

Pacific Gas and Electric Company
P.O. Box 770000
San Francisco, CA 94177-1490

January 02, 2018

NORTH STATE GROCERY INC
PO BOX 439
COTTONWOOD, CA 96022

RE: Permission to Operate Account No. 9088662704(Reference Number 375361)

Dear NORTH STATE GROCERY INC:

Thank you for your participation in Pacific Gas and Electric Company's (PG&E) Solar and Net Energy Metering (NEM) Program. Your new generating system at 1017 BRIDGE ST, COLUSA was inspected and authorized for permission to operate on 01/02/2018 by generator log number 30S398821. You may now interconnect to PG&E's electric grid and experience the benefits of renewable power. The equipment covered by this "Permission to Operate" includes:

Total Inverter Nameplate Rating: 516 kW

Total CEC-AC Rating: 516.15 kW

Inverters:

4 each Sungrow Power Supply SG60KU (480V)
6 each Sungrow Power Supply SG36KU (480V)
2 each Sungrow Power Supply SG30KU (480V)

PV Modules:

860 each Hanwha Q CELLS Q.PEAK G4.1 305
792 each Hanwha Q CELLS Q.PEAK G4.1 305
230 each Hanwha Q CELLS Q.PEAK G4.1 305

As a requirement of PG&E's Electric Rule 21* and your Interconnection Agreement, this letter authorizes and applies only to the system described above. This agreement does not confirm the safety, durability or reliability of your generating system. You are responsible for maintaining the safe operation of your system and for notifying PG&E if you make any changes to your system.

Look for more information about your new system in the mail soon:

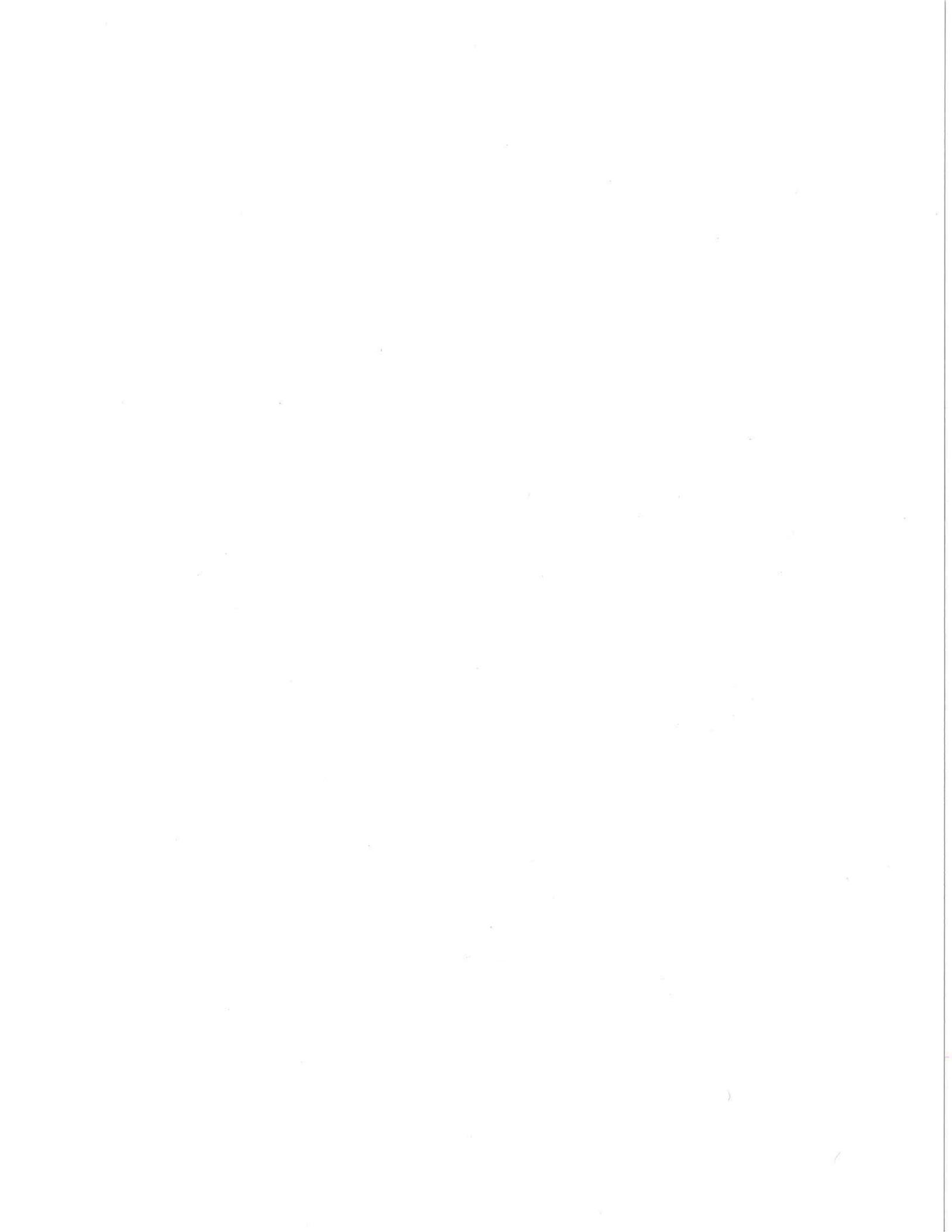
Soon you will receive a valuable new part of your billing called the "Net Energy Metering Statement, which details your monthly business' net energy -the difference between how much you use and how much you generate. With SmartMeter™ technology, you'll be able to see your net usage by logging on to www.pge.com/myenergy.

If you have additional questions regarding the interconnection of your system, your California Solar Initiative (CSI) incentive payment or billing, please contact our **Solar Customer Service Center at 1-877-743-4112**. We are available Monday through Friday from 8 a.m. to 5 p.m. to assist you.

Together, we are creating a green future where saving money and protecting the environment go hand-in-hand.

Sincerely,
Electric Generation Interconnection Department

*PG&E's authorization for you to operate your generating system is subject to all terms and conditions of Rule 21, your Interconnection Agreement and any other applicable rules, tariffs, laws and regulations.





INTERCONNECTION AGREEMENT FOR NET ENERGY METERING (NEM2) OF SOLAR OR WIND ELECTRIC GENERATING FACILITIES OF 1,000 KW OR LESS, OTHER THAN FACILITIES OF 30 KW OR LESS

This Interconnection Agreement for Net Energy Metering (NEM2) of Solar or Wind Electric Generating Facilities of 1,000 kW or Less, Other Than Facilities of 30 kW or Less (Agreement)¹ is entered into by and between NORTH STATE GROCERY INC Ref# 375361 (Customer-Generator), and Pacific Gas and Electric Company (PG&E), a California Corporation. Customer-Generator and PG&E are sometimes also referred to in this Agreement jointly as "Parties" or individually as "Party." In consideration of the mutual promises and obligations stated in this Agreement and its attachments, the Parties agree as follows:

1. SCOPE AND PURPOSE

This Agreement provides for Customer-Generator to interconnect and operate a Generating Facility in parallel with PG&E's Electric System to serve the electrical loads connected to the electric service agreement ID number that PG&E uses to interconnect Customer-Generator's Generating Facility. Customer-Generator's Generating Facility is intended primarily to offset part or all of the Customer-Generator's own electrical requirements. Consistent with, and in order to effectuate, the provisions of Sections 2827, 2827.7 and 2827.8 of the California Public Utilities Code and PG&E's electric rate Schedule NEM2 (NEM2), Parties enter into this Agreement. This Agreement applies to the Customer-Generator's Generating Facilities identified below with the specified characteristics and generating capacity, and does not allow interconnection or operation of facilities different than those described.

2. SUMMARY AND DESCRIPTION OF CUSTOMER-GENERATOR'S GENERATING FACILITY AND DESIGNATION OF OTHERWISE-APPLICABLE RATE SCHEDULE

- 2.1 A description of the Generating Facility, including a summary of its significant components and a single-line diagram showing the general arrangement of how Customer-Generator's Generating Facility and loads are interconnected with PG&E's Electric System, is attached to and made a part of this Agreement. (This description is supplied by Customer-Generator as Appendix A).
- 2.2 Generating Facility identification number: 30S398821 (Assigned by PG&E).
- 2.3 Customer-Generator's electric service agreement ID number: 9088662670 (Assigned by PG&E).
- 2.4 Name and address used by PG&E to locate the electric service agreement ID number used to interconnect the Generating Facility with PG&E's Electric System:

Name: NORTH STATE GROCERY INC

Address: 1017 BRIDGE ST

City/Zip Code: COLUSA 95932

¹ Additional forms are available on PG&E's website at <http://www.pge.com/gen>.



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2.5 Interconnected Equipment:

List of generating equipment interconnected with, or without, an inverter to PG&E. (For those generators interconnecting without an inverter, write in "N/A" in the right three columns. If an inverter is shared by more than one generator, write "shared" on the same line as that generator under the manufacturer column and do not enter the inverter rating. Attach list of additional equipment, if applicable.)

Type of Generator (Solar / Wind / Hybrid)	Generator Rating (watts)	Manufacturer of Inverter used with Generator (if Applicable)	Inverter Model Number (if Applicable)	Inverter Rating (watts) ² (if Applicable)
1 Solar	240000	Sungrow Power Supply	SG60KU (480V)	236400
2 Solar	216000 60000	Sungrow Power Supply Sungrow Power Supply	SG36KU (480V) SG30KU (480V)	211680 58800

2.6 Customer-Generator's otherwise-applicable rate schedule under the provisions of Schedule NEM2 will be A6.

2.7 The Generating Facility's expected date of Initial Operation is 31 December 2017. The expected date of Initial Operation shall be within two years of the date of this Agreement.

2.8 If the date of the permits allowing the Customer-Generator to commence construction of the Generating Facility is prior to January 1, 2003, please provide the date the permits were issued: N/A.

3. DOCUMENTS INCLUDED AND DEFINED TERMS

3.1 This Agreement includes the following exhibits that are specifically incorporated herein and made a part of this Agreement.

Appendix A Description of Generating Facility and Single-Line Diagram (Supplied by Customer-Generator).

Appendix B A Copy of PG&E's Agreement for Installation or Allocation of Special Facilities (Forms 79-255, 79-280, 79-702) or Agreements to Perform Any Tariff Related Work (62-4527), if applicable (Formed by the Parties).

² If installing an inverter, the inverter rating equals: (the CEC efficiency for each installed inverter) TIMES (the nameplate rating, in kW, of each inverter). The CEC efficiency is obtained on the CEC website at http://www.consumerenergycenter.org/erprebate/eligible_inverters.html as listed on the date the application is reviewed. Enter the total of all inverter ratings for multiple inverter installations in the Table above.



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In addition, PG&E Electric Tariff Rules and Rates, including but not limited to Electric Rules 2, 14, 15, 16, and 21, Schedule NEM2, and Customer-Generator's otherwise-applicable rate schedule, available at PG&E's website at www.pge.com or by request, are specifically incorporated herein and made part of this Agreement.

- 3.2 When initially capitalized, whether in the singular or in the plural, the terms used herein shall have the meanings assigned to them either in this Agreement or in PG&E's Electric Rule 21, Section C.

4. CUSTOMER BILLING AND PAYMENT

Customer-Generator initially selects Pacific Gas and Electric Company's electric rate schedule referenced in Section 2.6 of this Agreement as its otherwise-applicable rate schedule. Customer-Generator understands that they will be billed according to the otherwise-applicable rate schedule and Schedule NEM2.

5. TERM AND TERMINATION

- 5.1 This Agreement shall become effective as of the last date entered in Section 18 below. The Agreement shall continue in full force and effect until the earliest date that one of the following events occurs:

- (a) The Parties agree in writing to terminate the Agreement.
- (b) Unless otherwise agreed in writing by the Parties, at 12:01 A.M. on the day following the date the electric service agreement ID number through which Customer-Generator's Generating Facility is interconnected to PG&E is closed or terminated.
- (c) At 12:01 A.M. on the 61st day after Customer-Generator or PG&E provides written Notice pursuant to Section 11 below to the other Party of Customer-Generator's or PG&E's intent to terminate this Agreement.

- 5.2 Customer-Generator may elect to terminate this Agreement pursuant to the terms of Section 5.1(c) for any reason. PG&E may elect to terminate this Agreement pursuant to the terms of Section 5.1(c) for one or more of the following reasons:

- (a) A change in applicable rules, tariffs, or regulations, as approved or directed by the Commission, or a change in any local, state or federal law, statute or regulation, either of which materially alters or otherwise affects PG&E's ability or obligation to perform PG&E's duties under this Agreement; or,
- (b) Customer-Generator fails to take all corrective actions specified in PG&E's Notice that Customer-Generator's Generating Facility is out of compliance with the terms of this Agreement within the time frame set forth in such Notice; or,
- (c) Customer-Generator abandons the Generating Facility. PG&E shall deem the Generating Facility to be abandoned if PG&E determines, in its sole opinion, the Generating Facility is nonoperational and Customer-Generator does not provide a substantive response to PG&E Notice of its intent to terminate this Agreement as a result of Customer-Generator's apparent abandonment of the Generating Facility affirming Customer-Generator's intent and ability to continue to operate the Generating Facility; or,



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(d) Customer-Generator's Generating Facility ceases to meet all applicable safety and performance standards set out in Section 6.

5.3 Notwithstanding any other provisions of this Agreement, PG&E shall have the right to unilaterally file with the Commission, pursuant to the Commission's rules and regulations, an application to terminate this Agreement.

5.4 Any agreements attached to and incorporated into this Agreement shall terminate concurrently with this Agreement unless the Parties have agreed otherwise in writing.

6. GENERATING FACILITY REQUIREMENTS

6.1 Customer-Generator's Generating Facility must meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the Commission regarding safety and reliability including Rule 21.

6.2 Customer-Generator shall: (a) maintain the Generating Facility and Interconnection Facilities in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to, Section 6.1, and (b) obtain any governmental authorizations and permits required for the construction and operation of the Generating Facility and Interconnection Facilities. Customer-Generator shall reimburse PG&E for any and all losses, damages, claims, penalties, or liability it incurs as a result of Customer-Generator's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of Customer-Generator's Generating Facility.

6.3 Customer-Generator shall not commence parallel operation of the Generating Facility until PG&E has provided express written approval. Such approval shall normally be provided no later than thirty (30) business days following PG&E's receipt of: (1) a completed *Generating Facility Interconnection Application for Non-Export or Certain Net Energy Metered Generating Facilities* (Form 79-974-02), including all supporting documents and payments as described in the Application; (2) a signed and completed *Interconnection Agreement for Net Energy Metering (NEM2) of Solar or Wind Electric Generating Facilities, Other Than Facilities of 30 KW or Less* (Form 79-978-02); and (3) a copy of the Customer-Generator's final inspection clearance from the governmental authority having jurisdiction over the Generating Facility. Such approval shall not be unreasonably withheld. PG&E shall have the right to have representatives present at the Commissioning Test as defined in Rule 21. Customer-Generator shall notify PG&E at least five (5) business days prior to the initial testing.

