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(Writer's Direct Dial No. 727-820-4692)

Dianne M. Triplett
Associate General Counsel

June 14, 2013

REDACTED

Ms. Ann Cole
Commission Clerk
Office of Commission Clerk
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: *Recall of PV Panels Manufactured by Advanced Solar Photonics on Behalf of Blue Chip Energy LLC*

Dear Ms. Cole:

Please find enclosed for filing on behalf of Duke Energy Florida, Inc., responses to Staff's Informal Data Request issued May 22, 2013.

Please let me know if you have any questions. Thank you for your assistance in this matter.

Sincerely,

Dianne M. Triplett

DMT:emc
cc: Jim Dean
Enclosures

DOCUMENT NUMBER-DATE

03385 JUN 14 2

FPSC-COMMISSION CLERK

DUKE ENERGY FLORIDA, (DEF) INC.'S RESPONSE TO FPSC DATA REQUEST
RECALL OF PV PANELS MANUFACTURED BY ADVANCED SOLAR
PHOTONICS ON BEHALF OF BLUE CHIP ENERGY LLC

1. When and how did your Company become aware of the recall of solar panels manufactured by Advanced Solar Photonics (ASP) on behalf of Blue Chip Energy LLC (BCE)? When and how did your Company first notify affected customers?

RESPONSE:

DEF became aware of a product recall of certain Advanced Solar Photonics (ASP), a/k/a BlueChip Energy (BCE) photovoltaic modules after the Florida Solar Energy Center (FSEC) identified a potential UL listing issue with the Advanced Solar Photonics panels that had been previously certified by FSEC. ASP announced a voluntary recall on February 1, 2013 stating that certain panels were mislabeled and may not meet UL standards. On February 26, 2013 DEF sent letters to all the BCE customers that had either already installed ASP panels and received rebates under the Company's incentive program or customers that were planning to install these panels in the near future to inform them of the product recall.

On April 15, 2013 UL issued a public notice that ASP/BCE has been applying a counterfeit UL mark to several of its products-- at least the AP-240PK, AP-245MK, and ASP-390M.

2. What procedures does your Company use to verify that the solar photovoltaic (PV) systems installed by customers are eligible to receive a rebate under the solar rebate program standards?

RESPONSE:

DEF requires and validates that each solar PV system participating in the Residential & Commercial Photovoltaic Programs has been permitted and inspected by the local building department to ensure that the system meets all local, state, and federal rules and codes. Typically the local codes require compliance with the National Electric Code (NEC). NEC section 90.4 (D) requires all PV Panels meet UL 1703 to be NEC compliant. DEF requires and validates that each solar PV system participating in the Residential & Commercial Photovoltaic Programs has been certified and approved by the Florida Solar Energy Center (FSEC). As a requirement of FSEC PV Module Registration, a DC PV module model must be listed to UL 1703. Evidence of listing to UL 1703 is required to be supplied by an applicant during the application process for FSEC PV Module Registration.

DEF completes an on-site verification for each solar PV system participating in the rebate program prior to processing or paying a rebate.

3. What procedures does your Company use to verify that customer-owned solar PV systems that are interconnected and net metered meet the requirements of Rule 25-6.065, Florida Administrative Code?

RESPONSE:

All customers wanting to interconnect a net metered renewable generation system are required to have an Application and Compliance Form completed. Section D of the form requires the installing contractor to certify the system installed meets UL1741, and IEEE 1547 standards. Section F has to be signed by an inspector from the local permitting authority certifying all code requirements have been met. Additionally, for Tier 2 systems (>10KW, <=100KW), and Tier 3 systems (>100KW, <=2MW) a DEF employee inspects the installation for general safety, verifies the appropriate disconnect switch has been installed, and verifies that all customer owned equipment has been installed on the load side of the meter. DEF then approves the Application and Compliance Form by signing in section G.

4. What procedures did your Company take to ensure that the solar panels were UL approved?

RESPONSE:

DEF's Residential & Commercial Photovoltaic Programs Participation Standards includes language that that the PV system shall meet UL Standards 1703, "Standard for Safety: Flat Plate Photovoltaic Modules and Panels". Additionally, the solar PV system must comply with all local, state, and federal rules and codes.

DEF requires and validates that each solar PV system participating in the rebate program has been certified and approved by the Florida Solar Energy Center (FSEC). As a requirement of FSEC PV Module Registration, a DC PV module model must be listed to UL 1703. Evidence of listing to UL 1703 is required to be supplied by an applicant during the application process for FSEC PV Module Registration.

DEF requires and validates that each solar PV system participating in the rebate program has been permitted and inspected by the local building department to ensure that the system meets all local codes. Typically the local codes require compliance with the National Electric Code (NEC). NEC Section 90.4 (D) requires all PV Panels meet UL 1703 to be NEC compliant.

Since the voluntary recall on February 1, 2013, DEF has hired a third party vendor to conduct on-site panel verifications on all ASP/BCE installations to ensure that the counterfeit UL marked panels do not receive a rebate.

5. Has the Company received any customer complaints regarding the PV panel recall? How is your Company working with customers that have concerns related to the recall?

RESPONSE:

DEF has received several complaints in regards to the ASP/BCE recall. The complaints have primarily been from customers that are currently active in the Residential & Commercial Photovoltaic Programs and are in the process of having PV systems installed. DEF's vendor is currently conducting on-verifications to ensure we do not rebate known non-UL approved panels. The on-site verifications have been positive and of all sixteen homes inspected have not had the ASP panels installed. However, we have received communications from approximately five customers who have the ASP panels installed and are awaiting ASP/BCE to replace their panels. DEF has granted multiple program extensions to these ASP/BCE customers allowing them extra time to have the counterfeit UL marked panels replaced or to complete the PV installation with UL compliant panels. At this point it is unknown if ASP/BCE will replace these panels.

6. Please complete the table below:

PV Participants and Incentives Paid 2011 through March 2013									
Program	2011			2012			2013		
	Participants	KW	Incentives	Participants	KW	Incentives	Participants	KW	Incentives
PV Incentives									
Residential PV									
Commercial PV									
Blue Chip Participants w/ASP panels									
Residential									
Commercial									
Total Residential & Commercial PV BCE									
Percent BCE Incentives to all PV Incentives									

RESPONSE:

DEF PV Participants and Incentives Paid 2011 Through March 2013									
Program	2011			2012			2013		
	Participants	KW	Incentives	Participants	KW	Incentives	Participants	KW	Incentives
PV Incentives									
Residential PV	88	556	\$1,197,406	106	737	\$1,444,511	69	503	\$1,006,097
Commercial PV	16	632.36	\$855,170	11	599.3	\$853,415	2	110	\$177,698
	104	1188.36	\$2,052,576	117	1,336	\$2,297,926	71	613	\$1,183,795
Blue Chip Participants w/ASP panels									
Residential	4	26.17	\$51,400	29	225.9	\$418,280	45	180	0
Commercial	4	70.3	\$119,250	1	100	\$130,000	3	25.4	0
Total Residential & Commercial PV BCE	8	96.47	\$170,650	30	325.9	\$548,280	48	205.4	0
Percent BCE Incentives to all PV Incentives			8%			24%			0%

7. How many customers have been identified within your service territory that are net metered customers with panels installed by BCE?

RESPONSE:

DEF has identified 141 customers within its service territory that are net metered customers with panels installed by Blue Chip Energy.

8. Please provide copies of all documents the Company either sent to or received from Blue Chip or Advanced Solar Photonics regarding the recall.

RESPONSE:

Copies of documents received or sent by the Company from Blue Chip/ASP are provided as requested. Customer names and addresses are confidential and subject to DEF's Request for Confidential Classification filed contemporaneously with service of this response.

9. Please provide copies of all documents the Company either sent to or received from the Florida Solar Energy Center regarding the recall.

RESPONSE:

Copies of documents the Company has sent or received from the Florida Solar Energy Center are provided as requested.

10. Please provide copies of all documents the Company either sent to or received from UL regarding the recall.

RESPONSE:

Copies of documents the Company sent or received from UL are provided as requested.

11. Please provide copies of all correspondence from the Company to each customer who is affected by the recall.

RESPONSE:

DEF communicated with all BCE customers that had either installed ASP panels and received rebates under the Company's incentive program or customers that were planning to install these panels in the near future to inform them of a product recall on February 26, 2013.

Additionally, letters for the customer segments defined below were mailed to customers on June 5, 2013.

- **PV customers who already have the panels installed**
- **Net metered customers with the panels installed**
- **PV customers on the wait list**
- **PV customers who are in the process of installing the panels but have not yet qualified for a rebate**

Copies of those letters are attached to this response. The names and addresses of those customers are confidential and subject to DEF's Request for Confidential Classification filed contemporaneously with service of this response.

12. Please provide the number of affected customers who have had their PV equipment either repaired or replaced in order to comply with UL 1703 Standards.

RESPONSE:

DEF is unaware of any customers who have had their PV equipment repaired or replaced to comply with UL 1703 standards.

13. Does your Company anticipate impact on any Florida Public Service Commission regulatory filings resulting from the recall?

RESPONSE:

The Company will provide all known information on the recall to Commission Staff as requested and respond to Commission direction in this matter.

14. Please describe your understanding of the purpose and effect of UL Standard 1703.

RESPONSE:

Underwriters Laboratory, (UL) advances safety science to prevent or reduce loss of life and property and promotes safe environments. UL certifies, validates, tests and inspects products. UL Standard 1703 covers requirements related to flat-plate photovoltaic modules and panels intended for installation on or integral with buildings, or to be freestanding (that is, not attached to buildings), in accordance with the National Electrical Code, NFPA 70, and Model Building Codes.

15. Please explain your understanding of the applicability of UL Standard 1703 to Rule 25-6.065, Florida Administrative Code.

RESPONSE:

Rule 25-6.065(5)(a) states that the Standard Interconnection Agreement for the net metering of customer-owned renewable generation require an inspection by local code officials “to ensure compliance with applicable local codes.” Typically, the local codes require compliance with the National Electric Code (NEC). Section 90.4(D) of the NEC requires all PV panels to meet UL 1703 to be NEC compliant. In addition, Florida Statute 377.705(4)(d) requires that all solar energy systems sold in Florida, must meet the standards established by the Florida Solar Energy Center. The Florida Solar Energy Center requires UL Standard 1703 compliance to meet their standards.

When these two requirements are taken together it seems to follow that FPSC Rule 25-6.065 requires photovoltaic panels to comply with Florida law and obtain Florida Solar Energy Center approval based on obtaining UL approval based on UL Standard 1703.

16. Please explain the applicability of UL Standard 1703 to the Tier 1, 2, and 3 interconnection agreements for customer-owned renewable generation.

RESPONSE:

As discussed in the previous responses, the Tier 1, 2, and 3 interconnection agreements require an inspection by local code officials and therefore the approval of the Florida Solar Energy Center. In order to obtain that approval the Florida Solar Energy Center

verifies that UL approval based on UL Standard 1703 has been obtained by the PV panel supplier or manufacturer.

17. Please explain the applicability of UL Standard 1703 to the Residential and Commercial Solar Photovoltaic Pilot Program Standards.

RESPONSE:

Consistent with Rule 25-6.065 F.A.C. and DEF's Tier 1, 2 and 3 interconnection agreements, installations under the SunSense Solar program must be inspected by a local electrical inspector to ensure compliance with local codes. Typically the local codes require compliance with the National Electric Code (NEC). Section 90.4 (D) of the NEC applies to Equipment and requires all PV panels meet UL 1703 to be NEC compliant. Additionally any solar system sold in Florida must meet the standards established by the Florida Solar Energy Center. The Florida Solar Energy Center requires UL Standard 1703 compliance for certification.

18. Please describe any safety or performance issues associated with the recalled Advanced Solar Photonics photovoltaic modules.

RESPONSE:

It is unknown if there are any safety or performance issues associated with the recalled Advanced Solar Photonics photovoltaic modules as they have not been tested by UL to the appropriate Standards for Safety. DEF, however, is not aware of any safety or performance issues.

19. Please explain whether, how, and by whom, the recalled Advanced Solar Photonics photovoltaic modules have been tested to determine any safety or performance issues.

RESPONSE:

According to the UL notice, these panels bear counterfeit UL Marks. The photovoltaic (solar) panels have not been evaluated by UL to the appropriate Standards for Safety and it is unknown if these photovoltaic panels comply with UL's safety requirements for the United States or Canada.

20. Is your Company involved in any lawsuits regarding ASP/BCE PV panels?

RESPONSE:

DEF is not currently involved in any lawsuits regarding ASP/BCE PV panels.

21. If the solar panels did not meet UL Standard 1703, has your Company complied with all applicable tariffs and Commission requirements, including program standards for eligibility in the solar rebate program? Please explain.

RESPONSE:

At the time when DEF verified the program standards and/or net metering tariff requirements for the customers with the solar panels at issue, DEF believed that all applicable requirements were met. Thus, when the initial decision was made to execute the standard interconnection agreement (and pay the incentive in the case of the customers in the solar rebate program), DEF and the customer did comply with all applicable tariffs and Commission requirements. Once the requirements have been met and the customer has been interconnected pursuant to Rule 25-6.065, F.A.C., the only conditions that are set forth in the rule as cause for the investor-owned utility to disconnect the customer's system from DEF's system are: (1) Emergencies or maintenance requirements on the investor-owned utility's electric system; (2) Hazardous conditions existing on the investor-owned utility system due to the operation of the customer's generating or protective equipment as determined by the investor-owned utility; (3) Adverse electrical effects, such as power quality problems, on the electrical equipment of the investor-owned utility's other electric consumers caused by the customer-owned renewable generation as determined by the investor-owned utility; and (4) Failure of the customer to maintain the required insurance coverage. None of these conditions are present with respect to these solar panels, because DEF has determined that any safety issue that may arise would be limited to the customer's side of the meter and would not impact DEF's system. The rules, tariff, and participation standards are silent as to the ramifications of subsequent knowledge that a code requirement is not valid.

Based on the information DEF has gathered thus far, it believes it is prudent to notify customers of the issue so that each customer can decide whether and how to address the situation.

22. If the solar panels were not UL approved, are rebates that have been made under your Company's incentive program appropriately recovered through the ECCR? Please explain.

RESPONSE:

Because DEF properly verified compliance with the participation standards at the time, all incentive payments made under the program and recovered through the ECCR are appropriate.

#8

Subject: ASP PV Recall Meeting
Location: Progress Energy 3300 Exchange Place Lake Mary, FL 32746 Room 4A
Start: Tue 2/19/2013 11:00 AM
End: Tue 2/19/2013 12:00 PM
Recurrence: (none)
Meeting Status: Meeting organizer
Organizer: Pietrzak, Joseph F.
Required Attendees: dnikitin@bluechipenergy.net; cgonzale@bluechipenergy.net

Meeting Agenda:

- I. ASP to review circumstances of the ASP PV product recall
- II. Review list of customers that have recalled product installed – Carlos Please include the customer’s name, address, & PEF account numbers in an electronic format preferably Excel. Additionally, we request the file sent next week, so that we can review and cross reference prior to our meeting.
- III. Review of the ASP plan to implement the product recall. Please provide as much detail as possible.

From: Dave Click [daveclick@fsec.ucf.edu]
Sent: Monday, February 04, 2013 9:09 AM
To: Pietrzak, Joseph F.
Subject: ASP Recall Notice

Here's the notice, just released today I think:

<http://www.advancedsolarphotonics.com/advanced-solar-photonics-announces-voluntary-product-safety-recall-of-certain-pv-solar-modules>

From: Carlos Gonzalez [Carlos.Gonzalez@usinvestingcorp.com]
Sent: Wednesday, March 06, 2013 5:06 PM
To: Pietrzak, Joseph F.
Cc: Demitri Nikitin
Subject: ASP Recall Procedure

Hi Joe:

We are putting the finishing touches on the requested documents. Will have to you in the morning.

Thanks for approving the extension on the system for my home.

Best regards,

Carlos M. Gonzalez

Business Development Director - BlueChip Energy, LLC

Managing Director – Sorrento Solar Frm, LLC

400 Rinehart Road, Lake Mary, Florida 32746

407-878-5752 cel 407-497-0101

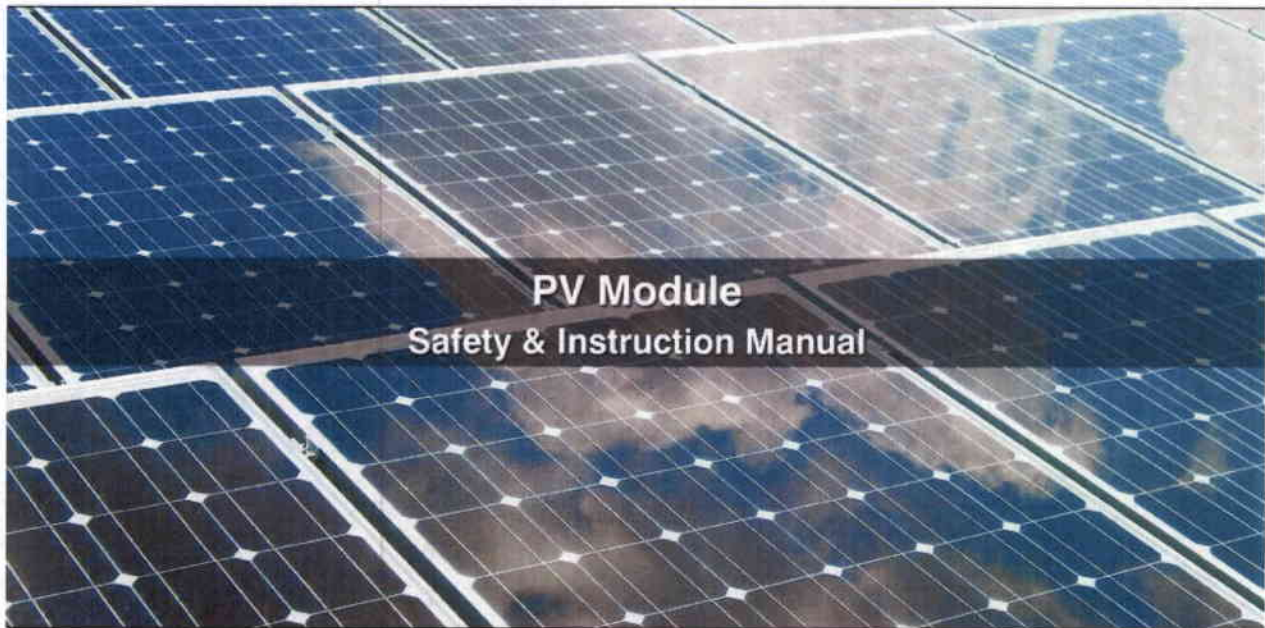
cgonzalez@SFINKX.com



www.SorrentoSolarFarm.com

www.Bluechipenergy.net

www.ASPFAB.com



**PV Module
Safety & Instruction Manual**

This document applies to the following PV Modules:

BLACKSTAR™ SERIES

AP-225MK, AP-230MK, AP-235MK, AP-240MK, AP-245MK.

TRUBLU™ SERIES

AP-220PK, AP-225PK, AP-230PK, AP-235PK, AP-240PK.

Version Date July 02, 2012

1.0 Introduction

Thank you for purchasing ASP Photovoltaic (PV) modules.

The modules you have chosen are highly efficient, use unique proprietary technology, are extremely rugged and are designed to provide the longest life span of any photovoltaic module in the industry.

Artificially concentrated sunlight shall not be directed on the module or panel.

This manual provides safety and installation instructions for ASP Photovoltaic modules.

1.1 Disclaimer of Liability

The installation techniques, handling and use of this product are beyond company control. Therefore, ASP does not assume responsibility for loss, damage or expense resulting from improper installation, handling or use.

1.2 Limited Warranty

Module Limited warranties are described in the ASP warranty certificates.

ASP module warranty describes as below:

- **Free from defect in materials and workmanship for 5 years**
- **90% of minimum warranty power output for 10 years**
- **80% of minimum warranty power output for 25 years**

2.0 Safety Precautions



Before installing this module, read all safety instructions in this manual.

Under normal conditions, a photovoltaic module is likely to experience conditions that produce more current and/or voltage than reported at standard test conditions. Accordingly, the values of I_{sc} and V_{oc} marked on this module should be multiplied by a factor of 1.25 when determining component voltage ratings, conductor ampacities, fuse sizes, and size of controls connected to the PV output.

Refer to section 690.8 of the National Electrical Code for an additional multiplying factor of 125 percent (80 percent derating) which may be applicable.

The module or panel should be installed in accordance with the latest National Electrical Code (USA), Canadian Electrical Code (Canada) or applicable national/international electric standards for the installation country.

The modules are class C fire rated and evaluated at 50lb/ft² as maximum load.



Warning!

During sunlight hours even at low light levels, there is a risk of shock. This hazard increases when multiple modules are connected together to provide higher system voltage or current levels. To reduce the risk of electrical shock or burns, modules may be covered with an opaque material during installation to avoid shock or burns. Do not touch live terminals with bare hands. Dangerous voltages may also be present at night from connections to batteries and feedback from inverters or other parts of the system.

- Cover all modules in the PV array with an opaque cloth or material before making or breaking electrical connections.
- All installations must be performed in compliance with all applicable regional and local codes.
- There are no user serviceable parts within the module. Do not attempt to repair any part of the module.
- Installation should be performed only by authorized personnel.
- Remove all metallic jewelry prior to installing this product to reduce the chance of accidental exposure to live circuits.

- Use insulated tools to reduce your risk of electric shock.
- Use wear protective equipment adequate to use in low voltage DC installations
- Do not stand on, drop, scratch or allow objects to fall on modules.
- If the front glass is broken, or the back sheet is torn, contact with any module surface or module frame can cause electric shock.
- Do not install or handle the modules when they are wet or during periods of high wind.
- Artificially concentrated sunlight shall not be directed on the module or panel.
- Do not expose backside of the module to sunlight.
- In order to prevent water from entering the junction box, which could present a safety hazard, modules should not be mounted such that the front glass faces downward (e.g. on a tracking structure that positions the modules with the junction box facing skyward during sleep mode.)
- Contact your module supplier if maintenance is necessary.
- Save these instructions!

3.0 Procedure for Installation

- ASP modules should be installed by a minimum of two qualified personnel. The system involves electricity, can be dangerous if the operators are not familiar with the appropriate safety procedures.
- ASP PV modules can be mounted by various methods, using the four mounting holes located on the module frame or may also be mounted using mounting clips on the channels within the recommended area located on the module frame. (please refer to Figure 1 and 6)
- Secure the module using the four mounting holes provided using stainless steel bolts, nuts and spring and pan washers for long-term security.
- Put the ASP PV modules on the channels, using the bolts, nut and washers then, tighten to 9.5N.m to 10N.m., or 7.00 to 7.50 foot pounds, on the bolt and nut with proper tools as described in Figure.1.

● Installing Modules

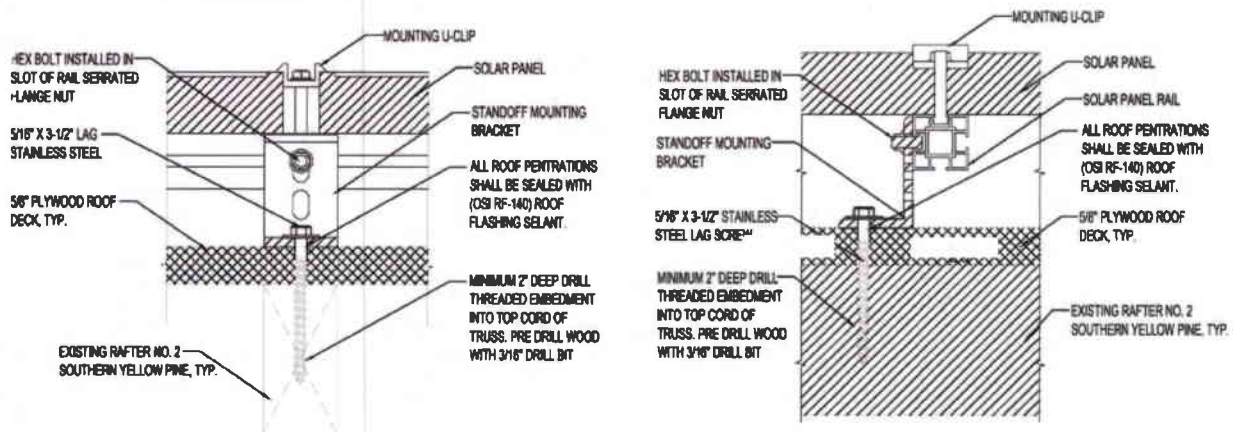


Figure 1 - Basic Mounting Structure

- **Roof Mounting**

Clearance between the module frame and the mounting surface is required to prevent the junction box from touching the surface, and to circulate cool air around the back/underneath of the module. If the modules are to be installed on the roof or wall of a building, a stand-off or rack mounting method is recommended.

Stand-Off/Rack-Mounting Method: The modules are supported parallel to the surface of the building wall or roof. Clearance between the module frames and surface of the wall or roof is required to prevent wiring damage and to allow air to circulate behind the module. We recommend you install the modules with a 3" to 6" air gap.

- **Mounting hardware size and torque**

Size Threads Per Inch		
	Assembly Torque (in-lb)	
	Max.	Min.
1/4 – 20	85	60
5/16 – 18	150	110
#10 - 32	35	35



CAUTION

Never leave a module unsupported or unsecured. If a module should fall, the glass could break. A module with broken glass cannot be repaired and must not be used.

4.0 Electrical Characteristics

The module electrical ratings are measured at Standard Test conditions (STC) of 1000 W/m² irradiance with air mass 1.5G spectrum and a cell temperature of 25°C. Electrical characteristics for specific ASP PV modules are on the product label and product data sheet.

A photovoltaic module may produce more current and/or voltage than reported at STC. As we have mentioned previously, sunny, cool weather and reflection from snow or water can increase current and power output. Therefore, the values of I_{sc} and V_{oc} marked on the module should be multiplied by using NEC standards when determining component voltage ratings, conductor amperage, fuse sizes, and size of controls connected to PV output.

Model	Max. System Voltage (V dc)	Max. Power (Wp)	Max. Power Voltage (Vmp)	Max. Power Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)	Dimensions (in/mm)	Max. Series Fuse (A)	Weight (lb/kg)
AP-225MK	UL-600V IEC-1000V	225	29.44	7.65	36.66	8.21	64.96 / 1650 (L) 39.05 / 992 (W) 1.97 / 50 (T)	15	41 lb 18.5 kg
AP-230MK		230	29.81	7.72	36.86	8.30			
AP-235MK		235	30.18	7.79	37.06	8.39			
AP-240MK		240	30.54	7.87	37.26	8.48			
AP-245MK		245	30.91	7.94	37.46	8.57			
AP-220PK	UL-600V IEC-1000V	220	29.07	7.57	36.46	8.12	64.96 / 1650 (L) 39.05 / 992 (W) 1.97 / 50 (T)	15	41 lb 18.5 kg
AP-225PK		225	29.44	7.65	36.66	8.21			
AP-230PK		230	29.81	7.72	36.86	8.30			
AP-235PK		235	30.18	7.79	37.06	8.39			
AP-240PK		240	30.54	7.87	37.26	8.48			

Table.1 Electrical Specifications

※ The electrical characteristics are within $\pm 10\%$ of the indicated values of ISC, VOC and Pmax under standard test conditions (irradiance of 1000W/m², AM 1.5 spectrum and a cell temperature of 25°C)

5.0 Electrical Connections

Modules may be connected in series and/or parallel to achieve the desired electrical output as long as certain conditions are met. Please use only the same type of module in a combined source circuit.

5.1 General Wiring

ASP recommends that all wiring be double insulated with a minimum rating of 90°C. All wiring should use flexible copper (Cu) conductors. The minimum size should be determined by the applicable codes. We recommend a size not less than 12AWG.



Details for wiring in accordance with the NEC, and that the grounding method of the frame of arrays shall comply with the NEC, article 250.

- Junction Box information is as below;

	Model	Manufacturer	Imax	Vmax	Temperature
Assembly		Tyco	30 A	600 VDC	- 40 ~ 105 °C
Cable	Tyco	Tyco	25A	600 VDC	- 40 ~ 90 °C
Connector	Tyco SolarLok	Tyco	20 A	600 VDC	- 40 ~ 110 °C

5.2 Module to Module Interconnection

ASP PV modules are designed to be readily interconnected. Each PV module has two cables, one has a positive (+) terminal and the other has a negative terminal, which are terminated inside the junction box.

Modules are interconnected by inserting the positive connector from one module into the negative connector of the next module in the array string. The mated connector pair is then securely attached to the inside flange of the module frame to protect them from damage (as shown in Figure 2).

If the modules are not provided with these connectors, please contact our representatives for detailed instructions.

- Connectors



Currently, ASP is using UL approved Tyco SolarLok locking type connectors.

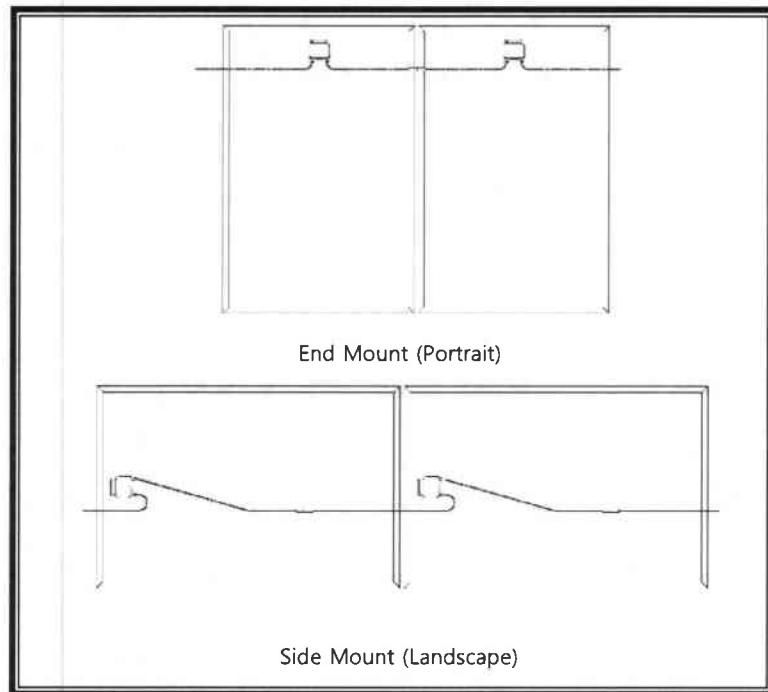



Figure 2 - Module Orientation

5.3 Equipment Grounding

Please refer to the applicable regional and local codes on grounding PV arrays and mounting frames for specific requirements.

- We recommend you attach all module frames to an earth ground.
- Attach a separate ground wire to one of the holes marked  on the module frame with a cable lug, a bolt, a star washer, and nut.

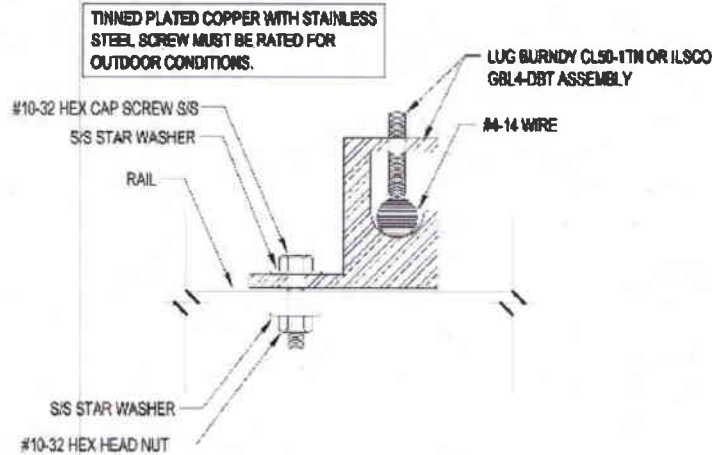


Figure 3 – Basic UL Grounding Structure

Grounding Hardware	size & material	Remarks
Lay-in Ground Lug	Tip Platted Copper with stainless steel set screw UL lay-in ground lug BURNDY CL50-1TN, ILSCO GBL-4DBT	Outdoors Use
Hex Cap Screw	Stainless Steel(STS304)	
Copper wire	#10-14 AWG	
Star washer	Stainless Steel (STS304)	
Hex Nut	Stainless(STS304)	

Grounding Hardware Size & Materials

5.4 Module Grounding

- Insert STS Bolt #10-32 into the frame grounding hole with associated hardware as shown in Figure.3; or
- Use other solar approved grounding lugs expressly for this purpose.

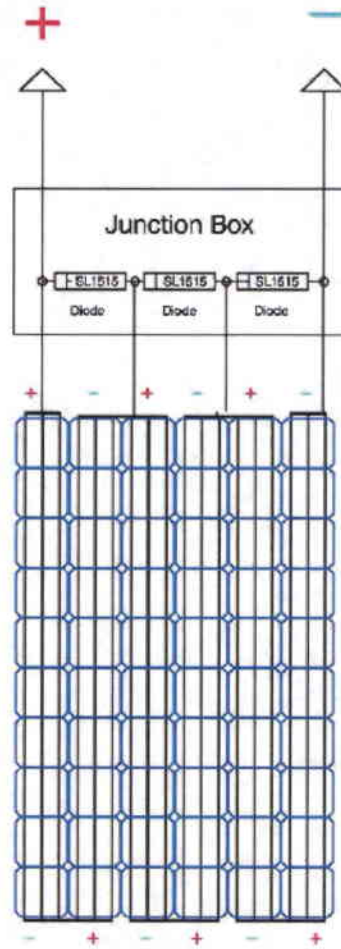


Figure 4 - Cell & Diode Circuit Diagram

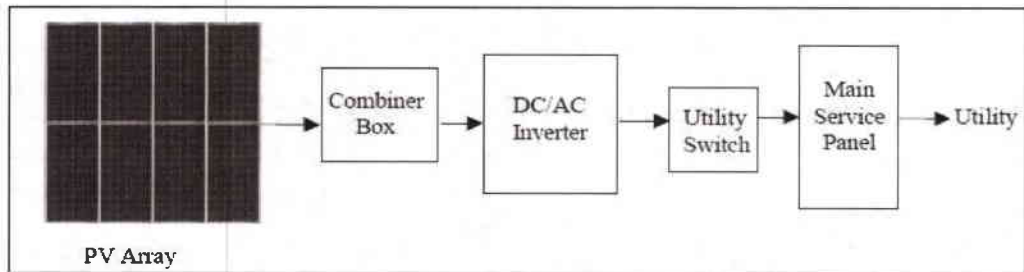


Figure 5 - Simplified PV System Diagram

5.6 Series Connection

The modules may be combined in series to produce the desired current output. The maximum V_{max} to be connected in series is recommended up to 480V. Every series string or module must be fused prior to combining with other strings. The maximum fuse size allowable is 15A. Bypass diodes are factory installed in the modules. Please refer to the applicable local and regional codes as well as the inverter requirements for additional fusing and limitations on the maximum number of modules in series.

6.0 Module Mounting

The ASP Limited Warranty for PV Modules is contingent upon modules being mounted in accordance with the requirements described in this section.

6.1 Site Considerations

ASP modules should be mounted in locations that meet the following requirements:

Operating Temperature:

All ASP modules must be mounted in environments that ensure the modules will operate within the maximum and minimum operating temperatures. Care should be taken to provide adequate ventilation behind the modules, especially in hot environments.

Design Strength:

ASP modules are designed to meet a specified maximum positive (or upward, e.g. wind) and negative (or downward, e.g. static load) when mounted in one of the standard mounting configurations.

When mounting modules in snow prone or high wind environments, special care should be taken to mount the modules in a manner that provides sufficient design strength while meeting local code requirements.

Excluded Operating Environments:

Certain operating environments are not recommended for specific ASP modules and are excluded from the ASP Limited Warranty for these modules. No ASP modules should be mounted at a site where it may be subject to direct contact with salt water or any other corrosive environment (sulfur from volcanoes, emissions from manufacturing plants).

6.2 Mounting Configurations

Modules may be mounted at any angle from horizontal to vertical. Select the appropriate orientation to maximize sunlight exposure. Specific information on module dimensions and the location of mounting and grounding holes is provided below. In order to prevent water from entering the junction box, which could present a safety hazard, module should not be mounted such that the front/top glass faces downward (e.g. on a tracking structure that positions the modules with the junction box facing skyward during sleep mode). Clearance between the module frames and structure or ground is required to prevent wiring damage and allows air to circulate behind the module.

When installed on a roof, the module shall be mounted over a fire resistant roof covering rated for the application. We recommend you install the modules on roof with a 3" to 6" air gap.

Do not remove or alter the module frame. Creating additional mounting holes may damage the module and reduce the strength of the frame.

Modules may be mounted using the following methods only:

- 1) **Frame Holes:** Secure the module to the structure using the factory mounting holes. For ¼"-20 stainless steel bolts with nuts, pan washers and spring washers are recommended per module. The module consists of 4 mounting slots located at 235mm from the end of modules each sides and 4 holes for grounding. Refer to the following figure for the module dimensions and mounting holes locations.

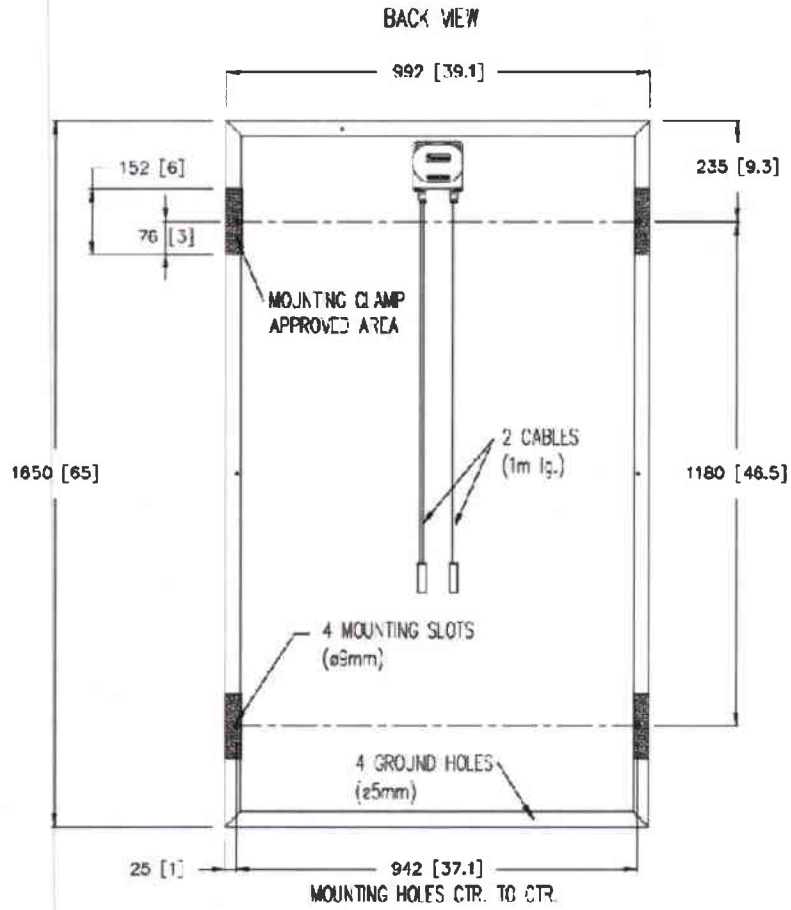


Figure 6 - Product Drawing

- 2) **Mounting Clamps or Clips:** Mount the module with the clamps, 4 per module, on the side frame of the module. The side frames are the longer sides of the module. The centerline of the clips should be located on appropriate positions for your requirement from the end of the module as shown in Figure 6. Installer should ensure the clamps are of sufficient strength to allow for the maximum design pressure of the module. Clips and clamps are not provided with the module. We recommend you use aluminum (material) clamps, per Code as shown in Figure 7.

