



J. RANCK
ELECTRIC, INC.

DOCKET# 14-0409

"ERRATA/AMENDMENT"

Flint, Michigan
3015 Airpark Drive N.
Flint, MI 48507
Phone: (800) 792-3822
Fax: (810) 424-9750

INSTALLER CERTIFICATION OF COMPLETION

The renewable energy facility for Heartland Healthcare at 1300 West Devon Avenue, Chicago, IL was commissioned on May 14, 2014. I certify that this system was installed in accordance with all local, state, and federal codes, and interconnection was approved by ComEd. The applicant has also completed payment for the renewable energy system.

SYSTEM DETAILS: 13.75KW BALLASTED ROOF TOP SOLAR PV ARRAY
SYSTEM CAPACITY: 13KW AC/13.75KW DC
MODULE TYPE: SONALI SOLAR 250 WATT ASSEMBLED IN MICHIGAN
NUMBER OF MODULES: 55
INVERTER TYPE: SOLECTRIA PV113
NUMBER OF INVERTERS: 1
PANEL SERIAL NUMBERS:
INVERTER SERIAL NUMBERS: 100928245-015
ESTIMATED ANNUAL PRODUCTION: 16,500KWh
LABOR HOURS: 150

SIGNATURE: 

PRINTED: Scott Walker

DATE: May 14th, 2014

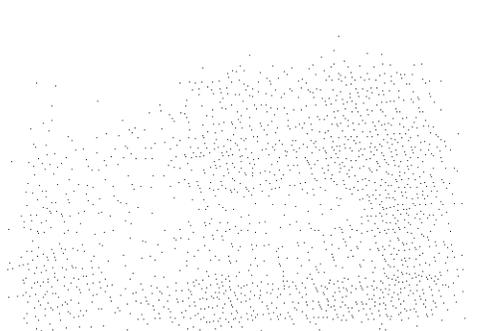
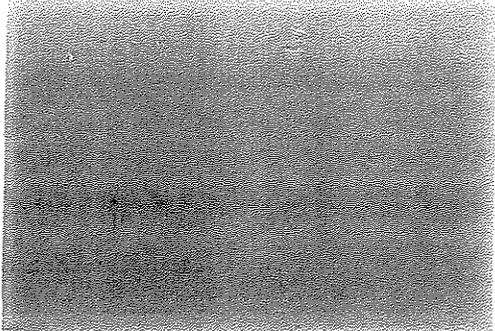
INSTALLATION COMPANY: J. Ranck Electric/Hickey Electrical

Corporate Headquarters
1993 Gover Parkway, Mt. Pleasant, MI 48858 | Fax: (989) 775-8830

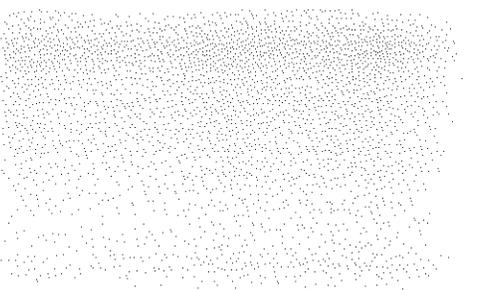
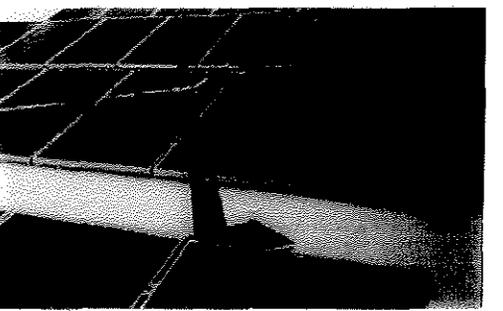
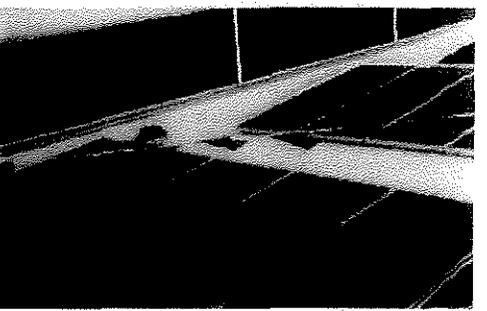
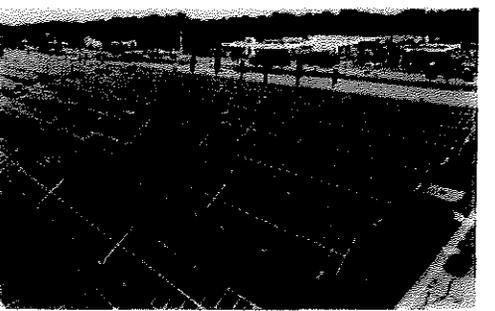
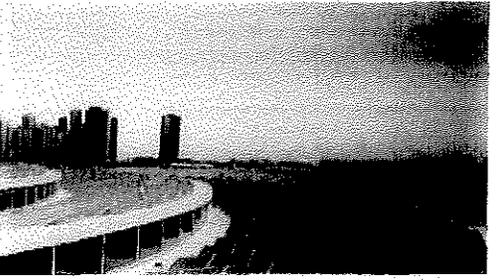
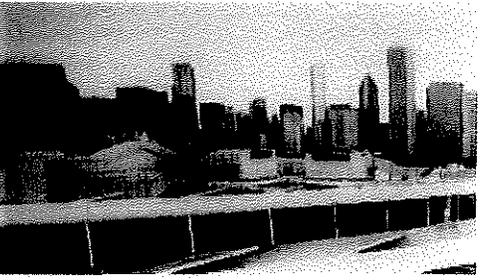
Sault Ste. Marie, Michigan
511 Ashmun, Suite 201, Sault Ste. Marie, MI 49783 | Fax: (906) 632-7014

