The Commonwealth Quarterly News from around the circuit.

Summer 2008



Commonwealth Electric Company of the midwest

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New Southwest Division Promotions

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Effective March 24, 2008, the Board of Directors elected James (Joe) Graham and Jay Hoobler to serve as Vice President of their respective locations.

Joe has over 30 years experience in the electrical construction market as a project engineer, project manager and the past 20 years as the Phoenix Branch Manager. Joe is a board member of the Phoenix Chapter of the National Electrical Contractors Association and serves as a trustee for the JATC.

Jay is a 1985 graduate of the University of Nebraska and has over 25 years of service as a project engineer, project manager and the Tucson Branch Manager since 1993. Jay is active in his community and serves as Vice President of the Saguaro Chapter of National Electrical Contractors Association and serves on several of its committees.



Jay Hoobler



Joe Graham

Safety Around the Circuit

Ruben Bera – Corporate Safety Director

Safety at all locations continues to be a priority. Here's a snap shot of what's happening...

Omaha continues to hold electrical arc flash training. I conduct these classes with the help of Mike Hodson and Jen Harris. These classes cover the important issues dealing with potential arc flash and arc blast. The classes are held after working hours and the feedback has been very positive. We will continue to present these classes to all locations.

Columbus recently completed OSHA 10 hour training. We have scheduled CPR classes and arc flash training. As I make my visits to this location, I am encouraged at the commitment towards safety this location has shown.

Des Moines holds regularly scheduled foreman training. Safety is always a major topic at these meetings.

Phoenix recently started their safety committee. The meeting is lead by Glen Thomas. We will continue to meet to bring new ideas that will help reduce exposure to accidents and illnesses. In May of this year, we conducted arc flash training.

Tucson recently completed electrical solar training. This class was held on two consecutive days and was attended by all foremen. The topic covered the hazards of working with solar panels and what we need to do to be prepared.

Lincoln is currently revamping their PPE requirements for arc flash to meet the customer demands.

We recently closed out 2007 and we had another excellent safety performance. Our recordable rate is 4.42, well below the national average. Our lost time rate was .16. Another excellent achievement!

In May, we again celebrated electrical safety month. With the achievements we've made, we need to be proud of the work we do and be proud of our safety performance.

Think Smart/Work Safe.

Fry's Food and Drug Marketplace

Ernest Jeffries – Project Manager

With a view of growth in the small town of Casa Grande, Arizona, approximately 30 miles southeast of Phoenix, the Fry's Food Stores of Arizona contracted to build a 114,775 sq ft food and drug marketplace containing groceries, pharmacy, garden center, bakery, deli, and of course a Starbucks Coffee House.

The Phoenix office of CECM was awarded an \$895,240 contract for the electrical wiring, refrigeration raceway system and fire alarm system installation. With completion schedule of 210 calendar days, approximately 4 months into the project the contract was increased to \$1,167,330 and within 7 months additionally increased to \$1,222,932 at which time a contract completion was extended 50 calendar days.

Project manager Ernest Jeffries, project engineer Jim Kohnen, supporting general foremen Dave Campbell, Dan Will, Bernie Manring and a crew averaging 20 electricians are performing the work on schedule and within budget and again most importantly, looking forward to no accidents or safety incidents.



Casa Grande, AZ

The Zorinsky Federal Building Project is Coming to an End

Dave Hron – Project Manager

Commonwealth Electric Company of the Midwest is nearing the completion of the Tenant Improvement remodel in the Zorinsky Federal Building located at 1616 Capital Ave. Of the 285,000 sq ft owned by the GSA, Commonwealth has completed construction on approximately 65% of the building. Occupying this space will be the US Army Corps of Engineers.

When we began the job in April of 2007 the completion date was set at December 2007, but that date was soon moved back to May of 2008.

The electrical foreman on this job is Rob Freeman. Rob has done an excellent job rising to the unique challenges on this project such as installing electrical outlets into prefab walls and numerous time sensitive modifications requested by the GC. Rob had a crew of 10 electricians working under him for the majority of this job.

The data foreman, Jeremy Englehart, did a remarkable job with a very complex labeling scheme using barcodes. This type of labeling had never been done before by Commonwealth, the GSA or the Corps of Engineers. This was a learning experience for all involved with a total of nearly 10,000 labels being produced and installed. The Data department ended up with 8 technicians on the job at any one time.

