

#### OFFICIAL NOTICE AND AGENDA

of a meeting of a City Board, Commission, Department, Committee, Agency, Corporation, Quasi-Municipal Corporation, or sub-unit thereof.

Meeting of the: FINANCE COMMITTEE
Date/Time: Tuesday, May 28, 2024, at 5:15 PM

Location: City Hall (407 Grant Street) - Council Chambers

Members: Michael Martens (C), Gary Gisselman (VC), Becky McElhaney, Terry Kilian, Vicki Tierney

#### FINANCE COMMITTEE AGENDA ITEMS

- 1 Minutes of the previous meeting (05/14/24).
- 2 Discussion and possible action on a budget modification to purchase of 10 Portable Motorola Radios for the Wausau Police Department.
- 3 Discussion and possible action to waive the fees for Firework Display permit and Temporary "Class B" Picnic Licnese for Man of Honor Annual Raffle Event.
- 4 Discussion and possible action approving sole source purchasing for the purchase of (8) Eight PVS-14 L3 Harris night vision units and mounts for the Wausau Fire Department.
- 5 Discussion and possible action approving budget modification for the Abel LS construction project.
- 6 Discussion and possible action regarding ARPA funding requests and related budget modification for Wausau Water Works Solar Array.

Adjourn

Michael Martens, Chairperson

NOTICE: The makeup of the Finance Committee and Human Resources Committee are identical; therefore, it is expected that a quorum of members of the Human Resources Committee will be in attendance. It is possible that a quorum of members of other committees of the Common Council of the City of Wausau may be in attendance at the above-mentioned meeting. No action will be taken by any such groups.

Members of the public who do not wish to appear in person may view the meeting live over the internet, live by cable TV, Channel 981, and a video is available in its entirety and can be accessed at <a href="https://tinyurl.com/WausauCityCouncil">https://tinyurl.com/WausauCityCouncil</a>. Any person wishing to offer public comment who does not appear in person to do so, may e-mail kody.hart2@ci.wausau.wi.us with "Finance Committee Public Comment" in the subject line prior to the meeting start. All public comment, either by email or in person, will be limited to items on the agenda at this time. The messages related to agenda items received prior to the start of the meeting will be provided to the Chair.

#### This Notice was posted at City Hall and faxed to the Daily Herald newsroom 05/24/2024 at 4:00 PM

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 (ADA), the City of Wausau will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs or activities. If you need assistance or reasonable accommodations in participating in this meeting or event due to a disability as defined under the ADA, please call the ADA Coordinator at (715) 261-6590 or <u>ADAServices@ci.wausau.wi.us</u> to discuss your accessibility needs. We ask your request be provided a minimum of 72 hours before the scheduled event or meeting. If a request is made less than 72 hours before the event the City of Wausau will make a good faith effort to accommodate your request.

#### FINANCE COMMITTEE

Date and Time: Tuesday, May 14, 2024, at 5:15 p.m., Council Chambers Members Present: Gary Gisselman (VC), Terry Kilian, Vicki Tierney

Members Excused: Michael Martens (C), Becky McElhaney

Others Present: Mayor Diny, Mary Anne Groat, Matt Barnes, Justin Pluess, Anne Jacobson, Eric Lindman, Dustin

Kraege, Liz Brodek, Tammy Statz, Kody Hart, Alder Henke

Noting the presence of a quorum Vice Chairperson Gisselman called the meeting to order at 5:15 p.m.

#### Minutes of the previous meeting(s) (04/23/2024).

Motion by Kilian, seconded by Tierney, to accept the minutes with an amendment on item 9 to state that Kilian had questioned as to why the city would move ahead on either of the two projects when the projects had not yet been given principal forgiveness. Motion carried 3-0.

#### Presentation on the Solar Array Recommendation by the Solar Array Task Force.

Kilian stated that the task force has done a lot of work and thanked the task force for their work.

## <u>Discussion and possible action regarding ARPA funding requests and related budget modification for Wausau Water Works Solar Array.</u>

Gisselman requested that this item be ranked and scored for ARPA funding for consideration at the next meeting.

## <u>Discussion and possible action approving the Intergovernmental Agreement for Law Enforcement Services for the 2024 Republican National Convention in Milwaukee, Wisconsin.</u>

Motion by Kilian, seconded by Tierney, to approve the agreement. Motion carried 3-0.

## <u>Discussion and possible action on a budget modification of \$25,550 for the Riverside Park Soil Remediation.</u> Motion by Kilian, seconded by Tierney, to approve the budget modification. Motion carried 3-0.

#### <u>Discussion and possible action regarding Safe Drinking Water Loan Closing and Payoff of Note Anticipation</u> Note 2023A.

Motion by Tierney, seconded by Kilian, to approve moving this forward. Motion carried 3-0.

# <u>Discussion and possible action to approve and adopt a Budget Modification for American Rescue Plan</u> <u>Coronavirus State and Local Fiscal Recovery Fund Funded Projects to Supplement Existing Lead Line</u> <u>Replacement Study.</u>

Motion by Tierney, seconded by Kilian, to approve the budget modification. Motion carried 3-0.

#### Discussion and Approval of 2024 Community Development Block Grant Program Year Allocations.

Kilian stated that there are no appropriate non-English language notifications for Community Development Block Grant meetings. It was stated that the Community Development Department works with organizations to get the word out of these meetings as it was stated that written notifications often go unread and verbally communicated notifications work best. It was stated that the department is working to get notifications on Hmong radio networks. Kilian requested that notifications be provided on the city website in languages other than English.

Motion by Kilian, seconded by Teirney, to approve the 2024 Community Development Block Grant Program Year Allocations. Motion carried 3-0.

#### <u>Adjourn</u>

Motion by Kilian, second by Tierney, to adjourn the meeting. Motion carried. Meeting adjourned at 5:51 p.m.

For full meeting video on YouTube: <a href="https://www.youtube.com/watch?v=FeTlbZ-VGJs">https://www.youtube.com/watch?v=FeTlbZ-VGJs</a>



# WAUSAU

...as the standard of excellence in policing

#### Memorandum

From: Captain Melinda Pauls, Police Department

To: Finance Committee

Date: May 23, 2024

Re: Use of Carry over funds for Motorola radio purchase

#### **Purpose:**

Requesting the use of 2023 carry over funds to purchase 10 new Motorola radios.

#### **Background:**

Currently Wausau PD has 77 Motorola Radios for 81 sworn staff. Of those 77, 24 are at their end of life, and are not able to be serviced as problems arise. The remaining 53 are serviceable and in good working order. The department also has 47 Tait radios, used for non-sworn staff, nearing end of life.

The police department had prepared to begin replacement of 10 radios per year, by increasing budget by \$50,000 per budget cycle, beginning in 2024. Through agreement with Finance, this request was removed from the 2024 budget with the intention of using 2023 carry over funds, to begin this replacement cycle.

The use of carry over funds from 2023, will be used to start the replacement of 10 radios per year, beginning in 2024. The department will have an increase of \$50,000 in the 2025 budget, which will continue indefinitely to use for the 10 radio per year replacement cycle.

#### Impact:

There is current 2023 carry over dollars in the amount of \$50,000, to cover the purchase of 10 new Motorola radios.

#### **Recommendation:**

Department recommends approving the use of carry over funds for the purchase of 10 Motorola radios.



## Man of Honor Society

## Of Marathon County

P. O. Box 2071 Wausau, WI 54402

#### WAUSAU CITY COUNCIL

16 May 2024

The Man of Honor Society of Marathon County is a local veteran's group who raise funds to assist fellow veterans and their families in need. We will celebrate our 20<sup>th</sup>. Year of dedication to these veterans by holding a community raffle and celebration at the Eagles Club in Wausau on 7, 8 and 9<sup>th</sup>. June 2024. We are a non-political, non-profit {501-C3} organization and we have no dues in our society.

On Saturday, 8<sup>th</sup>. June we will have a fireworks display for all who wish to attend as it is open to the public. The setup at the Eagles Club will be identical as in the past and I have spoken to the Fire Department Officials, and they were very satisfied the way we handled the event in past years.

Once again, we are requesting the City Council waive any permit fees for the Fireworks Display on 8 June and for the temporary Class B Retailers license on 7, 8 and 9 June as they so graciously have done so since 2014. We anticipate hundreds of people from the surrounding area will be in attendance as they have been for the past years and will be a great benefit to the local community. Again, we are a non-profit organization, and we are all veterans helping veterans and their families in need. Local support from the surrounding area has been outstanding, for which we are extremely grateful.

Your gonsideration is greatly appreciated.

JEFF MORGAN President

Man of Honor Society of Marathon County



### FIREWORKS DISPLAY APPLICATION

MAN OF HONOR SOCIETY PO BOX 2071 WAUSAU, WI 54402-2071

#### **Applicant**

Name License ID 198191

**Telephone** 715-212-3743 **Type** Fireworks Display

Business Fees \$100.00

#### **Applicant Notice**

- 1. The City of Wausau may suspend, revoke or deny a license issued upon this application if the applicant fails to provide requested information or is not truthful in completion of this application.
- 2. The City of Wausau does not issue licenses or permits to any person who has habitually been a law offender or has been convicted of a felony that the City determines relates to the licensing activity, unless the person has been duly pardoned.
- 3. Your license or permit will be held if you owe any outstanding fines, forfeitures or other debts to the City.
- 4. Because application fees offset the cost to process your application, the fees are non-refundable regardless of whether you



### LIQUOR APPLICATION

MAN OF HONOR SOCIETY PO BOX 2071 WAUSAU, WI 54402-2071

#### **Applicant**

Name License ID 198190

Telephone 715-212-3743 Type Temporary "Class B" (Picnic)

Business MAN OF HONOR SOCIETY Fees \$10.00

#### **Applicant Notice**

- 1. The City of Wausau may suspend, revoke or deny a license issued upon this application if the applicant fails to provide requested information or is not truthful in completion of this application.
- 2. The City of Wausau does not issue licenses or permits to any person who has habitually been a law offender or has been convicted of a felony that the City determines relates to the licensing activity, unless the person has been duly pardoned.
- 3. Your license or permit will be held if you owe any outstanding fines, forfeitures or other debts to the City.
- 4. Because application fees offset the cost to process your application, the fees are non-refundable regardless of whether you



### CITY OF WAUSAU SOLE SOURCE PURCHASE JUSTIFICATION REQUIRED FORM PURCHASE OF GOODS OR SERVICES EXCEEDING \$5,000

Purchase of goods or services for no more than \$25,000 may be made without competition when it is agreed in advance between the Department Head and the Finance Director. Sole source purchasing allows for the procurement of goods and services from a single source without soliciting quotes or bids from multiple sources. Sole source procurement cannot be used to avoid competition, rather it is used in certain situations when it can be documented that a vendor or contractor holds a unique set of skills or expertise, that the services are highly specialized or unique in character or when alternate products are unavailable or unsuitable from any other source. Sole source purchasing should be avoided unless it is clearly necessary and justifiable. The justification must withstand public and legislative scrutiny. The Department Head is responsible for providing written documentation justifying the valid reason to purchase from one source or that only one source is available. Sole source purchasing criteria include: urgency due to public safety, serious injury financial or other, other unusual and compelling reasons, goods or service is available from only one source and no other good or service will satisfy the City's requirements, legal services provided by an attorney, lack of acceptable bids or quotes, an alternate product or manufacturer would not be compatible with current products resulting in additional operating or maintenance costs, standardization of a specific product or manufacturer will result in a more efficient or economical operation or aesthetics, or compatibility is an overriding consideration, the purchase is from another governmental body, continuity is achieved in a phased project, the supplier or service demonstrates a unique capability not found elsewhere, the purchase is more economical to the city on the basis of time and money of proposal development.

- 1. Sole source purchase under \$5,000 shall be evaluated and determined by the Department Head.
- 2. Sole source purchase of \$5,000 to \$25,000 a formal written justification shall be forwarded to the Finance Director who will concur with the sole source or assist in locating additional competitive sources.
- 3. Sole source purchase exceeding \$25,000 must be approved by the Finance Committee.

-				
-		Ongoing Sole Source – 365 days	One Time Sole Source Request	
1	Provide a detailed explain	nation of the good or service to be nurch	ased and vendor	

vide a detailed explanation of the good or service to be purchased and vendor.

The vendor for this request is TNVC Inc. The goods provided is (8) Eight PVS-14 L3 Harris night vision units. Also (8) mounts for the units to allow them to attach to our issued sheriff department tactical helmets and shipping. Tis would be used with funding secured through a donation.

Provide a brief description of the intended application for the service or goods to be purchased.