WEBSITE: WWW.JRANCK.COM





COMMITMENT QUALITY



CORPORATE OFFICE:

J. Ranck Electric, Inc.
1995 Gover Parkway
Mt. Pleasant, MI 48858
Phone: (989) 775-7393
Fax: (989) 775-8830
Website: www.jranck.com

THE JRE STORY

CORPORATE HEADQUARTERS:

1993 Gover Parkway
Mount Pleasant, MI 48858

MID-MICHIGAN:

3015 Airpark Drive N.
Flint, MI 48507

NORTHERN MICHIGAN:

511 Ashmun, Suite 201
Sault Ste. Marie, MI 49783

SOUTHEAST WAREHOUSE:

23862 Sherwood
Centerline, MI 48015

1.800.792.3822

WWW.JRANCK.COM



J. Ranck Electric, Inc. was founded in 1986 by James A. Ranck, who at the time was working as a Journeyman electrician. Since then, the company has grown from a core group of three office staff and three electricians to a multi-location company with more than \$65 million in annual sales, 80+ office staff and 300+ electricians working to bring electrical and communication solutions to customers throughout Michigan and the midwest.

"We are proud to be a family-owned operation, solidly into our second generation with my son Adam as Vice President and daughter Angie as Human Resources Director. We search for employees that are the best in the industry while being the best fit for JRE. Our employees firmly believe in the corporate mission, which is to ensure that every customer is granted the highest quality, safety, and professional standards with each construction project performed. We strive to develop long-term connections with our customers, in order to create a relationship built on trust, anticipated needs, and responsive action.



With innovative leadership, we close out our 27th year with a close watch on our ever-changing industry, dedicated to upholding our corporate values while remaining a financially sound, profitable company while maintaining prudent growth."