With a joint effort between the foreman and our safety department, this job set a wonderful example, having

worked the entire project without an injury. This was much appreciated not only by Commonwealth but also by the customer. The men were rewarded with safety lunches which were enjoyed by all.

To sum up the entire project, no one put it better than Zach Hawks, project manager for the owner, who stated, "Commonwealth electricians and data technicians that have worked on this job have done a magnificent job with their craftsmanship and hard work."



New Facility For Global Solar Manufacturing

Clay Gideon – Project Manager

Global Solar Energy, a solar industry leader in manufacturing Copper Indium Gallium diSelenide (CIGS) thin-film solar cells for glass modules or flexible material products, announced the official opening of its new, breakthrough manufacturing plant. CECM Tucson was awarded the contract on this project in June 2007 under general contractor Chestnut Construction. Project manager Clay Gideon was in charge of overseeing the project with the help of on-site project manager Chuck Lewis and foremen Tom Barnes and Quang Tran.

Global Solar expands from its former 33,000 sq. ft. factory to the new 100,000 sq. ft. facility in Tucson, Arizona. Manufacturing will move from 5575 S. Houghton Road to 8500 S. Rita Rd. This will increase the company's capacity from 4.2 MW to 75 MW. With plans to put an additional 100 MW into production at the end of 2009, Global Solar is poised to bring its total global capacity to 175 MW in 2010. The company will also generate production power on-site through its upcoming 750 kW, utility-scale CIGS power field, what will be one of the world's largest CIGS solar fields.

The plant's phase one, full-production capacity of 40

CSI Tucson

Randy Comolli – Project Manager

The Department of Public Safety broke ground in November 2007 on a \$17.7 million regional crime lab that has been in planning more than five years. CECM Tucson was awarded this job under general contractor Summit Builders in December 2007. Project Manager Randy Comolli will be overseeing the project with the help of on-site general foreman Tony Doar. The current building, 6401 S. Tucson Blvd., a warehouse holding DPS administration, dispatch and other operations as well as the lab, is 47,000 square feet. In 2009, when the 42,000-square-foot lab is set to open, it will replace the current one, completed in 1978. The construction and outfitting of the crime lab is the first phase of a three-part plan. The hope is to consolidate all southern Arizona DPS offices in a single complex.

Todd Griffith, who oversees all four of the state's crime labs, said southern Arizona will finally have forensics technology found in other parts of the state. That's in part because there will be tabletop room for it. A machine can prepare 96 DNA specimens for examination at once, many more than a human could do. DPS tried to add that machine to the lab, but it simply wouldn't fit. The current DPS crime lab in Tucson, which is 27 years old, has seen a 300 percent increase in workload over the past seven years. The current lab was built for five to six people but currently houses a staff of 25. The new lab will be over four times larger than the current lab and will accommodate five to seven new personnel to help with the ever increasing number of cases in southern Arizona.

The new crime lab will provide services and facilities that

megawatts (MW) in annual U.S. production sets new industry records for CIGS production capacity and enables

Global Solar to meet heavy demands for solar adoption worldwide. This growth will enable Global Solar to continue to deliver CIGS solar cells for use in traditional glass module manufacturing as well as develop new business channels for its CIGS material for integration into products targeted at the



emerging Building Integrated Photovoltaic (BIPV) market.

GSE plans a major capital investment in its expansion, with \$75 million in new equipment and building improvements. \$26 million alone is earmarked for Tucson-area vendors and suppliers. GSE manufactures lightweight, portable solar panel chargers for use in military, commercial, and consumer applications.

Phase One is complete and we are awaiting final plans to begin Phase Two.

have been much needed but never present in the southern part of the state. Tucson will be able to conduct DNA testing which is currently only available in Phoenix. This includes the DNA testing of bones, which has become a vital tool in unidentified remains cases, and Y-STR DNA analysis of male chromosomes in relevant sexual assault cases.

Taking added staff, robotics and lost time transferring evidence between departments into account, law enforcement will be able to see results 15% to 20% faster. Processing



times for DUI-related evidence could drop as much as 25%. That translates into a faster turnaround of information. The crime lab handles some 10,000 cases each year, with about 800 specialized cases sent to Phoenix for processing. Those cases will now be processed at the new lab in Tucson. All law enforcement agencies except the Tucson Police Department use the lab.