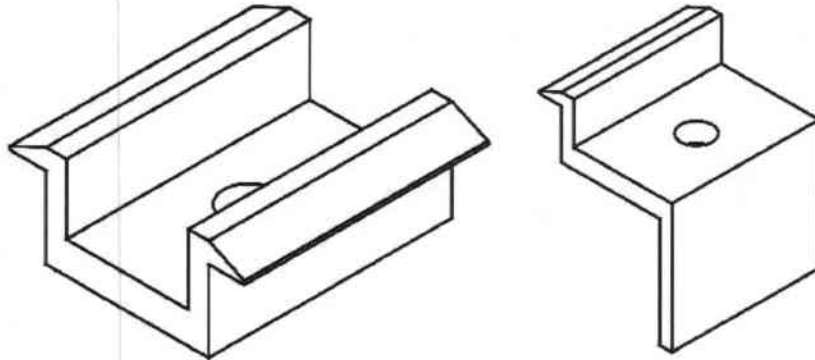


Figure 7 - Middle and End Clamps

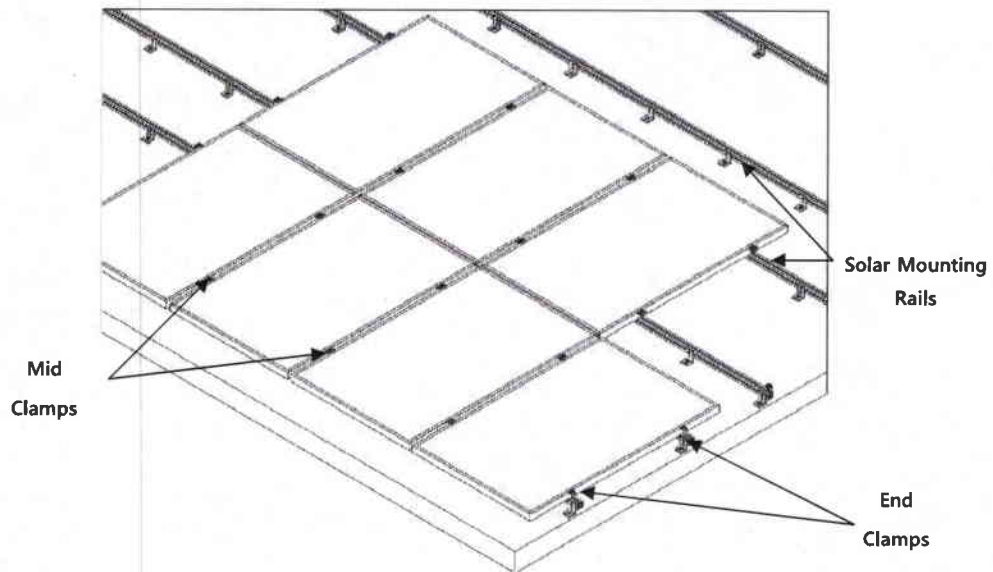


Figure 8 - Basic Arrangement of Clamps

7.0 Maintenance

Inspect all modules annually for safe electrical connections, sound mechanical connection and freedom from corrosion. Periodically clean the module surface with water and a soft cloth or sponge. Fingerprints may be removed with standard glass cleaner. Do not use harsh cleaning materials such as scouring powder, steel wool, blades or other sharp instruments to clean the glass surface of the module. Use of such materials will invalidate the product warranty.

8.0 Troubleshooting

A photovoltaic module will produce electricity when illuminated. Treat solar modules in the same way you would treat any electrical device. Only personnel trained in the use and handling of PV modules should attempt any diagnostic work.

Photovoltaic system malfunctions can, in rare cases be caused by module failures. Therefore it may become necessary to field check modules for proper operation. Field conditions vary widely. Since the module output is a function of sunlight and temperature, it can be difficult to determine what an appropriate field electrical reading should be. Subtle problems will not likely be determined in the field; however gross ones should be detectable.

One of the best ways to determine if a module is malfunctioning is to compare readings between modules. Similar readings would indicate that the module in question is within specifications. Wide differences, >20%, would most likely indicate a module problem.

There are two module electrical parameters that can be readily measured in the field that will give an indication if the module is functioning properly. These two parameters are the short circuit current (I_{sc}) and the open circuit voltage (V_{oc}). They are typically measured with a multi-meter (an instrument that measures current, voltage, and resistance in circuits).

Reading the voltage across the positive (+) and the negative (-) terminal / leads of the disconnected module will give the V_{oc} . Shorting the leads together and placing an ammeter in the circuit will give you the I_{sc} .

Comparing these readings between several modules will identify any under or non performing module(s).

It is also possible to compare these readings to the module specifications. However, the specifications are determined at a designated solar irradiance and a designated ambient temperature, e.g., "STC". If the field measurements are not made under conditions which match STC, the Isc and Voc values will be different. For larger systems another useful test can be made using a current probe attachment for the multi-meter. A current probe is a device that has jaws that open to allow it to be placed around the wire instead of in-line with the wire. This device can measure current without breaking the circuit.

Using the current probe, current can be easily measured at many different points in the array and compared one to another to see if they are the same. If they are the same it is likely the module(s) in question is functioning properly and if different, it is likely that the module(s) in question is not functioning properly.

When evaluating the readings one should keep in mind that module current is directly proportional to the amount of solar irradiation and module voltage is dependent on the module temperature. The published specifications are referenced to STC conditions, 1000W/m², AM=1.5 spectrum, and a cell temperature of 25°C. A decrease in light intensity of 50% will reduce the current by 50% with voltage remaining essentially unchanged. An increase in the cell temperature by 10°C, caused by the sun striking the module at a more direct angle or by the ambient air temperature rising, will reduce the voltage by 3.6% with the current remaining essentially unchanged.

Abnormal readings should alert the user to possible module problems. Replacing suspicious modules with known good ones will help confirm the diagnosis. Any module problems should be brought to the attention of your dealer, distributor, or ASP.

9.0 Repair

With the exception of module to module cabling and connections, all module repairs must take place at the factory. Before sending a module back, contact the module seller for authorization and return. Make sure you have the module serial number (on the module label).

It should be noted that most problems that occur in a photovoltaic power system are not caused by the photovoltaic modules. The most common problem is a bad or improper connection. Before considering returning a suspect module to the factory, check the tightness of the connection to adjacent modules. If the connector or wiring appears to be damaged, a trained technician should be able to repair the module at the site. If connections and wiring look good but the module does not seem to be working properly, return the module to the sellers.

For additional information:

Visit our website at www.AdvancedSolarPhotonics.com

Or contact our factory at :

Advanced Solar Photonics

400 Rinehart Road - Suite 1060

Lake Mary, Florida 32746

www.AdvancedSolarPhotonics.com

info@AdvancedSolarPhotonics.com

Tel: (407) 804-1000

From: Carlos Gonzalez [Carlos.Gonzalez@usinvestingcorp.com]
Sent: Thursday, March 07, 2013 1:40 PM
To: Pietrzak, Joseph F.
Cc: Demitri Nikitin; Gammon, David W
Subject: ASP Module Recall
Attachments: Procedure.pdf; Notification Notice.pdf; Customers Scheduled for Inspection.pdf; BlueChip_Module_UL_Listing.pdf; BCE Residential Agreement_Feb_2012.pdf; ASP_Module_Warranty_01-2012.pdf; ASP_Inverter_Intertek_Listing.pdf; ASP_Grid-Tied-Inverter Warranty_2012v1.1.pdf; ASP_BS250-TB240_Series_Installation-Manual_07 02 12.pdf

Joseph Pietrzak, CEM
Project Manager
Energy Efficiency Programs
Progress Energy Florida

Dear Mr. Pietrzak:

With reference to the requests made during the meeting at PEF/Lake Mary recently, and various telephone conversations thereafter, we have prepared the various documents provided with this mail.

Note that we are in the process of completing the stated procedures and anticipate completing all customer site inspections by end of April, and all required replacements by end of May.

Please let us know if there are any suggested changes to the procedures indicated.

We look forward to a continued mutually rewarding relationship.

Yours Truly,

Carlos M. Gonzalez

Business Development Director - BlueChip Energy, LLC

Managing Director – Sorrento Solar Frm, LLC

400 Rinehart Road, Lake Mary, Florida 32746

407-878-5752 cel 407-497-0101

cgonzalez@USInvestingCorp.com



www.SorrentoSolarFarm.com

www.Bluechipenergy.net

www.ASPFAB.com



Effective 01.01.2012 – 12.31.2013
Doc# 01.2012.1106.Rev.4

**LIMITED WARRANTY FOR
ASP PV MODULES MODELS**

AP-220PK, AP-225PK, AP-230PK, AP-235PK, AP-240PK, ASP-175M, ASP-180M, ASP-185M,
ASP-190M, AP-225MK, AP-230MK, AP-235MK, AP-240MK, AP-245MK, ASP-390M, ASP-395M,
ASP-400M, ASP-405M, ASP-410M, ASP-140GSM, ASP-400GSM

I. This Limited Product Warranty – applies to photovoltaic modules models AP-220PK, AP-225PK, AP-230PK, AP-235PK, AP-240PK, ASP-175M, ASP-180M, ASP-185M, ASP-190M, AP-225MK, AP-230MK, AP-235MK, AP-240MK, AP-245MK, ASP-390M, ASP-395M, ASP-400M, ASP-405M, ASP-410M, ASP-140GSM, ASP-400GSM manufactured by Advanced Solar Photonics, LLC or affiliated company "ASP". ASP warrants the quality of those PV modules and specifies the scope of such warranty.

Five (5) years limited PV Module warranty.

ASP PV Photovoltaic modules ("PV modules") 5 (five) years from the date of delivery, shall be free from defects in materials and workmanship under normal application, installation, use and service conditions. If the PV modules fail to conform to this warranty, then for a period ending five (5) years from date of delivery to the original end-Buyer ("the Buyer"), Advanced Solar Photonics will, at its option, either repair or replace the product. The repair or replacement remedy shall be the sole and exclusive remedy provided under the Limited Product Warranty and shall not extend beyond the five (5) year period set forth herein. This Limited Product Warranty does not warrant a specific power output, which shall be exclusively covered under clause 2 hereinafter (Limited Power Warranty).

ASP warrants the PV modules to be free from the defects and/or failures specified below for a period not exceeding five (5) years from the date of sale to the original customer. Those defects characterized as follows:

- 1) Defects and/or failures due to the manufacturing;
- 2) Defects and/or failures due to materials and components;
- 3) Cracking in the front glass surface due to the foreign objects inside the glass. This limited warranty excludes cracking of the glass surface due to the external stress or external shock from the external impact of flying objects or debris.
- 4) Non-conformity to the specifications due to faulty manufacturing and/or inspection process.

If the PV Modules fails to conform to this warranty ASP will repair or replace the defective module(s) at ASP's sole option.

II. Limited Power Warranty. Subject to ASP determining at its sole discretion that any power loss is due solely to defects in materials or workmanship, ASP warrants the power of the PV modules as follows:

The warranty period with respect to power output continues for a total of 25 years from date of purchase, the first 10 years at 90% minimum rated power output and the balance of 15 years at 80% minimum rated power output. This shall pertain to all models apart from model numbers **ASP-140GSM, ASP-400GSM**, which shall be the sole models to have this final period of 80% minimum rated power extended to 20 years achieving a total **Limited Power Warranty** period not to exceed 30 years.

This warranty is transferable when product remains installed in original location at the time of product warranty registration.

If the PV Modules fails to conform to this warranty ASP will repair or replace the defective module(s) at ASP's sole option.

III. Exclusions and Limitations. Warranty claims must in any event be filed within the applicable Warranty period. Warranty claims may only be made by, or on the behalf of, the original end Buyer or a person to whom title has been transferred for the PV Modules.

The Limited Warranties do not apply to any of the following:

1. PV modules which in Advanced Solar Photonics' absolute judgment have been subjected to: misuse, abuse, neglect or accident; alteration, improper installation, application or removal (including but not limited to installation, application or removal by any party other than an Advanced Solar Photonics authorized dealer; non-observance of Advanced Solar Photonics' installation, users and/or maintenance instructions; repair or modifications by someone other than an approved service technician of Advanced Solar Photonics; power failure surges, lightning, flood, fire, accidental breakage or other events outside Advanced Solar Photonics' control.
2. Cosmetic defects stemming from normal wear and tear of PV module materials.
3. PV modules installed in locations, which in Advanced Solar Photonics' absolute judgment may be subject to direct contact with salt water.
4. The Limited Warranties do not cover any transportation costs for return of the PV modules, or for reshipment of any repaired or replaced PV modules, or cost associated with installation, removal or reinstallation of the PV modules.
5. When used on a mobile platform of any type, the Limited Power Warranty, applying to any of the PV modules shall be limited to twelve (12) years.

Warranty claims will not apply if the type or serial number of the PV modules is altered, removed or made illegible.

1. "Minimum Peak Power" = Peak power minus the Peak power tolerance (as specified in Advanced Solar Photonics' Product datasheet). "Peak power" is the power in peak watts that a PV module generates at STC (Standard Test conditions: Irradiance of 1000 W/m², light spectrum AM 1.5g and a cell temperature of 25 degrees C)

Additional Item(s) Excluded from Warranty Coverage

Warranty coverage does not apply when:

1. The Product is improperly installed,
2. The Product is installed in a mobile or marine environment, subjected to improper voltage or power surges or abnormal environmental conditions (such as acid rain or other pollution),
3. The components in the construction base on which the module is mounted are defective
4. External corrosion, mold discoloration or the like occurs.

IV. Limited Product Warranty. SUBJECT TO THE LIMITATIONS UNDER APPLICABLE LAW, THE LIMITED WARRANTIES SET FORTH HEREIN ARE EXPRESSLY IN LIEU OF AND EXCLUDE ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR PARTICULAR PURPOSE, USE, OR APPLICATION, AND ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF ADVANCED SOLAR PHOTONICS, UNLESS SUCH OTHER WARRANTIES, OBLIGATIONS OR LIABILITIES ARE EXPRESSLY AGREED TO IN WRITING SIGNED AND APPROVED BY ADVANCED SOLAR PHOTONICS. ADVANCED SOLAR PHOTONICS SHALL HAVE NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR DAMAGE OR INJURY TO PERSONS OR PROPERTY OR FOR OTHER LOSS OR INJURY RESULTING FROM ANY CAUSE WHATSOEVER ARISING OUT OF OR RELATED TO THE PRODUCT, INCLUDING, WITHOUT LIMITATION, ANY DEFECTS IN THE MODULE, OR FROM USE OR INSTALLATION. UNDER NO CIRCUMSTANCES SHALL ADVANCED SOLAR PHOTONICS BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, HOWSOEVER CAUSED. LOSS OF USE, LOSS OF PROFITS, LOSS OF PRODUCTION, LOSS OF REVENUES ARE THEREFORE SPECIFICALLY BUT WITHOUT LIMITATION EXCLUDED. ADVANCED SOLAR PHOTONICS' AGGREGATE LIABILITY, IF ANY, IN DAMAGES OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID TO ADVANCED SOLAR PHOTONICS BY THE BUYER, FOR THE UNIT OF PRODUCT OR SERVICE FURNISHED OR TO BE FURNISHED, AS THE CASE MAY BE, WHICH GAVE RISE TO THE WARRANTY CLAIM. SOME STATES DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES OR THE EXCLUSION OF DAMAGES SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

V. Limitation of Liability. EXCEPT FOR THE WARRANTIES STATED HEREIN FOR THE BUYER, NO WARRANTY, CONDITION OR REPRESENTATION, EXPRESS, IMPLIED, ORAL OR STATUTORY, IS PROVIDED TO THE BUYER OR ANY THIRD PARTY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY, CONDITION OR REPRESENTATION: (A) OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE; (B) THAT THE PRODUCTS WILL BE FREE FROM INFRINGEMENT OR VIOLATION OF ANY RIGHTS, INCLUDING INTELLECTUAL

PROPERTY RIGHTS, OF THIRD PARTIES; OR (C) THAT THE OPERATION OF THE SOFTWARE WILL BE UNINTERRUPTED OR ERROR FREE. THIS DISCLAIMER AND EXCLUSION SHALL APPLY EVEN IF THE EXPRESS WARRANTY HEREIN FAILS OF ITS ESSENTIAL PURPOSE. THE BUYER'S SOLE AND EXCLUSIVE REMEDIES HEREUNDER AND THE ONLY LIABILITY OF SELLER IS EXPRESSLY LIMITED TO THE TERMS OF THE AGREEMENT. SELLER SHALL NOT BE LIABLE TO THE BUYER, OR ANY THIRD PARTY, FOR ANY OTHER SPECIAL, CONSEQUENTIAL, INCIDENTAL, EXEMPLARY OR INDIRECT COSTS OR DAMAGES, INCLUDING WITHOUT LIMITATION, LITIGATION COSTS, INSTALLATION AND REMOVAL COSTS, LOSS OF DATA, PRODUCTION OR PROFIT ARISING FROM ANY CAUSE WHATSOEVER, REGARDLESS OF THE FORM OF THE ACTION, WHETHER IN CONTRACT, TORT (INCLUDING SELLER'S OWN NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH COSTS OR DAMAGES. FOR PURPOSES OF THIS PROVISION, SELLER INCLUDES SELLER'S DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, REPRESENTATIVES, SUBCONTRACTORS AND SUPPLIERS. IN NO EVENT SHALL THE TOTAL COLLECTIVE CUMULATIVE LIABILITY OF SELLER, ITS EMPLOYEES, OFFICERS, AGENTS AND DIRECTORS EXCEED THE AMOUNT PAID TO SELLER FOR PRODUCTS FROM WHICH SUCH LIABILITY AROSE DURING THE TWELVE (12) MONTH PERIOD PRECEDING THE DATE OF THE MOST RECENT CLAIM.

VI. Obtaining Warranty Performance. If you feel you have a justified claim covered by this Limited Warranty, immediately notify the (a) Installer, who sold the PV-modules, or (b) any authorized Advanced Solar Photonics distributor, of the claim in writing, or (c) send such notification to Advanced Solar Photonics Corporation, 400 Rinehart Rd, Lake Mary, FL 32792, directly. In addition, please enclose evidence of the date of delivery of the PV module. If applicable, your installer or distributor will give advice on handling the claim. If further assistance is required, please write to Advanced Solar Photonics for instructions. The return of any PV-modules will not be accepted unless prior written authorization has been given by Advanced Solar Photonics.

From: Julie McKee
Sent: Friday, February 01, 2013 2:31 PM
To: Julie McKee
Cc: Claudio Brito; Scott DeGraff
Subject: System Inspections

Dear BlueChip Customer,

In the coming week, BlueChip Energy will be scheduling annual inspections of Fusion systems. As part of this scheduled customer visit, we will be conducting an inspection on solar systems for performance and safety.

Should any part of the system equipment not meet code compliance, performance expectations, or safety standards, it will be replaced at no cost to you.

Please cooperate with our scheduling department to set up an inspection visit or call us at 1-407-878-5742 between 9 a.m. and 5 p.m. Monday through Friday.

Thank you for your cooperation.

Julie McKee
Sales Administrator
BlueChip Energy, LLC
400 Rinehart Road, Suite 1000
Lake Mary, FL 32746
Tel: (407) 804-1000 x510
Direct: (407) 878-5745
Fax: (407) 333-9143
www.BlueChipEnergy.net



www.SunHouseSolar.com



**PV Module
Safety & Instruction Manual**

This document applies to the following PV Modules:

BLACKSTAR™ SERIES

AP-225MK, AP-230MK, AP-235MK, AP-240MK, AP-245MK.

TRUBLU™ SERIES

AP-220PK, AP-225PK, AP-230PK, AP-235PK, AP-240PK.

1.0 Introduction

Thank you for purchasing ASP Photovoltaic (PV) modules.

The modules you have chosen are highly efficient, use unique proprietary technology, are extremely rugged and are designed to provide the longest life span of any photovoltaic module in the industry.

Artificially concentrated sunlight shall not be directed on the module or panel.

This manual provides safety and installation instructions for ASP Photovoltaic modules.

1.1 Disclaimer of Liability

The installation techniques, handling and use of this product are beyond company control. Therefore, ASP does not assume responsibility for loss, damage or expense resulting from improper installation, handling or use.

1.2 Limited Warranty

Module Limited warranties are described in the ASP warranty certificates.

ASP module warranty describes as below:

- **Free from defect in materials and workmanship for 5 years**
- **90% of minimum warranty power output for 10 years**
- **80% of minimum warranty power output for 25 years**

2.0 Safety Precautions



Before installing this module, read all safety instructions in this manual.

Under normal conditions, a photovoltaic module is likely to experience conditions that produce more current and/or voltage than reported at standard test conditions. Accordingly, the values of I_{sc} and V_{oc} marked on this module should be multiplied by a factor of 1.25 when determining component voltage ratings, conductor ampacities, fuse sizes, and size of controls connected to the PV output.

Refer to section 690.8 of the National Electrical Code for an additional multiplying factor of 125 percent (80 percent derating) which may be applicable.

The module or panel should be installed in accordance with the latest National Electrical Code (USA), Canadian Electrical Code (Canada) or applicable national/international electric standards for the installation country.

The modules are class C fire rated and evaluated at 50lb/ft² as maximum load.



Warning!

During sunlight hours even at low light levels, there is a risk of shock. This hazard increases when multiple modules are connected together to provide higher system voltage or current levels. To reduce the risk of electrical shock or burns, modules may be covered with an opaque material during installation to avoid shock or burns. Do not touch live terminals with bare hands. Dangerous voltages may also be present at night from connections to batteries and feedback from inverters or other parts of the system.

- Cover all modules in the PV array with an opaque cloth or material before making or breaking electrical connections.
- All installations must be performed in compliance with all applicable regional and local codes.
- There are no user serviceable parts within the module. Do not attempt to repair any part of the module.
- Installation should be performed only by authorized personnel.
- Remove all metallic jewelry prior to installing this product to reduce the chance of accidental exposure to live circuits.

- Use insulated tools to reduce your risk of electric shock.
- Use wear protective equipment adequate to use in low voltage DC installations
- Do not stand on, drop, scratch or allow objects to fall on modules.
- If the front glass is broken, or the back sheet is torn, contact with any module surface or module frame can cause electric shock.
- Do not install or handle the modules when they are wet or during periods of high wind.
- Artificially concentrated sunlight shall not be directed on the module or panel.
- Do not expose backside of the module to sunlight.
- In order to prevent water from entering the junction box, which could present a safety hazard, modules should not be mounted such that the front glass faces downward (e.g. on a tracking structure that positions the modules with the junction box facing skyward during sleep mode.)
- Contact your module supplier if maintenance is necessary.
- Save these instructions!

3.0 Procedure for Installation

- ASP modules should be installed by a minimum of two qualified personnel. The system involves electricity, can be dangerous if the operators are not familiar with the appropriate safety procedures.
- ASP PV modules can be mounted by various methods, using the four mounting holes located on the module frame or may also be mounted using mounting clips on the channels within the recommended area located on the module frame. (please refer to Figure 1 and 6)
- Secure the module using the four mounting holes provided using stainless steel bolts, nuts and spring and pan washers for long-term security.
- Put the ASP PV modules on the channels, using the bolts, nut and washers then, tighten to 9.5N.m to 10N.m., or 7.00 to 7.50 foot pounds, on the bolt and nut with proper tools as described in Figure.1.

● Installing Modules

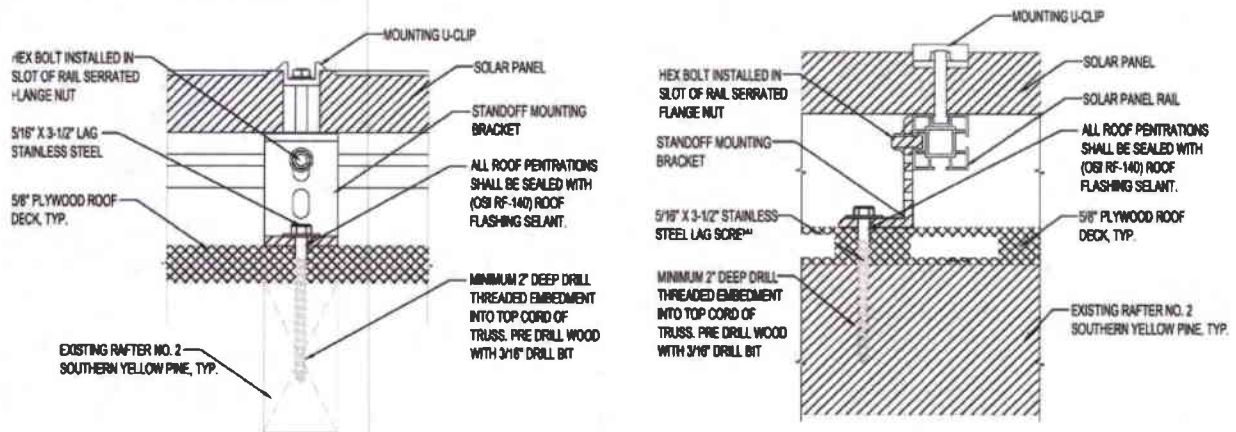


Figure 1 - Basic Mounting Structure

● **Roof Mounting**

Clearance between the module frame and the mounting surface is required to prevent the junction box from touching the surface, and to circulate cool air around the back/underneath of the module. If the modules are to be installed on the roof or wall of a building, a stand-off or rack mounting method is recommended.

Stand-Off/Rack-Mounting Method: The modules are supported parallel to the surface of the building wall or roof. Clearance between the module frames and surface of the wall of roof is required to prevent wiring damage and to allow air to circulate behind the module. We recommend you install the modules with a 3" to 6" air gap.

● **Mounting hardware size and torque**

Size Threads Per Inch		
	Assembly Torque (in-lb)	
	Max.	Min.
¼ – 20	85	60
5/16 – 18	150	110
#10 - 32	35	35



CAUTION

Never leave a module unsupported or unsecured. If a module should fall, the glass could break. A module with broken glass cannot be repaired and must not be used.

4.0 Electrical Characteristics

The module electrical ratings are measured at Standard Test conditions (STC) of 1000 W/m² irradiance with air mass 1.5G spectrum and a cell temperature of 25°C. Electrical characteristics for specific ASP PV modules are on the product label and product data sheet.

A photovoltaic module may produce more current and/or voltage than reported at STC. As we have mentioned previously, sunny, cool weather and reflection from snow or water can increase current and power output. Therefore, the values of Isc and Voc marked on the module should be multiplied by using NEC standards when determining component voltage ratings, conductor amperage, fuse sizes, and size of controls connected to PV output.

Model	Max. System Voltage (V dc)	Max. Power (Wp)	Max. Power Voltage (Vmp)	Max. Power Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)	Dimensions (in/mm)	Max. Series Fuse (A)	Weight (lb/kg)
AP-225MK	UL-600V IEC-1000V	225	29.44	7.65	36.66	8.21	64.96 / 1650 (L) 39.05 / 992 (W) 1.97 / 50 (T)	15	41 lb 18.5 kg
AP-230MK		230	29.81	7.72	36.86	8.30			
AP-235MK		235	30.18	7.79	37.06	8.39			
AP-240MK		240	30.54	7.87	37.26	8.48			
AP-245MK		245	30.91	7.94	37.46	8.57			
AP-220PK	UL-600V IEC-1000V	220	29.07	7.57	36.46	8.12	64.96 / 1650 (L) 39.05 / 992 (W) 1.97 / 50 (T)	15	41 lb 18.5 kg
AP-225PK		225	29.44	7.65	36.66	8.21			
AP-230PK		230	29.81	7.72	36.86	8.30			
AP-235PK		235	30.18	7.79	37.06	8.39			
AP-240PK		240	30.54	7.87	37.26	8.48			

Table.1 Electrical Specifications

※ The electrical characteristics are within $\pm 10\%$ of the indicated values of ISC, VOC and Pmax under standard test conditions (irradiance of 1000W/m², AM 1.5 spectrum and a cell temperature of 25°C)

5.0 Electrical Connections

Modules may be connected in series and/or parallel to achieve the desired electrical output as long as certain conditions are met. Please use only the same type of module in a combined source circuit.

5.1 General Wiring

ASP recommends that all wiring be double insulated with a minimum rating of 90°C. All wiring should use flexible copper (Cu) conductors. The minimum size should be determined by the applicable codes. We recommend a size not less than 12AWG.



Details for wiring in accordance with the NEC, and that the grounding method of the frame of arrays shall comply with the NEC, article 250.

- Junction Box information is as below;

	Model	Manufacturer	I _{max}	V _{max}	Temperature
Assembly		Tyco	30 A	600 VDC	- 40 ~ 105 °C
Cable	Tyco	Tyco	25A	600 VDC	- 40 ~ 90 °C
Connector	Tyco SolarLok	Tyco	20 A	600 VDC	- 40 ~ 110 °C

5.2 Module to Module Interconnection

ASP PV modules are designed to be readily interconnected. Each PV modules has two cables, one has a positive (+) terminal and the other has a negative terminal, which are terminated inside the junction box. Modules are interconnected by inserting the positive connector from one module into the negative connector of the next module in the array string. The mated connector pair is then securely attached to the inside flange of the module frame to protect them from damage (as shown in Figure 2).

If the modules are not provided with these connectors, please contact our representatives for detailed instructions.

- Connectors



Currently, ASP is using UL approved Tyco SolarLok locking type connectors.

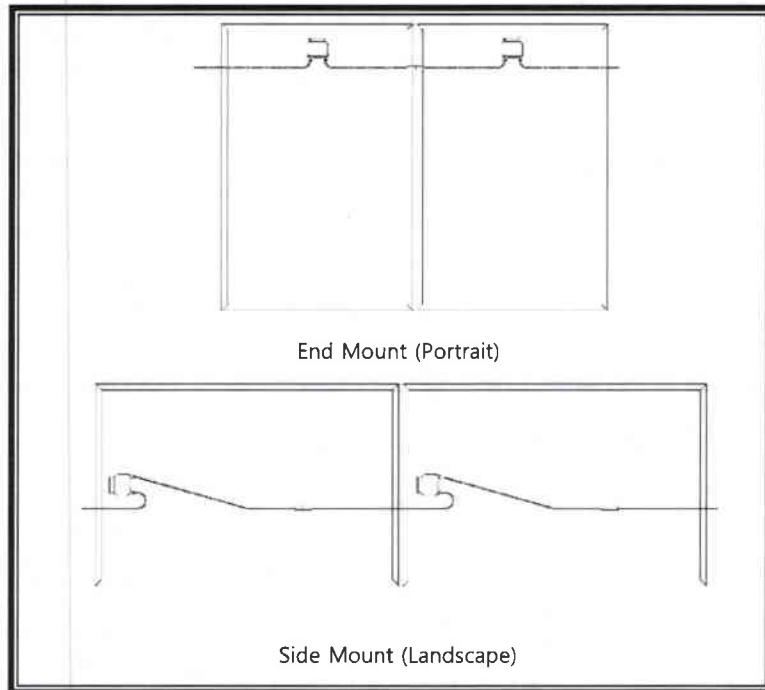



Figure 2 - Module Orientation

5.3 Equipment Grounding

Please refer to the applicable regional and local codes on grounding PV arrays and mounting frames for specific requirements.

- We recommend you attach all module frames to an earth ground.
- Attach a separate ground wire to one of the holes marked  on the module frame with a cable lug, a bolt, a star washer, and nut.

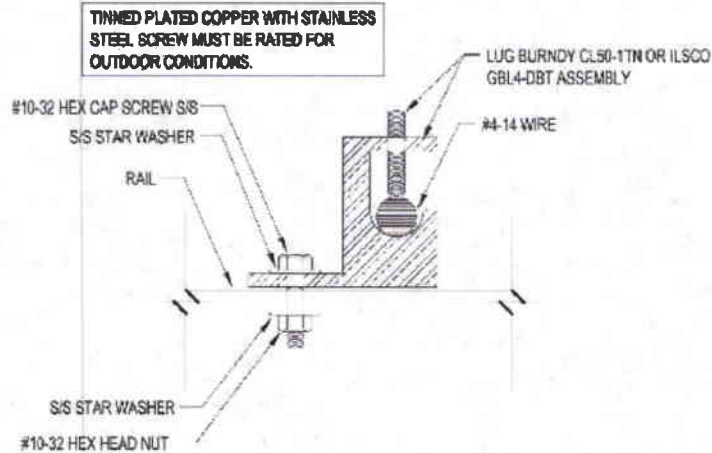


Figure 3 – Basic UL Grounding Structure

Grounding Hardware	size & material	Remarks
Lay-in Ground Lug	Tip Platted Copper with stainless steel set screw UL lay-in ground lug BURNDY CL50-1TN, ILSCO GBL-4DBT	Outdoors Use
Hex Cap Screw	Stainless Steel(STS304)	
Copper wire	#10-14 AWG	
Star washer	Stainless Steel (STS304)	
Hex Nut	Stainless(STS304)	

Grounding Hardware Size & Materials

5.4 Module Grounding

- Insert STS Bolt #10-32 into the frame grounding hole with associated hardware as shown in Figure 3; or
- Use other solar approved grounding lugs expressly for this purpose.

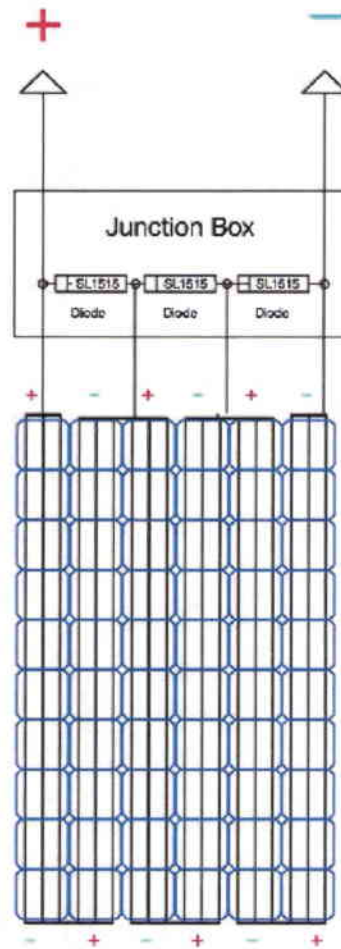


Figure 4 - Cell & Diode Circuit Diagram

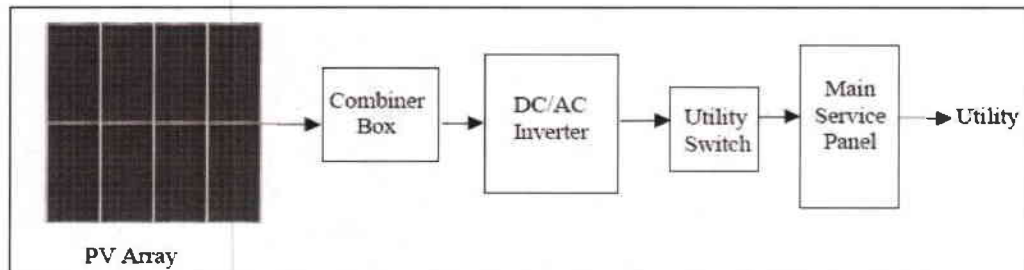


Figure 5 - Simplified PV System Diagram

5.6 Series Connection

The modules may be combined in series to produce the desired current output. The maximum V_{max} to be connected in series is recommended up to 480V. Every series string or module must be fused prior to combining with other strings. The maximum fuse size allowable is 15A. Bypass diodes are factory installed in the modules. Please refer to the applicable local and regional codes as well as the inverter requirements for additional fusing and limitations on the maximum number of modules in series.

6.0 Module Mounting

The ASP Limited Warranty for PV Modules is contingent upon modules being mounted in accordance with the requirements described in this section.

6.1 Site Considerations

ASP modules should be mounted in locations that meet the following requirements:

Operating Temperature:

All ASP modules must be mounted in environments that ensure the modules will operate within the maximum and minimum operating temperatures. Care should be taken to provide adequate ventilation behind the modules, especially in hot environments.

Design Strength:

ASP modules are designed to meet a specified maximum positive (or upward, e.g. wind) and negative (or downward, e.g. static load) when mounted in one of the standard mounting configurations.

When mounting modules in snow prone or high wind environments, special care should be taken to mount the modules in a manner that provides sufficient design strength while meeting local code requirements.

Excluded Operating Environments:

Certain operating environments are not recommended for specific ASP modules and are excluded from the ASP Limited Warranty for these modules. No ASP modules should be mounted at a site where it may be subject to direct contact with salt water or any other corrosive environment (sulfur from volcanoes, emissions from manufacturing plants).

6.2 Mounting Configurations

Modules may be mounted at any angle from horizontal to vertical. Select the appropriate orientation to maximize sunlight exposure. Specific information on module dimensions and the location of mounting and grounding holes is provided below. In order to prevent water from entering the junction box, which could present a safety hazard, module should not be mounted such that the front/top glass faces downward (e.g. on a tracking structure that positions the modules with the junction box facing skyward during sleep mode). Clearance between the module frames and structure or ground is required to prevent wiring damage and allows air to circulate behind the module.

When installed on a roof, the module shall be mounted over a fire resistant roof covering rated for the application. We recommend you install the modules on roof with a 3" to 6" air gap.

Do not remove or alter the module frame. Creating additional mounting holes may damage the module and reduce the strength of the frame.

Modules may be mounted using the following methods only:

- 1) **Frame Holes:** Secure the module to the structure using the factory mounting holes. For ¼"-20 stainless steel bolts with nuts, pan washers and spring washers are recommended per module. The module consists of 4 mounting slots located at 235mm from the end of modules each sides and 4 holes for grounding. Refer to the following figure for the module dimensions and mounting holes locations.

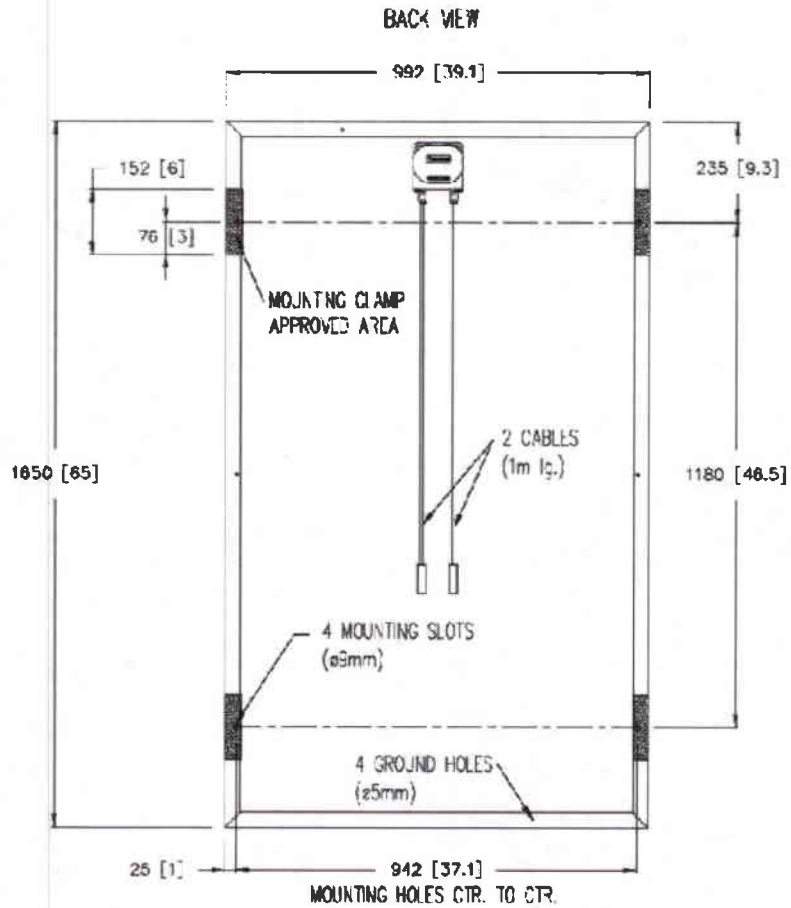


Figure 6 - Product Drawing

- 2) **Mounting Clamps or Clips:** Mount the module with the clamps, 4 per module, on the side frame of the module. The side frames are the longer sides of the module. The centerline of the clips should be located on appropriate positions for your requirement from the end of the module as shown in Figure 6. Installer should ensure the clamps are of sufficient strength to allow for the maximum design pressure of the module. Clips and clamps are not provided with the module. We recommend you use aluminum (material) clamps, per Code as shown in Figure 7.