— Jim Ranck, CEO

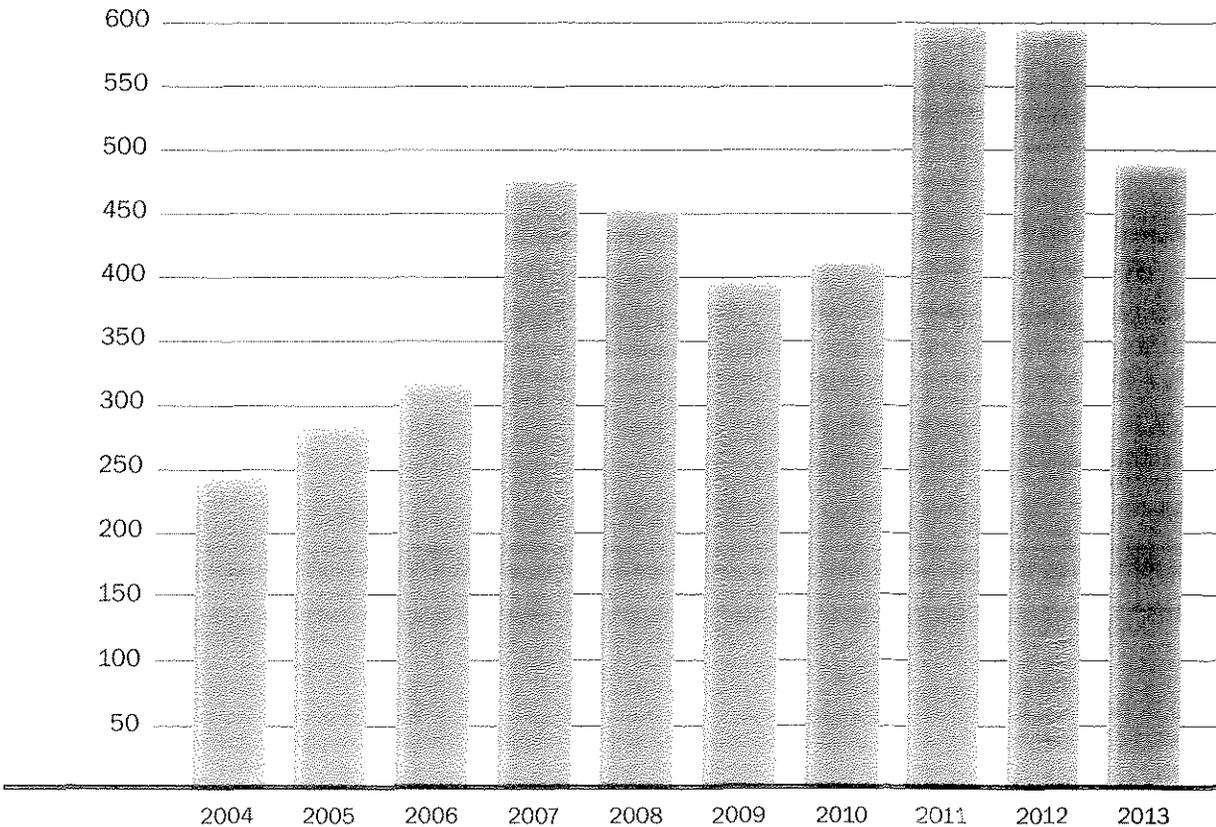
THE JRE STORY

FAST FACTS

- JRE has installed some of the largest solar arrays in Michigan including three of the five largest – The Ford Motor Company, Monroe Community College and General Motors
- In 2001, JRE was the first contractor to rewire the Mackinac Bridge at a cost of \$2.5 million since the suspension bridge opened in 1957
- JRE has completed projects and maintenance work in nearly 20 General Motors facilities in three states over the past 10 years
- In the fall of 2012, the JRE Storm Response Team sent 19 crew members to assist utility companies after Hurricane Sandy devastated the east coast. After nearly a month away, JRE crews were some of the last crews to leave



A year by year look at JRE's man-hours worked in the past 10 years:



[STRENGTH & STABILITY]

FINANCIAL CAPABILITIES

AT A GLANCE

- Over \$21 million in assets
- > \$11 million capital construction equipment
- \$6 million available working capital credit line
- Bonding capacity \$45 million (aggregate), \$15 million (single project)
- Forecasted 2013 revenues > \$65 million
- MDOT pre qualification rating \$74.9 million
- Stable and consistent backlog
- JRE was ranked 238 in the most recent ranking of ENR's Top 600 Specialty Contractors in the nation. The annual list orders Asbestos Abatement, Concrete, Demolition, Electrical, Glazing, Mechanical, Masonry, Painting, Roofing, Sheet Metal, Steel Erection, Utility, Wall/Ceiling, Excavation and other firms in order by annual revenue figures. JRE was the ninth highest contractor and the third highest electrical contractor in Michigan

WELL-RESPECTED INDUSTRY PARTNERSHIPS:



Banking
PNC Bank
(#11 US-Ranked
Financial Institution)



Insurance
Travelers
(AM Best A+ rating)



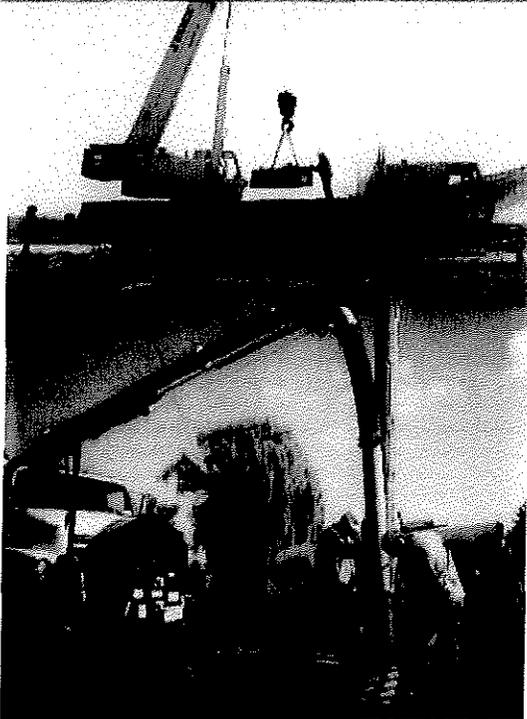
Surety
Cincinnati Insurance
(AM Best A+ rating)



CPA
Rehmann Robson

[STRENGTH & STABILITY]

FLEET CAPABILITIES



Our goal is to maintain a diverse pool of resources for employees and operators to pull from depending on the unique aspects of the job at hand. To say we are a "turnkey" contractor is an understatement. JRE handles the majority of work in-house and our fully staffed fleet eliminates the need to involve subcontractors. Because of the diverse knowledge of our operators, our fleet capabilities far exceed just putting holes in the ground and running conduit. Crews are prepared to assist in new construction projects, repairs, maintenance and exploratory excavation.

Our group of stationed mechanics and mobile mechanics ensure our fleet is prepared and in top shape whenever and wherever needed. Our routine annual maintenance program and mobile maintenance services ensures that our fleet is compliant with all state and federal regulations.

Equipment

- Crane - 120 ton (1)
- Trencher/Plows/Boring (14)
- Arrow Boards (21)
- Backhoes (16)
- Forklifts (23)
- Tractors (6)
- Excavators (24)
- Generators (3)
- Gator & ORV (11)
- Scissor Lifts (26)
- Skidders (7)
- Sweepers (5)
- Trailers (177)
- Compressors (14)
- Hydroseeders (1)
- Car Dolly (1)
- Cement Products (6)
- Water Pump Products (1)
- Pay Loaders (3)
- Post/Pile Drivers (1)
- Drum Rollers (2)
- Wood Chipper (1)