The reason for using this provider with the generous donation our TEMS team was provided is to keep continuity between ourselves and the sheriff's departments SWAT team. The units would be purchased through the same sales rep and company that the SWAT team currently uses. This company has been around for a long time and has a great reputation in the night vision world.

State why other products or services that compete in the market will not or do not meet your needs or comply with your specifications.

This particular vendor has an outstanding lifetime warranty on the main components of the individual units purchased through them. This purchase from this vendor provides continuity amongst the TEMS team members because it is the exact vendor and product already being worn by the rest of the SWAT team within the County.

4. Describe your efforts to identify other vendors to furnish the product or services.

Using the same gear as the rest of the team compared to the existing gear makes for a huge difference in safety as well as comfort particularly in the colder months. Using and training with County and the gear we are proposing to purchase "Exceeded Expectations".

5. How did you determine that the sole source vendor's price was reasonable?

The Wausau Fire Department TEMS team members have shopped and tried a variety of different gear setups finding this gear to be the most practical and reasonable over other gear while maintaining continuity in the team.

6.	Which of the following best describes this sole source procurement? Select all that apply.
	Product or vendor is uniquely qualified with capability not found elsewhere.
	Urgency due to public safety, serious financial injury or other. (explain)
$\boxtimes$	The procurement is of such a specialized nature that by virtue of experience, expertise, proximity or ownership of intellectual property
	Lack of acceptable quotes or bids.
	Product compatibility or the standardization of a
	product. Continuation of a phased project.
	Proposal development is uneconomical.
ı	Department: Fire Department
_	
L	reparer: Jeremy Kopp
١	lendor Name: TNVC Inc.
	xpected amount of purchase or contract: \$33.516.24
	epartment Head Signature: Date: 5/14/2024
	inance Director Signature: Date:



Doug Diny, Mayor

### Wausau Fire Department

606 East Thomas Street Wausau, Wisconsin 54403 Telephone (715) 261-7900 Fax (715) 261-7910



Jeremy Kopp, Fire Chief

May 14th, 2024

Re: Sole Source: Night vision units and mounts

To: City of Wausau Finance Committee

From: Wausau Fire Department

**Purpose:** The purpose of this memo is to request approval for a sole source purchase of night vision units for the Wausau Fire Department, funded by an anonymous donation facilitated through the Community Foundation.

**Background:** The Wausau Fire Department has been fortunate to receive funds for the purchase of eight (8) night vision units and eight (8) mounting brackets from an anonymous donor via the Community Foundation. These units are integral to ensuring continuity and safety within our Tactical Emergency Medical Services (TEMS) team, enhancing our capabilities in ways previously unavailable to us.

Attached Documents: Attached to this memo, you will find the following documents for your review:

- 1. W9 Form
- 2. Warranty Information
- 3. Quote for (8) PVS-14 L3 Harris night vision units and (8) mounting brackets, including shipping details.

**Rationale for Sole Source Request:** Our decision to pursue a sole source purchase from TNVC Inc. is rooted in several factors:

- Alignment with Sheriff's Department SWAT Team: Purchasing from TNVC Inc. ensures continuity between our TEMS team and the sheriff's department SWAT team, as they currently use the same supplier.
- Company Reputation and Warranty: TNVC Inc. is a reputable company with extensive experience in the night vision industry. Their outstanding lifetime warranty on main components provides assurance of product reliability and longevity.

**Request for Approval:** The Wausau Fire Department respectfully requests approval of this Sole Source request to contract with TNVC Inc. We firmly believe that this investment will yield significant dividends in safeguarding the health and welfare of our firefighters.

Best Regards,

Jeremy Kopp Fire Chief

(Rev. October 2018) Department of the Treasury

### **Request for Taxpayer Identification Number and Certification**

Give Form to the requester. Do not send to the IRS.

Internal	Revenue Service Go to www.irs.gov/FormW9 for	instructions and the late	st informatio	on.					
	1 Name (as shown on your income tax return). Name is required on this line	e; do not leave this line blank.	9 SORTONIA			2000	## I I I I I		
	TNVC, Inc.  2 Business name/disregarded entity name, if different from above	Factor in Motor and Con-						- CTE-100	
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S	1050 Nevada St, Suite 405	****							
	6 City, state, and ZIP code								
	Redlands, CA 92374								
	7 List account number(s) here (optional)				•				
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	n a U.S. citizen or other U.S. person (defined below); and								
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Sign Here			Date▶ 01-	-01-2	4				
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### TNVC Inc

1050 Nevada St. Suite 405 Redlands, Ca. 92374

## **Estimate**

Date	Estimate #
5/2/2024	19769-G

Name / Address	
City of Wausau Fire Department	
Quinn Ambrosius	
606 E. Thomas st.	
Wausau, WI 54403	

Ship To	
City of Wausau Fire Department	
Quinn Ambrosius	
606 E. Thomas st.	
Wausau, WI 54403	

		P.O.	No.		Terms	Rep
					Net 30	SC
Item	Description		Qty		Unit Price	Total
TNVC-TNVPVS14-L3WP-BLK	TNVC TNV/PVS-14, Gen3 L3Harris Unf White Phosphor, Black. Basic kit includes L3Harris data record, TNV/PVS-14, TNV Padded Pouch, TNVC Cleaning Kit, USG j-arm, pinhole lens cap, sacrifcial lens, der shield. TNVC Lifetime Limited Warranty.	: C I bayonet mist		8	3,980.28	31,842.247
NOR-RHINO-MNT	Norotos MILSPEC USGI Rhino Arm Mo P/N: 1701010 - A3256369	unt		8	178.00	1,424.00
Ground	Ground Shipping			1	250.00	250.00
			Subtot	al		\$33,516.24
			Sales	Гах	(0.0%)	\$0.00
			Total	î ă		\$33,516.24



Shane Cook
Business Development and Marketing
TNVC, Inc.
1050 Nevada Street
Suite 405
Redlands, California 92374

#### **Warranty Statement**

To Whom It May Concern;

#### **TNVC Lifetime Limited Warranty Policy:**

TNVC, Inc. and Night Goggles, Inc. warrants all TNV and NGI branded night vision devices assembled after 31 December 2017 (original warranty shall apply for products assembled prior to this date) for the lifetime of the product and guarantees this product to be free from manufacturing defects in material and workmanship under normal use, and transferable by the owner assuming that the product otherwise still falls within the scope of this warranty.

In the event that a defect covered by this warranty occurs TNVC, Inc. or Night Goggles, Inc., at its discretion, will either repair or replace the product. Such action on the part of TNVC, Inc. or Night Goggles, Inc. shall be the full extent of the company's liability, and the customer's sole and exclusive remedy. This warranty applies to all TNV and NGI-branded Night Vision Device housing systems, and furthermore warrants that all Image Intensifier Tubes will be free from manufacturing defects in material and workmanship under normal use for a period of 10 years after the original date of purchase. This warranty does not cover:

- Products that were used in other than normal and customary manner.
- Products that were misused.
- Products that were altered, modified, or repaired by the customer or a party other than TNVC, Inc.
- Products that were discontinued by the manufacturer and either parts or replacement units are not available due to reasons beyond the control of TNVC, Inc.
- Damage, defects, or failures resulting from use that would be construed by any reasonable person as normal and expected "wear and tear."

TNVC, Inc. shall not be responsible for any defects or damage that in the company's opinion, resulted from the mishandling, abuse, misuse, improper storage, or improper operation, including use in conjunction with equipment which is electrically or mechanically incompatible with or of inferior quality to the product, as well as failure to maintain the environmental conditions



specified by the manufacturer. This includes using rechargeable batteries, storing the product with batteries installed, or battery compartment corrosion due to faulty battery. Warranty claims falling outside of the scope of these written warranty terms may incur repair, labor, and shipping fees charged to the customer.

Customer is hereby notified that operation of the equipment during daylight or under excessive light conditions may permanently damage the image intensifier tube. While all TNV and NGI systems are auto-gated, they are not able to withstand exposure to constant light including, but not limited to, light sources, weapon sights, laser radiation. Auto-gated Image Intensifier Tubes are designed to stand up to nighttime battlefield light conditions, but prolonged exposure to any light source will still cause damage.

#### Shane Cook

Business Development and Marketing & Communications

#### TACTICAL NIGHT VISION COMPANY

www.tnvc.com (909) 796-7000 Ex. 202 shane@tnvc.com



Export of U.S. manufactured night vision equipment is strictly prohibited without a valid export license issued by the U.S. Department of State Office of Defense Trade Controls, in accordance with International Traffic in Arms (ITAR), Title 22, Code of Federal Regulations Part 120-130, and/or the U.S. Department of Commerce. For further information contact the Office of Defense Trade Control @ (202) 663-1282 and / or the U.S. Department of Commerce.



#### Dept. of Public Works & Utilities

### Eric Lindman, P.E. Director of Public Works & Utilities

**TO:** Finance Committee

**FROM:** Eric Lindman, P.E.

Director of Public Works & Utilities

**DATE:** May 28, 2024

**SUBJECT:** Abel Lift Station Budget Modification – ARPA & 2024 Budget

This is the only stormwater lift station within the city. The city council originally funded the proposed lift station rehabilitation through ARPA in the amount of \$900,000. Engineering worked with a consultant to prepare the design, plans and specifications for the project and it was bid in late April. Bids were opened at the Board of Public Works on May 21, 2024 and bids came in high. Low bid for construction was \$983,000 (\$895,000 base bid and \$88,000 Alternate). Additional expenditures in the amount \$75,000 were used toward professional engineering services to help prepare the specifications and drawings for bidding the project. The total project is \$1,058,000.

The needed amount of funds to award this project is a total of \$158,000. Using ARPA to fully fund projects over \$1,000,000 has special additional requirements so it is best if the city were to keep ARPA allocated funding to below this threshold. One option would be fund the remainder if this project as follows:

ARPA - \$70,000 Borrow (2024) - \$88,000 (amount of the alternate bid item)

#### 2024 GO Borrowing

Fire Station Land		805,000	
Street, Stormwater and Sidewalk Improvements			
W Wausau Ave, 10th to Stevens, STP Urban - Real Estate	-	60,000	
East Wausau Ave, 6th St to 18th St Design	-	58,500	
Grand/Bus 51, Kent to Lakewview Design	-	60,450	
Eau Claire Blvd, Grand Ave to west termini		1,925,000	
48th Avenue	TID 10	2,500,000 *	k
Emerson Street, Eau Claire Blvd to Kent St		150,000	
Mount View Blvd, Eau Claire Blvd to Kent St		155,000	
Pied Piper Lane, Eau Claire Blvd to Kent St		155,000	
Asphalt Paving		600,000	
Alley Paving		35,000	
Annual Sidewalk Replacement Contract		150,000	
Concrete Pavement Repairs (joints/cracks/paving)	TID 8 half	650,000	
Pavement Markings		75,000	
Short Street	TID 3	387,000	
Washington Siphon Project and wall	TID 8	850,000	
Motor Pool Replacement		1,630,538	
McClellan Ramp Demolition	TID 3	746,000	
Lot 14 Construction	TID 3	275,000	
		11,267,488	
Budget		12,934,488	
*Funding for Utility portion coming from State of Wisconsin		1,885,000	

#### **CITY OF WAUSAU**

#### AMERICAN RESCUE PLAN - SLFRF APPLICATION

#### Water Sewer and Broad Band Infrastructure

Water, Sewer and Broadband infrastructure this category is available to address the consequences of deferred maintenance in drinking water systems, treatment of sewage and stormwater along with resiliency measures to adapt to climate change. In addition the funds may be used for broad band investment and cybersecurity investments. Common examples would include:

- \* Sewage and Stormwater projects must be eligible under the EPA's Clean Water State Revolving Fund
- \*Water projects must be eligible under the EPA's Drinking Water State Revolving Fund

Project Title

- \*Broad band infrastructure must respond to lack of reliable service or affordable service
- \*Cybersecurity investment and modernization is eligible to new or existing infrastructure.