6.4 In order to promote the safety and reliability of the customer Generating Facility, the Customer-Generator certifies that as a part of this interconnection request for NEM2, that all major solar system components are on the verified equipment list maintained by the California Energy Commission and certifies that other equipment, as determined by PG&E, has safety certification from a nationally recognized testing laboratory.

6.5 Customer-Generator certifies as a part of this interconnection request for NEM2 that

(i) a warranty of at least 10 years has been provided on all equipment and on its installation, or



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(ii) a 10-year service warranty or executed "agreement" has been provided ensuring proper maintenance and continued system performance.

- 6.6 Customers on this tariff must pay for the interconnection of their Generation Facilities as provided in Electric Rule 21, pursuant to Decision 16-01-044.

7. INTERCONNECTION FACILITIES

- 7.1 Customer-Generator and/or PG&E, as appropriate, shall provide Interconnection Facilities that adequately protect PG&E's Electric System, personnel, and other persons from damage or injury, which may be caused by the operation of Customer-Generator's Generating Facility.
- 7.2 Customer-Generator shall be solely responsible for the costs, design, purchase, construction, permitting, operation, and maintenance of the Interconnection Facilities that Customer-Generator owns.
- 7.3 If the provisions of PG&E's Electric Rule 21, or any other tariff or rule approved by the Commission, require PG&E to own and operate a portion of the Interconnection Facilities, Customer-Generator and PG&E shall promptly execute an Special Facilities Agreement that establishes and allocates responsibility for the design, installation, operation, maintenance, and ownership of the Interconnection Facilities. This Special Facilities Agreement shall be attached to and made a part of this Agreement as Appendix B.

8. LIMITATION OF LIABILITY

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages of any kind whatsoever.

9. INSURANCE

Customer-Generator Facility is required to comply with standards and rules set forth in Section 6 and provide the following for insurance policies in place.

Customer-Generator shall furnish the required certificates and all endorsements to PG&E prior to Parallel Operation.

The certificate shall provide thirty (30) calendar days' written notice to PG&E prior to cancellation, termination, alteration, or material change of such insurance.

PG&E shall have the right to inspect or obtain a copy of the original policy or policies of insurance.

- 9.1 If at any time during this agreement the Customer-Generator fails to meet the requirements in Section 6 and is not self-insured under Section 9.3, the following insurance shall apply:

Customer-Generator shall procure and maintain a commercial general liability insurance policy at least as broad as the Insurance Services Office (ISO) commercial general liability coverage "occurrence" form; or, if Customer-Generator is an



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individual, then liability coverage with respect to premises and use at least as broad as the ISO homeowners' or personal liability Insurance occurrence policy form, or substitute, providing equivalent coverage no less than the following limits, based on generator size:

- (a) Two million dollars (\$2,000,000) for each occurrence if the Gross Nameplate Rating of the Generating Facility is greater than one hundred (100) kW; or
- (b) One million dollars (\$1,000,000) for each occurrence if the Gross Nameplate Rating of the Generating Facility is greater than twenty (20) kW and less than or equal to one hundred (100) kW; or
- (c) Five hundred thousand dollars (\$500,000) for each occurrence if the Gross Nameplate Rating of the Generating Facility is twenty (20) kW or less;
- (d) Two hundred thousand dollars (\$200,000) for each occurrence if the Gross Nameplate Rating of the Generating Facility is ten (10) kW or less and the Generating Facility is connected to an account receiving residential service from PG&E.

The insurance shall, by endorsement:

- (a) Add PG&E as an additional insured;
- (b) State that coverage provided is primary and is not in excess to or contributing with any insurance or self-insurance maintained by PG&E.
- (c) Contain a severability of interest clause or cross-liability clause.

9.2 If Customer-Generator's Generating Facility is connected to an account receiving residential service from PG&E and the requirement of Section 9.1 prevents Customer-Generator from obtaining the insurance required in this Section, then upon Customer-Generator's written Notice to PG&E in accordance with Section 11.1, the requirements of Section 9.1 may be waived.

9.3 Customer-Generator may self-insure with approval from PG&E. Evidence of an acceptable plan to self-insure, at least thirty (30) calendar days' prior to operations shall be submitted. Customer-Generators such as state agencies that self-insure under this section are exempt from Section 10.1.

If Customer-Generator ceases to self-insure to the level required hereunder, or if Customer-Generator is unable to provide continuing evidence of Customer-Generator's ability to self-insure, Customer-Generator agrees to immediately obtain the coverage required under agreement.

9.4 All required certificates, endorsements or letters of self-insurance shall be issued and submitted via email or fax to the following:

Pacific Gas and Electric Company
c/o EXIGIS LLC
support@exigis.com
Fax: 646-755-3327



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10. INDEMNITY FOR FAILURE TO COMPLY WITH INSURANCE PROVISIONS

- 10.1 If Customer-Generator fails to comply with the insurance provisions of this Agreement, Customer-Generator shall, at its own cost, defend, save harmless and indemnify PG&E, its directors, officers, employees, agents, assignees, and successors in interest from and against any and all loss, liability, damage, claim, cost, charge, demand, or expense of any kind or nature (including attorney's fees and other costs of litigation) resulting from the death or injury to any person or damage to any property, including the personnel and property of the utility, to the extent that the utility would have been protected had Customer-Generator complied with all such insurance provisions. The inclusion of this Section 10.1 is not intended to create any expressed or implied right in Customer-Generator to elect not to provide any such required insurance.
- 10.2 The provisions of this Section 10 shall not be construed to relieve any insurer of its obligations to pay any insurance claims in accordance with the provisions of any valid insurance policy.

11. NOTICES

- 11.1 Any written notice, demand, or request required or authorized in connection with this Agreement (Notice) shall be deemed properly given if delivered in person or sent by first class mail, postage prepaid, to the person specified below:

If to PG&E: Pacific Gas and Electric Company
 EGI Representative
 245 Market Street
 Mail Code: N7L
 San Francisco, CA 94105
Phone:
Email:

If to Customer-Generator:

NORTH STATE GROCERY INC
PO Box 439
Cottonwood, CA 96022

- 11.2 A Party may change its address for Notices at any time by providing the other Party notice of the change in accordance with Section 11.1.
- 11.3 The Parties may also designate operating representatives to conduct the daily communications, which may be necessary or convenient for the administration of this Agreement. Such designations, including names, addresses, and phone numbers may be communicated or revised by one Party's Notice to the other.

12. REVIEW OF RECORDS AND DATA

- 12.1 PG&E shall have the right to review and obtain copies of Customer-Generator's operations and maintenance records, logs, or other information such as Generating Facility availability, maintenance outages, circuit breaker operation requiring manual reset, relay targets and unusual events pertaining to Customer-Generator's Generating Facility or its interconnection to PG&E.



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- 12.2 Customer-Generator authorizes to release to the California Energy Commission (CEC) information regarding Customer-Generator's facility, including customer name and Generating Facility location, size, and operational characteristics, as requested from time to time pursuant to the CEC's rules and regulations.

13. ASSIGNMENT

Customer-Generator shall not voluntarily assign its rights nor delegate its duties under this Agreement without PG&E's written consent. Any assignment or delegation Customer-Generator makes without PG&E's written consent shall not be valid. PG&E shall not unreasonably withhold its consent to Customer-Generator's assignment of this Agreement.

14. NON-WAIVER

None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect.

15. GOVERNING LAW, JURISDICTION OF COMMISSION, INCLUSION OF PG&E's TARIFF SCHEDULES AND RULES

- 15.1 This Agreement shall be interpreted, governed, and construed under the laws of the State of California as if executed and to be performed wholly within the State of California without giving effect to choice of law provisions that might apply to the law of a different jurisdiction.
- 15.2 This Agreement shall, at all times, be subject to such changes or modifications by the Commission as it may from time to time direct in the exercise of its jurisdiction.
- 15.3 The interconnection and services provided under this Agreement shall at all times be subject to the terms and conditions set forth in the Tariff Schedules and Rules applicable to the electric service provided by PG&E, which Tariff Schedules and Rules are hereby incorporated into this Agreement by this reference.
- 15.4 Notwithstanding any other provisions of this Agreement, PG&E shall have the right to unilaterally file with the Commission, pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff or rule or any agreement relating thereto.

16. AMENDMENT AND MODIFICATION

This Agreement can only be amended or modified by a writing signed by both Parties.

17. ENTIRE AGREEMENT

This Agreement, including any incorporated Tariff Schedules and Rules, contains the entire Agreement and understanding between the Parties, their agents, and employees as to the subject matter of this Agreement. Each party also represents that in entering into this Agreement, it has not relied on any promise, inducement, representation, warranty,



Pacific Gas and
Electric Company

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agreement or other statement not set forth in this Agreement or in the incorporated Tariff Schedules and Rules.

18. SIGNATURES

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the last date set forth below.

NORTH STATE GROCERY INC

(Customer Generator's Name)

(Signature)

Richard E. Morgan JTC

(Print Name)

President

(Title)

11/13/17

(Date)

PACIFIC GAS AND ELECTRIC COMPANY

(Signature)

Robert Chan

(Print Name)

Supervisor,
Electric Grid Interconnection

12/21/2017

(Date)

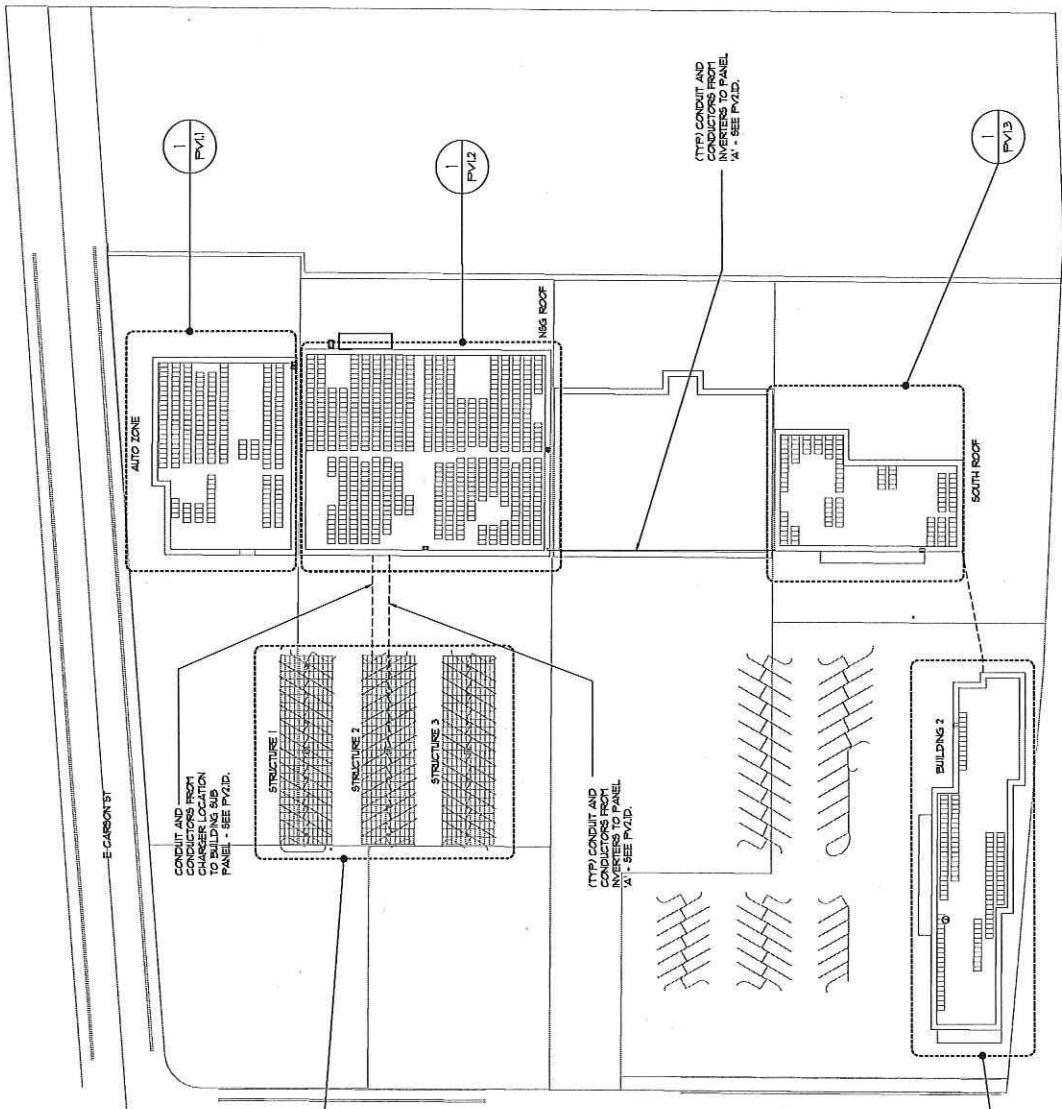


**INTERCONNECTION AGREEMENT FOR NET ENERGY
METERING (NEM2) OF SOLAR OR WIND ELECTRIC
GENERATING FACILITIES, OTHER THAN FACILITIES
OF 30 KW OR LESS**

APPENDIX A

**DESCRIPTION OF GENERATING FACILITY
AND SINGLE-LINE DIAGRAM**

(Provided by Customer-Generator)



