

SOLAR FORENSIC CONSULTING GROUP

EXPERT ASSESSMENT

*Solar Power Purchase Agreement - Production Representations,
Shading Analysis, Change-Order Discrepancies & Economic Review*

[Homeowner] v. [PPA Provider]

Residential Solar PV - Power Purchase Agreement - Municipal Utility Territory, North Texas

PREPARED BY

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Prepared for use by the Homeowner and reviewing counsel

Date of Report: April 2025 (original assessment)

SAMPLE - PUBLISHED WORK PRODUCT. This is a redacted excerpt of an actual assessment performed by the report author, published as a work sample. All party names, the property address, account numbers, and other case-identifying details have been removed or replaced with generic placeholders. The technical analysis, methodology, and publicly available source citations are reproduced as written. Engagement-specific exhibits (contract excerpts, monitoring screenshots, and the accompanying financial spreadsheet) are omitted from this sample.

SCOPE. This report provides independent technical, production, and financial analysis together with industry-practice context. It is not legal advice or tax advice, and it reaches no conclusions on any party's legal rights, obligations, or liability.

I. Scope of Opinion, Qualifications, and Methodology

A. Scope of Opinion

I have been engaged to provide an independent technical and industry-practice assessment of a residential solar photovoltaic (PV) system installed at the subject property in North Texas and operated under a 25-year Power Purchase Agreement (“the PPA”) with the PPA Provider (“the Provider”), executed in July 2023. This assessment is limited to the following subject-matter areas, all within my professional expertise as a solar industry practitioner:

- System engineering performance, including verification of equipment operation and review of metered production data;
- Independent modeling of the site's maximum achievable production given the as-installed array orientations, and derivation of the shading loss factor implied by the Provider's contract estimate;
- The relationship between the contract's stated annual consumption estimate, its stated production estimate, and the offset percentage represented on the face of the agreement;
- Documentary comparison of the original agreement against the executed change order, identifying figures that appear in one document and not the other, or that differ between them;
- The performance-guarantee and underproduction-reimbursement mechanics stated in Schedule C and as modified by the change order;
- Industry practice regarding residential solar market pricing, PPA economics, and federal Investment Tax Credit (ITC) ownership;
- Factual observations about which items of information are, and are not, contained in the documents listed in Section II, described against the Texas disclosure framework identified in Section X.

I do not offer legal opinions. I do not opine on whether the Provider violated any statute, whether any disclosure satisfied any legal standard, or what any party knew or intended. Where a Texas statute is identified in this report, I describe what the statute requires on its face and describe what the documents I reviewed contain; the legal interpretation of whether those contents satisfy the statute is reserved for counsel and the finder of fact. Where I identify a discrepancy between two documents, I state the discrepancy; I do not characterize its cause.

B. Qualifications

I am a solar industry professional with hands-on experience in residential solar system design, installation, performance evaluation, shading analysis, sales practices, contract review, and solar-specific financing as practiced in Texas and across the United States. I hold no financial relationship with any installer, lender, or PPA provider.

C. Methodology

My analysis was conducted in five steps:

- Document review of the items listed in Section II, performed page-by-page, including all schedules and the executed change order;
- Remote verification of inverter and module-level communication and reporting status through the manufacturer's monitoring platform, together with review of the platform's production history from commissioning forward;
- Independent array-level production modeling in NREL's PVWatts calculator (pvwatts.nrel.gov) using the as-installed azimuths and tilt, with disclosed, reproducible inputs;
- Review of publicly available 3D aerial and satellite imagery of the property to characterize surrounding vegetation, cross-referenced against imagery contained in the agreement itself;
- Reconciliation of metered production and utility consumption data against the consumption, production, and offset figures stated in the agreement, and comparison of total contract economics against published utility rates and market pricing benchmarks.

D. Basis of Assessment - Remote Analysis

This assessment was completed from the transaction documents, the utility billing record, publicly available aerial imagery, and the system's own monitoring data. No site visit was performed, and none was required for the questions presented: module-level monitoring establishes equipment operating status and production history with greater precision than visual observation, and every production, consumption, rate, and pricing figure in this report is derived from documents and data that any party can independently verify. Where the facts of a particular engagement warrant a physical inspection - for example, suspected workmanship defects or code-compliance questions - that inspection is available as a separately scoped supplemental service.

