Combined Site PDF

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4/9/24

Technician 1/ Technician 2

Arrived on site and checked in with ITS

Checked in with site security and made our way to roof

Located inverter 31 and proceeded to uninstall inverter

Once old inverter is down, we installed the new replacement PVI14TL inverter

Wired new inverter, set the modbus ID to the same within the previous inverter of 11 and powered the new inverter on

Confirmed production locally and remotely with ITS upon check out, site comms are fine

Brought old inverter back to Marlton warehouse

Job complete4/9/2024 Scheduled End

DateS2367 Site ID4/9/2024 Scheduled Start

Date

United StatesAddressInverter Replacement Work Type Account00549595 Work Order

NumberPartner Work

OrderPO Number4/9/2024 Created Date (Solar

LLC)Bill To Prepared for:Field Service Report

Job Details

Work Findings

Photos

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Job Review

Section Question Answer Photos

1.1.1

Failed EquipmentManufacturer Solectria

1.1.2

Failed EquipmentModel number PVI14TL-480

1.1.3

Combined Site PDF

Failed EquipmentSerial number 11491604119

1.1.4

Failed EquipmentInverter ID or location 31

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1.1.6

Failed EquipmentGeneral Notes MBID:11

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2.1.1

Newly Installed EquipmentManufacturer Solectria

2.1.2

Newly Installed EquipmentModel number PVI14TL-480

2.1.3

Newly Installed EquipmentSerial number 11491543039

2.1.4

Newly Installed EquipmentInverter ID or location 31

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2.1.6

Newly Installed EquipmentGeneral Notes MBID: 11

Combined Site PDF

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2/6/24

arrived on site

checked in with ITS

checked in with security and gained roof access

located inverters 15(31)

inverter was in standby with arc fault error

cleared fault and inverter started up

opened inverter and tested all voltage ac and dc, no issues were found

tested dc to ground, no indicators of ground faults on any of the strings

ac testing

L1L2-211

L2L3-210

L1L3-211

L1N-122

L2N-120

L3N-123

L1G-122

L2G-120

L3G-123

NG-0

dc testing

L1-454 L2-440 L3-453 L4453 L5-453 L6451

inverter has been running fine with no issues after restart and testing

issue was likely to do with bad weather causing the fault due to moisture getting inside a connector in the array

if inverter faults again it is recommended that a tech returns to look through array for bad connections

called ITS and updated with findings and checked out 2/21/2024 Scheduled End

DateS2367 Site ID2/21/2024 Scheduled Start

Date

United StatesAddressInverter Troubleshoot Work Type Account00499913 Work Order

Combined Site PDF

NumberPartner Work

OrderPO Number2/22/2024 Created Date (Solar

LLC)Bill To Prepared for:Field Service Report

Job Details

Work Findings

==========

left site

2/21/24::: Technician 7

Upon arrival, the inverter is in the university building. Checked in with security and accessed the roof.

Inverter 12/31 continuously going offline in arc protect even after arc board has been replaced.

Located inverter 31 and found it on standby with Arc Protect as the active fault. Shutdown the inverter and checked torque

on each string. Then checked for any blown fuses which 0 was found.

Finally took string voltages which will be below this.

Model: PVI 14TL-208

SN:11491604119

L1-L2:208v

L1-L3:209

L2-L3:208v

L1-N:122v

L2-N:119v

L3-N:122v

S1-440v

S2-425v

S3-439v

S4-439v

S5-438v

S6-437v

After finding 0 faults . Used the string diagram and located the array with the 6 strings for inverter 31. Went string 1 to 6

removing the wind guard and wire managing each connector found on the roof and reinstalled the wind

guard. Found a

total of 6 connector laying on the roof and some were laying in a puddle. After confirming all dc wires for inverter 31 are

correct. Turned the inverter back on,cleared the fault and the inverter began producing.

Called Solectria and spoke with Technician 3.

Updated him with the original case number.

Solectria case # 440586278

Technician 3 states If the inverter faults out again call back and perform string test one by one turning on the inverter separately

with each string to see which causes the fault. If the inverter produces with each string individually he will issue a RMA for

a replacement.

Called ITS and confirmed they can see the production of the inverter also.