Funds resulting from a racketeering investigation DPS worked on will pay for the lab's construction and equipment. The construction and outfitting of the crime lab is the first phase of a three-part plan. The hope is to consolidate all southern Arizona DPS offices in a single complex. That construction will require another \$19.5 million DPS doesn't yet have.

Above is a computer generated image of what the new DPS crime laboratory in Tucson will look like.

Sanofi-Aventis Tucson Research Center

Jay Hoobler - Vice President

Sanofi-aventis, a leading global pharmaceutical company, recently broke ground on a new Research Center in Oro Valley. Under general contractor DPR Construction, the CECM Tucson location was awarded the job in January 2008. DPR construction has been recognized with numerous awards such as "Excellence in Safety award from Construction Employers Association" in 2008, Best of 2007 awards, Top Contractor in California by California Construction and 2007 ENR Rankings Top Green Contractor by Engineering News Record (ENR). This project will be overseen by Vice President Jay Hoobler with the help of on-site Project Engineer Dean Basse and Administrative Assistant Sherrill Basse.

Sanofi-aventis is a Paris based company; the U.S. affiliate headquarters is located in Bridgewater, NJ. Sanofi-aventis pharmaceutical group has some 100,000 employees in more than 100 countries. Sanofi-aventis U.S. employs approximately 16,000 employees in the United States located at 14 geographical sites throughout the country. The company gave the go-ahead to build a new research center in July 2005. Oro Valley was selected because of the company's presence there and because of an expanding bio-tech research environment in the city.

The company, which has had a presence in Tucson for more than 17 years, announced the purchase of more than 11 acres in Innovation Park last year to support the future expansion of its research and development center. The new center will be built on a 12 acre site at the intersection of Innovation Park Drive and Rancho Vistoso Boulevard. The new research center will be housed in a state-of-the-art facility located in the 300-acre, high-tech campus, which is becoming a significant biotech hub for Pima County. This short stretch of roadway through an area of businesses and offices connects with Rancho Vistoso Blvd and enters into Sun City Rancho Vistoso, Tucson.

The Tucson Research Center is a combinatorial technologies center and serves as an integrated lead discovery group.



The new facility will house 108 employees, an addition of 40 new jobs from Sanofi-aventis and 68 current Tucson employees. The new site has been chosen because it can accommodate future growth and provide more flexible and integrated space. The research center will be situated on the site to allow easy expansion in the future.

The project includes a two story laboratory wing that houses Chemistry, Biology, analytical Chemistry, information systems, and library development work, and a two story office wing for science and administrative support offices. Sanofi-aventis is very excited to have the 110,350 square foot center designed to achieve LEED (Leadership in Energy and Environmental Design) certified rating. Green Building Rating System[™] is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

Design is complete and construction began in January 2008 with completion scheduled for summer 2009.

Matt Briggs - Service Manager

Mike King – Lincoln Branch Manager

I am excited to announce the promotion of Matt Briggs as our new service manager in our Lincoln office. He will be working closely with our senior service manager, Clayton Anderson.

Matt has been an IBEW electrician for nearly 20 years and for many of those years worked as a service electrician here in Lincoln for Commonwealth. Matt brings youth and a renewed excitement to the service operation and is setting out to meet new customers and new opportunities.



Matt Briggs

Butterfly and Insect Pavilion

Mark Ross – Project Manager

The newly constructed Butterfly and Insect Pavilion at the Henry Doorly Zoo in Omaha opened in late May. The 14,000 square foot building sets just south of the Scott Aquarium and when viewed from overhead, resembles a winged insect.

The Butterfly Conservative (2450 sq ft) features 10 foot high glass sidewalls and a walkway that winds past waterfalls, over streams, through lush vegetation and loops around a water lily pool. Many species of butterflies and moths will be flying among the visitors as they walk through. There will also



be a room where butterflies and moths in their cocoons will be brought in from all over the world and be put on display so the people can watch the metamorphosis from cocoon to flying insect.