Department		DPWU		Contact Name:	Eric Lindman	
Priorit	ty 1-6 (low-high)	4 - High Priority				
	6=Emergency, 5=Urgent,	4=High Priority, 3 Medium Priority, 2 Low Priority, 1 No Priority				
	Project Type (Che					
	Sewage Infrastructure			Broadband Infrastruc	ture	
	Stormwater Infrastructure			Cybersecurity Investment		
X	Water Infrastructure					

Wausau Water Works Solar Array - DWTF

#### PROJECT DESCRIPTION

#### Provide a description of the project, purchase or service attach additional information if needed

This project will construct a ground mounted solar array at the Drinking Water Treatment Facility (DWTF) which offset up to an estimated 62% of energy usage and 67% of the annual utility bill. See the attached analysis for Scenario 1 Alt. The utility commission began this discussion starting back in 2020 as a possible way to mitigate future rate increases. Since those discussions began there as some neighborhood concerns about he solar array and how it would blend into the residential area. In 2023 a solar array task force was developed to further discuss and prepare infromation about a solar array and to engage the community. Over the past year the task force worked with a consultant to narrow down possible options for an array, determine the effectiveness of solar power generation, engaged the neighborhood and their concerns and ultimately provide a recommendation back to the Commission on a possible option fo an array, location and size of the array. The recommendation would be a 3-acre +/- ground mounted array that would generate about 875 kW-DC power (about 720kW AC power). Conservative estimate for payback of the system would be 13-years. This scenarion for payback includes a 30% tax credit back toward the capital cost and a focus on energy rebate. There are additinal possible funding/grant options but none are guaranteed so they were not included but will be pursued to decrease the payback time.

	WATER, SEWAGE AND STORMWATER PROJECT- CHECK THOSE THAT APPLY						
	Addresses critical health or safety hazard.		This project was identified and deferred on prior years capital/operating budget				
X	Required to achieve or miantain an adequate level of service		Expands existing service into an undeveloped area.				
X	Provides new service, facility, system or equipment.	X	Repairs, replaces or prevents a breakdown of an existing infrastructure				

#### PROJECT OR PURCHASE JUSTIFICATION

#### Describe physical condition, demand/capacity, functionality and/or safety concerns or revenue generating potential that justifies the project, purchase or acquisition

The primary goal adopted by the council for use of ARPA was to impact as many residents in the city as possible. This project will have an impact on all residents within the city in a positive way. The impact will be the long term savings to the utility operations which will mitigate future rate increases. This project also follows the city's adopted Strategic Plan and the City's adopted resolution for Supporting Reduction of Greenhouse Gas Emissions and Energy Security. The utility is challenged to find innovative ways to reduce operational costs moving forward. Solar energy is a proven technology to reduce energy costs long term. This project is a long term plan to help stabilize utility rates.

#### IMPACT ON DEFERRED IMPLEMENTATION/PURCHASE

Describe how project deferral will impact future asset maintenance, economic growth, quality of service, efficiency or effectiveness, quality of life, safety, financing or other issues.

Electrical costs continue to rise each year and finding efficient ways to reduce those costs is a benefit to all rate payers at the utility. It is conservatively estimated there will be a steady annual energy increase of 3.5%, the Department of Energy estimates higher at 5%. The sooner this project moves forward the sooner the energy cost offset will begin to benefit rate payers. There is currently tax credits available to municipalities through the Inflation Reduction Act and which significantly offset the capital cost of the project, these credits are only expected to be around for the next 3-years, to take advantage of these the project would need to move forward soon to begin design, bidding, and then construction. materilas have a long lead time so we are resonably looking at a 2025-2026 construction timeline. If ARPA were to be approved we would be able to bid the project late 2024 and begin construction later 2025.

#### RETURN ON INVESTMENT

Describe the financial benefits, cost savings or payback of the capital project such as grant funding, cost avoidance, future debt avoidance or operational cost or income benefits

Having back up power supply at this location is essential for ensuring redundancy for both the water and wastewater sytems. Reliability and redundancy is essential for utilities to operatie and provide safe drinking water and adequate wastewater during emergency events.

#### WATER, SEWER, STORMWATER AND BROADBAND INFRASTRUCTURE - FINANCIAL DETAIL

**DPWU** 

ONE TIME EXPENSE	2	022	202	3	2024	2025		2026	Total
Planning /Design									-
LandAcquisition									-
Engineering Study & Data Collection					100,000				100,000
Equipment Purchase & Installation					2,576,257				2,576,257
Other(Describe)									 
Total Costs	\$	-	\$	- \$	2,676,257	\$	- \$	-	\$ 2,676,257
FUNDING SOURCES									
ARPA Funding					800,000				800,000
Donations									-
User Fees									-
Debt Issuance									-
Other Grant Income					772,877				772,877
Other (Describe) Focus on Energy					25,000				 25,000
Total Sources	\$	-	\$	- \$	1,597,877	\$	- \$	-	\$ 1,597,877
Shortfall	\$	-	\$	- \$	1,078,380	\$	- \$	_	\$ 1,078,380

ONGOING NEW OPERATIONAL EXP	2022	2023	2024	2025	2026	Total
Staff Costs						-
Contractual Services						-
Supplies/Materials						-
Maintenance						-
Other (Describe)						-
Total Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
FUNDING SOURCES						

ARPA Funding Donations User Fees Other Grant Income Other (Describe) \$ Total Funding Sources \$ Shortfall

#### IDENTIFY ONGOING FUNDING SOURCE FOR NEW OPERATIONAL EXPENSES AFTER THE ARPA GRANT PERIOD

Operational expenses will be done by in-house staffing. Electricians are trained on power generation and equipment and the monitoring and troubleshooting of the system will be done with water staff personnel. The are expected to be minimal over the life of the system.

DESCRIBE EVENTS OR CIRCUMSTANCES THAT WOULD PREVENT COSTS FROM BEING OBLIGATED BY DECEMBER 31, 2024 AND EXPENDED BY DECEMBER 31, 2026 attach additional information if needed

## WATER, SEWER, STORMWATER AND BROADBAND INFRASTRUCTURE - CALENDAR $\mathbf{DPWU}$

YEAR 2022   Jan   Feb   Mar   Apr   May   Jun   Jul   Aug   Sep   Oct   N	TIME FRAME (Start/End by Month)					
Task: Planning/ Design/Recruiting Task: Planning/ Design/Recruiting Task: Contract Execution Task: Planning/ Design/Recruiting Task: Planning/ Design/Recruiting Task: Contract Execution Task: Cont	ov De					
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TIME FRAME (Start/End Dates by Month)   Task: Planning/ Design/Recruiting						
YEAR 2024 funds must be obligated by 12/31/2024   Jan   Feb   Mar   Apr   May   Jun   Jul   Aug   Sep   Oct   N						
Task: Planning/ Design/Recruiting Task: RFP/ RFQ/ Bid/ Award Task: Contract Execution Task: Construction Task: Construction Task: Ta						
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YEAR 2025         Jan         Feb         Mar         Apr         May         Jun         Jul         Aug         Sep         Oct         N           Task: Planning/ Design/Recruiting         Image: Construction						
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Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



Contact QstN

Andy Pohren Sam Mueller Madison, WI 53705

### **Discussion Topics**

### Updates from 3/26/24:

- Include site prep costs in project cost
- Model and analyze Load Shift
- Update Export Rate to include Avoided Capacity Cost Rate
- Model multiple Utility Cost Escalation Rates
- Update WI Focus on Energy Rebate
- WPS Transformer → non-issue (2500 kVa)

Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



Contact QstN

Andy Pohren Sam Mueller Madison, WI 53705

### **Scenario Summary**

#### Scenario 1: Well House



Priorities: maximize capacity & energy offset, minimize installed cost

#### Scenario 2: North Well House



Priorities: maximize capacity & energy offset, minimize installed cost, reduce visibility

#### Scenario 3: North Fields



Priorities: maximize capacity & energy offset, make effort to eliminate visibility

### Scenario 1 : (Well House) Alternate



Priorities: maximize financial payback

Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



### **Scenario Summary**

Financials	Scenario 1	Scenario 2	Scenario 3	Scenario 1 alt
Short description	Well house	N Well house	North Fields	Well house alt
Installed DC capacity	1.5 MW	1.5 MW	1.5 MW	0.875 MW
Installed AC capacity	1.0 MW	1.0 MW	1.0 MW	0.720 MW
Est. full project cost	\$4,142,574	\$4,192,574	\$8,528,148	\$2,576,257
Est. full project cost	\$2.76/W	\$2.80/W	\$5.69/W	\$2.94/W
Est. avg. annual energy cost savings	\$191,774	\$192,868	\$188,442	\$121,046
Est. avg. O&M annual cost	\$26,076	\$26,076	\$26,076	\$15,211
Est. levelized cost of energy (LCOE)	\$0.064/kWh	\$0.064/kWh	\$0.133/kWh	\$0.063/kWh
Est. lifetime savings	\$999,747	\$992,105	(\$2,153,446)	\$711,220
Est. payback (after 30% ITC, WFOE rebate)	19.9 yrs	19.9 yrs	25+ yrs	19.3 yrs
Est. 1 <sup>st</sup> year energy production	1,917,591 kWh	1,929,842 kWh	1,895,252 kWh	1,193,627 kWh
Est. 1st year energy offset	100%	100%	98%	62%
Est. 1st year utility bill offset (savings)	72%	72%	70%	45%

Available incentives to consider	Included in financial analysis*
30% Investment Tax Credit (ITC)	yes
10% ITC Bonus – Domestic Content	no
10% ITC Bonus – LI Community	no
WI Focus on Energy Rebate	yes
WI PSC Energy Innovation Grant	no

<sup>\*</sup>Including the ITC bonuses (10% Domestic Content, 10% LI Community) and WI PSC EI Grant reduces the project payback by  $^{\sim}5$  years

Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



### **Escalation Rate and Load Shift Summary**

Financials – Scenario 1 (1.5 MW_DC)	Standard Operation			Load Shift to Off-Peak			
Utility Escalation Rate	3.5%	5%	7%	3.5%	5%	7%	
Load shift (Yes = Shift to Off-peak)	No	No	No	Yes	Yes	Yes	
Est. avg. annual energy cost savings	\$191,774	\$234,411	\$309,746	\$246,876	\$301,763	\$398,744	
Est. lifetime savings	\$999,747	\$2,065,668	\$3,949,053	\$2,377,293	\$3,749,482	\$6,174,014	
Est. payback (after 30% ITC, WFOE rebate)	19.9 yrs	17.4 yrs	15.3 yrs	15.5 yrs	13.7 yrs	12.4 yrs	
Est. 1 <sup>st</sup> year energy offset	100%	100%	100%	100%	100%	100%	
Est. 1 <sup>st</sup> year utility bill offset (savings)	72%	72%	72%	92%	92%	92%	

Financials – Scenario 1 alt (875 kW_DC)	Standard Operation			Load Shift to Off-Peak		
Utility Escalation Rate	3.5%	5%	7%	3.5%	5%	7%
Load shift (Yes = Shift to Off-peak)	No	No	No	Yes	Yes	Yes
Est. avg. annual energy cost savings	\$121,046	\$147,958	\$195,509	\$180,661	\$220,827	\$291,796
Est. lifetime savings	\$711,220	\$1,384,020	\$2,572,796	\$2,201,586	\$3,205,737	\$4,979,981
Est. payback (after 30% ITC, WFOE rebate)	19.3 yrs	17.0 yrs	15.0 yrs	12.9 yrs	11.9 yrs	10.9 yrs
Est. 1 <sup>st</sup> year energy offset	62%	62%	62%	62%	62%	62%
Est. 1st year utility bill offset (savings)	45%	45%	45%	67%	67%	67%

Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



### Scenario 1 (Well House)



Financials	
Est. installed cost	\$4,142,574
Est. installed cost	\$2.76/W
Est. avg. annual energy cost savings	\$191,774
Est. avg. O&M annual cost	\$26,076
Est. levelized cost of energy (LCOE)	\$0.064/kWh
Est. lifetime savings	\$999,747
Est. payback (after 30% ITC, WFOE rebate)	19.9 yrs.
Est. 1st year utility bill offset (savings)	72%

Performance	
Installed DC potential capacity	1,500 kW_DC
Installed AC potential capacity	1,000 kW_AC
Annual energy consumption	1,927,017 kWh
Est. 1 <sup>st</sup> year solar energy production	1,917,591 kWh
Est. 1 <sup>st</sup> year energy consumption offset	100%

Available incentives to consider	
30% Investment Tax Credit (ITC)	\$1,242,772
10% ITC Bonus – Domestic Content	\$414,257
10% ITC Bonus – LI Community	\$414,257
WI Focus on Energy Rebate	\$25,000
WI PSC Energy Innovation Grant	\$250,000

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### Scenario 2 (North Well House)



Financials	
Est. installed cost	\$4,192,574
Est. installed cost	\$2.80/W
Est. avg. annual energy cost savings	\$192,868
Est. avg. O&M annual cost	\$26,076
Est. levelized cost of energy (LCOE)	\$0.064/kWh
Est. lifetime savings	\$992,105
Est. payback (after 30% ITC, WFOE rebate)	19.9 yrs.
Est. 1st year utility bill offset (savings)	72%