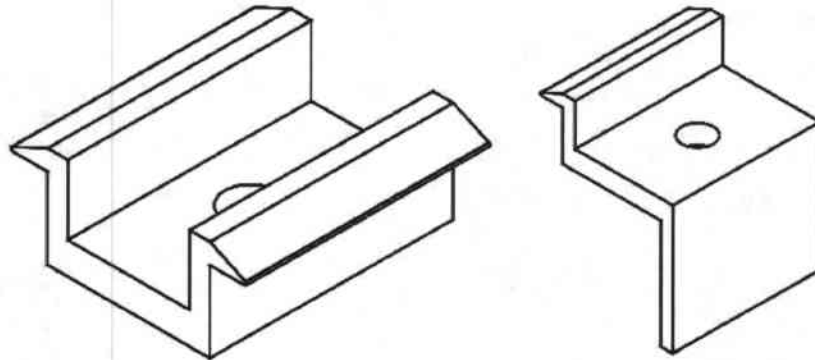


Figure 7 - Middle and End Clamps

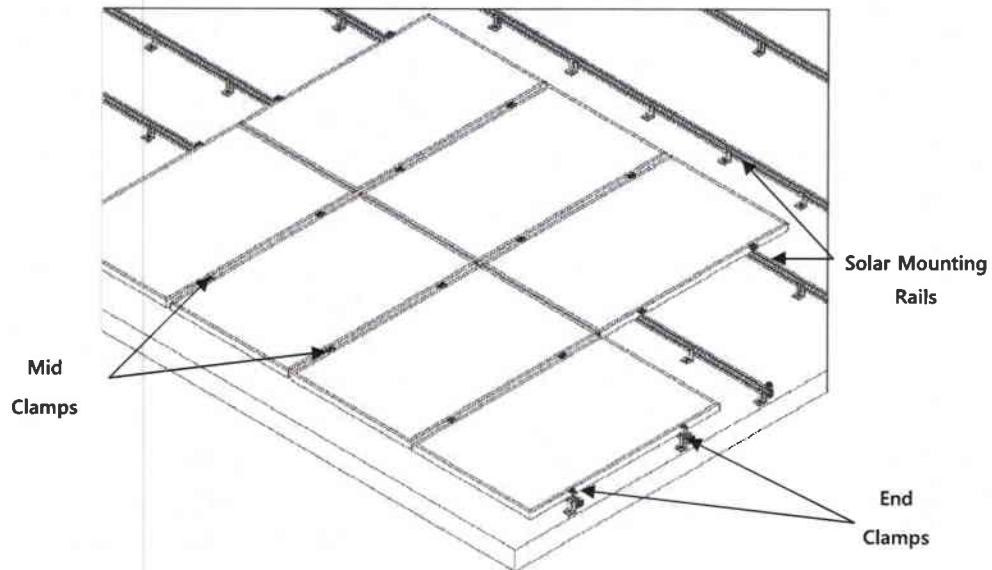


Figure 8 - Basic Arrangement of Clamps

7.0 Maintenance

Inspect all modules annually for safe electrical connections, sound mechanical connection and freedom from corrosion. Periodically clean the module surface with water and a soft cloth or sponge. Fingerprints may be removed with standard glass cleaner. Do not use harsh cleaning materials such as scouring powder, steel wool, blades or other sharp instruments to clean the glass surface of the module. Use of such materials will invalidate the product warranty.

8.0 Troubleshooting

A photovoltaic module will produce electricity when illuminated. Treat solar modules in the same way you would treat any electrical device. Only personnel trained in the use and handling of PV modules should attempt any diagnostic work.

Photovoltaic system malfunctions can, in rare cases be caused by module failures. Therefore it may become necessary to field check modules for proper operation. Field conditions vary widely. Since the module output is a function of sunlight and temperature, it can be difficult to determine what an appropriate field electrical reading should be. Subtle problems will not likely be determined in the field; however gross ones should be detectable.

One of the best ways to determine if a module is malfunctioning is to compare readings between modules. Similar readings would indicate that the module in question is within specifications. Wide differences, >20%, would most likely indicate a module problem.

There are two module electrical parameters that can be readily measured in the field that will give an indication if the module is functioning properly. These two parameters are the short circuit current (I_{sc}) and the open circuit voltage (V_{oc}). They are typically measured with a multi-meter (an instrument that measures current, voltage, and resistance in circuits).

Reading the voltage across the positive (+) and the negative (-) terminal / leads of the disconnected module will give the V_{oc} . Shorting the leads together and placing an ammeter in the circuit will give you the I_{sc} .

Comparing these readings between several modules will identify any under or non performing module(s).

It is also possible to compare these readings to the module specifications. However, the specifications are determined at a designated solar irradiance and a designated ambient temperature, e.g., "STC". If the field measurements are not made under conditions which match STC, the Isc and Voc values will be different.

For larger systems another useful test can be made using a current probe attachment for the multi-meter. A current probe is a device that has jaws that open to allow it to be placed around the wire instead of in-line with the wire. This device can measure current without breaking the circuit.

Using the current probe, current can be easily measured at many different points in the array and compared one to another to see if they are the same. If they are the same it is likely the module(s) in question is functioning properly and if different, it is likely that the module(s) in question is not functioning properly.

When evaluating the readings one should keep in mind that module current is directly proportional to the amount of solar irradiation and module voltage is dependent on the module temperature. The published specifications are referenced to STC conditions, 1000W/m², AM=1.5 spectrum, and a cell temperature of 25°C. A decrease in light intensity of 50% will reduce the current by 50% with voltage remaining essentially unchanged. An increase in the cell temperature by 10°C, caused by the sun striking the module at a more direct angle or by the ambient air temperature rising, will reduce the voltage by 3.6% with the current remaining essentially unchanged.

Abnormal readings should alert the user to possible module problems. Replacing suspicious modules with known good ones will help confirm the diagnosis. Any module problems should be brought to the attention of your dealer, distributor, or ASP.

9.0 Repair

With the exception of module to module cabling and connections, all module repairs must take place at the factory. Before sending a module back, contact the module seller for authorization and return. Make sure you have the module serial number (on the module label).

It should be noted that most problems that occur in a photovoltaic power system are not caused by the photovoltaic modules. The most common problem is a bad or improper connection. Before considering returning a suspect module to the factory, check the tightness of the connection to adjacent modules. If the connector or wiring appears to be damaged, a trained technician should be able to repair the module at the site. If connections and wiring look good but the module does not seem to be working properly, return the module to the sellers.

For additional information:

Visit our website at www.AdvancedSolarPhotonics.com

Or contact our factory at :

Advanced Solar Photonics

400 Rinehart Road - Suite 1060

Lake Mary, Florida 32746

www.AdvancedSolarPhotonics.com

info@AdvancedSolarPhotonics.com

Tel: (407) 804-1000



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Product Description

Title: INVERTERS, CONVERTERS & CONTROLLERS & INTERCONNECTION SYSTEM EQUIPMENT

Company: ADVANCED SOLAR PHOTONICS, LLC - Lake Mary, FL USA

Product Information: PV Inverter, Grid-Tied, Model Nos. PV240, PV250, PV260, PV270.

Evaluated to the following: A representative sample of the listed devices have been tested, investigated and found to comply with the requirements of the Standard (s) for Inverters, Converters, Controllers & Interconnection System Equipment for Use With Distributed Energy Resources (UL-1741) and are identified with the ETL Listed Mark.

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Americas+1-888-347-5478
 (or +1-312-906-7801)
 Email dirlist@intertek.com

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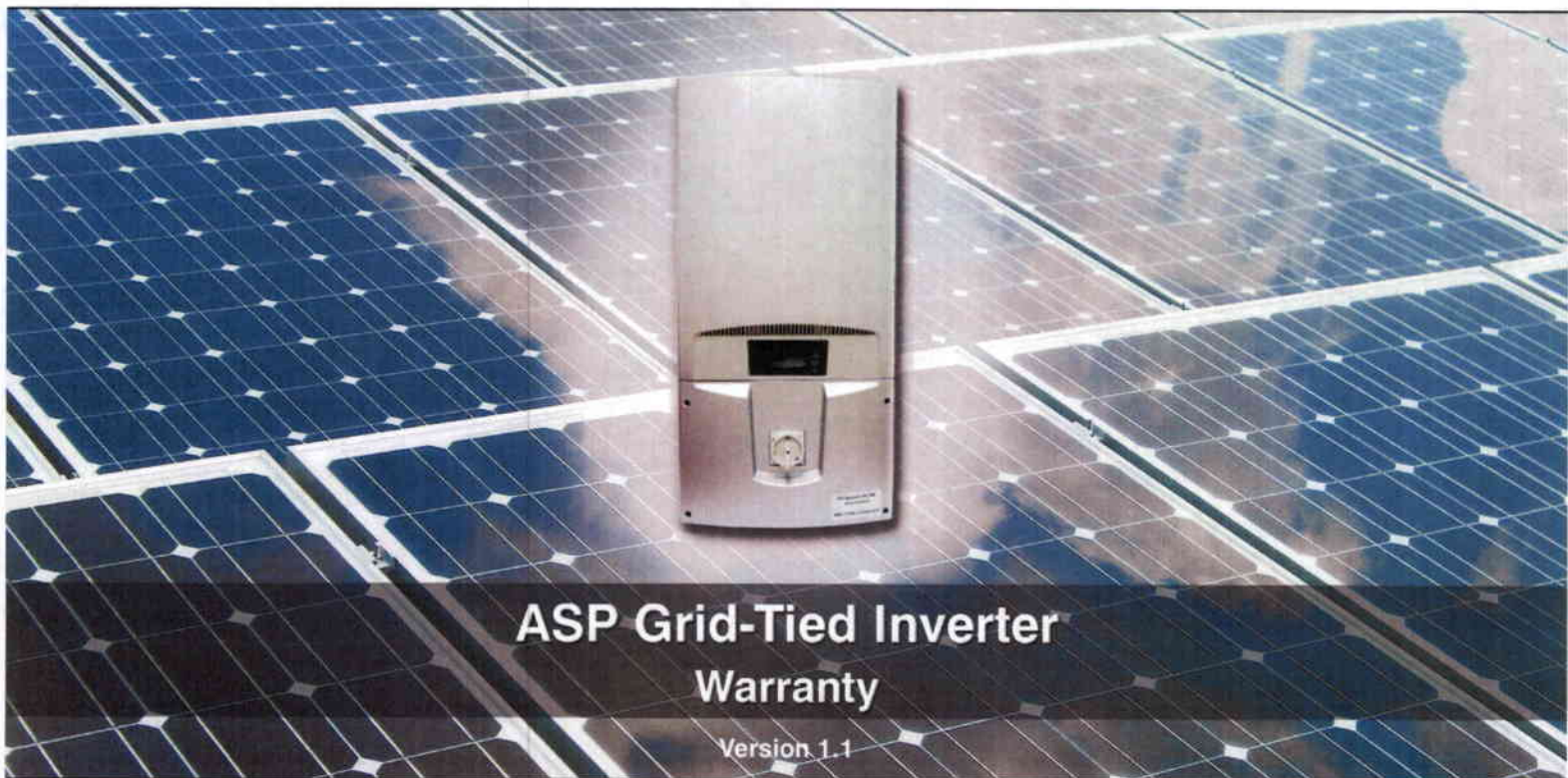
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The following describes the standard warranty policy for ASP's Grid-Tied Inverter product (the "Product") supplied by Advanced Solar Photonics ("ASP"). The warranty applicable for each specific product will be subject to the final agreement between ASP and the original purchaser (the "Purchaser").

Warranty Period

The standard warranty period offered by ASP is ten years.

The warranty period shall begin from the date of delivery.

Scope of Warranty

ASP warrants the Product to be free from defects in material or manufacture during the Warranty Period and covers replacement parts or repairs required during the Warranty Period subject to the warranty conditions listed below.

Warranty only applies to Purchaser and cannot be transferred. If the Purchaser sells the Product to end customers, the warranty provided to end customers shall be given by Purchaser and the end customers shall contact Purchaser in case of warranty claim.



Warranty Conditions

If a Product becomes defective during the relevant factory warranty period, one of the following services, as determined by ASP in its sole discretion, will be performed at no charge for materials or labor costs:

- repair at ASP; or
- repair on site; or
- exchange for a replacement device of equivalent value according to model and age. (In this case, the remainder of the warranty entitlement will be transferred to the replacement device.)

Exclusion of Warranty

The warranty is void and does not cover any defects or damages caused by in any of the following circumstances:

- (a) the Product has been misused, neglected, damaged or abused;
- (b) the Product has been improperly installed, operated, repaired or maintained;
- (c) the Product has been modified;
- (d) the Product has been connected to other equipment with which it is not compatible;
- (e) the Product has been used or stored in conditions outside its electrical or environmental specifications;
- (f) the Product has been used for purposes other than for which it was designed;
- (g) the Product has been used outside its stated specifications, operating parameters and application;
- (h) the seal on the Product is broken;
- (i) acts of third parties, atmospheric discharges, excess voltage, chemical influences, natural wear and tear and for loss and damage in transit;
- (j) improper testing, operation, maintenance, adjustment, repair, or any modification of any kind not authorized in writing by ASP personnel;
- (k) application beyond the scope of safety standards (e.g. VDE); and
- (l) neglect, accident, fire, flood, lightning, vandalism, acts of God.

Any equipment, parts or materials included in the Product and not manufactured by ASP are warranted solely by the manufacturer of such equipment, parts or materials and are not included as part of this warranty.



How to Assert a Warranty Claim

To assert a warranty claim, Purchaser shall complete a Field Failure Record ("FFR"). The FFR form is available from ASP at the following address

Advanced Solar Photonics
400 Rinehart Rd, Suite 1060
Lake Mary, FL 32746, USA
Attn: Engineering Department
Tel.: 407 804 1000
Fax: 407 333 9143

For determination of warranty entitlement, please submit a copy of the purchase receipt. The type plate on the device must be completely legible. Otherwise, ASP is entitled to refuse to provide warranty services.

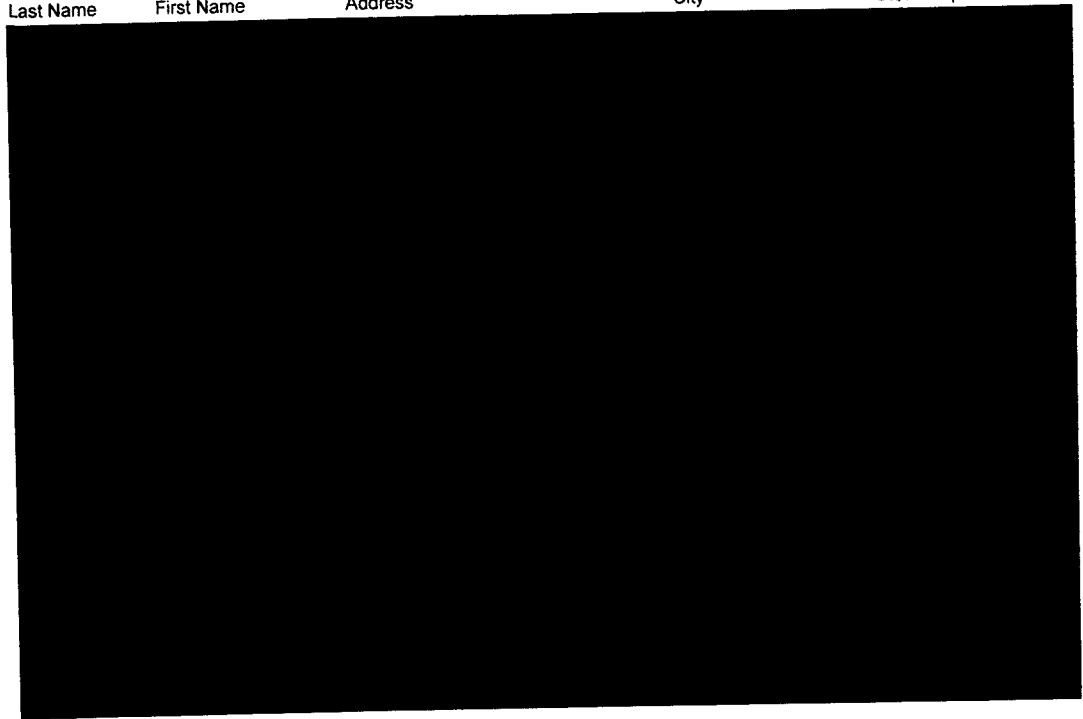
If ASP accepts the warranty claim, ASP will instruct Purchaser to return the Product either to ASP or its authorized service agent. Wherever possible, use the original packaging to return items. If ASP accepts the warranty claim, ASP will provide, or arrange for, repair or replacement, as ASP shall determine in its sole discretion. ASP shall bear the cost of such repair or replacement. The Purchaser shall bear the cost of freight and insurance on the Product to ASP or its authorized service agent, as the case may be. ASP shall bear the cost of freight and insurance to return the Product to Purchaser.

ASP's sole responsibility is to repair or replace subject to a valid warranty claim.

In all cases, ASP's Standard Terms and Conditions apply. ASP's Standard Terms and Conditions are available at http://www.advancedsolarphotonics.com/wp-content/uploads/docs/ASP_Standard-Terms-Conditions_2012.pdf

Customers Scheduled for Inspection

Last Name First Name Address City State Zip



Modules Installed but Lacking Net Meter or Connection*

Customer Name System size



*As of 2/19/2013



REDACTED



QIGU.E342475
Photovoltaic Modules and Panels

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Photovoltaic Modules and Panels

[See General Information for Photovoltaic Modules and Panels](#)

BLUECHIP ENERGY L L C
SUITE 1060
400 RINEHART RD
LAKE MARY, FL 32746 USA

E342475



Trademark and/or Tradename: **ASP**

Photovoltaic modules, Models ASP-385M, #ASP-390M, ASP-395M, ASP-400M, ASP-405M, ASP-410M.

Models AP-220, AP-225, AP-230, #AP-235, #AP-240, #AP-245.

- Evaluated to the requirements of "CEC-300-2011-005-CMF - Guidelines for California's Solar Electric Incentive Programs".

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March 7, 2013

Procedure for ASP Photovoltaic panel inspection, evaluation and replacement.

All replacements shall be generally carried in accordance to Limited Product Warranty for the Residential systems outlined in SOLAR PV SYSTEM PURCHASE AGREEMENT Doc# PSA07.2011.Rev.12.JM. Document Attached.

1. Limited Product Warranty. Seller provides an installation warranty (on parts and labor) for the "Fusion™ System" for a period of twelve (12) months from the date of certification. Product warranties for panels (typically 25 years -- 90% minimum rated power output for the first 10 years and 80% minimum rated power output for the balance of 15 years) and inverters (typically 10 years) are provided by the respective manufacturers and are separate from BCE's installation warranty. Notwithstanding any provision to the contrary (but subject to the operation of any law to the extent it cannot be excluded), Seller's sole and exclusive obligations to the Customer for any Product made by Seller and sold hereunder are to repair returned Product or provide a replacement Product, at Seller's sole option, for any Product which has been returned to Seller under the Return Material Authorization (RMA) procedure (as defined below) and which in the reasonable opinion of Seller is determined to be defective in workmanship, material or not in compliance with the Seller specification applicable to the Product and has in fact failed under normal use on or before 12 months from the date of certification unless implicitly stated otherwise for a particular Product. An extended warranty may be purchased for an additional price, as quoted by Seller. All Products, which are prototypes, experimental, alpha, beta, field trial or unqualified Products, are not warranted. Further, Seller does not warrant rubber, plastic parts, or safety seals. Seller assumes no liability or responsibility for third parties' components that may be contained in Seller's Product; these components carry their own original manufacturer's warranty that may be transferrable to Buyer. Any Product repaired or replaced under warranty is only warranted for the period of time remaining in the original warranty for the Product.

Seller reserves the right, at its sole option, to repair or replace any defective Product. The warranty provided herein shall extend to any Product which has proved defective and has failed through normal use, but excludes and does not cover any Product or parts thereof which have been accidentally damaged, disassembled, modified, misused, repaired or reworked (by any party other than Seller or its authorized agents), improperly stored or handled, used in conjunction with another product that is electronically or mechanically incompatible or of an inferior quality, or used in applications which exceed the Product specifications or ratings, neglected, improperly installed or otherwise abused or is used in hazardous activities or locations.

Customer must submit a claim under the warranty in writing no later than thirty (30) days after the claimed defect is discovered. The Customer must make all claims under these warranties and no claim will be accepted from any third party. The warranties set forth herein are non-transferable. NOTWITHSTANDING ANY PROVISION OF THIS AGREEMENT OR OTHER RELATED DOCUMENTATION (INCLUDING WITHOUT LIMITATION ANY SPECIFICATIONS) TO THE CONTRARY, THE PROVISIONS OF WARRANTIES SET FORTH HEREIN ARE THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES FOR ANY DEFECTIVE OR NONCONFORMING PRODUCTS.

2. Return Material Authorization Procedures. Seller will only accept Products returned under the Seller Return Material Authorization process ("RMA"). Customer shall obtain a RMA number from Seller prior to returning any Product and return the Product prepaid and insured to Seller to the FOB point of Lake Mary, Florida. Seller will replace or repair, at its option, any component found to be defective, in normal service during the warranty period. Any Product which has been returned to Seller but which is found to meet the applicable specification for the Product and not defective in workmanship and or material, shall be subject to Seller's standard examination charge in effect at the time which shall be charged to the Customer. Where any Product is returned without

2. Panel Inspection Procedures. Panels must be inspected by authorized and trained by BlueChip Energy personnel. Inspection should be conducted according to Manufacturer Panel Warranty.

BLUECHIP ENERGY LLC

HEAD OFFICE: USA | 400 RINEHART ROAD #1060 | LAKE MARY | FL 32746 USA
www.bluechipenergy.org | fusion@bluechipenergy.org | TEL: 407.804.1000 | FAX: 407.333.9143

If panels will be found Non-Compliant they have to be replaced in accordance with LIMITED WARRANTY FOR ASP PV MODULES MODELS AP/ASP190, AP/ASP215, AP/ASP220, AP/ASP225, AP/ASP230, AP/ASP235, AP/ASP240, AP/ASP245, AP/ASP390, ASP395, AP/ASP400, AP/ASP405, AP/ASP410. Doc# 01.2011.1106.Rev.3 Document Attached.

I. This Limited Product Warranty – applies to photovoltaic modules models AP/ASP190, AP/ASP215, AP/ASP220, AP/ASP225, AP/ASP230, AP/ASP235, AP/ASP240, AP/ASP245, AP/ASP390, ASP395, AP/ASP400, AP/ASP405, AP/ASP410 manufactured by Advanced Solar Photonics, LLC or affiliated company "ASP". ASP warrants the quality of those PV modules and specifies the scope of such warranty.

Five (5) years limited PV Module warranty.

ASP PV Photovoltaic modules ("PV modules") 5 (five) years from the date of delivery, shall be free from defects in materials and workmanship under normal application, installation, use and service conditions. If the PV modules fail to conform to this warranty, then for a period ending five (5) years from date of delivery to the original end-Buyer ("the Buyer"), Advanced Solar Photonics will, at its option, either repair or replace the product. The repair or replacement remedy shall be the sole and exclusive remedy provided under the Limited Product Warranty and shall not extend beyond the five (5) year period set forth herein. This Limited Product Warranty does not warrant a specific power output, which shall be exclusively covered under clause 2 hereinafter (Limited Power Warranty).

ASP warrants the PV modules to be free from the defects and/or failures specified below for a period not exceeding five (5) years from the date of sale to the original customer. Those defects characterized as follows:

- 1) Defects and/or failures due to the manufacturing;
- 2) Defects and/or failures due to materials and components;
- 3) Cracking in the front glass surface due to the foreign objects inside the glass. This limited warranty excludes cracking of the glass surface due to the external stress or external shock from the external impact of flying object or debris.
- 4) Non-conformity to the specifications due to faulty manufacturing and/or inspection process.

If the PV Modules fails to conform to this warranty ASP will repair or replace the defective module(s) at ASP's sole option.

II. Limited Power Warranty. Subject to ASP determining at its sole discretion that any power loss is due solely to defects in materials or workmanship, ASP warrants the power of the PV modules as follows:

The warranty period with respect to power output continues for a total of 25 years from date of purchase, the first 10 years at 90% minimum rated power output and the balance of 20 years at 80% minimum rated power output.

This warranty is transferable when product remains installed in original location at the time of product warranty registration.

If the PV Modules fails to conform to this warranty ASP will repair or replace the defective module(s) at ASP's sole option.

III. Exclusions and Limitations. Warranty claims must in any event be filed within the applicable Warranty period. Warranty claims may only be made by, or on the behalf of, the original end Buyer or a person to whom title has been transferred for the PV Modules.

The Limited Warranties do not apply to any of the following:

1. PV modules which in Advanced Solar Photonics's absolute judgment have been subjected to: misuse, abuse, neglect or accident; alteration, improper installation, application or removal (including but not limited to installation, application or removal by any party other than a Advanced Solar Photonics authorized dealer; non-observance of Advanced Solar Photonics's installation, users and/or maintenance instructions; repair or modifications by someone other than an approved service technician of Advanced Solar Photonics; power failure surges, lightning, flood, fire, accidental breakage or other events outside Advanced Solar Photonics's control.
2. Cosmetic defects stemming from normal wear and tear of PV module materials.
3. PV modules installed in locations, which in Advanced Solar Photonics's absolute judgment may be subject to direct contact with salt water.
4. The Limited Warranties do not cover any transportation costs for return of the PV modules, or for reshipment of any repaired or replaced PV modules, or cost associated with installation, removal or reinstallation of the PV modules.
5. When used on a mobile platform of any type, the Limited Power Warranty, applying to any of the PV modules shall be limited to twelve (12) years as per the provisions of clause 2(a) hereof.

Warranty claims will not apply if the type or serial number of the PV modules is altered, removed or made illegible.

1. "Minimum Peak Power" = Peak power minus the Peak power tolerance (as specified in Advanced Solar Photonics's Product datasheet). "Peak power" is the power in peak watts that a PV module generates at STC (Standard Test conditions: Irradiance of 1000 W/m², light spectrum AM 1.5g and a cell temperature of 25 degrees C)

Additional Item(s) Excluded from Warranty Coverage

Warranty coverage does not apply when:

1. The Product is improperly installed,
2. The Product is installed in a mobile or marine environment, subjected to improper voltage or power surges or abnormal environmental conditions (such as acid rain or other pollution),
3. The components in the construction base on which the module is mounted are defective
4. External corrosion, mold discoloration or the like occurs.

IV. Limited Product Warranty. SUBJECT TO THE LIMITATIONS UNDER APPLICABLE LAW, THE LIMITED WARRANTIES SET FORTH HEREIN ARE EXPRESSLY IN LIEU OF AND EXCLUDE ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR PARTICULAR PURPOSE, USE, OR APPLICATION, AND ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF ADVANCED SOLAR PHOTONICS, UNLESS SUCH OTHER WARRANTIES, OBLIGATIONS OR LIABILITIES ARE EXPRESSLY AGREED TO IN WRITING SIGNED AND APPROVED BY ADVANCED SOLAR PHOTONICS. ADVANCED SOLAR PHOTONICS SHALL HAVE NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR DAMAGE OR INJURY TO PERSONS OR PROPERTY OR FOR OTHER LOSS OR INJURY RESULTING FROM ANY CAUSE WHATSOEVER ARISING OUT OF OR RELATED TO THE PRODUCT, INCLUDING, WITHOUT LIMITATION, ANY DEFECTS IN THE MODULE, OR FROM USE OR INSTALLATION. UNDER NO CIRCUMSTANCES SHALL ADVANCED SOLAR PHOTONICS BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, HOWSOEVER CAUSED. LOSS OF USE, LOSS OF PROFITS, LOSS OF PRODUCTION, LOSS OF REVENUES ARE THEREFORE SPECIFICALLY BUT WITHOUT LIMITATION EXCLUDED. ADVANCED SOLAR PHOTONICS'S AGGREGATE LIABILITY, IF ANY, IN DAMAGES OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID TO ADVANCED SOLAR PHOTONICS BY THE BUYER, FOR THE UNIT OF PRODUCT OR SERVICE FURNISHED OR TO BE FURNISHED, AS THE CASE MAY BE, WHICH GAVE RISE TO THE WARRANTY CLAIM. SOME STATES DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES OR THE EXCLUSION OF DAMAGES SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

V. Limitation of Liability. EXCEPT FOR THE WARRANTIES STATED HEREIN FOR THE BUYER, NO WARRANTY, CONDITION OR REPRESENTATION, EXPRESS, IMPLIED, ORAL OR STATUTORY, IS PROVIDED TO THE BUYER OR ANY THIRD PARTY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY, CONDITION OR REPRESENTATION: (A) OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE; (B) THAT THE PRODUCTS WILL BE FREE FROM INFRINGEMENT OR VIOLATION OF ANY RIGHTS, INCLUDING INTELLECTUAL PROPERTY RIGHTS, OF THIRD PARTIES; OR (C) THAT THE OPERATION OF THE SOFTWARE WILL BE UNINTERRUPTED OR ERROR FREE. THIS DISCLAIMER AND EXCLUSION SHALL APPLY EVEN IF THE EXPRESS WARRANTY HEREIN FAILS OF ITS ESSENTIAL PURPOSE. THE BUYER'S SOLE AND EXCLUSIVE REMEDIES HEREUNDER AND THE ONLY LIABILITY OF SELLER IS EXPRESSLY LIMITED TO THE TERMS OF THE AGREEMENT. SELLER SHALL NOT BE LIABLE TO THE BUYER, OR ANY THIRD PARTY, FOR ANY OTHER SPECIAL, CONSEQUENTIAL, INCIDENTAL, EXEMPLARY OR INDIRECT COSTS OR DAMAGES, INCLUDING WITHOUT LIMITATION, LITIGATION COSTS, INSTALLATION AND REMOVAL COSTS, LOSS OF DATA, PRODUCTION OR PROFIT ARISING FROM ANY CAUSE WHATSOEVER, REGARDLESS OF THE

FORM OF THE ACTION, WHETHER IN CONTRACT, TORT (INCLUDING SELLER'S OWN NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH COSTS OR DAMAGES. FOR PURPOSES OF THIS PROVISION, SELLER INCLUDES SELLER'S DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, REPRESENTATIVES, SUBCONTRACTORS AND SUPPLIERS. IN NO EVENT SHALL THE TOTAL COLLECTIVE CUMULATIVE LIABILITY OF SELLER, ITS EMPLOYEES, OFFICERS, AGENTS AND DIRECTORS EXCEED THE AMOUNT PAID TO SELLER FOR PRODUCTS FROM WHICH SUCH LIABILITY AROSE DURING THE TWELVE (12) MONTH PERIOD PRECEDING THE DATE OF THE MOST RECENT CLAIM.

VI. Obtaining Warranty Performance. If you feel you have a justified claim covered by this Limited Warranty, immediately notify the (a) Installer, who sold the PV-modules, or (b) any authorized Advanced Solar Photonics distributor, of the claim in writing, or (c) send such notification to Advanced Solar Photonics Corporation, 400 Rinehart Rd, Lake Mary, FL 32792, directly. In addition, please enclose evidence of the date of delivery of the PV module. If applicable, your installer or distributor will give advice on handling the claim. If further assistance is required, please write to Advanced Solar Photonics for instructions. The return of any PV-modules will not be accepted unless prior written authorization has been given by Advanced Solar Photonics.

3. If panels did not pass Inspection they will have to be replaced by BCE personnel for the panels of the same brand and model, fully compliant with UL Certification Directory listing for BCE Photovoltaic Modules and panels, file # QIGU.E342475 (File Attached), or any other Certification organization (Intertek, CSA, etc...), guaranteeing that panels are in full compliance with UL 1703 requirements. If necessary, work permits have to be obtained from the local building department.

4. If panels of the same brand and model are no longer available, they will have to be replaced by BCE personnel for the panels of comparable brand and Technical specifications, fully compliant with UL 1703 test requirements.

In this case the new design documentation have to be produced, FSEC approval received, and a new work permit pooled from the building department according to the following Procedure.

Steps to complete solar installations:

FILL OUT FORMS:

1. Pull Job number _____
2. Print property data sheet from county property appraiser.
3. Print out building sketch or aerial photo from Google maps.
4. Fill out "Welcome Letter"
5. Fill out site survey customer information.
6. Fill out Roofing inspection report.
7. Print out panel schedule.
8. Fill out building/electrical permit application and NOC.
9. Fill out power company net meter documents.

CONDUCT THE SITE SURVEY:

1. Contact customer to schedule site survey. Add date to Outlook installation schedule.
2. Have homeowner sign permit application, NOC and power company documents.
3. Fill out site survey form.
4. Fill out roofing inspection report.
5. Measure roof and draw roof plan.
6. Conduct shade survey using solar pathfinder.
7. Take photos of roof, trusses, service panel, and sub panels.

SUBMIT INFORMATION TO ENGINEERING:

1. Scan site survey and roof dimensions and save to S:\Installation Pictures*(customer name)*.
2. Download photos from camera and save in S:\Installation Pictures*(customer name)*.
3. Email photos and site survey to AI in engineering.

4. Engineer will start doing the drawings.

SUBMIT HOMEOWNERS ASSOCIATION APPLICATION (If Required)

FILE NOTICE OF COMMENCEMENT WITH COUNTY CLERK OF COURT:

1. Call the county clerk of courts for the address and cost to file the NOC. \$13?
2. Scan a copy of the NOC for future reference.
3. Mail NOC and self addressed stamp envelop to the county clerk of court or have runner deliver to clerk of courts.

MAIL/DELIEVER PERMIT PACKAGE:

1. Electrical and mechanical drawings. Verify with municipality how many sets.
2. Electrical and/or building permit application.
3. Have license holder sign permit application.
4. If new to area call contractor licensing for requirements.
5. Provide check for plan review deposit. (If required by municipality)
6. Provide power of attorney. If runner is dropping off or picking up permit
7. Copies of EC license and workers comp. exemption.
8. Cover letter (if mailed)
9. Submit completed Notice of Commencement.
10. Follow up with building department every 3 days until approved.

INSTALLER PACKET CHECKLIST:

1. Job Information Sheet.
2. Job Map and directions from the shop.
3. Roof Layout.
4. Solar material checklist.
5. Electrical material checklist.
6. E02 Electrical Plan.

COMPLETE THE INSTALLION:

1. Pull FUSION kit. Panels, inverter, rack and combiner box.
2. Order miscellaneous materials. Conduit, wire, breaker and straps.
3. Once complete. Test open circuit voltage on each string.
4. Startup system and test for proper operation.
5. Take photos of the array and inverter.
6. Record inverter serial number (s) _____
7. Installation manager to conduct quality inspection.

FINAL INSPECTION: (Let the customer know the inspection date)

1. Schedule final electrical/building inspection with city/county.
2. Access to home required if inverter is in the garage.
3. Meet electrical and/or building inspector on job.
4. Inspector(s) must sign permit card and have electrical inspector sign power company application. (Power companies will accept a scan of the signed permit card)

5. Put together and fill out Close Out documents. IRS 5695, Completion Certificate, Inverter warranty, and 5 referral award forms.
6. Check to make sure all required signatures are on Net Meter documents.
7. Office will schedule close out meeting.

CLOSE OUT: (Let the sales rep know the date)

1. Schedule closeout meeting with customer.
2. Add closeout date/time to Outlook installation schedule.
3. Pick up signed finance paperwork or cash/check from homeowner. PAF
4. Have homeowner sign "Completion Certificate."
5. Give homeowner IRS 5695 form.
6. Give homeowner prefilled out inverter warranty registration card.
7. Give homeowner 5 referral award forms.

SUBMIT NET METER APPLICATION TO POWER COMPANY:

1. Scan net meter documents and permit card.
2. Save scanned documents to customer's folder in "Solar Customers"
3. Get together any additional documents that may be required by power company.
4. Email all documents to appropriate contact or designated email account for that power company.
5. Attempt to get a tentative install date from the power company. Let the homeowner know if we get the date.
6. Follow up with homeowner to verify installation of solar PV meter.

Schedule at Attachments:

1. ASP Panel Product Warranty
2. ASP Grid Tied Inverter Warranty
3. ASP Module installation Manual
4. BCE Residential Sales Agreement with warranty.
5. UL Photovoltaic Module or Panel Certification
6. Intertek Certification on ASP Inverter



SOLAR PV SYSTEM PURCHASE AGREEMENT

Buyer's Name: _____ Date: _____

Address: _____ City: _____ State: _____ Zip Code: _____

Home Phone: _____ Cell Phone: _____ E-mail: _____

Existing Roof Conditions and Options: Shingles Tile Metal Micro Inverters Monitoring Utility Provider: _____

I. **The Product.** The Product as Purchased is _____. The term nominal in the contract below means that a system can be installed with more or less 3% of the DC output. **Buyer's Initials** _____ **Seller's Initials** _____

2.5 kWatt (Nominal)	5.0 kWatt (Nominal)	7.5 kWatt (Nominal)	10.0 kWatt (Nominal)	25.0 kWatt (Nominal)	Description:

Method of Payment: Credit Card Check Cash Finance

Special Payment Terms: _____

Notes: _____

II. **Price and Terms of Payment.** The purchase price for the Product, including technical materials, is a total of \$_____ (USD) [Check one: inclusive exclusive] of the cost of installation. Buyer shall make the milestone payments to Seller in accordance with the terms described herein. At the time of execution of this Agreement, Buyer shall make a Down Payment of 50% (for cash accounts only) of the purchase price pursuant to the instructions in the invoice issued by Seller, unless otherwise agreed. Immediately upon notification by Seller that the Product is ready for shipment, Buyer shall pay Seller the remaining balance due to Seller. All payback calculations presented by Seller are estimates only. All payback calculations should be confirmed with your state, utility company, or any other source of such paybacks. Customer is fully responsible for structural and roof conditions and net metering fee.

III. **Right of Rescission.** Notwithstanding other provisions of this Agreement, Buyer has the right to terminate this Agreement without penalty no later than by midnight of the third (3rd) business day from the date of execution of this Agreement by written notice to Seller by United States Certified Mail, Return Receipt Requested. This cancellation must be clear of intent, written in English and postmarked before midnight of the third business day after the date on which Buyer signs this Agreement. For the purposes of this provision, a "business day" shall include Monday through Saturday, but shall not include Sundays or any legal holiday on which the U.S. Postal Service does not deliver mail.

IV. **Shipment and Delivery.** Seller shall ship the Product purchased pursuant to this Agreement to Buyer at an estimated time of ten to twelve weeks after the date on which Seller receives Buyer's Down Payment. Conditions of shipment and delivery shall be subject to the conditions set forth in this Agreement and in the Standard Terms and Conditions. Partial shipments and early shipments are allowed as needed and any shipment may be transhipped as may be appropriate. The shipment schedule is contingent upon timely receipt by Seller of Buyer's Down Payment, timely payment of the balance of the purchase price, and the fulfillment of other conditions that, if applicable, are stated elsewhere in this Agreement. Any failure by Buyer to adhere to the payment plan as outlined in Article IV may cause Seller to revise the shipment schedule.

V. **Installation.** When Buyer receives the shipment of the Product from Seller, Seller shall arrange for the Product to be installed at the Project Address indicated above. PV system will be installed by currently certified Contractor.

VI. **Federal and State Rebates.** Buyer shall, at his or her option and without Seller's involvement, apply for any federal and state rebates, tax credits or any other governmental incentives made available by federal and state governments for the purchase of solar systems. Seller shall not be liable in any way to Buyer or to any third party for filing for or obtaining of any such rebates. Seller also does not guarantee and shall not be liable for the amount of rebate applicable to Buyer or the issuance and delivery of the rebate payment.

VII. **Financing Option.** Buyer shall have the option to apply for financing as arranged by Seller for the purchase of the Product.

BUYER HEREBY ACKNOWLEDGES THAT HE/SHE HAS READ THIS AGREEMENT IN FULL AND AGREES TO THE TERMS THEREOF.

Buyer

Date

Energy Specialist, BlueChip Energy, LLC
(Sign and print)

Date

Buyer

Date

Officer Authorization, BlueChip Energy, LLC

Date

(Additional Terms on Reverse)

Terms and Conditions of Sale. This sale is contingent upon site approval by Seller's authorized installer. If at any time Buyer is delinquent in the payment of any invoice or is otherwise in breach of this Agreement, Seller may, at its discretion, stop performance of services or withhold shipment (including partial shipments) of any order and may require Buyer to pre-pay for further performance or shipments. All payments not received when due shall be subject to an additional charge of one and one half percent (1.5%) per month (annual rate 19.56%) of the unpaid amount or the maximum rate permitted by law, whichever is less, until the date of payment. Buyer shall be liable for all costs of collection of payment due to Seller. Buyer grants Seller a security interest in Products (excluding services) purchased under this Agreement to secure payment for those Products purchased. If requested by Seller, Buyer agrees to execute financing statements to perfect such security interest. There is no set-off right for the Buyer. Buyer understands and acknowledges that proper operation of the Product purchased pursuant to this Agreement is dependent on Buyer's existing roof, plumbing and other equipment not supplied by Seller and Seller shall have no obligation or liability for the condition thereof. Risk of loss to the product shall pass to Buyer upon Seller's delivery of the product to Buyer's project address. The Buyer further understands the Seller may at its discretion choose material and system components based on performance expectations and physical parameters of the project.

Assignment of Environmental Attributes. The Customer assigns to BCE all environmental attributes, including without limitation carbon offsets and renewable energy certificates, produced by the System throughout its lifetime, unless such environmental attributes have been or will be assigned to the customer's utility as part of a rebate program.