II. Materials Reviewed

#	Document / Data Source	Date	Origin
1	Residential Solar Power Purchase Agreement, including Schedule C (production guarantee and underproduction reimbursement)	July 2023	Provider
2	Executed change order to the PPA	2023	Provider
3	Third-party monitoring portal production reports (commissioning forward)	2023–2025	Monitoring platform
4	Inverter manufacturer monitoring platform, module-level status and production data	2023–2025	Manufacturer platform
5	Homeowner's monthly utility statements, full calendar year 2024	2024	Homeowner
6	Published municipal utility residential rate schedule	2024–2025	Public
7	NREL PVWatts calculator model runs (inputs disclosed in Section V)	April 2025	Author

#	Document / Data Source	Date	Origin
8	Publicly available 3D aerial and satellite imagery of the property	April 2025	Public

III. Transaction Structure

Term	Value
Agreement type	25-year residential solar Power Purchase Agreement (Provider owns the system)
Execution	July 2023
System as contracted	18 modules · 6.84 kW DC · microinverters
System as installed	19 modules × 405 W · 7.70 kW DC · string inverter
Commissioning	November 20, 2023
Contract page 1 - stated annual consumption	9,000 kWh
Contract page 1 - stated annual production	9,343 kWh
Contract page 1 - stated utility offset	103.81%
Schedule C - guaranteed production	15,843 kWh over 24 months (7,922 kWh/yr)
Underproduction reimbursement rate	\$0.243/kWh (original) - \$0.20/kWh (change order)
Total scheduled payments (25 yr)	\$69,551.97
Utility territory	Municipal electric utility (not a deregulated REP/TDU market)

Because the Provider owns the system under the PPA structure, the Provider - not the Homeowner - is positioned to claim the 30% federal Investment Tax Credit, and the Homeowner acquires no ownership interest through the scheduled payments.

IV. System Performance - Equipment Status and Metered Production

Remote verification through the inverter manufacturer's monitoring platform confirmed that all modules and the inverter were communicating and reporting, with no equipment faults indicated, as of the assessment date. Production history is continuous from commissioning forward with no extended outage periods.

Because solar performance is conventionally evaluated over full 12-month cycles, and because complete billing and production records exist for the 2024 calendar year, this analysis uses calendar year 2024.

Measure	Calendar year 2024
Metered system production	3,979 kWh
Homeowner's total household electricity consumption	21,548 kWh
Resulting utility offset achieved	≈ 18.5%
Utility offset stated on page 1 of the agreement	103.81%

- The equipment is operating. The production shortfall relative to the contract estimate is not attributable to equipment failure, and no defect claim is advanced in this report.
- The two inputs producing the 103.81% figure on page 1 - a 9,000 kWh annual consumption estimate and a 9,343 kWh annual production estimate - are each addressed separately in Sections V and VI below.
- **Note on system size.** The agreement describes an 18-module, 6.84 kW system; the system as installed comprises 19 modules totaling 7.70 kW. To avoid understating production, all calculations in this report use the larger as-installed system. A 6.84 kW system on the same roof would produce less energy at the same contract cost.

V. Independent Production Modeling and the Implied Shading Factor

A. Modeled Maximum Production

Each array was modeled independently in NREL's PVWatts calculator using the as-installed azimuth and tilt. PVWatts is publicly accessible with no login required, making every figure below independently verifiable. The PVWatts default system loss factor of 14.08% was applied. These figures assume zero shading from vegetation or structures.

Array	Configuration	Modeled annual output
Array 1	5 modules · 2.025 kW · azimuth 131° · tilt 34°	2,937 kWh
Array 2	8 modules · 3.240 kW · azimuth 311° · tilt 34°	4,688 kWh
Array 3	6 modules · 2.430 kW · azimuth 221° · tilt 34°	4,865 kWh
Total modeled maximum (zero shading)		12,490 kWh

This 12,490 kWh figure represents the ceiling this system could generate at this location with these orientations and tilts absent any shading. (Azimuth denotes the compass direction the array faces, with 180° being due south; tilt denotes the array's angle from horizontal.)

B. The Shading Factor Implied by the Contract Estimate

- A 25% reduction applied to the modeled maximum yields approximately 9,368 kWh ($12,490 \times 0.75$).
- The agreement states an annual production estimate of 9,343 kWh - a difference of 25 kWh, or approximately 0.3%, from that calculation.
- The arithmetic is therefore consistent with a shading and loss allowance of approximately 25% having been applied to a comparable maximum-production figure. I state this as an arithmetic relationship. I did not have access to the Provider's modeling workpapers and make no finding as to what factor the Provider in fact applied or how its estimate was derived.