1002 ROOF/CANOPY MOUNTED SOLAR PHOTOVOLTAIC PANELS.
SEE STRUCTURAL SUBMITTALS FOR MOUNTING. SEE PV1 FOR

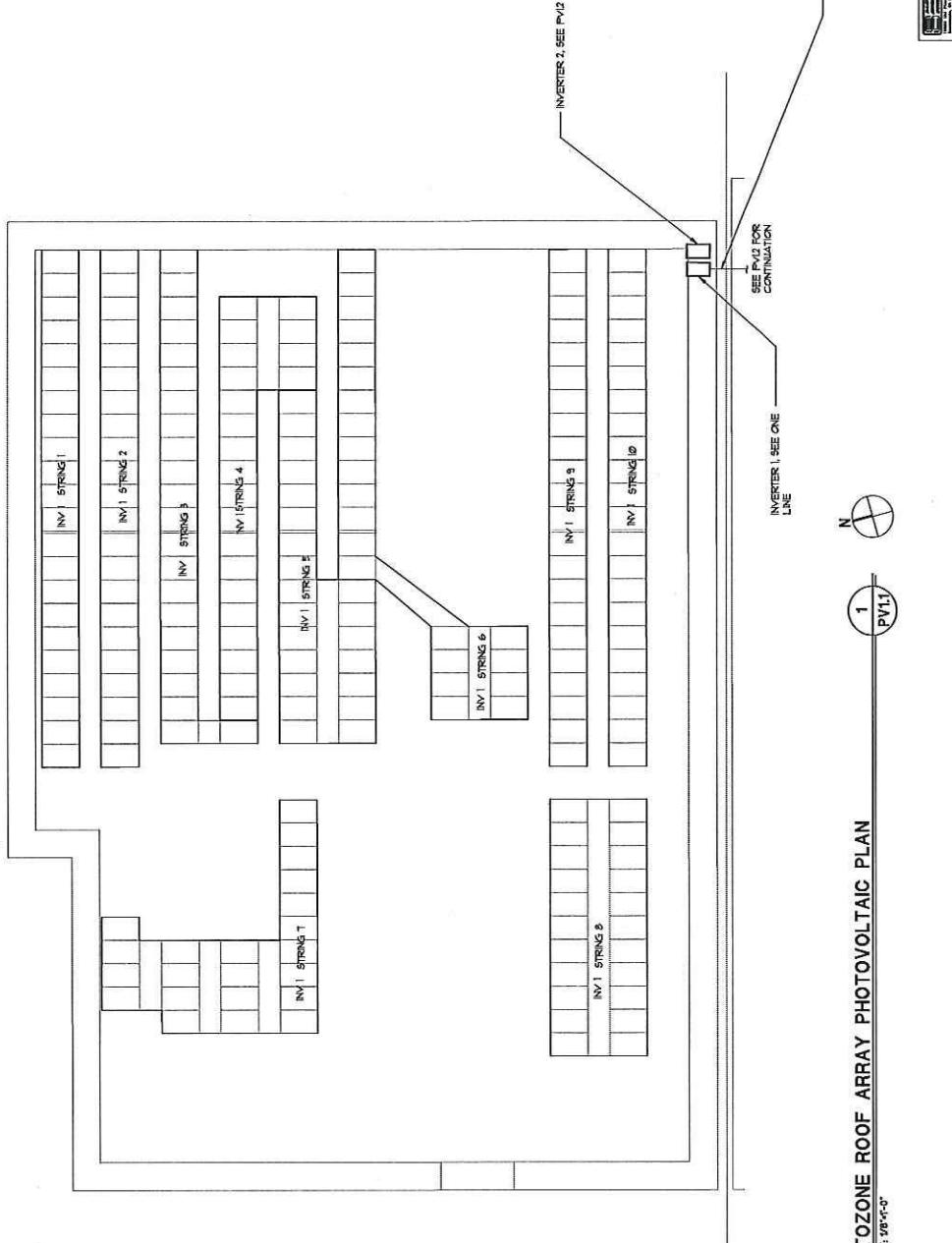
ELECTRICAL CONNECTIONS.

BAGS OF DESIGN

- 4 SUNGRU SG-BGKU INVERTERS
- 2 SUNGRU SG-CBKU INVERTERS
- 1 SUNGRU SG-CBKU INVERTERS
- 10 STRINGS OF 22 MOD.
- INVERTER 2-3, 11 STRINGS OF 22 MOD.
- INVERTER 4, 10 STRINGS OF 22 MOD.
- INVERTER 5, 5 STRINGS OF 22 MOD.
- INVERTER 6, 6 STRINGS OF 20 MOD.
- INVERTER 7, 12 STRINGS OF 22 MOD.
- BBX HANWHA Q-PANEL G4, 320W

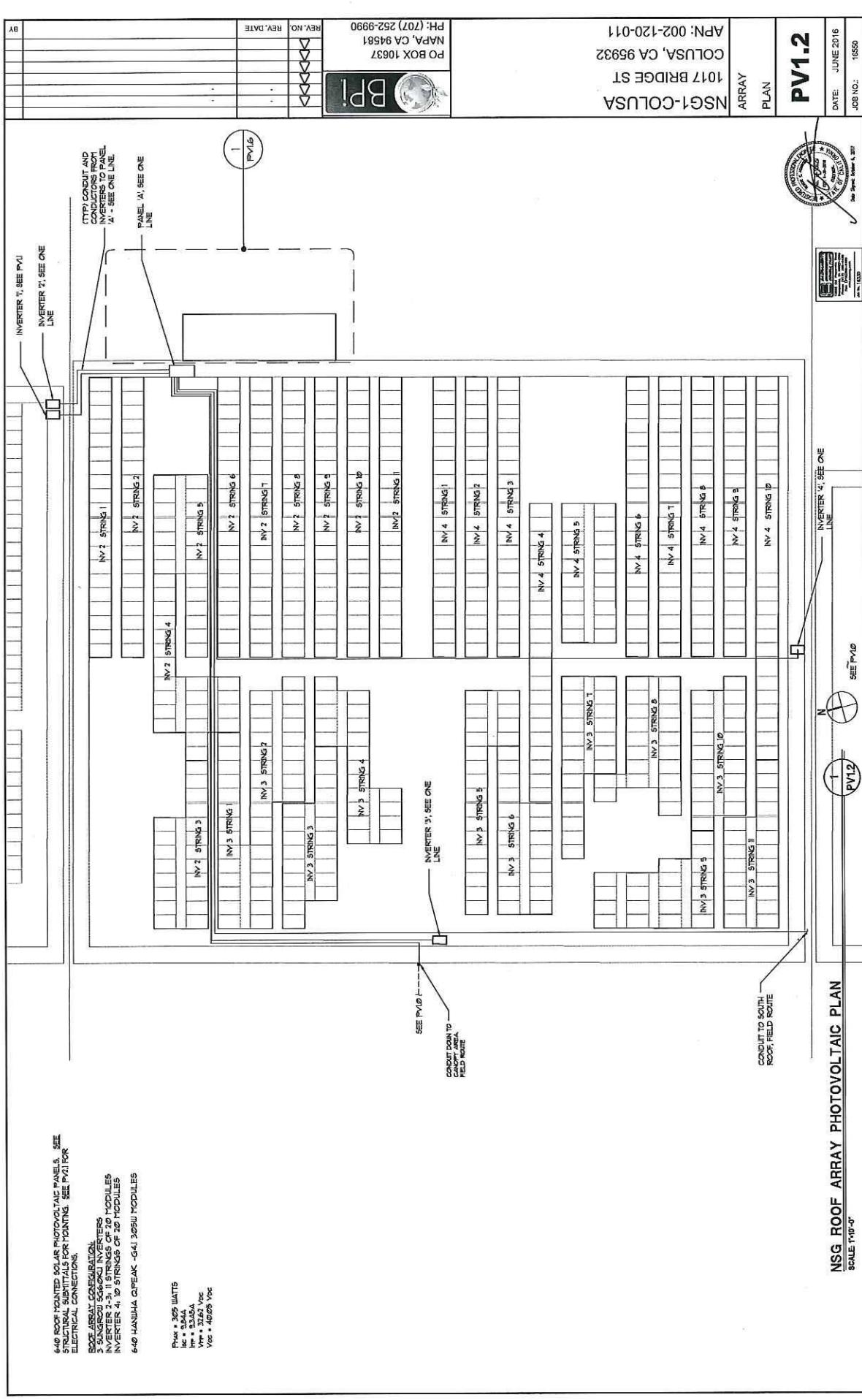
53 STRINGS TOTAL

(182) TOTAL PANELS
 P_{MAX} = 305 WATTS
 I_{DC} = 9.84A
 I_{MP} = 9.36A
 V_{MP} = 32.62 VOLTS
 VOC = 40.05 VOLTS



SEE
200W ROOF MOUNTED SOLAR PHOTOVOLTAIC PANELS.
STRUCTURAL SUBSTITUTES FOR MOUNTING. SEE PY21 FOR
ELECTRICAL CONNECTIONS.

SEE
CODE APPROVAL CONFIGURATION.
SUNVERTER 550-600U INVERTER
UNIVERTER II (10 STRINGS OF 22 MODULES
200W HANWHA Q-Peak -G4 305W MODULES



APN: 002-120-011
COLUSA, CA 95932
1017 BRIDGE ST
NSG1-COLUSA
ARRAY
PLAN
PV1.3



JUNE 2016
JOB NO.: 18550

REV. NO. REV. DATE
PH: (707) 252-9990
PO BOX 10637
NAPA, CA 94581
APN: 002-120-011
COLUSA, CA 95932
1017 BRIDGE ST
NSG1-COLUSA
ARRAY
PLAN
PV1.3

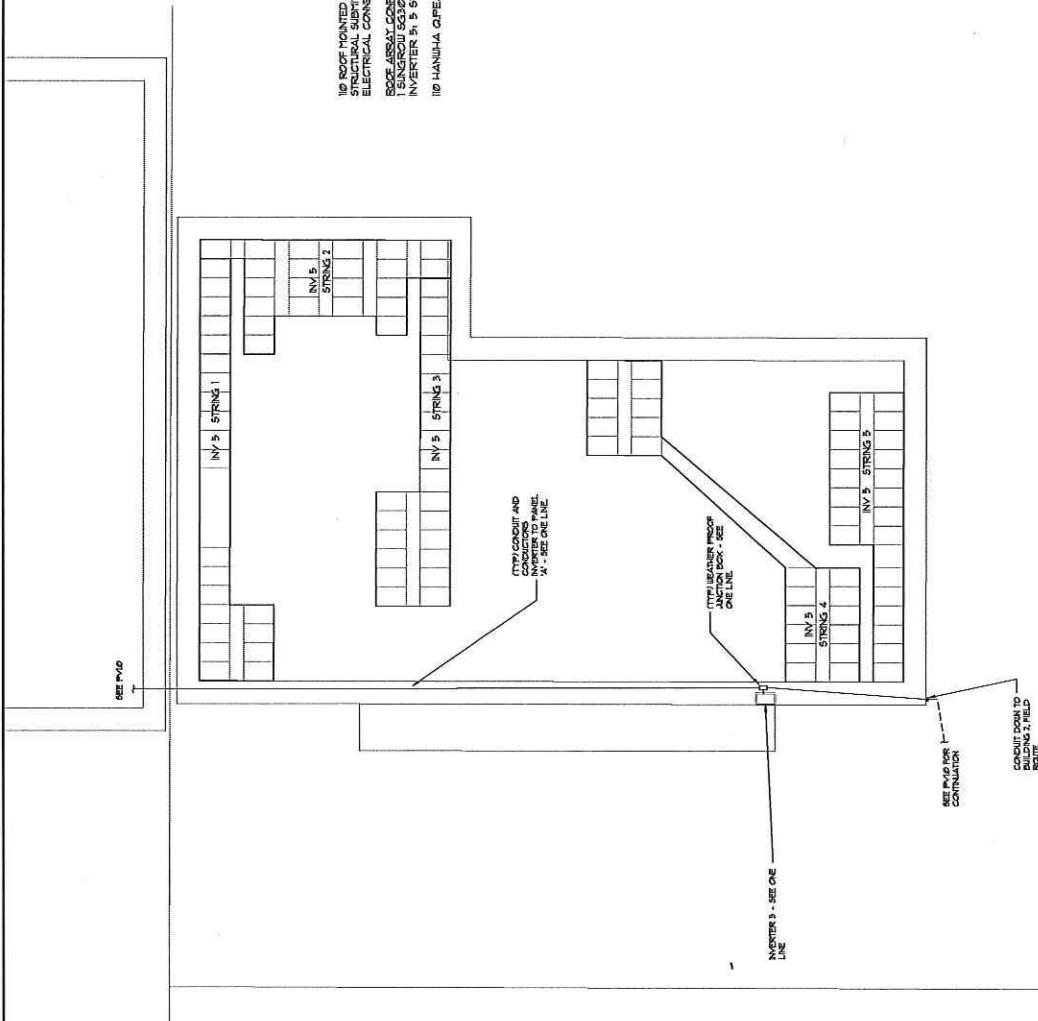


NO ROPE MOUNTED SOLAR PHOTOVOLTAIC PANELS. SEE
STRUCTURAL SUPPORTS FOR MOUNTING. SEE P-21 FOR
ELECTRICAL CONNECTIONS.

SPACE ASSAY CONSIDERATION:
INTEGRATOR: 5' X 5' STRINGS OF 72 MODULES
INVERTER: 5' X 5' STRINGS OF 72 MODULES

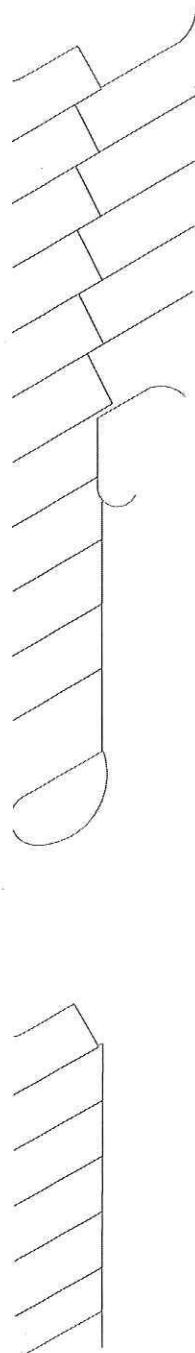
ID HANWHA Q-Peak - G4 320W MODULES

Pmax = 305Watts
Isc = 3.9A
Irr = 5.3A
Vmp = 21.62 Volts
Voc = 40.02 Volts

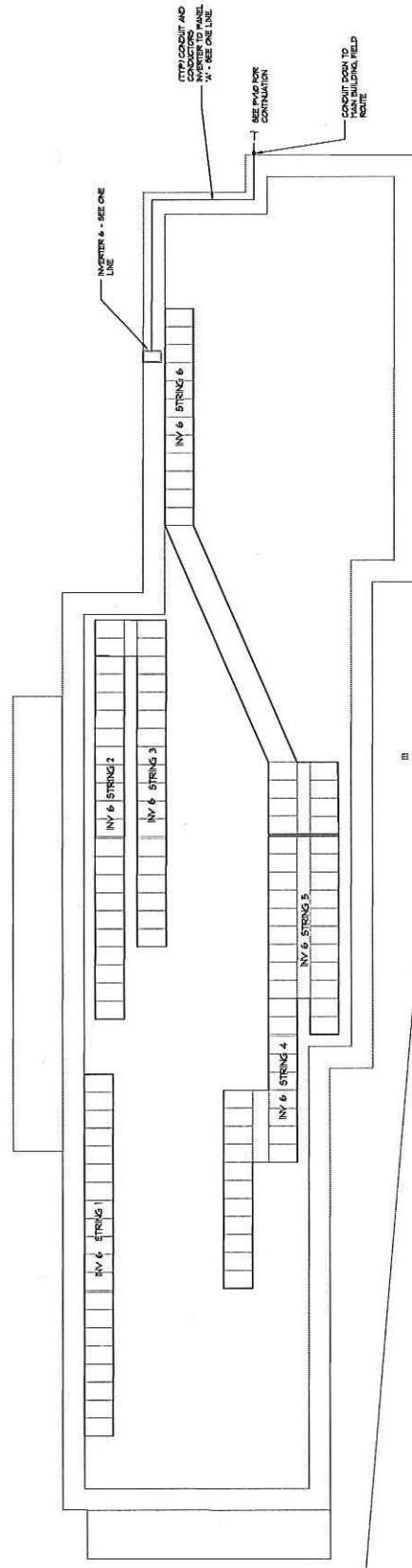


REV. NO.	REV. DATE	PH. (707) 252-9990
▼	▼	PO BOX 10637 NPA CA 95581
▼	▼	APN: 002-120-011
▼	▼	COLUSA, CA 95932
▼	▼	1017 BRIDGE ST
▼	▼	NSG1-COLUSA
▼	▼	ARRAY
▼	▼	PLAN
DBI		PV1.4
		DATE: JUNE 2016
		JOB NO.: 16550