Photos

Combined Site PDF

==========

3/25/24

-Arrived on site

-Checked in with ITS

-checked in with security on site

-Began moving to roof

Inv 40

Sn:11491624010

Error-arc protect

-AC voltage

L1-n-120

L2-n-123

L3-n-122

L1-L2-211

L1-L3-212

L2-L3-212

-Dc voltage

S1-428

S2-422

S3-436

S4-436

S5-434

S6-435

-0 volts to ground on positive and negative

-Tested all fuses all are good

-Began testing 1 string at a time to see if inverter will produce on the individual strings

Inverters passed the individual string tests

-Called Solectria

-Spoke with Technician 4

-Gave him serial number

-He informed this is first call in for this inverter

-Case#0440607261

Combined Site PDF

-This is being logged as first occurrence if the inverter goes down due to arc protect solectria will rma arc board. If that

fails to fix issue next step is to rma entire unit.

-As for now Inv 40 is back up and fully operational 3/25/2024 Scheduled End

DateS2367 Site ID3/25/2024 Scheduled Start

Date

United StatesAddressInverter Outage (Single) Work Type Account00527631 Work Order

NumberPartner Work

OrderPO Number3/29/2024 Created Date (Solar

LLC)Bill To Prepared for:Field Service Report

Job Details

Work Findings

==========

Inv 31

SN:11491604119

-Found inverter in arc protect

-Reviewed last techs notes and saw solectria next recommend troubleshooting step

-I performed these steps and confirmed the inverter produces on each string individually

AC voltage

L1-L2:208v

L1-L3:209

L2-L3:208v

L1-N:122v

L2-N:119v

L3-N:122v

Dc voltage

S1-440v

S2-425v

S3-439v

S4-439v

Combined Site PDF

S5-438v

S6-437v

Called solectria

Existing case#440586278

Spoke with Technician 4

-He requested recent fault logs and provided them to him

-I also informed him of my troubleshooting steps

-This unit is going RMAd under the existing case# we have open

-Inverter is back up and running after clearing arc protect but will most likely go offline again

-Return wo will require 2 techs 6 hours

Recommend bringing 2 ropes to pull up inverter from the lower roof. No lift is required

Inv 16

-Upon arrival on site Inv 16 is producing and reporting.

-Moved to upper roof to check inverter

Sn: 11491510648

-Checked error logs found no recent faults

Inverter likely had a coms glitch that made it appear offline

-ITS has been updated on all findings

-New rma created

-Also created follow on work order to fix wire way and wire management on convent building roof

-2 techs 4 hours needed to make these repairs

-Material need

100-12 zip ties

Photos

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Job Review

Section Question Answer Photos

Combined Site PDF

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Inverter 16 - Intermittent Outages

Case #0440614585

- Arrived on site

- Checked in with front desk

- Gained roof acces from

- Located inverter 16, & inv was producing.

- Checked error history & found isolation error.

- Shutdown inverter & tested/checked DC voltages , fuses & for ground faults.

- Found slight ground fault on string 3+

- Fault was reading at 27.2Vdc & wasnt bleeding below 27.2Vdc

- Connectors to string 3+ was changed as well as lead from the panel. Still was getting a ground fault reading afterwards.

- Isolated string 3, further TS is needed. Possibly pulling a few panels up.

- no modules showing physical damages.

- Theres debris & soiling from various sections of ponding water, which can also be causing this issue.

- Called Solectria to create a case for the intermittent outages.

- Solectria said theyll keep eye on this issue moving forward. If the issue continues they will RMA the wiring boards.

Case# 0440614585

Case # 0440614585

Follow up WOs

- Install New lcd display. Inv 18 sn: 11491506186

- TS inv 16 string 3+ ground fault.

Recommend

- Removing the soil buildup from the ponding water spots.6/10/2024 Scheduled End

DateS2367 Site ID6/10/2024 Scheduled Start

Date

United StatesAddressInverter Outage (Single) Work Type Account00566904 Work Order

NumberPartner Work

OrderPO Number6/11/2024 Created Date (Solar

Combined Site PDF

LLC)Bill To Prepared for:Field Service Report

Job Details

Work Findings

Failed Job Review

Section Question Answer Photos

Job Review

Section Question Answer Photos

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2.1.97

Summary of Work CompletedPhotos

Combined Site PDF

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7/19/24

-Inv 18 screen replacement-Inv 16 ground fault troubleshooting

-Arrived on site

-Checked in with security

-Moved to upper roof of college building where Inv 16 and 18 are located

-Once on roof we found that Inv 18 had a yellow jacket nest and wasp nest in it

-We took care of the bees with wasp spray and cleared the nests from the inverter