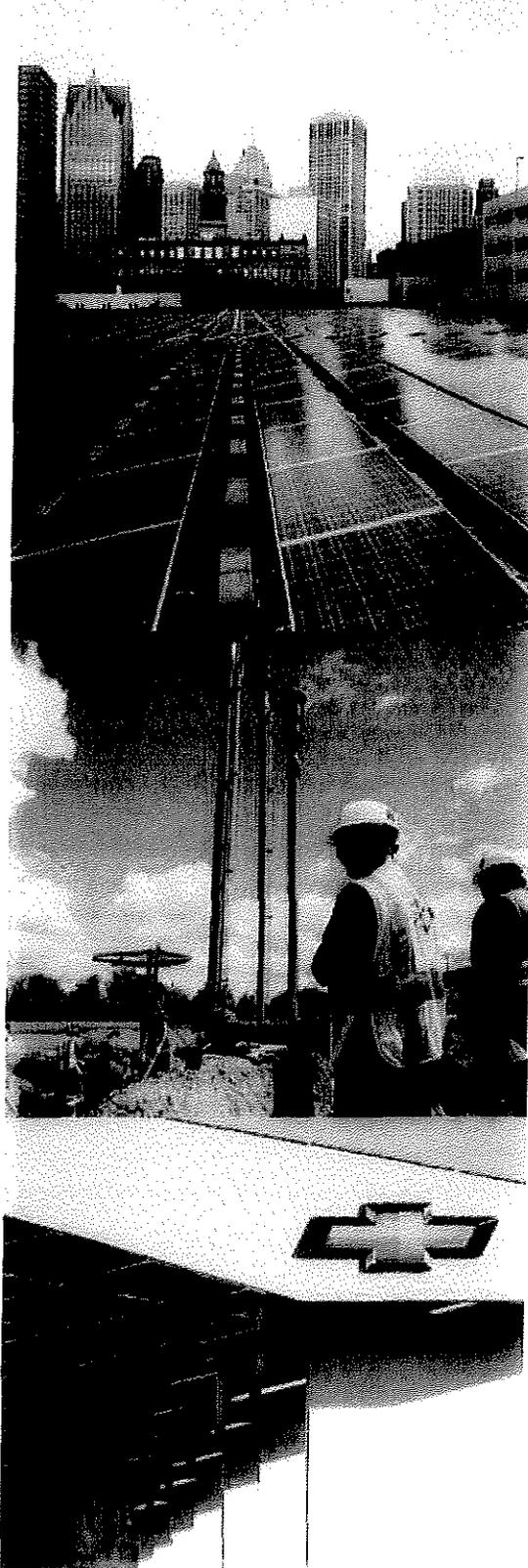
Cars and Trucks

- Light Duty cars/trucks (66)
- DOT Trucks (33)
- Bucket Trucks (29)
- Digger Trucks (13)
- Dump and Vac Trucks (15)
- Stinger/Knuckle Booms (7)
- Stake Trucks (6)
- Mechanic Trucks (2)
- Van/Box Trucks (6)
- TMA Trucks (6)
- Semi Trucks (5)

JRE has made
a total fleet
investment of
\$11.4 Million

PROJECT EXPERIENCE

RENEWABLE ENERGY



DTE ENERGY SOLAR

NUMEROUS SOLAR ARRAYS THROUGHOUT MICHIGAN

- 2010- ongoing, \$14 million total contracts (majority of which is labor only contracts for the installation of owner provided modules, inverters and racking systems)
- DTE Solar Currents Program - collaboration with major industry to increase alternative energy usage to 15 MW through southeast Michigan
- Ground mount, rooftop, and tracking arrays ranging in size from 60 kW to 816 kw
- Total installation of 6.25 MW towards the 15 MW DTE Solar Currents goal

CANTON RENEWABLES, LLC

LANDFILL TO NATURAL GAS PLANT - CANTON, MI

- February – December 2012, \$3.5 million contract
 - General Contractor – Walbridge Aldinger Company
 - New construction of plant expected to process green biomethane equivalent to 6 million diesel gasoline gallons a year
 - Control cables and terminations to 400 field devices, Fire detection and security system design/installations and 10,000 linear feet of conduit installed
- JRE assisted the owner, GC, and other trades in the design of the entire system taking the project drawings from the 30-35 % as-bid drawings to 100% construction drawings.

ROBERT BOSCH, LLC

NUMEROUS SOLAR ARRAYS THROUGHOUT MICHIGAN

- 2010 – ongoing, \$1 million total contracts for installation of owner manufactured solar panels
- 437 kW installed
- Installation of both roof and ground mounted systems, some with Energy ReCommerce 3rd party monitoring systems
- Designed to showcase the efficiency & aesthetics of Bosch manufactured products

CHEVY VOLTE SOLAR CARPORT CHARGING STATIONS

11-32 KW SOLAR ARRAYS — 18 US LOCATIONS

- November – April 2011
- Installation of 6–12 parking space solar canopies with charging stations
- 6 stall canopy uses 96 modules, 12 stall canopy uses 192 modules, 1 GE Voltec electric car charging unit per 2 stalls. SMA Sunny Boy inverters & 3rd party monitoring system integration

[PROJECT EXPERIENCE]

GROUND MOUNT SOLAR



UNIVERSITY OF MICHIGAN

DTE SOLAR CURRENTS PROGRAM — ANN ARBOR, MI

- October — December 2012
- Installation of 430kW ground mount solar array on a 2.5 acre parcel at the University's North Campus Research Complex
- Solar World 240 watt modules, Schneider Electric 500kW inverter & Solar Flex Rack racking system

