

Trinity Methodist Church  
6151 W. Charleston Blvd.  
Las Vegas, NV 89146

Dear Trinity Methodist Church

We are pleased to submit a proposal for your solar electric energy system. Solar electric systems are environmentally friendly and reduce your reliance on energy from the utility. Instead of renting your electricity from your utility, you can now own your own clean energy production.

We have designed a system that achieves the best energy cost savings for you. This includes an analysis of your energy requirements, a study of the best energy production design and the application of any available state and federal rebates.

We are committed to a quality installation and to ensuring your total satisfaction with our products and service. The next step is signing the necessary agreements so we can reserve your rebate and begin the engineering and permitting processes. This proposal is valid for 30 days.

We look forward to helping you achieve energy independence, make a positive environmental impact, and ensure a great investment. Please contact us with any questions.

Tim Fromhart  
Tel: 702-463-0024

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## Summary

**Customer**  
Trinity Methodist Church

**Site Address**  
6151 W. Charleston Blvd.  
Las Vegas, NV 89146

**Company Contact**  
Tim Fromhart  
Service 1st Energy Solutions  
5643 W. Charleston blvd. #4  
Las Vegas, NV 89146

Financial Analysis			
Utility Savings Over System Life	\$270,140 \$900 / mo (avg)	Reduction in Green House Gas Emissions	693 tons of CO2
Total Life-Cycle Payback (Cash Flow compared to Net Cost)	1,171%	Rate of Return on Cash Invested	25.7%
Levelized Cost of Solar Energy	\$0.02 / kWh		

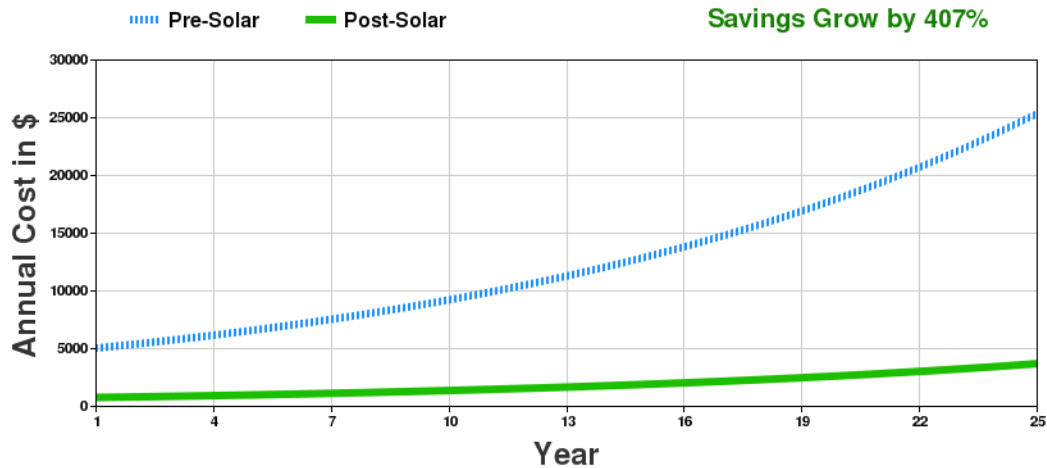
Cost Breakdown		
<b>Installer Contract Cost</b>	\$147,804	(\$5.33/watt DC, \$6.33/watt AC)
NV RenewableGenerations Rebate Program (Step 1)	(\$125,984)	
<b>Net Cost (year of installation)</b>	<u>\$21,820</u>	(\$0.79/watt DC, \$0.93/watt AC)

System Description	
Total System Size	27.720 kW DC Power (STC) / 23.344 kW AC Power (CEC)
Estimated Annual Production	40,471 kWh
PV Panel Description	126 x Grape Solar Model: CS-P-220-DJ
Inverters	Qty. 2 - Fronius USA LLC Model: IG Plus 10.0-240