-We then removed the cover and removed the defective screen

-Installed new screen

-Put Inverter cover back on and powers the unit back on

-Once powered on screen was working fine no issue

-Moved to inverter 16

-Inverter 16 is on and running when opening the combiner string 3 is isolated by previous tech

-String 3 showing 397 positive to negative

-String 3 showing 300v positive to ground and 31v negative to ground

-Looked thru site paperwork and found string diagram and located string 3 on roof

-Moved to home run and tested for fault found that there are no faults on the series of 10 mods when the home runs are

disconnected

-The home run is however showing 155v when tested to ground.

-The home run is not landed in the inverter or connected in the array so there should be no voltage on the positive home

run at all

-Wires on roof are bunched together and laying on water all over

-Will need to return with 2-3 techs to lift mods and trace strings back to find out if there a pinched wire somewhere within

the array

-In order to do this will need at least 2 techs and 8 hours to complete

-As for now Inv 16 is producing with string 3 isolated7/19/2024 Scheduled End

DateS2367 Site ID7/19/2024 Scheduled Start

Date

Combined Site PDF

United StatesAddressInverter Component Replacement Work Type Account00586593 Work Order NumberPartner Work OrderPO Number7/19/2024 Created Date (Solar LLC)Bill To Prepared for:Field Service Report

Job Details

Work Findings

Failed Job Review

Section Question Answer Photos

Job Review

Section Question Answer Photos

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4.1.97

Summary of Work CompletedPhotos

Combined Site PDF

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8/20/24 Technician 6

Wire management

-Arrived on site checked in with maintenance

-Moved to rooftop

-Wire way that jumps from array to array is completely disassembled and dc wiring is laying on roof

-Documented findings

-Began scanning roof to gather all missing pieces

-Was able to find all missing pieces and began laying them out

-We began snapping everything back together

-We then laid the dc wiring back in the trays and put the cover on top

-Once all was assembled we zip tied every 3 feet to keep the wire secured to each

other

-After zip tying everything we clipped the zip ties and took photos of completed work

-We then checked the array itself for down wires.

-We didnt find anything concerning with actual wiring under the panels themselves made a few adjustments but overall

the panel wiring is in good shape

-Job complete8/20/2024 Scheduled End

DateS2367 Site ID8/20/2024 Scheduled Start

Date

United StatesAddressOther Work Type Account00549675 Work Order

NumberPartner Work

OrderPO Number8/21/2024 Created Date (Solar

LLC)Bill To Prepared for:Field Service Report

Job Details

Work Findings

Failed Job Review

Section Question Answer Photos

Job Review

Section Question Answer Photos

Combined Site PDF

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2.1.97

Summary of Work CompletedPhotos

Combined Site PDF

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Technician Findings:

Upon arrival ,Met with security, signed in, and accessed the lower roof.

Work Performed:

1. Lower Roof::::

Inspected the array and performed wire management using panel clips and zip ties.

Secured all panel wires and home runs.

Successfully assembled and secured the wire tray for the lower roof.

2. Higher Roof:::::

Accessed the higher roof and wire managed all accessible areas.

Progress was limited due to large puddles, ice, and water across the roof.

Found a wire tray connecting several arrays to be completely dismantled.

Recommendations:

A return trip is needed to fully reattach and secure the wire trays on the higher roof once conditions improve.

Departure Status:

The lower roof is fully wire managed and secured.

The higher roof requires additional work to complete wire tray repairs.

Recommendations for Return Visit:

A return trip is needed to fully reattach and secure the wire trays on the higher roof once conditions improve.12/12/2024 Scheduled End

DateS2367 Site ID12/12/2024 Scheduled Start

Date

United StatesAddressSystem Repairs Work Type Account00590654 Work Order

NumberPartner Work

OrderPO Number12/13/2024 Created Date (Solar

LLC)Bill To Prepared for:Field Service Report

Job Details

Work Findings

Photos

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Combined Site PDF

Job Review

Section Question Answer Photos

Combined Site PDF

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Upon arrival,Met with security, signed in, and accessed the roof.