HURON COUNTY

WHITE LAKE

DTE SOLAR CURRENTS PROGRAM — WHITE LAKE, MI

- August — October 2012
- Installation of 495kW ground mount solar array
- Solar World 240 watt modules, SMA 500kW inverter & Solar Flex Rack racking system

HARTLAND HIGH SCHOOL

DTE SOLAR CURRENTS PROGRAM — HARTLAND, MI

- October — December 2012
- Installation of 444kW ground mount solar
- Solar World 255 watt modules, AE Solar 500kW inverter & AET racking system

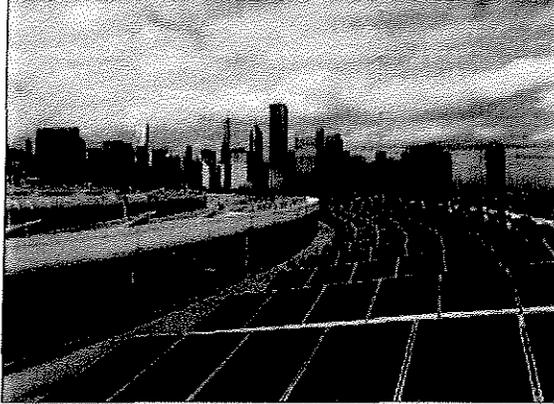
GM HAMMERS V&R

DTE SOLAR CURRENTS PROGRAM — DETROIT, MI

- June — September 2011
- Installation of 500 kW ground mount solar array for DTE/GM
- Sharp 128 thin film modules, Suncon 500 kW inverter stepped up to 13.8 KV to match facility primary voltage & Solar Flex Rack racking system.

[PROJECT EXPERIENCE]

ROOFTOP SOLAR



STEED AQUARIUM

265 KW SOLAR ARRAY — CHICAGO, IL

- October — December 2013
- Installation of 265 kW roof mount solar array
- 300 Watt modules provided by owner, Schneider Electric 250kW inverter & Schletter racking system



MERCY HEIGHT SCHOOL

402 KW SOLAR ARRAY — FARMINGTON HILLS, MI

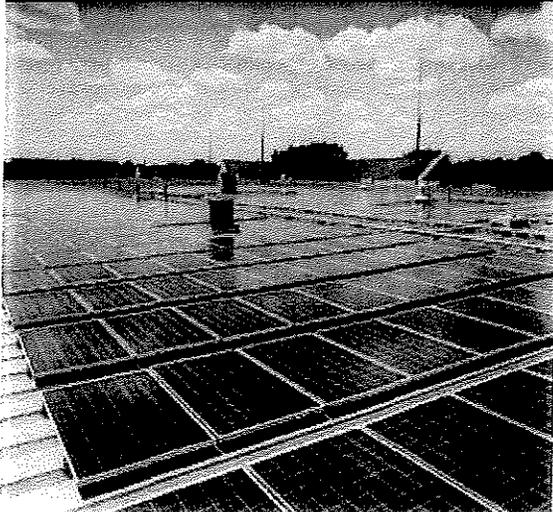
- November — December 2011
- DTE Solar Currents Program Project
- Covers majority of school rooftop
- BP 225 watt modules, 1.375 kW Satcon inverter, AET Racking system & DTE Web based monitoring system



BLUE CROSS BLUE SHIELD

220 KW SOLAR ARRAY — DETROIT, MI

- April — June 2011
- DTE Solar Currents Program Project
- 33,000 square feet of surface area
- Schott 235 watt modules, 2 Satcon Inverters rated at 100 kW, AET racking system & DTE Web based monitoring system



WATER ENVIRONMENTAL SERVICES LIMITED

122 KW SOLAR ARRAY — GRAND RAPIDS, MI

- April — July 2012
- Installation of 122 kW solar array on the roof of the Water and Environmental Building
- Canadian Solar 290 watt modules, Solectria 95 kW inverter & S5! racking system

PROJECT EXPERIENCE

SPECIALTY SOLAR



UNIVERSITY OF MICHIGAN

FULLER RD. 241 KW SOLAR ARRAY — ANN ARBOR, MI

- May — November 2013
- DTE Solar Currents Program project
- Installation of 241 kW combination tracking/ground mount array, Solar World 255 watt modules, Solectria 300 kW & 15 kW inverters, Schletter racking system & DTE Web based monitoring system

DOW FURNACE CENTER

35 KW SOLAR ARRAY — SAGINAW, MI

- August - October 2012
- Installation of 35 kW awning mounted solar array
- Suntech 275 watt modules, Solectria 15 kW inverter & Schletter racking system

GEAR CHARGING STATIONS

15 KW SOLAR ARRAY — GEORGIA

- November — April 2011
- Installation of 8 parking space solar canopies with charging stations
- Uses GE modules, 1 GE electric car charging unit per 2 stalls, SMA Sunny Boy inverter