Limited Product Warranty. Seller provides an installation warranty (on parts and labor) for the "Fusion™ System" for a period of twelve (12) months from the date of certification. Product warranties for panels (typically 25 years -- 90% minimum rated power output for the first 10 years and 80% minimum rated power output for the balance of 15 years) and inverters (typically 10 years) are provided by the respective manufacturers and are separate from BCE's installation warranty. Notwithstanding any provision to the contrary (but subject to the operation of any law to the extent it cannot be excluded), Seller's sole and exclusive obligations to the Customer for any Product made by Seller and sold hereunder are to repair returned Product or provide a replacement Product, at Seller's sole option, for any Product which has been returned to Seller under the Return Material Authorization (RMA) procedure (as defined below) and which in the reasonable opinion of Seller is determined to be defective in workmanship, material or not in compliance with the Seller specification applicable to the Product and has in fact failed under normal use on or before 12 months from the date of certification unless implicitly stated otherwise for a particular Product. An extended warranty may be purchased for an additional price, as quoted by Seller. All Products, which are prototypes, experimental, alpha, beta, field trial or unqualified Products, are not warranted. Further, Seller does not warrant rubber, plastic parts, or safety seals. Seller assumes no liability or responsibility for third parties' components that may be contained in Seller's Product; these components carry their own original manufacturer's warranty that may be transferrable to Buyer. Any Product repaired or replaced under warranty is only warranted for the period of time remaining in the original warranty for the Product. Seller reserves the right, at its sole option, to repair or replace any defective Product. The warranty provided herein shall extend to any Product which has proved defective and has failed through normal use, but excludes and does not cover any Product or parts thereof which have been accidentally damaged, disassembled, modified, misused, repaired or reworked (by any party other than Seller or its authorized agents), improperly stored or handled, used in conjunction with another product that is electronically or mechanically incompatible or of an inferior quality, or used in applications which exceed the Product specifications or ratings, neglected, improperly installed or otherwise abused or is used in hazardous activities or locations. Customer must submit a claim under the warranty in writing no later than thirty (30) days after the claimed defect is discovered. The Customer must make all claims under these warranties and no claim will be accepted from any third party. The warranties set forth herein are non-transferable. NOTWITHSTANDING ANY PROVISION OF THIS AGREEMENT OR OTHER RELATED DOCUMENTATION (INCLUDING WITHOUT LIMITATION ANY SPECIFICATIONS) TO THE CONTRARY, THE PROVISIONS OF WARRANTIES SET FORTH HEREIN ARE THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES FOR ANY DEFECTIVE OR NONCONFORMING PRODUCTS.

Return Material Authorization Procedures. Seller will only accept Products returned under the Seller Return Material Authorization process ("RMA"). Customer shall obtain a RMA number from Seller prior to returning any Product and return the Product prepaid and insured to Seller to the FOB point of Lake Mary, Florida. Seller will replace or repair, at its option, any component found to be defective, in normal service during the warranty period. Any Product which has been returned to Seller but which is found to meet the applicable specification for the Product and not defective in workmanship and/or material, shall be subject to Seller's standard examination charge in effect at the time which shall be charged to the Customer. Where any Product is returned without an itemized statement of claimed defects, Seller will not evaluate the Product but will return it to the Customer at the Customer's expense.

Dispute Resolution. If any dispute arises between any of the Parties in connection with the validity, interpretation, implementation or alleged material breach of any provision of this Agreement, they shall endeavor to settle such dispute amicably and in good faith. In the case of failure by the Parties to resolve the dispute in the manner set out above within 30 (thirty) days from the date when the dispute arose, the dispute shall be referred to a mutually acceptable sole arbitrator. The place of the court of arbitration shall be Seminole County, Florida, U.S.A. The arbitration proceedings shall be conducted in accordance with the applicable Florida Arbitration Code and shall be conducted in the English language. The arbitrator's decision shall be final and legally binding and judgment may be entered thereon. The arbitrator shall also decide on the costs of the arbitration proceedings. The cost of arbitration shall be borne by the losing party or by both parties in proportions decided by the arbitrators. The arbitrator's award shall be limited to actual damages only. The parties agree that any arbitration or other action in relation to an alleged breach of this Agreement shall be commenced within one year of the date of the breach, without regard to the date the breach is discovered. Any arbitration or other action not commenced within that one year time period shall be barred, without regard to any other limitations period set forth by law or statute.

Legal. This Agreement constitutes the entire agreement between the parties hereto concerning the subject matter of this Agreement, apart from existing non-disclosure agreements, and there are no understandings, agreements, representations, conditions, warranties, or other terms, express or implied, which are not specified herein. The validity, interpretation and performance of this Agreement shall be governed by and construed under the applicable laws of the State of Florida and the United States of America, as if performed wholly within the state and without giving effect to the principles of conflict of laws. Seller and Buyer hereby irrevocably and unconditionally submit to the jurisdiction of the courts of the State of Florida and all courts competent to hear appeal therefrom and venue in Seminole County, Florida. No forbearance, indulgence or relaxation or inaction by either Party at any time to require performance of any of the provisions of this Agreement shall in any way affect, diminish or prejudice the right of either Party to require performance of that provision presently or in the future. Any waiver or acquiescence by either Party of any breach of any of the provisions of this Agreement shall not be construed as a waiver or acquiescence of any right under or arising out of this Agreement or of the subsequent breach, or acquiescence to or recognition of rights other than as expressly stipulated in this Agreement or as otherwise agreed by the parties in writing. This Agreement shall not be assigned or otherwise transferred by Buyer without the prior written consent of Seller and shall inure to the benefit of the successors and permitted assigns of the parties. This Agreement may only be modified by a written document executed by authorized representatives of Seller and Buyer. In the event that any of the terms of this Agreement, apart from payment, become or are declared to be unenforceable by any court of competent jurisdiction, such terms shall be null and void and shall be deemed deleted from this Agreement, but only to the extent that such term is unenforceable, it being the intent and agreement of the parties that the Agreement shall be deemed amended by modifying such term to the extent necessary to make it legal, valid or enforceable while preserving its intent or, if that is not possible, by substituting therefore another term that is enforceable and achieves the same objective. All remaining terms of this Agreement shall remain in full force and effect.

From: Wayne Tupuola [Wayne.Tupuola@ICT-Investments.com]
Sent: Friday, December 21, 2012 2:15 PM
To: 'Dave Click'
Cc: Demitri Nikitin; Thomas Gregory; Andy White; al.mackay@advancedsolarphotonics.com; Pietrzak, Joseph F.; Luis Aviles; 'Philip Fairey'; Bob Reedy; Susan Schleith; Houtan Moaveni
Subject: RE: UCF-ASP Letter Regarding ASP390M UL Listing
Attachments: ATL RQR 100554009.pdf

Dave: Please find the COC for Our ASP390 M modules.

Best Regards,

Wayne Tupuola
Vice President of Operations
Advanced Solar Photonics, LLC
400 Rinehart Road, Suite 1000
Lake Mary, FL 32746
(407) 804-1000 ext. 509
www.AdvancedSolarPhotonics.com

Winner of the 2010 Governor's Business Diversification Award for Green-to-Gold

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The contents of this e-mail is confidential. If you are not the intended recipient or if this e-mail was addressed to you by error, please immediately notify the sender and delete the e-mail. Being the recipient of this e-mail you are kindly requested to keep this information secret and, if necessary, to disclose it only to those staff members or authorized persons whom you have committed to secrecy. Any unauthorized copying and transmission is prohibited.

-----Original Message-----

From: Dave Click [<mailto:daveclick@fsec.ucf.edu>]
Sent: Friday, December 21, 2012 12:32 PM
To: Wayne Tupuola
Cc: Demitri Nikitin; Thomas Gregory; Andy White; al.mackay@advancedsolarphotonics.com; Joe Pietrzak; Luis Aviles; 'Philip Fairey'; Bob Reedy; Susan Schleith; Houtan Moaveni
Subject: UCF-ASP Letter Regarding ASP390M UL Listing

Mr. Tupuola,

Please find the attached letter regarding the UL listing of the ASP390M modules, intended for the Progress Energy SunSense systems being installed by Blue Chip Energy.

Thank you for your attention to this matter.

Dave Click, PE

Program Director, PV Project Engineering Solar Systems Research Division
321.638.1408

CC:
Blue Chip Energy: Dimitri Nikitin, Thomas Gregory, Andy White, Al Mackay Progress Energy: Joe Pietrzak University of Central Florida: Luis Aviles, Philip Fairey, Bob Reedy, Susan Schleith, Houtan Moaveni



WAYNE TUPUOLA
BLUECHIP ENERGY L L C
SUITE 1060
400 RINEHART RD
LAKE MARY FL 32746

Date: 2012/11/14
Subscriber: 100554009
PartySite:
File No:
Service Request No: SR9277062
Project Number: 12SR9277062
PD No: 12M53797
PO Number:

Subject: Multiple Listing Correlation Sheet

Dear Wayne Tupuola,

Enclosed is a copy of your completed Multiple Listing Correlation Sheet covering the Basic File listed below. The following documents were added (new) or revised on 11/14/2012.

<u>Basic File</u>	<u>Vol</u>	<u>ML File</u>	<u>Pages</u>	<u>Revised</u>	<u>New</u>
E336437	1	E342475	ML Correlation Page(s)		
E336437	1	E342475	ML Cert of Compliance		

Please review this material and report any inaccuracies to UL's Customer Service Professionals. Contact information for all of UL's global offices can be found at <http://www.ul.com/global/eng/pages/corporate/contactus>.

If you'd like to receive updated materials FASTER, UL offers electronic access and/or delivery of this material. For more details, contact UL's Customer Service Professionals as shown above, referring to the above Service Request number.

This material is provided on behalf of UL LLC(UL) or any authorized licensee of UL.

SEO File



Multiple Listing Correlation Sheet

ML FILE NO. E342475

Issued: 2010-11-10
Revised: 2012-11-14

MULTIPLE LISTING
of
PHOTOVOLTAIC MODULES AND PANELS
(QIGU, QIGU7)
for

[100554-009] BLUECHIP ENERGY L L C

Basically Listed for:

[100535-988] TOPSUN CO LTD (SEO)

Basically Listed products covered by Procedure and/or Reports under File No. E336437, Volume 1

Products Covered	Report Date	Basic Applicant's (Supplier's) Product Designation	Multiple Listee's Product Designation	ILL #
Photovoltaic module	2010-10-01	TS-S390 #	ASP-390M #	1
		TS-S385	ASP-385M	1
		TS-S395	ASP-395M	2,3
		TS-S400	ASP-400M	2,4
		TS-S405	ASP-405M	2,5
		TS-S410	ASP-410M	2,6

- Evaluated to the requirements of "CEC-300-2008-007-CMF - Guidelines for California's Solar Electric Incentive Programs".

MARKING: Same as that described in Follow-Up Service Procedure and/or Report except for Multiple Listee's name, file number, Trademark / Tradename,



when applicable, and product designation.

LITERATURE: If literature is packaged with the Multiple Listed product(s) it shall be in compliance with the requirements outlined in the appropriate UL Standard(s).

CERTIFICATE OF COMPLIANCE

Certificate Number 20121114-E342475
Report Reference E342475-20101110
Issue Date 2012-NOVEMBER-14

Issued to: BLUECHIP ENERGY L L C
SUITE 1060
400 RINEHART RD
LAKE MARY, FL 32746 USA

This is to certify that representative samples of Photovoltaic Modules and Panels
ASP-390M #, ASP-385M, ASP-395M, ASP-400M,
ASP-405M, ASP-410M


- Evaluated to the requirements of "CEC-300-2008-007-CMF - Guidelines for California's Solar Electric Incentive Programs".

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

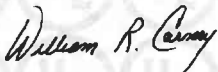
Standard(s) for Safety: Flat-Plate Photovoltaic Modules and Panels,
UL 1703 and ULC/ORD-C1703-01

Additional Information: See the UL Online Certifications Directory at
www.ul.com/database for additional information

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.

The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and "US" identifiers:  the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

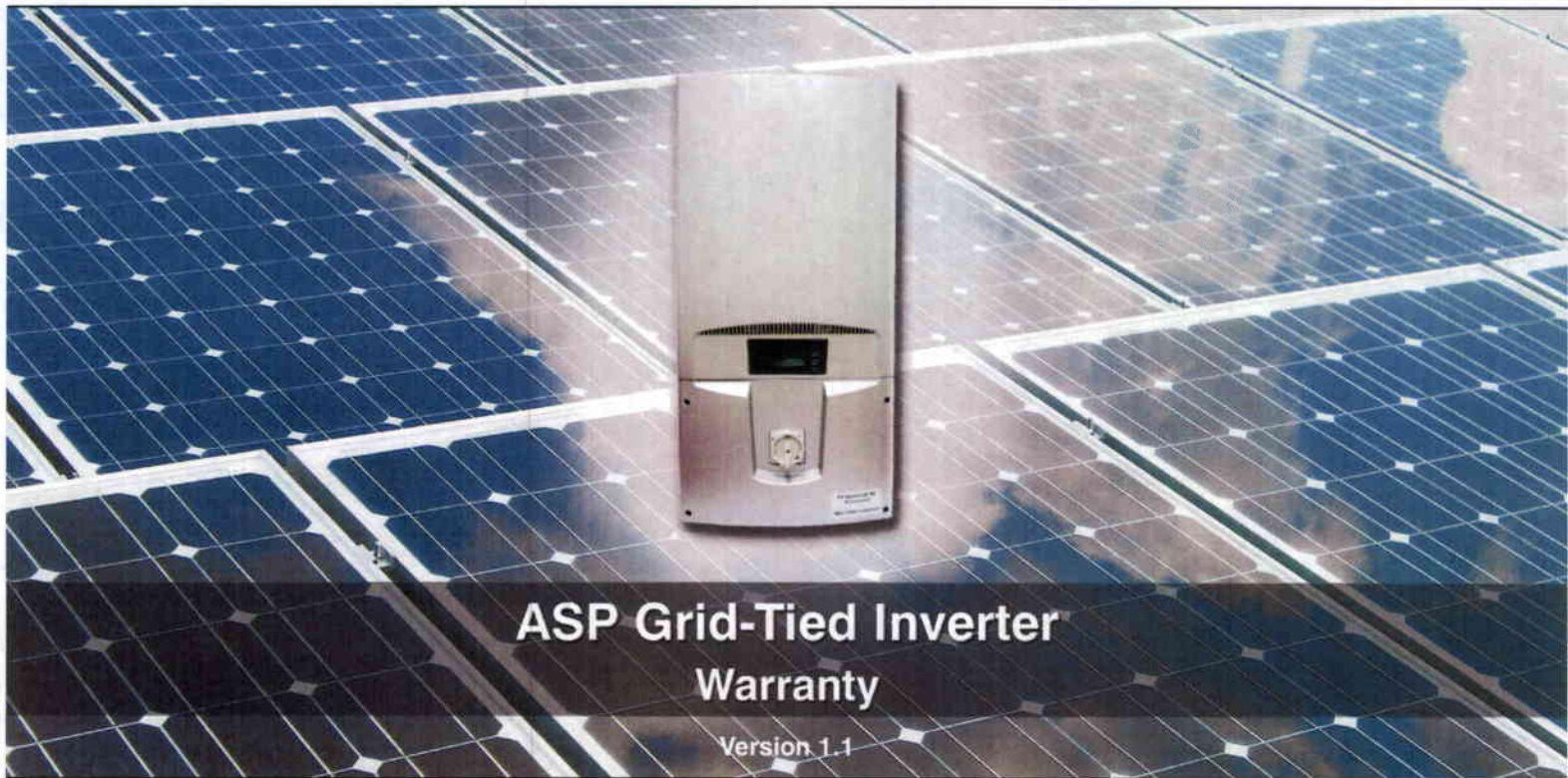
Look for the UL Listing Mark on the product.



William R. Carney, Director, North American Certification Programs
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at www.ul.com/contactus





The following describes the standard warranty policy for ASP's Grid-Tied Inverter product (the "Product") supplied by Advanced Solar Photonics ("ASP"). The warranty applicable for each specific product will be subject to the final agreement between ASP and the original purchaser (the "Purchaser").

Warranty Period

The standard warranty period offered by ASP is ten years.

The warranty period shall begin from the date of delivery.

Scope of Warranty

ASP warrants the Product to be free from defects in material or manufacture during the Warranty Period and covers replacement parts or repairs required during the Warranty Period subject to the warranty conditions listed below.

Warranty only applies to Purchaser and cannot be transferred. If the Purchaser sells the Product to end customers, the warranty provided to end customers shall be given by Purchaser and the end customers shall contact Purchaser in case of warranty claim.



Warranty Conditions

If a Product becomes defective during the relevant factory warranty period, one of the following services, as determined by ASP in its sole discretion, will be performed at no charge for materials or labor costs:

- repair at ASP; or
- repair on site; or
- exchange for a replacement device of equivalent value according to model and age. (In this case, the remainder of the warranty entitlement will be transferred to the replacement device.)

Exclusion of Warranty

The warranty is void and does not cover any defects or damages caused by in any of the following circumstances:

- (a) the Product has been misused, neglected, damaged or abused;
- (b) the Product has been improperly installed, operated, repaired or maintained;
- (c) the Product has been modified;
- (d) the Product has been connected to other equipment with which it is not compatible;
- (e) the Product has been used or stored in conditions outside its electrical or environmental specifications;
- (f) the Product has been used for purposes other than for which it was designed;
- (g) the Product has been used outside its stated specifications, operating parameters and application;
- (h) the seal on the Product is broken;
- (i) acts of third parties, atmospheric discharges, excess voltage, chemical influences, natural wear and tear and for loss and damage in transit;
- (j) improper testing, operation, maintenance, adjustment, repair, or any modification of any kind not authorized in writing by ASP personnel;
- (k) application beyond the scope of safety standards (e.g. VDE); and
- (l) neglect, accident, fire, flood, lightning, vandalism, acts of God.

Any equipment, parts or materials included in the Product and not manufactured by ASP are warranted solely by the manufacturer of such equipment, parts or materials and are not included as part of this warranty.



How to Assert a Warranty Claim

To assert a warranty claim, Purchaser shall complete a Field Failure Record ("FFR"). The FFR form is available from ASP at the following address

Advanced Solar Photonics
400 Rinehart Rd, Suite 1060
Lake Mary, FL 32746, USA
Attn: Engineering Department
Tel.: 407 804 1000
Fax: 407 333 9143

For determination of warranty entitlement, please submit a copy of the purchase receipt. The type plate on the device must be completely legible. Otherwise, ASP is entitled to refuse to provide warranty services.

If ASP accepts the warranty claim, ASP will instruct Purchaser to return the Product either to ASP or its authorized service agent. Wherever possible, use the original packaging to return items. If ASP accepts the warranty claim, ASP will provide, or arrange for, repair or replacement, as ASP shall determine in its sole discretion. ASP shall bear the cost of such repair or replacement. The Purchaser shall bear the cost of freight and insurance on the Product to ASP or its authorized service agent, as the case may be. ASP shall bear the cost of freight and insurance to return the Product to Purchaser.

ASP's sole responsibility is to repair or replace subject to a valid warranty claim.

In all cases, ASP's Standard Terms and Conditions apply. ASP's Standard Terms and Conditions are available at http://www.advancedsolarphotonics.com/wp-content/uploads/docs/ASP_Standard-Terms-Conditions_2012.pdf



[<- Back](#)

Product Description

Title: INVERTERS, CONVERTERS & CONTROLLERS & INTERCONNECTION SYSTEM EQUIPMENT

Company: ADVANCED SOLAR PHOTONICS, LLC - Lake Mary, FL USA

Product Information: PV Inverter, Grid-Tied, Model Nos. PV240, PV250, PV260, PV270.

Evaluated to the following: A representative sample of the listed devices have been tested, investigated and found to comply with the requirements of the Standard (s) for Inverters, Converters, Controllers & Interconnection System Equipment for Use With Distributed Energy Resources (UL-1741) and are identified with the ETL Listed Mark.

[<- Back](#)

Contact Us

Americas+1-888-347-5478
 (or +1-312-906-7801)
 Email dirlist@intertek.com

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**LIMITED WARRANTY FOR
ASP PV MODULES MODELS**

**AP-220PK, AP-225PK, AP-230PK, AP-235PK, AP-240PK, AP-175M, AP-180M, AP-185M,
AP-190M, AP-225MK, AP-230MK, AP-235MK, AP-240MK, AP-245MK, AP-390M, AP-395M,
AP-400M, AP-405M, AP-410M, AP-140GSM, AP-400GSM**

Effective 01.01.2012 – 12.31.2013
Doc# 01.2012.1106.Rev.4

I. This Limited Product Warranty – applies to photovoltaic modules models **AP-220PK, AP-225PK, AP-230PK, AP-235PK, AP-240PK, AP-175M, AP-180M, AP-185M, AP-190M, AP-225MK, AP-230MK, AP-235MK, AP-240MK, AP-245MK, AP-390M, AP-395M, AP-400M, AP-405M, AP-410M, AP-140GSM, AP-400GSM** manufactured by Advanced Solar Photonics, LLC or affiliated company "ASP". ASP warrants the quality of those PV modules and specifies the scope of such warranty.

Five (5) years limited PV Module warranty.

ASP PV Photovoltaic modules ("PV modules") 5 (five) years from the date of delivery, shall be free from defects in materials and workmanship under normal application, installation, use and service conditions. If the PV modules fail to conform to this warranty, then for a period ending five (5) years from date of delivery to the original end-Buyer ("the Buyer"), Advanced Solar Photonics will, at its option, either repair or replace the product. The repair or replacement remedy shall be the sole and exclusive remedy provided under the Limited Product Warranty and shall not extend beyond the five (5) year period set forth herein. This Limited Product Warranty does not warrant a specific power output, which shall be exclusively covered under clause 2 hereinafter (Limited Power Warranty).

ASP warrants the PV modules to be free from the defects and/or failures specified below for a period not exceeding five (5) years from the date of sale to the original customer. Those defects characterized as follows:

- 1) Defects and/or failures due to the manufacturing;
- 2) Defects and/or failures due to materials and components;
- 3) Cracking in the front glass surface due to the foreign objects inside the glass. This limited warranty excludes cracking of the glass surface due to the external stress or external shock from the external impact of flying objects or debris.
- 4) Non-conformity to the specifications due to faulty manufacturing and/or inspection process.

If the PV Modules fails to conform to this warranty ASP will repair or replace the defective module(s) at ASP's sole option.

II. Limited Power Warranty. Subject to ASP determining at its sole discretion that any power loss is due solely to defects in materials or workmanship, ASP warrants the power of the PV modules as follows:

The warranty period with respect to power output continues for a total of 25 years from date of purchase, the first 10 years at 90% minimum rated power output and the balance of 15 years at 80% minimum rated power output. This shall pertain to all models apart from model numbers **ASP-140GSM, ASP-400GSM**, which shall be the sole models to have this final period of 80% minimum rated power extended to 20 years achieving a total **Limited Power Warranty** period not to exceed 30 years.

This warranty is transferable when product remains installed in original location at the time of product warranty registration.

If the PV Modules fails to conform to this warranty ASP will repair or replace the defective module(s) at ASP's sole option.

III. Exclusions and Limitations. Warranty claims must in any event be filed within the applicable Warranty period. Warranty claims may only be made by, or on the behalf of, the original end Buyer or a person to whom title has been transferred for the PV Modules.

The Limited Warranties do not apply to any of the following:

1. PV modules which in Advanced Solar Photonics' absolute judgment have been subjected to: misuse, abuse, neglect or accident; alteration, improper installation, application or removal (including but not limited to installation, application or removal by any party other than an Advanced Solar Photonics authorized dealer; non-observance of Advanced Solar Photonics' installation, users and/or maintenance instructions; repair or modifications by someone other than an approved service technician of Advanced Solar Photonics; power failure surges, lightning, flood, fire, accidental breakage or other events outside Advanced Solar Photonics' control.
2. Cosmetic defects stemming from normal wear and tear of PV module materials.
3. PV modules installed in locations, which in Advanced Solar Photonics' absolute judgment may be subject to direct contact with salt water.
4. The Limited Warranties do not cover any transportation costs for return of the PV modules, or for reshipment of any repaired or replaced PV modules, or cost associated with installation, removal or reinstallation of the PV modules.
5. When used on a mobile platform of any type, the Limited Power Warranty, applying to any of the PV modules shall be limited to twelve (12) years.

Warranty claims will not apply if the type or serial number of the PV modules is altered, removed or made illegible.

1. *"Minimum Peak Power" = Peak power minus the Peak power tolerance (as specified in Advanced Solar Photonics' Product datasheet). "Peak power" is the power in peak watts that a PV module generates at STC (Standard Test conditions: Irradiance of 1000 W/m², light spectrum AM 1.5g and a cell temperature of 25 degrees C)*

Additional Item(s) Excluded from Warranty Coverage

Warranty coverage does not apply when:

1. The Product is improperly installed.
2. The Product is installed in a mobile or marine environment, subjected to improper voltage or power surges or abnormal environmental conditions (such as acid rain or other pollution),
3. The components in the construction base on which the module is mounted are defective
4. External corrosion, mold discoloration or the like occurs.

IV. Limited Product Warranty. SUBJECT TO THE LIMITATIONS UNDER APPLICABLE LAW, THE LIMITED WARRANTIES SET FORTH HEREIN ARE EXPRESSLY IN LIEU OF AND EXCLUDE ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR PARTICULAR PURPOSE, USE, OR APPLICATION, AND ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF ADVANCED SOLAR PHOTONICS, UNLESS SUCH OTHER WARRANTIES, OBLIGATIONS OR LIABILITIES ARE EXPRESSLY AGREED TO IN WRITING SIGNED AND APPROVED BY ADVANCED SOLAR PHOTONICS. ADVANCED SOLAR PHOTONICS SHALL HAVE NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR DAMAGE OR INJURY TO PERSONS OR PROPERTY OR FOR OTHER LOSS OR INJURY RESULTING FROM ANY CAUSE WHATSOEVER ARISING OUT OF OR RELATED TO THE PRODUCT, INCLUDING, WITHOUT LIMITATION, ANY DEFECTS IN THE MODULE, OR FROM USE OR INSTALLATION. UNDER NO CIRCUMSTANCES SHALL ADVANCED SOLAR PHOTONICS BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, HOWSOEVER CAUSED. LOSS OF USE, LOSS OF PROFITS, LOSS OF PRODUCTION, LOSS OF REVENUES ARE THEREFORE SPECIFICALLY BUT WITHOUT LIMITATION EXCLUDED. ADVANCED SOLAR PHOTONICS' AGGREGATE LIABILITY, IF ANY, IN DAMAGES OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID TO ADVANCED SOLAR PHOTONICS BY THE BUYER, FOR THE UNIT OF PRODUCT OR SERVICE FURNISHED OR TO BE FURNISHED, AS THE CASE MAY BE, WHICH GAVE RISE TO THE WARRANTY CLAIM. SOME STATES DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES OR THE EXCLUSION OF DAMAGES SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

V. Limitation of Liability. EXCEPT FOR THE WARRANTIES STATED HEREIN FOR THE BUYER, NO WARRANTY, CONDITION OR REPRESENTATION, EXPRESS, IMPLIED, ORAL OR STATUTORY, IS PROVIDED TO THE BUYER OR ANY THIRD PARTY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY, CONDITION OR REPRESENTATION: (A) OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE; (B) THAT THE PRODUCTS WILL BE FREE FROM INFRINGEMENT OR VIOLATION OF ANY RIGHTS, INCLUDING INTELLECTUAL

PROPERTY RIGHTS, OF THIRD PARTIES; OR (C) THAT THE OPERATION OF THE SOFTWARE WILL BE UNINTERRUPTED OR ERROR FREE. THIS DISCLAIMER AND EXCLUSION SHALL APPLY EVEN IF THE EXPRESS WARRANTY HEREIN FAILS OF ITS ESSENTIAL PURPOSE. THE BUYER'S SOLE AND EXCLUSIVE REMEDIES HEREUNDER AND THE ONLY LIABILITY OF SELLER IS EXPRESSLY LIMITED TO THE TERMS OF THE AGREEMENT. SELLER SHALL NOT BE LIABLE TO THE BUYER, OR ANY THIRD PARTY, FOR ANY OTHER SPECIAL, CONSEQUENTIAL, INCIDENTAL, EXEMPLARY OR INDIRECT COSTS OR DAMAGES, INCLUDING WITHOUT LIMITATION, LITIGATION COSTS, INSTALLATION AND REMOVAL COSTS, LOSS OF DATA, PRODUCTION OR PROFIT ARISING FROM ANY CAUSE WHATSOEVER, REGARDLESS OF THE FORM OF THE ACTION, WHETHER IN CONTRACT, TORT (INCLUDING SELLER'S OWN NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH COSTS OR DAMAGES. FOR PURPOSES OF THIS PROVISION, SELLER INCLUDES SELLER'S DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, REPRESENTATIVES, SUBCONTRACTORS AND SUPPLIERS. IN NO EVENT SHALL THE TOTAL COLLECTIVE CUMULATIVE LIABILITY OF SELLER, ITS EMPLOYEES, OFFICERS, AGENTS AND DIRECTORS EXCEED THE AMOUNT PAID TO SELLER FOR PRODUCTS FROM WHICH SUCH LIABILITY AROSE DURING THE TWELVE (12) MONTH PERIOD PRECEDING THE DATE OF THE MOST RECENT CLAIM.

VI. Obtaining Warranty Performance. If you feel you have a justified claim covered by this Limited Warranty, immediately notify the (a) Installer, who sold the PV-modules, or (b) any authorized Advanced Solar Photonics distributor, of the claim in writing, or (c) send such notification to Advanced Solar Photonics Corporation, 400 Rinehart Rd, Lake Mary, FL 32792, directly. In addition, please enclose evidence of the date of delivery of the PV module. If applicable, your installer or distributor will give advice on handling the claim. If further assistance is required, please write to Advanced Solar Photonics for instructions. The return of any PV-modules will not be accepted unless prior written authorization has been given by Advanced Solar Photonics.

ADVANCED SOLAR PHOTONICS LLC.
HEAD OFFICE: USA | 400 RINEHART ROAD #1000 | LAKE MARY | FL 32746 USA
www.advancedsolarphotonics.com | info@aspfab.com
TEL: 407.804.1000 | FAX: 407.333.9143



SOLAR PV SYSTEM PURCHASE AGREEMENT

Buyer's Name: _____ Date: _____

Address: _____ City: _____ State: _____ Zip Code: _____

Home Phone: _____ Cell Phone: _____ E-mail: _____

Existing Roof Conditions and Options: Shingles Tile Metal Micro Inverters Monitoring Utility Provider: _____

I. The Product. The Product as Purchased is _____. The term nominal in the contract below means that a system can be installed with more or less 3% of the DC output. **Buyer's Initials** _____ **Seller's Initials** _____

2.5 kWatt (Nominal)	5.0 kWatt (Nominal)	7.5 kWatt (Nominal)	10.0 kWatt (Nominal)	25.0 kWatt (Nominal)	Description:

Method of Payment: Credit Card Check Cash Finance

Special Payment Terms: _____

Notes: _____

II. Price and Terms of Payment. The purchase price for the Product, including technical materials, is a total of \$_____ (USD) [Check one: inclusive exclusive] of the cost of installation. Buyer shall make the milestone payments to Seller in accordance with the terms described herein. At the time of execution of this Agreement, Buyer shall make a Down Payment of **50%** (for cash accounts only) of the purchase price pursuant to the instructions in the invoice issued by Seller, unless otherwise agreed. Immediately upon notification by Seller that the Product is ready for shipment, Buyer shall pay Seller the remaining balance due to Seller. All payback calculations presented by Seller are estimates only. All payback calculations should be confirmed with your state, utility company, or any other source of such paybacks. Customer is fully responsible for structural and roof conditions and net metering fee.

III. Right of Rescission. Notwithstanding other provisions of this Agreement, Buyer has the right to terminate this Agreement without penalty no later than by midnight of the third (3rd) business day from the date of execution of this Agreement by written notice to Seller by United States Certified Mail, Return Receipt Requested. This cancellation must be clear of intent, written in English and postmarked before midnight of the third business day after the date on which Buyer signs this Agreement. For the purposes of this provision, a "business day" shall include Monday through Saturday, but shall not include Sundays or any legal holiday on which the U.S. Postal Service does not deliver mail.

IV. Shipment and Delivery. Seller shall ship the Product purchased pursuant to this Agreement to Buyer at an estimated time of ten to twelve weeks after the date on which Seller receives Buyer's Down Payment. Conditions of shipment and delivery shall be subject to the conditions set forth in this Agreement and in the Standard Terms and Conditions. Partial shipments and early shipments are allowed as needed and any shipment may be transshipped as may be appropriate. The shipment schedule is contingent upon timely receipt by Seller of Buyer's Down Payment, timely payment of the balance of the purchase price, and the fulfillment of other conditions that, if applicable, are stated elsewhere in this Agreement. Any failure by Buyer to adhere to the payment plan as outlined in Article IV may cause Seller to revise the shipment schedule.

V. Installation. When Buyer receives the shipment of the Product from Seller, Seller shall arrange for the Product to be installed at the Project Address indicated above. PV system will be installed by currently certified Contractor.

VI. Federal and State Rebates. Buyer shall, at his or her option and without Seller's involvement, apply for any federal and state rebates, tax credits or any other governmental incentives made available by federal and state governments for the purchase of solar systems. Seller shall not be liable in any way to Buyer or to any third party for filing for or obtaining of any such rebates. Seller also does not guarantee and shall not be liable for the amount of rebate applicable to Buyer or the issuance and delivery of the rebate payment.

VII. Financing Option. Buyer shall have the option to apply for financing as arranged by Seller for the purchase of the Product.

BUYER HEREBY ACKNOWLEDGES THAT HE/SHE HAS READ THIS AGREEMENT IN FULL AND AGREES TO THE TERMS THEREOF.

 Buyer Date Energy Specialist, BlueChip Energy, LLC Date
 (Sign and print)

 Buyer Date Officer Authorization, BlueChip Energy, LLC Date

(Additional Terms on Reverse)

Terms and Conditions of Sale. This sale is contingent upon site approval by Seller's authorized installer. If at any time Buyer is delinquent in the payment of any invoice or is otherwise in breach of this Agreement, Seller may, at its discretion, stop performance of services or withhold shipment (including partial shipments) of any order and may require Buyer to pre-pay for further performance or shipments. All payments not received when due shall be subject to an additional charge of one and one half percent (1.5%) per month (annual rate 19.56%) of the unpaid amount or the maximum rate permitted by law, whichever is less, until the date of payment. Buyer shall be liable for all costs of collection of payment due to Seller. Buyer grants Seller a security interest in Products (excluding services) purchased under this Agreement to secure payment for those Products purchased. If requested by Seller, Buyer agrees to execute financing statements to perfect such security interest. There is no set-off right for the Buyer. Buyer understands and acknowledges that proper operation of the Product purchased pursuant to this Agreement is dependent on Buyer's existing roof, plumbing and other equipment not supplied by Seller and Seller shall have no obligation or liability for the condition thereof. Risk of loss to the product shall pass to Buyer upon Seller's delivery of the product to Buyer's project address. The Buyer further understands the Seller may at its discretion choose material and system components based on performance expectations and physical parameters of the project.

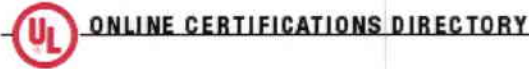
Assignment of Environmental Attributes. The Customer assigns to BCE all environmental attributes, including without limitation carbon offsets and renewable energy certificates, produced by the System throughout its lifetime, unless such environmental attributes have been or will be assigned to the customer's utility as part of a rebate program.

Limited Product Warranty. Seller provides an installation warranty (on parts and labor) for the "Fusion™ System" for a period of twelve (12) months from the date of certification. Product warranties for panels (typically 25 years -- 90% minimum rated power output for the first 10 years and 80% minimum rated power output for the balance of 15 years) and inverters (typically 10 years) are provided by the respective manufacturers and are separate from BCE's installation warranty. Notwithstanding any provision to the contrary (but subject to the operation of any law to the extent it cannot be excluded), Seller's sole and exclusive obligations to the Customer for any Product made by Seller and sold hereunder are to repair returned Product or provide a replacement Product, at Seller's sole option, for any Product which has been returned to Seller under the Return Material Authorization (RMA) procedure (as defined below) and which in the reasonable opinion of Seller is determined to be defective in workmanship, material or not in compliance with the Seller specification applicable to the Product and has in fact failed under normal use on or before 12 months from the date of certification unless implicitly stated otherwise for a particular Product. An extended warranty may be purchased for an additional price, as quoted by Seller. All Products, which are prototypes, experimental, alpha, beta, field trial or unqualified Products, are not warranted. Further, Seller does not warrant rubber, plastic parts, or safety seals. Seller assumes no liability or responsibility for third parties' components that may be contained in Seller's Product; these components carry their own original manufacturer's warranty that may be transferrable to Buyer. Any Product repaired or replaced under warranty is only warranted for the period of time remaining in the original warranty for the Product. Seller reserves the right, at its sole option, to repair or replace any defective Product. The warranty provided herein shall extend to any Product which has proved defective and has failed through normal use, but excludes and does not cover any Product or parts thereof which have been accidentally damaged, disassembled, modified, misused, repaired or reworked (by any party other than Seller or its authorized agents), improperly stored or handled, used in conjunction with another product that is electronically or mechanically incompatible or of an inferior quality, or used in applications which exceed the Product specifications or ratings, neglected, improperly installed or otherwise abused or is used in hazardous activities or locations. Customer must submit a claim under the warranty in writing no later than thirty (30) days after the claimed defect is discovered. The Customer must make all claims under these warranties and no claim will be accepted from any third party. The warranties set forth herein are non-transferable. NOTWITHSTANDING ANY PROVISION OF THIS AGREEMENT OR OTHER RELATED DOCUMENTATION (INCLUDING WITHOUT LIMITATION ANY SPECIFICATIONS) TO THE CONTRARY, THE PROVISIONS OF WARRANTIES SET FORTH HEREIN ARE THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES FOR ANY DEFECTIVE OR NONCONFORMING PRODUCTS.

Return Material Authorization Procedures. Seller will only accept Products returned under the Seller Return Material Authorization process ("RMA"). Customer shall obtain a RMA number from Seller prior to returning any Product and return the Product prepaid and insured to Seller to the FOB point of Lake Mary, Florida. Seller will replace or repair, at its option, any component found to be defective, in normal service during the warranty period. Any Product which has been returned to Seller but which is found to meet the applicable specification for the Product and not defective in workmanship and or material, shall be subject to Seller's standard examination charge in effect at the time which shall be charged to the Customer. Where any Product is returned without an itemized statement of claimed defects, Seller will not evaluate the Product but will return it to the Customer at the Customer's expense.

Dispute Resolution. If any dispute arises between any of the Parties in connection with the validity, interpretation, implementation or alleged material breach of any provision of this Agreement, they shall endeavor to settle such dispute amicably and in good faith. In the case of failure by the Parties to resolve the dispute in the manner set out above within 30 (thirty) days from the date when the dispute arose, the dispute shall be referred to a mutually acceptable sole arbitrator. The place of the court of arbitration shall be Seminole County, Florida, U.S.A. The arbitration proceedings shall be conducted in accordance with the applicable Florida Arbitration Code and shall be conducted in the English language. The arbitrator's decision shall be final and legally binding and judgment may be entered thereon. The arbitrator shall also decide on the costs of the arbitration proceedings. The cost of arbitration shall be borne by the losing party or by both parties in proportions decided by the arbitrators. The arbitrator's award shall be limited to actual damages only. The parties agree that any arbitration or other action in relation to an alleged breach of this Agreement shall be commenced within one year of the date of the breach, without regard to the date the breach is discovered. Any arbitration or other action not commenced within that one year time period shall be barred, without regard to any other limitations period set forth by law or statute.

Legal. This Agreement constitutes the entire agreement between the parties hereto concerning the subject matter of this Agreement, apart from existing non-disclosure agreements, and there are no understandings, agreements, representations, conditions, warranties, or other terms, express or implied, which are not specified herein. The validity, interpretation and performance of this Agreement shall be governed by and construed under the applicable laws of the State of Florida and the United States of America, as if performed wholly within the state and without giving effect to the principles of conflict of laws. Seller and Buyer hereby irrevocably and unconditionally submit to the jurisdiction of the courts of the State of Florida and all courts competent to hear appeal therefrom and venue in Seminole County, Florida. No forbearance, indulgence or relaxation or inaction by either Party at any time to require performance of any of the provisions of this Agreement shall in any way affect, diminish or prejudice the right of either Party to require performance of that provision presently or in the future. Any waiver or acquiescence by either Party of any breach of any of the provisions of this Agreement shall not be construed as a waiver or acquiescence of any right under or arising out of this Agreement or of the subsequent breach, or acquiescence to or recognition of rights other than as expressly stipulated in this Agreement or as otherwise agreed by the parties in writing. This Agreement shall not be assigned or otherwise transferred by Buyer without the prior written consent of Seller and shall inure to the benefit of the successors and permitted assigns of the parties. This Agreement may only be modified by a written document executed by authorized representatives of Seller and Buyer. In the event that any of the terms of this Agreement, apart from payment, become or are declared to be unenforceable by any court of competent jurisdiction, such terms shall be null and void and shall be deemed deleted from this Agreement, but only to the extent that such term is unenforceable, it being the intent and agreement of the parties that the Agreement shall be deemed amended by modifying such term to the extent necessary to make it legal, valid or enforceable while preserving its intent or, if that is not possible, by substituting therefore another term that is enforceable and achieves the same objective. All remaining terms of this Agreement shall remain in full force and effect.