The Insect Zoo (2413 sq ft) will be comprised of individual exhibits displaying ants, spiders, scorpions, centipedes, beetles and many other insect species. There is a walkway that goes through areas made to look like it was carved out of nature.

The lower level will also have areas that will be used for growing additional insects and amphibians. These will then be put on exhibit at a later time. The building has access to walk around it, with areas that have glass enclosed exhibits viewable from the walkway on the outside of the building.

This project had a one year completion time frame. Kevin Kalal was the foreman for this project and was instrumental in getting the job done on time. It's always enjoyable working with Dr. Lee Simmons, seeing his passion for the preservation and conservation of the earth's creatures. Next in line is the new Madagascar Exhibit to be completed in May of 2009.

Phoenix Wins Safety Award

Ruben Bera – Corporate Safety Director Joe Graham – Vice President

On May 1, 2008, The Mortenson Construction Company in Phoenix, AZ held their First Annual Building Partner Appreciation Celebration. The event included a golf tournament with lunch followed by an awards ceremony. Commonwealth Electric Company - Phoenix branch received Mortenson's Building Partner Appreciation Award, recognizing them for their excellent safety efforts on the various Mortenson projects. This included being recognized for achieving zero lost time accidents. Many of these projects included extensive lockout/tagout operations, plant shut downs and many other tasks that required the skills that our electricians possess. Some of these projects and those who helped achieve this award are:

- Rawhide at Wildhorse Pass Project John Mackay - Project Manager Dave Campbell - Project Superintendent
- 24th Street Water Treatment Plant Rehabilitation Project John Silvas - Project Manager

Jason Turner - Project Superintendent

• Chandler Heights Recharge Project Gene Hayes - Project Manager, Bernie Manring -Superintendent Carl Pollock - Project General Foreman • **Polly Rosenbaum Archives Project** John Silvas - Project Manager Joe Amavisca - Superintendent

A big thanks to everyone who worked on these projects and to all the other electricians who work every day with safety at the top of their list.

This recognition from a major general contractor is a compliment to the efforts from all team members at our Phoenix branch. Congratulations to all! Your efforts help us spread the word that we are "Committed to Excellence."



Left to right: John Mackay, John Silvas, Dave Campbell, Jason Turner, Bernie Manring, Carl Pollock, Gene Hayes, Joe Amavisca

Safety Around the Circuit

Ruben Bera – Corporate Safety Director

As I have said many times, not only do we provide the customer a good quality product on time, but we also do it safely. One job that has stood out recently is the Ethanol Plant in Aurora, NE.

This project is run under the direction of Norm Stentz, our Lincoln branch project engineer. Our general foreman is Steve Wilken, assisting Steve are foremen Chris Swanson and Dallas Hall. This job consists of many large deep duct banks and many pipe connections. The general contractor is Kiewit Energy. We are working with Mass Electric on this project. Norm works closely with Richard Hillier, electrical general superintendent and Gerardo Mulero and Kyle Higginbotham, electrical superintendents for Mass Electric. Norm makes bi-monthly visits and works behind the scene to ensure this project runs smoothly.

From the beginning of this project, we were told that safety would be a priority. Our crew has met the challenge and continues to perform safely in some adverse weather conditions. This area is in an open field and the cold Nebraska north winds can make working very difficult. Some of the safety highlights achieved are:

• On 1/13/08 the Aurora Project Team achieved over 100,000 man-hours without a recordable accident.

• On 3/30/08 the project worked 171,685 man-hours without a recordable accident.

 \bullet As of 3/30/08 our electrical crew worked 10,019 man-hours without a recordable accident.

• Our electrical crew has won every safety award given by Kiewit Energy. This includes lunches as well as outerwear.



Aurora NE Ethanol Plant Commonwealth Electric, Project Engineer — Norm Stentz, Richard Hillier, Electrical General Superintendent — Mass Electric Company.

We have beaten every contractor on-site for monthly safety awards.

• Commonwealth Electric has won the Mass Electric Safety award for all projects currently under construction.

As this job progresses, there will be other safety challenges. Under the leadership of Norm and his crew, these challenges will be met. Hats off to Norm Stentz for his leadership and to all the crew at the Aurora project. This is just another example of the safety commitment made by all.



Aurora Ethanol Plant





Commonwealth Electric/Mass Electric Safety Crew