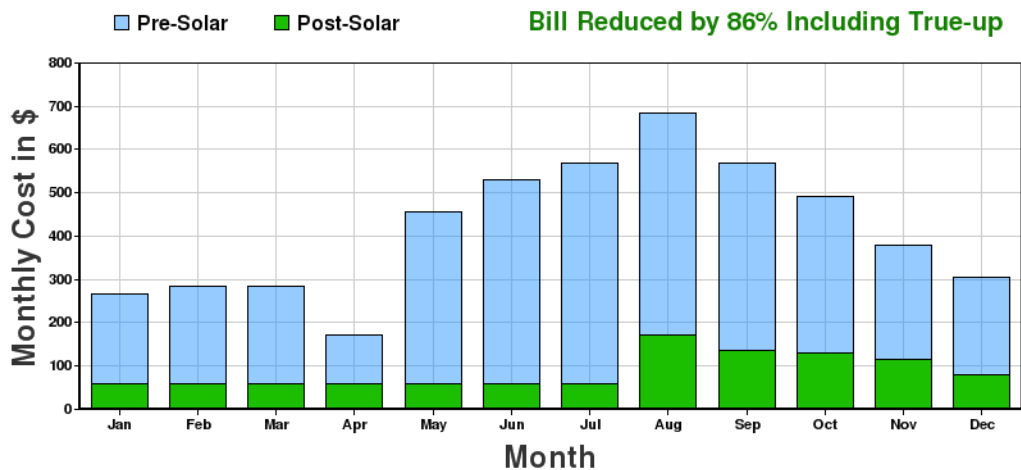
## Energy Analysis

Your historical energy usage was used to help size your solar system. Based upon the system size suggested, the expected electricity bill savings over a 25 year period are provided. In addition, the first-year electricity bill savings you can expect are provided together with a chart of the monthly solar system output (PV production) you can expect.

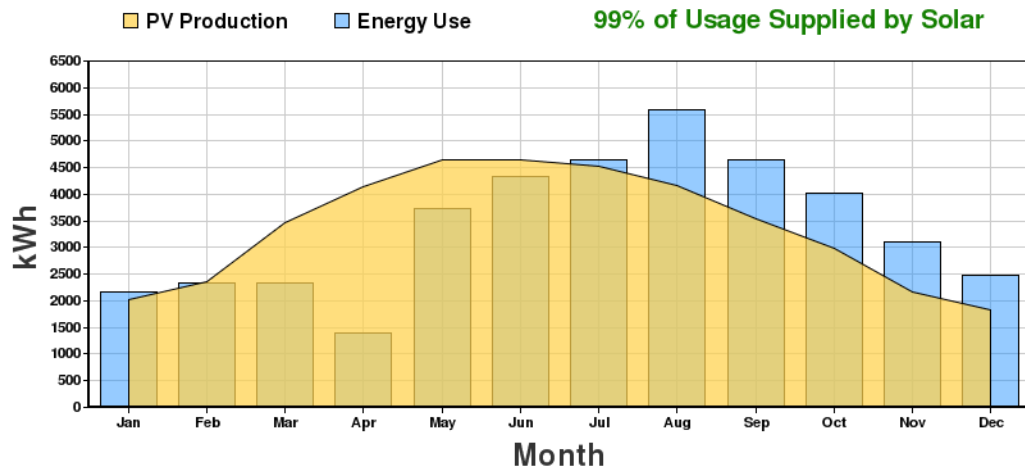
### Annual Electricity Bill Savings Over Time



### Monthly Electricity Bill Savings



### Monthly Electricity Use and Amount Supplied by Solar



Assumptions: Post-Solar Electric Rate Schedule for NV Energy (fmr Nevada Power Company) is Large Residential Service (Rate Code: LRS) Annual utility inflation: 7.00% (assumed). Energy Bill Savings are actual, without any tax effects applied.

## Energy Bill Estimate

The following energy bill estimate is without any tax effects applied.

(kWh)	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Annual</u>
<b>Total Usage</b>	2,170	2,325	2,325	1,395	3,720	4,340	4,650	5,580	4,650	4,030	3,100	2,480	40.8k
<b>Solar Production</b>	2,017	2,356	3,472	4,144	4,657	4,650	4,518	4,165	3,534	2,980	2,155	1,823	40.5k
<b>Energy to Purchase</b>	153	-31	-1,147	-2,749	-937	-310	132	1,415	1,116	1,050	945	657	294