Located Inverter 29 on the lower roof; it was on and producing.

1. Inverter 29:::::::

Used screens from truck stock as no materials were pre-ordered.

Replaced the screen and powered the inverter back on.

Confirmed it began producing with no issues.

2. Inverter 33::::

While at the inverter pad, noted that Inverter 33 requires a screen replacement.

3. Inverter 17::::

Accessed the higher roof and located Inverter 17.

Replaced the screen and confirmed production.

4. Inverter 15::::

While on the higher roof, found that Inverter 15 will also require a screen replacement.

Departure Status:

Inverter 29 and Inverter 17 screens were successfully replaced and are now producing.

Inverter 33 and Inverter 15 still require screen replacements.12/12/2024 Scheduled End DateS2367 Site ID12/12/2024 Scheduled Start Date

United StatesAddressInverter Component Replacement Work Type Account00636665 Work Order NumberPartner Work OrderPO Number12/12/2024 Created Date (Solar LLC)Bill To Prepared for:Field Service Report

Job Details

Work Findings

Photos

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Job Review

Section Question Answer Photos

Combined Site PDF

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1/8/24

-Inv 46 replacement

-Old Sn:11491625004

-Arrived on site

-Took all failed equipment photos

-Labeled all dc strings

-Removed all wiring

-Removed all bushing and lock rings

-Removed old inverter

New inverter

-Sn:11491624051

-Knocked out conduit holes

-Laid inverter next to mounting bracket

-Fed all wiring into knockouts

-Stood inverter up and locked into mounting brackets

installed all lock rings bushings

-Began wiring the inverter starting with grounded then AC then dc

-Once all wiring was properly torqued we restored AC power

-Then powered unit on and set mod bus id to 3

-Inverter began producing

-Updated ITS

-job complete1/8/2024 Scheduled End

DateS2367 Site ID1/8/2024 Scheduled Start

Date

United StatesAddressInverter Replacement Work Type Account00481797 Work Order

NumberPartner Work

OrderPO Number1/10/2024 Created Date (Solar

LLC)Bill To Prepared for:Field Service Report

Job Details

Work Findings

Combined Site PDF

Failed Job Review

Section Question Answer Photos

Job Review

Section Question Answer Photos

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4.2.97

Summary of Work CompletedPhotos

Combined Site PDF

==========

3/25/24

-Arrived on site

-Checked in with ITS

-checked in with security on site

-Began moving to roof

Inv 40

Sn:11491624010

Error-arc protect

-AC voltage

L1-n-120

L2-n-123

L3-n-122

L1-L2-211

L1-L3-212

L2-L3-212

-Dc voltage

S1-428

S2-422

S3-436

S4-436

S5-434

S6-435

-0 volts to ground on positive and negative

-Tested all fuses all are good

-Began testing 1 string at a time to see if inverter will produce on the individual strings

Inverters passed the individual string tests

-Called Solectria

-Spoke with Technician 4

-Gave him serial number

-He informed this is first call in for this inverter

-Case#0440607261

Combined Site PDF

-This is being logged as first occurrence if the inverter goes down due to arc protect solectria will rma arc board. If that

fails to fix issue next step is to rma entire unit.

-As for now Inv 40 is back up and fully operational 3/25/2024 Scheduled End

DateS2367 Site ID3/25/2024 Scheduled Start

Date

United StatesAddressInverter Outage (Single) Work Type Account00527631 Work Order

NumberPartner Work

OrderPO Number3/29/2024 Created Date (Solar

LLC)Bill To Prepared for:Field Service Report

Job Details

Work Findings

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Inv 31

SN:11491604119

-Found inverter in arc protect

-Reviewed last techs notes and saw solectria next recommend troubleshooting step

-I performed these steps and confirmed the inverter produces on each string individually

AC voltage

L1-L2:208v

L1-L3:209

L2-L3:208v

L1-N:122v

L2-N:119v

L3-N:122v

Dc voltage

S1-440v

S2-425v

S3-439v

S4-439v

Combined Site PDF

S5-438v

S6-437v

Called solectria

Existing case#440586278

Spoke with Technician 4

-He requested recent fault logs and provided them to him

-I also informed him of my troubleshooting steps

-This unit is going RMAd under the existing case# we have open

-Inverter is back up and running after clearing arc protect but will most likely go offline again

-Return wo will require 2 techs 6 hours

Recommend bringing 2 ropes to pull up inverter from the lower roof. No lift is required

Inv 16

-Upon arrival on site Inv 16 is producing and reporting.