QIGU.E342475 Photovoltaic Modules and Panels

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Photovoltaic Modules and Panels

[See General Information for Photovoltaic Modules and Panels](#)

BLUECHIP ENERGY L L C
SUITE 1060
400 RINEHART RD
LAKE MARY, FL 32746 USA

E342475



Trademark and/or Tradename: **ASP**

Photovoltaic modules, Models ASP-385M, #ASP-390M, ASP-395M, ASP-400M, ASP-405M, ASP-410M.

Models AP-220, AP-225, AP-230, #AP-235, #AP-240, #AP-245.

- Evaluated to the requirements of "CEC-300-2011-005-CMF - Guidelines for California's Solar Electric Incentive Programs".

[Last Updated](#) on 2013-01-11

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From: Carlos Gonzalez [Carlos.Gonzalez@usinvestingcorp.com]
Sent: Friday, March 01, 2013 5:36 PM
To: Pietrzak, Joseph F.
Cc: Demitri Nikitin; Wayne Tupuola
Subject: FW: Panel Recall flow
Attachments: Panel Recall Flow.pdf

Hi Joe:

Here is the procedure that we have established. On Monday I will obtain the final list of potential customers affected and will determine a timetable for doing all the work.

Best regards,

Carlos M. Gonzalez

Business Development Director - BlueChip Energy, LLC
Managing Director – Sorrento Solar Farm, LLC
400 Rinehart Road, Lake Mary, Florida 32746
407-878-5752 cel 407-497-0101
cgonzalez@USInvestingCorp.com



www.SorrentoSolarFarm.com

www.Bluechipenergy.net

www.ASPFAB.com

From: Wayne Tupuola
Sent: Friday, March 01, 2013 3:15 PM
To: Carlos Gonzalez
Subject: FW: Panel Recall flow

FYI,

Wayne Tupuola

Vice President of Operations
Advanced Solar Photonics, LLC
400 Rinehart Road, Suite 1000
Lake Mary, FL 32746
(407) 804-1000 ext. 509
www.AdvancedSolarPhotonics.com



Winner of the 2010 Governor's Business Diversification Award for Green-to-Gold

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From: Wayne Tupuola
Sent: Thursday, February 21, 2013 3:00 PM
To: Andy White; Ronald Henson; Penny Romano; Julie McKee; Carrie Valentine; Genti Zeqo
Cc: Demitri Nikitin; Lana Nikitin
Subject: Panel Recall flow

To all: In regards to a process flow of the ASP panel recall, this is a signed and agreed upon approach to follow. Please submit to me a request for approval if additional resources are required.

Thanks,

Wayne Tupuola
Vice President of Operations
Advanced Solar Photonics, LLC
400 Rinehart Road, Suite 1000
Lake Mary, FL 32746
(407) 804-1000 ext. 509
www.AdvancedSolarPhotonics.com

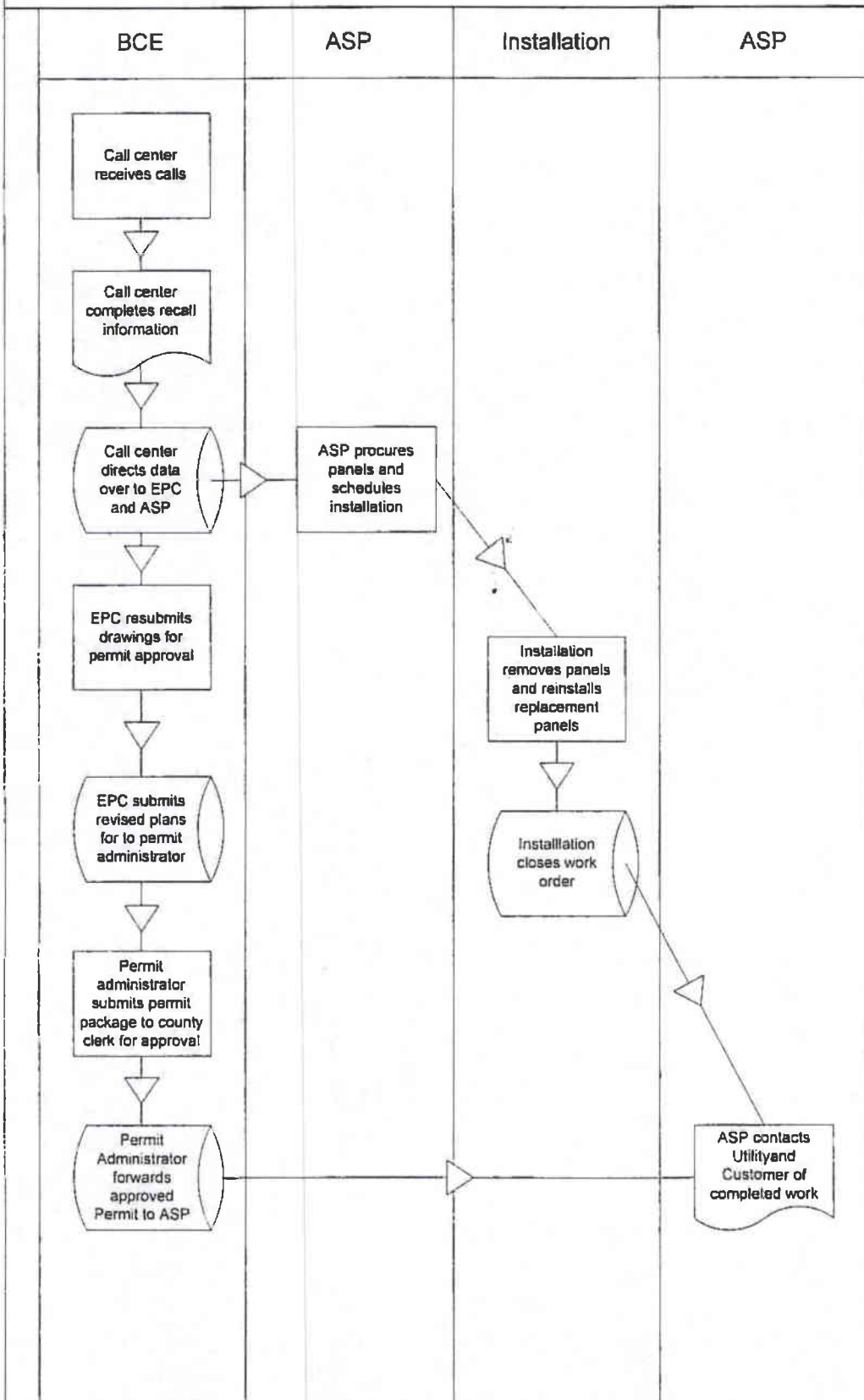


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Panel Recall



Ad White
W. Smith
J. Romano
Justin Man
Julie Miller
C. Valentin
UFA

From: Demitri Nikitin [dnikitin@ICT-Investments.com]
Sent: Monday, March 04, 2013 5:15 PM
To: Pietrzak, Joseph F.
Cc: Carlos Gonzalez
Subject: Links to BCE and ASP certifications

UL

<http://database.ul.com/>

Type company name as: BLUECHIP ENERGY

CSA

http://directories.csa-international.org/cert_rec_srch.asp?txtDir=* &Submit=Search&txtCustomer=blue+chip+energy&txtProvState=&txtCountry=&txtFile=&txtMajorClass=&txtMinorClass=&txtClassDesc=&txtKeyword=

Intertek

<http://etlwhidirectory.etlsemko.com//WebClients/ITS/DLP/products.nsf/vwSearch?SearchView&Query=FIELD%20ListHead%20Contains%20advanced%20solar%20photonics%20or%20FIELD%20CatCode%20Contains%20advanced%20solar%20photonics%20or%20FIELD%20Title%20Contains%20advanced%20solar%20photonics%20or%20FIELD%20ProductInformation%20Contains%20advanced%20solar%20photonics%20or%20FIELD%20ProductInfo%20Contains%20advanced%20solar%20photonics&SearchOrder=1&SearchMax=1000&SearchWV=FALSE&SearchThesaurus=FALSE&SearchFuzzy=FALSE>

Demitri Nikitin
BlueChip Energy



400 Rinehart Rd #1060
Lake Mary FL 32746
Tel: 407-804-1000 x 503
fax: 407-333-9143
email: dnikitin@bluechipenergy.org
Skype: demitri.nikitin2
www.bluechipenergy.org

Winner of the 2010 Governor's Business Diversification Award for Green-to-Gold

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From: Julie McKee
Sent: Friday, February 01, 2013 2:31 PM
To: Julie McKee
Cc: Claudio Brito; Scott DeGraff
Subject: System Inspections

Dear BlueChip Customer,

In the coming week, BlueChip Energy will be scheduling annual inspections of Fusion systems. As part of this scheduled customer visit, we will be conducting an inspection on solar systems for performance and safety.

Should any part of the system equipment not meet code compliance, performance expectations, or safety standards, it will be replaced at no cost to you.

Please cooperate with our scheduling department to set up an inspection visit or call us at 1-407-878-5742 between 9 a.m. and 5 p.m. Monday through Friday.

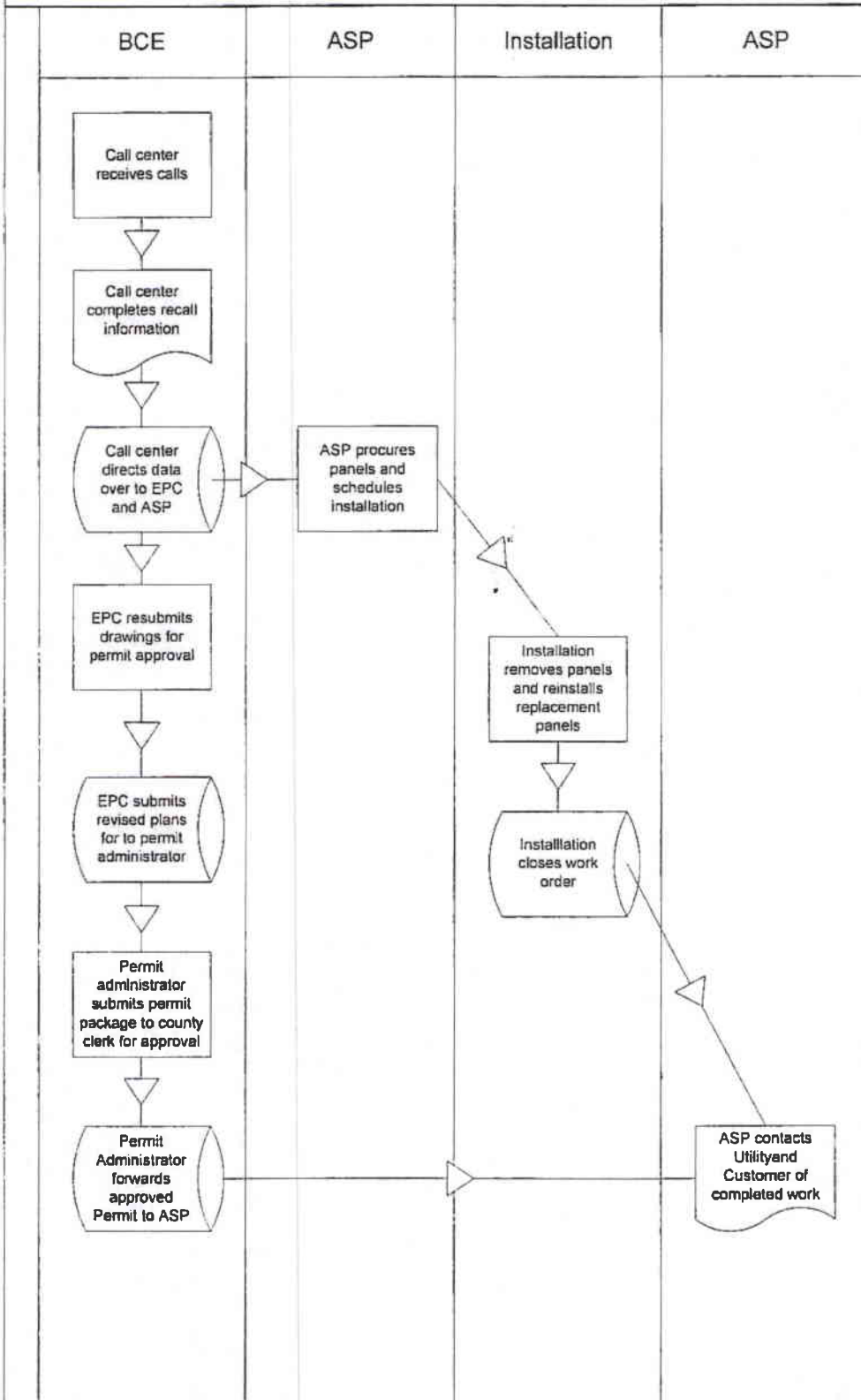
Thank you for your cooperation.

Julie McKee
Sales Administrator
BlueChip Energy, LLC
400 Rinehart Road, Suite 1000
Lake Mary, FL 32746
Tel: (407) 804-1000 x510
Direct: (407) 878-5745
Fax: (407) 333-9143
www.BlueChipEnergy.net



www.SunHouseSolar.com

Panel Recall



Ad White
W Smith
J Bonoro
Justin Man
Julie Mote
C Valentini
UFA



March 7, 2013

Procedure for ASP Photovoltaic panel inspection, evaluation and replacement.

All replacements shall be generally carried in accordance to Limited Product Warranty for the Residential systems outlined in SOLAR PV SYSTEM PURCHASE AGREEMENT Doc# PSA07.2011.Rev.12.JM. Document Attached.

1. Limited Product Warranty. Seller provides an installation warranty (on parts and labor) for the "Fusion™ System" for a period of twelve (12) months from the date of certification. Product warranties for panels (typically 25 years -- 90% minimum rated power output for the first 10 years and 80% minimum rated power output for the balance of 15 years) and inverters (typically 10 years) are provided by the respective manufacturers and are separate from BCE's installation warranty. Notwithstanding any provision to the contrary (but subject to the operation of any law to the extent it cannot be excluded), Seller's sole and exclusive obligations to the Customer for any Product made by Seller and sold hereunder are to repair returned Product or provide a replacement Product, at Seller's sole option, for any Product which has been returned to Seller under the Return Material Authorization (RMA) procedure (as defined below) and which in the reasonable opinion of Seller is determined to be defective in workmanship, material or not in compliance with the Seller specification applicable to the Product and has in fact failed under normal use on or before 12 months from the date of certification unless implicitly stated otherwise for a particular Product. An extended warranty may be purchased for an additional price, as quoted by Seller. All Products, which are prototypes, experimental, alpha, beta, field trial or unqualified Products, are not warranted. Further, Seller does not warrant rubber, plastic parts, or safety seals.

Seller assumes no liability or responsibility for third parties' components that may be contained in Seller's Product; these components carry their own original manufacturer's warranty that may be transferrable to Buyer. Any Product repaired or replaced under warranty is only warranted for the period of time remaining in the original warranty for the Product.

Seller reserves the right, at its sole option, to repair or replace any defective Product. The warranty provided herein shall extend to any Product which has proved defective and has failed through normal use, but excludes and does not cover any Product or parts thereof which have been accidentally damaged, disassembled, modified, misused, repaired or reworked (by any party other than Seller or its authorized agents), improperly stored or handled, used in conjunction with another product that is electronically or mechanically incompatible or of an inferior quality, or used in applications which exceed the Product specifications or ratings, neglected, improperly installed or otherwise abused or is used in hazardous activities or locations.

Customer must submit a claim under the warranty in writing no later than thirty (30) days after the claimed defect is discovered. The Customer must make all claims under these warranties and no claim will be accepted from any third party. The warranties set forth herein are non-transferable. NOTWITHSTANDING ANY PROVISION OF THIS AGREEMENT OR OTHER RELATED DOCUMENTATION (INCLUDING WITHOUT LIMITATION ANY SPECIFICATIONS) TO THE CONTRARY, THE PROVISIONS OF WARRANTIES SET FORTH HEREIN ARE THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES FOR ANY DEFECTIVE OR NONCONFORMING PRODUCTS.

2. Return Material Authorization Procedures. Seller will only accept Products returned under the Seller Return Material Authorization process ("RMA"). Customer shall obtain a RMA number from Seller prior to returning any Product and return the Product prepaid and insured to Seller to the FOB point of Lake Mary, Florida. Seller will replace or repair, at its option, any component found to be defective, in normal service during the warranty period. Any Product which has been returned to Seller but which is found to meet the applicable specification for the Product and not defective in workmanship and or material, shall be subject to Seller's standard examination charge in effect at the time which shall be charged to the Customer. Where any Product is returned without

2. Panel Inspection Procedures. Panels must be inspected by authorized and trained by BlueChip Energy personnel. Inspection should be conducted according to Manufacturer Panel Warranty.

BLUECHIP ENERGY LLC

HEAD OFFICE: USA | 400 RINEHART ROAD #1060 | LAKE MARY | FL 32746 USA
www.bluechipenergy.org | fusion@bluechipenergy.org | TEL: 407.804.1000 | FAX: 407.333.9143

If panels will be found Non-Compliant they have to be replaced in accordance with LIMITED WARRANTY FOR ASP PV MODULES MODELS AP/ASP190, AP/ASP215, AP/ASP220, AP/ASP225, AP/ASP230, AP/ASP235, AP/ASP240, AP/ASP245, AP/ASP390, ASP395, AP/ASP400, AP/ASP405, AP/ASP410. Doc# 01.2011.1106.Rev.3 Document Attached.

I. This Limited Product Warranty – applies to photovoltaic modules models AP/ASP190, AP/ASP215, AP/ASP220, AP/ASP225, AP/ASP230, AP/ASP235, AP/ASP240, AP/ASP245, AP/ASP390, ASP395, AP/ASP400, AP/ASP405, AP/ASP410 manufactured by Advanced Solar Photonics, LLC or affiliated company "ASP". ASP warrants the quality of those PV modules and specifies the scope of such warranty.

Five (5) years limited PV Module warranty.

ASP PV Photovoltaic modules ("PV modules") 5 (five) years from the date of delivery, shall be free from defects in materials and workmanship under normal application, installation, use and service conditions. If the PV modules fail to conform to this warranty, then for a period ending five (5) years from date of delivery to the original end-Buyer ("the Buyer"), Advanced Solar Photonics will, at its option, either repair or replace the product. The repair or replacement remedy shall be the sole and exclusive remedy provided under the Limited Product Warranty and shall not extend beyond the five (5) year period set forth herein. This Limited Product Warranty does not warrant a specific power output, which shall be exclusively covered under clause 2 hereinafter (Limited Power Warranty).

ASP warrants the PV modules to be free from the defects and/or failures specified below for a period not exceeding five (5) years from the date of sale to the original customer. Those defects characterized as follows:

- 1) Defects and/or failures due to the manufacturing;
- 2) Defects and/or failures due to materials and components;
- 3) Cracking in the front glass surface due to the foreign objects inside the glass. This limited warranty excludes cracking of the glass surface due to the external stress or external shock from the external impact of flying object or debris.
- 4) Non-conformity to the specifications due to faulty manufacturing and/or inspection process.

If the PV Modules fails to conform to this warranty ASP will repair or replace the defective module(s) at ASP's sole option.

II. Limited Power Warranty. Subject to ASP determining at its sole discretion that any power loss is due solely to defects in materials or workmanship, ASP warrants the power of the PV modules as follows:

The warranty period with respect to power output continues for a total of 25 years from date of purchase, the first 10 years at 90% minimum rated power output and the balance of 20 years at 80% minimum rated power output.

This warranty is transferable when product remains installed in original location at the time of product warranty registration.

If the PV Modules fails to conform to this warranty ASP will repair or replace the defective module(s) at ASP's sole option.

III. Exclusions and Limitations. Warranty claims must in any event be filed within the applicable Warranty period. Warranty claims may only be made by, or on the behalf of, the original end Buyer or a person to whom title has been transferred for the PV Modules.

The Limited Warranties do not apply to any of the following:

1. PV modules which in Advanced Solar Photonics's absolute judgment have been subjected to: misuse, abuse, neglect or accident; alteration, improper installation, application or removal (including but not limited to installation, application or removal by any party other than a Advanced Solar Photonics authorized dealer; non-observance of Advanced Solar Photonics's installation, users and/or maintenance instructions; repair or modifications by someone other than an approved service technician of Advanced Solar Photonics; power failure surges, lightning, flood, fire, accidental breakage or other events outside Advanced Solar Photonics's control.
2. Cosmetic defects stemming from normal wear and tear of PV module materials.
3. PV modules installed in locations, which in Advanced Solar Photonics's absolute judgment may be subject to direct contact with salt water.
4. The Limited Warranties do not cover any transportation costs for return of the PV modules, or for reshipment of any repaired or replaced PV modules, or cost associated with installation, removal or reinstallation of the PV modules.
5. When used on a mobile platform of any type, the Limited Power Warranty, applying to any of the PV modules shall be limited to twelve (12) years as per the provisions of clause 2(a) hereof.

Warranty claims will not apply if the type or serial number of the PV modules is altered, removed or made illegible.

1. *"Minimum Peak Power" = Peak power minus the Peak power tolerance (as specified in Advanced Solar Photonics's Product datasheet). "Peak power" is the power in peak watts that a PV module generates at STC (Standard Test conditions: Irradiance of 1000 W/m², light spectrum AM 1.5g and a cell temperature of 25 degrees C)*

Additional Item(s) Excluded from Warranty Coverage

Warranty coverage does not apply when:

1. The Product is improperly installed,
2. The Product is installed in a mobile or marine environment, subjected to improper voltage or power surges or abnormal environmental conditions (such as acid rain or other pollution),
3. The components in the construction base on which the module is mounted are defective
4. External corrosion, mold discoloration or the like occurs.

IV. Limited Product Warranty. SUBJECT TO THE LIMITATIONS UNDER APPLICABLE LAW, THE LIMITED WARRANTIES SET FORTH HEREIN ARE EXPRESSLY IN LIEU OF AND EXCLUDE ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR PARTICULAR PURPOSE, USE, OR APPLICATION, AND ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF ADVANCED SOLAR PHOTONICS, UNLESS SUCH OTHER WARRANTIES, OBLIGATIONS OR LIABILITIES ARE EXPRESSLY AGREED TO IN WRITING SIGNED AND APPROVED BY ADVANCED SOLAR PHOTONICS. ADVANCED SOLAR PHOTONICS SHALL HAVE NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR DAMAGE OR INJURY TO PERSONS OR PROPERTY OR FOR OTHER LOSS OR INJURY RESULTING FROM ANY CAUSE WHATSOEVER ARISING OUT OF OR RELATED TO THE PRODUCT, INCLUDING, WITHOUT LIMITATION, ANY DEFECTS IN THE MODULE, OR FROM USE OR INSTALLATION. UNDER NO CIRCUMSTANCES SHALL ADVANCED SOLAR PHOTONICS BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, HOWSOEVER CAUSED. LOSS OF USE, LOSS OF PROFITS, LOSS OF PRODUCTION, LOSS OF REVENUES ARE THEREFORE SPECIFICALLY BUT WITHOUT LIMITATION EXCLUDED. ADVANCED SOLAR PHOTONICS'S AGGREGATE LIABILITY, IF ANY, IN DAMAGES OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID TO ADVANCED SOLAR PHOTONICS BY THE BUYER, FOR THE UNIT OF PRODUCT OR SERVICE FURNISHED OR TO BE FURNISHED, AS THE CASE MAY BE, WHICH GAVE RISE TO THE WARRANTY CLAIM. SOME STATES DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES OR THE EXCLUSION OF DAMAGES SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

V. Limitation of Liability. EXCEPT FOR THE WARRANTIES STATED HEREIN FOR THE BUYER, NO WARRANTY, CONDITION OR REPRESENTATION, EXPRESS, IMPLIED, ORAL OR STATUTORY, IS PROVIDED TO THE BUYER OR ANY THIRD PARTY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY, CONDITION OR REPRESENTATION: (A) OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE; (B) THAT THE PRODUCTS WILL BE FREE FROM INFRINGEMENT OR VIOLATION OF ANY RIGHTS, INCLUDING INTELLECTUAL PROPERTY RIGHTS, OF THIRD PARTIES; OR (C) THAT THE OPERATION OF THE SOFTWARE WILL BE UNINTERRUPTED OR ERROR FREE. THIS DISCLAIMER AND EXCLUSION SHALL APPLY EVEN IF THE EXPRESS WARRANTY HEREIN FAILS OF ITS ESSENTIAL PURPOSE. THE BUYER'S SOLE AND EXCLUSIVE REMEDIES HEREUNDER AND THE ONLY LIABILITY OF SELLER IS EXPRESSLY LIMITED TO THE TERMS OF THE AGREEMENT. SELLER SHALL NOT BE LIABLE TO THE BUYER, OR ANY THIRD PARTY, FOR ANY OTHER SPECIAL, CONSEQUENTIAL, INCIDENTAL, EXEMPLARY OR INDIRECT COSTS OR DAMAGES, INCLUDING WITHOUT LIMITATION, LITIGATION COSTS, INSTALLATION AND REMOVAL COSTS, LOSS OF DATA, PRODUCTION OR PROFIT ARISING FROM ANY CAUSE WHATSOEVER, REGARDLESS OF THE

FORM OF THE ACTION, WHETHER IN CONTRACT, TORT (INCLUDING SELLER'S OWN NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH COSTS OR DAMAGES. FOR PURPOSES OF THIS PROVISION, SELLER INCLUDES SELLER'S DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, REPRESENTATIVES, SUBCONTRACTORS AND SUPPLIERS. IN NO EVENT SHALL THE TOTAL COLLECTIVE CUMULATIVE LIABILITY OF SELLER, ITS EMPLOYEES, OFFICERS, AGENTS AND DIRECTORS EXCEED THE AMOUNT PAID TO SELLER FOR PRODUCTS FROM WHICH SUCH LIABILITY AROSE DURING THE TWELVE (12) MONTH PERIOD PRECEDING THE DATE OF THE MOST RECENT CLAIM.

VI. Obtaining Warranty Performance. If you feel you have a justified claim covered by this Limited Warranty, immediately notify the (a) Installer, who sold the PV-modules, or (b) any authorized Advanced Solar Photonics distributor, of the claim in writing, or (c) send such notification to Advanced Solar Photonics Corporation, 400 Rinehart Rd, Lake Mary, FL 32792, directly. In addition, please enclose evidence of the date of delivery of the PV module. If applicable, your installer or distributor will give advice on handling the claim. If further assistance is required, please write to Advanced Solar Photonics for instructions. The return of any PV-modules will not be accepted unless prior written authorization has been given by Advanced Solar Photonics.

3. If panels did not pass Inspection they will have to be replaced by BCE personnel for the panels of the same brand and model, fully compliant with UL Certification Directory listing for BCE Photovoltaic Modules and panels, file # QIGU.E342475 (File Attached), or any other Certification organization (Intertek, CSA, etc...), guaranteeing that panels are in full compliance with UL 1703 requirements. If necessary, work permits have to be obtained from the local building department.

4. If panels of the same brand and model are no longer available, they will have to be replaced by BCE personnel for the panels of comparable brand and Technical specifications, fully compliant with UL 1703 test requirements.

In this case the new design documentation have to be produced, FSEC approval received, and a new work permit pooled from the building department according to the following Procedure.

Steps to complete solar installations:

FILL OUT FORMS:

1. Pull Job number _____
2. Print property data sheet from county property appraiser.
3. Print out building sketch or aerial photo from Google maps.
4. Fill out "Welcome Letter"
5. Fill out site survey customer information.
6. Fill out Roofing inspection report.
7. Print out panel schedule.
8. Fill out building/electrical permit application and NOC.
9. Fill out power company net meter documents.

CONDUCT THE SITE SURVEY:

1. Contact customer to schedule site survey. Add date to Outlook installation schedule.
2. Have homeowner sign permit application, NOC and power company documents.
3. Fill out site survey form.
4. Fill out roofing inspection report.
5. Measure roof and draw roof plan.
6. Conduct shade survey using solar pathfinder.
7. Take photos of roof, trusses, service panel, and sub panels.

SUBMIT INFORMATION TO ENGINEERING:

1. Scan site survey and roof dimensions and save to S:\Installation Pictures*(customer name)*.
2. Download photos from camera and save in S:\Installation Pictures*(customer name)*.
3. Email photos and site survey to AI in engineering.

4. Engineer will start doing the drawings.

SUBMIT HOMEOWNERS ASSOCIATION APPLICATION (If Required)

FILE NOTICE OF COMMENCEMENT WITH COUNTY CLERK OF COURT:

1. Call the county clerk of courts for the address and cost to file the NOC. \$13?
2. Scan a copy of the NOC for future reference.
3. Mail NOC and self addressed stamp envelop to the county clerk of court or have runner deliver to clerk of courts.

MAIL/DELIEVER PERMIT PACKAGE:

1. Electrical and mechanical drawings. Verify with municipality how many sets.
2. Electrical and/or building permit application.
3. Have license holder sign permit application.
4. If new to area call contractor licensing for requirements.
5. Provide check for plan review deposit. (If required by municipality)
6. Provide power of attorney. If runner is dropping off or picking up permit
7. Copies of EC license and workers comp. exemption.
8. Cover letter (if mailed)
9. Submit completed Notice of Commencement.
10. Follow up with building department every 3 days until approved.

INSTALLER PACKET CHECKLIST:

1. Job Information Sheet.
2. Job Map and directions from the shop.
3. Roof Layout.
4. Solar material checklist.
5. Electrical material checklist.
6. E02 Electrical Plan.

COMPLETE THE INSTALLION:

1. Pull FUSION kit. Panels, inverter, rack and combiner box.
2. Order miscellaneous materials. Conduit, wire, breaker and straps.
3. Once complete. Test open circuit voltage on each string.
4. Startup system and test for proper operation.
5. Take photos of the array and inverter.
6. Record inverter serial number (s) _____
7. Installation manager to conduct quality inspection.

FINAL INSPECTION: (Let the customer know the inspection date)

1. Schedule final electrical/building inspection with city/county.
2. Access to home required if inverter is in the garage.
3. Meet electrical and/or building inspector on job.
4. Inspector(s) must sign permit card and have electrical inspector sign power company application. (Power companies will accept a scan of the signed permit card)

5. Put together and fill out Close Out documents. IRS 5695, Completion Certificate, Inverter warranty, and 5 referral award forms.
6. Check to make sure all required signatures are on Net Meter documents.
7. Office will schedule close out meeting.

CLOSE OUT: (Let the sales rep know the date)

1. Schedule closeout meeting with customer.
2. Add closeout date/time to Outlook installation schedule.
3. Pick up signed finance paperwork or cash/check from homeowner. PAF
4. Have homeowner sign "Completion Certificate."
5. Give homeowner IRS 5695 form.
6. Give homeowner prefilled out inverter warranty registration card.
7. Give homeowner 5 referral award forms.

SUBMIT NET METER APPLICATION TO POWER COMPANY:

1. Scan net meter documents and permit card.
2. Save scanned documents to customer's folder in "Solar Customers"
3. Get together any additional documents that may be required by power company.
4. Email all documents to appropriate contact or designated email account for that power company.
5. Attempt to get a tentative install date from the power company. Let the homeowner know if we get the date.
6. Follow up with homeowner to verify installation of solar PV meter.

Schedule at Attachments:

1. ASP Panel Product Warranty
2. ASP Grid Tied Inverter Warranty
3. ASP Module installation Manual
4. BCE Residential Sales Agreement with warranty.
5. UL Photovoltaic Module or Panel Certification
6. Intertek Certification on ASP Inverter

From: Carlos Gonzalez [Carlos.Gonzalez@usinvestingcorp.com]
Sent: Friday, March 15, 2013 4:25 PM
To: Pietrzak, Joseph F.
Cc: Demitri Nikitin; Lana Nikitin
Subject: RE: Conference Call

Hi Joe:

9:30 on Tuesday is alright. Demitri and I will be on the call. Please be prepared to address the following issues that have been raised by our staff:

Here are my questions for the Progress conference call tomorrow.

- **We have customers that are on the waiting list calling us regarding receiving notification that they are approved?**
- **Can we get more time to complete/determine what will be done?**

Looking forward to getting these issues resolved.

Best regards,
Carlos

From: Pietrzak, Joseph F. [mailto:Joseph.Pietrzak@pgnmail.com]
Sent: Friday, March 15, 2013 2:45 PM
To: Carlos Gonzalez
Subject: RE: Conference Call

Carlos,

Are you available for a call on Tuesday at 9:30?

Best regards,

Joe

From: Carlos Gonzalez [mailto:Carlos.Gonzalez@usinvestingcorp.com]
Sent: Friday, March 15, 2013 2:19 PM
To: Pietrzak, Joseph F.
Subject: RE: Conference Call

Hi Joe:

Please let me know when we can schedule this call. Thanks.

Carlos

From: Pietrzak, Joseph F. [mailto:Joseph.Pietrzak@pgnmail.com]
Sent: Tuesday, March 12, 2013 3:30 PM
To: Carlos Gonzalez
Cc: Demitri Nikitin
Subject: RE: Conference Call

Carlos:

We can potentially discuss on Friday but I will need to confirm our availability when I get back into the office later this week.

I will send out a second communication once I firm up a date and time.

Best regards,

Joe

From: Carlos Gonzalez [<mailto:Carlos.Gonzalez@usinvestingcorp.com>]

Sent: Tuesday, March 12, 2013 12:59 PM

To: Pietrzak, Joseph F.

Cc: Demitri Nikitin

Subject: Conference Call

Hi Joe:

We would like to have a conference call with you, in order to update the current ASP modules situation. Both Demitri and I will be available today at 4:00PM, if you want to do it then. Otherwise, please let me know when you would be available.

Best regards,

Carlos M. Gonzalez

Business Development Director - BlueChip Energy, LLC

Managing Director – Sorrento Solar Farm, LLC

400 Rinehart Road, Lake Mary, Florida 32746

407-878-5752 cel 407-497-0101

cgonzalez@USInvestingCorp.com



www.SorrentoSolarFarm.com

www.Bluechipenergy.net

www.ASPFAB.com

#9

From: Stephen Barkaszi [barkaszi@fsec.ucf.edu]
Sent: Tuesday, February 19, 2013 3:58 PM
To: Pietrzak, Joseph F.
Subject: Address for ASP recall letter

Joe,
You can ask people to send any inquiries about systems affected by the recall to:

pvsystem@fsec.ucf.edu

Thanks,
Stephen

From: Stephen Barkaszi [barkaszi@fsec.ucf.edu]
Sent: Thursday, February 21, 2013 12:35 PM
To: Pietrzak, Joseph F.
Subject: ASP inverters

Joe,

The ASP inverters submitted by Blue Chip for use in their systems have been listed by Intertek.

<http://etlwhidirectory.etlsemko.com/WebClients/ITS/DLP/products.nsf/4c8700f3b75987a08525777700583333/a52c61440dc0a29685257a1a005e67a4?OpenDocument>

Stephen

From: Dave Click [daveclick@fsec.ucf.edu]
Sent: Tuesday, February 05, 2013 4:36 PM
To: Pietrzak, Joseph F.
Subject: ASP Update

Hi Joe,

UL is not planning to issue a public notice, unless upon further review they find that the ASP notice is insufficient. I'll keep you informed.
It certainly looks to me that they need to replace the 1.4 MW on their roof with someone else's modules.

Dave

Subject: FW: FSEC Certification

From: Dave Click [mailto:daveclick@fsec.ucf.edu]
Sent: Tuesday, January 08, 2013 3:29 PM
To: Pietrzak, Joseph F.
Cc: 'AJ Dunevent'; Gammon, David W; Merritt, Gordon; Stephen Barkaszi; Houtan Moaveni
Subject: Re: FSEC Certification

Joe,

I'm CCing Stephen Barkaszi to get his input as to the policy details.

My initial thought is that no, this certification is no longer valid. Per a voicemail I received from my UL rep earlier today, in about two weeks UL will be issuing a public notice that the AP-240PK modules are not UL listed-- they have been counterfeiting the UL mark on these products. I believe that Stephen and AJ have revoked the FSEC module registration for this product family. The 390W modules appear to also lack a UL listing and so we'll be revoking the registration for those too. Given that these modules are no longer UL listed, this system certification is invalid.

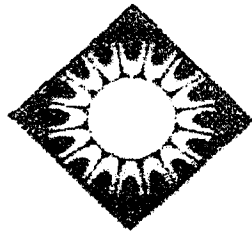
For the SunSense project, we will request that Blue Chip replace the 390W modules at the schools, since we can't have non-UL listed modules at the school sites. We're working out how to do this now.

DKC

On 2013/1/8 14:56, Pietrzak, Joseph F. wrote:

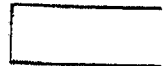
Dave:

Is the following FSEC Certification still valid:



FSEC[®]

Photo



L

F

PV Modules and Array

PV Module Manufacturer:	Advanced Solar Photonics	Ar
PV Module Model Number:	AP-240PK	Tr
FSEC Module Certification Number:	AV11-NT90-0110	N
Listing to UL 1703 Verified:	Yes	N

Power Conditioning Equipment (Inverter)

Inverter Manufacturer:	Advanced Solar Photonics	Inv
Inverter Model Number:	PV250	AC
Listing to UL 1471 Verified:	Yes	AC

Best regards,

Joe

Joseph Pietrzak, CEM

Sr. Program Manager, SunSense Solar Programs

Duke Energy | 4359 SE Maricamp Rd. | Mail Code: OC23 | Ocala, Fl. 34480

Public 352-694-8515 | VNet 220-6515 | Joseph.Pietrzak@pgnmail.com

From: Dave Click [daveclick@fsec.ucf.edu]
Sent: Friday, December 21, 2012 2:30 PM
To: Pietrzak, Joseph F.
Subject: Note from the original listee of the ASP 240W module

Hi Joe,

Here's the email I just referenced on the phone. Frank gave me permission to forward. I will do my best to ascertain whether similar issues are happening with the 390W module.

DKC

----- Original Message -----

Subject:RE: Identify ASP modules with model AP-240PK are counterfeit!

Date:Fri, 21 Dec 2012 22:12:52 +0800

From:Frank Liang <frank.liang@inventecenergy.com>

To:Dave Click <daveclick@fsec.ucf.edu>

CC:Ivy Wu <ivy.wu@inventecenergy.com>, "Alan.Kuo" <Alan.Kuo@inventecenergy.com>,

"Ken.CY.Chen" <CY.Chen@inventecenergy.com>, "Bradley.C.Rowe@ul.com"

<Bradley.C.Rowe@ul.com>

Dear Mr. Click,

Thank you for the prompt reply to my email.

From looking at the data shown on this 390W label, it doesn't appear to be ours, so I can inform you that Inventec is not involved with this module, and perhaps they are doing such kind of misconduct with other module supplier once again.

I hopt this helps to clarify and wish you good luck in further investigation in this company to prevent further cases from happening.

Thank you,

Frank

寄件者: Dave Click [daveclick@fsec.ucf.edu]

寄件日期: 2012年12月21日 下午 09:54

收件者: Frank Liang

副本: Ivy Wu; Alan.Kuo; Ken.CY.Chen

主旨: Re: Identify ASP modules with model AP-240PK are counterfeit!

Dear Mr. Liang,

Thank you for your email-- I really appreciate your taking the time to let me know. I just obtained a picture of their 390W module nameplate label; it looks like this also has the UL code of 3YR9-- that's yours, right? Did Inventec have any involvement with that module?

Feel free to CC Brad, <Bradley.C.Rowe@ul.com>, on your response.

Merry Christmas to you, too!

Dave

On 2012/12/20 18:17, Frank Liang wrote:

Dear Mr. Dave Click,

Greeting from Frank Liang! I am the Senior Director of Global Marketing of Sales in Inventec Energy Corporation.

Your information was forwarded to me by Bradley Rowe of UL US office, and am writing you this email to clarify and identify the UL Multiple-Listing issue regarding PV modules sold and installed with ASP model AP-240PK under our UL ML number, and claimed they were designed and made in USA were all counterfeit because the truth is that we, Inventec Energy Corporation, the UL certification owner DID NOT, and HAVE NOT shipped any volume order to our customer (Blue Chip) except sending them a couple of sample modules or testing and evaluation!

The situation is very simple and clear. This customer took advantage of the trust from my previous sales guy who applied and UL Multiple listing for ASP module with model AP-240PK for them, and perhaps they were making PV modules elsewhere (China or wherever that could be), but not with us!

