

# ESSAYONS *Forward*

U.S. Army Corps of Engineers  
Gulf Region Division, Iraq - Volume 4, Issue 9

November 2007

**Al Mamoon Exchange  
and Telecommunications  
Center rising in Baghdad**

**Page 14**



November 2007  
Volume 4, Issue 9

**Inside this issue:**

*CG / CSM Columns* 3  
*Change of Command* 4  
*Maternity hospital* 5  
*Basrah area power* 6  
*Sadr City water plant* 8  
*Al-Garma substation* 10  
*Postcards from Iraq* 12  
*Strategic cities update* 12  
*Telecom center started* 14  
*Maysan electrical* 16  
*Roll on / Roll off* 18  
*Hail & Farewell* 20



USACE photo by Grant Sattler

Gulf Region Division Deputy Commanding Officer Col. Dale Adams and Cmd. Sgt. Major Eloy Alcivar present Staff Sgt. Thomas Washington with the Sergeant Audie Murphy Club medallion in an Oct. 29 induction ceremony at GRD headquarters.

**On the cover:**



A crane operator lowers rebar to workers preparing the foundation of the Al Mamoon Telecommunications Center.

USACE photo by Norris Jones

**ESSAYONS FORWARD**

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**ESSAYONS FORWARD** is the field magazine of the Gulf Region Division (Provisional), U.S. Army Corps of Engineers, in accordance with AR 360-1. It is produced for electronic distribution with limited hardcopy circulation as needed. It is produced in the Iraq theater of operations. The views and opinions expressed in this field magazine are those of the writers and are not necessarily those of the U.S. Army Corps of Engineers, or the Department of Defense. Letters, articles, notices of events, photographs and art are welcomed, but may be edited for clarity and brevity. Publication of submissions is at the discretion of the editor; photos must be high resolution and include caption information.

Submissions can be emailed to: **CEGRD. PAO@tac01.usace.army.mil**

**ESSAYONS FORWARD** is on-line: [www.grd.usace.army.mil/news/essayonsforward](http://www.grd.usace.army.mil/news/essayonsforward)

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**KEEP IT LOCKED ON...**

Baghdad: 104.1 and 107.7 FM  
 Kirkuk: 100.1 and 107.3 FM  
 Balad: 107.3 FM  
 Mosul: 105.1 FM  
 Q-West: 93.3 FM  
 Sinjar: 107.9 FM  
 Tallil: 100.1 and 107.3 FM  
 Tikrit: 93.3 FM

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# Commander's Commentary



As this issue of the Essayons Forward goes to press we are in a special time of year.

It was a new delight for me to celebrate the cultural festivals of Eid ul Fitr recently with our Iraqi team members here in Baghdad at the conclusion of the Ramadan fasting period practiced by the Islamic faith. It was a reminder to me that this is a special time of year in America as well when Americans celebrate a variety of traditions reflecting the cultural diversity of the United States.

The diversity we have in cultural, religious and ethnic observances in our personal lives is in a way a parallel to the variety of experience, skills and abilities that work-force diversity brings to the mission here in Iraq. You are a unique team producing outstanding results. Teamwork isn't everyone running to left field when the ball is hit, but everyone doing his or her part to cover the play.

You each know the importance of your role in the reconstruction mission – bringing basic services long denied to many of the people of Iraq by a tyrannical ruler—but there is even more at stake as we work to support a new democracy in its ability to provide those basic services that are vital to governance. There continues a critical struggle between two giants, two opposing and incompatible ideologies: one based on self-determination, the rule of law and representative government; the other on the twisting of a faith, lies, repression and fear.

The fall season in Baghdad is certainly different for me as I see the green grass, instead of brown. In a way the Iraqi people are like that fall grass, beginning to benefit all across the country from your efforts that are resulting in more electricity, improved potable water and sewerage services, new schools and clinics, and much more. But like the African proverb, "When elephants fight, the grass suffers," the people of Iraq are enduring extreme hardships brought to them by terrorists and those who oppose the idea of democracy.

Some of you will be taking the opportunity for R&R to visit with friends and family over the coming months. Put some thought into avoiding the hazards of the holiday and winter season. Some dangers are outside our direct control, such as bad weather. However you can still plan for emergencies. Other potential dangers are in our control, alcohol use back home, awareness of our own health and abilities, to name a few. Please make wise decisions for you and your family. We want you back rested and fit for duty.

