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Bergelectric's Expanding Expertise & Experience in Alternative Energy

Although we think of converting light energy into electrical energy as a relatively new green concept, the word photovoltaic (PV)—from the Greek word for light ("photo") combined with the name of trailblazer Alessandro Volta ("volt")—was first used in the late 1800s. In the 21st Century, as energy costs have soared along with a penchant for pursuing clean and safe energy, more and more opportunities to incorporate this alternative-energy source into environmentally-conscious projects are arising.

Bergelectric has also come a long way in both expertise and experience since its first photovoltaic project—a 237 kW installation at an energy-savvy Safeway supermarket in southern California. Since then, this electrical contracting trendsetter has installed equipment, incorporating the latest PV technologies to harness our sun's energy, on dozens of projects from coast-to-coast. From the sunny shores of California to a forward-thinking Marine Corps base in North Carolina—and many points in between—Bergelectric's installations are delivering over 65 megawatts (MW) of power, decreasing America's dependence on fossil fuels to generate electricity and replacing pollution-emitting energy production with a clean, renewable alternative.

New PV Projects Indicative of Increasing Scale and Magnitude

The

While most early photovoltaic projects undertaken by Bergelectric were in conjunction with other work being performed, the firm has developed a reputation in the renewable energy marketplace as a primary resource to clients pursuing large-scale stand-alone installations. At the **Camp Lejeune Marine Corps Base**, Berg crews installed approximately 20,000 solar PV panels that will reduce the 244-square-mile premier military training facility's dependence on traditional power sources while also fulfilling requirements of the *Energy Independence and Security Act of 2007 (EISA)*.

The recent selection of Bergelectric to provide services to general contractor **Chevron Energy Solutions** on a 10 MW solar installation on the Texas/Mexican border for **SunEdison** is testimony to the *ENR* top-ten-ranked electrical contractor's standing as a key player in the

growing alternative-energy arena. As Bergelectric President/CEO Tom Anderson reflected on the company's expanding role, "Both the **Chevron** and **Camp Lejeune** assignments are indicative of the scale and magnitude of photovoltaic projects we're participating in, which are contributing to Berg's maturing as a national force in alternative energies."

"Both the Chevron and Camp Lejeune assignments are indicative of the scale and magnitude of photovoltaic projects we're participating in, which are contributing to Berg's maturing as a national force in alternative energies."

Stronger, Faster, More Productive—Berg Developing PV Installation Innovations

PV technology is evolving at a rapid clip. Smart combiner boxes—which collect energy generated by solar panels and send it on to inverters—are now being used to communicate with a common data-acquisition system so that power production can be monitored remotely at the string level, the same way inverters are typically monitored. Large central inverters are being replaced by string inverters and micro

INSIDE CONNECTIONS

National

Something New Under the Sun: Berg matures as a resource for solar projects.

New Board Member Bergelectric veteran William Sorber elected to Board of Directors.

Awards Palomar Medical Center named best healthcare project in CA by ENR.

Los Angeles UPS upgrade offers continuous service and peace of mind for major data center.

San Diego Trust and teamwork propel massive Naval Hospital toward

early completion.

Sacramento

UC Davis maintains leadership in sustainability with LEED Platinum student-housing project.

Ventura

Berg leading the way on **Oxnard Airport** Improvements.

Colorado Berg plays key role in the vibrant resurgence of **Downtown Denver**.

Las Vegas Nevada Army Guard Maintenance Shop underway in Las Vegas.

Arizona

Providing dependable power in record time on 186,500-sf **CyrusOne Data Center**.

Orange County

Expanding Orange County, CA offices to new Irvine location.

Portland

New \$112-million hospital meets demand for modern healthcare in Kennewick, WA.





Camp Lejeune, North Carolina

Tom Anderson, President/CEO, Bergelectric Corp. inverters to reduce space consumption and allow for shutdown of just portions of an array for service and maintenance. Systems are getting larger in general—320-watt modules are not uncommon in current installations.

Being on the cutting edge of evolving technologies and making its own contributions to improving installation methods is part of the culture of Bergelectric, as well as what is driving its ability to offer innovations in the PV marketplace. In their office "laboratory," Bergelectric's PV experts have actually built a five-module canopy that is allowing them to experiment with the best ways to reduce installation labor hours and train personnel. One of the most valuable developments has been a unique track system that enables field crews to slide the panels into place, rather than bolting them down.

In addition, "Our Berg professionals have developed a high-strength rivet that replaces an existing nut-and-bolt assembly," explained Bergelectric Project Manager Jim McBroom. Once the heavy-duty rivet system is approved, McBroom projects that the average assembly time per nut-and-bolt will be reduced from one minute to approximately seven seconds. With 35,000 modules on a new Palm Springs schools PV assignment alone, that equates to a potential savings of over 2000 hours and over \$145,000 in material savings.

Documenting Means, Methods and Materials for "One Berg"

Documenting these best practices and sharing them companywide is being accomplished through the creation of the *Bergelectric Photovoltaic Manual*. The detailed manual features proven design procedures, improved methods, as well as preferred materials and tools for working smarter, such as PV-specific checklists, design-review tracking logs and commissioning guidelines.

With nationwide resources, commitment to advancing technologies, ever-increasing expertise and vision for the future, Bergelectric is poised to be able to serve whatever alternative power needs its clients may pursue.

Providing Quality Electrical Contracting & Engineering For 67 Years

Austin Berg joins Hunt-Hardin team to build nation's largest JW Marriott.

Orlando

Joining forces with **Chevron Energy Solutions** to install 42,000 photovoltaic modules at new solar park.

Raleigh-Durham

UNC expands with new \$200 million hospital in historic Hillsborough.



NO. 10 Among electrical contractors nationwide

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William Sorber Elected to Board of Directors



Nilliam Sorber, VP Southeast Region Bergelectric Corp

In 1989, when Bill Sorber joined the Bergelectric team in San Diego, he never envisioned that he would play a critical role in the company's transformation into the national powerhouse that it is today. What he did know for certain was that he had an extraordinary drive to succeed and a passion to "do well."

In April 1999, with some major correctional facility work in place in the Pacific Northwest to jumpstart Bergelectric's new location, Sorber left San Diego and began a trail-blazing trek north. With a team of intrepid Berg employees, as it was first reported in this publication, he "opened the doors and turned the lights on" in Berg's new full-service Portland office.

Building on his success as a branch manager in Portland, when existing relationships with several of Bergelectric's national clients mandated a greater Bergelectric presence in the southeastern US, Sorber once again answered the call to organic growth. It was the fall of 2000 and this time he was traversing the continent-returning to the roots of his youthbuilding on the vision and applying his expertise in logistics, resources, sales and management to a brand-new office in Orlando, FL.

Upon Sorber's May 2012 election to the Bergelectric Board of Directors, President/CEO Tom Anderson, stated, "Bill has distinguished himself as an extraordinary professional who is 100 percent engaged in our industry at all times - and his accomplishments at Berg reflect this commitment."