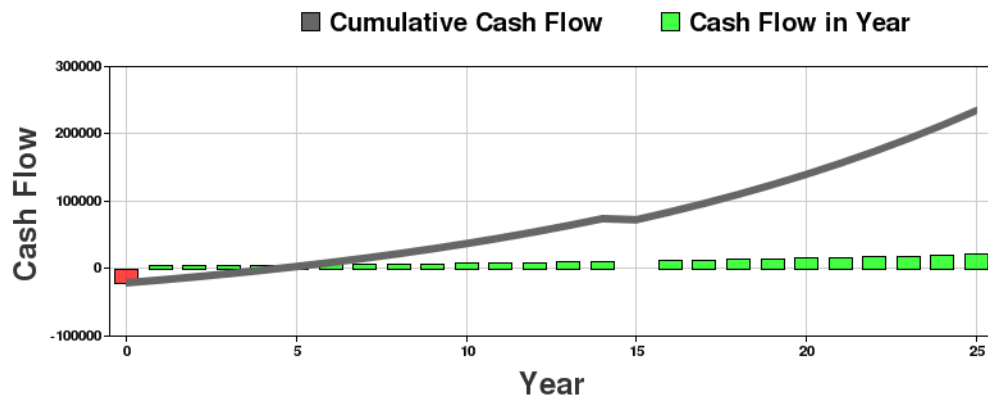
(Cost)	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Annual</u>
<b>Pre-solar*</b>	\$266	\$285	\$285	\$171	\$455	\$531	\$569	\$683	\$569	\$493	\$379	\$304	\$4,990
<b>Post-solar*</b>	\$60	\$60	\$60	\$60	\$60	\$60	\$60	\$173	\$137	\$129	\$116	\$80	\$1,055
<b>Annual Bill "True-up"</b>	Credit for excess electricity generated (month of credit depends on interconnect date)											\$336	\$336
<b>Energy Bill Savings</b>	\$206	\$225	\$225	\$111	\$395	\$471	\$509	\$510	\$432	\$364	\$263	\$560	\$4,271

\*Includes rate inflation

NOTES ON TRUE-UP AND ENERGY BILL SAVINGS:  
 The Energy Bill Savings is your Pre-solar Bill minus the Post-solar Bill, plus the True-up. The "credit for excess electricity generated" is limited by your bill during the year: it cannot be greater than your Energy Charges, which are your Post-solar Bill minus any minimum charges. The True-Up Credit you see on your statement may be greater than this, and is available to offset higher Energy Charges you may incur in the future.

## Financial Analysis

The first chart summarizes the cash flow you can expect from the system quoted. Key financial measures are also provided.



Financial Summary	
Utility Savings Over System Life	\$270,140
Average Monthly Utility Savings	\$900 (over system life)
Loan Value:	\$0
Net Cost (In year of installation)	\$21,820
Rate of Return on Cash Invested	25.7%
Total Life-Cycle Payback (Cash flow compared to Net Cost)	1,171%
Levelized Cost of Solar Energy (Net Cost / lifetime energy production)	\$0.02 / kWh

## Environmental Impact Analysis

Your solar system will generate significant environmental benefits. These come primarily from avoided power plant emissions. Below is a summary of environmental benefits your solar system will provide.

<b>Your New, Lower Carbon Footprint</b>	
Your solar system will reduce Green House Gas emissions by <b>693 tons of CO2</b> (Over 25 years)	
<b>Equivalent CO2 Reductions</b>	
Small Car:	2,349,492 miles
Medium Car:	1,260,182 miles
SUV:	882,930 miles
Air Miles:	1,429,072 miles
Trees Planted:	27,724 trees planted
CO2 from Trash & Waste:	1,260 persons

## Cost Detail & System Description

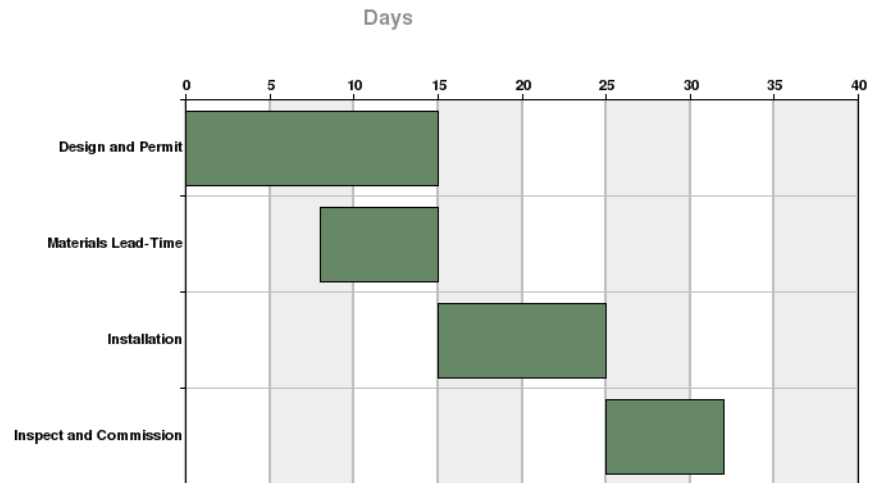
This is a summary of the cost and a description of the solar system we are quoting.