1,500 kW_DC
1,000 kW_AC
1,927,017 kWh
1,929,842 kWh
100%

Available incentives to consider	
30% Investment Tax Credit (ITC)	\$1,257,772
10% ITC Bonus – Domestic Content	\$419,257
10% ITC Bonus – LI Community	\$419,257
WI Focus on Energy Rebate	\$25,000
WI PSC Energy Innovation Grant	\$250,000

Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



### Scenario 3 (North Fields)



Financials	
Est. installed cost	\$8,528,148
Est. installed cost	\$5.69/W
Est. avg. annual energy cost savings	\$188,442
Est. avg. O&M annual cost	\$26,076
Est. levelized cost of energy (LCOE)	\$0.13/kWh
Est. lifetime savings	(\$2,153,446)
Est. payback (after 30% ITC, WFOE rebate)	25+ years
Est. 1 <sup>st</sup> year utility bill offset (savings)	70%

Performance	
Installed DC potential capacity	1,500 kW_DC
Installed AC potential capacity	1,000 kW_AC
Annual energy consumption	1,927,017 kWh
Est. 1 <sup>st</sup> year solar energy production	1,895,252 kWh
Est. 1st year energy consumption offset	98%
Available incentives to consider	
30% Investment Tax Credit (ITC)	\$2,558,444
30% Investment Tax Credit (ITC)  10% ITC Bonus – Domestic Content	\$2,558,444 \$852,815
, ,	
10% ITC Bonus – Domestic Content	\$852,815

Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



### Scenario 1 (Well House) - Alternate



Financials	
Est. installed cost	\$2,576,257
Est. installed cost	\$2.94/W
Est. avg. annual energy cost savings	\$121,046
Est. avg. O&M annual cost	\$15,211
Est. levelized cost of energy (LCOE)	\$0.063/kWh
Est. lifetime savings	\$711,220
Est. payback (after 30% ITC, WFOE rebate)	19.3 yrs.
Est. 1st year utility bill offset (savings)	45%

Performance	
Installed DC potential capacity	875 kW_DC
Installed AC potential capacity	720 kW_AC
Annual energy consumption	1,927,017 kWh
Est. 1 <sup>st</sup> year solar energy production	1,193,627 kWh
Est. 1st year energy consumption offset	62%

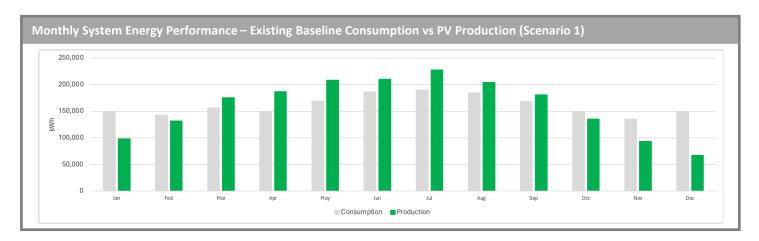
Available incentives to consider	
30% Investment Tax Credit (ITC)	\$772,877
10% ITC Bonus – Domestic Content	\$257,626
10% ITC Bonus – LI Community	\$257,626
WI Focus on Energy Rebate	\$25,000
WI PSC Energy Innovation Grant	\$250,000

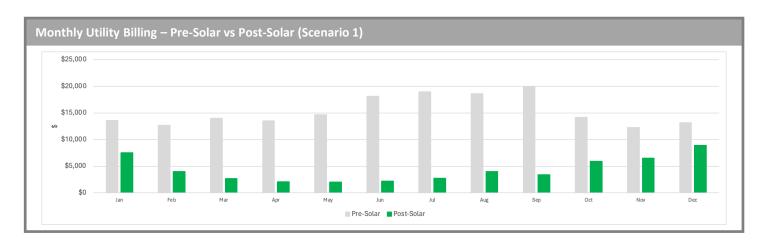


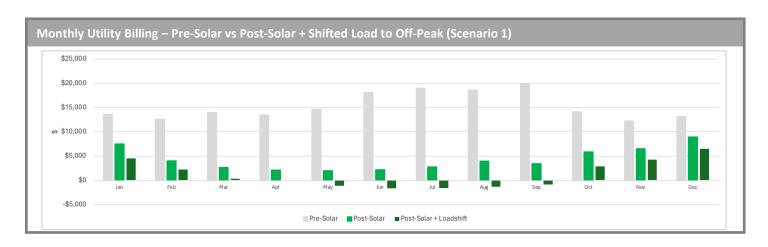
Equipment Assumptions – All Scenarios	
System type	Grid-tied
Racking installation	Ground-mount, fixed-tilt
Modules type	Monocrystalline
Module size	500 W; VSUN500 -132BMH (82.4" x 44.6" x 1.38")
Number of modules (panels)	3,000 (Scenarios 1, 2, and 3); 1,750 (Scenario 1 Alternate)
Inverters	String inverter; SolarEdge
Power optimizers	For Scenario 3 only

04/12/2024



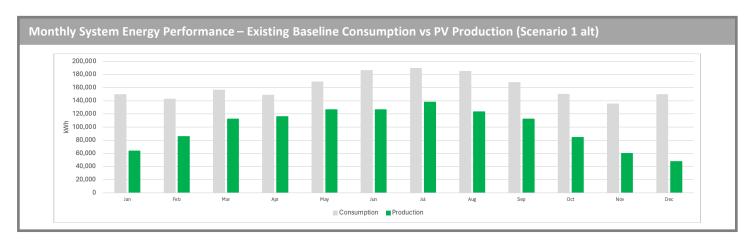


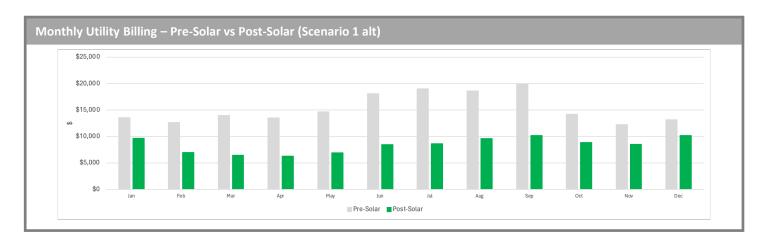


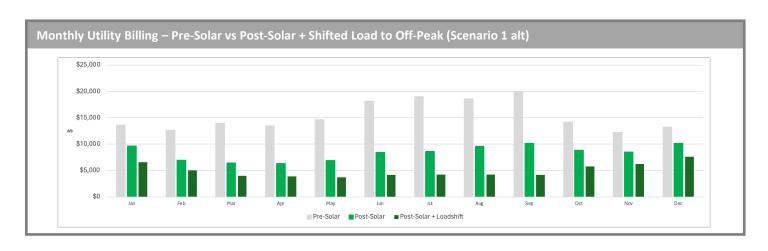


04/12/2024









Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



## **Heat Maps of Energy Consumption**

Heat map of energy consumption, kWh (month vs hour of day)

Sum of kWh	Month												
Hour	1	2	3	4	5	6	7	8	9	10	11	12	<b>Grand Total</b>
0	5,085	7,155	7,788	7,557	7,556	8,711	8,885	8,204	6,928	7,646	6,281	5,454	87,251
1	4,776	7,180	7,600	7,353	7,384	8,244	8,527	7,784	6,474	6,596	5,727	4,776	82,420
2	4,622	7,216	7,599	7,512	6,987	8,048	8,256	7,644	5,844	5,600	5,028	4,622	78,978
3	4,834	6,953	7,309	7,174	6,476	7,832	7,863	7,357	5,232	4,865	4,763	4,834	75,493
4	4,927	6,351	6,549	5,892	5,689	7,248	7,639	6,950	4,892	4,318	4,526	4,927	69,907
5	4,747	5,660	5,655	5,357	5,520	7,151	7,260	6,829	4,794	4,273	4,272	4,747	66,265
6	4,711	5,587	5,368	6,081	6,144	7,297	7,333	6,861	5,041	4,420	4,227	4,711	67,782
7	4,682	5,107	5,290	5,728	6,473	7,432	7,348	7,181	5,210	4,483	4,283	4,682	67,900
8	4,665	4,784	5,037	5,365	6,526	7,667	7,533	7,233	5,349	4,396	4,340	4,665	67,559
9	4,811	4,448	5,078	4,844	6,457	7,724	7,379	7,180	5,615	4,249	4,352	4,811	66,947
10	4,955	4,271	5,122	4,729	6,441	7,703	7,493	7,446	6,424	4,322	4,490	4,955	68,351
11	5,274	4,282	5,131	4,523	6,337	7,446	7,279	7,173	7,208	4,562	4,756	5,274	69,245
12	5,660	4,434	4,945	4,316	6,427	6,970	7,186	7,399	7,906	4,763	5,024	5,660	70,691
13	6,378	4,361	4,887	4,638	6,478	6,971	7,253	7,603	8,239	5,387	5,359	6,378	73,932
14	7,056	4,635	5,520	4,993	7,027	7,198	7,160	7,970	8,373	6,300	5,563	7,056	78,851
15	7,547	5,615	6,457	5,196	7,432	7,002	7,092	7,812	8,401	7,140	5,786	7,547	83,027
16	8,075	6,038	7,138	5,870	7,688	7,514	7,235	7,877	8,231	7,763	6,324	8,075	87,828
17	8,088	6,275	7,324	6,721	7,846	7,712	7,527	7,827	8,426	8,162	6,732	8,088	90,728
18	8,382	6,663	7,611	7,267	7,995	7,989	8,125	8,244	8,465	8,388	7,173	8,382	94,684
19	8,513	6,945	7,750	7,443	7,881	8,205	8,702	8,303	8,604	8,509	7,426	8,513	96,795
20	8,646	6,991	7,707	7,437	7,941	8,275	8,801	8,366	8,348	8,504	7,449	8,646	97,111
21	8,310	7,062	7,773	7,391	7,961	8,537	9,043	8,383	8,173	8,357	7,485	8,310	96,785
22	7,803	7,128	7,772	7,534	8,019	8,688	9,203	8,564	8,243	8,424	7,291	7,803	96,474
23	6,557	7,199	7,777	7,565	7,919	8,569	9,271	8,284	7,441	8,326	6,550	6,557	92,012
Grand Total	149,103	142,340	156,187	148,485	168,604	186,133	189,394	184,475	167,861	149,754	135,209	149,472	1,927,017

Heat map of energy production, kWh (month vs hour of day) – Scenario 1

Sum of Production [kWh]	Month												
Hour	1	2	3	4	5	6	7	8	9	10	11	12	<b>Grand Total</b>
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	11	193	6	0	0	0	0	0	211
6	0	0	0	315	1,295	1,573	1,231	520	0	0	0	0	4,934
7	0	0	730	3,780	6,041	6,294	5,735	4,218	2,546	741	0	0	30,084
8	0	2,051	6,365	9,785	12,882	11,805	12,780	10,555	8,287	6,547	1,509	4	82,570
9	3,409	8,062	14,920	15,534	19,232	18,705	19,394	16,795	14,303	11,515	6,817	2,914	151,600
10	8,928	13,745	19,159	19,467	21,335	22,288	23,597	21,792	20,724	16,124	13,018	6,770	206,946
11	14,403	16,386	21,116	21,020	23,076	23,091	24,816	23,438	21,509	17,808	16,532	10,135	233,330
12	18,246	18,453	22,813	23,246	24,840	22,757	26,372	23,521	23,474	18,530	16,276	13,984	252,513
13	17,447	19,802	23,064	22,288	23,708	22,545	25,770	23,861	23,436	18,639	16,393	14,884	251,836
14	16,896	18,742	22,793	22,363	21,838	21,773	24,453	22,447	24,150	17,069	12,695	9,294	234,513
15	11,340	16,796	19,692	20,616	20,919	20,597	23,459	22,269	20,637	14,826	6,976	6,620	204,748
16	6,060	12,573	14,269	15,207	16,248	18,316	19,295	18,059	13,449	9,713	3,087	2,260	148,536
17	1,136	4,982	8,413	9,507	10,770	12,557	12,405	11,559	6,890	3,544	80	0	81,842
18	0	130	1,934	3,264	4,933	6,034	6,725	4,382	1,572	0	0	0	28,973
19	0	0	0	178	1,086	1,409	1,454	629	0	0	0	0	4,756
20	0	0	0	0	0	134	65	0	0	0	0	0	199
21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	97,866	131,721	175,267	186,569	208,215	210,068	227,558	204,044	180,976	135,055	93,385	66,866	1,917,591

Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



## **Heat Maps of Energy Purchase and Export**

Heat map of energy purchase, kWh (month vs hour of day) – Scenario 1

Sum of Purchase [kWh]	Month												
Hour	1	2	3	4	5	6	7	8	9	10	11	12	<b>Grand Total</b>
0	5,085	7,155	7,788	7,557	7,556	8,711	8,885	8,204	6,928	7,646	6,281	5,454	87,251
1	4,776	7,180	7,600	7,353	7,384	8,244	8,527	7,784	6,474	6,596	5,727	4,776	82,420
2	4,622	7,216	7,599	7,512	6,987	8,048	8,256	7,644	5,844	5,600	5,028	4,622	78,978
3	4,834	6,953	7,309	7,174	6,476	7,832	7,863	7,357	5,232	4,865	4,763	4,834	75,493
4	4,927	6,351	6,549	5,892	5,689	7,248	7,639	6,950	4,892	4,318	4,526	4,927	69,907
5	4,747	5,660	5,655	5,357	5,509	6,957	7,254	6,829	4,794	4,273	4,272	4,747	66,054
6	4,711	5,587	5,368	5,767	4,849	5,724	6,102	6,341	5,041	4,420	4,227	4,711	62,848
7	4,682	5,107	4,560	2,346	1,500	1,605	1,747	2,964	2,664	3,742	4,283	4,682	39,883
8	4,665	2,778	1,471	392	713	745	452	876	1,225	1,078	2,869	4,661	21,926
9	2,264	815	406	72	374	181	97	278	352	543	710	2,042	8,135
10	1,115	235	289	102	193	13	76	318	74	510	433	1,075	4,433
11	378		137	-	54		27	44	287	398	232	903	2,460
12	175	89	-	-	-	259	129	-	235	467	399	511	2,264
13	405	7	-	-	101	288	324	30	236	309	247	839	2,786
14	822	13	1	-	249	302	222	336	3	285	1,185	1,427	4,846
15	1,670	428	343	34	233	857	474	291	248	709	2,147	2,170	9,604
16	3,143	860	866	362	529	280	402	158	641	2,168	3,454	5,815	18,678
17	6,952	2,773	1,398	791	1,100	706	946	758	2,372	4,618	6,652	8,088	37,154
18	8,382	6,533	5,677	4,024	3,115	2,462	1,922	3,886	6,893	8,388	7,173	8,382	66,835
19	8,513	6,945	7,750	7,265	6,795	6,797	7,249	7,674	8,604	8,509	7,426	8,513	92,039
20	8,646	6,991	7,707	7,437	7,941	8,141	8,736	8,366	8,348	8,504	7,449	8,646	96,913
21	8,310	7,062	7,773	7,391	7,961	8,537	9,043	8,383	8,173	8,357	7,485	8,310	96,785
22	7,803	7,128	7,772	7,534	8,019	8,688	9,203	8,564	8,243	8,424	7,291	7,803	96,474
23	6,557	7,199	7,777	7,565	7,919	8,569	9,271	8,284	7,441	8,326	6,550	6,557	92,012
Grand Total	108,184	101,067	101,797	91,926	91,245	101,195	104,846	102,319	95,244	103,055	100,810	114,492	1,216,179

Heat map of energy export, kWh (month vs hour of day) – Scenario 1  $\,$ 

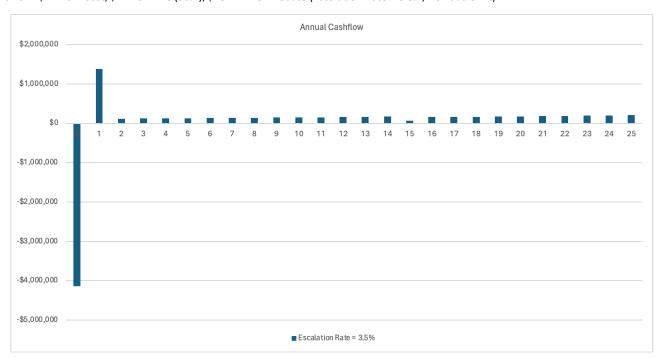
Sum of Export [kWh]	Month												
Hour	1	2	3	4	5	6	7	8	9	10	11	12	<b>Grand Total</b>
0				-	0.00		,	-					
1			7	-		- 1	7		-	1.5	7		1.0
2			7	-			7	-			7		
3		-	7	-		1.5	7	-	-	1.0	7		
4			7	-			7	-			7		
5			7	-		1.5	7		-	10.1	7	70	
6			7	-				-			7		
7			7	398	1,068	467	135	70	-	1.0	7	70	2,067
8		45	2,800	4,812	7,069	4,884	5,699	4,199	4,162	3,229	38	-	36,937
9	862	4,429	10,248	10,762	13,150	11,162	12,112	9,892	9,040	7,810	3,176	145	92,788
10	5,088	9,709	14,326	14,840	15,087	14,598	16,179	14,664	14,374	12,312	8,961	2,890	143,027
11	9,507	12,104	16,121	16,497	16,794	15,645	17,564	16,309	14,589	13,644	12,008	5,764	166,546
12	12,760	14,108	17,868	18,930	18,413	16,047	19,315	16,122	15,803	14,234	11,652	8,835	184,086
13	11,474	15,448	18,177	17,649	17,331	15,861	18,841	16,288	15,433	13,561	11,281	9,345	180,690
14	10,663	14,120	17,275	17,370	15,060	14,876	17,514	14,813	15,781	11,054	8,317	3,665	160,508
15	5,464	11,609	13,578	15,454	13,720	14,452	16,841	14,748	12,484	8,394	3,337	1,243	131,325
16	1,128	7,395	7,998	9,699	9,088	11,082	12,462	10,339	5,859	4,117	217	-	79,386
17	0.00	1,480	2,487	3,578	4,024	5,550	5,823	4,490	836		-	-	28,268
18		641	-	21	52	506	523	24	-	100	-		1,125
19			-	-		1.5		-			-		15.1
20		191	-	-		6.5	-	-	-	100	-	-	-
21			-	-		1.5	-	-			7		
22		151	7	-		1.5	-	-	-	- 1	7	-	
23			7	-				-					
Grand Total	56,947	90,448	120,877	130,009	130,856	125,131	143,010	121,888	108,360	88,356	58,986	31,886	1,206,753

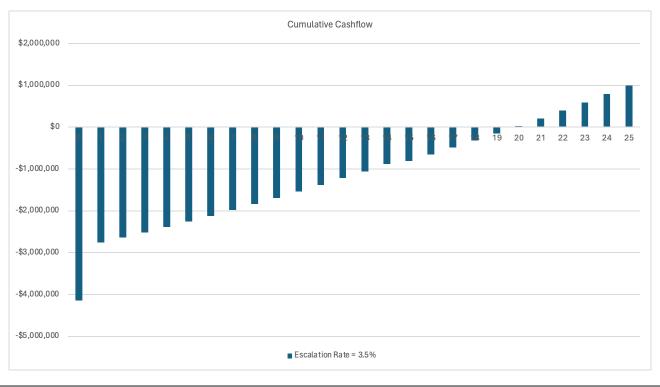
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### **Return on Investment / Payback Analysis (Scenario 1)**

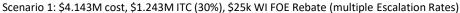
#### Scenario 1: \$4.143M cost, \$1.243M ITC (30%), \$25k WI FOE Rebate (Escalation Rate = 3.5%, No Load Shift)

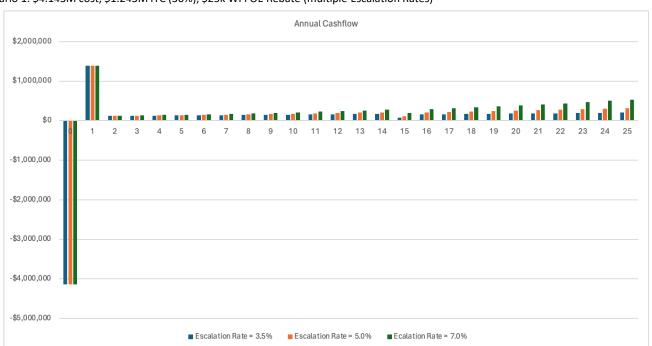


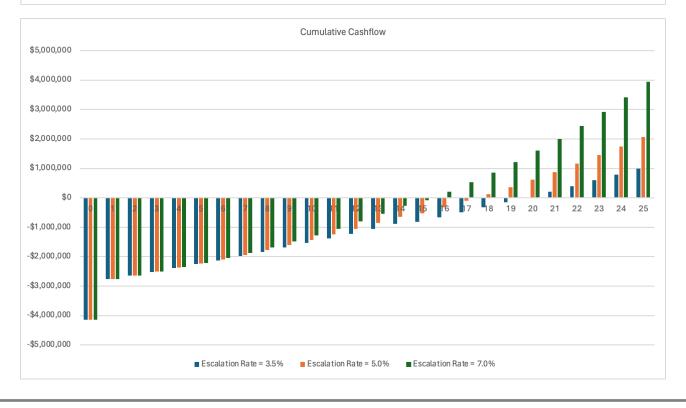












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-\$1,000,000

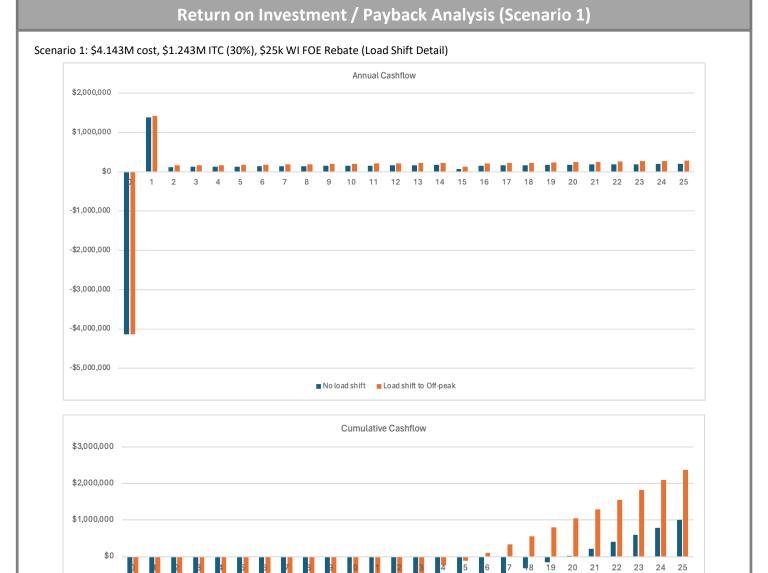
-\$2,000,000

-\$3,000,000

-\$4,000,000

-\$5,000,000





■ No load shift ■ Load shift to Off-peak

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### **Key Assumptions and Notes**

- 1. Solar PV system life assumed to be 25 years (minimum).
- 2. Solar PV system performance degradation modeled at 0.5% per year.
- 3. Utility Electricity Rate escalation assumption of 3.5% per year (following 20-year historic trend in Wisconsin).
- 4. Utility bill savings from offsets based on energy and demand rates as per Wisconsin Public Services (WPS) rate CG-20.

Season	Time	Rate (\$/kWh)	Customer Demand (\$/kW)	Demand Charge (\$/kW)
Winter (Oct-May)	On-peak (Mon-Fri 8AM-1PM & 5PM-9PM)	\$0.0728	\$2.399	\$11.992
Winter (Oct-May)	Off-peak	\$0.4282	\$2.399	\$0.000
Summer (June-Sep)	On-peak (Mon-Fri 8AM-6PM)	\$0.0728	\$2.399	\$18.449
Summer (June-Sep)	Off-peak	\$0.4282	\$2.399	\$0.000

5. Utility bill savings from exports modeled using the weighted average of \$0.0613/kWh buy back rate (Avoided Energy Cost Rate), based on WPS Parallel Generation Purchase tariff (WPS PG-2B), and an hourly performance/consumption simulation model.