SCIO SOLAR

60 KW COMBINED SOLAR ARRAY — SCIO, MI

- March — October 2010
- First DTE Solar Currents Program project installed in the State of Michigan
- Installation of 47 kW fixed array & 13 kW single access tracking array
- Fixed array uses 224 watt Sharp modules, 2-15 kW & 1-13 kW Solectria inverters
- Tracking array uses 60-224 watt panels & 1-13 kW Solectria inverter forming 6 single access tracking arrays consisting of 10 panels, each allowing automatic adjustment with sun movement using a pyranometer
- Both arrays are connected to the DTE web based monitoring system

| PROJECT EXPERIENCE |

SOLAR MAINTENANCE

J. Ranck Electric, Inc. (JRE) is currently contracted with both DTE and Bosch for the maintenance and repair of all of their owner controlled solar arrays. JRE provides 24/7 on call service for emergency work, and schedules troubleshooting and repairs reported for non emergency work. JRE performed scheduled yearly maintenance on all of the arrays per contract documents. These services include, but are not limited to the following items:

- Overall site conditions: Grounds, safety signage
 - Signs and labels checked - indicate if present and intact
 - Site appearance described
 - Any issues are reported to the owner. I.e. debris issues, etc.
- Solar Modules:
 - Check module condition
 - Report dust, film etc if present on modules
- Racking:
 - Check general condition of racking
 - Report any issues that need attention
 - Perform torque tests on racking
- Service Rack:
 - Perform torque test on equipment at the service rack
 - Check all wires for tightness
 - Perform IR Scans
- Inverters:
 - Check general condition of Inverters
 - Report any issues that need attention
 - Check field wires for tightness
 - Verify fuses are good
 - Perform IR Scans
 - Replace filters as needed.
 - Complete Performance Testing
- Disconnects/Master Combiners:
 - Check condition of all disconnects and master combiners
 - Report any issues that need attention
 - Perform torque test on terminations
 - Perform IR Scans

DTE ENERGY COMPANY

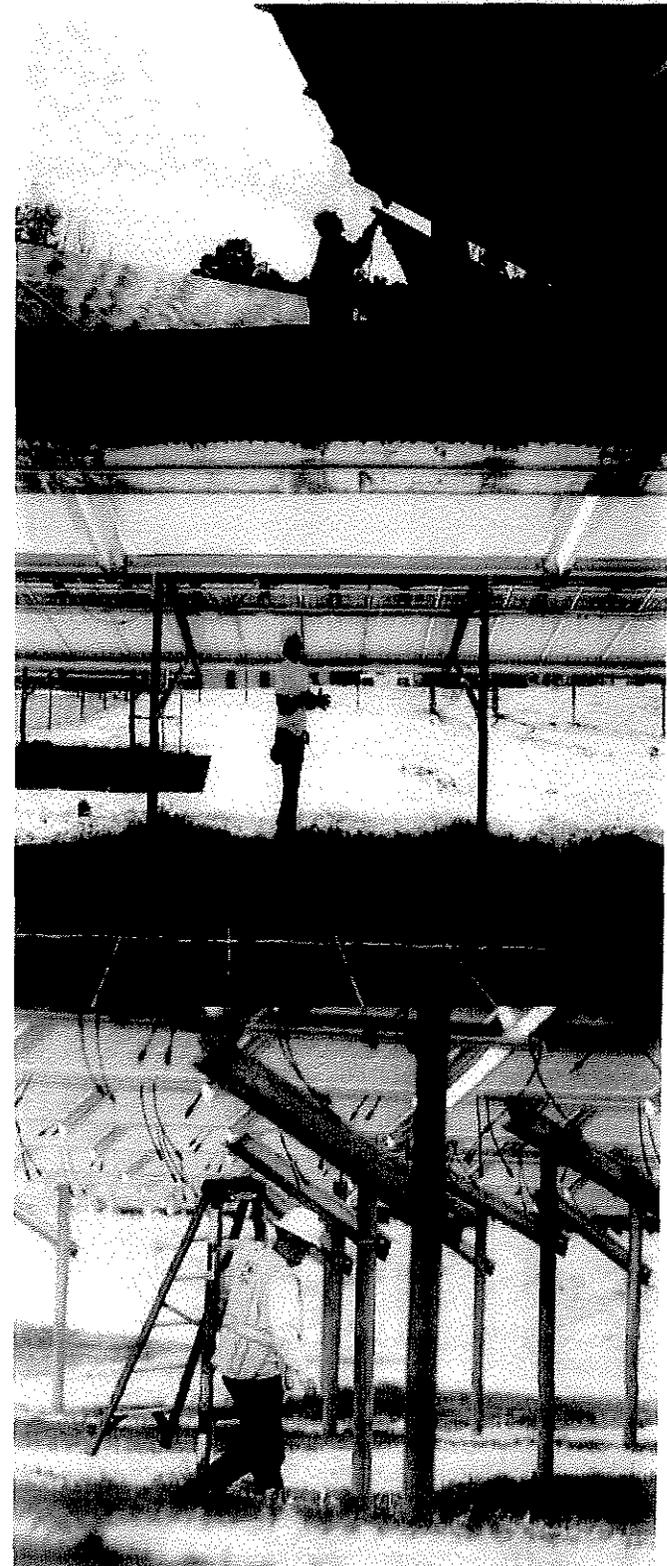
O & M CONTRACT FOR ALL MICHIGAN SOLAR SITES