I truly believe and think that both the US authorities and the owners who purchased the PV modules from them are entitled and deserved to know the truth about the misconduct and not honest behavior of this company!

Please feel free to let me know if any questions or any additional information you need from us to assist you with the further investigation!

Thank you and Merry Christmas,

Frank Liang
Senior Director,
Global Sales and Marketing
Mobile: 886953915499

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From: Dave Click [daveclick@fsec.ucf.edu]
Sent: Thursday, January 17, 2013 10:21 AM
To: Pietrzak, Joseph F.
Cc: 'AJ Dunevent'; Gammon, David W; Merritt, Gordon; Stephen Barkaszi; Houtan Moaveni
Subject: Re: FSEV Certification

Joe, as an update, UL hopes to issue their public notice by the end of the week. I will forward as soon as I get it.

On 2013/1/8 15:29, Dave Click wrote:

> Joe,
>
> I'm CCing Stephen Barkaszi to get his input as to the policy details.
>
> My initial thought is that no, this certification is no longer valid.
> Per a voicemail I received from my UL rep earlier today, in about two
> weeks UL will be issuing a public notice that the AP-240PK modules are
> not UL listed-- they have been counterfeiting the UL mark on these
> products. I believe that Stephen and AJ have revoked the FSEC module
> registration for this product family. The 390W modules appear to also
> lack a UL listing and so we'll be revoking the registration for those
> too. Given that these modules are no longer UL listed, this system
> certification is invalid.
>
> For the SunSense project, we will request that Blue Chip replace the
> 390W modules at the schools, since we can't have non-UL listed modules
> at the school sites. We're working out how to do this now.

> DKC

> On 2013/1/8 14:56, Pietrzak, Joseph F. wrote:

>>
>> Dave:
>>
>> Is the following FSEC Certification still valid:
>>
>> Best regards,
>>
>> Joe
>>
>> Joseph Pietrzak, CEM
>>
>> Sr. Program Manager, SunSense Solar Programs
>>
>> DukeEnergy | 4359 SE Maricamp Rd. | Mail Code: OC23 | Ocala, Fl. 34480
>>
>> Public 352-694-8515 | VNet 220-6515 | Joseph.Pietrzak@pgnmail.com
>> <mailto:Joseph.Pietrzak@pgnmail.com>
>>

>

From: Erin Blackwell [Erin.Blackwell@ucf.edu]
Sent: Monday, March 25, 2013 4:08 PM
To: Pietrzak, Joseph F.
Cc: Susan Schroen (sschroen@fsec.ucf.edu)
Subject: UCF Proposal on Behalf of David Click
Attachments: 03.26.2013 Click Progress Energy Letter.pdf; 03.25.2013 Click Progress Energy SOW.pdf
Importance: High

Greetings:

On behalf of Mr. Dave Click, Florida Solar Energy Center, we are pleased to submit our research proposal entitled "FSEC PEF BlueChip Inspections." Our quote for this proposal is a total of \$10,000 which includes a base task valued at \$3,750 and an option task valued at \$6,250. Attached is the transmittal letter and the statement of work.

Please let me know if you need anything further.

Regards,

Erin

Erin C. Blackwell

SR. PROPOSAL MANAGER | 407.823.4456 | ERIN.BLACKWELL@UCF.EDU



OFFICE OF RESEARCH & COMMERCIALIZATION | UNIVERSITY OF CENTRAL

12201 RESEARCH PARKWAY, SUITE 501 | ORLANDO, FL 32826-3246

From: Dave Click [daveclick@fsec.ucf.edu]
Sent: Friday, December 21, 2012 12:32 PM
To: wayne.tupuola@ict-investments.com
Cc: dnikitin@bluechipenergy.net; thomas.gregory@bluechipenergy.net; Andy White; al.mackay@advancedsolarphotonics.com; Pietrzak, Joseph F.; Luis Aviles; 'Philip Fairey'; Bob Reedy; Susan Schleith; Houtan Moaveni
Subject: UCF-ASP Letter Regarding ASP390M UL Listing
Attachments: PEF SunSense - ASP Module Issue Letter.pdf

Mr. Tupuola,

Please find the attached letter regarding the UL listing of the ASP390M modules, intended for the Progress Energy SunSense systems being installed by Blue Chip Energy.

Thank you for your attention to this matter.

Dave Click, PE
Program Director, PV Project Engineering Solar Systems Research Division
321.638.1408

CC:
Blue Chip Energy: Demitri Nikitin, Thomas Gregory, Andy White, Al Mackay Progress Energy: Joe Pietrzak University of Central Florida: Luis Aviles, Philip Fairey, Bob Reedy, Susan Schleith, Houtan Moaveni

From: Dave Click [daveclick@fsec.ucf.edu]
Sent: Monday, April 15, 2013 1:56 PM
To: Pauline Furfaro; Jennifer Szaro; Paredes, Natalia; Pietrzak, Joseph F.; Mccomb, John
Subject: UL Notice: BlueChip Modules are Counterfeit

For Your Consideration:

UL has issued a public notice that BlueChip Energy has been applying a counterfeit UL mark to its products-- at least the AP-240PK, AP-245MK, and ASP-390M. Thousands of these modules have been manufactured (well beyond the 1000 that BlueChip acknowledged in a previous press release).

According to one customer who called me last week, when he asked Blue Chip about his AP-240PK system, two company representatives falsely assured him that everything was UL compliant. I haven't independently verified this but I know that ASP is replacing some modules out there on fielded systems. ASP has also claimed that only systems in Progress Energy territory are affected, despite my discovering this issue on a rooftop in OUC territory.

<http://www.sacbee.com/2013/04/15/5342560/ul-warns-of-counterfeit-ul-mark.html>

The UL website will also have this later today, probably at this link:

<http://www.ul.com/global/eng/pages/newsroom/publicnotices/>

Customers with questions should contact UL directly. We'll have an update on our website in the next few days.

--

Dave Click, PE
Program Director, PV Project Engineering Florida Solar Energy Center
321.638.1408

#10

From: Rowe, Bradley C. [Bradley.C.Rowe@ul.com]
Sent: Friday, February 08, 2013 5:08 PM
To: Pietrzak, Joseph F.
Subject: ASP Meeting

Joe
Would my attendance by telephone be helpful to you?

Brad rowe
Sent from my iPhone

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From: Rowe, Bradley C. [Bradley.C.Rowe@ul.com]
Sent: Tuesday, February 12, 2013 11:21 AM
To: Ritchie, Scott J.
Cc: Pietrzak, Joseph F.
Subject: FW: ASP Meeting

Scott -

This is a follow-up to my voice message from yesterday. As I explained, Mr. Pietrzak would like someone from UL to attend their meeting with ASP on Feb. 19 in Lake Mary, Florida. I wrote and talked with Mr. Pietrzak about our severe limitations about what we can say at such a meeting. Basically, our input could include what is and what is not UL certified.... and any programs that UL could offer to certify future production or even to investigate currently installed PV panels. I am not able to make the meeting due to budget constraints and since I am already leading a meeting later that same day. I offered to attend by phone, but Mr. Pietrzak sees a benefit in having UL present to provide UL's perspective. Please give Mr. Pietrzak a call and let him know if you could attend.

Thank you
Brad Rowe

-----Original Message-----

From: Pietrzak, Joseph F. [<mailto:Joseph.Pietrzak@pgnmail.com>]
Sent: Monday, February 11, 2013 7:57 AM
To: Rowe, Bradley C.
Subject: RE: ASP Meeting

Brad,

Would you please give me a call to discuss. My direct number is 352-694-8515.

Best regards,

Joe

-----Original Message-----

From: Rowe, Bradley C. [<mailto:Bradley.C.Rowe@ul.com>]
Sent: Friday, February 08, 2013 5:08 PM
To: Pietrzak, Joseph F.
Subject: ASP Meeting

Joe

Would my attendance by telephone be helpful to you?

Brad rowe
Sent from my iPhone

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From: Rowe, Bradley C. [Bradley.C.Rowe@ul.com]
Sent: Friday, February 08, 2013 4:34 PM
To: Pietrzak, Joseph F.
Cc: Ritchie, Scott J.
Subject: FW: PV Module Recall

Feb. 8, 2013

Joe –

Your email to our Scott Ritchie was forwarded to me for reply. My name is Brad Rowe and I work at UL LLC in the Market Surveillance Department- Northbrook, Illinois.

You have asked for UL to be present at a meeting involving ASP solar panels. We assume that this is the result of a public notice that was issued by ASP regarding 3 models of PV panels that were inappropriately marked with UL Listing Marks. UL was made aware of these panels and determined that they displayed UL Marks that were not authorized by us. Our typical action in such a case would be to issue a public notice to alert users, distributors and authorities such as yourself, that the panels were not investigated by UL. ASP decided to issue such a notice on their own. The ASP notice includes information on what users/distributors/AHJs should do to correct the situation and fully describes the panels that bear the unauthorized UL marks.

A UL representative at your meeting would not be able to provide any additional information on the ASP panels. We do not know if those panels comply with safety requirements as we did not investigate or test them in any way. It is unknown to us where they were manufactured and UL has no authority to recall, remove labels or take other such actions. It is up to the local authorities to determine what action they may or may not take. Of course, if asked, our Field Evaluation staff could be contracted to do an investigation on panels in the field. Finally, we cannot know that the questionable panels are even ones that are included in the ASP notice.

Brad Rowe
Senior Market Surveillance Engineer
UL LLC

From: Pietrzak, Joseph F. [mailto:Joseph.Pietrzak@pgnmail.com]
Sent: Friday, February 08, 2013 11:25 AM
To: Ritchie, Scott J.
Subject: RE: PV Module Recall

Scott,

We have scheduled the recall meeting with ASP at 11:00 AM on February 19th at our Lake Mary Headquartes, the address is as follows:

Progress Energy
3300 Exchange Place
Lake Mary, FL 32746

As discussed, we would like to request a UL representative to be present at the meeting.

Please confirm that UL availability for the meeting. My direct number is 352-694-8515, if you would like to discuss.

Best regards,

Joe

From: Pietrzak, Joseph F.
Sent: Thursday, February 07, 2013 11:09 AM
To: 'Scott.J.Ritchie@ul.com'
Subject: FW: PV Module Recall

Scott,

Below is the recall that we discussed.

Please call me back if you have any questions.

Best regards,

Joe

Joseph Pietrzak, CEM
Sr. Program Manager, SunSense Solar Programs
Duke Energy | 4359 SE Maricamp Rd. | Mail Code: OC23 | Ocala, Fl. 34480
Public 352-694-8515 | VNet 220-6515 | Joseph.Pietrzak@pgnmail.com

From: Fecteau, Jeffrey
Sent: Tuesday, February 05, 2013 9:33 AM
Subject: PV Module Recall

Use the below link to view the manufacturer's product recall of ASP PV modules. These specific PV modules mentioned in the recall are not authorized to bear the UL Listed mark as they were not evaluated by UL to the applicable UL Standard, UL 1703.

<http://www.advancedsolarchotonics.com/advanced-solar-photonics-announces-voluntary-product-safety-recall-of-certain-pv-solar-modules>

Jeffrey A. Fecteau CBO, ECO
Lead Regulatory Engineer

UL LLC
Wyoming, MN. 55092
M: (952) 838-5453
F: (847) 313-3869

W: ul.com

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Subject: FW: PV Module Recall

From: Fecteau, Jeffrey [mailto:Jeffrey.Fecteau@ul.com]
Sent: Tuesday, February 05, 2013 10:43 AM
To: Pietrzak, Joseph F.
Subject: FW: PV Module Recall

From: Fecteau, Jeffrey
Sent: Tuesday, February 05, 2013 9:33 AM
Subject: PV Module Recall

Use the below link to view the manufacturers product recall of ASP PV modules. These these specific PV modules mentioned in the recall are not authorized to bear the UL Listed mark as they were not evaluated by UL to the applicable UL Standard, UL 1703.

<http://www.advancedsolarphotonics.com/advanced-solar-photonics-announces-voluntary-product-safety-recall-of-certain-pv-solar-modules>

Jeffrey A. Fecteau CBO, ECO
Lead Regulatory Engineer

UL LLC
Wyoming, MN. 55092
M: (952) 838-5453
F: (847) 313-3869
W: ul.com

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From: Rowe, Bradley C. [Bradley.C.Rowe@ul.com]
Sent: Tuesday, February 19, 2013 11:56 AM
To: Pietrzak, Joseph F.
Subject: RE: ASP Meeting

Joe -

Thanks for including me on the call this morning.
I hope my attending by phone was helpful.

If you learn anything about the inverters used with the ASP modules that is suspect regarding UL certification, please send it to me for investigation. I did not see any inverters currently UL Listed for BlueChip / ASP.

Brad Rowe

-----Original Message-----

From: Pietrzak, Joseph F. [<mailto:Joseph.Pietrzak@pgnmail.com>]
Sent: Wednesday, February 13, 2013 2:57 PM
To: Rowe, Bradley C.
Subject: RE: ASP Meeting

Thank you.

Have you received any updates in regards to the ASP recall?

Best regards,

Joe

-----Original Message-----

From: Rowe, Bradley C. [<mailto:Bradley.C.Rowe@ul.com>]
Sent: Wednesday, February 13, 2013 3:56 PM
To: Pietrzak, Joseph F.
Subject: RE: ASP Meeting

Yes, I can make that. Call me at 847-664-2888

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#11

Date

Customer Name
Customer Address

Subject: Recall of certain Advanced Solar Photonics photovoltaic modules

Dear Customer Name,

We want to make sure you are aware of a product recall of certain Advanced Solar Photonics (ASP) photovoltaic modules. According to ASP, these modules may contain certain photovoltaic (PV) products that were mislabeled during the manufacturing process and may contain components with unknown compliance to Underwriters Laboratory (UL) standards.

At this time, the recall notice does not change your rebate status for the PV incentives program.

You are receiving this notification because our records reflect that you may have installed, or are planning to install, these modules at your property. As required by Florida Public Service Commission rules, Progress Energy's interconnection standards, and the SunSense® PV incentive program standards, all PV systems must be code compliant and meet UL standards for safety.

Additionally, the SunSense PV incentive program standards require that PV systems be certified by the Florida Solar Energy Center (FSEC) to be eligible for an incentive. Due to the uncertain status of the UL listing, certain system FSEC certifications may also be voided. To check on the status of your FESC PV certification, you may contact the Florida Solar Energy Center at pvsystem@fsec.ucf.edu.

Progress Energy has contacted ASP in an effort to better understand the circumstances surrounding UL compliance and their efforts to remedy these issues. We pledge to keep you informed as additional details become available.

Your safety and the reliability of the electric grid system are our primary concern. If ASP has not yet contacted you, we encourage you to contact them at the number provided within the recall notice: 407.804.1000.

Sincerely,

Progress Energy's Interconnection and SunSense Departments

You may also see the complete recall notice at: <http://www.advancedsolarpotonics.com>, search: ASP announces product recall.



Date

Customer Name
Customer Address

URGENT PLEASE READ: SAFETY MESSAGE

Subject: Counterfeit UL Safety Marks on certain Advanced Solar Photonics/Bluechip Energy photovoltaic panels

Dear **Customer Name**,

We want to make sure you are aware of a public notice recently issued by Underwriters Laboratory (UL) with respect to certain Advanced Solar Photonics (ASP) (also known as Bluechip Energy) photovoltaic panels (also d/b/a SunHouse Solar). According to the UL notice, these panels bear counterfeit UL Marks. The photovoltaic (solar) panels have not been evaluated by UL to the appropriate Standards for Safety and it is unknown if these photovoltaic panels comply with UL's safety requirements for the United States or Canada. You may see the complete public notice at the following website:

<http://www.ul.com/global/eng/pages/newsroom/publicnotices/> and search: photovoltaic.

You are receiving this notification because our records reflect that you may have installed these panels at your property. As required by Florida Public Service Commission rules and Duke Energy Florida's interconnection standards, all PV systems must be code compliant.

The UL public notice does not change your net metering status as set forth in the net metering and interconnection rule. At this time, Duke Energy Florida does not plan to remove you from our Net Metering Tariff. However, the Florida Public Service Commission is currently reviewing this issue and may find an alternate resolution. As such, we strongly urge that if you have these ASP panels installed at your home or business, you consider taking actions to inspect, remove, and/or replace the panels as soon as possible. As indicated above, the counterfeit UL Mark means that the panels have not been tested to UL standards. Therefore the panels may not comply with safety requirements. Duke Energy Florida reminds you that, per Rule 25-6.065, the customer must maintain its equipment in a safe manner and must hold harmless and indemnify Duke Energy Florida for all loss to third parties resulting from the operation of the equipment.

Thank you for your attention to this important safety matter.

Sincerely,

Duke Energy Florida's Interconnection Department



Date

Customer Name
Customer Address

URGENT PLEASE READ: SAFETY MESSAGE

Subject: Counterfeit UL Safety Marks on certain Advanced Solar Photonics/Bluechip Energy photovoltaic panels

Dear **Customer Name**,

We want to make sure you are aware of a public notice recently issued by Underwriters Laboratory (UL) with respect to certain Advanced Solar Photonics (ASP) (also known as Bluechip Energy) photovoltaic panels, (also d/b/a SunHouse Solar). According to the UL notice, these panels bear counterfeit UL Marks. The photovoltaic (solar) panels have not been evaluated by UL to the appropriate Standards for Safety and it is unknown if these photovoltaic panels comply with UL's safety requirements for the United States or Canada. You may see the complete public notice at the following website:

<http://www.ul.com/global/eng/pages/newsroom/publicnotices/> and search: photovoltaic.

You are receiving this notification because our records reflect that you may have installed these panels at your property. As required by Florida Public Service Commission rules, Duke Energy Florida's interconnection standards, and the SunSense® PV incentive program standards, all PV systems must be code compliant.

Additionally, the SunSense PV incentive program standards require that PV systems be certified by the Florida Solar Energy Center (FSEC) to be eligible for an incentive. Because these panels are not UL-listed, their FSEC certifications will likely also be voided. To check on the status of your FSEC PV certification, you may contact the Florida Solar Energy Center at pvsystem@fsec.ucf.edu.

The UL public notice does not change your rebate status for the PV incentives program. At this time, Duke Energy Florida does not plan to remove you from our Net Metering Tariff. However, the Florida Public Service Commission is currently reviewing this issue and may find an alternate resolution. As such, we strongly urge that if you have these ASP panels installed at your home or business, you consider taking actions to inspect, remove, and/or replace the panels as soon as possible. As indicated above, the counterfeit UL Mark means that the panels have not been tested to UL standards. Therefore the panels may not comply with safety requirements. Duke Energy Florida reminds you that, per Rule 25-6.065, the customer must maintain its equipment in a safe manner and must hold harmless and indemnify Duke Energy Florida for all loss to third parties resulting from the operation of the equipment.

Thank you for your attention to this important safety matter.

Sincerely,
Duke Energy Florida's Interconnection and SunSense Departments



Date

Customer Name
Customer Address

URGENT PLEASE READ: SAFETY MESSAGE

Subject: Counterfeit UL Safety Marks on certain Advanced Solar Photonics/Bluechip Energy photovoltaic panels

Dear **Customer Name**,

We want to make sure you are aware of a public notice recently issued by Underwriters Laboratory (UL) with respect to certain Advanced Solar Photonics (ASP) (also known as Bluechip Energy) photovoltaic panels, also d/b/a SunHouse Solar. According to the UL notice, these panels bear counterfeit UL Marks. The photovoltaic (solar) panels have not been evaluated by UL to the appropriate Standards for Safety and it is unknown if these photovoltaic panels comply with UL's safety requirements for the United States or Canada. You may see the complete public notice at the following website:

<http://www.ul.com/global/eng/pages/newsroom/publicnotices/> and search: photovoltaic.

You are receiving this notification because our records reflect that you are in the process of installing these panels at your property so that you can participate in the SunSense® PV incentive program. We understand, based on previous conversations with you, that you have been working with ASP to rectify the status of the PV panels. As required by Florida Public Service Commission rules, Duke Energy Florida's interconnection standards, and the SunSense® PV incentive program standards, all PV systems must be code compliant. Additionally, the SunSense PV incentive program standards require that PV systems be certified by the Florida Solar Energy Center (FSEC) to be eligible for an incentive. Because these panels are not UL-listed, their FSEC certifications will likely also be voided.

Given the status of the ASP panels, your planned ASP PV installation no longer meets the requirements for the SunSense PV incentive program. We hope that ASP has been cooperative in finding a solution that will bring you into compliance with the program standards. To ensure that you do not lose your status on the approved list, we are willing to provide you 30 days to work with ASP, or another contractor, to find a solution. Once you have made alternate arrangements, please complete an updated application and submit it to: PEFSolarPV@PGNmail.com.

Sincerely,

Duke Energy Florida's Interconnection and SunSense Departments



Date

Customer Name

Customer Address

URGENT PLEASE READ: SAFETY MESSAGE

Subject: Counterfeit UL Safety Marks on certain Advanced Solar Photonics/Bluechip Energy photovoltaic panels

Dear **Customer Name**,

We want to make sure you are aware of a public notice recently issued by Underwriters Laboratory (UL) with respect to certain Advanced Solar Photonics (ASP) (also known as Bluechip Energy) photovoltaic panels, also d/b/a SunHouse Solar. According to the UL notice, these panels bear counterfeit UL Marks. The photovoltaic (solar) panels have not been evaluated by UL to the appropriate Standards for Safety and it is unknown if these photovoltaic panels comply with UL's safety requirements for the United States or Canada. You may see the complete public notice at the following website:

<http://www.ul.com/global/eng/pages/newsroom/publicnotices/> and search: photovoltaic.

You are receiving this notification because our records reflect that you are on the wait list to participate in the SunSense® PV incentive program and that you plan to have these panels installed at your property. As required by Florida Public Service Commission rules, Duke Energy Florida's interconnection standards, and the SunSense® PV incentive program standards, all PV systems must be code compliant. .

Additionally, the SunSense PV incentive program standards require that PV systems be certified by the Florida Solar Energy Center (FSEC) to be eligible for an incentive. Because these panels are not UL-listed, their FSEC certifications will likely also be voided.

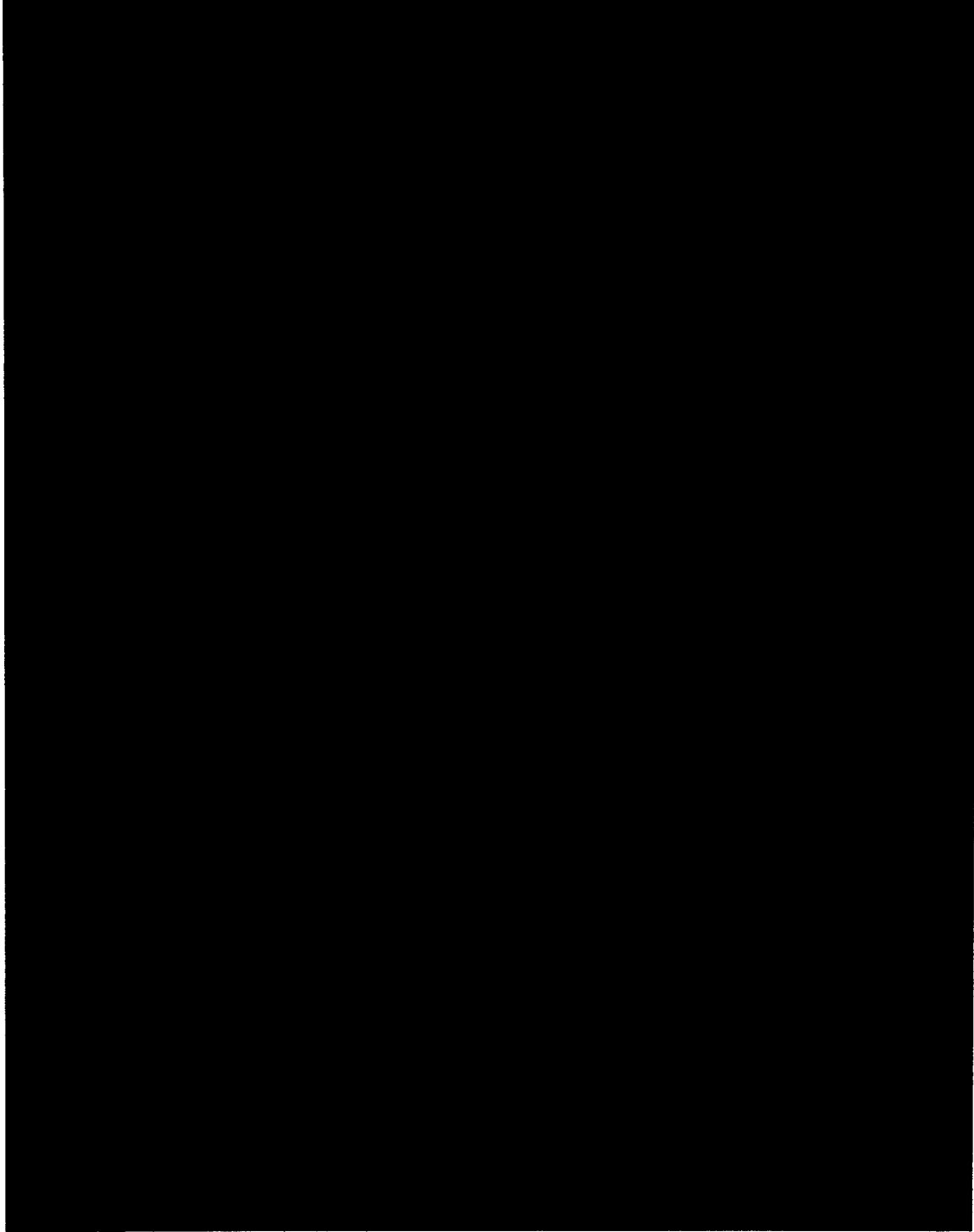
Unfortunately, given the status of the ASP panels, your planned PV installation no longer meets the requirements for the SunSense PV incentive program. Duke Energy Florida is willing to hold your place on the waiting list and provide you 30 days to obtain different solar panels from another company so that your planned installation will meet the program requirements for the SunSense PV incentive program. Once you have made alternate arrangements, please complete an updated application and submit it to PEFSolarPV@PGNmail.com.

Sincerely,

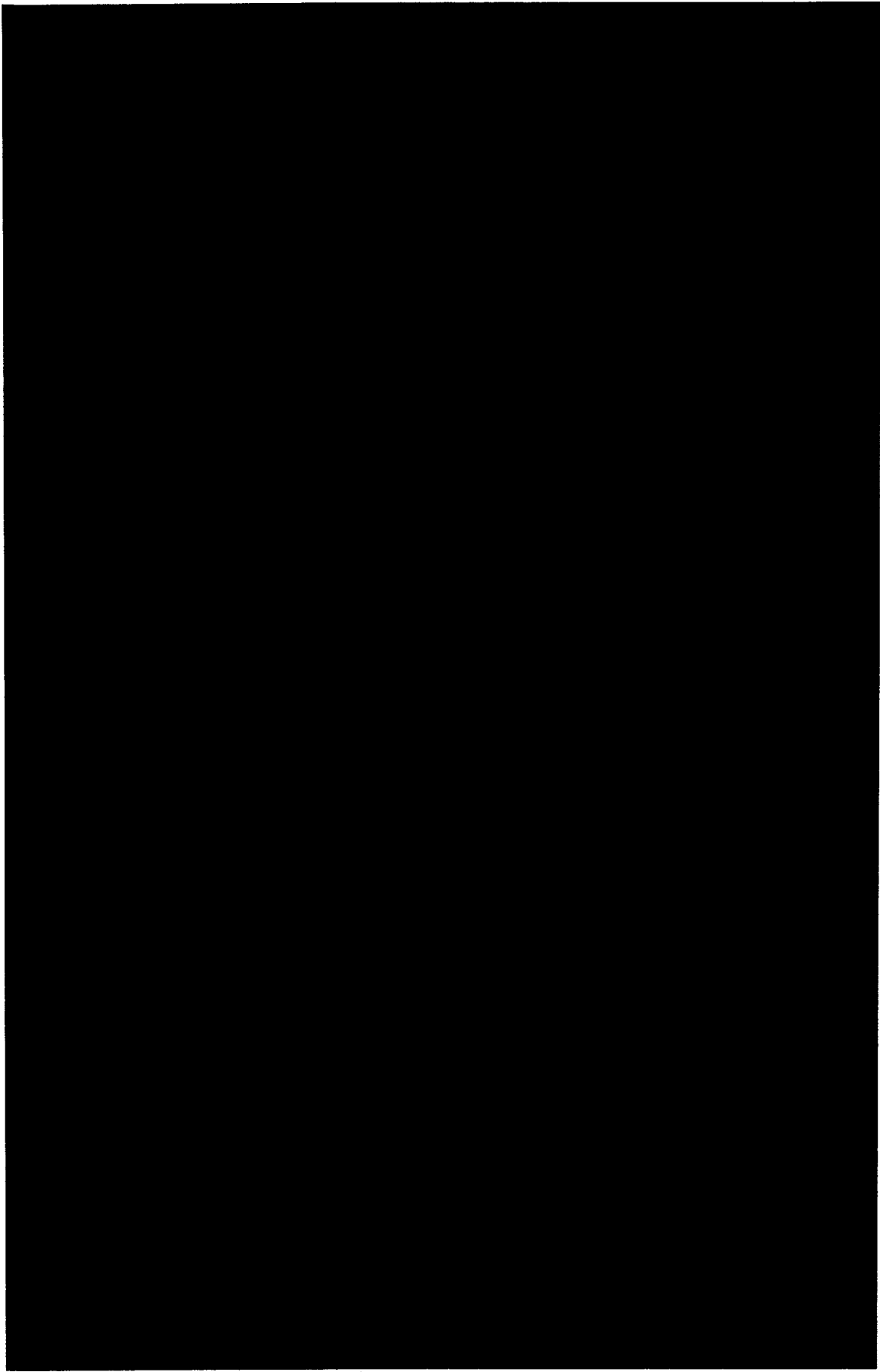
Duke Energy Florida's Interconnection and SunSense Departments

ASP Mail List Recall

Customer Name	PBF Account #	Physical Address	City	State	Zip Code
---------------	---------------	------------------	------	-------	----------



REDACTED



REDACTED

Customer on Wait List

CUSTOMER NAME	STREET ADDRESS	CITY	STATE	ZIP CODE
[REDACTED]				

REDACTED

Customer in Queue for Rebate

CUSTOMER NAME	STREET ADDRESS	CITY	STATE	ZIP CODE
[REDACTED]				

REDACTED

Net Metered Customers 4-30-2013 Excluding Already in Queue

CSS Customer of Record

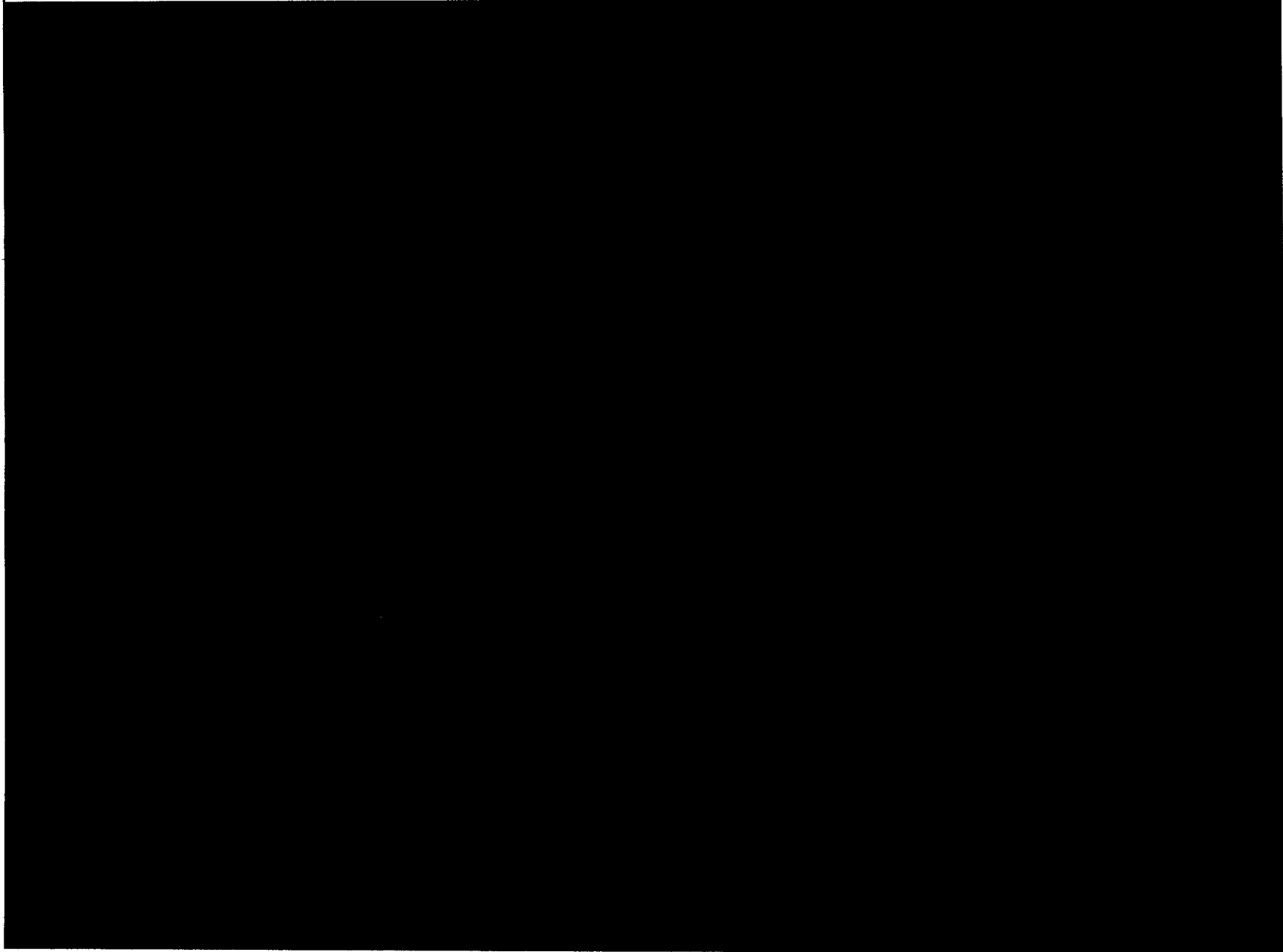
Premise Address

City

County

State

Zip



REDACTED

CSS Customer of Record

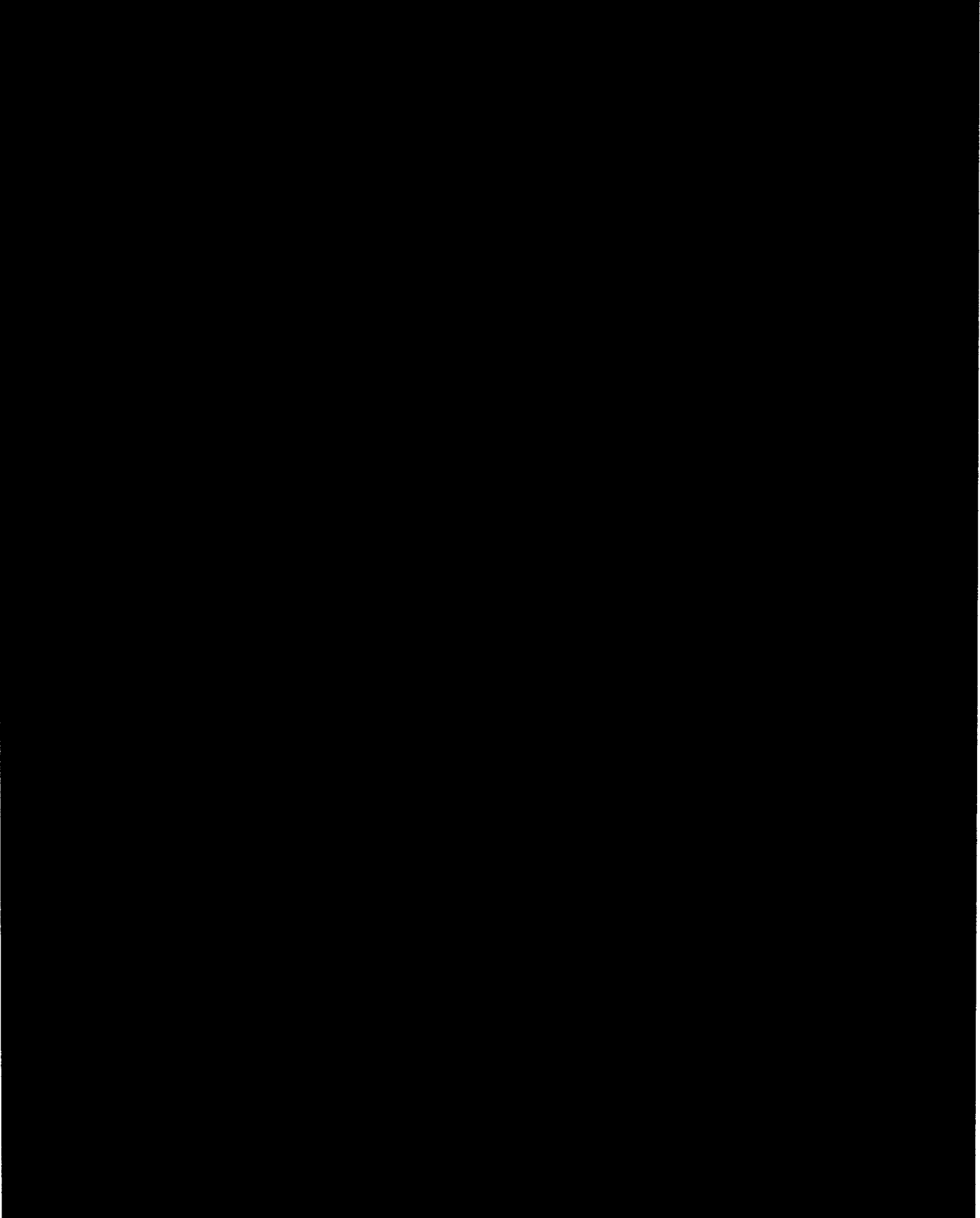
Premise Address

City

County

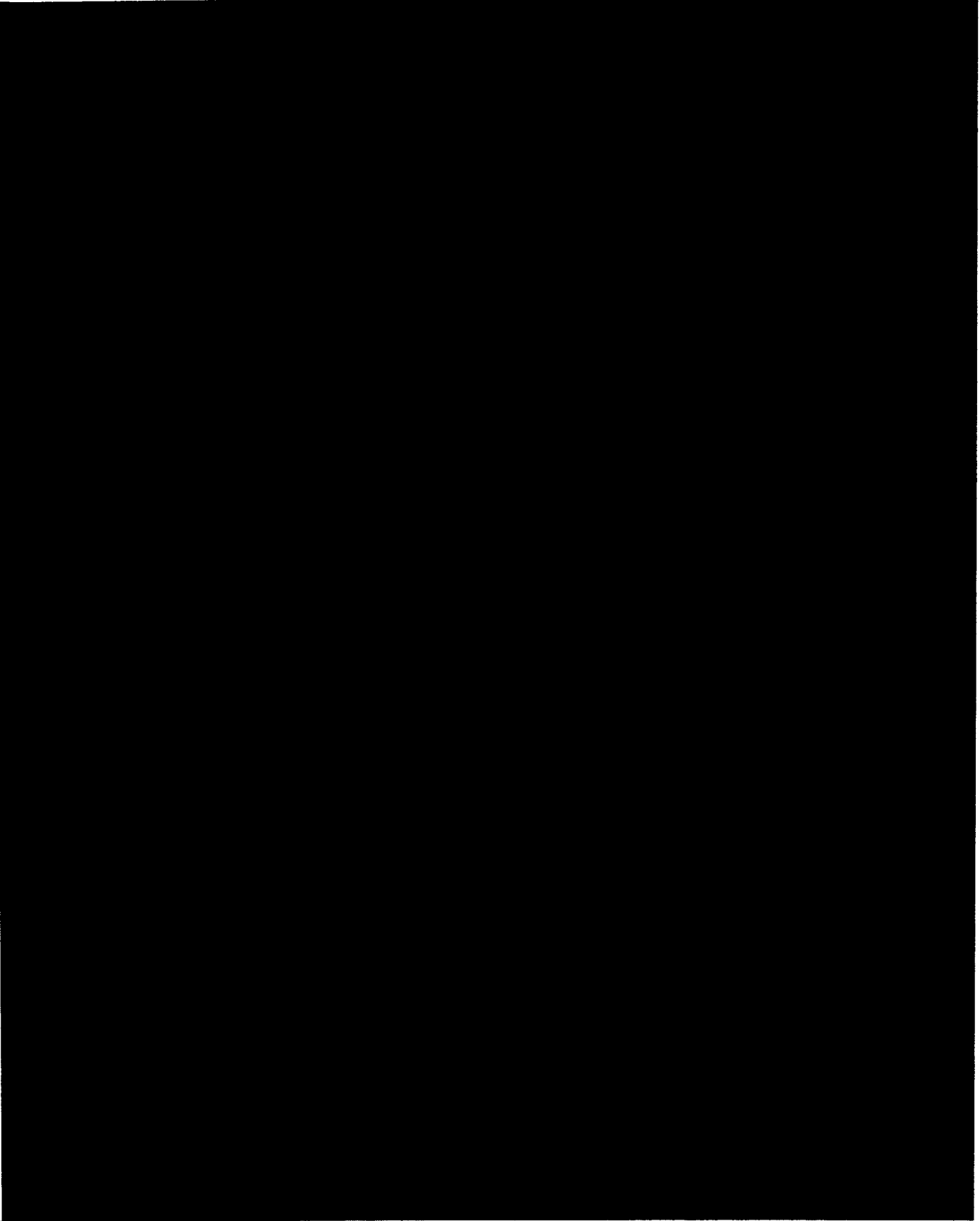
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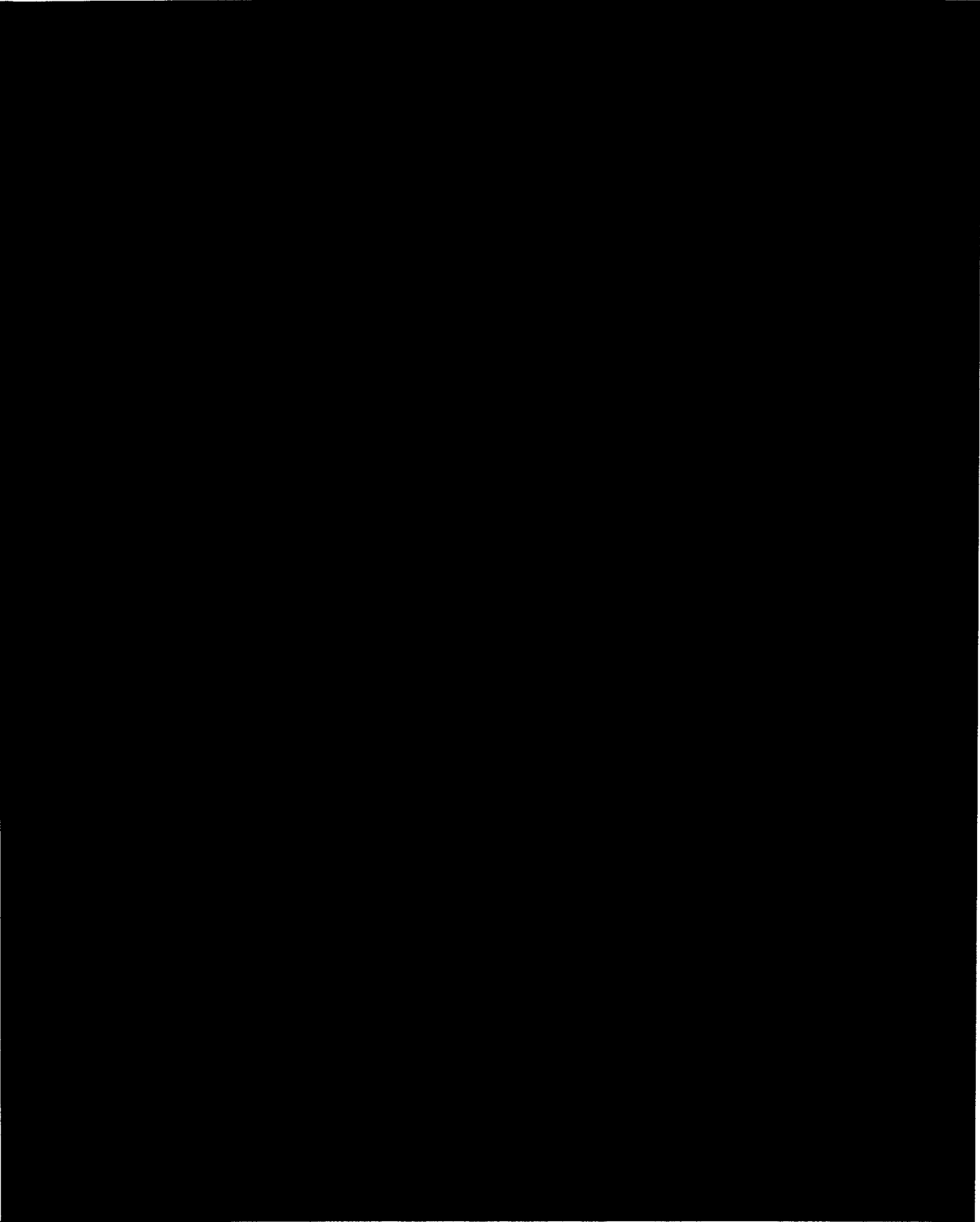
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CSS Customer of Record Premise Address City County State Zip



