Commonwealth Quarterly News from around the circuit. The

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Commonwealth Electric Company of the midwest

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A Reflection of 2008

David F. Firestone - President/COO

As we begin this New Year, it probably would be good to look back and reflect a bit on 2008!

2008 saw CECM revenues reach their highest level yet! \$106,000,000. In October, we were listed in the top "50" electrical contractor firms reported in EC & M magazine and just missed the top "50" in ENR magazine. Not bad for a company who in 1987 had revenues of just \$5.6 million.

Our first payroll in 1987, for all four locations, was 89 employees. Today with seven locations, we have averaged 683 employees and peaked at 746.

We have performed all types of work. Data Centers, solar work, hospitals, power plants, water treatment plants, ethanol plants and auto dealerships just to name a few - some of which we performed with our out of state NECA contractor friends.

We continued to upgrade and improve our computer support and estimating systems and we now have the

ability to do our own webcasting.

All in all, I would have to say 2008 was a pretty good year! Now let's talk about what's ahead for us in 2009. I believe we still have some very good opportunities this year. Some projects have slowed down and some have been put on hold for the time being. With the econo-



David Firestone President/COO

my a big question, a lot of customers are waiting to see what's going to happen later on this year. We have ridden out the downturns before and we will again as we continue to profitably grow our company.

I would like to thank all of you - our employees, customers, and vendors - all of our working partners for your continued commitment to CECM and know that we too are "Committed to Excellence".

Commonwealth Electric Company of the Midwest Helps Linweld expand in Des Moines

Michael Price - Vice President

Commonwealth Electric was selected to perform the shell package electrical work for Linweld's Raccoon River Air Separation Plant in Grimes, Iowa. An air separation plant is an industrial facility that essentially turns normal outside air into usable gases for the industrial, food pro-



cessing and medical industries. Through a process involving pressure and temperature; oxygen, nitrogen and argon gases are produced. This facility will be the first of its kind in the State of Iowa.

In addition to performing the shell package work, Commonwealth Electric was also selected to perform the interior package, or process control package, which includes the balance of the electrical work required to facilitate the plant's construction. The plant will be a fully automated, state of the art facility including numerous specialized components and unique equipment. One unique piece of equipment is called the Continued on page 2

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"Cold Box". This is a structure that is 14' wide, 28' deep and 135' tall. The cold box was built in Japan and shipped to the jobsite in 2 pieces, each 135' long. This box encloses all the process equipment needed to separate the incoming air into its component gases. It is called a cold box because during the separation process, the internal equipment will see temperatures down to -320 degrees Fahrenheit... And you thought it was cold in Iowa during the winter.

The electrical work involves a dedicated 161 KV substation for the plant, site lighting and distribution work, 13.8 KV distribution, 480V electrical equipment and distribution, emergency generator set and distribution, motors and motor control, lighting, grounding, instrumentation and control work, telephone, data, and security. Perhaps one of the most interesting components of the project is the large 12,000 HP, 13.8 KV electrical motor for the main compressor. This motor, and the entire plant, will operate 24 hours a day, 7 days a week, 365 days a year.

The project has been designed by Linweld's parent company; Taiyo Nippon Sanso Corporation (TNSC) in Japan. It has been a unique and rewarding experience working with the Japanese on this project. Additionally, Frank Kormanec,

Tucson Dodge

Jay Hoobler - Vice President

Commonwealth Tucson is in the process of completing the new Tucson Dodge dealership. General contractor Canyon Building & Design and overseeing Project Manager Tim Beatty began this project in November 2007 and are scheduled to be complete by the end of January 2009.

On this 9.16 acre site foreman Wade Comolli, along with his crew, are working on this four phase project. The first phase was a new 22,260 sq ft automotive service and maintenance area. The second phase was a new Parts Department with sales and storage facilities. The third phase was a new sales lot and a 22,200 sq ft show room and office area. The fourth phase was the demolition of the old showroom and the addition of a new sales display parking lot.

Linweld On-Site Project Manager and Manager of ASU Operations and Ron Smith, Linweld Executive Vice President have been a pleasure to work with.