DO ROOF MOUNTED SOLAR PHOTOVOLTAIC PANELS. SEE
STRUCTURAL SUBMITTALS FOR MOUNTING. SEE PV2.1 FOR
ELECTRICAL CONNECTIONS.
SOLAR ASSAY CONSIDERATIONS:
INVERTER 6 - 6 STRINGS
10 HANWHA QPEAK -G4 305W MODULES



Panel • 305W WATTS
No. • 3044
Imp. • 13.4
Voc • 33.62 Vdc
Voc • 40.025 Vdc

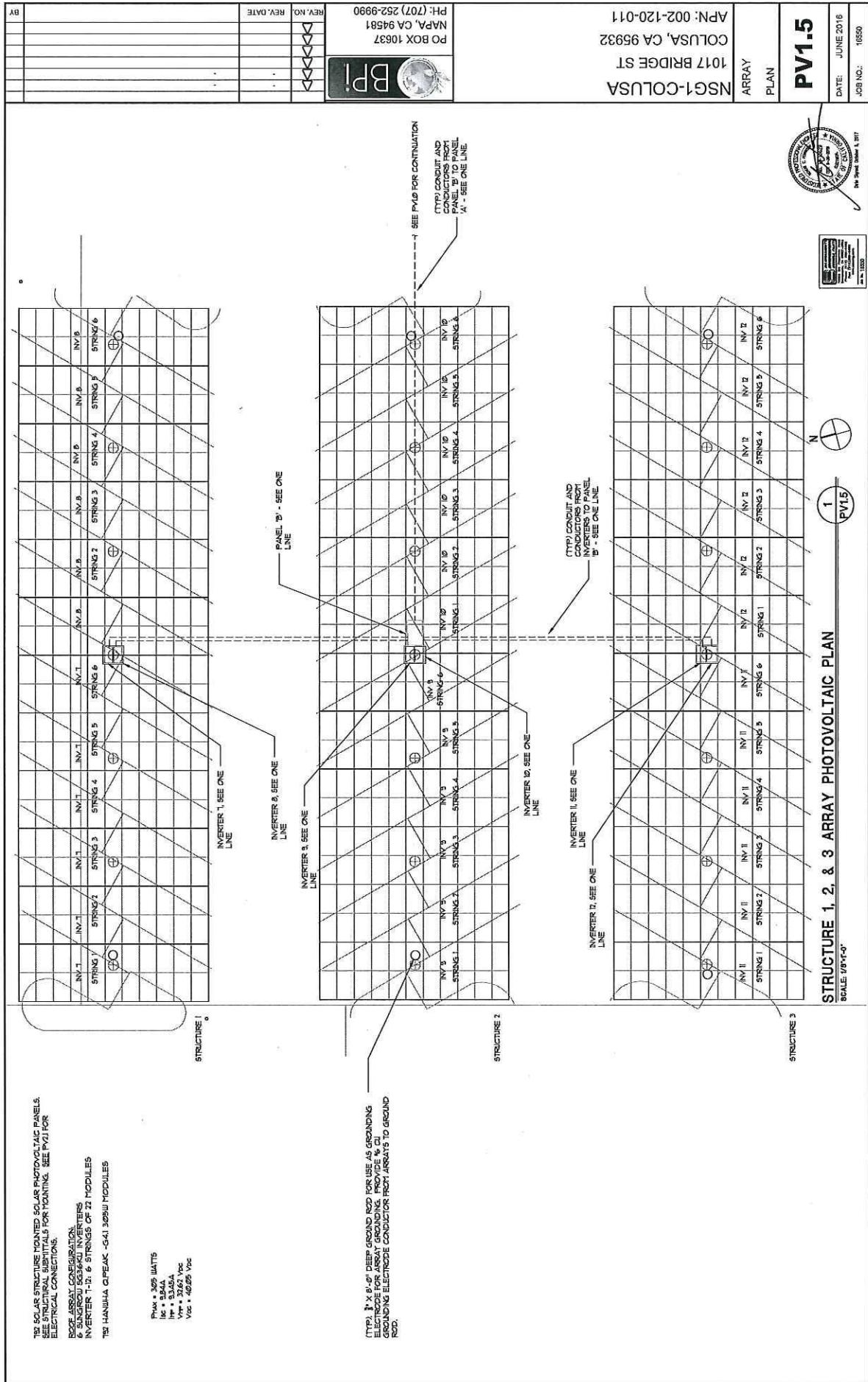


BUILDING 2 ROOF ARRAY PHOTOVOLTAIC PLAN

SCALE 1/80'-0"

(1)
PV1.4





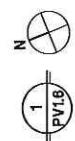
T32 SOLAR STRUCTURE MOUNTED SOLAR PHOTOVOLTAIC PANELS.
SEE STRUTURAL SUBSTITUTIONS FOR MOUNTING. SEE FMV1 FOR
ELECTRICAL CONNECTIONS.

ECOF ABSORT CONFIGURATION.
6 SUNLAYER 5524KU INVERTERS
INVERTER T-12: 6 STRINGS OF 22 MODULES

T32 HANWHA Q-PeAK -641 320W MODULES

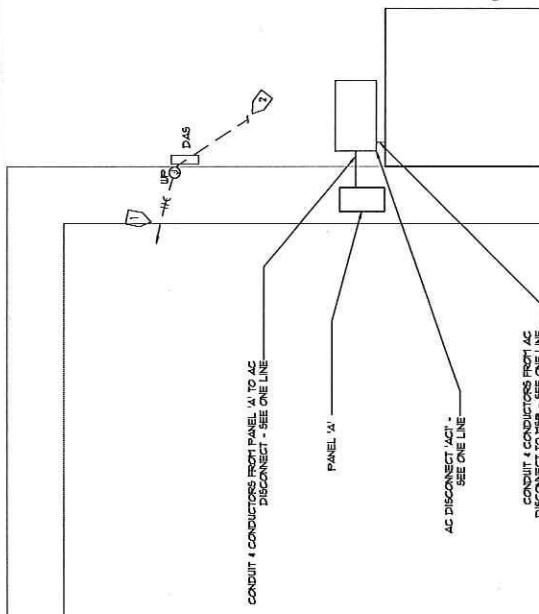
NSG1-COLUSA	1017 BRIDGE ST	COLUSA, CA 95932	APN: 002-120-011
PO BOX 10637	NPA CA 95881	PH: (707) 252-9990	METER AREA PLAN
REV. NO.	REV. DATE	BY	
			

PV1.6



METER AREA PLAN
SCALE 1/4"=10'

(E) 1955



NUMBERED NOTES

- [1] (2) 10, 10 G N.P.C. TO NEAREST PANEL. PROVIDE 20AMP BREAKER IN EXISTING PANEL AND CONNECT DAS CIRCUIT TO NEW BREAKER.
- [2] (1) 1" DATA CONDUIT TO DATA CONNECTION POINT - SEE ONE LINE FIELD ROUTE. ALTERNATELY, WIRELESS CONNECTION MAY BE PROVIDED.

By

SUNGROW SG50KU INVERTERS, 6

SUNGROW SG56KU INVERTERS

INVERTER 1: 10 STRINGS OF 22 MODULES, INVERTER 2-3: 11 STRINGS OF 20 MODULES, INVERTER 4: 11 STRINGS OF 20 MODULES, INVERTER 5: 5 STRINGS OF 22 MODULES, INVERTER 6: 5 STRINGS OF 20 MODULES, INVERTER 7: 12; 6 STRINGS OF 22 MODULES

1882 HANWHA Q.PEAK-G4.1 305W MODULES TOTAL, 53 STRINGS TOTAL

Refer to specifications of solar equipment see attached cut sheets.

INVERTER 1

INVERTER 2-3

INVERTER 4

INVERTER 5-7

INVERTER 8-10

INVERTER 9-11

INVERTER 12

INVERTER 13

INVERTER 14

INVERTER 15

INVERTER 16

INVERTER 17

INVERTER 18

INVERTER 19

INVERTER 20

INVERTER 21

INVERTER 22

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INVERTER 297

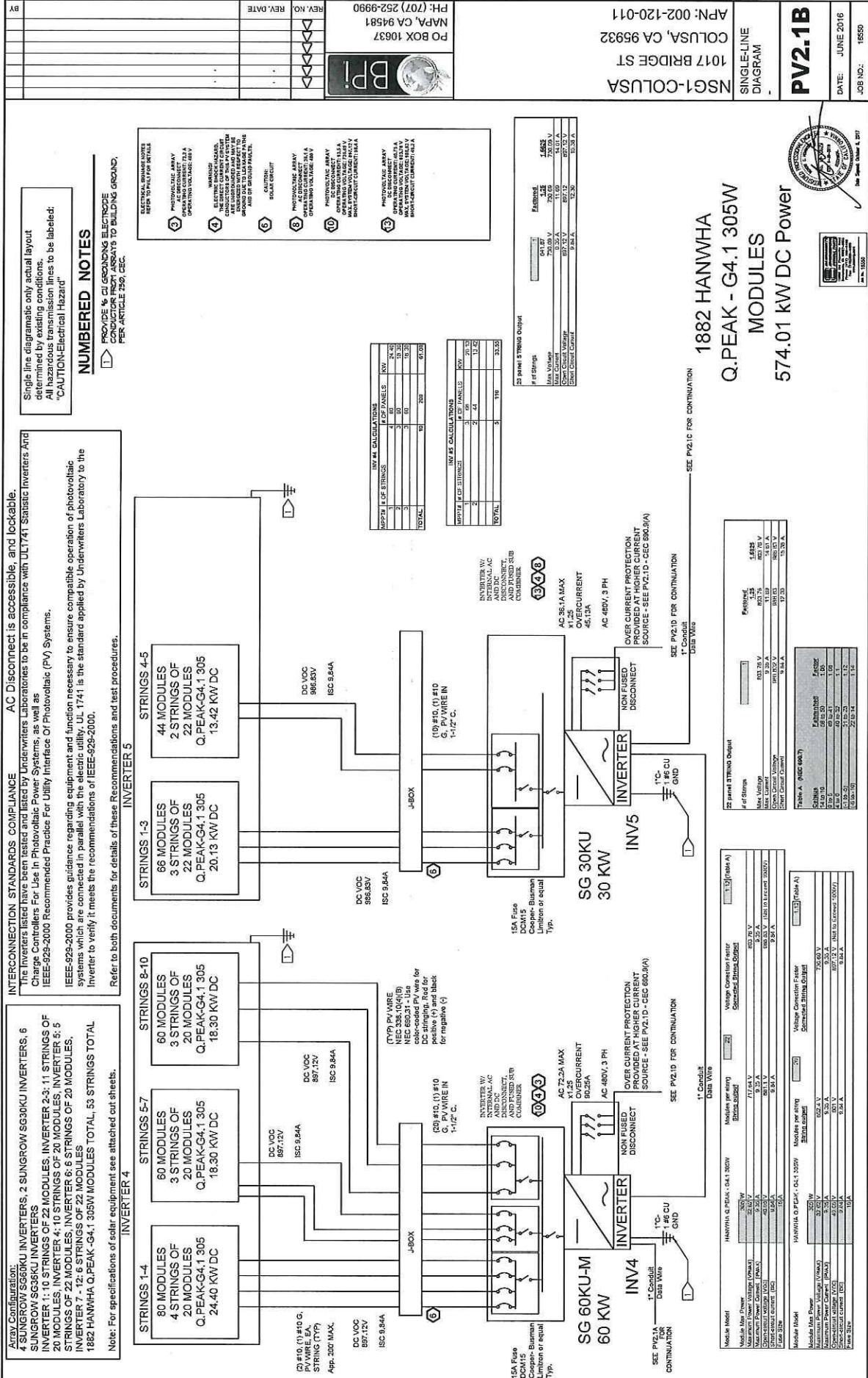
INVERTER 298

INVERTER 299

INVERTER 300

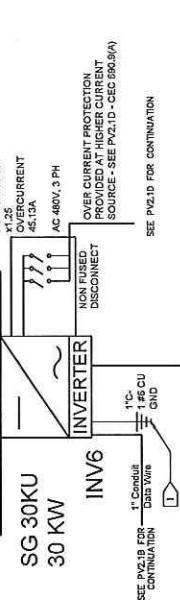
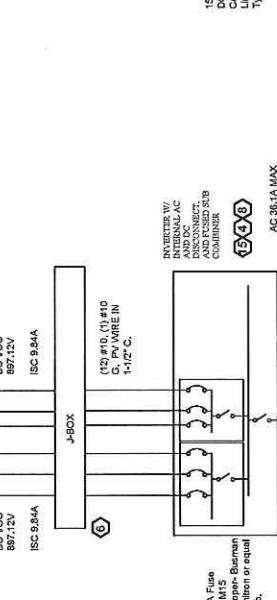
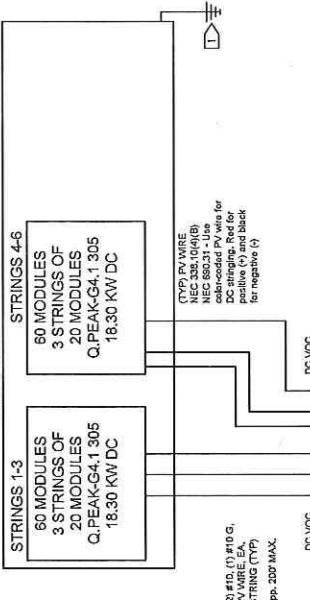
INVERTER 301

INVERTER



Array Configuration:
4 SUNGROW SG30KU INVERTERS, 2 SUNGROW SG36KU INVERTERS, 6 SUNGROW SC236KU INVERTERS
INVERTER 1: 10 STRINGS OF 22 MODULES, INVERTER 2-3: 11 STRINGS OF 20 MODULES, INVERTER 4: 10 STRINGS OF 20 MODULES, INVERTER 5: 5 STRINGS OF 22 MODULES, INVERTER 6: 6 STRINGS OF 20 MODULES
INVERTER 7-12: 6 STRINGS OF 22 MODULES
1882 HANWHA Q.PEAK-G4.1 305V MODULES TOTAL, 53 STRINGS TOTAL
Note: For specifications of solar equipment see attached cut sheets.