-Moved to upper roof to check inverter

Sn: 11491510648

-Checked error logs found no recent faults

Inverter likely had a coms glitch that made it appear offline

-ITS has been updated on all findings

-New rma created

-Also created follow on work order to fix wire way and wire management on convent building roof

-2 techs 4 hours needed to make these repairs

-Material need

100-12 zip ties

Photos

==========

Job Review

Section Question Answer Photos

Combined Site PDF

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8/20/24 Technician 6

Wire management

-Arrived on site checked in with maintenance

-Moved to rooftop

-Wire way that jumps from array to array is completely disassembled and dc wiring is laying on roof

-Documented findings

-Began scanning roof to gather all missing pieces

-Was able to find all missing pieces and began laying them out

-We began snapping everything back together

-We then laid the dc wiring back in the trays and put the cover on top

-Once all was assembled we zip tied every 3 feet to keep the wire secured to each

other

-After zip tying everything we clipped the zip ties and took photos of completed work

-We then checked the array itself for down wires.

-We didnt find anything concerning with actual wiring under the panels themselves made a few adjustments but overall

the panel wiring is in good shape

-Job complete8/20/2024 Scheduled End

DateS2367 Site ID8/20/2024 Scheduled Start

Date

United StatesAddressOther Work Type Account00549675 Work Order

NumberPartner Work

OrderPO Number8/21/2024 Created Date (Solar

LLC)Bill To Prepared for:Field Service Report

Job Details

Work Findings

Failed Job Review

Section Question Answer Photos

Job Review

Section Question Answer Photos

Combined Site PDF

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2.1.97

Summary of Work CompletedPhotos

Combined Site PDF

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Technician 5 9/23/24

Clean Drains

WO:590661

- Arrived on site

- Checked in with front desk

- Gained roof acces

- Located roof drains

- Began removing debris surrounding the drains.

- Some of the drains dip below the actual roof level. This may cause some ponding water around the drain.

- All drains cleared.

- Noticed inv 17 & 29 needs new lcd screens.

- Solectria LCD Screen case #0440626288

Checking the drains on any site visit will assist in keeping them clear.

Quote for the lcd screens will be sent to me sometime today. The field report will be updated with that info once I receive

it.

FOLLOW UP WO

Create WO to replace two screens

Solectria

PVI 14TL-208

Inv 29 sn: 11491625640

Inv 17 sn: 11491505016

No lift needed

1 tech9/23/2024 Scheduled End

DateS2367 Site ID9/23/2024 Scheduled Start

Date

United StatesAddressInspection/Troubleshoot Other Work Type Account00590661 Work Order

NumberPartner Work

OrderPO Number9/24/2024 Created Date (Solar

LLC)Bill To Prepared for:Field Service Report

Combined Site PDF

Job Details

Work Findings

Failed Job Review

Section Question Answer Photos

Job Review

Section Question Answer Photos

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2.1.97

Summary of Work CompletedPhotos

Combined Site PDF

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Technician 5

9/23/24

Inv 34 production outage

WO:629956

Case #0440626263

- Arrived on site
- Checked in with front desk
- Gained roof acces from
- Located inverter 34
- Checked error history & found arc protect.
- Clear the fault
- Shutdown inverter & began checking AC/DC voltages , fuses & for ground faults.
- No errors were found. AC/DC producing as it should.
- Reached out to Solectria to create a case & document the Arc protect.
- 0440626263 case #

This is the first case documented with Solectria. Solectria tends to need this particular fault to occur 2-3 times before

sending out new board.

Moving forward inv 34 should be monitored to see if the fault continues.9/23/2024 Scheduled End DateS2367 Site ID9/23/2024 Scheduled Start Date

United StatesAddressInverter Outage (Single) Work Type Account00629956 Work Order NumberPartner Work OrderPO Number9/24/2024 Created Date (Solar LLC)Bill To Prepared for:Field Service Report

Job Details

Work Findings

Failed Job Review

Section Question Answer Photos

Job Review

Combined Site PDF

Section Question Answer Photos

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2.1.97

Summary of Work CompletedPhotos