



First Amendment to Energy Performance Contract (EPC) with Iconergy, Ltd. for NWRF Floating Solar PV Project

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- Pre-qualified by the Colorado Energy Office as an Energy Service Company (ESCO)
- Partnered with the Town of Erie to complete an Investment Grade Audit (IGA) in 2021. Energy efficiency and renewable energy measures were identified in the final IGA report, and this scope was completed as a capital project using the Colorado Energy Office Performance Contracting Program (CEPCP)
- Completed project scope will be measured and verified over the next three years.
- Utilized programs and rebates from utility companies, and a grant from DOLA (EIAF) to support energy efficiency, water use reduction, and renewable energy measures.

EPC Phase I Efficiency Improvements – Completed

Matrix of Buildings where Measures are Implemented



ERIE
COLORADO



ERIE
COLORADO

Erie Community Center (ECC)
 Leon A. Wurl Service Center (LAWSC)
 Erie Police Department & Municipal Center (PC)
 Lynn R Morgan Water Treatment Facility (WTF)
 North Water Reclamation Facility Admin (NWRFA)
 Town Hall (TH)

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Additional Studied IGA Measure : NWRP Floating Solar PV System

- Re-use water pond can accommodate a floating solar photovoltaic (PV) system tied into one, two or all three electrical meters
- Evaluated 100% offset of electrical consumption for site – requires a 3.1MW total solar PV array
- Preserves the existing land for future use
- System will reduce evaporation rate on the pond and cool effluent water temperature that is released into Boulder Creek



Proposed EPC Measure: 1.2 MW NWRF Floating Solar Array

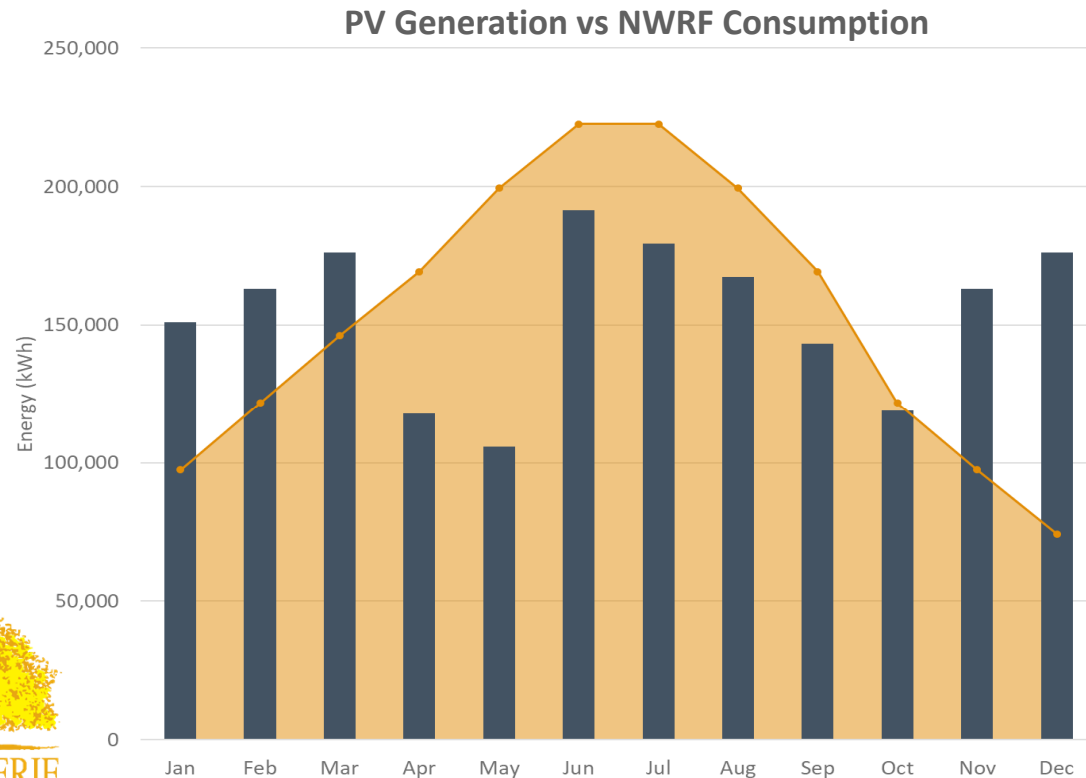
Due to current funding available, the system has been scaled to 1.2MW for this phase.

Floating Solar Array will be completed by Iconergy if Council approves Amendment 1-EPC to the current Energy Performance Contract with the Town

- DOLA EIAF Matching Grant was awarded to the Town for the 1.2MW system - \$900k
- Project scope is scalable and additional PV can be installed as funding becomes available
- Program outcome is guaranteed
- Colorado Energy Office (CEO) provides project oversight through implementation
- Results are tracked yearly via required 3-year measurement and verification

PROJECT OVERVIEW

- Town of Erie will install a 1.2 MW floating solar PV system to offset 100% of the electrical energy consumption of their Solids Building and Re-Use Pump Station
- The Solids Building and Re-Use Pump Station account for nearly **40%** of electrical energy consumption at the North Water Reclamation Facility (NWRf)



The floating solar PV system will be placed on the pond close to the Solids Building and Re-Use Pump Station – placing the system close to the buildings will help reduce cost and losses.

Funding

- 21% of the project costs will be reimbursed by the \$900k DOLA EIAF Grant
 - Payback period with energy savings alone would be 25 years. The EIAF grant supports the Solar PV by reducing the payback period to 17 years.
- 30% of the project currently qualifies for a Federal credit via the Direct Pay provision of the Inflation Reduction Act.
- 49% of the project is funded by Erie with ROI supported by the Colorado Energy Office (CEO) Energy Performance Contract.