As Vice President Southeast Region, Sorber is licensed in over 20 states and was also instrumental in establishing Berg's Raleigh-Durham, North Carolina office. His current responsibilities include assisting with national sales and overseeing regional offices in Florida and Texas. He offered words of encouragement to talented young Bergelectric professionals when he said that "It's all about drive, motivation and the desire to do well-Berg provides the opportunity to be all that you can be."

> A N G E L E S LOS

Berg Provides 24/7 Protection at Critical Data Center

UPS Upgrade Offers Continuous Service and Peace of Mind

Knowing that help is only a phone call away provides peace of mind for 13.6-million customers—across more than 20 states – that rely on one of the nation's leading providers of emergency roadside-assistance and a host of other insurance and banking services. Channeling complex and criss-crossing requests is the 24/7 job of a dynamic state-of-the-art Data/Call Center located in Costa Mesa, CA that serves as the central hub for information flow.



Recognizing that any power outage at the more than 10,000-sf facilityregardless of duration-was unacceptable and could prove catastrophic to service, this industry giant took a proactive approach to ensure continuous operations by shoring up its mission-critical electrical systems. Calling on the expertise of general contractor **KCS West** to lead the charge, this client is now able to assure its members that they can continue to count on premier round-the-clock service by providing a major uninterrupted power supply (UPS) upgrade.

One Berg—One Mission

Supporting electrical engineer Syska Hennessy Group in a design-assist role, Bergelectric was responsible for installing a new 1 MW UPS power system featuring an upstream Automatic Transfer Switch and furnishing a new 2 MW genset.



This Data/Call Center in Orange County, CA serves as a central hub for more than 20 states that rely on its 24/7 operations for a host of services.

"Carefully choreographed coordination and intricate timing was essential to a successful transfer of power," noted Bergelectric Vice President Doug Crumby. "Experts from several offices and divisions-like Bob Marsh, a Berg senior project manager from Orange County who led the charge in securing the record on-time delivery of critical equipment-united Bergelectric as one driving force to make it all possible," Crumby added.

Berg crews clocked more than 14,000 hours over a compressed four-month timeframe working both day and night shifts to deliver the nuts and bolts of the installation, which included a 3,000A extension to the existing generator paralleling gear, new generator isolation board and roll-up generator connection box. "Our on-site team, co-led by myself and Scott Strang, worked tirelessly researching existing conditions and translating each power requirement to the new installation, which ensured that all equipment would be properly linked to redundant power sources," explained Berg General Foreman Darin O'Dowd.

"Intricate timing was essential to a successful transfer of power for this complex data center—experts from several Bergelectric offices and divisions united as one driving force to make it all possible."

Flawless Transition Requires Meticulous Preplanning

To facilitate the changeover, Berg's Prefabrication Manager Wally Macias orchestrated the delivery of over 400 precisely-assembled and clearly-marked branch circuit whips. "Making a flawless transition from the client's existing system, in a live fully-functioning data center within an eight-hour window, required intense planning that produced 24 meticulously-calculated and pre-approved Methods of Procedure for critical outage activities," said Los Angeles Service Division Manager Hans Erickson. The result: a successful installation utilizing the companywide expertise and resources of Bergelectric in a seamless delivery of a new \$5-million UPS system that will help provide consistent, reliable operation and peace-of-mind for years to come.

Although Marine Corps Base (MCB) Camp Pendleton's vision "supports today's fight and prepares for tomorrow's future," many of the aging buildings dotting the sprawling 125,000-acre training facility were hard pressed to keep up with technological advances. As home to expeditionary forces, special operations, aircraft groups and other valiant service-related professionals, Camp Pendleton trains and sends forth the best-of-the-best combat-ready personnel.

Providing the best care for returning wounded, ill and injured service members is one of the driving forces behind a commitment to "modernizing base infrastructure and providing superior service and support." Its centerpiece is a \$453-million state-of-the-art Naval Hospital Replacement Project that is taking advantage of resources from the American Recovery Reinvestment Act (ARRA) of 2009, which requires that construction funds earmarked for the massive effort be utilized within a designated period of time.

The crucially-timely completion has been entrusted to the expertise and track record of a seasoned design-build team led by general-contracting-joint-venture Clark/McCarthy and designers HKS Architects, Inc., who are dramatically cutting a normally seven-year delivery process in half. Charged with laying the groundwork at the outset of the enormous endeavor was Bergelectric San Diego Commercial Projects Division Manager Rick Greenwell whose initial efforts in managing the largest construction contract—and one of the most challenging projects—awarded by the Department of the Navy, are summed up by his reflection on teamwork: "We designed and are building a full-service medical facility in a fraction of the time a similar hospital in the civilian market would take, which is only possible through the efforts of a world-class team working together to build a world-class facility."

Experienced Team Meticulously Monitors Design

underscored Dragman-Renz.

By sharing resources, mentoring one another and utilizing each team member's expertise, the entire team worked synergistically and focused on the mission at hand: delivering the most technologically-advanced medical facility for our military men and women who sacrifice so much for our freedoms.

Giving Back to Those Who Faithfully Served

life-period," Wise proclaimed.

In addition to responsibility for designing the fire-alarm, security, tel/data, nurse-call, infant-protect and DAS systems, Bergelectric is installing the entire low-voltage network for the hospital. "We have counted on the expertise of several service-disabled veteran-owned businesses to help us meet our commitments, including **MCB**—who has handled a significant portion of the low-voltage





DIEGO S A N

Design-Building Navy's Largest Project

Trust and Teamwork Propel Camp Pendleton Hospital Toward Early Completion

According to Bergelectric Preconstruction Design Manager Carrie Dragman-Renz, the Naval Hospital is an unprecedented design and construction experience serving as a solid model for the ultimate design-build team. Blurring organizational lines and working in intensely close collaboration with the engineers of **EXP U.S.** Services, Inc., Berg is taking the lead on the mammoth electrical effort, which consists of 12 kV main electrical power for the 500,000-sf facility, 2,500-space parking structure and 20,000-sf central utilities plant. "We had 14 months to complete six concurrent design submittals, beginning with a fast-track site and underground submittal. Given the colossal task of gathering and processing an astronomical amount of data, we could not have moved at the pace and accuracy we have without a major commitment from the EXP team led by Jamie Schnick,"

This incredible degree of cooperation extends to the field operations as well. Senior Project Manager Jay Dee Wise emphasized the collaboration among the mechanical and framing/drywall contractors as being instrumental in meeting the three-year construction schedule. "I've never had a better experience in my



Naval Replacement Hospital MCB Camp Pendleton

STAGGERING STATISTICS 3.9-million linear feet of wire 1-million linear feet of pipe 15,000 electrical-device boxes 8,500 light fixtures 10.950 switches & outlets 751 solar panels & 3 inverters

installation," explained Bergelectric General Foreman Dave Cruz-a Marine Corps veteran himself. In addition to MCB, multi-faceted subcontractor G&C has handled a myriad of logistical challenges from purchasing materials to overseeing rental equipment that assists Site Office Superintendent Mike Stilwell in keeping the well-oiled Bergelectric machine running smoothly.