Season	Time	Rate (\$/kWh)
Winter (Oct-May)	On-peak (Mon-Fri 7AM-10PM)	\$0.07013
Winter (Oct-May)	Off-peak	\$0.02904
Summer (June-Sep)	On-peak (Mon-Fri 7AM-11PM)	\$0.08132
Summer (June-Sep)	Off-peak	\$0.03041

- 6. Per communication with WPS on 3/14/24, while on PG-2B tariff, bill credits are applied to that month's bill; any credit that exceeds \$100 is paid in the form of a check.
- Plant operation and energy usage modeled to remain consistent with 2023 usage. Increased energy usage in future years
  was not modeled.
- 8. Scenario 1 & 2 are modeled as pile-driven ground mounts with a fixed rack at a 25-degrees tilt with 15-ft row spacing, achieving an overall smaller array footprint.
- 9. Scenario 3 is modeled as a pile-drive ground mount with a fixed rack at a 27-degree tilt with 16.5-ft row spacing, achieving a higher production but also takes up a slightly larger footprint.
- 10. Scenario 1 Alternate is modeled as a pile-drive ground mount with a fixed rack at a 30-degree tilt with 20-ft row spacing, achieving a higher production but also a larger footprint.
- 11. There is a potential for additional engineering fees and distribution study fees from WPS that are unknown until interconnection application is filled with WPS. The Distribution study may result in the need for system side improvements to support the PV system, which also could lead to additional costs to the City. In this scenario, an alternative option could be to reduce the PV system size to meet utility transformer limitations once the study is complete.
- 12. Average O&M costs include potential inverter replacement at year 15 in the lifetime of the PV system.
- 13. The property for Scenario 1, and the southern part of Scenario 2, is located in the City of Wausau jurisdiction. It is currently Zoned Residential (SR-2), and per zoning laws the property would need to be rezoned to Heavy industrial (HI); reference <a href="https://library.municode.com/wi/wausau/codes/code">https://library.municode.com/wi/wausau/codes/code</a> of ordinances?nodeId=TIT23ZO ARTIIILAUSRE 23.03.05 Table of land uses. Per the Solar arrays exempt from Screening requirements. 23.06.21 Exterior storage and screening standards. Part 6(a)
  - https://library.municode.com/wi/wausau/codes/code of ordinances?nodeId=TIT23ZO ARTVIPEST 23.06.21EXSTSCST
- 14. The property for Scenario 3, and the north part of Scenario 2, is located in the Village of Maine jurisdiction. This is also zoned residential, and an application and petition would be needed to rezone with the city (\$150 application fee). Application and reference available at <a href="https://cdn.townweb.com/villageofmaine.org/wp-content/uploads/2023/03/amendzoningordinance7-2020.pdf">https://cdn.townweb.com/villageofmaine.org/wp-content/uploads/2023/03/amendzoningordinance7-2020.pdf</a>

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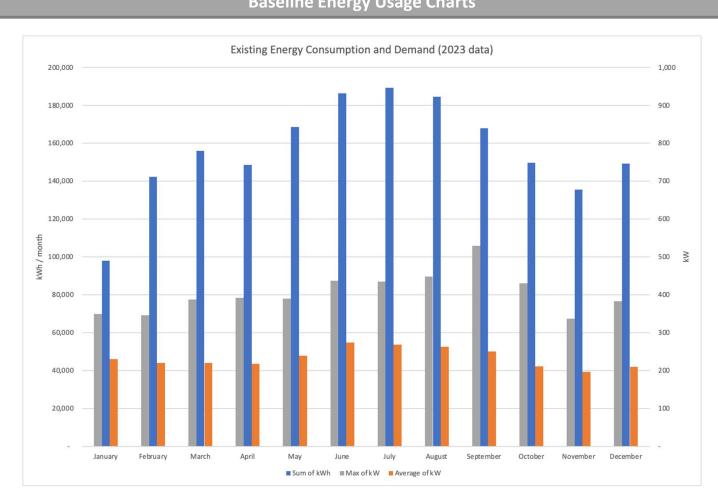
### **Key Assumptions and Notes**

- 15. Notes on the Federal Investment Tax Credit (ITC).
  - a. Per guidance from the US DOE and the Federal Office for Energy Efficiency and Renewable Energy, as a tax-exempt organization, the City of Wausau is eligible to receive a refund (i.e. direct pay) from the IRS for tax credits on projects placed in service after 2022. Organizations that wish to receive direct pay, also known as elective pay, must pre-register with the IRS before the tax return is due and receive a registration number.
  - b. The Base Credit for a PV system is 30% of eligible project costs.
  - c. Note Eligible solar equipment purchase through debt financing qualifies for the ITC. However, the amount of the base ITC may be reduced by up to 15% if tax exempt bonds are used to finance the PV system.
  - d. A Domestic Content Bonus of 10% is also available. To qualify for the domestic content bonus, all structural steel or iron products used must be produced in the United States and a "required percentage" of the total costs of manufactured products (including components) of the facility need to be mined, produced, or manufactured in the United States. The required percentage of manufactured products starts at 40% for all projects beginning construction before 2025, increases to 45% for projects beginning construction in 2025, 50% for projects beginning construction in 2026, and 55% for projects beginning construction after 2026.
  - e. The PV solar system at the Wausau Water Treatment Plant would also qualify for a Low-Income Community Bonus of 10% for being located in a low-income community as defined by the New Markets Tax Credit. This Bonus is awarded based on an application process, that is presently oversubscribed and not guaranteed.
  - f. It is highly recommended that the City consult with their accountant and professional tax advisor regarding the ITC prior to commencing a project.
  - g. Additional information about eligibility and application for Federal Solar Tax Credits for Businesses is available at https://www.energy.gov/eere/solar/federal-solar-tax-credits-businesses.
- 16. Additional information about eligibility and application for Wisconsin Focus on Energy Rebate is available at <a href="https://focusonenergy.com/business/renewables#rebate-info">https://focusonenergy.com/business/renewables#rebate-info</a>.
- 17. Additional information about eligibility and application for Wisconsin Public Service Commission Energy Innovation Grant is available at <a href="https://psc.wi.gov/Pages/ServiceType/OEI/EnergyInnovationGrantProgram.aspx">https://psc.wi.gov/Pages/ServiceType/OEI/EnergyInnovationGrantProgram.aspx</a>. Per PSC on 3/11/24, it is not certain if the EI grant will again be offered in 2024.
- 18. Recommended solar system and equipment warranties include minimum of 2-year workmanship warranty, 25-year warranty on modules and power optimizers (Scenario 3), 12-year warranty on inverters (extended 20-year warranty can also be considered).
- 19. Pricing for all Scenarios includes costs/fees for common excavation and site preparation (such as leveling, grading, debris removal, erosion control, etc), building of land berm, and building of an access road.
- 20. Pricing does not include any interest, finance or borrowing charges or fees.
- 21. Pricing for all Scenarios does not include costs/fees for prairie seeding/restoration and ongoing prairie/land maintenance is not included in the O&M estimate.

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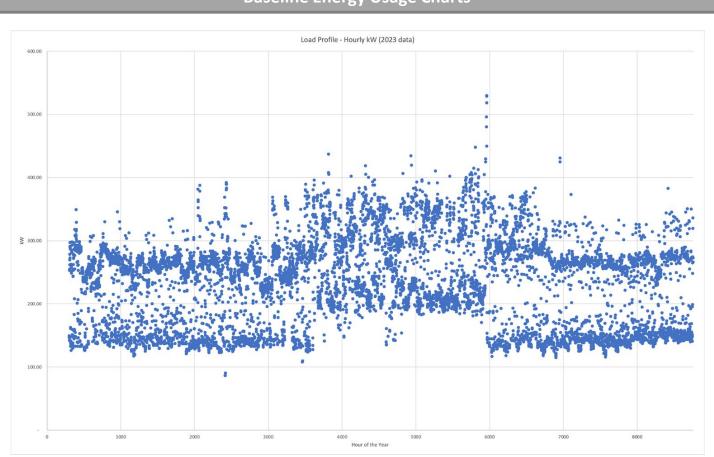
## **Baseline Energy Usage Charts**



Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401







Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



## Baseline - Energy Usage (kWh) & Demand (kW) Charts

Heat map of existing energy consumption, kWh (month vs hour of day)

Sum of kWh	Month												
Hour	1	2	3	4	5	6	7	8	9	10	11	12	Grand Total
0	5,085	7,155	7,788	7,557	7,556	8,711	8,885	8,204	6,928	7,646	6,281	5,454	87,251
1	4,776	7,180	7,600	7,353	7,384	8,244	8,527	7,784	6,474	6,596	5,727	4,776	82,420
2	4,622	7,216	7,599	7,512	6,987	8,048	8,256	7,644	5,844	5,600	5,028	4,622	78,978
3	4,834	6,953	7,309	7,174	6,476	7,832	7,863	7,357	5,232	4,865	4,763	4,834	75,493
4	4,927	6,351	6,549	5,892	5,689	7,248	7,639	6,950	4,892	4,318	4,526	4,927	69,907
5	4,747	5,660	5,655	5,357	5,520	7,151	7,260	6,829	4,794	4,273	4,272	4,747	66,265
6	4,711	5,587	5,368	6,081	6,144	7,297	7,333	6,861	5,041	4,420	4,227	4,711	67,782
7	4,682	5,107	5,290	5,728	6,473	7,432	7,348	7,181	5,210	4,483	4,283	4,682	67,900
8	4,665	4,784	5,037	5,365	6,526	7,667	7,533	7,233	5,349	4,396	4,340	4,665	67,559
9	4,811	4,448	5,078	4,844	6,457	7,724	7,379	7,180	5,615	4,249	4,352	4,811	66,947
10	4,955	4,271	5,122	4,729	6,441	7,703	7,493	7,446	6,424	4,322	4,490	4,955	68,351
11	5,274	4,282	5,131	4,523	6,337	7,446	7,279	7,173	7,208	4,562	4,756	5,274	69,245
12	5,660	4,434	4,945	4,316	6,427	6,970	7,186	7,399	7,906	4,763	5,024	5,660	70,691
13	6,378	4,361	4,887	4,638	6,478	6,971	7,253	7,603	8,239	5,387	5,359	6,378	73,932
14	7,056	4,635	5,520	4,993	7,027	7,198	7,160	7,970	8,373	6,300	5,563	7,056	78,851
15	7,547	5,615	6,457	5,196	7,432	7,002	7,092	7,812	8,401	7,140	5,786	7,547	83,027
16	8,075	6,038	7,138	5,870	7,688	7,514	7,235	7,877	8,231	7,763	6,324	8,075	87,828
17	8,088	6,275	7,324	6,721	7,846	7,712	7,527	7,827	8,426	8,162	6,732	8,088	90,728
18	8,382	6,663	7,611	7,267	7,995	7,989	8,125	8,244	8,465	8,388	7,173	8,382	94,684
19	8,513	6,945	7,750	7,443	7,881	8,205	8,702	8,303	8,604	8,509	7,426	8,513	96,795
20	8,646	6,991	7,707	7,437	7,941	8,275	8,801	8,366	8,348	8,504	7,449	8,646	97,111
21	8,310	7,062	7,773	7,391	7,961	8,537	9,043	8,383	8,173	8,357	7,485	8,310	96,785
22	7,803	7,128	7,772	7,534	8,019	8,688	9,203	8,564	8,243	8,424	7,291	7,803	96,474
23	6,557	7,199	7,777	7,565	7,919	8,569	9,271	8,284	7,441	8,326	6,550	6,557	92,012
Grand Total	149,103	142,340	156,187	148,485	168,604	186,133	189,394	184,475	167,861	149,754	135,209	149,472	1,927,017

Heat map of existing demand, kW (month vs hour of day)

Max of kW	Month												
Hour	1	2	3	4	5	6	7	8	9	10	11	12	Grand Total
)	280	291	332	323	353	437	406	406	405	373	337	280	437
1	298	309	313	323	379	369	388	448	373	317	324	298	448
2	249	330	282	326	300	408	388	404	358	324	317	249	408
3	257	319	282	352	390	405	374	415	323	299	300	257	415
4	258	284	301	343	298	369	364	366	326	280	303	258	369
5	290	279	286	342	284	391	337	389	301	194	189	290	391
6	284	302	338	381	351	344	340	325	481	249	165	284	481
7	209	272	382	389	341	364	341	385	496	285	241	209	496
8	214	313	362	392	349	377	341	380	529	297	286	214	529
9	248	312	388	389	381	384	335	395	518	198	289	248	518
10	269	261	352	383	355	372	341	410	530	257	286	269	530
11	273	241	340	338	365	371	367	360	450	258	272	273	450
12	326	244	284	243	369	366	349	392	370	322	271	326	392
13	326	259	283	343	368	375	358	363	375	318	313	326	375
14	321	330	289	338	365	363	400	402	412	302	280	321	412
15	328	311	291	271	320	368	434	408	378	299	279	328	434
16	337	306	281	271	362	358	352	400	370	376	313	337	400
17	327	346	279	284	365	354	368	391	370	331	276	327	391
18	383	289	277	329	370	402	394	393	378	353	320	383	402
19	350	285	335	285	358	385	397	392	425	431	326	350	431
20	350	285	305	302	371	419	369	400	430	425	284	350	430
21	338	294	322	288	371	380	420	387	372	329	324	338	420
22	345	289	302	328	381	380	374	390	368	343	333	345	390
23	331	304	315	328	396	378	375	405	361	341	327	331	405
Grand Total	383	346	388	392	396	437	434	448	530	431	337	383	530

Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



## Shifted Load to Off-Peak - Energy Usage (kWh) & Demand (kW) Charts

Heat map of shifted energy consumption, kWh (month vs hour of day)

Sum of kWh	Month												
Hour	1	2	3	4	5	6	7	8	9	10	11	12	<b>Grand Total</b>
0	10,500	9,800	10,850	10,500	10,850	10,500	10,850	10,850	10,500	10,850	10,500	11,200	127,750
1	10,850	9,800	10,850	10,500	10,850	10,500	10,850	10,850	10,500	10,850	10,500	10,850	127,750
2	10,850	9,800	10,850	10,500	10,850	10,500	10,850	10,850	10,500	10,850	10,500	10,850	127,750
3	10,850	9,800	10,850	10,500	10,850	10,500	10,850	10,850	10,500	10,850	10,500	10,850	127,750
4	10,850	9,800	10,850	10,500	10,850	10,500	10,850	10,850	10,500	10,850	10,500	10,850	127,750
5	10,850	9,800	10,850	10,500	10,850	10,500	10,850	10,850	10,500	10,850	4,500	10,850	121,750
6	4,650	9,800	10,850	10,500	10,850	10,500	10,850	10,850	10,500	10,850	4,500	10,850	115,550
7	4,650	9,800	4,650	4,500	4,650	10,500	10,850	10,850	10,500	4,650	4,500	4,650	84,750
8	4,650	4,200	4,650	4,500	4,650	4,500	4,650	4,650	4,500	4,650	4,500	4,650	54,750
9	4,650	4,200	4,650	4,500	4,650	4,500	4,650	4,650	4,500	4,650	4,500	4,650	54,750
10	4,650	4,200	4,650	4,500	4,650	4,500	4,650	4,650	4,500	4,650	4,500	4,650	54,750
11	4,650	4,200	4,650	4,500	4,650	4,500	4,650	4,650	4,500	4,650	4,500	4,650	54,750
12	4,650	4,200	4,650	4,500	4,650	4,500	4,650	4,650	4,500	4,650	4,500	4,650	54,750
13	4,650	4,200	4,650	4,500	4,650	4,500	4,650	4,650	4,500	4,650	4,500	4,650	54,750
14	4,650	4,200	4,650	4,500	4,650	4,500	4,650	4,650	4,500	4,650	4,500	4,650	54,750
15	4,650	4,200	4,650	4,500	4,650	4,500	4,650	4,650	4,500	4,650	4,500	4,650	54,750
16	4,650	4,200	4,650	4,500	4,650	4,500	4,650	4,650	4,500	4,650	4,500	4,650	54,750
17	4,650	4,200	4,650	4,500	4,650	4,500	4,650	4,650	4,500	4,650	4,500	4,650	54,750
18	4,650	4,200	4,650	4,500	4,650	4,500	4,650	4,650	4,500	4,650	4,500	4,650	54,750
19	4,650	4,200	4,650	4,500	4,650	4,500	4,650	4,650	4,500	4,650	4,500	4,650	54,750
20	4,650	4,200	4,650	4,500	4,650	10,500	10,850	4,650	4,500	4,650	4,500	4,650	66,950
21	4,650	4,200	4,650	4,500	4,650	10,500	10,850	4,650	4,500	4,650	4,500	4,650	66,950
22	4,650	4,200	4,650	4,500	10,850	10,500	10,850	10,850	10,500	4,650	4,500	4,650	85,350
23	4,650	9,800	4,650	4,500	10,850	10,500	10,850	10,850	10,500	4,650	4,500	4,650	90,950
Grand Total	148,450	151,200	155,000	150,000	167,400	180,000	186,000	173,600	168,000	155,000	138,000	155,350	1,928,000

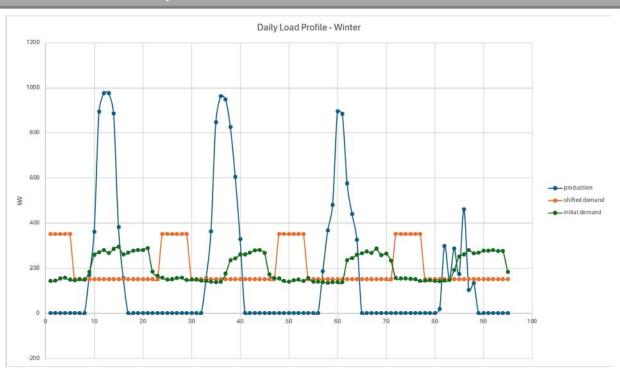
Heat map of shifted demand, kW (month vs hour of day)

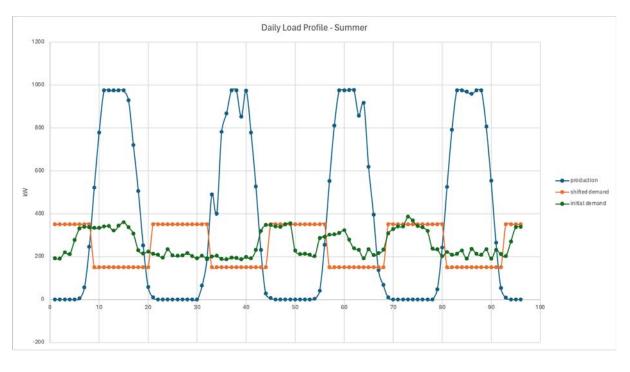
Max of kW	Month												
Hour	1	2	3	4	5	6	7	8	9	10	11	12	<b>Grand Total</b>
0	350	350	350	350	350	350	350	350	350	350	350	350	350
1	350	350	350	350	350	350	350	350	350	350	350	350	350
2	350	350	350	350	350	350	350	350	350	350	350	350	350
3	350	350	350	350	350	350	350	350	350	350	350	350	350
4	350	350	350	350	350	350	350	350	350	350	350	350	350
5	350	350	350	350	350	350	350	350	350	350	150	350	350
6	150	350	350	350	350	350	350	350	350	350	150	350	350
7	150	350	150	150	150	350	350	350	350	150	150	150	350
8	150	150	150	150	150	150	150	150	150	150	150	150	150
9	150	150	150	150	150	150	150	150	150	150	150	150	150
10	150	150	150	150	150	150	150	150	150	150	150	150	150
11	150	150	150	150	150	150	150	150	150	150	150	150	150
12	150	150	150	150	150	150	150	150	150	150	150	150	150
13	150	150	150	150	150	150	150	150	150	150	150	150	150
14	150	150	150	150	150	150	150	150	150	150	150	150	150
15	150	150	150	150	150	150	150	150	150	150	150	150	150
16	150	150	150	150	150	150	150	150	150	150	150	150	150
17	150	150	150	150	150	150	150	150	150	150	150	150	150
18	150	150	150	150	150	150	150	150	150	150	150	150	150
19	150	150	150	150	150	150	150	150	150	150	150	150	150
20	150	150	150	150	150	350	350	150	150	150	150	150	350
21	150	150	150	150	150	350	350	150	150	150	150	150	350
22	150	150	150	150	350	350	350	350	350	150	150	150	350
23	150	350	150	150	350	350	350	350	350	150	150	150	350
<b>Grand Total</b>	350	350	350	350	350	350	350	350	350	350	350	350	350

Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



## Sample Load Profiles – Shifted Load to Off-Peak

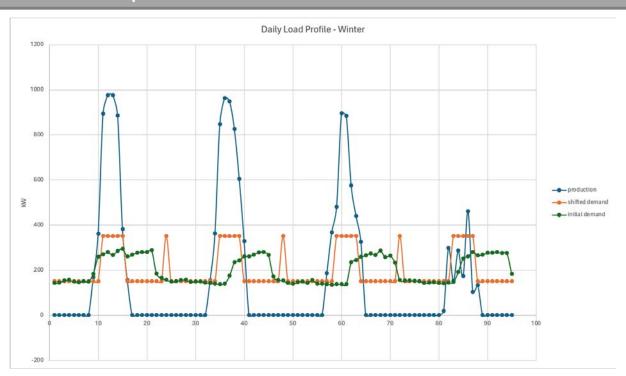


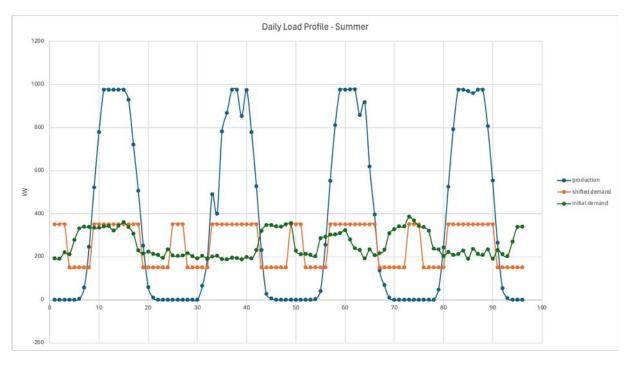


Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



## Sample Load Profiles – Shifted Load to Solar Production





Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



## **Utility Bill Components**

**Business Solutions Center** 

877-444-0888 800-450-7240

					ric Emergenci Emergencies	es	800-450-724 800-450-728
Bill Date	Account Nun	ber Next Meter Read	Date	Amount Due		Payment D	ue Date
10/13/2023	0401272549-0	0087 10/31/2023		\$40,508.19		11/27/2	023
Customer Name Service Address		NVE				Account Summa	
	ast Bill us Balance	401		\$18,962.40 \$18,962.40 \$21,545.79 \$40,508.19	Billing Days Avg Temp Heating Deg Day	Oct 2023 32 62°F	Sep 2023 30 66*F 22
Electric Servic	e nd TOU Secondary Cg-20	octual Reading 10/01/2023 Set Reading 09/01/2023	2402 -2122 280		Cooling Deg Day KWH Used Avg KWH / Day Therms Used Avg Therms / Da	76 167891 5246.6 1680.1 1y 52.5	131 171605 5720.2 1268.6 42.3
		Meter Constant Total Electric Use	x 600 168000 KV	VH	Usage by Mo	Graphs	herms KWH
Demand Charges/I Customer Demand On-Peak Off-Peak Energy Charges/C On-Peak Off-Peak Fuel Cost Adjustm Other Service Cha Wil Low Income As	529 KW 529 KW 09/06/2 redits 50,941 116,950 ent - Prior Year rges/Credits	@ 09/06/2023 11:00 * \$2.35 @ 09/06/2023 11:00 * \$18.4 023 07:45; 480 KW at \$0 KWH at \$0.07767 KWH at \$0.04569 KWH at \$0.00138	49 Subtotal:	\$1,269.07 \$9,759.52 \$0.00 \$3,956.59 \$5,343.45 \$231.69 \$37.45 \$20,689.50 \$20,689.50	1500	louth Name of the local of the	Aug Sep
Gas Service Gas Sm Coml & I Meter 445470	Utility Bill	Compone	nts		1875 1250 6250		
Local Distribution Customer Charge Distribution	Fixed = Demand =	\$91.73 \$11,028.59	0.4% 53.3%	30.58	0 5	Jan Febr	Aug Sep
Gas Supply Serv Base Gas PGA	Energy =	\$9,531.73	46.1%	320.39 40.47			
PGA	Other =	\$37.45	0.2%	25.88 356.29			
ACCOUNT NUMBER	Total =	\$20,689.50	100%	2570004494	Out 24406	5 (	12}
		Please return this st	ub with your paym	ent.			