C. The Shading Factor Indicated by Metered Production

Basis	Annual kWh	Reduction from modeled maximum
Modeled maximum, zero shading	12,490 kWh	-
Contract estimate (page 1)	9,343 kWh	≈ 25%
Metered production, calendar 2024	3,979 kWh	≈ 68%

- With the system verified as fully operational throughout the period, the difference between modeled maximum production and metered production is attributable principally to site shading.
- The reduction indicated by metered data is approximately 68%, against approximately 25% implied by the contract estimate - a difference of roughly 43 percentage points, or approximately 5,364 kWh per year.
- Review of publicly available 3D aerial and satellite imagery shows mature, full-canopy trees surrounding the structure on multiple sides. These are large specimens whose size at the time of contracting is documented by imagery predating the agreement.
- The rooftop photograph contained within the agreement itself depicts surrounding vegetation. Counsel may wish to compare that photograph against the shading allowance implied by the production estimate in the same document.
- Site shading analysis - by handheld irradiance instrument, drone survey, or software modeling from aerial imagery - is a standard step in residential solar design. The Provider's shade report, irradiance measurements, and design files for this site may be an appropriate subject of document requests.

VI. The Consumption Estimate and the Stated Offset Percentage

The 103.81% offset stated on page 1 of the agreement is the quotient of two Provider-supplied figures: an estimated annual production of 9,343 kWh and an estimated annual household consumption of 9,000 kWh. Section V addresses the production input. The following factual observations concern the consumption input:

- The Homeowner's actual metered household consumption for calendar year 2024 was 21,548 kWh - approximately 2.4 times the 9,000 kWh figure stated in the agreement.
- I was unable to determine, from the documents listed in Section II, the basis for the 9,000 kWh estimate. No supporting usage analysis, load calculation, or utility-data summary appears in the materials produced.
- The Homeowner's twelve months of utility statements preceding the installation were available from the serving utility at the time of contracting. Obtaining and using the prior twelve months of metered consumption is the standard industry basis for sizing a residential system and for computing a projected offset percentage.
- An offset percentage is a ratio of projected production to projected consumption. Where either input diverges from the metered record, the resulting percentage diverges correspondingly; here both inputs diverge in the same direction, and their combined effect on the stated percentage is compounding rather than offsetting.
- Any usage analysis, load worksheet, or utility-data authorization used by the Provider in preparing the 9,000 kWh figure may be an appropriate subject of document requests.

VII. Documentary Discrepancies Between the Agreement and the Change Order

The following are factual comparisons between the executed agreement and the executed change order. I state what each document contains. I do not characterize the cause of any difference, and I express no opinion on the legal effect of any of these items.

#	Item	Original agreement states	Change order states
1	System size - original	6.84 kW (18 modules)	7.6 kW
2	System size - revised	-	7.6 kW (system as installed measures 7.70 kW / 19 modules)
3	Inverter type	Microinverters (module-level)	No change recorded; a string inverter was installed
4	Prior annual production estimate	9,343 kWh (page 1); 7,922 kWh/yr (Schedule C)	8,936 kWh - a figure not located anywhere in the original agreement
5	Revised annual production estimate	-	9,713 kWh, while stating the prior and revised system sizes as identical
6	Underproduction reimbursement rate	\$0.243/kWh	Described as a reduction from \$0.25/kWh to \$0.20/kWh

- **On items 1, 2, and 5.** The change order records the prior and revised system sizes as the same figure (7.6 kW), while stating a revised production estimate 777 kWh higher than the figure it identifies as prior. An increase in projected annual output on an unchanged system size, at an unchanged site, is not explained within the four corners of the change order.

- **On item 3.** The agreement specifies module-level microinverters; a string inverter was installed. These are different products with different monitoring granularity: module-level equipment reports the output of each individual module, whereas a string inverter reports at the string or system level. The change order does not record this substitution.
- **On item 6.** The change order describes the reduction as being from \$0.25/kWh, while the original agreement states \$0.243/kWh. The reimbursement rate is the mechanism by which the Homeowner is compensated for production below the Schedule C guarantee.
- **On the interaction with Schedule C.** The change order does not state whether the revised 9,713 kWh estimate supersedes the guarantee figures in Schedule C of the original agreement. Because Schedule C governs the guarantee and reimbursement mechanics, the financial modeling accompanying this report uses the Schedule C production figures and the lower \$0.20/kWh reimbursement rate. If Schedule C was in fact revised, that document has not been produced.