"Linweld, TNSC, NBI and the entire project team have been great to work with. We are working hard to meet, and exceed their expectations."

Ron Saf - CECM Project Manager

The Commonwealth Project Manager is Ron Saf and our Foreman is Nate Findlay. Ron, Nate and the crew are nearly midway through the project which is scheduled for May completion. The project team includes Neumann Brother's Construction, TNSC, Montross Engineering and The Waldinger Corporation.

Due to the coordinated efforts of all parties, the dealership was able to remain open without interruption in service. During these tough times for the automotive industry, we have been fortunate to be involved with a dealership that is



expanding and looking to the future.

Jason Lane Named Assistant Service Manager in Des Moines

Allison Peterson- Service Coodinator

Commonwealth Electric's Des Moines office has a new face behind the service desk. Jason Lane was recently brought into the office from the field to serve as our new Assistant Service Manager. Jason was hired by Commonwealth as a service driver in March of 2005 and has a total of 10 years of experience as an IBEW electrician.

Mike Duffy will retain the title and duties of Service Manager. The addition of Jason to the Service Department will allow Mike to devote the necessary time to his special projects and accounts while making it possible for us to continue to expand our service operations. Jason is making a great effort to visit our service customers and introduce him-

self. He will make a wonderful addition to the Des Moines office.

Please join us in congratulating and welcoming Jason into the Assistant Service Manager position.



Platte West Water Treatment Plant

Gary Demmel - Vice President

In June 2005, the Metropolitan Utilities District approved Alberici Constructors out of St. Louis as the General Contractor to build their new Platte West Water Treatment Plant at 216th and "Q" Streets in Omaha, Nebraska. Alberici awarded the electrical contract to Sachs Electric also of St. Louis. Sachs teamed up with Commonwealth Electric prior to bidding on the project with Commonwealth being a 40% partner for the electrical part of the project.

This 630,511 square foot plant processes 104 million gallons per day of water with a total project cost of \$236 million. It contains 120,000 yards of concrete which is enough to pave 34 miles of highway. It derives its water from 42 wells that are 100' in depth spread over 1900 acres of land. It utilizes 4 miles of pipeline that are from 48 inches to 72 inches in diameter to move the water from the well fields to the treatment plant. The plant started operating on June 14, 2008 but has not been at full capacity. It will be taken to full capacity during the summer of 2009 as greater water needs are required.

Dax Nieders and Colleen Connors served as Project Manager and Project Engineer respectively for Sachs Electric on the job site. Pat Klausen was the on-site Project Manager for Commonwealth with Tom Kroh being the Commonwealth Superintendent. Matt Burnham was the General Foreman for the electrical part of the project. The General Foreman for the low voltage work was Tom Mangiamelli. Commonwealth provided and supervised all of the labor on the project while Sachs purchased all of the material. This turned out to be a great partnership.

The plant is fed from one Omaha Public Power service at 500 amperes and 13.8 KV. It has four 1100 KW backup generators with paralleling gear. There are four 2000 KVA substations and two 750 KVA transformers to feed the plant 480 volt system. One of the more time consuming projects was installation of the 600 feet of parallel 4000 amp 480 volt bus ducts. A Siemens distributed control system controls the pumps and processes for the plant. The plant is protected by a very complex security system which was installed by Adesta to meet the new Homeland Security regulations.

Thanks goes out to Sachs Electric for being a terrific partner on this project. Congratulations to our construction crew and our management team for a very successful project.







CECM Phoenix Receives Award

John Silvas - Project Manager

On December 4, 2008 the Phoenix Branch received a 2008 "Best in Arizona" Mechanical/Electrical Award from the Southwest Contractor Magazine for our contribution on the Polly Rosenbaum State Archives Building. M.A. Mortenson was the General Contractor; this was the fourth project in the past two years that we have teamed together.

The State of Arizona required a new storage facility for its collection of archives, artifacts, public records and historic documents. Construction began in January 2007 and was completed in August of 2008. The building is located on 19th Avenue between Madison and Jackson Street. The facility was constructed primarily of pre-cast concrete and besides the 30 foot high storage areas, contains a laboratory for repair/restoration of historic documents, office space, an audio visual room and public hearing rooms. A blast freezer and cold room provide protection from pests.