ACCOUNT NUMBER: 0401272549-00087

Amount Due By 11/27/2023 \$40,508.19 A 1% late fee will be charged on any unpaid balance Please write your account number on your check **Amount Enclosed** 

WAUSAU WATER WORKS 407 GRANT ST WAUSAU WI 54403-4737

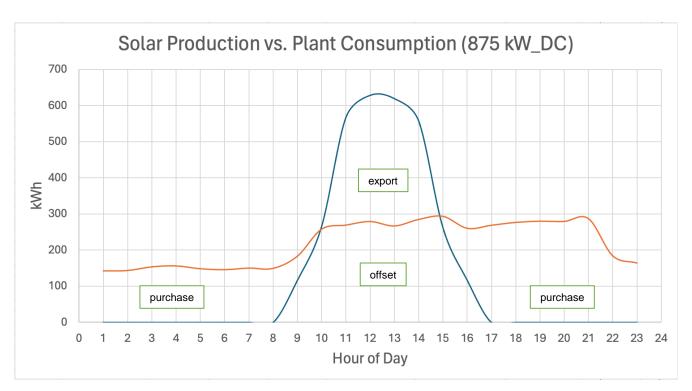
Wisconsin Public Service PO Box 6040 Carol Stream IL 60197-6040

0110401272549000872 4004050819

Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



## Purchase, Offset, and Export for Parallel Generation Example



Offset & Purchase Rates (CG20)

Season	Time	Rate (\$/kWh)	Customer Demand (\$/kW)	Demand Charge (\$/kW)
Winter (Oct-May)	On-peak (Mon-Fri 8AM-1PM & 5PM-9PM)	\$0.0728	\$2.399	\$11.992
Winter (Oct-May)	Off-peak	\$0.4282	\$2.399	\$0.000
Summer (June-Sep)	On-peak (Mon-Fri 8AM-6PM)	\$0.0728	\$2.399	\$18.449
Summer (June-Sep)	Off-peak	\$0.4282	\$2.399	\$0.000

### Avoided Energy and Capacity Cost Rates (PG-2B)

Season	Time	Rate (\$/kWh)
Winter (Oct-May)	On-peak (Mon-Fri 7AM-10PM)	\$0.07013
Winter (Oct-May)	Off-peak	\$0.02904
Summer (June-Sep)	On-peak (Mon-Fri 7AM-11PM)	\$0.08132
Summer (June-Sep)	Off-peak	\$0.03041

Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



### **Utility Rate Structure**

### WISCONSIN PUBLIC SERVICE CORPORATION

P.S.C.W. Volume No. 7

Replaces 32nd Rev. Sheet No. E6.10
Amendment 789 Schedule Cg-20

#### Small Comm'l and Indus. Service-Time of Use

#### Electric

#### AVAILABILITY

This schedule is available to small commercial and industrial customers where one or both of the following have been exceeded for three consecutive months and also exceeded for at least one billing month in each succeeding rolling 12-billing month period:

- 1. Total demand of 100kW; or
- 2. Total monthly energy consumption of 25,000 kWh.

If the customer's system demand falls below 100 kW or the customer's energy consumption falls below 25,000 kWh for 12 consecutive billing months, the Company will complete a billing comparison using the customer's previous 12 months of consumption showing the customer's historical bills under the Cg-20 rate schedule and the Cg-5 rate schedule. If these bill comparisons show that the customer had a lower bill under the Cg-20 rate schedule than they would have had under the Cg-5 rate schedule, the customer will be notified that they can opt to stay on the Cg-20 rate schedule or be moved to the Cg-5 rate schedule. If the customer does not respond within 15 days of notification, the customer will remain on the Cg-20 rate schedule. This provision may be modified in future rate case proceedings.

#### WISCONSIN PUBLIC SERVICE CORPORATION

P.S.C.W. Volume No. 7

25th Rev. Sheet No. E6.01
Replaces 24th Rev. Sheet No. E6.01
Amendment 794 Schedule Cg-5

#### Small Commercial and Industrial Service

#### Electric

### AVAILABILITY

This schedule is available to small commercial and industrial customers where:

- Total monthly energy consumption has exceeded 12,500 kwh for three consecutive months and, after qualifying at least once in succeeding rolling 12 month periods; or
- Does not meet the availability criteria for the Cg-20 and Cp rate schedules.

For new customers the company may, at its discretion, waive the three month qualification period when, in the company's judgment, the customer would obviously meet the qualification criteria. The company shall inform the customer in writing that failure of the customer to meet the qualification criteria after a waiver is granted will result in:

- 1. The customer being immediately placed on the appropriate rate schedule, and
- 2. Backbilling to reflect the appropriate rate schedule from the date the waiver was originally effective.

Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



## **Utility Rate Structure**

WISCONSIN PUBLIC SERVICE CORPORATION

P.S.C.W. Volume No. 7

33rd Rev. Sheet No. E6.10 Replaces 32nd Rev. Sheet No. E6.10 Amendment 789 Schedule Cg-20

#### Small Comm'l and Indus. Service-Time of Use

Electric

This schedule is available to small commercial and industrial customers where one or both of the following have been exceeded for three consecutive months and also exceeded for at least one billing month in each succeeding rolling 12-billing month period:

CUSTOMER CHARGE

For customers with company metering equipment installed at:

Under 6,000 volts \$3.0575 6,000 volts to 15,000 volts inclusive \$5.5890

The above listed voltages are phase-to-ground for wye-connected company systems and phase-to-phase for delta-connected company systems.

 $\frac{\text{CUSTOMER DEMAND}}{\text{Per kW of maximum demand during the current or preceding 11 months.}}$ 

DEMAND CHARGE ON-PEAK

8AM - 1PM; & 5PM - 9PM; Mon - Fri (Except Holidays) \$11.992/kW

b. Summer (Calendar Months Jun-Sep): 8AM - 6PM; Mon - Fri (Except Holidays) \$18.449/kW

OFF-PEAK All Hours Not in On-Peak Period \$0/kW

ENERGY CHARGE

ON-PEAK

a. Winter (Calendar Months Oct-May): \$0.072' 8AM - 1PM; & 5PM - 9PM; Mon - Fri (Except Holidays) \$0.07278/kWh

b. Summer (Calendar Months Jun-Sep):

8AM - 6PM; Mon - Fri (Except Holidays)

OFF-PEAK

All Hours Not in On-Peak Period \$0.04282/kWh

Wausau Water Treatment Facility 700 Bugbee Ave Wausau, WI 54401



## **Utility Rate Structure**

#### WISCONSIN PUBLIC SERVICE CORPORATION

P.S.C.W. Volume No. 7

14th Rev. Sheet No. E4.19 Replaces 13th Rev Sheet No. E4.19 Amendment 794 Schedule PG-2B

Parallel Generation-Purchase by WPSC

Electric

AVAILABILITY
To customers who (1) purchase power from the Company under a time-of-use tariffed rate, (2) satisfy the requirements of "qualifying facility" status under Part 292 of the Federal Energy Regulatory Commission's regulations under the Public Utility Regulatory Policies Act of 1978, (3) generate electrical energy with total customer owned generating capacity of 1,000 kW or less, and (4) desire to sell electrical energy to the Company.

Avoided Energy Cost Rate:
The customer will receive a credit on their bill equal to the kilowatt hours supplied to the Company multiplied by the customer's Avoided Energy Cost Rate (shown below). The customer's Avoided Energy Cost Rate is not subject to any adjustments, such as the adjustment for cost of fuel, or any other miscellaneous surcharges or adjustments. This tariff is intended to provide payment for energy sent to the Company.

Secondary Primary Transmission On Peak

Winter \$0.04219 \$0.04147 \$0.04095

Summer \$0.05338 \$0.05247 \$0.05182

Off Peak

Winter \$0.02904 \$0.02855 \$0.02819

Summer \$0.03041 \$0.02895 \$0.02899

The Avoided Energy Cost Rate shall be updated on January 1 of each year and will be calculated as follows:

Avoided Energy Cost Rate = A x (1 + B), where

A = The forecasted January through December load weighted average Day- Ahead Locational Marginal Pricing for the WPS.WPSM pricing load zone approved in the Company's annual fuel plan. On Peak

Secondary Primary Transmission All on-peak excess energy, per kWh \$0.02794 \$0.02713 \$0.02679

The Avoided Capacity Cost Rate will be updated each June 1 to reflect the current MISO Cost of New Entry (CONE) value for the applicable Local Resource Zone and Planning Year, and will be adjusted for distribution and transmission line losses based on the most recently authorized values.

#### Avoided Transmission Cost Rate:

The customer will receive a credit on their bill equal to the kilowatthours supplied to the Company multiplied by the Avoided Transmission Cost Rate

\$0.00000 All excess energy, per kWh

Winter (calendar months of October through May): 7:00 AM to 10:00 PM; Monday through Friday (except holidays).

 $\frac{\text{Summer (calendar months of June through September)}}{\text{Monday through Friday (except holidays)}}. \ 7:00 \ \text{AM to } 11:00 \ \text{PM;}$ 

#### OFF-PEAK HOURS

All hours not listed as on-peak hours.

	CITY OF WAUSAU								
ARPA FU	INDS EVALUATION CRITER	IA							
CRITERIA		POSSIBLE SCORE							
	0 points	1-5 points	6-10 points	Solar Array \$800,000	Gary	martens	Becky	Terry	Vicki
ALIGN WITH PRIORITIES:How well does the proposal align with the community's funding priorities? Does it support a livable community, fiscally sustainable government, environmentally sustainable community, and an improved & equitable quality of life?	Project is inconsistent with community priorities and does not advance community service.	Project is partly consistent with priorities but does not significantly advance community service.	Project is directly related to the community priorities and community service.	6.8	5	9	6	6	8
OTHER FUNDING SOURCES: Are there other federal/state ARPA alternative funding opportunities (such as the federal infrastructure bill) that could replace or supplement the request? Have these other funding sources been considered? Could the project/proposal be phased to accomodate other federal/state ARPA sources?	Alternative funding sources may be available but have not been explored, considered or leveraged.	Alternative funding sources may be available and will be leveraged if possible.	No alternate funding sources exist or alternative funding sources have already been leveraged to maximize the investment.	6.4		5	6	Q	8
TIMELINE: Can the proposal be implemented and completed within the ARPA program deadlines? Obligated by 12/31/2024 and expended by 12/31/2026	Project timeline is not well defined and does not clearly establish a work completion within the timeline. Project completion is near the end the ARPA requirements	Project timeline is lengthy but demonstrates that completion is within the ARPA requirements.	Project timeline clearly demonstrates that work will conclude within the short term (1 year or less).	6.6	4	-	7	9	5
COST: While projects funded with ARPA should be impactful best practices indicate the funds should be spread over the qualifying period to enhance budgetary and financial stability. Does the proposal represent a reasonable allocation of resources relative to other community proposals?	Project exhausts all or the majority of funds immediately.	Project ARPA funding request is requires a significant ARPA allocation. However, the project provides for phases which allows for flexibility of unexpected City needs and priorities.	Project ARPA funding request is reasonable to the City overall ARPA allocation. The funding request allows the City to diversify the ARPA investments. Significant projects may be allocated in phases to provide future flexibility of unexpected needs and priorities.						
RESIDENT IMPACT: What portion of the community would benefit from this proposal?	Proposal fails to identify positive impact nor identifies populations benefitted	Proposal demonstrates a positive impact on a material portion of the population 25-75%	Project demonstrates a strong positive impact on a	6.2	5		7	8	8
			significant portion of the	6.8	8	7	8	6	5
<b>IMPACT ON FUTURE BUDGETS</b> : Will this proposal require ongoing funding? Will it reduce or increase ongoing operating expenses? Will the project produce additional annual revenues?	Project creates a new funding dependency and future tax levy pressure.	Project would have a neutral impact on personnel or other operating costs or revenues. Project is budget neutral.	Project decreases future operating costs, increase operating revenues,	6	3	7	6	6	8
COMPLEXITY AND READINESS: Is the project or proposal complex with multiple phases before implementation can begin? Does the project or proposal require outside approvals or oversight? Does a clear implementation plan exist? What complications could arise to prevent this project from achieving its intended goals?	Project is unable to proceed due to obstacles such as land acquisition, easements, designs and other approvals. Project is not shovel ready.		Project is entirely ready to proceed. No obstacles exist.						
CENSUS TRACT ELIBILITY: Does the proposal/project fall within a census tract or benefit those vulnerable popuations and those disproportionately negatively impacted by COVID19?	This project/proposal is not located in a census tract and not designed to benefit those disporpostionately negatively impacted by COVID as interpreted by ARPA regulations?	This project/proposal is not located in a census tract but will benefit all citizens including those disporpostionately negatively impacted by COVID as interpreted by ARPA regulations?	This project/proposal is located in a census tract or is considered to benefit those disporpostionately negatively impacted by COVID as interpreted by ARPA regulations?	6.2	4	Ü	6	9	5
<b>IMPACT OF DEFERRAL</b> : What is the impact of the deferral? Will costs go up? Will the City be out of compliance with mandates or regulations? Are there health and safety risks impacting residents that will remain unaddressed? Does this proposal improve the environmental quality of the city?	Deferral causes limited impact to service or disruptions.	Deferral will have limited impact on regulatory mandates, health and safety risks or environmental qualities.	Deferral will have a detrimental impact on regulatory mandates, health and safety risks or environmental qualities.	4.8	5	i 3	6	5	5
PROJECT PRIORITY AND IMPACT: Regardless of any other scores, do you believe this project should be a priority? Do you believe that the project is transformational for the community? Do you believe that the project will make a big impact?	Low priority, impact, transformational power	Some priority, impact and transformational power	High priority, impact and transformational power	4.0		. 3	Ü	J	3
The second section of the project will make a big impact:				6	E	7	6	6	5
			TOTAL	60.4	49	62	58	71	62
		1							