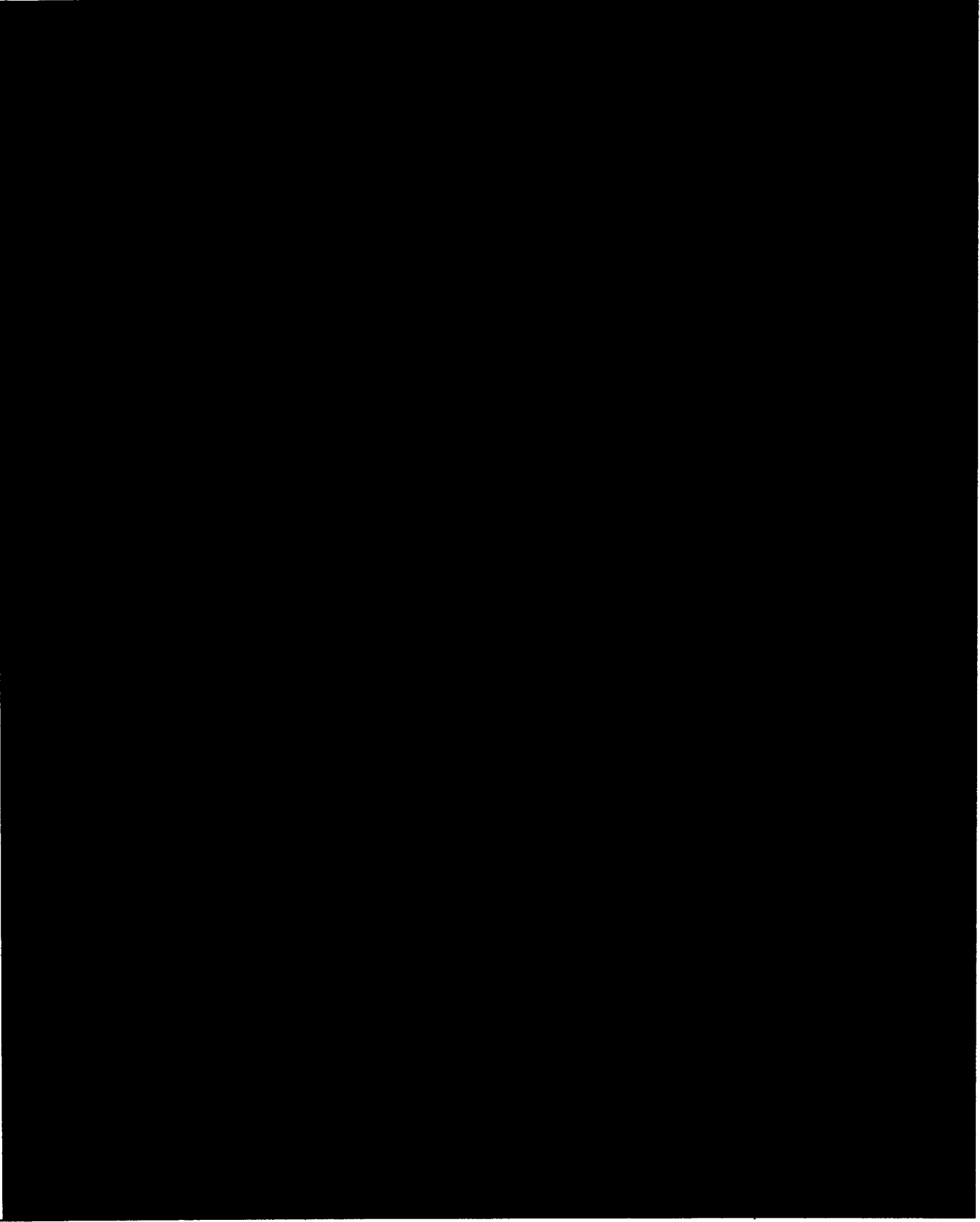
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CSS Customer of Record Premise Address City County State Zip



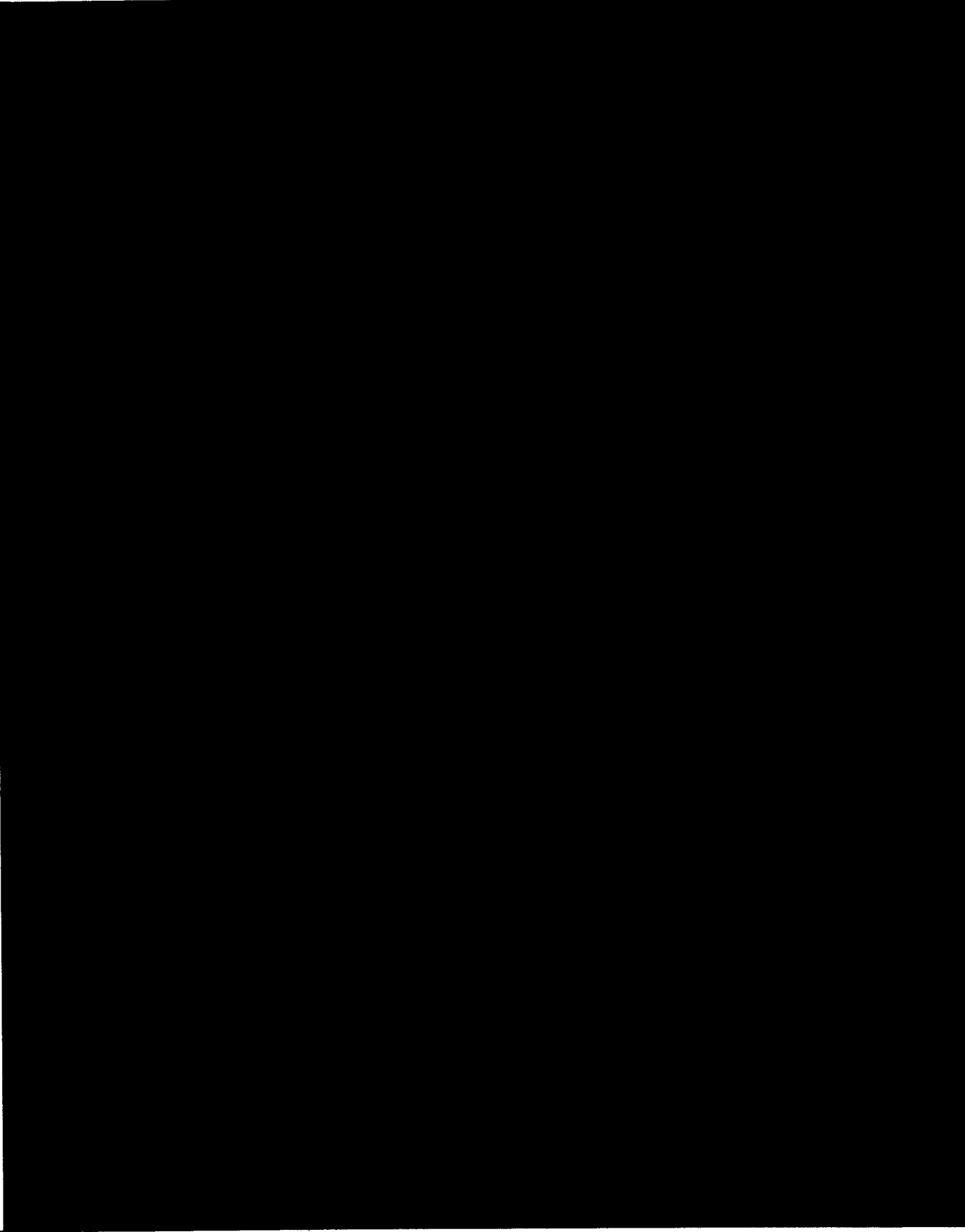
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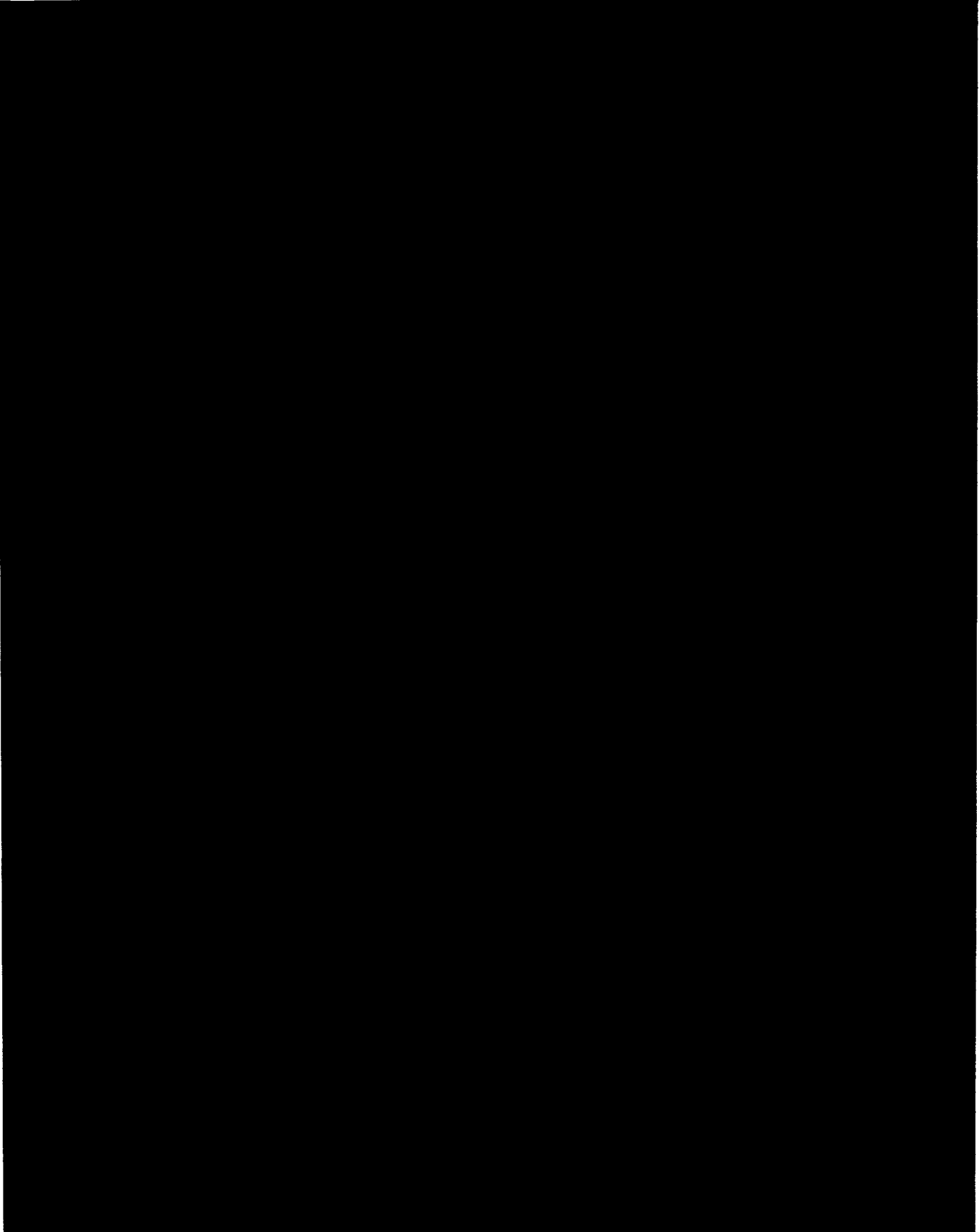
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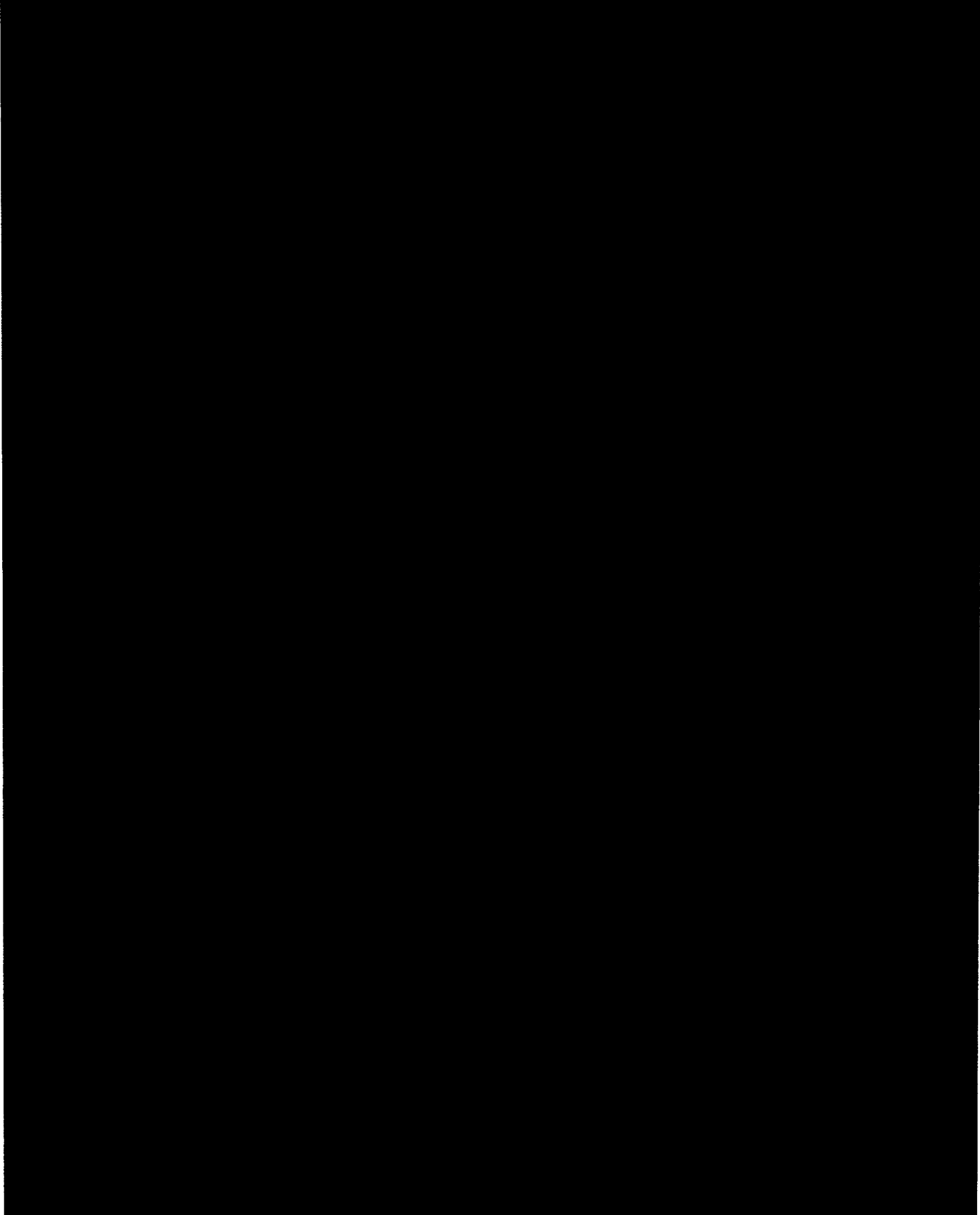
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County

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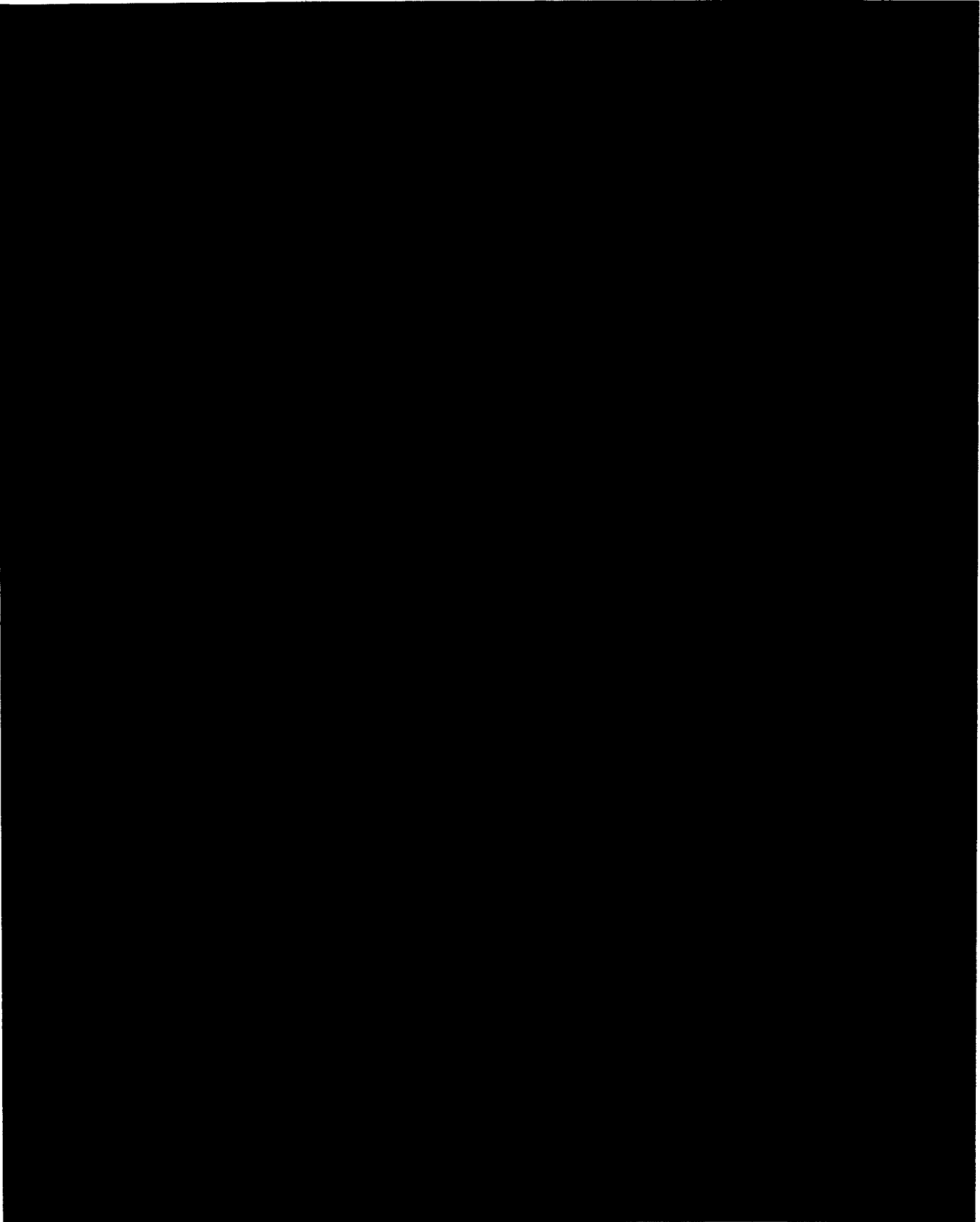
Premise Address

CSS Customer of Record



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CSS Customer of Record Premise Address City County State Zip



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CSS Customer of Record

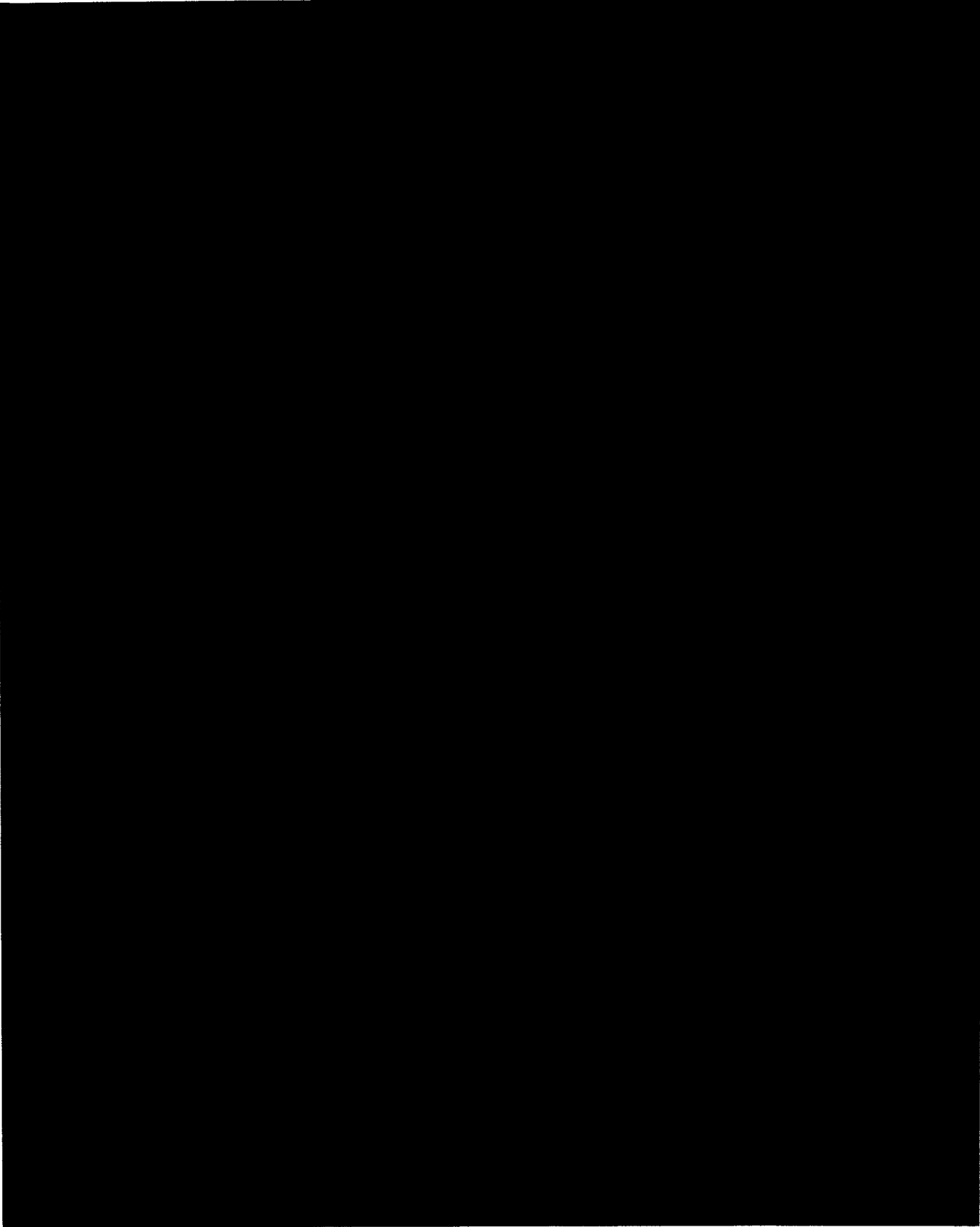
Premise Address

City

County

State

Zip



REDACTED

CSS Customer of Record	Premise Address	City	County	State	Zip
[REDACTED]					

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Zip

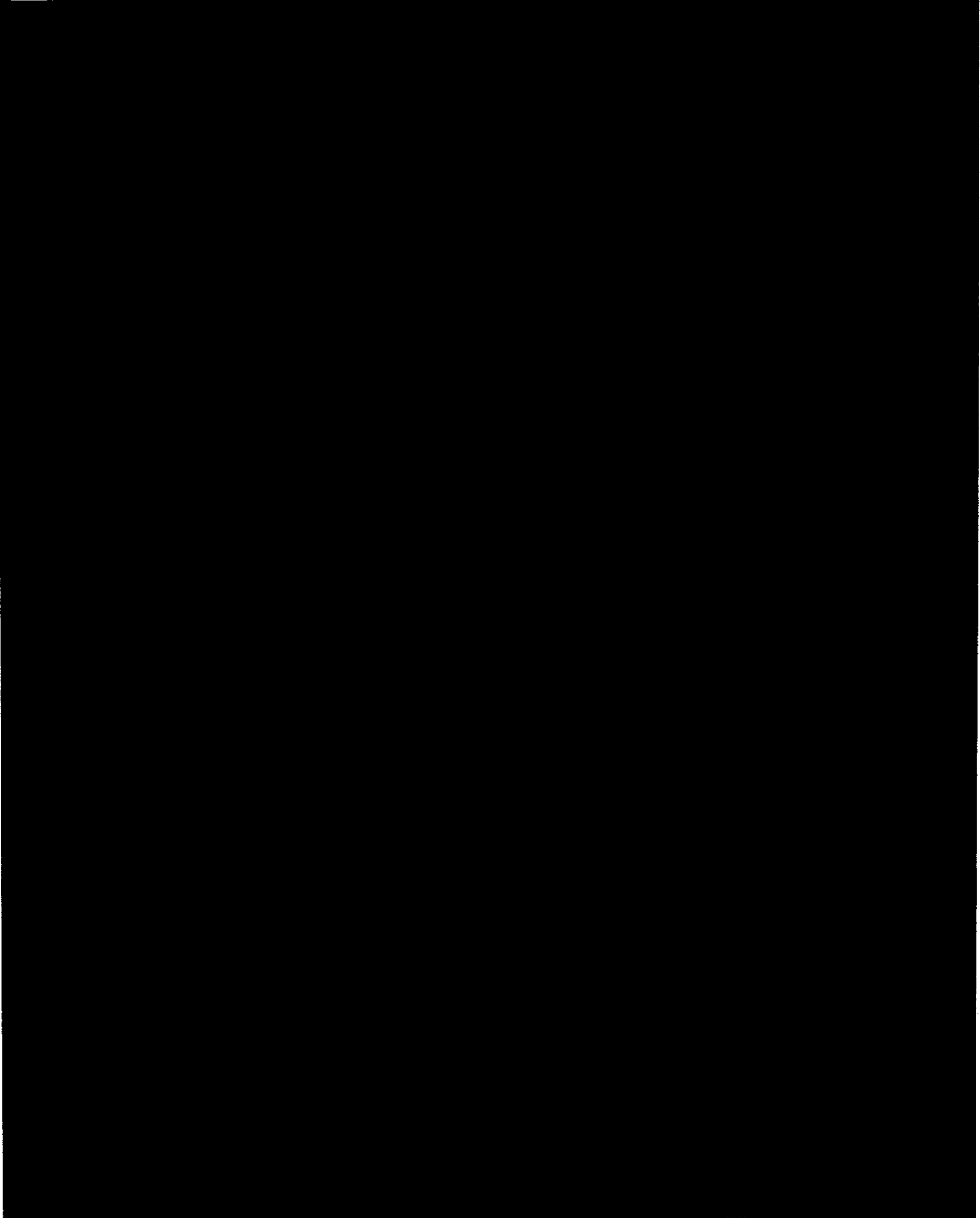
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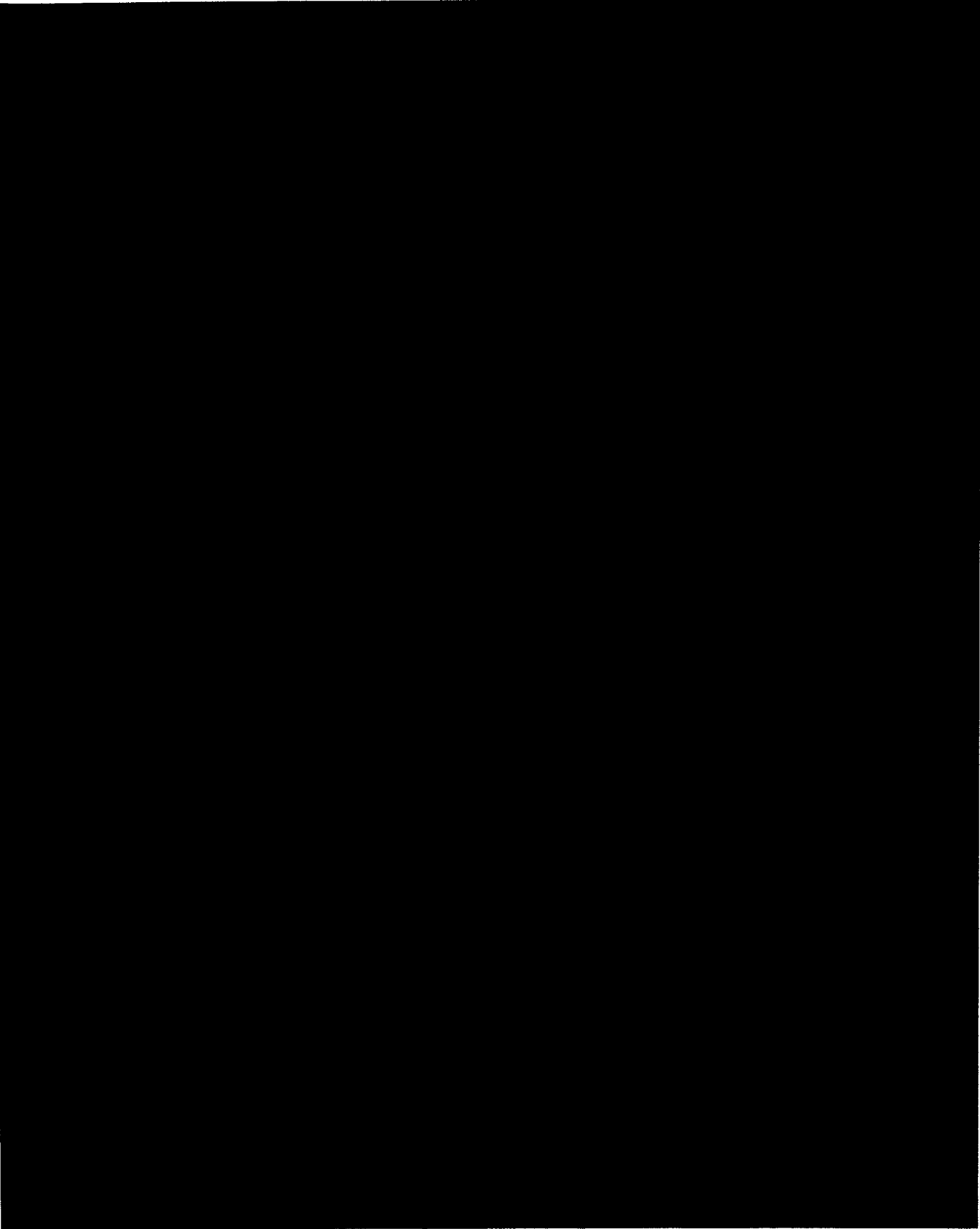
Premise Address

CSS Customer of Record



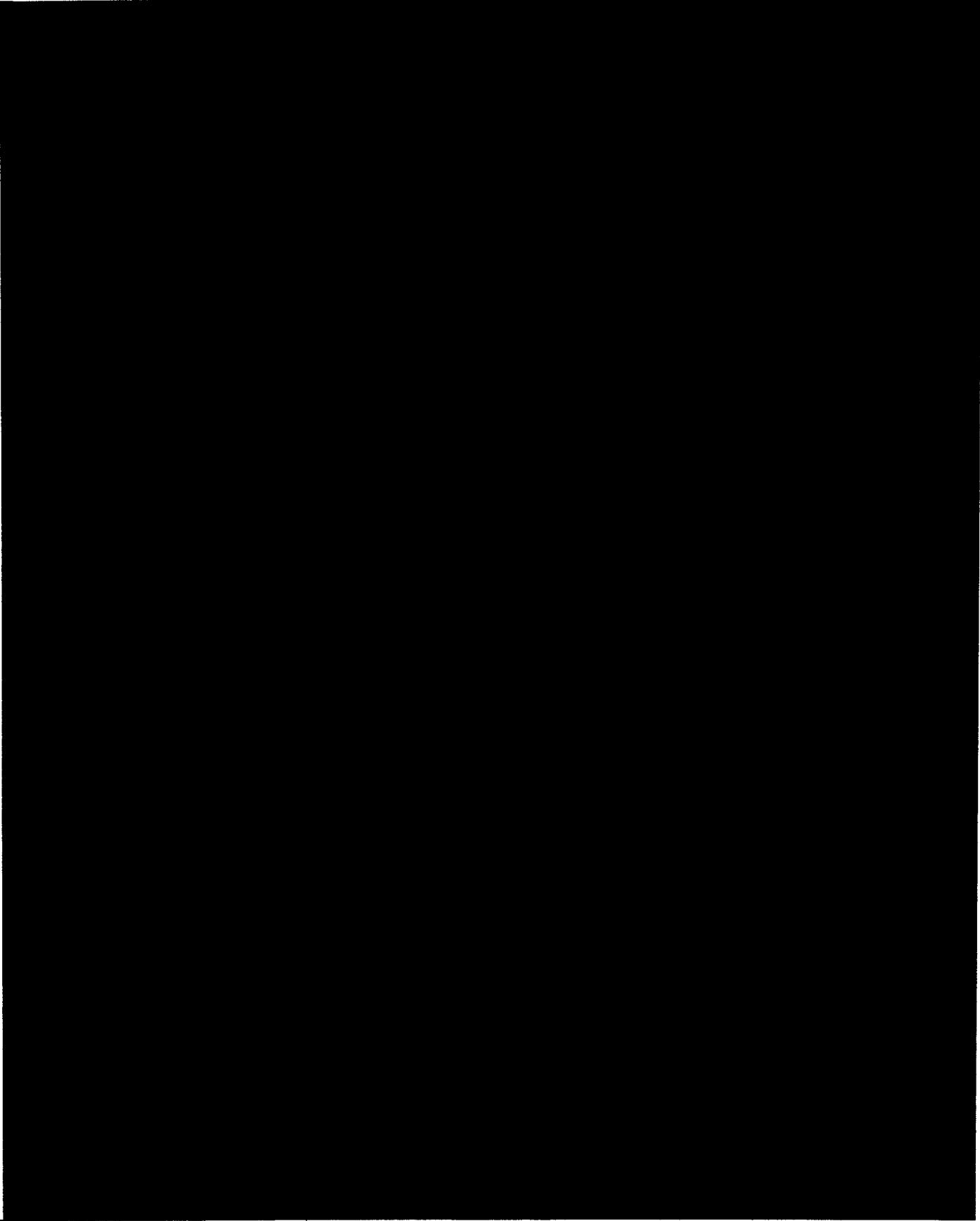
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CSS Customer of Record Premise Address City County State Zip



