	(5,013,000)	(5,495,000)	(5,618,256)	-	(18,181,000)	(13,551,000)	(19,404,000)	(21,452,120)	(22,515,362)	(17,369,730)
Capital Projects Funded with WIFIA (Intake)						(20,386,000)				
Capital Projects Funded with SRF Loans										
36"/42" Intake Replacement			(777,149)	(15,210,000)	(19,292,790)					
Electrical Reliability Project					(3,300,000)	(5,500,000)	(5,500,000)	(3,300,000)		
East Filter Plant Reliability						(5,500,000)	(5,500,000)			
West Filter Plant Modifications									(6,500,000)	(5,500,000)
LSLR Pilot (Construction)						(4,105,000)	(5,636,000)	(5,648,000)	(5,660,240)	(5,672,725)
Annual Water Main Replacement										
Small Diameter Water Main Lining (L17-5393)						(1,300,000)				
Large Diameter Water Main Lining										(2,000,000)
New Debt Service - GO Bonds							(1,449,605)	(2,530,051)	(4,077,167)	(5,787,585)
New Debt Service - WIFIA (Intake)							(952,193)	(952,193)	(952,193)	(952,193)
New Debt Service - IEPA SRF										
36"/42" Intake Replacement							(2,006,036)	(2,006,036)	(2,006,036)	(2,006,036)
Electrical Reliability Project										(1,122,592)
East Filter Plant Reliability										(645,508)
West Filter Plant Modifications										(645,508)
Annual LSLR							(234,997)	(565,732)	(897,171)	(1,245,929)
Annual Water Main Replacement										
Small Diameter Water Main Lining (L17-5393)										(76,287)
Large Diameter Water Main Lining										(123,231)
Total Capital Items	(6,509,000)	(7,110,000)	(11,436,036)	(24,512,457)	(67,039,790)	(37,192,638)	(45,096,900)	(42,738,124)	(52,266,794)	(45,698,368)
NET CHANGE IN POSITION	4,969,581	1,423,219	508,140	(5,469,410)	3,754,275	(111,040)	21,209	100,567	(63,458)	49,214
Beginning Water Fund Reserve	\$ 756,594	\$ 5,726,175	\$ 7,149,393	\$ 7,657,533	\$ 2,188,123	\$ 5,942,398	\$ 5,831,358	\$ 5,852,567	\$ 5,953,134	\$ 5,889,677
Ending Water Fund Reserve	\$ 5,726,175	\$ 7,149,393	\$ 7,657,533	\$ 2,188,123	\$ 5,942,398	\$ 5,831,358	\$ 5,852,567	\$ 5,953,134	\$ 5,889,677	\$ 5,938,890
Target Water Fund Reserve	\$ 3,500,000	\$ 3,500,000	\$ 3,500,000	\$ 3,500,000	\$ 5,800,000	\$ 5,800,000	\$ 5,800,000	\$ 5,800,000	\$ 5,800,000	\$ 5,800,000