INVERTER 6



SEE PV2.10 FOR CONTINUATION

SEE DETAIL A/PV2.10 (Typ)

1*Conduit

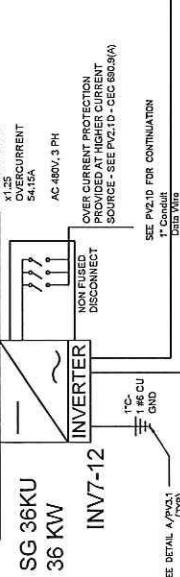
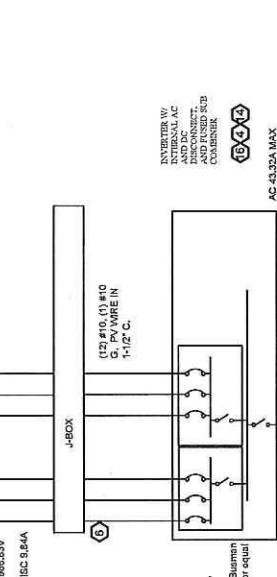
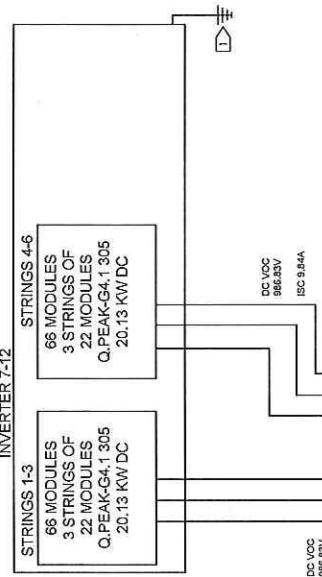
Data Wire

INTERCONNECTION STANDARDS COMPLIANCE
The inverters listed have been tested and listed by Underwriters Laboratories to be in compliance with UL744: Statistic Inverters And Charge Controllers For Use In Photovoltaic Power Systems, as well as IEEE-929-2000 Recommended Practice For Utility Interface Of Photovoltaic (PV) Systems.

IEEE-929-2000 provides guidance regarding equipment and function necessary to ensure compatible operation of photovoltaic systems which are connected in parallel with the electric utility. UL 1741 is the standard applied by Underwriters Laboratory to the inverter to verify it meets the recommendations of IEEE-929-2000.

Refer to both documents for details of these recommendations and test procedures.

INVERTER 7-12



SEE PV2.10 FOR CONTINUATION

Single line diagrammatic only actual layout determined by existing conditions.
All hazardous transmission lines to be labeled:
"CAUTION-Electrical Hazard"

NUMBERED NOTES

PROVIDE % G U GROUNDING ELECTRODE CONDUCTOR FROM ARRAYS TO BUILDING GROUND.
PER ARTICLE 690, CEC.

ELECTRICAL EQUIPMENT LOCATED OUTSIDE REFER TO LOCAL FAIR ISLE

REF. NO. REV. DATE

REV. NO. REV. DATE

By _____

Date _____

Signature _____

AC Disconnect is accessible, and lockable.

The inverters listed have been tested and listed by Underwriters Laboratories to be in compliance with UL744: Statistic Inverters And Charge Controllers For Use In Photovoltaic Power Systems, as well as IEEE-929-2000 Recommended Practice For Utility Interface Of Photovoltaic (PV) Systems.

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Refer to both documents for details of these recommendations and test procedures.

INVERTER 7-12

PROVIDE % G U GROUNDING ELECTRODE CONDUCTOR FROM ARRAYS TO BUILDING GROUND.
PER ARTICLE 690, CEC.

ELECTRICAL EQUIPMENT LOCATED OUTSIDE REFER TO LOCAL FAIR ISLE

REF. NO. REV. DATE

REV. NO. REV. DATE

AC Disconnect is accessible, and lockable.

The inverters listed have been tested and listed by Underwriters Laboratories to be in compliance with UL744: Statistic Inverters And Charge Controllers For Use In Photovoltaic Power Systems, as well as IEEE-929-2000 Recommended Practice For Utility Interface Of Photovoltaic (PV) Systems.

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INVERTER 7-12

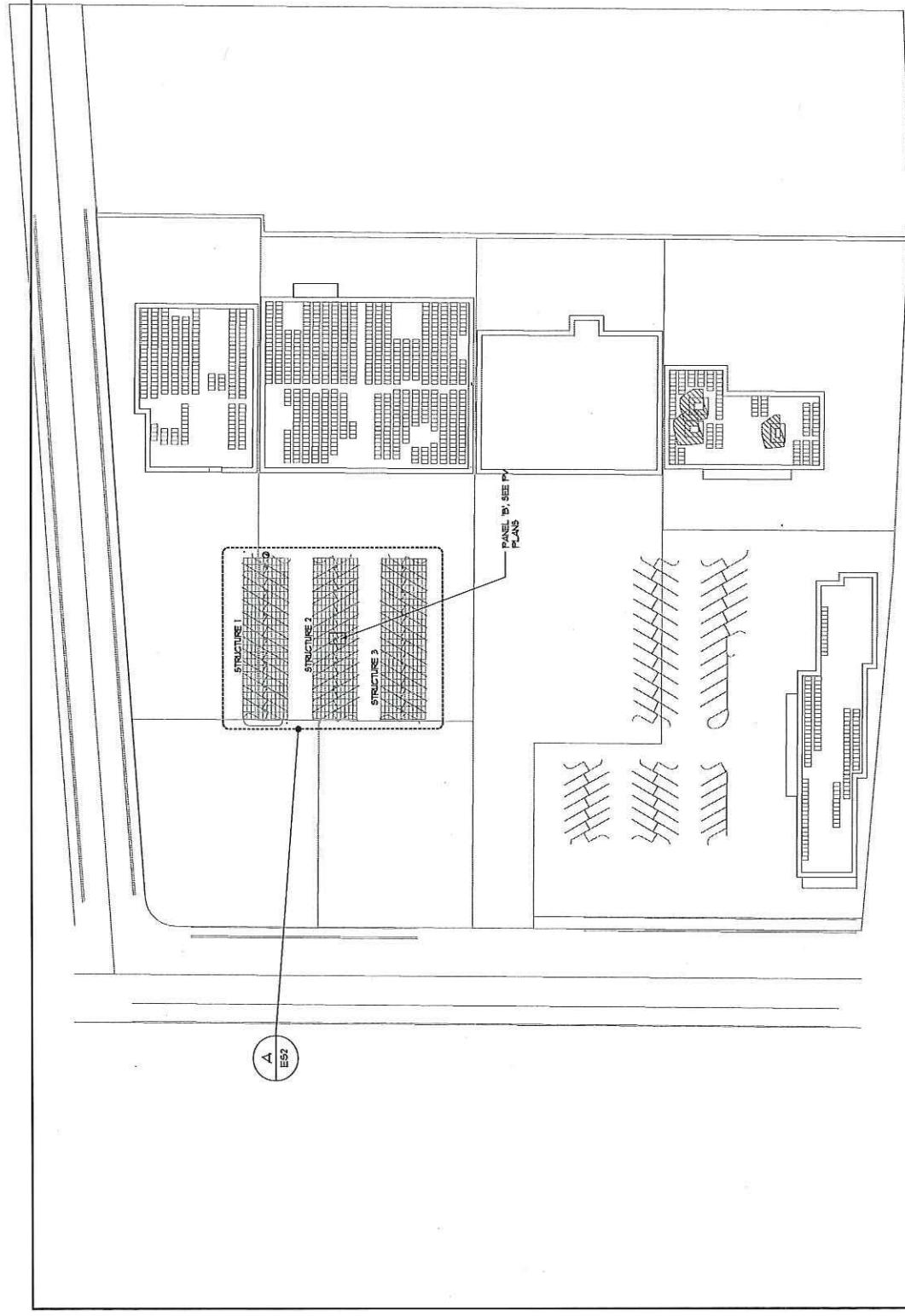
PROVIDE % G U GROUNDING ELECTRODE CONDUCTOR FROM ARRAYS TO BUILDING GROUND.
PER ARTICLE 690, CEC.

ELECTRICAL EQUIPMENT LOCATED OUTSIDE REFER TO LOCAL FAIR ISLE

REF. NO. REV. DATE

REV. NO. REV. DATE

AC Disconnect is accessible, and lockable.



STRUCTURE 1-3 LIGHTING PLAN

SCALE: 1" = 10'-0"

STRUCTURE 1

STRUCTURE 2

STRUCTURE 3

NOTES

□ HOME RA TO 20A/P CIRCUIT IN PANEL B, CONTROL VIA THE CLOCK INSTALL TIME
CLOCK NEXT TO PANEL B IN NEUTRAL ENCLOSURE.

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	INPUT VOLT	LAMPS NO.	INPUT VA	REMARKS	
					CANOPY	INCANTING
A	LITHONIA INDUSCL-ED-20G-350- SPC-5WAC-120V- P-FROZEN-GLOBE	277	1 LED	25	LED SURFACE CANOPY LIGHT W/ MOUNT BRKT AND STAINLESS STEEL	

REV. NO. REV. DATE

PO BOX 10637 NAPA, CA 94581 PH: (707) 252-9990 APN: 002-120-0-011
COLUSA, CA 95932 NSG1-COOLUSA 1017 BRIDGE ST

STRUCTURE LIGHTING PLAN

DATE: JUNE 2016
JOB NO.: 18550

ES2

STRUCTURE LIGHTING PLAN

DATE: JUNE 2016
JOB NO.: 18550

ES2

ARRAY Configuration:
4 SUNGROW SG30KU INVERTERS, 2 SUNGROW SG30KU INVERTERS, 6 SUNGROW SG35KU INVERTERS
INVERTER 1: 10 STRINGS OF 22 MODULES, INVERTER 2-3: 11 STRINGS OF 20 MODULES, INVERTER 4: 10 STRINGS OF 20 MODULES, INVERTER 5: 5 STRINGS OF 22 MODULES, INVERTER 6: 6 STRINGS OF 20 MODULES, INVERTER 7-12: 6 STRINGS OF 22 MODULES

Note: For specifications of solar equipment see attached cut sheets.

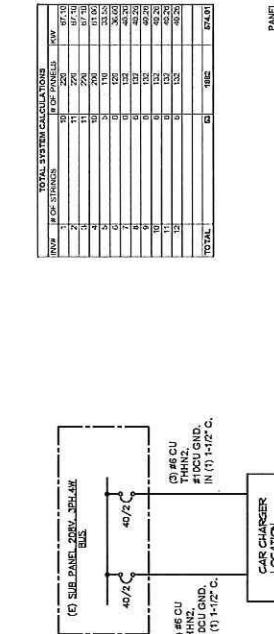
1882 HANWHA Q.PEAK - G4.1 305W MODULES 574.01 kW DC Power

INTERCONNECTION STANDARDS COMPLIANCE
The Inverters listed have been tested and listed by Underwriters Laboratories to be in compliance with UL1741 Statistic Inverters And Charge Controllers For Use in Photovoltaic Power Systems, as well as IEEE 929-2000 Recommended Practice For Utility Interface Of Photovoltaic (PV) Systems.
IEEE 929-2000 provides guidance regarding equipment and function necessary to ensure compatible operation of photovoltaic systems which are connected in parallel with the electric utility. UL 1741 is the standard applied by Underwriters Laboratories to the Inverter to verify it meets the recommendations of IEEE 929-2000.

Refer to both documents for details of these Recommendations and test procedures.

AC Disconnect is accessible, and lockable.

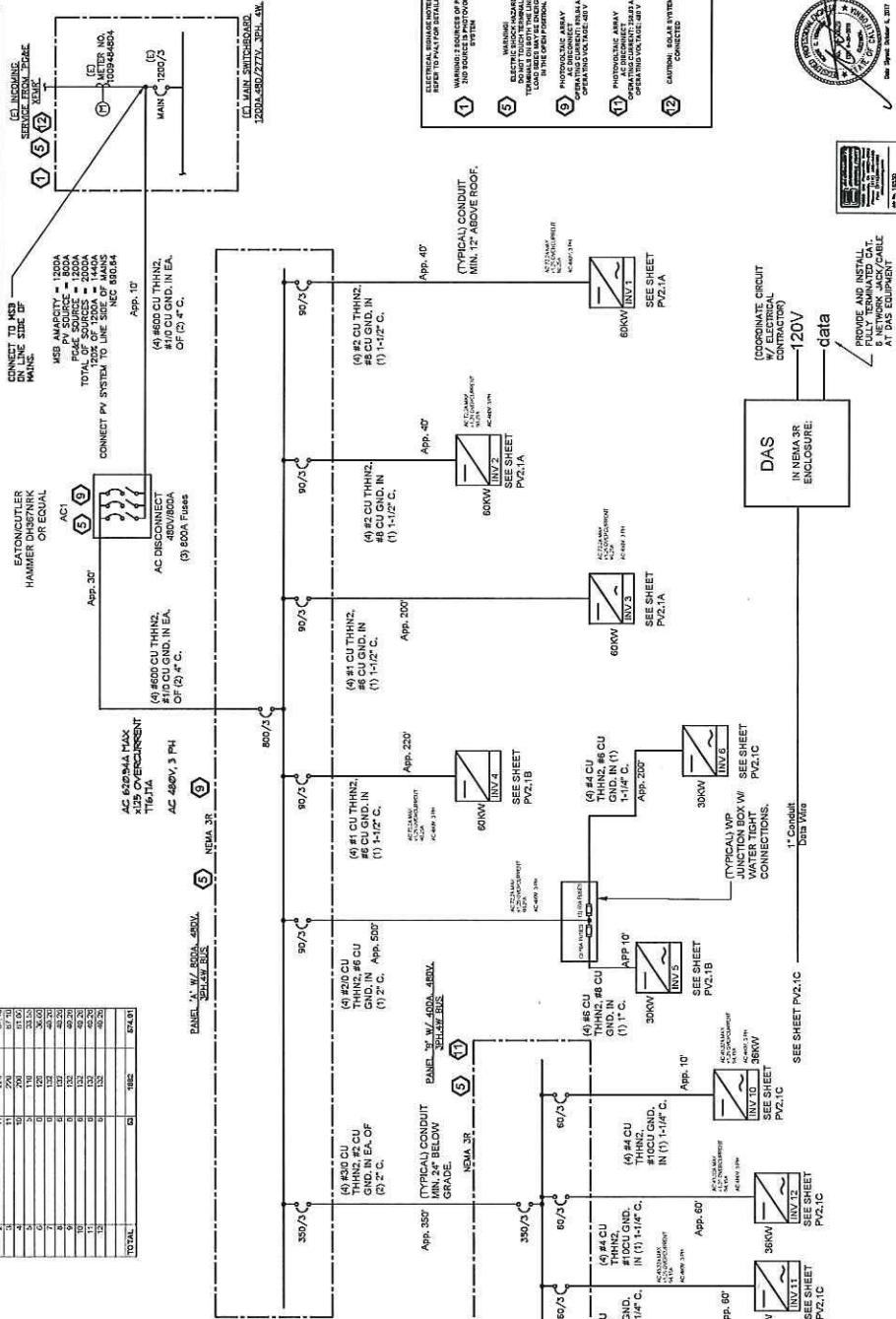
All hazardous transmission lines to be labeled:
"CAUTION-Electrical Hazard"