Unique Work Plan and Staggered Schedule Shave Time

With upwards of 1,000 construction workers on site per day and a schedule that could not miss a beat, carefully orchestrating Berg crews and their workflow has been essential to maintaining forward momentum. "Shaving time off the schedule by completing various elements of work such as high-overhead and wall rough-in for the entire hospital facility-vs. floor-by-floor completion-plus instituting a staggered schedule that eliminates our five crews working on top of one another has been highly effective," acknowledged Bergelectric Project Manager Aaron Rigg. With creative coordination and dedicated professionals, the new Naval Hospital at MCB Camp Pendleton will be "Fit for Duty" to best serve wounded warriors, as well as the "always faithful" 150,000 active military personnel, their families and retired veterans.

"Designing and building a full-service medical facility in a fraction of the time a similar hospital would take was made possible through the efforts of a world-class team working together to build a world-class facility."

Rick Greenwell, Division Manager, San Diego Commercial Projects Bergelectric Corp.

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"Focused on the mission and locked in step, we shared our resources, mentored each other and utilized each team member's experience and knowledge."

Carrie Dragman-Renz, Preconstruction Design Manager, Bergelectric Corp. ust teamwork collaboration trust teamwork collaboration trust teamwork collaboration tru

"The collaboration among Berg and the mechanical and framing/drywall contractors has been instrumental in meeting the three-year construction schedule. I've never had a better experience in my life-period."

Jay Dee Wise, Senior Project Manager, Bergelectric Corp.

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A W A R D

The award-winning Palomar Medical Center has been called the "Hospital of the Future." Photos courtesy of DPR.

Palomar Medical Center Named Best Project of 2012

ENR

As the design-assist electrical contractor, Bergelectric is honored to have played an integral role in the construction of the \$956-million "Hospital of the Future," Palomar Medical Center (PMC), which was recently named 2012's "Best Health Care Project" and "Best Project of the Year" by ENR California.

Situated on 40 acres in Escondido, CA, the 11-story, 360-bed PMC "... is widely considered an architectural and technological masterpiece," according to ENR. As one of the largest buildings in the US to use an integrated-project-delivery method, the project team has been praised by Construction Manager DPR as being "forward-thinking" and dedicated to problem solving in "the most collaborative and selfless ways."

Palomar Medical Center, Escondido, CA

Construction Manager: DPR Architect: CO Architects Construction Start: February 2007 Completion: August 2012 Electrical Contract Value: **\$101 Million** Delivery Method: Design-Assist Size: 740,000 sf Generators Installed: 5 Light Fixtures Installed: 20,000+ Conduit Installed: Over 1 Million Feet Wire Installed: Over 5 Million Feet

Maintaining **Global Leadership in**

\$75-Million UC Davis Student Housing Project Targets LEED Platinum

True to its well-deserved reputation as a global trailblazer in sustainability-related research, instruction, projects and programs, the University of California at Davis campus has embarked on a transformative student-housing project that will be the poster child for sustainable living. The human values that UC Davis is committed to—"caring and personal relationships," as well as "collaborative and thoughtful work"-are some of the same principles driving the \$75-million design-build of the campus' latest endeavor-Tercero Student Housing Phase 3 (TP3).

Under the guidance of Sundt Construction and architect Esherick Homsey **Dodge & Davis (EHDD)**—the worldwide leader in design of net-zero energy projects-the 321,300-sf complex is already taking shape. In addition to serving in a design-assist role by working collaboratively with electrical engineer Guttmann & Blaevoet, Bergelectric has been able to help accelerate the project through the implementation of an intensive design-review process and phasing construction. "By designing the phases concurrently and starting construction before 100% drawings were complete, our crews were already mobilized on-site-performing deep-underground and under-slab electrical installations-prior to this winter's rainy season arriving," noted Bergelectric Superintendent Chris Nelson.

The Power to Deliver Full Service

With the critical assistance of General Foreman Larry Jemmings and Detailer Robert Lewis, an aggressive schedule pinpointing all conduit locations and elevations was developed, which kept underground installations on track. Building Information Modeling (BIM) has also been instrumental in facilitating coordination with all MEP trades tasked with working in an extremely limited interstitial space within the buildings' hallways, as well as maintaining a seamless workflow.



Bergelectric has helped to accelerate this \$75-million UC Davis Tercero Student Housing Phase 3 project through an intensive design-review process and phasing electrical contruction.

Electrical site infrastructure for the complex includes distribution of 15 kV to two new customer-owned pad-mount utility transformers designed to help bring EHDD's vision of the site to life and accommodate UC Davis' budgetary considerations. Additional new site infrastructure includes 480-volt and tel/data service to each of the seven buildings, as well as two emergency-power generators to service complex life-safety requirements. To keep the University on the cutting edge of technology and security, Bergelectric is also providing tel/data, fire-alarm and access-control systems in each of the seven buildings, as well as audio/video for a 250-seat lecture hall located within Building 2.

Advancing Sustainability Goals

Seeking a LEED Platinum certification, the four-story buildings will be home to nearly 1,200 power-savvy students. To help advance the university's LEED goal, LED site lighting was incorporated into the design to reduce energy consumption and longterm maintenance costs. "Adding to the energy savings are efficient light fixtures with optimized foot-candle levels in all rooms that reduce building electrical loads while providing sufficient light for occupants - all in all the team expects to exceed California Title 24 energy-efficiency standards by 37%," said fellow Berg Superintendent Glenn Azvedo.

A major contributor to **TP3**'s ability to meet **UC Davis**' sustainability goals is the electrical system developed to determine energy loads for each building. "We designed a system that provides per-building metering for each of seven 4-story buildings total energy demand, as well as monitored points along the electrical-distribution system-ultimately enabling calculation of all building loads through a deductive sum for other loads that are not specifically metered," explained Berg Project Manager Stacy King. "The collected information is fed back to the campus SCADA (Supervisory Control and Data Acquisition System) via a dedicated network access module (NAM) at each building's main meter," King added.

When completed in 2014, this model for sustainable living will not only serve as a flagship for good environmental stewardship, it will also fulfill another UC Davis guiding principle-advancement of the campus community.



Berg Leading the Way on Oxnard Airport Improvements

Located just inland from the sparkling blue waters of the Pacific Ocean, Ventura County's **Oxnard Airport** has supported continuous airline passenger service since World War II. Despite a recessiondriven decline in enplanements, the airport has continued to support a charter service and other general-aviation-related tenants that call the 216-acre airport home—including helicopter companies and aviation maintenance businesses.