Net Cost Detail	
<b>Gross Cost</b>	<b>\$147,804</b>
<b>Total Incentives:</b> (In year of installation)	<b>(\$125,984)</b>
<b>Net Cost:</b> (In year of installation)	<b>\$21,820</b>
<b>Contract Cost:</b>	<b>\$147,804</b>

<b>System Description</b>	
Total System Size:	27.720 kW DC Power (STC) 24.444 kW (PTC) 23.344 kW AC Power (CEC Size)
Net Cost per Watt:	\$0.79 / Watt DC Power (STC) \$0.89 / watt (PTC) \$0.93 / watt AC Power (CEC Size)
Estimated Annual Production:	40,471 kWh
<b>Array 1</b>	
Proposed Array Sizes (STC):	27.720 kW
Number of PV Panels:	126
PV Panel Description:	Grape Solar Model: CS-P-220-DJ 220W Polycrystalline Module
Inverters:	Qty. 2 Fronius USA LLC Model: IG Plus 10.0-240 10000W (240Vac) Utility Interactive Inverter
Output due to Shade Factors:	100%
Array Area & Orientation:	Roof Mount: 3,250 sq-ft Tilt: 2°, Azimuth: 180° (S)

## Job Schedule

The job schedule provided below summarizes our schedule for meeting four key milestones.



## Cash Flow by Year

The following table of estimated cash flows includes any tax effects, rate and cost inflation and other time-related cash flow factors. Refer to the Disclaimers & Assumptions section (below) for further clarification.

Year:	0	1	2	3	4
Installation, Operation & Maintenance Costs	(\$147,804)	(\$74)	(\$75)	(\$76)	(\$76)
NV RenewableGenerations Rebate Program (Step 1)	\$125,984	\$0	\$0	\$0	\$0
Annual Utility Savings (Includes Rate Inflation )	\$0	\$4,271	\$4,570	\$4,890	\$5,232
<b>Total Annual Cash Flow</b>	<b>(\$21,820)</b>	<b>\$4,197</b>	<b>\$4,495</b>	<b>\$4,814</b>	<b>\$5,156</b>
Cumulative Cash Flow	(\$21,820)	(\$17,623)	(\$13,128)	(\$8,314)	(\$3,158)

Year:	5	6	7	8	9
Installation, Operation & Maintenance Costs	(\$77)	(\$78)	(\$79)	(\$80)	(\$80)
NV RenewableGenerations Rebate Program (Step 1)	\$0	\$0	\$0	\$0	\$0
Annual Utility Savings (Includes Rate Inflation )	\$5,599	\$5,991	\$6,410	\$6,858	\$7,339
<b>Total Annual Cash Flow</b>	<b>\$5,522</b>	<b>\$5,913</b>	<b>\$6,331</b>	<b>\$6,778</b>	<b>\$7,259</b>
Cumulative Cash Flow	\$2,364	\$8,277	\$14,608	\$21,386	\$28,645

Year:	10	11	12	13	14
Installation, Operation & Maintenance Costs	(\$81)	(\$82)	(\$83)	(\$84)	(\$84)
NV RenewableGenerations Rebate Program (Step 1)	\$0	\$0	\$0	\$0	\$0
Annual Utility Savings (Includes Rate Inflation )	\$7,852	\$8,402	\$8,990	\$9,619	\$10,292
<b>Total Annual Cash Flow</b>	<b>\$7,771</b>	<b>\$8,320</b>	<b>\$8,907</b>	<b>\$9,535</b>	<b>\$10,208</b>
Cumulative Cash Flow	\$36,416	\$44,736	\$53,643	\$63,178	\$73,386

Year:	15	16	17	18	19
Installation, Operation & Maintenance Costs	(\$12,590)	(\$86)	(\$87)	(\$88)	(\$89)
NV RenewableGenerations Rebate Program (Step 1)	\$0	\$0	\$0	\$0	\$0
Annual Utility Savings (Includes Rate Inflation )	\$11,013	\$11,784	\$12,608	\$13,491	\$14,436
<b>Total Annual Cash Flow</b>	<b>(\$1,577)</b>	<b>\$11,698</b>	<b>\$12,521</b>	<b>\$13,403</b>	<b>\$14,347</b>
Cumulative Cash Flow	\$71,809	\$83,507	\$96,028	\$109,431	\$123,778