Row	Total System Calculations	Row
1	1000 W	97/100
2	11	97/10
3	11	97/10
4	11	97/10
5	11	97/10
6	120	97/10
7	12	97/10
8	12	97/10
9	12	97/10
10	12	97/10
11	12	97/10
12	12	97/10
TOTAL	6000	97/100

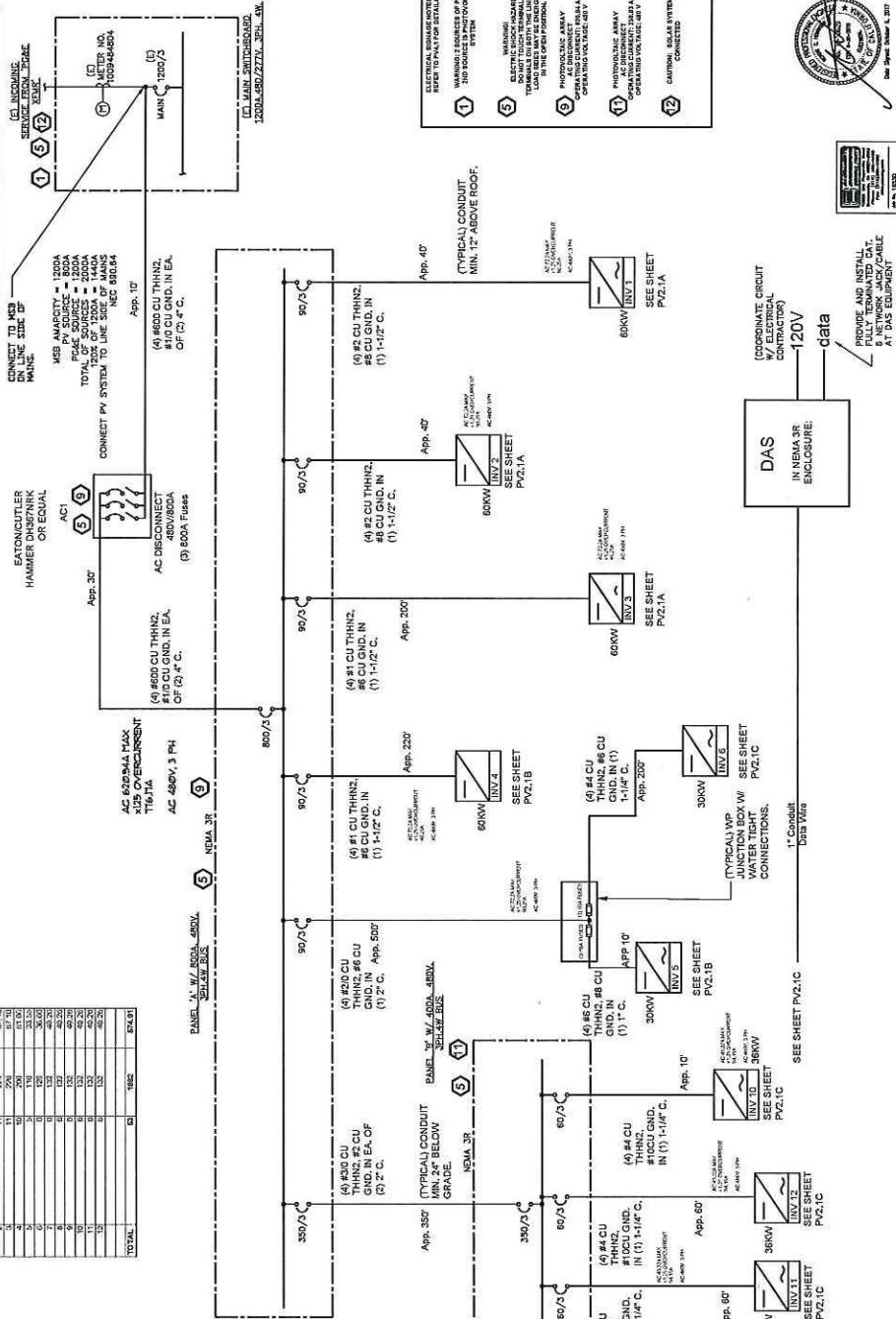
Single line diagrammatic only actual layout determined by existing conditions.

All hazardous transmission lines to be labeled:
"CAUTION-Electrical Hazard"



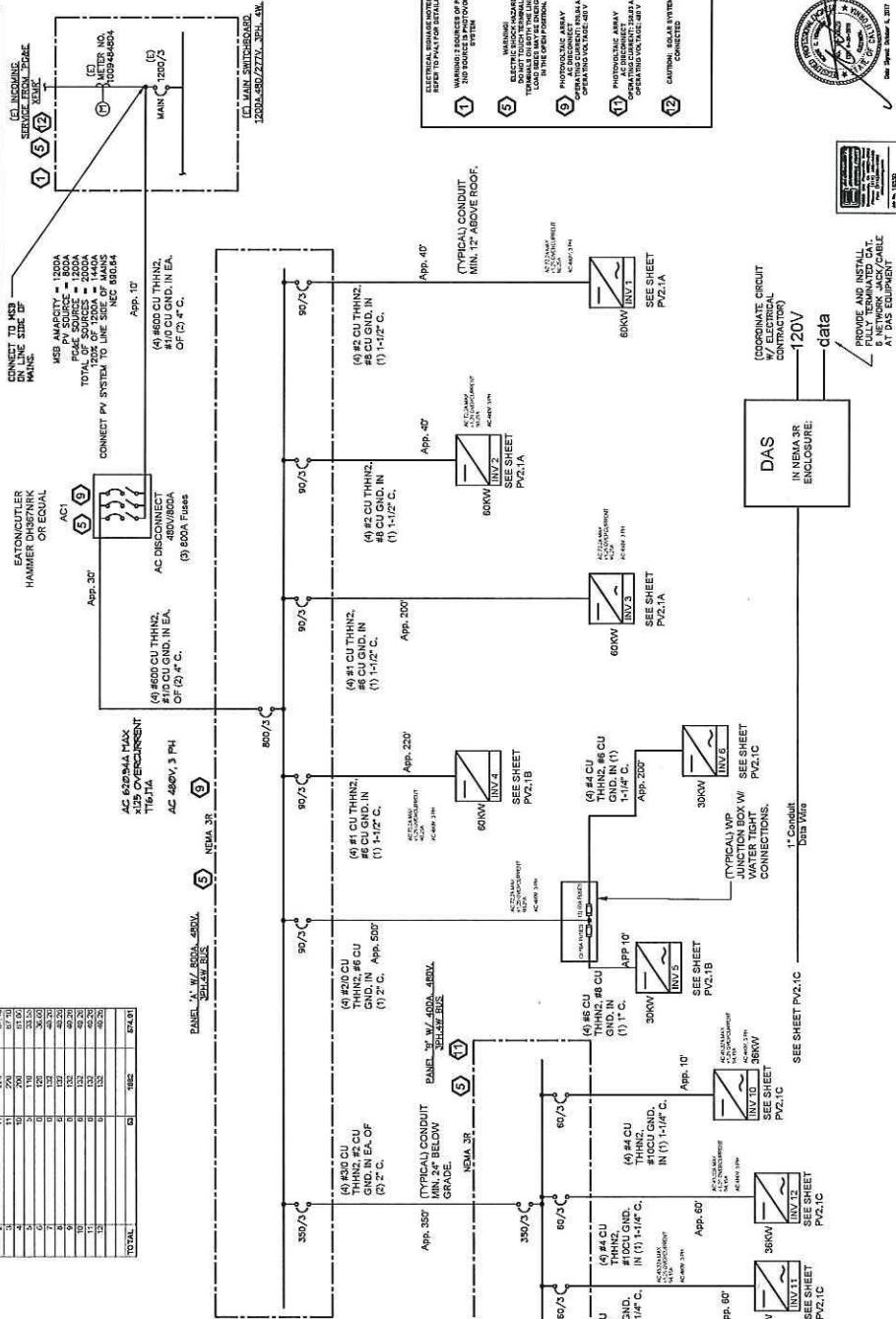
Single line diagrammatic only actual layout determined by existing conditions.

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"CAUTION-Electrical Hazard"



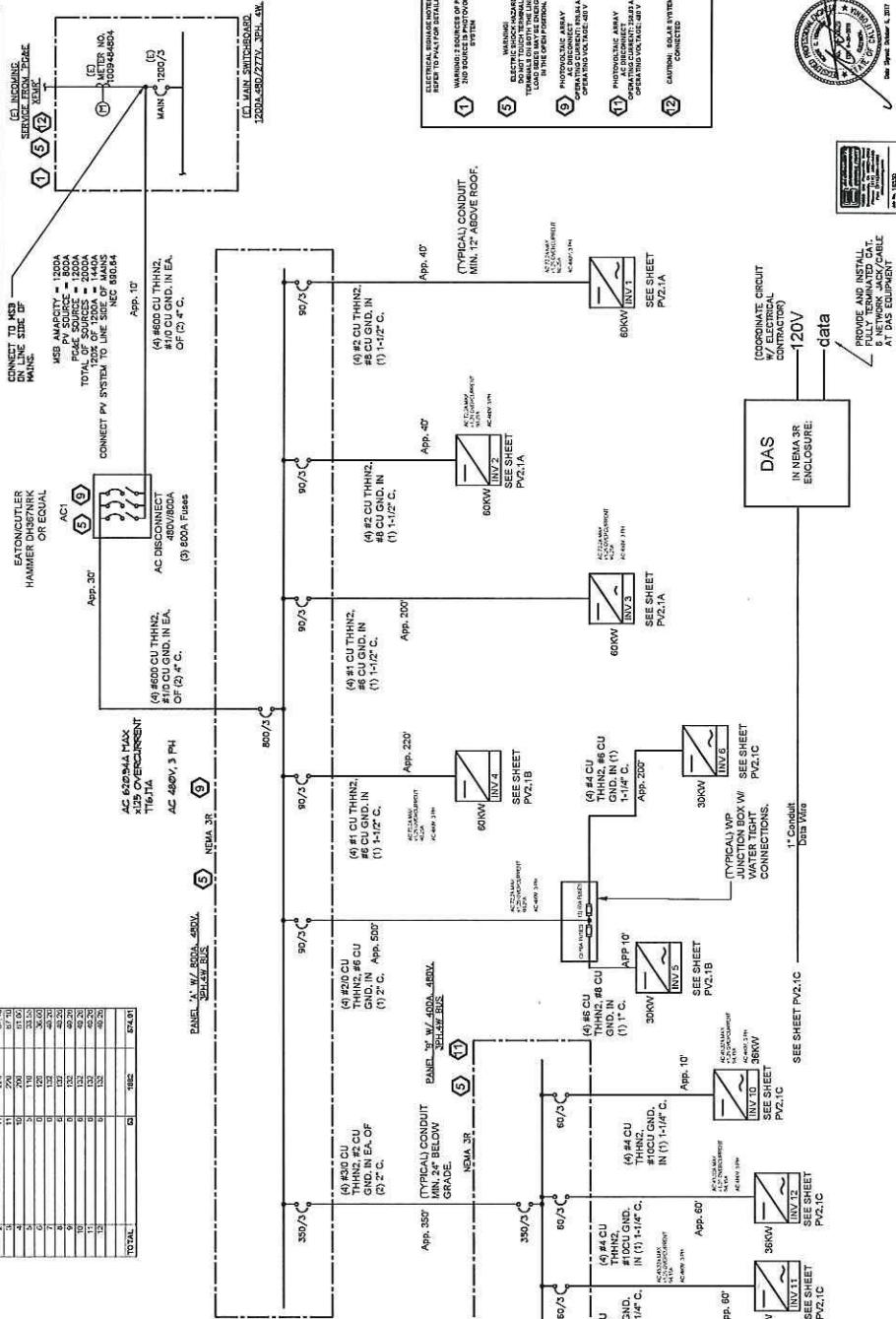
Single line diagrammatic only actual layout determined by existing conditions.

All hazardous transmission lines to be labeled:
"CAUTION-Electrical Hazard"



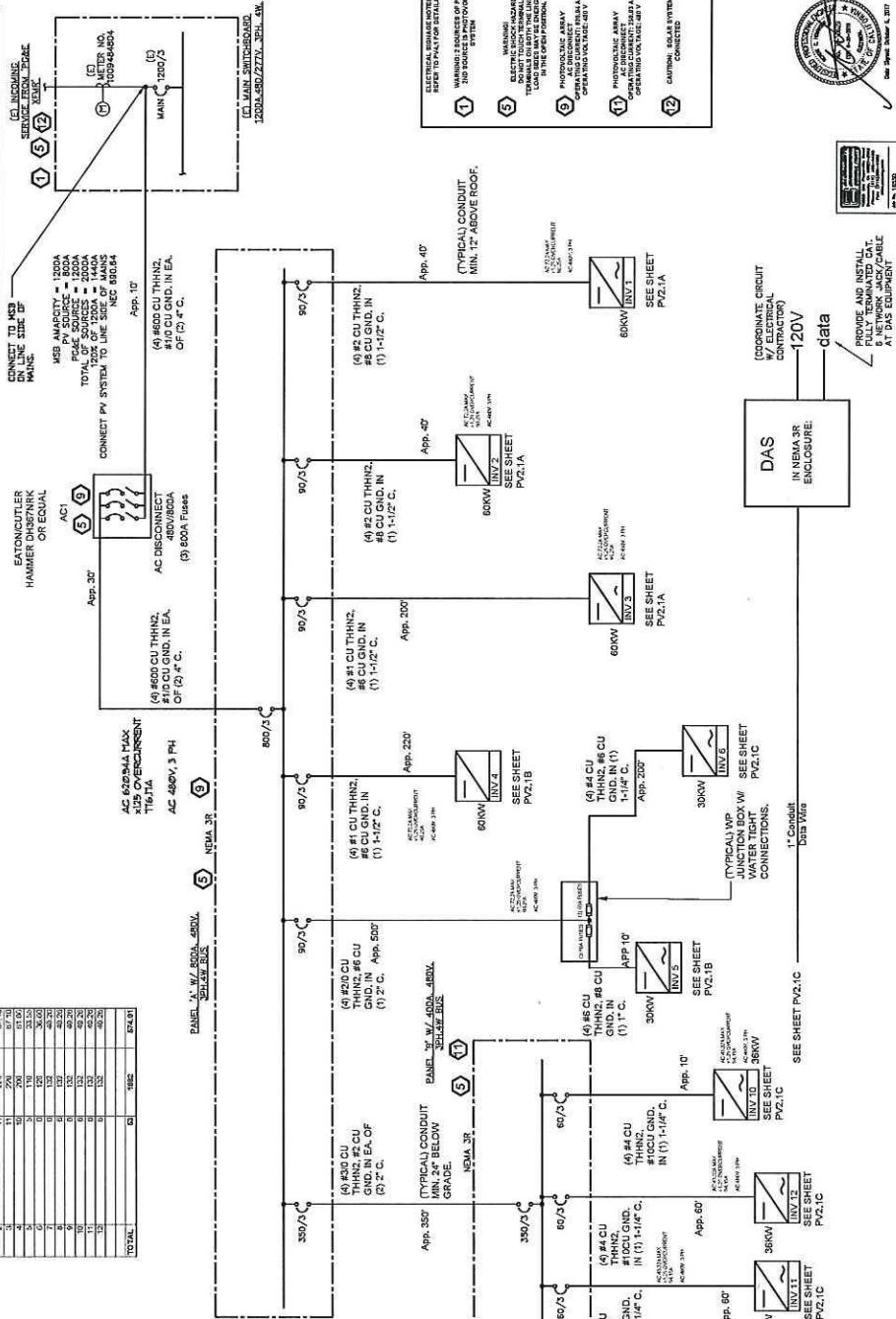
Single line diagrammatic only actual layout determined by existing conditions.