Throughout its heyday Oxnard Airport had several well-known carriers whose service to Los Angeles International Airport (LAX) ended in 2010. While the airport has continued the search for a new commercial carrier, Bergelectric has been busy making a series of improvements - hangar renovations, generator replacement and new service switchgear—that will contribute to Oxnard's attractiveness as a non-hub commercial service airport as well as to its goal of increased energy efficiency.

Entering into a New Era in Aviation

In anticipation of beginning new commercial service and in support of its existing clients, including Las Vegas-based MVP Airways, Oxnard Airport has embarked on a runway and taxiway lighting-improvements program, led by Bergelectric, which will fulfill several goals in addition to supporting the restarting of commercial flights.

According to Bergelectric Project Manager David Lopez, in order to further the airport's goal to become more energy efficient, Oxnard Airport is upgrading airfield lighting fixtures to LED that will result in a two-fold benefit-lowering

1000

airfield lighting and maintenance costs, as well as reducing emissions. An added bonus of the \$1.1-million project is that the upgrades also mean that Oxnard will be able to meet FAA

standards for lighting offsets.

Meticulously-Planned Shutdowns Mandate Round-the-Clock Crews

VENTURA

With only one 5,953-foot-long runway, Bergelectric's primary challenge in installing the new lighting was to strictly adhere to the airport shutdown schedule that was required at the active airport. "To be able to accomplish the upgrades, our 40-day construction period allows for four 34-hour airport operations shutdowns during which most of the critical work will be accomplished," explained Bergelectric Foreman John Creighton. Within this timeframe Berg crews are working around the clock—from Wednesday at 9:00 pm to Friday at 7:00 am when the airport re-opens-performing installation of runway lighting, conduit installation, airfield signage and a grounding grid system known as counterpoise.

Throughout regular daytime hours, Berg professionals are on site in taxiway object free areas (TOFAS) where they will perform work that does not directly interfere with runway operations, such as installing LED wind socks and airfield signs. Modifications to the electrical switchgear room, which serves as the brain center of operations, include replacement of the runway and taxiway lightingsystem regulators, equipment modifications and installation of a computerized airfield lighting-control and monitoring system.

Lead Estimator Shawn Biety was instrumental in developing a detailed and precise bid for the Oxnard Airport taxiway and runway improvements project that enabled crews to accurately determine materials and scheduling for 276 runway and taxiway LED fixtures and over 85,000 linear feet of trenching and installation.

Improvements Create Value for County of Ventura and Community

As a home to not only scheduled-charter-service provider MVP Airways, but other aviation-related businesses that include Aspen Helicopters, Agricultural Spraving, Oxnard Jet Center, Light Helicopter Depot and Channel Islands Helicopters, these improvement projects will allow the **Oxnard Airport** to "continue to be a valuable asset to the **County of Ventura** and the surrounding community."



3

Size: 152 ground-le

4

It's no wonder that **Coors Field** required an extra 950 parking spaces in a new structure this sports venue has claimed the enviable position as leader in attendance for baseball's entire Major League. At 337,000 square feet, faithful fans will discover that finding a parking space is a whole lot easier. Bergelectric is providing all electrical, lighting and fire-alarm systems, in addition to an emergency generator and mechanical connections to ensure that the elevators serving the four-story garage will remain operational during any unexpected power outage. Working in close coordination with the general contractor PCL and the Colorado Rockies' management, Berg crews took a break in the action and re-paved any underground work that began prior to baseball's opening day, and will resume construction once the season is over.

Downtown | 1701 Bryant Street Just west of I-25 lies Sports Authority Field at Mile High, which replaced Denver's Mile High Stadium. Home to the **Broncos** of NFL fame, the sports venue seats over 76,000. In order for all fans to be able to better view their team's performance. Bergelectric participated in a \$30-million scoreboard-improvement program. With the assistance of in-house prefabrication experts who assembled conduit racks in advance, Berg installed new power and fiber cabling for the upgrades and additions.

Walkable Urbanism

How Bergelectric is Contributing to Denver's Vibrant Downtown

Eclectic. Exciting. Energetic. Environmentally-friendly. These are just a few of the many attributes that describe the vibrant urban core known as Downtown Denver, and why the Mile High City was named by the Harris Poll as "the #1 city where people want to live." During his annual State of the City address, Denver's Mayor Hancock emphasized "quality of life, transportation options, walkable urbanism and its . . . growing rental market" as primary magnets attracting talented professionals to the area's eight distinctive districts.

From sports venues and mixed-use developments to luxury apartment communities and a massive federal office-building modernization. Bergelectric is impacting Denver's revitalization as well as contributing to creating a sustainable environment, "We're excited to be working on over a half dozen high-profile projects-all part of a \$1-billion investment in both public and private development that is generating a resurgence in the Downtown Denver economy," stated Bergelectric Colorado Regional Manager Alan Stout.

Let's Take a Walk!

Byron G. Rogers FOB Remodel & Modernization Central Business District | 1961 Stout Street

Located in the heart of the city's Central Business District, this venerable old federal office building has gotten a new lease on life through a complete remodel and modernization of 18 floors. Bergelectric's experts are helping bring the 1960s-era building into the 21st Century—from emergency power, security systems and telecommunications to lighting, fire alarms and lightning protection. Due to the sensitive security issues associated the 11 federal agencies housed in this facility, a secure-documents-handling website was utilized by Berg professionals when exchanging BIM modeling and other information.

C O L O R A D O

FASCINATING FACT:

The once inefficient '60s-era behemoth is projected to attain a 2030 NetZero Benchmark.

2

Delivery: Design-Build **Owner: GSA**

Size: 494,000 sf; 18 floors General Contractor: Mortenson Construction Architect: Bennett Wagner & Grody Architects and HOK

One Union Station

Lower Downtown District | 1615 Wynkoop Street

The historic Denver Union Station is both an icon and anchor in the Lower Downtown District and is inspiring expansive surrounding redevelopment. Complementing this architectural gem is an adjacent five-story mixed-use office building, which will provide tenants and visitors with parking in a one-level underground structure. Bergelectric professionals delivered the core/shell electrical and fire-alarm system for this 152,000-sf development that will ignite new life in the community. Reserved for future retail and restaurant space, the ground floor will soon be attracting new lessees.

FASCINATING FACT:

The circa 1894 depot now known as Union Station was designed to serve four railways converging in Denver that were sweeping across the west, including Union Pacific.

2,000-sf office building & future evel retail	
South Wing Development 11 C	

General Contractor: Kiewit Building Group Architect: AndersMasonDale Architects, P.C.