- 2010 - Present
- Currently maintain 20 sites with additional sites added as DTE solar projects are completed
- Yearly contract that has been renewed for 4 years

BOSCH

O & M CONTRACT FOR ALL MICHIGAN SOLAR SITES

- 2011 - Present
- Currently maintain 3 sites with additional sites added as Bosch solar projects are completed
- Yearly contract that has been renewed for 3 years



PROJECT EXPERIENCE

INSTALLED PROJECTS

JRE Solar Projects					
Job Name	City, State	Type of Installation	Completion Year	kW Output	Yearly Totals
Forensics Center Pv System	Diamondale, MI	Roof Mount	2009	24.8	2009 24.80 kW
Ottawa Wildlife Refuge	Oak Harbor, OH	Ground Mount	2010	81	2010 211.00 kW
Scio Solar	Scio twp, MI	Ground Mount	2010	60	
Bosch Solar	Flat Rock, MI	Ground Mount	2010	50	
Centerline Warehouse Solar	Centerline, MI	Roof Mount	2010	20	
Bcbs - 200 Kw Solar	Detroit, MI	Roof Mount	2011	220	2011 2,732.00 kW
Ford 500 Kw Solar	Wayne, MI	Ground Mount	2011	502	
Mccc 500 Kw Solar	Monroe, MI	Ground Mount	2011	513	
Gm Hamtramck 500 Kw Solar	Detroit, MI	Ground Mount	2011	516	
Tdc Solar	Westland, MI	Ground Mount	2011	391	
1001 - American Chevrolet	Modesto, CA	Canopy/Charging Station	2011	11	
1003 - Dublin Chevrolet	Dublin, CA	Canopy/Charging Station	2011	21	
1006 - Hamtramck 3	Detroit, MI	Canopy/Charging Station	2011	12	
1007 - Putnam Chevrolet	Burlingame, CA	Canopy/Charging Station	2011	11	
1011 - Milford Proving Grounds	Milford, MI	Canopy/Charging Station	2011	21	
1020 - Patsy Lou Chevrolet	Flint, MI	Canopy/Charging Station	2011	21	
1021 - Serra Chevrolet	Bartlett, TN	Canopy/Charging Station	2011	11	
Dwsd	Detroit, MI	Roof Mount	2011	20	
Chapaton Solar	St. Clair Shores, MI	Ground Mount	2011	20	
Genesee Co Controller	Flint, MI	Awning Mount	2011	5	
Mercy High School Solar	Farmington Hills, MI	Roof Mount	2011	402	
Dow Event Center Solar	Saginaw, MI	Awning Mount	2011	35	
1004 - John Sullivan Chevrolet	Roseville, CA	Canopy/Charging Station	2012	32	2012 1,477.26 kW
1008 - Quality Chevrolet	Escondido, CA	Canopy/Charging Station	2012	11	
1018 - Hamtramck 2	Detroit, MI	Canopy/Charging Station	2012	14	
Warren Schools Solar	Warren, MI	Roof Mount	2012	195.7	
Oakland Schools	Oakland County, MI	Roof Mount	2012	80	
Grand Rapids Wwtp	Grand Rapids, MI	Roof Mount	2012	111	
Warren Wwtp	Warren, MI	Ground Mount	2012	10.56	
Ge Solar Carport-Ga	Atlanta, GA	Canopy/Charging Station	2012	15	
Yonkers-Solar-New York	Yonkers, NY	Roof Mount	2012	1008	
Indian Springs 495Kw Solar	White Lake, MI	Ground Mount	2013	495	2013 3,474.80 kW
Bosch-Plymouth Solar	Plymouth, MI	Roof Mount	2013	11	
Bosch-Farmington Solar	Farmington Hills, MI	Roof Mount	2013	20	
U Of M 430Kw Nrc Solar	Ann Arbor, MI	Ground Mount	2013	430	
Basf Wyandotte	Wyandotte, MI	Roof Mount	2013	100	
Harrison Solar Array	Harrison, MI	Ground Mount	2013	46.2	
Gm Warren Tech Cntr.Solar	Warren, MI	Ground Mount	2013	49	
U Of M Fuller Rd, Ist	Ann Arbor, MI	Ground Mount	2013	241	
Metrolink Transit Solar	Rock Island, IL	Roof Mount	2013	345.6	
Hartland High School	Hartland, MI	Ground Mount	2013	444	
St.Clair County Resa	Marysville, MI	Ground Mount	2013	517	
Leipprandt Orchards 411Kw	Pigeon, MI	Ground Mount	2013	511	
Shedd Aquarium Solar Inst	Chicago, IL	Roof Mount	2013	265	
Heartland Health Solar	Chicago, IL	Roof Mount	2014	13.75	2014 in Progress
Jre-Flint Rooftop Solar	Flint, MI	Roof Mount	2014	10.4	
Jre-Mt.Pleasant Solar	Mt. Pleasant, MI	Ground Mount	2014	190	
Mcpheil Properties Solar	Wixom, MI	Ground Mount	2014	816	
Standard Electric Solar	Mt. Pleasant, MI	Roof Mount	2014	40.26	
Connexus Array	Ramsey, MN	Ground Mount	2014	245.6	1,316.01 kW
TOTAL:			9,235.87 kW		