Year:	20	21	22	23	24	25
Installation, Operation & Maintenance Costs	(\$90)	(\$91)	(\$91)	(\$92)	(\$93)	(\$94)
NV RenewableGenerations Rebate Program (Step 1)	\$0	\$0	\$0	\$0	\$0	\$0
Annual Utility Savings (Includes Rate Inflation )	\$15,446	\$16,528	\$17,684	\$18,923	\$20,247	\$21,664
<b>Total Annual Cash Flow</b>	<b>\$15,356</b>	<b>\$16,437</b>	<b>\$17,593</b>	<b>\$18,831</b>	<b>\$20,154</b>	<b>\$21,570</b>
Cumulative Cash Flow	\$139,134	\$155,571	\$173,164	\$191,995	\$212,149	\$233,719

## Quotation & Contract for a Renewable Energy Power System

**Service 1st Energy Solutions**

5643 W. Charleston blvd. #4  
 Las Vegas, NV 89146  
 Licenses:

**Sales Consultant**

Tim Fromhart  
 Tel: 702-463-0024  
 Email: tim@service1stnow.com

**Customer**

Trinity Methodist Church

*Site Address*

Trinity Methodist Church  
 6151 W. Charleston Blvd.  
 Las Vegas, NV 89146

*Mailing Address:*

*same as site address*

Project Description & Major Components	
Array 1: Roof Mount	System Size: 27.720 kW DC, STC (\$0.79/ DC watt) System Size: 23.344 kW AC, CEC (\$0.93/ AC watt)
<p><b>Major System Components</b></p> <p>PV Panels: Qty: 126 - mfg 372: Grape Solar Model: CS-P-220-DJ. 220W Polycrystalline Module.</p> <p>Inverter(s): Qty: 2 - mfg 84: Fronius USA LLC Model: IG Plus 10.0-240. 10000W (240Vac) Utility Interactive Inverter.</p>	<p><b>Standard Components</b></p> <p>Racking and mounting components per Uniform Building Code. AC and DC disconnects per National Electric Code and Utility. Wiring, conduit and overcurrent protection per National Electric Code. Roofing sealant and flashings as required.</p>
<p><b>Standard Labor:</b></p> <p>Design system and secure basic building or electrical permit (architectural, planning commission or other reviews are extra). Install specified system in good workman like manner. Complete and submit utility interconnection documents (if any). Coordinate building, electrical and utility inspections (as applicable).</p>	
<p><b>Additional Components &amp; Allowances:</b></p>	

<b>System Pricing Details</b>	
<b>Installed System Price:</b> Includes Sales tax and Shipping (before incentives)	<b>\$147,804</b>
Less Rebate(s) to be Received by Installer:	\$0
<b>Contract Net Cost:</b>	<b>\$147,804</b>
<p><b>Time for Completion:</b> The work to be performed by Contractor pursuant to this Agreement shall be commenced within _____ days from this date or approximately on _____ and shall be substantially completed within ____ days or approximately on _____.</p>	
<p><b>Construction Commencement Schedule:</b> Commencement of work shall be defined as Delivery of material to site, or _____. Contractor's failure to substantially commence work, without lawful excuse, within twenty (20) days from the date specified above is a violation of the Contractor's License Law.</p>	
<p><b>Additional Contract Provisions:</b>                      All payments are due Net 10 days. 1% interest per month carrying charge.                      System completion occurs upon building or electrical inspectors permit signoff. Utility inspection typically occurs 4 to 14 days after permit signoff. Quoted system price includes permit and electric utility fees.                      This PV system includes a/the 10-year warranty required by the California Solar Initiative.</p>	
<b>Acceptance</b>	
<p>This quotation is valid for 14 days from the above date, quoted schedule is valid for 3 days. If the customer decides to purchase the goods and services outlined above, this document shall become part of the Agreement for Supply and Installation of a Renewable Energy Power System which specifies additional terms and boilerplate consumer rights as part of a Home Improvement Contract.</p>	
Salesperson Signature:	Date:
To be signed when customer decides to purchase	
Customer Acceptance Signature:	Date:

## Terms & Conditions of Sale

### General Provisions

Any alteration or deviation from the above specifications, including but not limited to any such alteration or deviation involving additional material and/or labor costs, will be executed only upon a written order for same, signed by Owner and Contractor, and if there is any charge for such alteration or deviation, the additional charge will be added to the contract price of this contract. If payment is not made when due, Contractor may suspend work on the job until such time as all payments due have been made. A failure to make payment for a period in excess of 15 days from the due date of the payment shall be deemed a material breach of this contract.