Delgany Apartments

Lower Downtown/Central Platte Valley Districts | 1490 Delgany Street

With Downtown Denver's attractive urban center being ranked by the Brookings Institution as the "#1 city where 25-34 year olds are moving," it's no wonder apartments are in such high demand. Connecting two up-and-coming districts-Lower Downtown (LoDo) and Central Platte Valley-Delgany Apartments offers tech-savvy tenants the latest in tel-data and TV cabling, access-control and security systems, as well as trendy future ground-level retail attractions. Due to the tight urban construction site, during the full electrical buildout of this 10-story luxury apartment building, Bergelectric crews took particular care in coordinating with Opus Group in order to maintain electrical, telephone and cable TV to two adjacent existing structures when routing service conduits.

FASCINATING FACT:

Downtown Denver was home to 17,000 residents in 2012-up 25% from the prior year.

Size: 426,860 sf; 288 Apartments **Delivery:** Design-Build **Owner:** Amstar

General Contractor: Opus Group Architect: Opus Architecture & Engineering

Coors Field Parking Structure

Ballpark District | 27th & Blake Streets

FASCINATING FACT:

Since it opened in 1995, Coors Field has been a league leader in attendance every year.

Size: 337,000 sf, 950 spaces Owner: Metropolitan Major League Stadium District Architect: Studio Completiva

General Contractor: PCL

Coors Field Suites

(5)

Ballpark District | 20th & Blake Streets

Five different types of suites are offered at Coors Field to meet a wide variety of Colorado Rockies baseball fan requirements, which can accommodate from 12 to 500 people. Whether it's one of the Private Suites that create an intimate elegant setting to Mezzanine or Super Suites for larger groups, fans can count on great food and hospitality at Coors Field. Bergelectric teams, led by the manpower of the local Denver service department, were responsible for upgrading suites at four different locations throughout the stadium. Working hand-in-hand with the on-site Mortenson Construction team regarding critical layout and schedule, Berg professionals were able to also offer value-engineering opportunities prior to crews removing existing service, then installing new upgraded power and lighting.

FASCINATING FACT:

A baseball travels 9% further at 5,280 feet than it does at sea level.

Size: 85,000 sf **Owner:** Colorado Rockies **General Contractor:** Mortenson Construction Architect: Populous

Sports Authority Field at Mile High

FASCINATING FACT:

Every non-strike Denver Broncos home game since 1970 has been sold out.

Size: Scoreboard Upgrades **Owner:** The Denver Broncos **General Contractor:** Daktronics

Pepsi Center Auraria | 1000 Chopper Circle

6

This multi-purpose arena is home to three sports teams—basketball's Denver Nuggets, hockey's Colorado Avalanche and lacrosse's Colorado Mammoth. To better serve both sports fans and concert-goers, Bergelectric installed raceways and Verizon Wireless antennas throughout the stadium to enhance peak-use cell-phone coverage during events.

FASCINATING FACT:

Pepsi Center is affectionately known by Denverites as "The Can."

Size: Wireless Upgrades **Owner:** Kroenke Sports

General Contractor: Quanta Wireless

Serving Both Community and Country



Nevada Betting On New Army National Guard Field Maintenance Shop

For those who serve in the Army National Guard (ARNG)-whether it's within their own state or on a mission for the nation-they know that "the Guard does whatever is needed, wherever it is needed." That's the

same philosophy Bergelectric is applying to the new Nevada ARNG Las Vegas Field Maintenance Shop (FMS).

Conveniently co-located adjacent to the ARNG Readiness Center, the FMS is set to replace the deteriorating 70s-era shop 10 miles away in Henderson. The state-of-the-art replacement facility, which is being built under the direction of general contractor CORE Construction, will provide field and sustainment support to serve the growing needs of more than 10 southern Nevada Army Guard units.

In addition to a separate vehicle wash area, the 42,746-sf facility designed by Jacobs Engineering Group features maintenance bays, auto shops, military equipment storage and administrative spaces that will support the maintenance operations conducted on a variety of wheeled and tracked vehicles. Under the leadership of Superintendent Mike McGowan, Bergelectric crews will be providing all building and underground electrical, in addition to fire alarm, tel/data and underground communications that are at the heart of the \$23-million facility's operation.

Focus on Cost and Energy Efficiencies

Ensuring that the FMS will be up-and-running during possible electrical outages, Berg crews are also responsible for the installation of a 1000 kW emergency-power generator. On a day-to-day basis, incorporating solar power in the Las Vegas FMS will reduce the amount of electricity required by local service provider NV Energy to run the facility.

In a design-assist effort with Harris Engineering-designers of the 195 kW photovoltaic parking canopy system – Bergelectric lent its considerable nationwide experience in installing photovoltaic solar panels by offering recommendations for the most suitable equipment types including, panels, inverters, collector boxes and feeders, as well as alternative-installation methods. "We worked with designers of the solar system to facilitate an accurate and cost-effective design that would fit the needs of the State of Nevada Public Works Board, who is the customer,

as well as the Army National Guard end-users," explained Bergelectric Project Manager Nathan Sawyer.

Bergelectric's additional in-house capabilities enabled its Las Vegas office to offer other efficiencies to the CORE Construction team on the Nevada ARNG Las Vegas FMS project. "Our crews were able to quickly and economically install communication duct banks prepared in advance in our prefabrication shop," noted Berg Foreman Kenny Bryner. By being available to "do whatever is needed, wherever it is needed," Berg is helping to deliver an Army National Guard Field Maintenance Shop in Las Vegas that will be ready to protect the citizens of Nevada and beyond for many years to come.



The 42,758-sf Nevada Army National Guard Field Maintenance Shop, Las Vegas, Nevada.

Bigger, Better Business Connections

Berg Expanding Orange County Offices with New Irvine, CA Location

From a sheep-grazing rancho in the late 1800s, nestled in the rolling hills along the Santa Ana River, Irvine blossomed as one of the top 20 national master-planned urban communities in the USA. In addition to being touted by the likes of Money Magazine as "One of the Best Places to Live," this Orange County, CA oasis has earned a reputation as an "enterprising business environment" that attracts industry giants by offering the best in educational institutions and transportation systems.

Whether Berg professionals are supporting construction projects across the country or collaborating with partners in the region, being just a few miles from the John Wayne Orange County Airport and Interstate 405 corridor enhances accessibility. Irvine's self-described penchant for providing a "team-like lifestyle" is in sync with Bergelectric's business model and one of the many attributes that led them to choose Irvine for their new and expanded offices. "Within a five-minute radius, our teams are able to meet at a moment's notice or have more one-on-one time with over a dozen of Berg's general-contracting clients located here," shared Orange County Regional Manager Mark Bauer.

Promoting Productivity and Planning for the Future

Completing tenant improvements on the 15,000 square feet of space was a collaborative effort of several Bergelectric divisions and offices who worked together to provide the latest technologies, with a common goal of promoting increased productivity and providing room to grow. "The new Irvine location not only adds necessary expansion, it also provides enhanced conferencing spaces, spacious parking and a multi-functional warehouse," Bauer added.