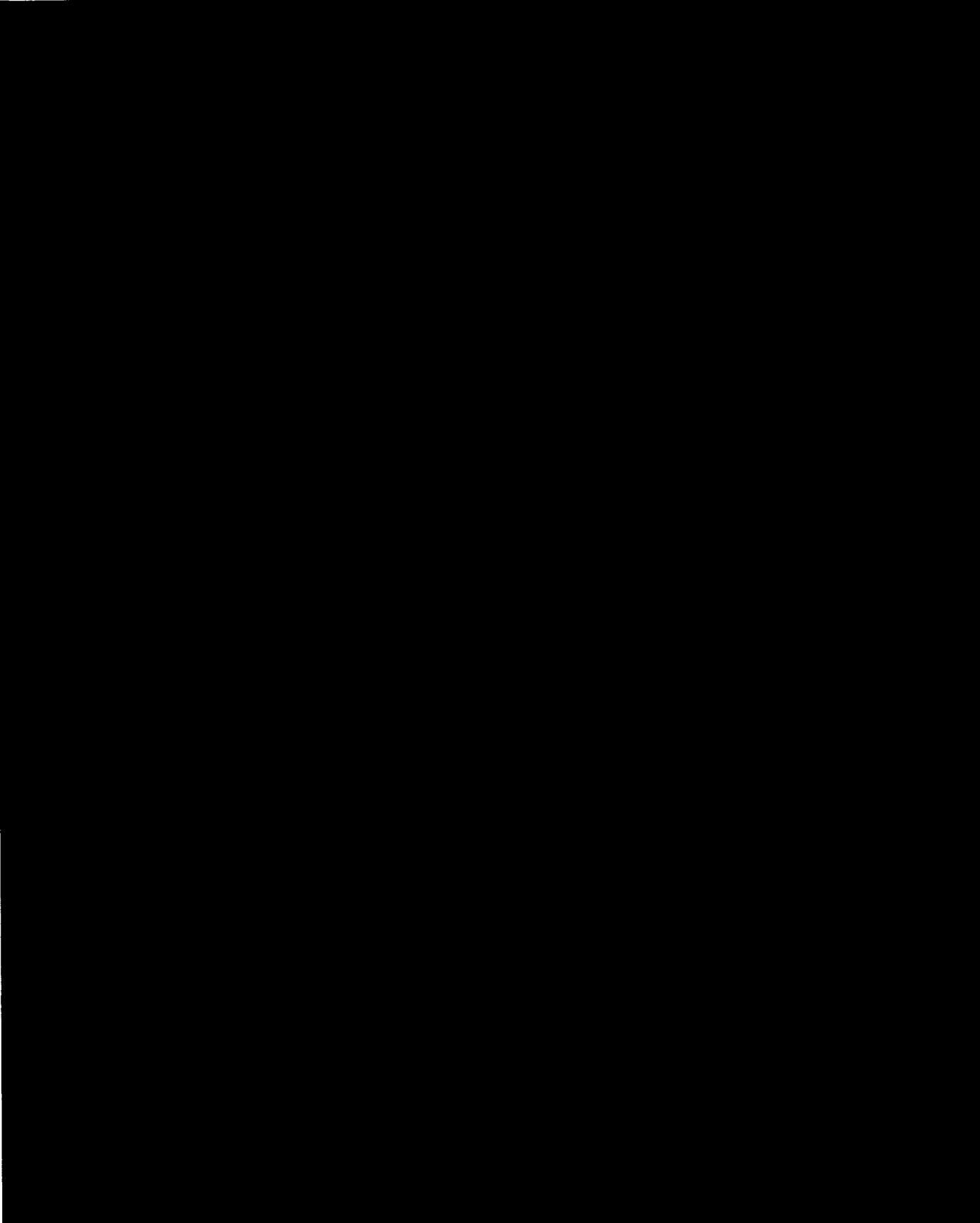
REDACTED

CSS Customer of Record Premise Address City County State Zip



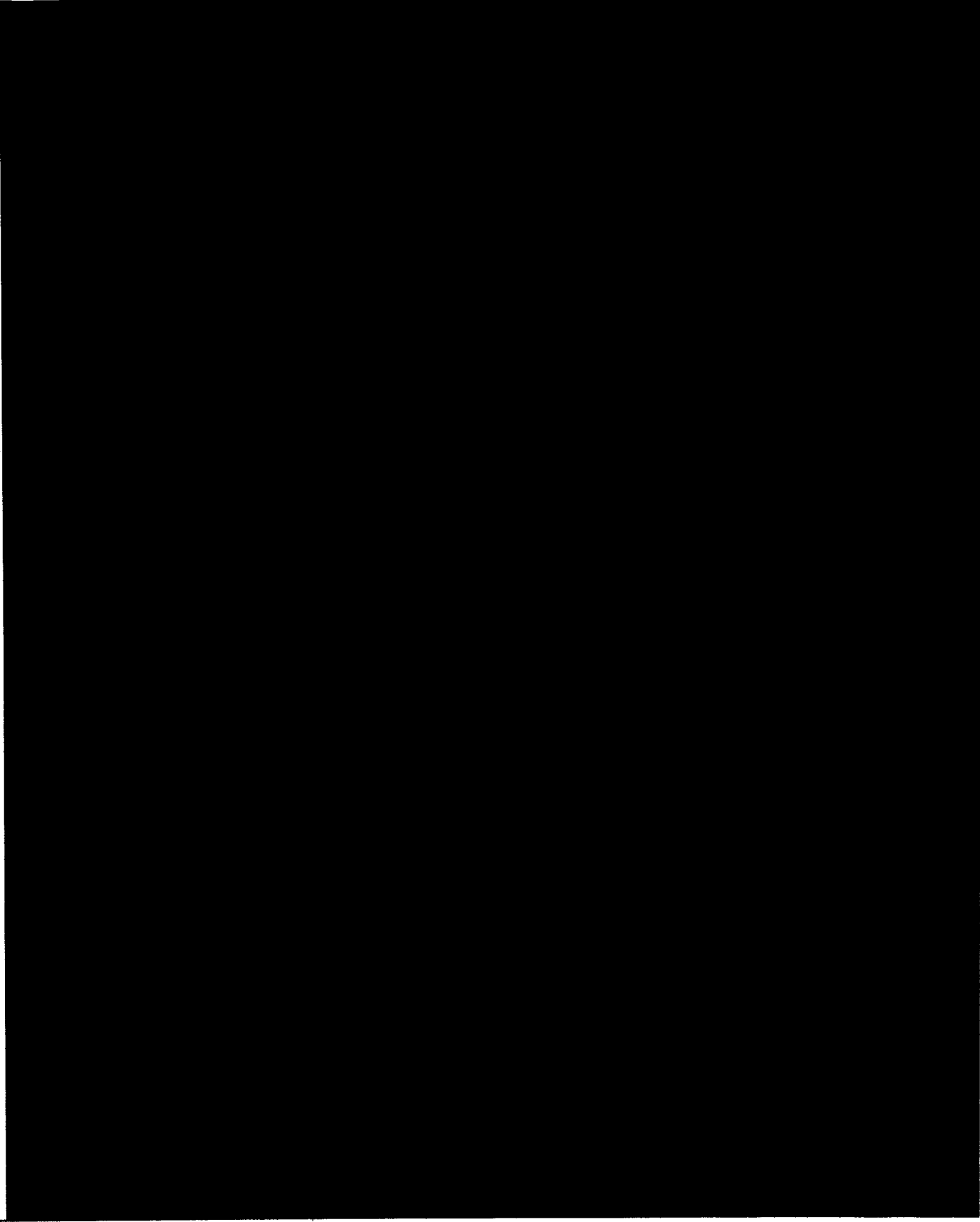
REDACTED

CSS Customer of Record Premise Address City County State Zip



REDACTED

CSS Customer of Record Premise Address City County State Zip



REDACTED

Zip

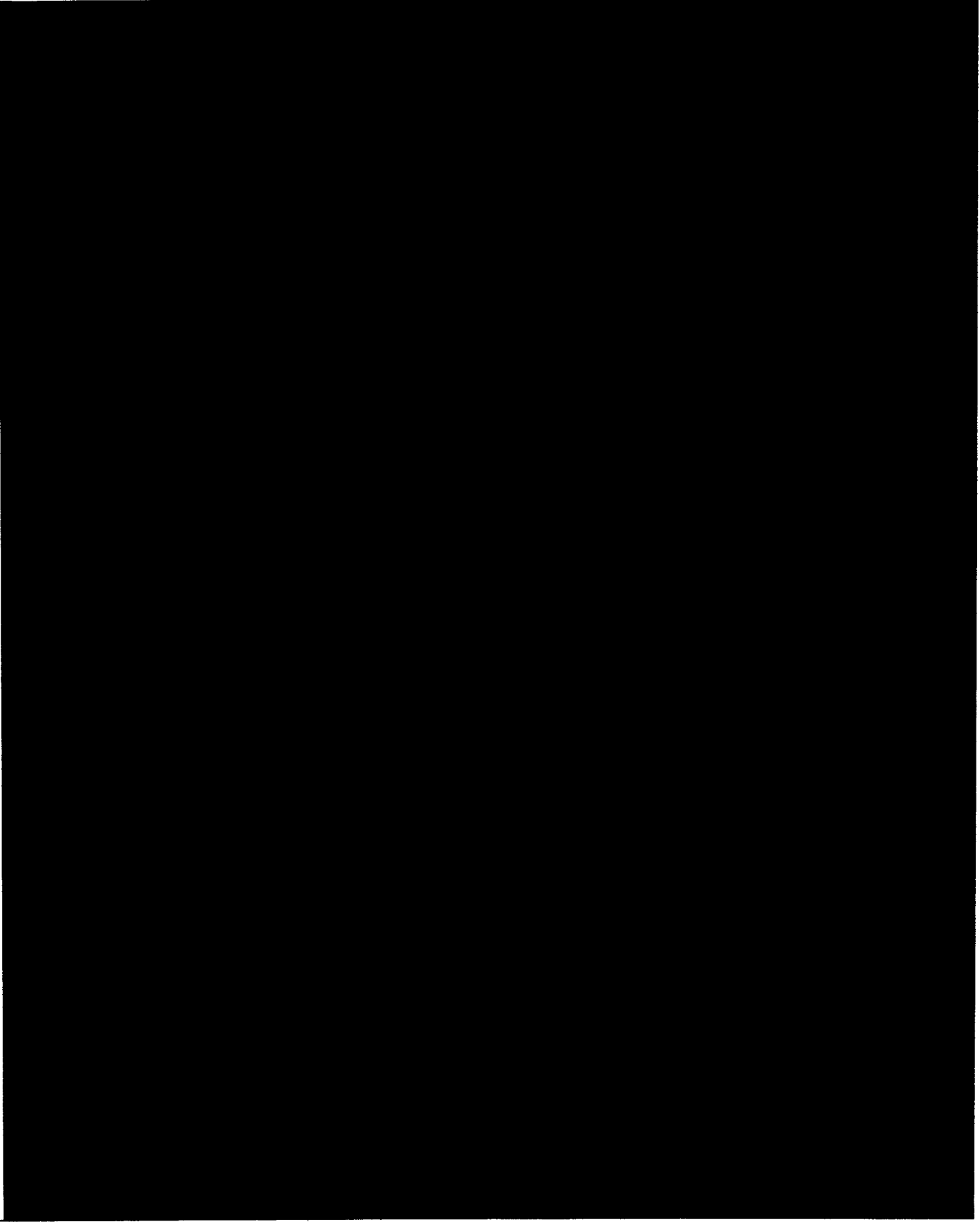
State

County

City

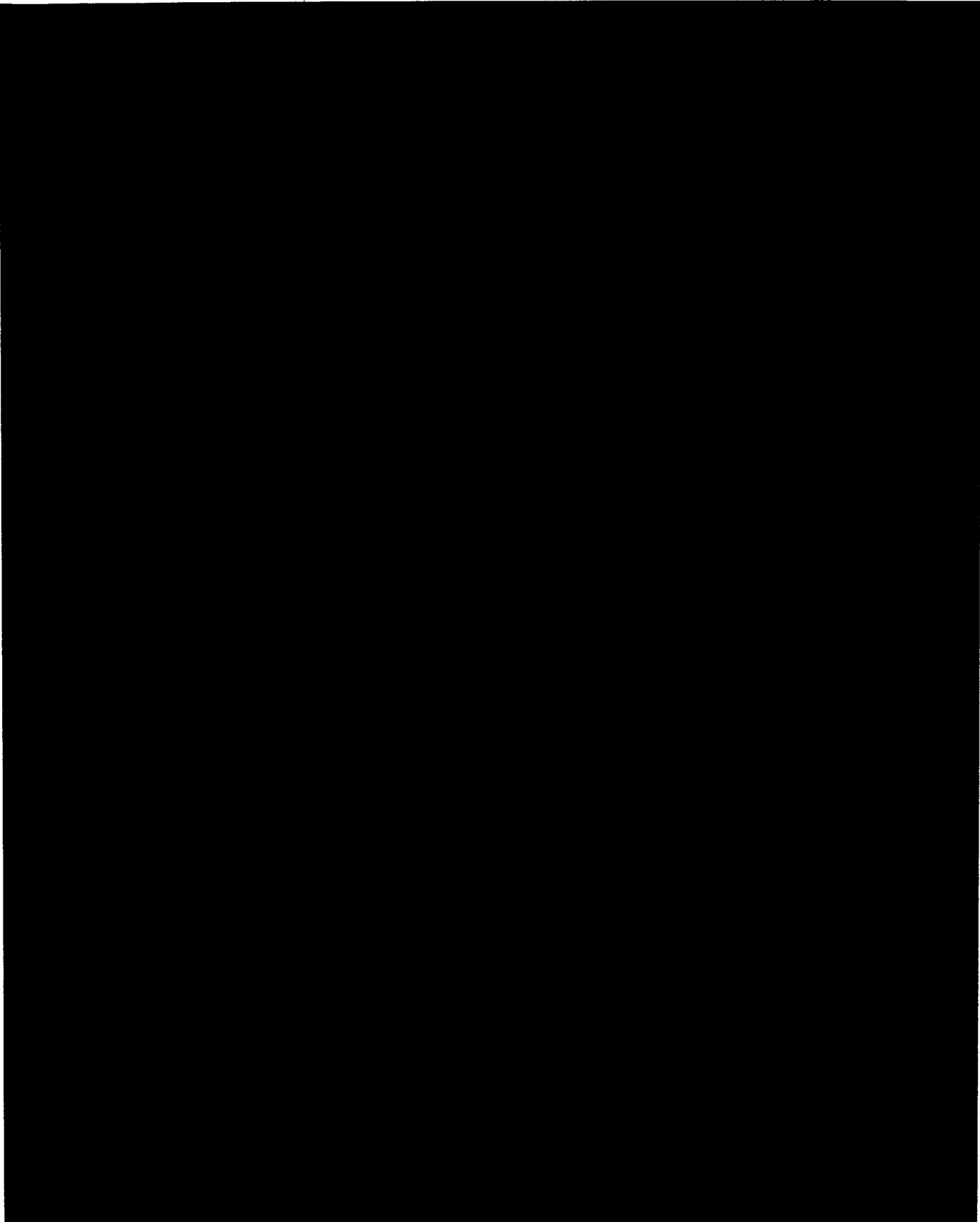
Premise Address

CSS Customer of Record



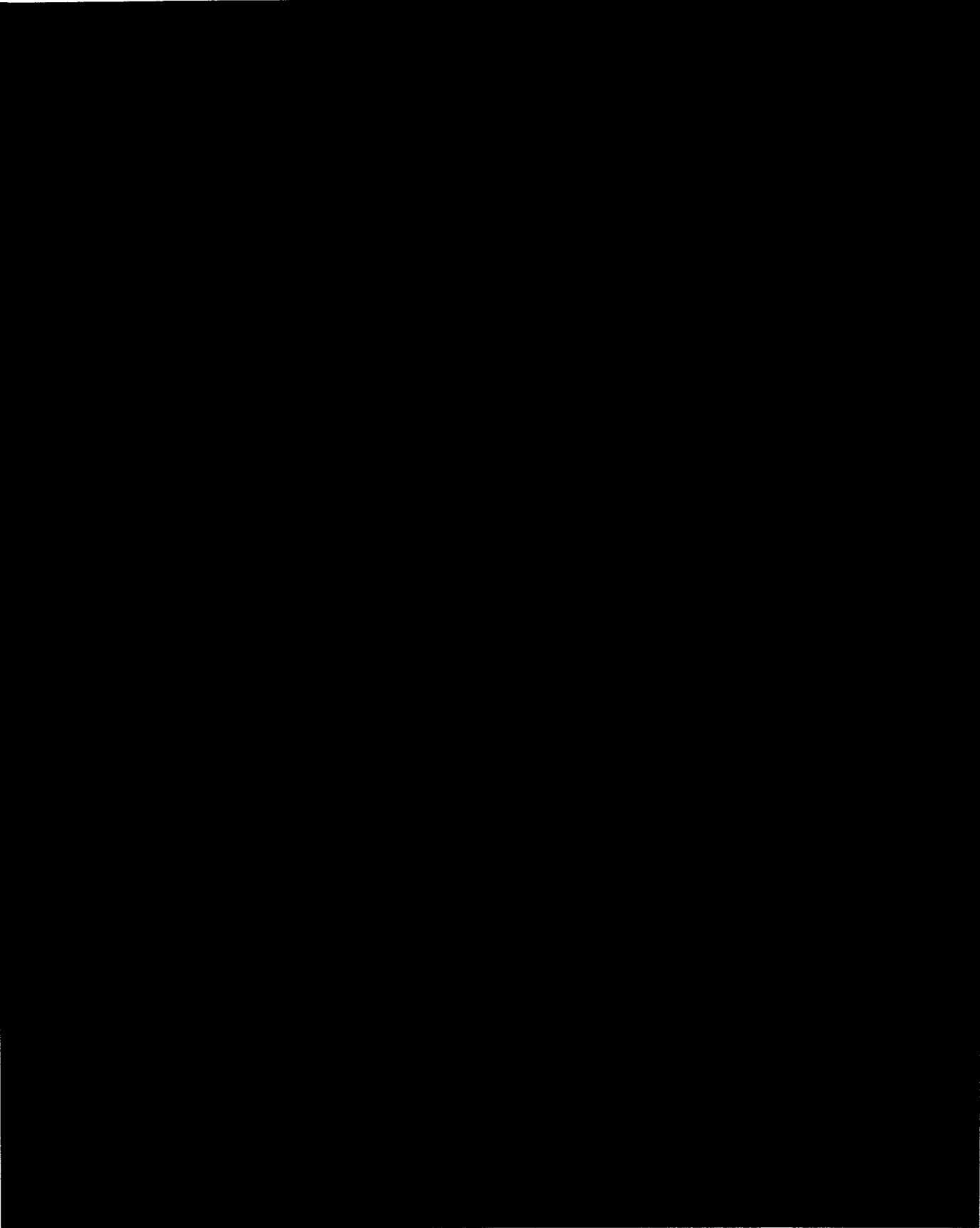
REDACTED

CSS Customer of Record Premise Address City County State Zip



REDACTED

CSS Customer of Record Premise Address City County State Zip



REDACTED

Zip

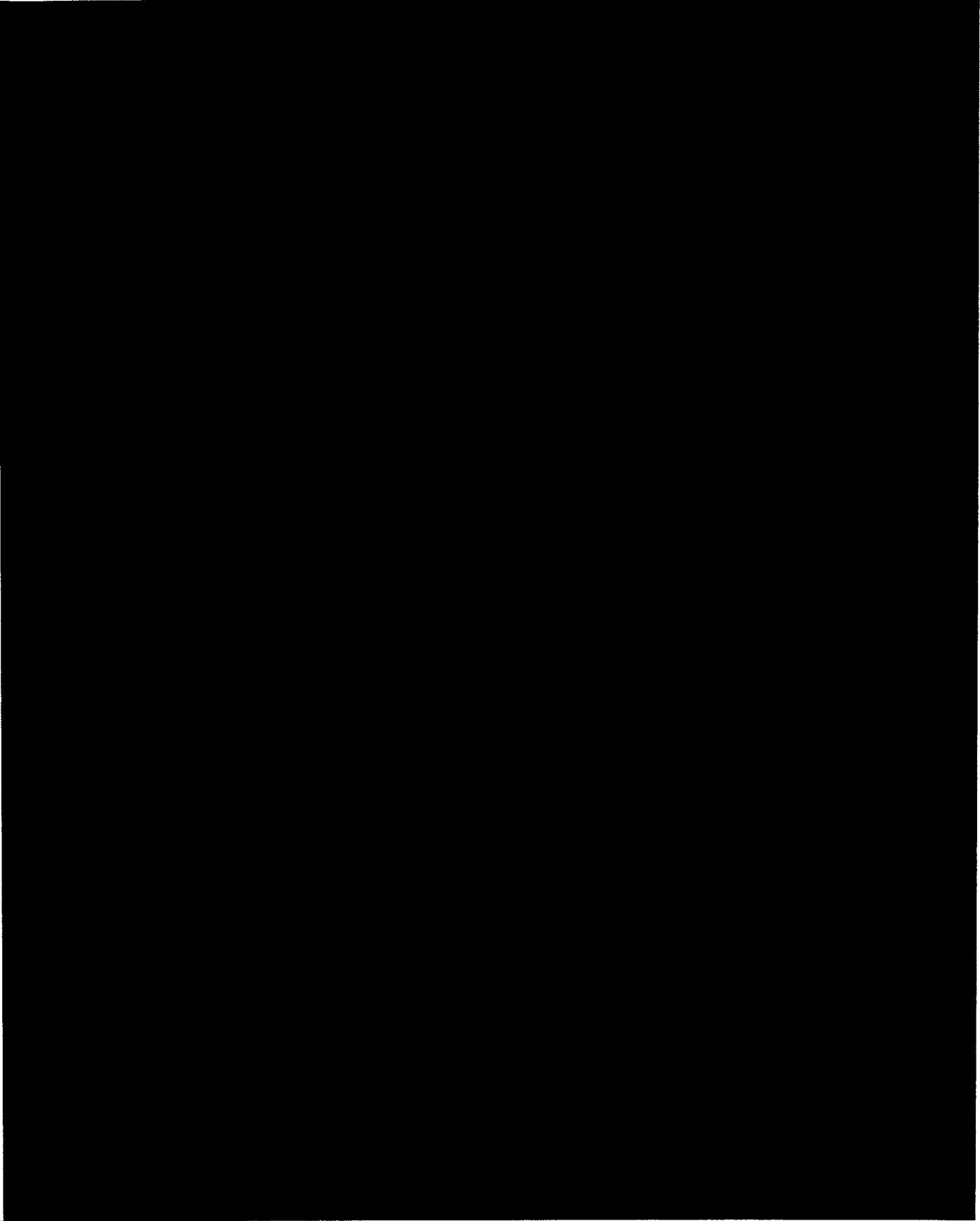
State

County

City

Premise Address

CSS Customer of Record



REDACTED

CSS Customer of Record	Premise Address	City	County	State	Zip
[REDACTED]					

REDACTED



CSS Customer of Record Premise Address City County State Zip

REDACTED

Zip

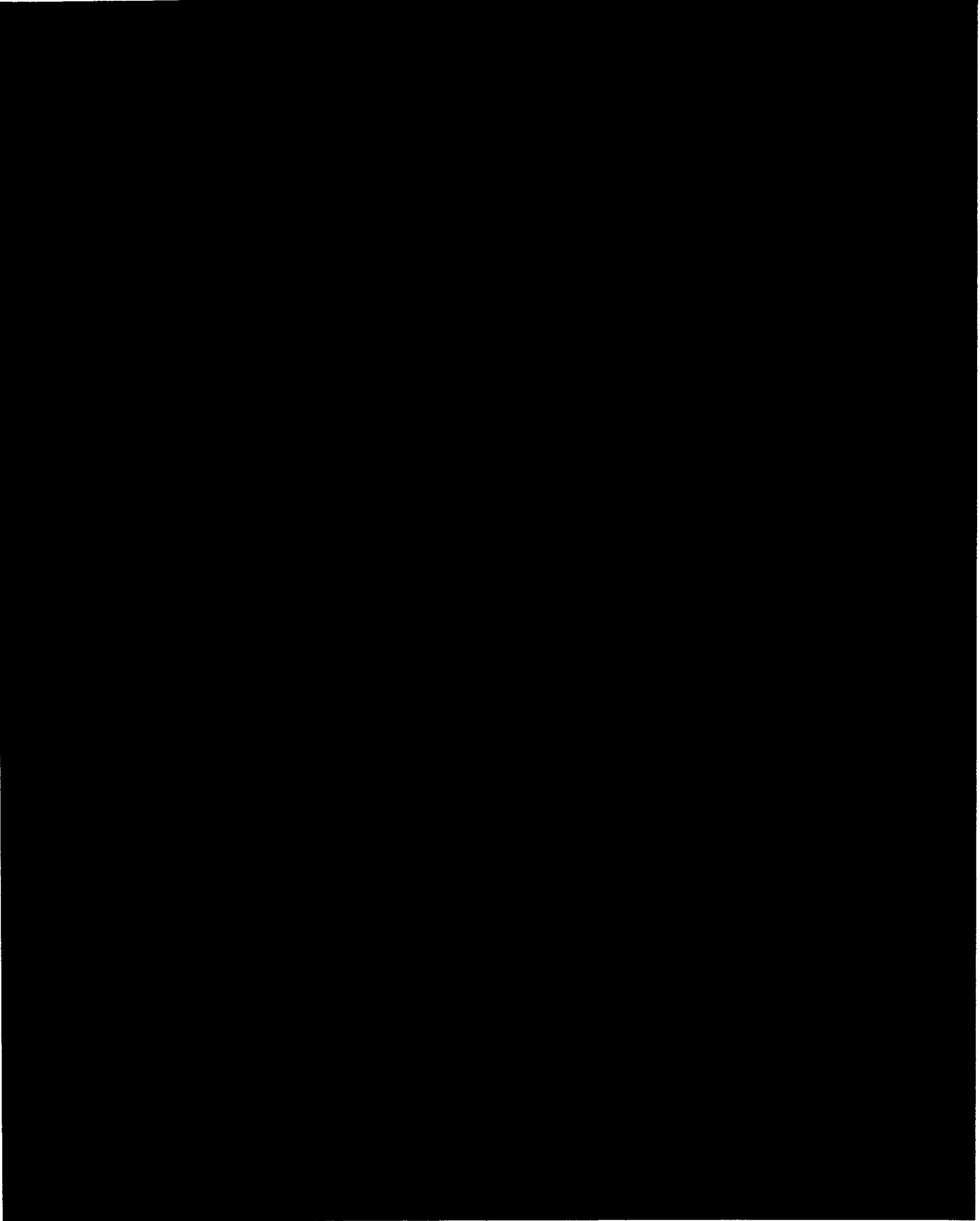
State

County

City

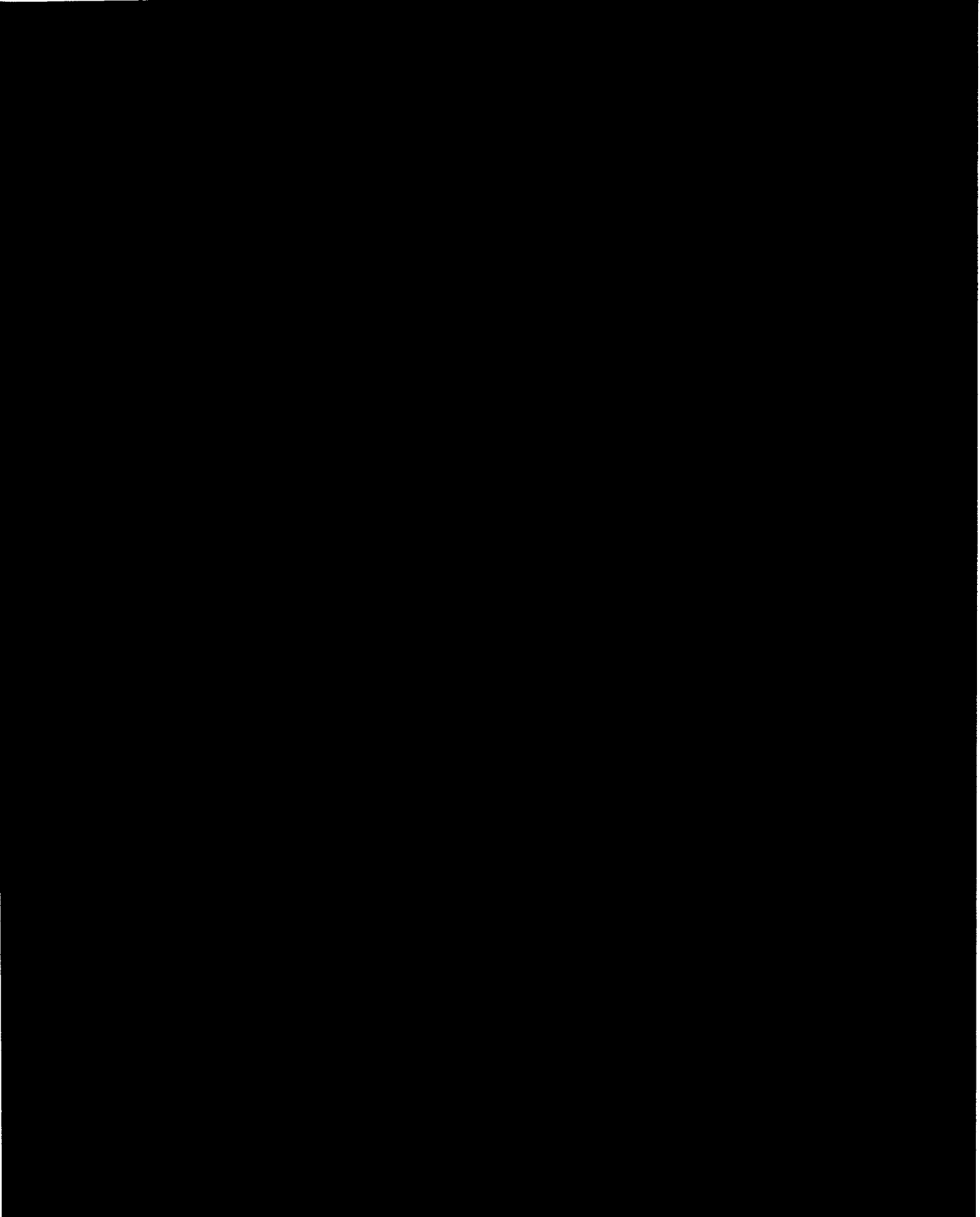
Premise Address

CSS Customer of Record



REDACTED

CSS Customer of Record Premise Address City County State Zip



REDACTED



CSS Customer of Record Premise Address City County State Zip

REDACTED



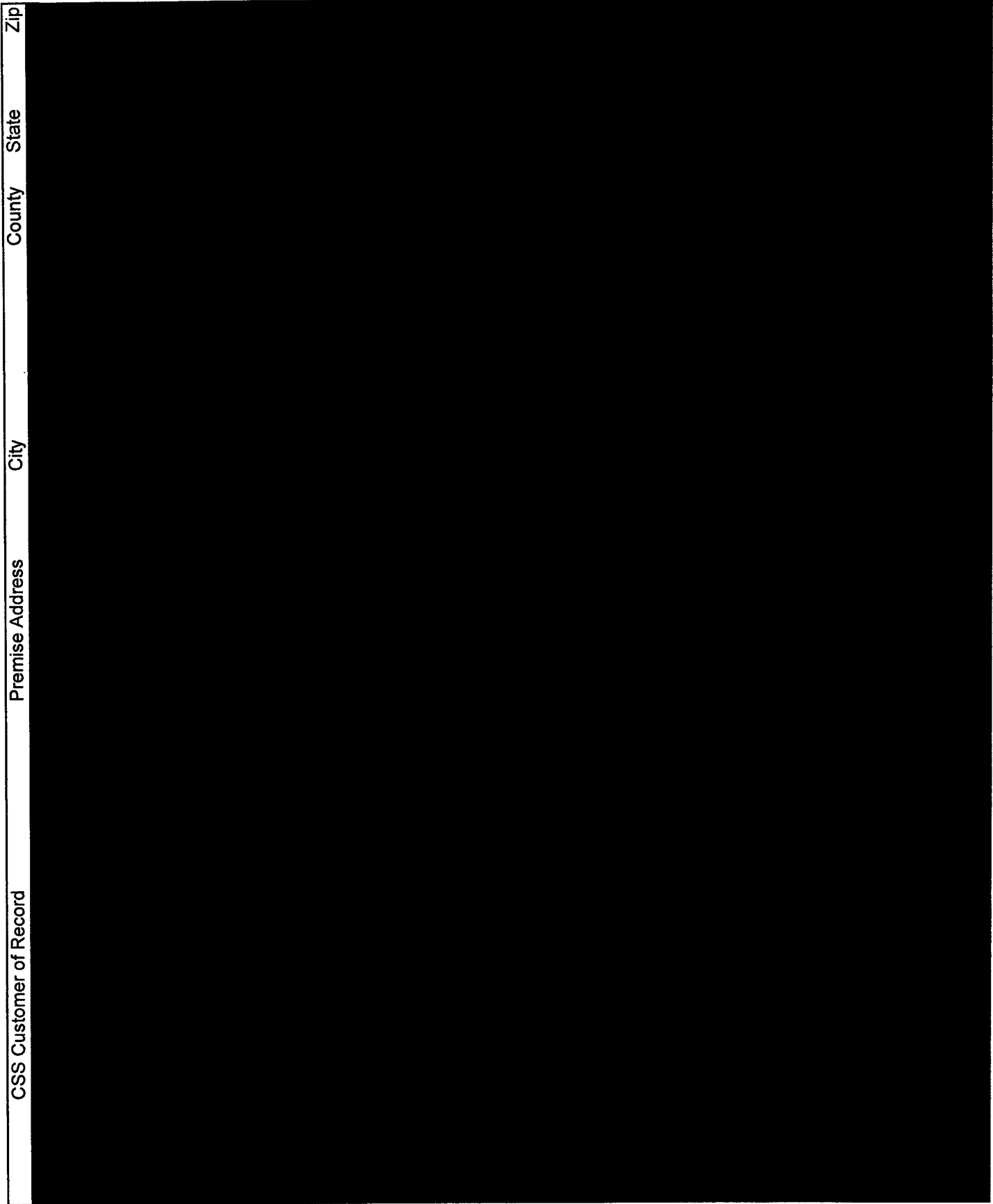
CSS Customer of Record Premise Address City County State Zip

REDACTED



CSS Customer of Record Premise Address City County State Zip

REDACTED



CSS Customer of Record Premise Address City County State Zip

REDACTED

Zip

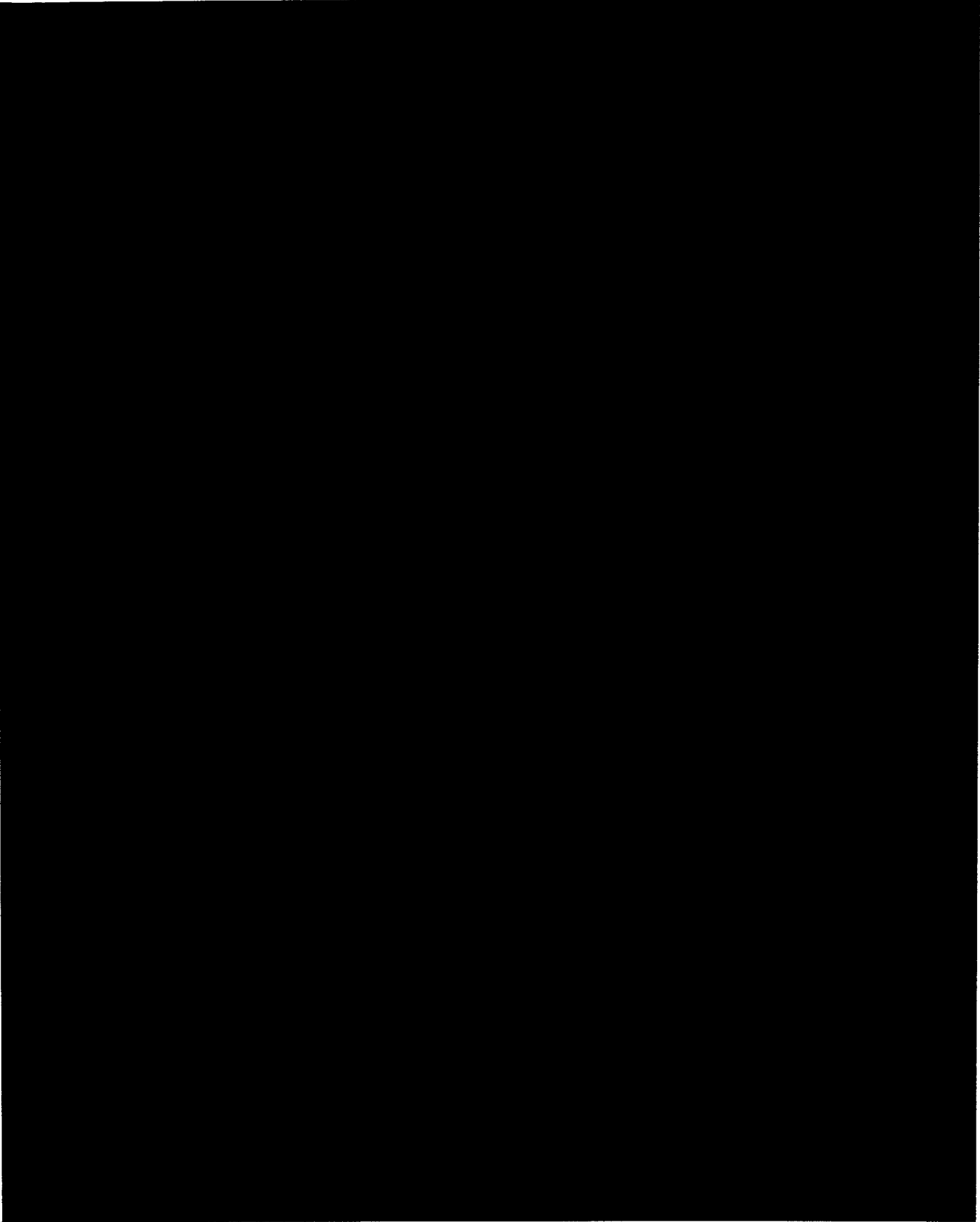
State

County


City

Premise Address

CSS Customer of Record



REDACTED

CSS Customer of Record	Premise Address	City	County	State	Zip
					

REDACTED

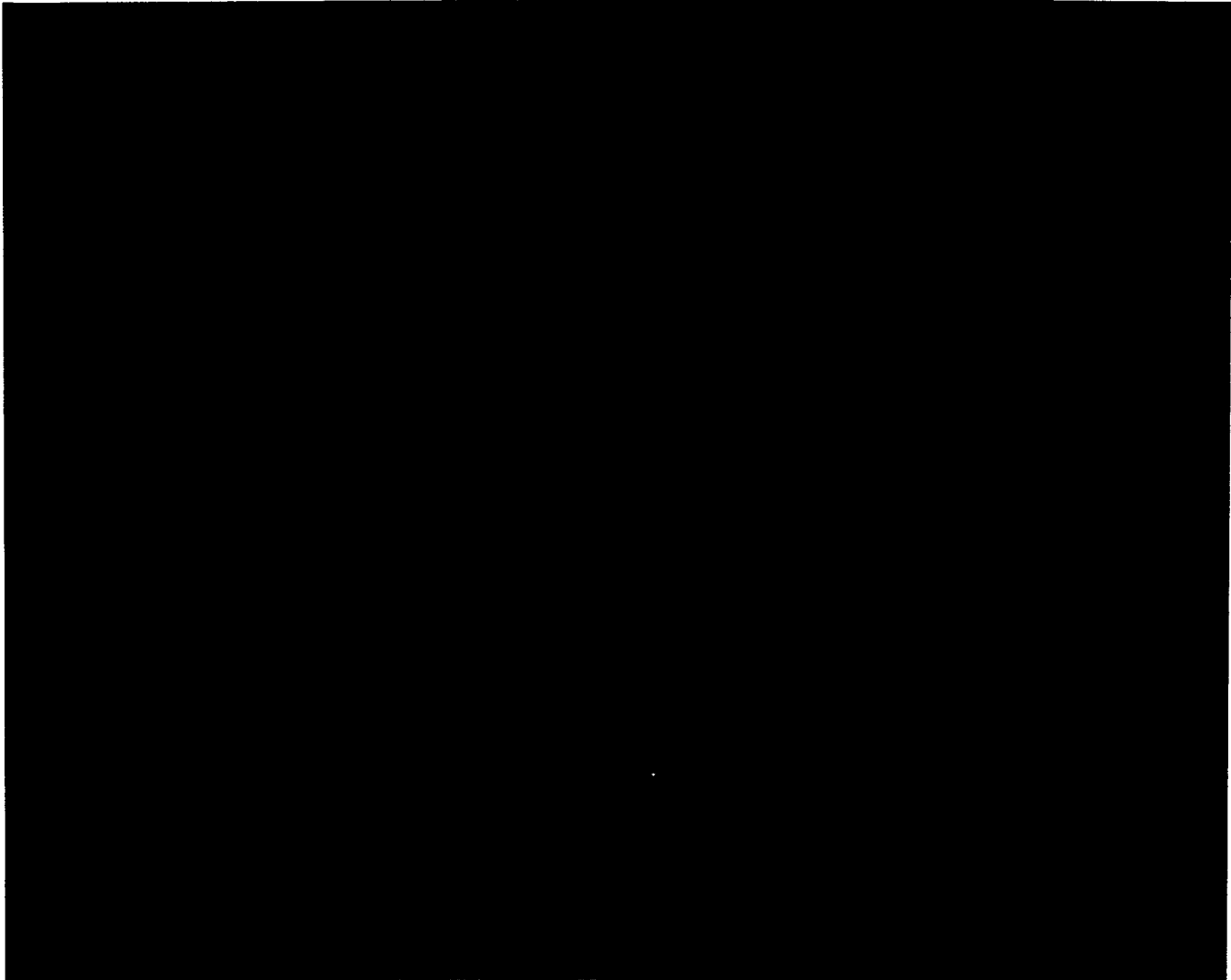
PV Customers Already Installed

CUSTOMER NAME

STREET ADDRESS

CITY

STATE ZIP CODE



REDACTED