

City of Vergas Building and Solar Analysis

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Building Energy Analysis

Vergas Fire Hall:

Consumption: 66,064 kWh's per year- Small General Service, FTOS Heat, and Off peak Water Heater

Cost: \$3,922 (\$2,289.67 Energy kWh charge)

Rate Analysis

Vergas Fire Hall:

(22%) Small General Service; Summer: \$0.07546 Winter: \$0.05595

Average Rate: \$0.08007

(76%) FTOS Heat; Summer: \$0.01032 Winter: \$0.01109

Average Rate: \$0.02626

(2%) Off peak water heater; Summer: \$0.03084 Winter: \$0.03204

Average Rate: \$0.04707

Weighted Average Rate Paid: \$0.03581

Actual Average for Solar Analysis: \$0.07767 (FTOS only active 10 PM – 6 AM so solar will never be consumed under the lower rate)

Solar Analysis (Updated with final bid pricing)

Vergas Fire Hall

50 kWDC / 40 kWAC Nameplate Capacity

Annual Production: 54,500 kWh (82% offset)

Total Cost: \$110,356

Incentives: Otter Tail Power POP Rebate: \$ 55,078

IRS 30% ITC Base credit: \$33,047

Total Incentives: \$88,125

Balance after incentives: **(\$22,231)**

Annual Energy Savings: \$4,200 (\$200 annual insurance included)

Cashflow Positive: 5 years, 2 months

Lifetime Savings (30 years): \$123,547

Total Energy Value (30 years): \$145,778

Loan and Grant Information

West Central Initiative is offering up to \$150,000 loans with 0% interest and no origination fee to communities that cannot finance their solar projects in other ways

Repayment will consist of the utility rebate, tax credit when it is received, and a simple repayment plan not to exceed 72 months

Tax Credit Assistance and Guidance

The MN Dept of Commerce contracted with Deloitte to provide support for communities with clean energy tax credits. Deloitte will support municipalities with active projects to file 990-T and clean energy tax credits

West Central Initiative will also contract with Giraffe Finance who will file for the federal tax credit on behalf of the city. The city will share relevant project information and details with the Giraffe team; the Giraffe team will file all the necessary paperwork and documents.

Only once the city receives their tax return will Giraffe be paid. This service is worth \$5,000; West Central Initiative will pay for our communities to use this service.