Providing Dependable Power

Berg Part of Team Delivering Data Center of the Future

in Record Time

Rising from the desert floor on a 57-acre parcel just east of Phoenix, AZ is the most powerful and potentially the largest data center of its kind in the country. Providing an unprecedented 110 megawatts of power capacity from an on-site substation, **CyrusOne**'s Chandler facility is poised to handle the growing colocation data center needs of additional customers-beyond the top Fortune companies they already serve worldwide.

Choosing the Valley of the Sun site plays a strategic role in CyrusOne's future expansion capabilities as well as proximity to California clientele seeking a cost-effective, secure alternative for data handling that will not be jeopardized by earthquakes, wildfires, landslides and other natural disasters which have befallen the Golden State. The industry trailblazer selected general contractor JE Dunn Construction Company to oversee building the initial 186,500-squarefoot facility—which would normally be accomplished during an 18-20 month timeframe-in a record seven months.

Redundant Power: Key to a Secure Data Environment

In addition to the power distribution for both the data halls and offices, Bergelectric is installing emergency-power systems to ensure system availability in the event of a component failure by providing independent backup for the data center. "All of the entities involved were totally committed to achieving this unprecedented schedule. We participated in coordination meetings from the start with CyrusOne, JE Dunn and the electrical engineer to pin down specifications including those for providing the highest power redundancy available in a 2N architecture facility," noted Bergelectric Project Manager Marcell Beasley.

Detailing: Preconstruction thru Project Delivery

During this time, research was also conducted on **CyrusOne**'s existing facilities' use of a first-of-its-kind structural ceiling grid system-known as the Gordon grid-that supports overhead cable and utility distribution specific to enterprise colocation data-center requirements. According to Preconstruction Manager Shawn LePine who spearheaded early efforts in budgeting and estimating, "Our innovative team, including Detailer Chris King from Las Vegas and Project Engineer Bruce Bailey, collaborated to determine how light fixtures would need to be manufactured to fit the Gordon grid and developed special struts and boxes to accommodate the system."

Once in the field, it was full-time Onsite Detailer Dominick Lamorte's mission to see that each of the components fit like a glove by coordinating all project drawings and being continuously involved in building information modeling (BIM) throughout the entire delivery process. By transferring the BIM drawings to Berg's Trimble® Total Station GPS unit, detailers were also able to define installation points for underground raceways and conduit systems throughout the building, which enhanced onsite productivity and kept the project moving at a swift pace.

A R I Z O N A

Prefabrication: Enhancing Schedule Adherence

"We couldn't have maintained the aggressive schedule without the assistance of our in-house prefabrication department right here in Tempe, who prepared nearly 30,000 feet of underground duct banks for installation," added Bergelectric General Foreman Mike Faust. Due to their close proximity to the project, prefabrication crews were able to assemble the underground

conduit raceways and transport them to the project site as needed. Berg professionals both locally and from around the nation contributed their dedication and expertise to help deliver the Phoenix Data Center in record time so that CyrusOne will be able to continue to provide 24/7 service and honor their "100% uptime service level agreement on power" to clientele.





CyrusOne selected general contractor JE Dunn **Construction Company** to oversee building its 186,500-sf data center—which would normally be accomplished during an 18-20 month timeframe-in a record seven months.

Meeting Demand for MODERN HEALTHCARE

Delivering a New Hospital for Tech-Savvy Residents in Washington

From world-class fishing to award-winning wineries, the Tri-Cities area of southeastern Washington State offers an attractive quality of life in support of its strong science-and-tech-based economy. In recent years, the **City of Kennewick** earned several distinctions from Forbes-notably No. 1 in Job Growth and No. 11 in US geekiest cities—and since then the community has continued to expand with hundreds of new homes and apartments coming on line. Along with the steady growth in population over the past decade has come a need to update and expand the aging downtown hospital that has served the area for 60 years.

Since 2007, Kennewick General Hospital (KGH) has been on a mission to outage. Bergelectric General Foreman identity funding opportunities that would allow it to update and maintain its aging Slade Smith will be leading crews in the installation of the raceways for systems 27-bed downtown facility with a focus on pediatrics and obstetrics, while delivering critical to the high-tech, quality care local residents will receive at the new ground-up "quality healthcare close to home" at the new state-of-the-art campus situated on hospital including, nurse call, fire alarm, tel/data, access control and CCTV. a portion of its Southridge property's 40 acres. KGH found a perfect match for When completed, the hospital will not only offer 74 beds, all of which are the assignment in Wisconsin-based C.D. Smith Construction, who specializes in building healthcare facilities and is acting as both general contractor and leaseback private, but will have six operating suites, a trauma center and a complete imaging department including mobile MRI and CT. The complex also features a separate financier on the \$112-million hospital. Bringing its cutting-edge solutions to the 171,700-sf facility is Portland-based **PKA Architects** whose design will central-utility plant with provisions for future expansion and onsite heliport for accommodate the latest medical technology. patient air transport. Additionally, this upgrade to more modern facilities at the new Kennewick General Hospital Southridge will have created more than 250 jobs and assured that the Tri-Cities area population of more than a quarter million will enjoy Contributing to the Bottom Line of \$112-Million Facility quality healthcare services right in their own backyard.

Bergelectric's first-hand knowledge of the KGH project over the past five years - as well as substantial hospital preconstruction expertise coupled with recent experience in the regional construction market-offered the C.D. Smith team valuable insight into pinpoint-accurate pricing that provided details for any remaining gaps in the budget calculations as final design of the 74-bed facility neared completion. In a design-assist role under the direction of Bergelectric Project Manager Alex Yurchenko, Berg professionals are working hand-in-hand with Interface Engineering in providing value-engineering options such as a comprehensive review of the lighting package, which will keep the budget-sensitive project on course and progressing to its 2014 completion.

Bergelectric crews will perform highly-accurate in-slab installations for inserts, sleeves and conduits utilizing 2-D layouts on Trimble® Total Station technologies. Supporting the work of the field crews, Berg in-house detailers will provide BIM 3D

Showcased in the new offices are stylish indirect lighting featuring architectural products supplied by Lightolier, Performance Lighting, Prudential Lighting and SCI. Equipment includes up-to-the-minute advances in Wi-Fi connectivity,

security systems and paging capabilities. Self-performing the electrical design and low-voltage systems, Berg called on the in-house expertise of the Los Angeles Technology Systems Group for tailoring the fire-alarm, access-control, CCTV. background music and video-conferencing systems to Berg's specific needsboth current and well into the future.

os Angeles

ORANGE

COUNTY

1935 Deere Ave Irvine, CA

San Diego

"By relocating its Orange County, CA offices to Irvine, Berg is bridging geographical boundaries, enhancing accessibility, providing expansion and presenting a cohesive 'One Berg' to clients, vendors and the community."