[QUALIFICATIONS]

ORGANIZATIONAL CHART

President
Jim Ranck

JRE Vice President
Adam Ranck

CFO
Matt Warren

HR Director
Angie Wood

Renewable Energy
Division/Business
Development
Manager
Scott Walker

Purchasing &
Inventory Director
Bob Caylor

JRE Safety Director
Klay Northrup

JRE Fleet and
Warehousing
Loren Wilcox

Corporate Field
Supeintendent
Bob Hemminger

Renewable Energy
Division Lead
Foreman
Jason LeCureux

In house and
on-site safety
specialists

In house and
on-site mechanics

Field Staff

Foremen & Journeymen

As a union affiliated contractor, J. Ranck Electric has a core group of long-term and highly trained crew members that have been with JRE for over 15 years. This quality of field leadership has allowed JRE the ability to manage highly technical projects from small two-man crews up to 250 man projects.

Groundmen & Operators

JRE handles all site preparation in-house. We have groundmen and operators that specialize in all types of excavation including trenching, directional boring, augering and hydrovacing operations.

Many of these key field employees have experience with highly specialized processes associated with electrical construction including rooftop, ground mounted & specialty renewable energy projects, lighting, streetscapes, inside and outside electrical, medium and high voltage construction, maintenance and emergency storm response.

QUALIFICATIONS

KEY PERSONNEL



JIM RANCK,
Project Executive
President & Founder of J. Ranck Electric, Inc.



ADAM RANCK,
Project Executive
Vice President of Operations



SCOTT WALKER, Renewable Energy Division
Manager / Business Development Manager

Scott Walker has been employed by J. Ranck Electric, Inc. since 2006. Walker was hired as an electrical project manager handling all manner of electrical jobs as needed. Walker was instrumental in the development and implementation of our Renewable Energy Division. He estimated and managed all projects beginning in 2009 until 2013, when he was promoted to Business Development Director. In addition to researching and developing leads in other areas, Mr. Walker is still heavily involved in the Renewable Energy Division as its director. Walker provides estimating and management services when needed, as well as mentoring other up and coming renewable energy project managers and estimators. Scott brings an invaluable element to JRE. He began as an apprentice working in the IBEW system, becoming a journeyman in 2001, and foreman soon after. His advancement into project management began in 2001. His acquired knowledge throughout this time frame is an asset that is highly prized. Walker is licensed in multiple states allowing JRE to complete renewable energy projects throughout a large area. His attention to detail, ability to multi-task, outstanding communications and problem solving skills, and constant attention to keeping projects on time and within budget, are his greatest assets.



JASON LECREUX, Renewable Energy Division Lead
Foreman

LeCreux has been employed by J. Ranck Electric, Inc. since September of 2010. With 11 years of working in electrical construction in the roles of apprentice, journeyman and foreman, LeCreux has had extensive experience working on in the electrical field. Starting at J. Ranck as a journeyman, LeCreux has worked his way up to becoming our premier solar foreman, highly trained and educated to handle any type of solar project he may be assigned to. LeCreux is known for his multitasking abilities and success on high profile, complex and multi-location projects. His solid work ethic inspires his crew to work at their utmost ability while working safely and efficiently. He has a record of keeping his jobs on schedule, utilizing his strong communication skills to coordinate between JRE's home office,

| ADDITIONAL INFORMATION |

LICENSES / CERTIFICATIONS

Please see the attached licenses and certifications as listed below:

Rock Island Reciprocal Contractor's License
NABCEP Entry Level Installation Certificate
NABCEP Full Installation Certificate

CITY OF ROCK ISLAND

2014

This is to Certify that

is a LICENSED AND REGISTERED ELECTRICAL CONTRACTOR #

J. Ranck Electric, Inc.

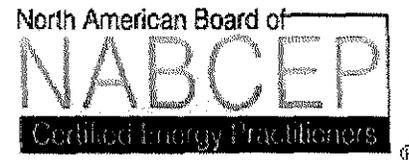
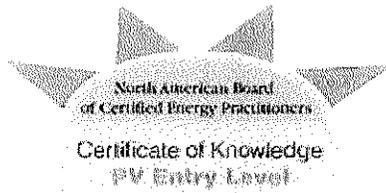
B122118

Registered under the Provisions of the Laws of the City of Rock Island, Illinois
Registration valid until April 30, 2015



Thomas G. Ayers
Chief Building Official

DOCUMENT
9409



The North American Board of Certified Energy Practitioners
does hereby state that

Scott Walker

**Has successfully completed the requirements necessary to obtain
the NABCEP® PV Entry Level Certificate of Knowledge.**

Ezra Auerbach

Board Chair

PV Entry Level Certificate of Knowledge
Number E071609-11

North American Board of
NABCEP
Certified Energy Practitioners®



The North American Board of
Certified Energy Practitioners

does hereby certify that

Scott Walker

has satisfied the requirements and standards for the
Certified Solar PV Installer in credentials established
by the NABCEP Board of Directors.

Certificate No. 110112-158

Valid for three years from
the date of **September 22, 2012**

Donald B. Warfield

Donald B. Warfield, *Board Chairman*

“ERRATA/AMENDMEN

DOCKET# 14-0409