In addition, the following general provisions apply:

- All work shall be completed in a workman-like manner and in compliance with all building codes and other applicable laws.
- To the extent required by law all work shall be performed by individuals duly licensed and authorized by law to perform said work.
- Contractor shall furnish Owner appropriate releases or waivers of lien for all work performed or materials provided at the time the next periodic payment shall be due.
- All change orders shall be in writing and signed both by Owner and Contractor, and shall be incorporated in, and become a part of the contract.
- Contractor warrants it is adequately insured for injury to its employees and others incurring loss or injury as a result of the acts of Contractor or its employees or subcontractors.
- Contractor shall obtain all permits necessary for the work to be performed. The actual cost due for any permits to be obtained will be passed on to the Owner.
- Contractor agrees to remove all debris and leave the premises in broom clean condition.
- In the event Owner shall fail to pay any periodic or installment payment due hereunder, Contractor may cease work without breach pending payment or resolution of any dispute.
- All disputes hereunder shall be resolved by binding arbitration in accordance with rules of the American Arbitration Association.
- Contractor shall not be liable for any delay due to circumstances beyond its control including strikes, casualty or general unavailability of materials.
- Contractor warrants all work for a period of one hundred and twenty months following completion.

FAILURE BY CONTRACTOR WITHOUT LAWFUL EXCUSE TO SUBSTANTIALLY COMMENCE WORK WITHIN TWENTY (20) DAYS FROM THE APPROXIMATE DATE SPECIFIED IN THE PROPOSAL AND

CONTRACT WHEN WORK WILL BEGIN IS A VIOLATION OF THE CONTRACTOR'S LICENSE LAW.

### Other Terms

The following terms and conditions apply to the payment schedule:

- If the payment schedule contained in the contract provides for a down payment to be paid to Contractor by Owner before the commencement of work, such down payment shall not exceed One Thousand Dollars (\$1,000) or 10% of the contract price, excluding finance charges, whichever is the lesser.
- In no event shall the payment schedule provide for Contractor to receive, nor shall Contractor actually receive, payment in excess of 100% of the value of the work performed on the project at any time, excluding finance charges, except that Contractor may receive an initial down payment authorized by condition (1) above.
- A failure by Contractor without lawful excuse to substantially commence work within twenty (20) days of the approximate date specified in this Contract when work will begin shall postpone the next succeeding payment to Contractor for that period of time equivalent to the time between when substantial commencement was to have occurred and when it did occur.

The terms and conditions set forth above pertaining to the payment schedule shall not apply when the contract provides for Contractor to furnish a performance and payment bond, lien and completion bond, bond equivalent, or joint control approved by the Registrar of Contractors covering full performance and completion of the contract and such bonds or joint control is or are furnished by Contractor, or when the parties agree for full payment to be made upon or for a schedule of payments to commence after satisfactory completion of the project.

If the contract provides for a payment of a salesperson's commission out of the contract price, that payment shall be made on a pro rata basis in proportion to the schedule of payments made to the contractor by the disbursing party.

## Notice of Right to Cancellation

NOTICE TO OWNER (Section 7018.5 California Contractors License Law) THE LAW REQUIRES THAT, BEFORE A LICENSED CONTRACTOR CAN ENTER INTO A CONTRACT WITH YOU FOR A WORK OF IMPROVEMENT ON YOUR PROPERTY, HE MUST GIVE YOU A COPY OF THIS NOTICE.

Under the California Mechanics` Lien Law, any contractor, subcontractor, laborer, supplier, or other person or entity who helps to improve your property, but is not paid for his or her work or supplies, has a right to place a lien on your home, land, or property where the work was performed and to sue you in court to obtain payment. This means that after a court hearing; your home, land, and property could be sold by a court officer and the proceeds of the sale used to satisfy what you owe. This can happen even if you have paid your contractor in full if the contractor's subcontractors, laborers, or suppliers remain unpaid. To preserve their rights to file a claim or lien against your property, certain claimants such as subcontractors or material suppliers are each required to provide a document called a "Preliminary Notice." Contractors and laborers who contract with owners directly do not have to provide such notice since you are aware of their existence as an owner. A preliminary notice is not a lien against your property. Its purpose is to notify you of persons or entities that may have a right to file a lien against your property if they are not paid. In order to perfect their lien rights, a contractor, subcontractor, supplier, or laborer must file a mechanics` lien with the county recorder that then becomes a recorded lien against your property. Generally, the maximum time allowed for filing a mechanics` lien against your property is 90 days after substantial completion of your project.