All hazardous transmission lines to be labeled:
"CAUTION-Electrical Hazard"



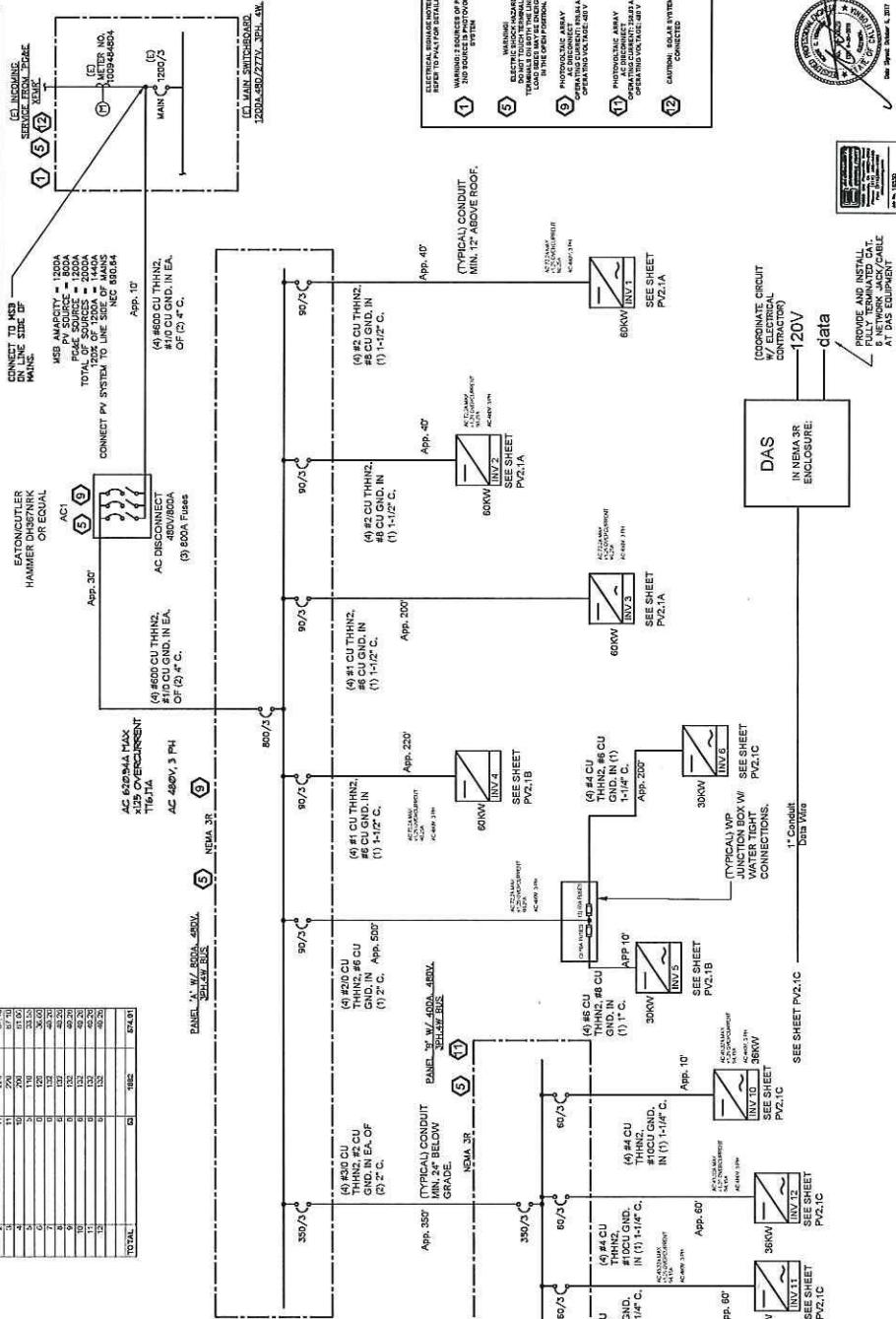
Single line diagrammatic only actual layout determined by existing conditions.

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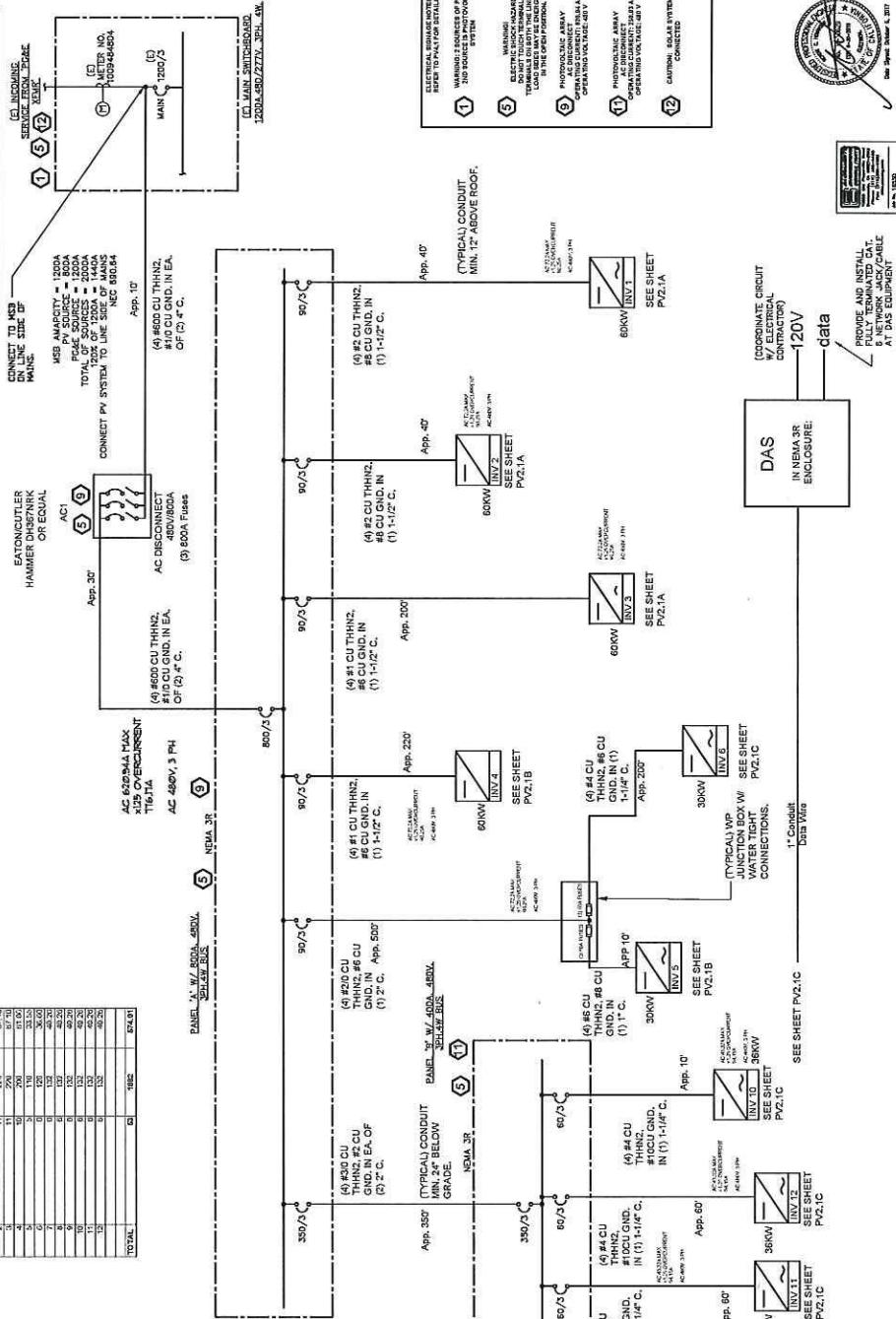
Single line diagrammatic only actual layout determined by existing conditions.

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"CAUTION-Electrical Hazard"



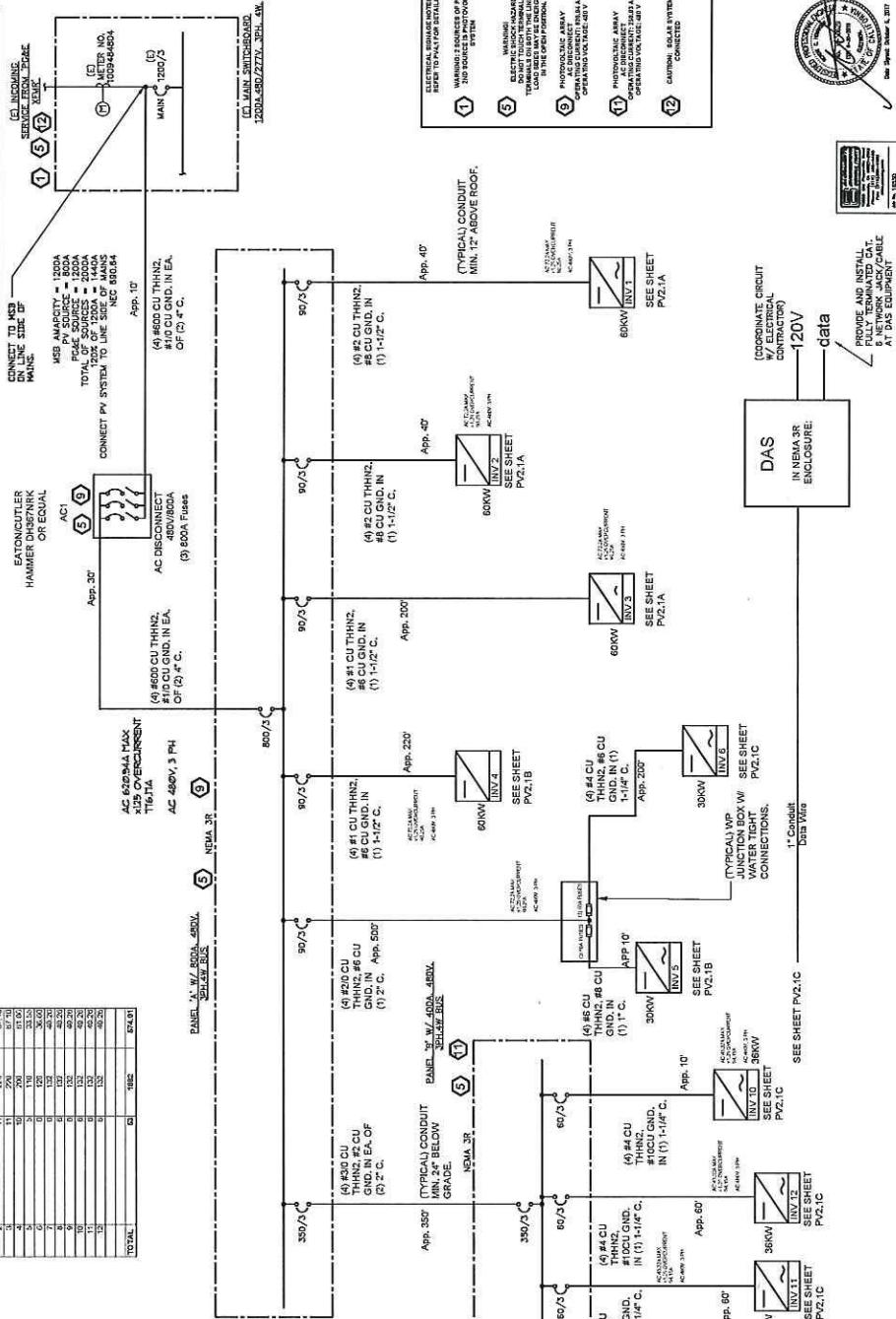
Single line diagrammatic only actual layout determined by existing conditions.