CECM was contracted to provide the electrical systems to include fire alarm, access control and emergency power at an initial value of \$2.1 million. Through design changes and

Phoenix Children's Hospital

John Silvas - Project Manager

CECM Phoenix recently began work on the new Parking Garage "A" Structure at the Phoenix Children's Hospital. This is the third project during the current "Phase 1" expansion that we have teamed with Kitchell Contractors Inc. We are nearing completion on the Parking Garage "B" and Central Plant Underground/Site lighting projects. The total combined contract value between the three projects is \$1.6 million dollars. The project manager for all three phases is John Silvas and the project superintendent is Carl Pollock.

Parking Garage A is a 196,462 square foot structure and will consist of 4 tiers of pre-cast concrete and a total of 507 parking spaces. Eventually, Garage A will provide parking and access for patients, families and visitors off of Thomas Road. Garage A will initially be utilized for construction parking during the remainder of the "Phase 1" build out. This work is scheduled to be completed in 2012. Our scope of work is to provide the power distribution, lighting, and raceways for access control/communications.

Parking Garage B has 5 tiers of "post tension" cast in place concrete. This garage will eventually provide 744 employee parking spaces; which we were contracted to provide the normal power distribution, emergency power distribution, and lighting plus raceways for the access control/communications. other additions, the contract value at the date of completion was \$2.4 million. Project Manager was John Silvas and Joe Amavisca was the Project Superintendent.

3D modeling or BIM was utilized on this project to coordinate and identify any potential conflicts between the MEP, structural and architectural disciplines. Thus, allowing for a timely progression on the project.



Our scope of work in the central plant/loading dock was to provide underground raceways for the power distribution, access control and communications. The site lighting for the central plant was also included in our contract.

For the past 25 years, Phoenix Children's Hospital has provided quality healthcare for children. Phoenix Children's Hospital is one of the ten largest children's hospitals in the country and the only licensed children's hospital in the state of Arizona. PCH provides specialty and sub-specialty inpatient, outpatient, and emergency care to patients throughout Arizona and other southwestern states. We, at Commonwealth, are pleased to be involved with the expansion of the current facilities, which will allow PCH to continue to provide for the medical needs for children.



Des Moines Skywalk Bridges

Matt Masters – Project Manager

From Wells Fargo Arena to the Civic Center, the Ruan Building to Principal Tower, Allied Campus to the Polk County Building, the Des Moines' skywalk system takes you all over downtown Des Moines without ever having to brave the elements.

Commonwealth Electric Company of the Midwest was awarded the electrical portion of the city project that includes the skywalk system's two newest bridges. Crossing 12th Street between Locust and Walnut, and diagonally across the intersection of 12th and Mulberry, these two sky bridges connect the Allied Nationwide Campus.

Neumann Brothers Inc. is the General Contractor on the project. Doyle Horwart is Commonwealth Electric's Project Foreman with Jeff Gero as Estimator and Matt Masters as the Project Manager. Neumann has been great to work with and we look forward to working with them on future endeavors.

Safety Orientation

Ruben Bera - Corporate Safety Director

An important part of any effective safety and health program is making sure employees are aware of the safety requirements of the organization. It would be difficult to try and pass out all the aspects of working safe at the time you were hired. Considering the nature of our work, electrical installations and maintenance, trying to educate employees all at once makes no sense. People will forget or a certain situation may not come up for months or years after the hire date. This is one reason we hold tool box safety meetings, conduct on-site safety training and provide all employees with the latest information on how to work safe around energized equipment.

Several years ago we developed a new employee orientation video. The idea behind this video was to give all new employees an overview of the safety issues they may face and how we at Commonwealth Electric Company of the Midwest can help prevent injuries and damage to property. The video is an overview of the expectations of all employees.