VIII. Performance Guarantee and Reimbursement Mechanics

- Schedule C guarantees 15,843 kWh of production over the first 24 months, equivalent to 7,922 kWh annually.
- That annual guarantee figure is 1,422 kWh below the 9,343 kWh production estimate stated on page 1 of the same agreement - a reduction of approximately 15%. The same document therefore contains two different annual production figures, one used to present the system's expected performance and a lower one used to define the Provider's guarantee obligation.
- Metered production of 3,979 kWh in calendar year 2024 is approximately 3,943 kWh below the Schedule C annual guarantee of 7,922 kWh.
- At the \$0.20/kWh reimbursement rate recorded in the change order, that shortfall corresponds to approximately \$789 in reimbursement for the year, against scheduled PPA payments for the same period. The reimbursement rate is fixed in dollar terms for the life of the agreement and does not adjust with future utility rates.
- Counsel may wish to examine the guarantee's measurement period, the mechanism and timing by which reimbursement is triggered and paid, and whether any reimbursement has in fact been issued.

IX. Contract Economics

A. Contract Cost Against Market Cash Pricing

Metric	Value
Total scheduled PPA payments (25 yr)	\$69,551.97
Regional market cash pricing at execution (July 2023)	\$2.75 – \$3.00 per watt
Implied cash price, 7.70 kW system	\$21,175 – \$23,100
Midpoint used for comparison	\$22,000
30% federal ITC on a cash purchase (homeowner-retained)	\$6,600
Net cash cost after ITC	\$15,400

Metric	Value
Ratio: scheduled PPA payments to net cash cost	≈ 4.5×

The \$2.75–\$3.00/W range reflects my direct experience quoting and reviewing regional residential installations in the 2023 market and is consistent with the published federal-laboratory benchmarks cited in Section XIII, which note that reported market prices for financed systems include dealer fees while modeled benchmark costs exclude financing costs.

B. Value Delivered Under Measured Performance

The following is a scenario calculation using the Homeowner's published utility rates and metered production. It is presented as arithmetic, with each input disclosed.

- **Effective displaced rate.** The serving municipal utility charges, for the winter season, \$0.0528/kWh for the first 600 kWh and \$0.0370/kWh thereafter; for the summer season, \$0.0561/kWh; with a Recovery Adjustment Factor of \$0.0819/kWh applied year-round in addition to the energy rate. A blended displaced value of approximately \$0.13/kWh is used below. Base charges and taxes are excluded from the calculation.
- **Lifetime production scenario.** At the measured rate of approximately 4,000 kWh annually, gross 25-year production would approximate 100,000 kWh. Applying a 20% aggregate reduction for module degradation and continued canopy growth over the term yields approximately 80,000 kWh.
- **Resulting value.** 80,000 kWh × \$0.13/kWh ≈ \$10,400 in displaced electricity cost over 25 years. Under the undiscounted scenario (100,000 kWh with no degradation or canopy growth), the figure is approximately \$13,000.
- **Comparison to purchase.** Against a net cash purchase cost of \$15,400, the range above corresponds to a net position of approximately –\$5,000 to –\$2,400 over the 25-year term. Against the PPA's scheduled payments of \$69,551.97, the corresponding figures are substantially larger.
- **Excluded from the above.** The calculation does not account for future utility rate changes, panel cleaning or maintenance, removal and reinstallation at roof replacement, changes in homeowner's insurance premiums, or changes to the utility's net metering policy. Several electric cooperatives in the region have revised their distributed-generation compensation policies in recent years.

C. Tax Credit Position

Under the PPA structure the Provider owns the system and is positioned to claim the 30% federal Investment Tax Credit. On the cash-price range above, the credit forgone by the Homeowner relative to an ownership structure is approximately \$6,353 to \$6,930. I express no opinion on any party's tax treatment or compliance; the Provider's ITC basis documentation may be an appropriate subject of discovery.

X. Texas Disclosure Framework Applicable to the 2023 Transaction

A. The Governing Chapter

Senate Bill 398 (87th Leg., eff. Sept. 1, 2021) added to the Texas Business & Commerce Code a chapter imposing written disclosure obligations on sellers and lessors of distributed renewable generation resources. It was enacted as Chapter 113 and was in effect in that form at the July 2023

execution date; it was redesignated as Chapter 115 effective September 1, 2023 (H.B. 4595), without substantive change to the disclosure items relevant here. Section references below are to the current Chapter 115 numbering. I describe what the statute requires on its face and what the documents I reviewed contain; whether the contents satisfy the statute is reserved for counsel and the finder of fact.