The Notice of Cancellation, regarding your right to cancel this contract, is attached hereto and made a part to this contract.

### NOTICE OF RIGHT TO CANCEL:

Notice of Cancellation \_\_\_\_\_ (enter date of transaction)

You may cancel this transaction, without any penalty or obligation, within three business days from the above date. If you cancel, any property traded in, payments made under the contract or sale, and any negotiable instrument executed by you will be returned within 10 days following receipt by the seller of your cancellation notice. Additionally, any security interest arising out of the transaction will be canceled. If you cancel, you must make available to the seller at your residence, in substantially as good condition as when received, any goods delivered to you under this contract or sale, or you may, if you wish, comply with the instructions of the seller regarding the return shipment of the goods at the seller`s expense and risk.

If you do make the goods available to the seller and the seller does not pick them up within 20 days of the date of

your notice of cancellation, you may retain or dispose of the goods without any further obligation.

If you fail to make the goods available to the seller, or if you agree to return the goods to the seller and fail to do so, then you remain liable for performance of all obligations under the contract.

To cancel this transaction, mail or deliver a signed and dated copy of this cancellation notice, or any other written notice, or send a telegram to:

Contractor Name and Address:

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No later than midnight of \_\_\_\_\_ (date)

I hereby cancel this transaction \_\_\_\_\_ (date)

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(Buyer`s Signature)

## Disclaimers & Assumptions

### Operation, Maintenance and Inflation Rates

This estimate assumes the following system operating, maintenance and inflation rates:

System Life:	25 years
Operation & Maintenance:	0.05% of system cost per annum
PV Degradation:	0.05% per annum
Inverter Life:	15 years
O&M and Inverter Replacement Inflation:	1.0% per annum

### System Size Ratings & Performance

There are three methods commonly used to rate PV system size: STC, PTC and CEC. The Standard Test Condition rating ("STC" also called "DC" or "nameplate") assumes a standard set of operation conditions. The STC rating is most often used by manufacturers to classify the power output of PV modules. The PV-USA Test Condition ("PTC") and California Energy Commission ("CEC") ratings were designed to accommodate operating conditions which may be a closer approximate to the performance realized from your PV modules.

To calculate the system's energy production over any given year, a calculation of the expected degradation in system performance is included (See "PV Degradation", above).

### Tax Credits & Deductions

Income tax rate assumed: 0.00%

To calculate the estimated cash flow in this proposal, our analysis used the tax rates you provided earlier in the set-up. We should stress that we cannot provide tax or investment guidance. You should consult your tax preparer or investment adviser for these services. This analysis calculates the cash flows based only on the assumptions entered into the proposal.

This analysis assumes Federal income Tax is not applied to any state or local incentives. Therefore, the basis for the Federal ITC is the installation cost less 100% of any and all state or local incentives.

#### Commercial:

In calculating the cash flow for a business, our analysis assumes that your beginning utility expense is a tax

deductible business expense. Since your beginning utility bill will be reduced by installing the solar energy system, our analysis takes this into account.

It also assumes that when you install your solar energy system, you will be able to receive tax benefits from the investment tax credit, depreciation of the equipment, annual maintenance expense, and interest used in financing. Unlike a residential system, the financing does not have to be secured by real estate in order for the interest to qualify as a tax deduction. Clean Power Finance can arrange this financing for you.

MACRS Depreciation: Any commercial entity that invests in or purchases qualified solar energy property may use the Modified Accelerated Cost Recovery System (MACRS) accelerated depreciation schedule: Year 1=20.00%, Year 2=32.00%, Year 3=19.20%, Year 4=11.52%, Year 5=11.52%, Year 6=5.76%. This analysis assumes Federal income Tax is not applied to any state or local incentives. Therefore, the basis for depreciation is the installation cost less 50% of any Federal energy tax credits less 100% of any and all state or local incentives received in year 0. See IRS Publications 946 and 587.

In this analysis, year 0 is the year in which the solar energy system is installed. Our analysis assumes that you will receive the Investment Tax Credit and apply it to your income tax for year 0.

For all following years, tax deductions are applied to the year in which they occurred. The tax effect of deductions in year 1 are applied to year 1, and so forth.

### **Annual Utility Savings**

For an individual, electric bills are not usually deductible against income taxes.