There have been changes in our industry that we needed to share with all employees. With the cold weather in the midwest, we thought a perfect location to re-shoot the video would be in warm Phoenix, AZ. Making a quality video takes more time and effort than you would think. We had to develop a script, build a story line and find a job site that would allow us to film on their work site. Once we had the "actors" in place, we began filming. Each scene took several takes before the finished product was approved. Once the final product is delivered, all new employees and current employees will have an opportunity to view the video. This is an excellent way to demonstrate our commitment to employee safety and provide all employees with an up-to-date



video on how they can prevent injuries. We will look for continued changes and at some point in time, another video may be needed.

Many special thanks go out to all who helped make this presentation possible:

Joe Graham - Vice President and Branch Manager of the Phoenix office for helping make this happen. Carl Pollack – General Foreman - Phoenix Children's Hospital. Carl worked with the General Contractor, Kitchell Contactors to allow us to use their site.

Our actors: Jason Turner, Ryan Shaw, Anthony Middaugh, Caleb Graham, Kory Murphy – Service Technician, John Mackay – Phoenix Service Manager.

I also want to thank our producer, Crucible Media Services.

At Commonwealth Electric Company of the Midwest, we pride ourselves in keeping all employees safe and informed.



Cosentry Service & Generator Upgrades & Phase 4 Data Center Expansion Projects

Chuck Fintel - Project Manager

In 2001, a company, in partnership with Norm Waitt (cofounder of Gateway Computers), began operations with the opening of a Data Center. This Data Center began with the hosting of several corporate clients. This company today is known as CoSentry. It provides Business Resiliency Solutions.

CoSentry started out by leasing a small area of the old Southroads Mall in Bellevue, NE. Today CoSentry has become an anchor tenant in the revitalized Southroads Technology Center. CoSentry today is a one source provider of business continuity and managed technical services. CoSentry provides data center, collocation, hosting, work group, print and mail, and systems recovery solution. The company also provides managed internet services via data centers in Omaha, NE, Kansas City, MO and Sioux Falls, SD.

CoSentry's business has grown tremendously since 2001. Commonwealth Electric Company of the Midwest has been fortunate to help CoSentry grow their facilities in Omaha. Between 2004 and 2007, we've performed the electrical projects for CoSentry's print room, various raised floor additions, power upgrade, disaster recovery site and the 2006 data center expansion.

Over the years, CoSentry's growth became impacted by the power available in the Southroad's facility. Therefore, in 2007 CoSentry realized they needed to upgrade the incoming power to the facility in order to continue their growth. In 2008, we competitively bid the Service and Generator Upgrade, Phase 4, and Data Center Expansion projects. We were selected by Cosentry to perform this work.

The Service and Generator Upgrade Project consisted of installing 2 each, 2000A matching services. Both of the services consisted of 2000A transformers and 1 MEG Cummins generators. Each service had its own electric room. Each electric room included 1 each, 2000A automatic transfer switch; 1 each, 800A automatic transfer switch; 1 each, 2000A switchgear and 1 each, 800A switchgear. We installed a new 500KVA UPS and we refed a 500 KVA UPS from an existing service. Also included in the project were the addition of 3 each, 800A PDUs and 4 remote power panels (RPP). Each RPP has 4 each, 250A 3 phase panels in it. We added 5 manual transfer switches to existing CRAC units to provide redundant power to the units.

The Phase 4 Data Center Expansion added 2000 sq ft of data

center space to the existing 12,000 sq ft data center. This work included demolition of an existing space, along with new lighting, new power requirements to CRAC units, power panels and a raised floor.

With the completion of the Service and Generator Upgrade Project, CoSentry has 3 independent services, each having gen-



erator backup and a 500KVA UPS.

These projects were completed without disturbing the Data Center environment. There were no injuries or lost time accidents on the job and the project came in under budget.

Scott Capps is the overall foreman for all of the work at CoSentry. His crew for this project included Ed Cox as foreman, Shad Hawbaker, Foster Weyand, Bob Bergamine and Nick Strong. The foreman for the Phase 4 work was Will Fabian. Congratulations guys on a job well done!

Since these jobs were so successful, we are in negotiations with CoSentry to start their Phase 5 project, which will consist of another service and generator upgrade and additional raised floor space.