§ 115.003 applies by its terms to “a purchase, lease, or power purchase agreement” and requires the seller or lessor to provide the customer in writing, among other items:

- “a description of all equipment to be installed” (§ 115.003(2));
- “the cost of all equipment to be installed” (§ 115.003(3));
- “a detailed accounting of fees associated with the installation or operation of the generation resource” (§ 115.003(4));
- “representations, if any, made as part of the agreement regarding the expected operational performance and financial performance of the generation resource” (§ 115.003(5));
- “all applicable warranties” (§ 115.003(6)).

§ 115.005 separately entitles a residential customer who enters into a power purchase agreement to receive in writing the disclosures required under §§ 115.003(1), (2), (5), and (6); the term and rate of the agreement including any payment escalators or other terms affecting the customer's payments; and whether the agreement and any applicable warranty is transferable to a subsequent purchaser of the property.

B. Factual Mapping of the Documents to the Statutory Items

- **Equipment description (§ 115.003(2)).** The agreement describes an 18-module, 6.84 kW system with module-level microinverters. The system as installed comprises 19 modules totaling 7.70 kW with a string inverter. The change order records neither the module-count change nor the inverter substitution (Section VII).
- **Operational-performance representations (§ 115.003(5)).** The agreement states an annual production estimate of 9,343 kWh on page 1 and a guarantee of 7,922 kWh/yr in Schedule C, and states a 103.81% utility offset premised on a 9,000 kWh consumption estimate. Sections IV through VIII describe the relationship between those figures, independent modeling, and metered production and consumption.
- **Financial-performance representations (§ 115.003(5)).** Section IX sets out the relationship between the scheduled payments and the value of the electricity the system has been measured to produce.
- **Payment-affecting terms (§ 115.005(2)).** The underproduction reimbursement rate is stated as \$0.243/kWh in the agreement and described in the change order as a reduction from \$0.25/kWh to \$0.20/kWh. Whether that mechanism constitutes an “other term that affects the customer's payments” within the statute's meaning is for counsel.
- **Transferability (§ 115.005(3)).** Counsel may wish to review the agreement's assignment and assumption provisions against this requirement directly.

C. Subsequent Texas Legislation (Context Only)

Senate Bill 1036, the Residential Solar Retailer Regulatory Act (89th Leg., eff. Sept. 1, 2025, codified at Chapter 1806, Texas Occupations Code), establishes registration of solar retailers and salespersons under the Texas Department of Licensing and Regulation and requires, among other items, plain-language disclosure of total system cost including fees and financing charges, and

energy-savings projections calculated on realistic assumptions. It also subjects solar retailers to the standards of Chapter 115 and the Deceptive Trade Practices consumer-protection subchapter as if they were sellers or lessors under Chapter 115. SB 1036 post-dates this agreement and does not apply retroactively; it is referenced solely as regulatory context.

XI. Summary of Findings

Based on the foregoing document review, remote monitoring verification, independent modeling, and industry-practice analysis:

- 1. Equipment status.** The system is operational; modules and inverter report without faults, and production is continuous from commissioning. No equipment defect is identified, and none is claimed.
- 2. Modeled versus actual production.** Independent PVWatts modeling establishes a zero-shading maximum of 12,490 kWh annually for the as-installed arrays. Metered production for calendar year 2024 was 3,979 kWh, a reduction of approximately 68%.
- 3. The contract estimate's implied shading allowance.** The agreement's 9,343 kWh estimate corresponds arithmetically to a reduction of approximately 25% from a comparable maximum-production figure - approximately 43 percentage points less reduction than metered performance indicates, on a site surrounded by mature full-canopy trees documented in imagery predating the agreement and depicted in the agreement's own rooftop photograph.
- 4. The consumption estimate.** The agreement states annual household consumption of 9,000 kWh. Metered consumption for calendar year 2024 was 21,548 kWh. No basis for the 9,000 kWh figure appears in the documents produced, and twelve months of utility statements were available at the time of contracting.
- 5. The stated offset.** The 103.81% offset on page 1 is the quotient of the two figures above. Measured against metered data, the system supplied approximately 18.5% of the household's electricity in 2024.
- 6. Internal inconsistency within the agreement.** Page 1 states 9,343 kWh of annual production; Schedule C of the same agreement guarantees 7,922 kWh annually - approximately 15% lower.
- 7. Change-order discrepancies.** The change order states system sizes that match neither the original agreement (6.84 kW) nor the system as installed (7.70 kW); recites a prior production estimate (8,936 kWh) not found in the original agreement; states a revised estimate 777 kWh higher on an unchanged system size at an unchanged site; does not record the substitution of a string inverter for the contracted microinverters; and describes the reimbursement-rate reduction from a starting figure that differs from the rate stated in the agreement.
- 8. Economics.** Scheduled payments of \$69,551.97 approximate 4.5 times the net cash cost of an equivalent purchased system (\$15,400 after the ITC). Under the measured-production scenario in Section IX.B, the electricity value delivered over the full term is on the order of \$10,400 to \$13,000.