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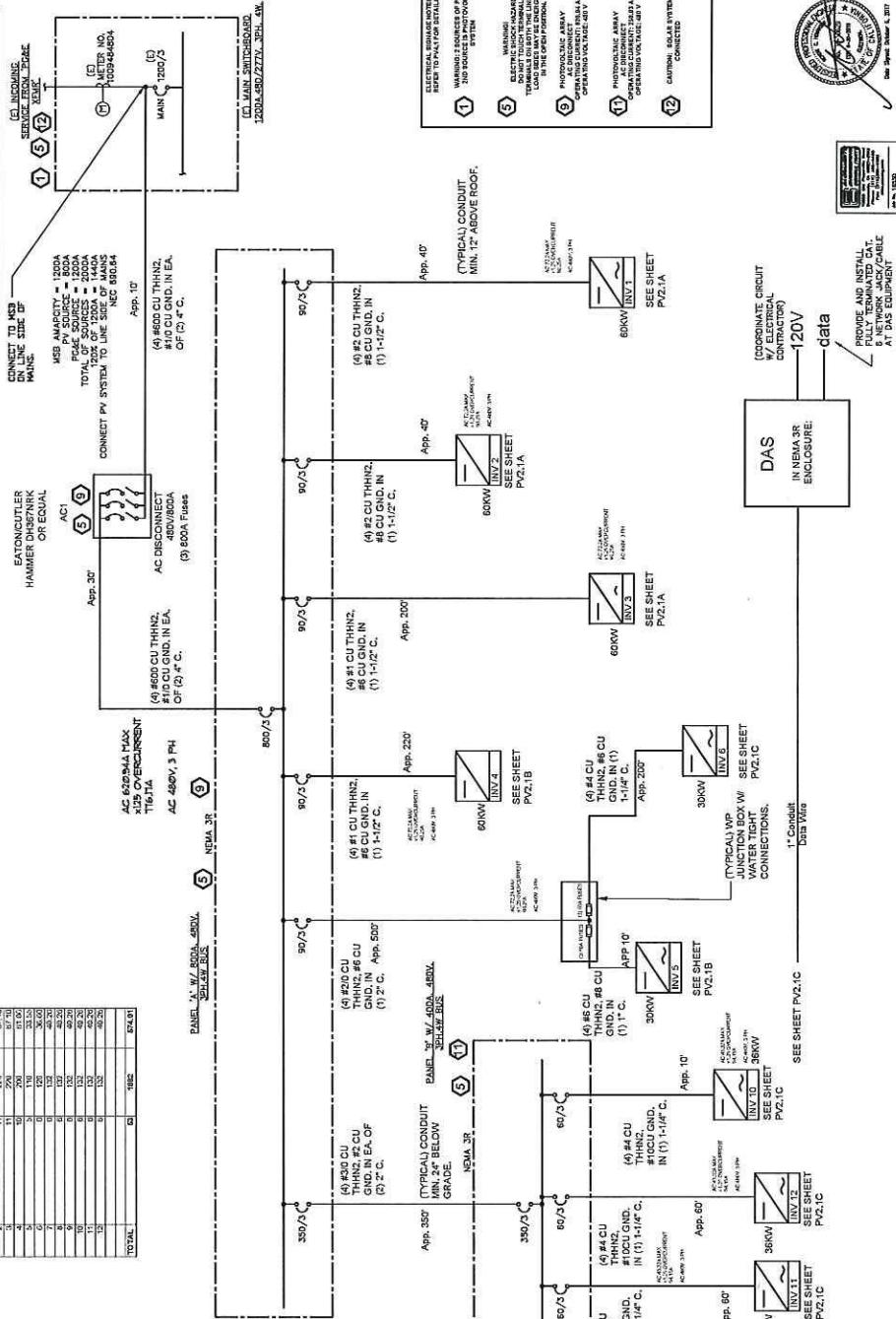
Single line diagrammatic only actual layout determined by existing conditions.

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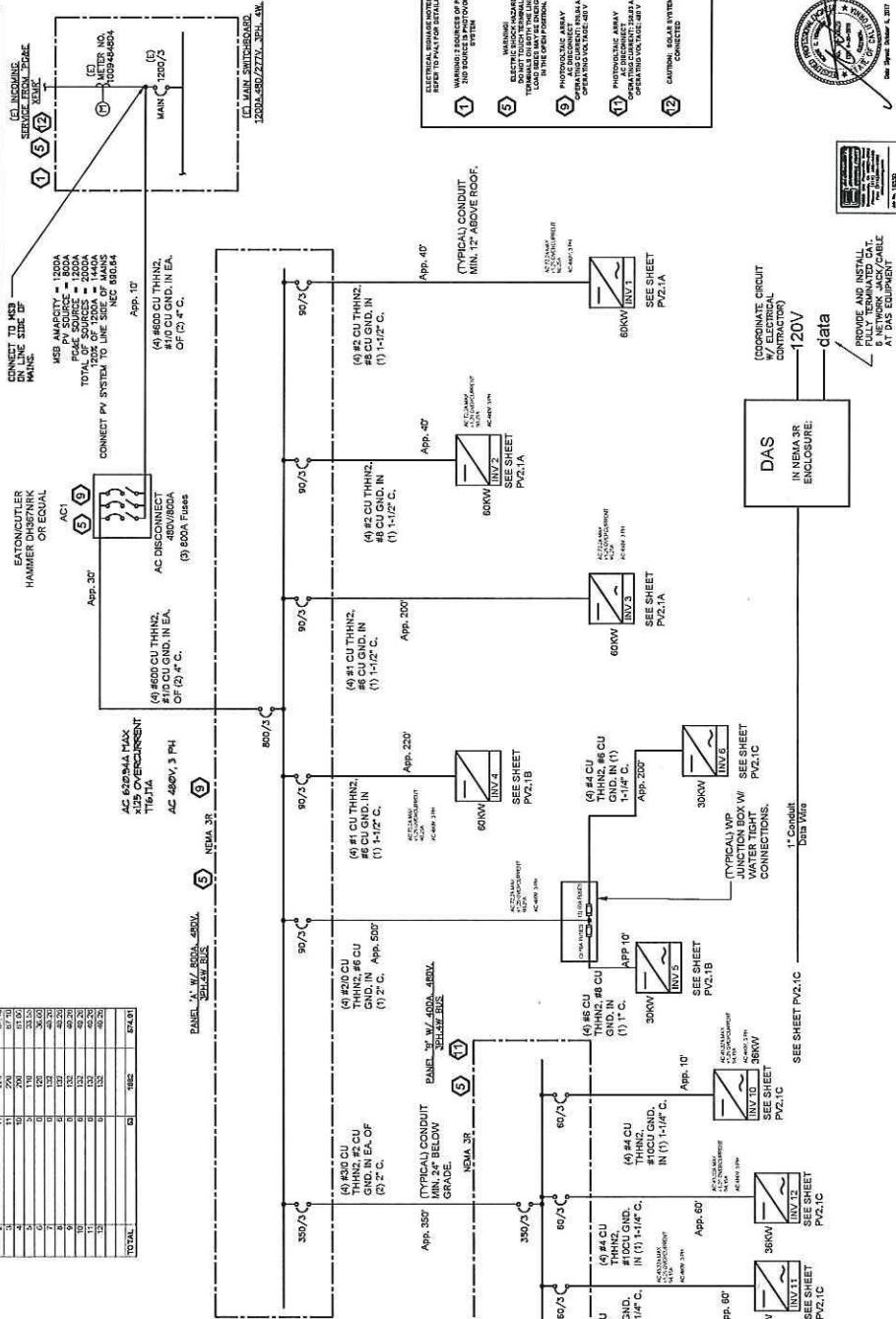
Single line diagrammatic only actual layout determined by existing conditions.

All hazardous transmission lines to be labeled:
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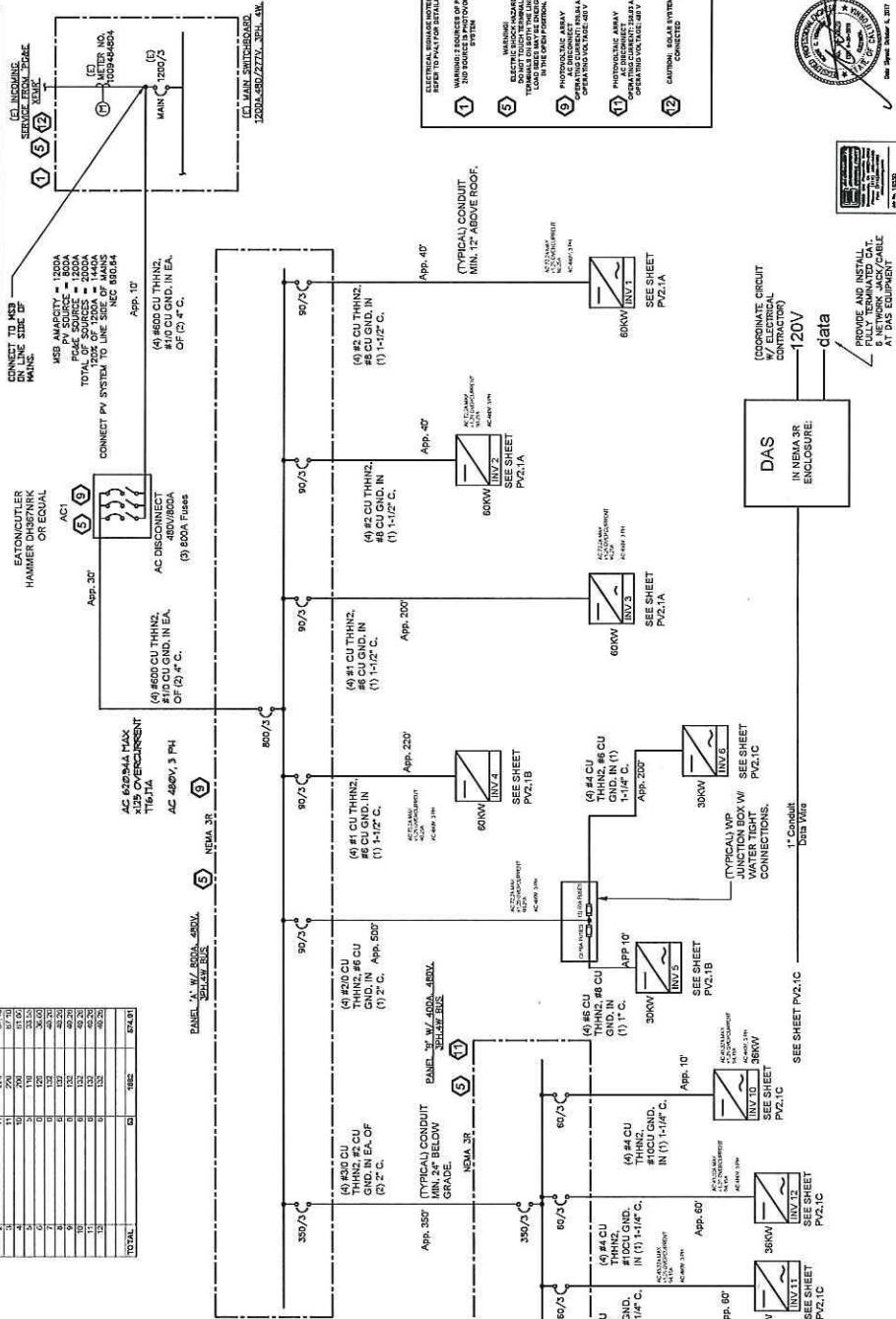
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All hazardous transmission lines to be labeled:
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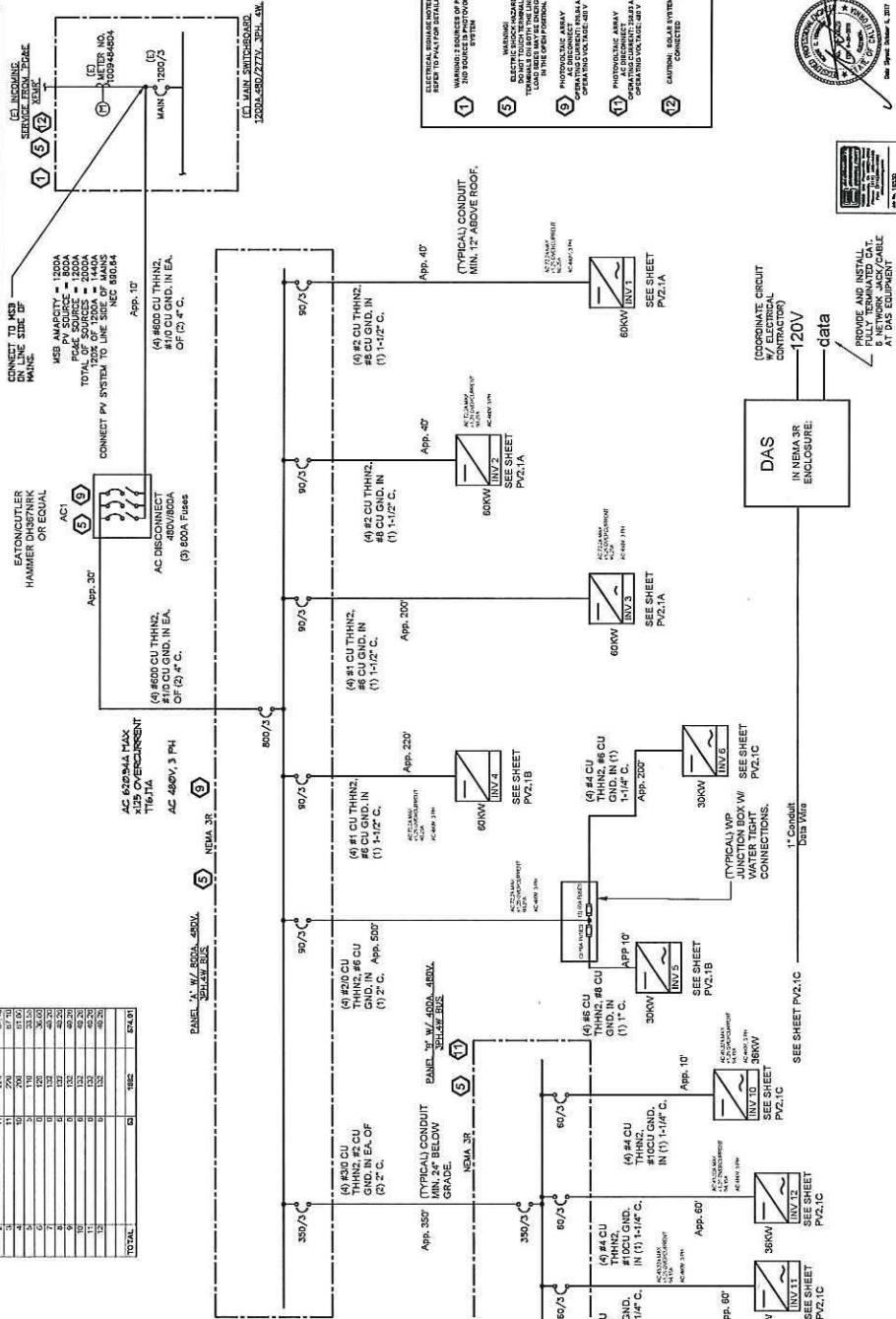
Single line diagrammatic only actual layout determined by existing conditions.

All hazardous transmission lines to be labeled:
"CAUTION-Electrical Hazard"



Single line diagrammatic only actual layout determined by existing conditions.

All hazardous transmission lines to be labeled:
"CAUTION-Electrical Hazard"



Single line diagrammatic only actual layout determined by existing conditions.



**INTERCONNECTION AGREEMENT FOR NET ENERGY
METERING (NEM2) OF SOLAR OR WIND ELECTRIC
GENERATING FACILITIES, OTHER THAN FACILITIES
OF 30 KW OR LESS**

APPENDIX B (If Applicable)

**Any Rule 2 or Rule 21 Agreements for the Installation or
Allocation of Special Facilities (Forms 79-255, 79-280, 79-702)
or Agreements to Perform Any Tariff Related Work (62-4527)
(Formed between the Parties)**