Conducting a well-orchestrated weekend move from the existing Costa Mesa offices was the task of Bergelectric's San Diego-based Information Technology (IT) Division, working in conjunction with the LA Technology Systems Group. Blurring the lines between divisions, the team worked seamlessly during the transition to bring the corporation's new phone system online and took painstaking care in relocating intricate network equipment. Coordinating this multi-office effort was Preconstruction Manager David Jacques, who served as overall construction manager on the buildout. "By coming together as a unified force, we're bridging geographical boundaries and presenting a cohesive 'One Berg' to our clients, vendors and the community," Jacques stated.

P O R T L A N D

modeling of electrical rooms and 1-lines, cable tray and conduit racks to facilitate a smooth construction effort.

In addition to providing utility service to the site and power distribution throughout the three-story building, Bergelectric also delivered temporary power for use during construction, as well as emergency-power generation by installing two 1,000 kW paralleled generators with provisions for a future third unit to make certain the hospital remains operational during any unforeseen "Berg's first-hand knowledge, substantial hospital preconstruction expertise and recent experience in the regional construction market provided valuable insight on the Kennewick General Hospital Southridge project in Washington state."



The new \$112-million Kennewick General Hospital Southridge, designed by PKA Architects, is being financed and constructed by C.D. Smith Construction. A U S T I N

Nation's Largest JW MARRIOTT to call Austin home

Berg Joins Hunt-Hardin Team on \$300-million Complex

Of the many monikers associated with the state capital of Texas—whether ranked among "America's Best Cities," being named "No. 1 Boom Town" or achieving notoriety as the "Hottest Spot to Start a Small Business"—the well-deserved label that put Austin on the map is Live Music Capital of the World[®], which is now the city's official tagline. Each year this gastronomicallyeclectic and culturally-diverse college town attracts nearly 20 million visitors who come to partake in everything from famous barbeque and Formula 1[™] racing to music festivals and international business conferences.

Luxury Convention Hotel Meets Pent-up Demand for Accommodations

Perhaps the only thing that has held this mega award-winner back from competing with a dozen larger cities in attracting the nation's biggest conventions and meetings is a shortage of accommodations. That's where one of the "fastest-growing independent hospitality companies in the country" comes in. White Lodging, who already owns and operates more than 20 other Austin properties, is developing the nation's largest JW Marriott just two blocks from

the downtown convention center. At 1,012 rooms, this luxury convention hotel designed by **HKS**, Inc., will rival anything competing metropolises have to offer.

Recognized as one of ENR's top-ranked hotel contractors, Hunt Construction Group has teamed with Austin's Hardin Construction in a joint venture (Hunt-Hardin) to build the 1.2-million-square-foot complex. Featuring 35 meeting rooms and over 110,000 square feet of banquet, meeting and exhibition space, the hotel's amenities such as a huge 3,500-sf fitness center will also enhance its attractiveness as a convention-headquarters venue. Rising 33 stories above the Austin skyline, the **JW Marriott Convention Center** Hotel's urban setting with insufficient onsite parking, restricted materials storage and limited laydown space is presenting challenges that are well matched to solutions-oriented Bergelectric professionals.

Enhancing Productivity is Watchword

"Our national resources and well-thought-out approach that includes meticulous materials management and prefabrication innovation really helped us rise to the top on this project," noted Bergelectric Senior Project Manager Jim Finch. Calling on the expertise of Estimating Manager Louis Wyler, Berg was able to help Hunt-Hardin identify constructability issues early in the bid process and also offer cost-saving national buying power for the hotel's extensive decorative-fixture package.

"Enhancing productivity is the watchword across the board and we are collaborating with our vendors to assist us in the effort by staging and storing our factory shipments at their facilities until they are actually needed on site by our Field Operation Manager Darrell Tuma," said Berg's Project Manager Jay Vanadore. "With over a thousand hotel rooms in the tower, this **JW Marriott** is a perfect candidate to take full advantage of Berg's expertise in prefabricating repeating components," Vanadore added.

Because the project requires a fully-coordinated 3D Model, Berg's ability to upload pinpoint-accurate coordinates from the BIM model utilizing its in-house

Trimble[®] Total Station will prove to be particularly beneficial to keeping the project on track-providing maximum flexibility and cost savings. "Our detailing department will significantly enhance the onsite electrician's ability to efficiently perform layout and measurement tasks in the field," explained Peter Merello, who is spearheading the detailing effort along with Chris King.

2015 Opening Attracting Thousands

With an estimated grand opening in early 2015, the \$300-million JW Marriott **Convention Center Hotel** is already contributing to Austin's competitiveness in the national conference marketplace. Over 70,000 rooms and several industry conventions have been booked to date, which will bring thousands of new visitors to the Live Music Capital of the World® to get a taste of the unique Austin experience firsthand.

"Our national resources and well-thought-out approach that includes meticulous materials management and prefabrication innovation really helped us rise to the top on this project."

Jim Finch, Senior Project Manager, Bergelectric Corp.

General Contractor Hunt-Hardin Joint Venture

Architect HKS. Inc.

Electrical Engineer Blum Consulting Engineers



Largest JW Marriott in the US





1012 ROOMS



With an estimated grand opening in early 2015, this \$300-million JW Marriott Convention Center Hotel in Austin, TX, is already contributing to the City's competitiveness in the national-conference marketplace.

Based in Chapel Hill, the University of North Carolina Hospitals (UNCH) is academically linked to the School of Medicine where the life-saving results of world-renowned biomedical research are applied to a wide array of patient care at institutions specializing in children, cancer. neurosciences and women at its main campus. With the addition of the North Carolina Cancer Hospital and Memorial Hospital running at peak capacity, the Chapel Hill campus has become much more congested in recent years. In order to carry on **UNCH**'s mission of delivering quality healthcare and outstanding service, they developed a long-term strategy to expand critical care at the main campus and serve the less extreme cases at a satellite facility.

A Proven Team



New Texas Solar Park Features 42,000 Solar Modules

The business of generating electricity has come a long way since 1882 when Thomas Alva Edison switched on the first power-generating station in Manhattan. Fast forward to 2013 and the spotlight is on industry leader **SunEdison**, who is the largest North American developer of solar-power projects-meeting the needs of both Fortune 500 companies and neighborhoods nationwide. In addition to developing over 883 MW of solar-energy capacity, SunEdison is the first solar-energy services provider to commercialize the Power Purchase Agreement (PPA), eliminating capital outlay from customers, which has attracted utility companies like **Bryan Texas Utilities (BTU)** who entered into a long-term PPA on a 225-acre solar park being developed near the border town of Presidio.

Expertise in Remote Location Mobilization Provides Distinct Advantage

SunEdison chose Chevron Energy Solutions as general contractor for the fast-track installation of a nearly 10 MW AC-rated photovoltaic system that will be producing renewable power from the sun-and reducing the use of fossil fuel-derived energy-in a remarkable 10-week timeframe. For well over a decade, Chevron Energy Solutions has developed hundreds of alternative and renewable energy projects like the BTU-Acacia solar-park project.