For a business, electric bills are usually deductible against income taxes. Our analysis takes into account the change in tax deduction due to the PV system. Cost inflation assumed for the utility rate and degradation of system performance are also taken into account.

### **Average Monthly Utility Savings**

"Average Monthly Utility Savings" is the average annual utility bill savings expected across the system life. This takes into account utility rate inflation and any expected degradation in system performance. This estimate has not assumed any changes in the amount or timing in your building's energy use.

### **Rate of Return (IRR) on Cash Invested**

"Internal Rate of Return (IRR) on Cash Invested" is the rate of return (annual compounded) that the cash flows (savings, incentives, tax benefits, etc.) bring based upon the amount of cash invested upon installation. If you

financed your system 100%, IRR does not apply since you did not actually invest cash.

### Total Life-Cycle Payback

"Total Life-Cycle Payback" is the rate of return (%) the invested Net Cost (in the installation year) yields over the system's expected life. The Net Cost does not include incentives which may materialize in later years, such as tax credits or deductions or production rebates. This calculation is not adjusted for the time-value of money.

### Levelized Cost of Energy

"Levelized Cost of Energy" is an approximation of the average cost of energy from your solar system. To determine Levelized Cost the system Net Cost (in the installation year) is divided by the amount of energy produced over the system life. For this calculation, energy produced over system life is limited to the annual energy demand of the building times assumed system life in years. The Net Cost does not include incentives which may materialize in later years, such as tax credits or deductions or production rebates. This calculation is not adjusted for the time-value of money.

### Environmental Analysis

Small car emissions calculated on .59 pounds emissions per passenger, per mile. Medium car emissions calculations based on 1.1 pounds of carbon dioxide emissions per mile. SUV/4 wheel drive carbon dioxide emissions based on 1.57 pounds per mile.

Air travel emissions based on 0.97 pounds per passenger mile, based on a Boeing 747 at average USA capacity and calculated per person. Train travel calculations based on average occupancy of intercity train.

Tree offset calculation is based on a tree planted in the humid tropics absorbing on average 50 pounds (22 kg) of carbon dioxide annually over 40 years - each tree will absorb 1 ton of CO2 over its lifetime; but as trees grow, they compete for resources and some may die or be destroyed - not all will achieve their full carbon sequestration potential. This calculator assumes that 5 trees should be planted to ensure that at least one lives to 40 years or that their combined sequestration equals 1 ton.

General waste is based on the USA average carbon dioxide emission equivalent of 1,010 pounds per person per year.

Sources: [Sightline Institute](#), [Trees for the Future](#) and [USA Environmental Protection Agency](#)

### Electric Utility Rates & Assumptions

Utility:	NV Energy (fmr Nevada Power Company)
Rate Name (Post Installation):	Large Residential Service

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Rate Code:	LRS
Annual Inflation:	7.0% (assumed)

### Utility Electric Rate Inflation: Historical References

In 2006, the average retail electricity price for all customers across the United States rose to 8.9 cents per kWh, a sharp increase of three-fourths of a cent from the 2005 price level. The 9.3 percent increase was the largest since 1981.

Fourteen States and the District of Columbia saw the average price of electricity rise by 10 percent or more from 2005 to 2006. Prices increased in all regions of the country but most of the larger increases occurred in the East. Another 14 States saw increases between 5 and 10 percent between 2005 and 2006. States with restructuring programs such as Maryland and Delaware had portions of their retail electricity price caps lifted in 2006, contributing to significant price hikes.

Average industrial prices increased to 6.2 cents per kWh, or 7.5 percent above 2005. Average commercial prices increased to 9.5 cents per kWh, a 9.1 percent increase. In Texas, where the largest volume of industrial sales on a State level occurs, industrial prices increased almost 10 percent. About two-thirds of the industrial market in Texas is now served by energy service providers. Of the remaining one-third, investor-owned utilities served 17.1 percent; distribution cooperatives served 7.5 percent, and municipal utilities 6.2 percent. In the six New England States, average industrial prices increased more than 28 percent.

Residential prices increased to 10.4 cents per kWh, almost a cent, or 10.1 percent, between 2005 and 2006. Average residential prices rose sharply in New England and the West South Central Census Divisions as Connecticut and Texas had large price increases for the second year in a row. Delaware had the highest average residential price increase at almost 30 percent.

Source: [http://www.eia.doe.gov/cneaf/electricity/esr/esr\\_sum.html](http://www.eia.doe.gov/cneaf/electricity/esr/esr_sum.html)

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