Building	Capacity (kW - DC)	Generation (kWh)	Util Rate (\$ / kWh)	Savings (\$)	Cost (\$ / W)	Gross Cost (\$)	DOLA Grant (\$)	Cost w/DOLA (\$)	IRA Direct Pay (\$)	Net Cost (\$)	SPB (years)
Solids	1,020	1,517,800	\$0.070	\$106,280	\$3.33	\$3,395,929	(\$765,000)	\$2,630,929	(\$1,086,610)	\$1,544,319	17
Pump	180	267,900		\$18,760	\$3.33	\$599,282	(\$135,000)	\$464,282	(\$191,755)	\$272,527	
					Contingency	\$266,007		\$266,007		\$266,007	
					M&V (3 years)	\$15,455					
Total	1,200	1,785,700		\$125,000	\$3.56	\$4,276,673	(\$900,000)	\$3,361,218	(\$1,278,365)	\$2,082,853	

FUTURE WORK

The NWRP Float Solar PV project is scalable: Goal is 100%

Electrical offset of all (3) NWRP meters

- Current Phase - 1.2 MW system to offset Solids and Re-Use Pump meters
- Future Phase - 1.9 MW system for the Admin & Process Building meter.
- FY26 Congressionally Directed Spending application submitted - decision expected November 2025

Current Phase *(shown by dark colors)*

1.2 MW of PV is installed to offset all electrical energy consumption of the Solids Building and Re-Use Pump Station

Estimated annual generation: **1,840 MWh**

Energy Use
(kWh)

Solar Generation
(1.2 MW System)

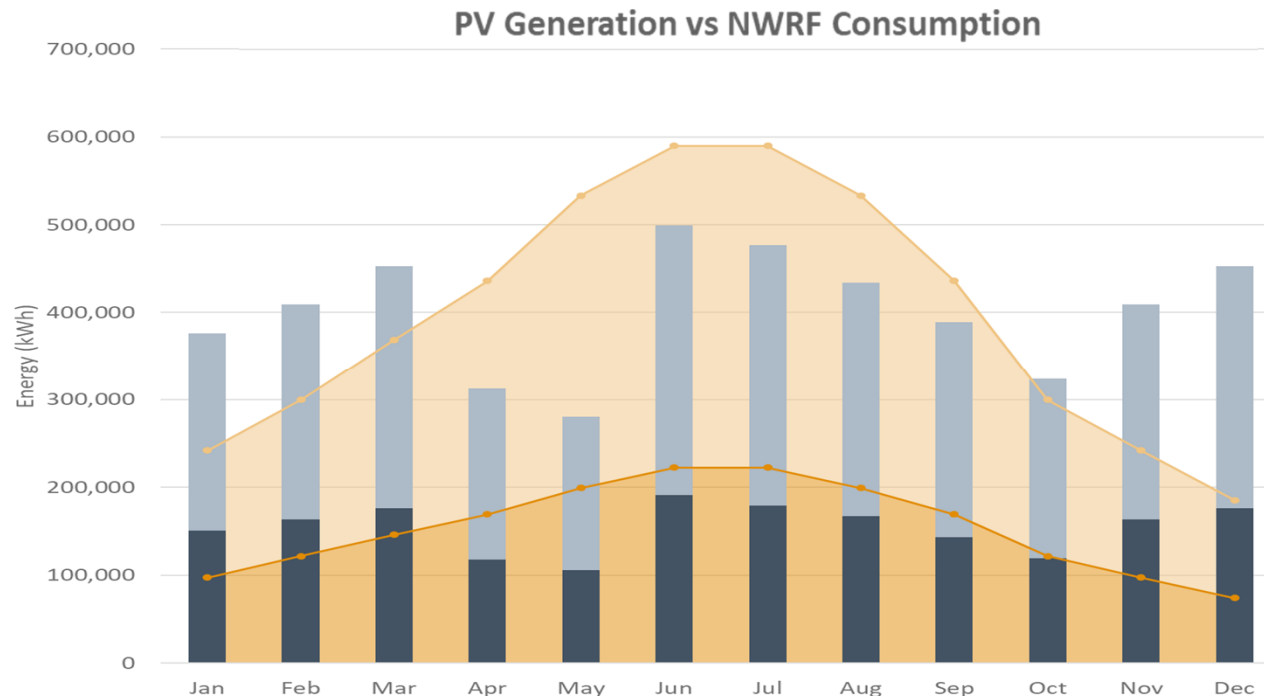
Future Phase *(shown by light colors)*

1.9 MW of additional PV is installed to offset all electrical energy consumption of the Admin & Process Building

Estimated annual generation: **2,915 MWh**

Energy Use
(kWh)

Solar Generation
(1.9 MW System)



NWRF Floating Solar PV Project Timeline

- June 24, 2025 - Approve EPC Amendment (1-EPC) for 1.2 MW PV System
- July – Sept. 2025: Finalize PV array design and order equipment
- Sept. 2025 – Jan. 2026: Installation of PV system and interconnection
- Jan. 2026 – Mar. 2026: Start up and commissioning
- Mar. 2026 – Feb. 2029: Measure and verify system performance

What this project will do for carbon dioxide reduction is equivalent to:

- 334 gas-powered passenger cars driven in one year
- 3,644,363 miles driven by the average car
- 1,589,679 pounds of coal consumed
- 18.9 tanker trucks of gas
- 155 homes' energy use for one year
- 65,743 home BBQ propane cylinders
- 96,990,970 smart phones charged