"Having recently completed the \$45.4-million energy-conservation project at Camp Lejeune that involved the installation of approximately 20,000 solar photovoltaic panels, Superintendent Jeff Ford and General Foreman Corey Mitchell were a perfect choice to head up this massive field effort, which is also Bergelectric's first project with Chevron Energy Solutions," explained Berg Operations Manager Rob Ford. In addition to its experienced personnel, a primary factor in the selection of Berg to install over 42,000 solar modules and a dozen 800 kW Inverters on the Texas assignment is the company's ability to quickly and effectively mobilize in the most remote areas

Delivering Renewable Power with CHEVRON ENERGY SOLUTIONS

Located less than three miles from the US-Mexico border with the closest town for accommodations being 90 miles away, and shipments of materials originating in El Paso-a 240-mile distance-working in Presidio has its share of logistical

challenges. A tracking program that includes at least twice weekly conference calls with distributors assures that the right materials are arriving on time. Berg's national resources, along with its highly-capable human resources team that is working diligently with local agencies, means that on-site labor demands-expected to peak at about 115 onsite personnel-are being met.

Providing Sustainable Savings for Construction and Future Operations

A global leader in the technology that makes harnessing solar power possible, SunEdison's parent company **MEMC**[®] is providing its high-power, highperformance Silvantis 290W photovoltaic solar modules for Bergelectric to install at the Presidio site. Silvantis' 1000V UL rating translates to Berg crews being able to wire more modules together in a series string to one of the massive inverters. "Ultimately, the BTU system will provide considerable cost savings for construction as well as operations and maintenance," noted Berg Project Manager Ron Howard. "Because fewer combiner boxes are required and the amount of individual wiring home-runs are reduced, we're able to spec higherefficiency/lower-cost 800 kW and 400 kW inverters," Howard added.

Bergelectric is installing the ground-mounted tracking system in addition to providing all A/C, D/C and communications wiring, which will go through a rigorous four-week testing and commissioning period prior to being tied into the existing power grid. Although the 10 MW solar park is expected to provide renewable energy-generation capacity for the residents throughout the county, according to the City of Presidio it won't be long until its entire municipality is "being powered by the sun."

RALEIGH-DURHAM

RICH PAST, BRIGHT FUTURE

UNC Expanding with New Hospital in Historic Hillsborough

Along the banks of the Eno River, just 10 miles away from the hustle and bustle of Chapel Hill, is historic Hillsborough, NC. With its strategic location at the junction of two major highway arteries – Interstates 40 and 85 – and its close proximity to the Triangle region where approximately one-third of **UNCH**'s patients reside, Hillsborough is a perfect choice for the site of a new 61-bed full-service hospital. The vibrant town is celebrated as much for its antebellum architecture and acclaimed authors, as it is for its trendy bistros and progressive populace that sees the new hospital as a way to attract quality businesses while maintaining intelligent growth.

The core team for the \$200-million hospital-general contractor Skanska and Zimmer Gunsul Frasca Architects - is well known to UNCH having successfully delivered the North Carolina Cancer Hospital in 2009. Bergelectric's proven track record at several **UNC** venues, including the 210,000-sf Physical Science Complex and its current work on a logistically-complex remodel at the main hospital, provides the Hillsborough team with a solid base of knowledge from which to provide exceptional service to **UNC**. "We're glad to be back with **UNC** working on this high-profile project that will contribute so much to the local community as well as the region," stated Bergelectric Raleigh-Durham Regional Manager Ray Murfello.

In addition to two 3200-amp electrical services, both the treatment building and the patient tower will be backed-up by 4,150 volts / 3,200 amps of emergency power that will ensure the hospital will remain up and running during power outages. Bergelectric professionals will also provide the full-service hospital—which features operating rooms, x-ray and MRI services, its own lab, as well as a trauma center-with a comprehensive set of fire/life safety systems focused on secure and reliable operations



Bergelectric's proven track record at several **UNC** venues provides a solid base of knowledge from which to provide exceptional service at the new \$200-million Hillsborough campus hospital.

In addition to the facility-wide fire alarm, state-of-the-art tel/data, security, CCTV, paging and nurse-call systems will enhance critical communications at the Hillsborough hospital.

Detailing and Prefabrication Pros Enhancing Productivity

"The **UNCH** Hillsborough project is particularly well suited to Berg's capabilities in both prefabrication and detailing, which will help keep the project on schedule, increase productivity and streamline installation," shared Bergelectric Project Manager Rex Fletcher, Jr. Berg's in-house detailing professionals, led by Shawn Fehring from the Las Vegas office, will coordinate specific elements associated with precisely locating floor penetrations, pinpointing where conduit racks will be led and determining placement of electrical-room equipment that is at the heart of the hospital's day-to-day operations.

"By tapping into our prefabrication resources, Berg's ability to assemble certain items in advance-such as rough-in boxes, or overhead, panel and branch conduit racks – will increase installation efficiencies by our crews in the field and help us deliver a timely project," added Berg General Foreman Kelly Moose. Once completed in 2015, **UNCH**'s newest hospital will be offering a bright future not only for the citizens of Hillsborough, but for the entire region as well.

Working with Chevron Energy Solutions, Bergelectric is installing 42,000 of these MEMC® high-performance solar modules at the BTU- Acacia solar park project in Presidio, TX.

REPORT

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A message from the president/CEO



Navigating the Future– Bergelectric Positioned to Deliver

Although the financial crisis of 2008 seems like a long time ago, much of the fallout from the initial debacle still lingers in 2013. As we consider the future, there are market and financial challenges we continue to face including:

- Tight margins on projects
- A sluggish (though improving) private sector
- A shrinking federal-project sector
- Increased costs for healthcare
- Increased costs for materials and labor
- · Increased costs of regulatory requirements



Tom Anderson President/Chief Executive Officer

We are innovators focused on productivity and efficiency and will continue to provide a high level of service to both our employees and clients.

Improved Performance and Key Initiatives Drive Growth

Remarkably, in spite of all these obstacles, Berg experienced growth in 2012—with sales of \$600 million and a workforce that has surpassed 2,100 highly-capable professionals. Additionally, we have improved our performance and expanded many of our regional divisions across the country. Several key initiatives are driving our success:

- Better internal and external communication striving for "One Berg"
- Monthly board meetings to monitor and propel initiatives
- Emphasis on Key Performance Indicators to increase efficiency
- Benchmarking of employee compensation nationally
- Enhancing productivity through "lean" projectdelivery methods
- An integrated network of HR resources throughout the nation

In short, if a robust economy returns, Bergelectric has extraordinary resources in place that will allow our company to flourish. If a sluggish economy persists, we can count on the fact that we remain innovators focused on productivity and efficiency and will continue to provide a high level of service to both our employees and clients! Many thanks to our loyal clients, employees and suppliers—together we have a bright future.

Thomas R. Anderson President/Chief Executive Officer, Bergelectric Corp.

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