9. Texas framework. The disclosure chapter enacted by S.B. 398 was in effect at execution and entitles a PPA customer to specified written disclosures, including equipment description and operational- and financial-performance representations. Section X maps the reviewed documents to those items; the legal sufficiency of the documents under the statute is reserved for counsel and the finder of fact.

I make no findings about the parties' states of mind, intent, motives, or legal duties. The legal significance of the foregoing factual observations and industry-practice context is reserved for counsel and the finder of fact.

XII. Reservations

This report is based on the materials listed in Section II, my remote verification of system status and production, and the public sources cited in Section XIII. I reserve the right to supplement or amend my opinions if additional documents are produced, including but not limited to:

- The Provider's shade report, irradiance measurements, site survey, and production-modeling workpapers for this installation;
- Any usage analysis, load worksheet, or utility-data authorization used to derive the 9,000 kWh annual consumption figure;
- Any revised Schedule C, or documentation establishing whether the change order's 9,713 kWh estimate supersedes the Schedule C guarantee figures;
- Documentation of the inverter substitution, including any internal approval, revised design, or permit revision;
- Records of any underproduction reimbursement calculated, invoiced, or paid under the guarantee;
- Any sales-training, scripting, or marketing materials used in connection with this transaction.

XIII. Sources Cited

All links were active and verified as of the date of the original report.

A. Texas Statutes and Legislative Materials

- Tex. Bus. & Com. Code ch. 115, Sales and Leasing of Distributed Renewable Generation Resources (§§ 115.001–115.005). <https://statutes.capitol.texas.gov/Docs/BC/htm/BC.115.htm>
- S.B. 398, 87th Leg., R.S. (2021) (enacting the chapter as Ch. 113, eff. Sept. 1, 2021). <https://capitol.texas.gov/tlodocs/87R/billtext/pdf/SB00398F.pdf>
- H.B. 4595, 88th Leg., R.S. (2023) (nonsubstantive revision; redesignation as Ch. 115, eff. Sept. 1, 2023). <https://capitol.texas.gov/BillLookup/History.aspx?LegSess=88R&Bill=HB4595>
- S.B. 1036, 89th Leg., R.S. (2025), Residential Solar Retailer Regulatory Act (Tex. Occ. Code ch. 1806, eff. Sept. 1, 2025). <https://capitol.texas.gov/BillLookup/History.aspx?LegSess=89R&Bill=SB1036>

B. Federal Modeling and Benchmark Sources

- NREL, PVWatts Calculator. <https://pvwatts.nrel.gov>

- Ramasamy et al., “U.S. Solar Photovoltaic System and Energy Storage Cost Benchmarks, With Minimum Sustainable Price Analysis: Q1 2023,” NREL/TP-7A40-87303 (2023).
<https://www.nrel.gov/docs/fy23osti/87303.pdf>
- Lawrence Berkeley National Laboratory, Tracking the Sun, 2023 Edition.
<https://emp.lbl.gov/tracking-the-sun>
- U.S. Dep’t of Energy, “Homeowner’s Guide to the Federal Tax Credit for Solar Photovoltaics” (DOE/EE-2315).
<https://www.energy.gov/eere/solar/homeowners-guide-federal-tax-credit-solar-photovoltaics>

C. Consumer-Protection and Industry Sources

- Consumer Financial Protection Bureau, Office of Markets, “Issue Spotlight: Solar Financing” (Aug. 7, 2024). <https://files.consumerfinance.gov/f/documents/cfpbsolar-financing-issue-spotlight2024-08.pdf>
- U.S. Dep’t of the Treasury, joint Treasury/CFPB/FTC announcement on residential solar consumer protection, Press Release JY-2522 (Aug. 7, 2024). <https://home.treasury.gov/news/press-releases/jy2522>
- Center for Responsible Lending, “The Shady Side of Solar System Financing” (July 2024).
<https://www.responsiblelending.org/research-publication/shady-side-solar-system-financing>

Respectfully submitted,

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Date: _____