**ESSAYONS!**  
**Brig. Gen Jeffrey Dorko**  
**Gulf Region Division**  
**Commander**



# Cmd. Sgt. Major's Message

To the men and women of the Gulf Region Division at the headquarters and in the field, as we approach the end of year holiday period I thank you for your continuous service and commitment to integrity and professionalism. I especially want to express my appreciation to each of your families for their continuous support to

you and all of us.

I encourage you to plan your activities and traditions for the upcoming holidays to minimize the chance of personal distress. Prepare yourself mentally and physically. If you will be home over the holidays, be cautious of the hazards of travel, rich food and drink, and winter weather.

The holiday season can bring some distractions, and while it is valuable to think of gratitude, giving and peace on earth, I want to strongly emphasize that we must remain situationally aware. Do not become complacent and always be ready for the unexpected. Our mission must continue—always focused on

building a better tomorrow today, not just for our Iraqi friends, but for our allies and for our country.

If you remain here, you will see the trappings of the holidays, but the familiar details of Thanksgiving, Christmas and New Year's may not be the same as you are accustomed to with friends and family. But never forget that you are part of over 200,000 Americans, military and civilian, who will be celebrating these holidays away from home and family. You are never alone.

I encourage you to get involved in the available daily, weekly, and monthly extracurricular activities offered by the church, chaplains, MWR, and your units. Enjoy the company of others. Take a little extra time to keep yourself physically and mentally fit.

Be safe and never forget that we have a team of professional people ready to help you if you need technical, professional, physical, and spiritual assistance.

**ESSAYONS! ARMY STRONG!!**  
**Command Sgt. Maj. Eloy Alcivar**  
**Gulf Region Division**

# Gulf Region Division changes leadership



USACE photo by Norris Jones

**Brig. Gen. Jeffrey J. Dorko takes command of the U.S. Army Corps of Engineers Gulf Region Division as Multi-National Force–Iraq Commanding General Gen. David H. Petraeus passes him the unit guidon in a change of command ceremony Oct. 10, 2007, in Baghdad, Iraq. Former Gulf Region Division Commander Brig. Gen. Michael J. Walsh looks on.**

**B**AGHDAD, Iraq—Brigadier Gen. Jeffrey J. Dorko took command of the U.S. Army Corps of Engineers, Gulf Region Division on Oct. 10, 2007, from Brig. Gen. Michael J. Walsh at a ceremony on the Gulf Region Division’s headquarters compound here.

“It is a great honor to be allowed to join the leaders of Iraq and the Iraqi people in rebuilding a free and democratic country, where everyone can live in peace, free from fear, in an environment that lets every citizen better their lives and reach their extraordinary potential,” said Dorko as he addressed the crowd of more than 100. “I realize I’ve only begun to understand how challenging our work is, and that in the midst of progress there will always be difficult days, some setbacks, and new challenges. But as I close in on 30 years of service in the U.S. Army, there’s no place that I would rather be than here, side-by side with our Iraqi friends, working to make a difference every day.”

The ceremony began with a Color Guard presentation – members of each branch of service, the U.S. Army Corps of Engineers civilians and the country of Iraq were represented. The reviewing officer was Gen. David Petraeus, commanding general of Multi-National Force-Iraq. Other dignitaries in attendance included U.S. Ambassador to Iraq Ryan Crocker; British Lt. Gen. W.R. Rollo, deputy commander of the Multi-National Force-Iraq; the Iraqi Minister of Electricity Karim Wahid; and the Iraqi Minister of Health Abdul Samed.

Providing music for the ceremony was an ensemble from the 3<sup>rd</sup> Infantry Division Band.

Dorko assumes command of GRD after serving as Commander

*‘...there’s no place that I would rather be than here, side-by side with our Iraqi friends, working to make a difference every day.’*

*Brig. Gen. Jeffrey J. Dorko*

of the Southwestern Division since June 21, 2004. His previous assignment was Chief of Staff, U.S. Army Maneuver Support Center at Fort Leonard Wood, Mo. As Southwestern Division Commander, Dorko oversaw the 3,000-person engineering and construction organization for four district offices in Little Rock, Ark.; Tulsa, Okla.; Fort Worth; and Galveston, Texas.

Dorko graduated from the U.S. Military Academy in 1978. He earned master’s degrees in Construction Management from the George Washington University, and National Security Strategy from the Industrial College of the Armed Forces.

In his remarks Petraeus said, “GRD’s close relationship with the Embassy and our Iraqi counterparts ensures that we will maintain the momentum that has been achieved in recent months and recent years through close coordination, through mentorship, through partnering. GRD is assisting Iraqi ministerial counterparts in developing capacity, increasing knowledge and setting up training academies that will build for the future. In short, GRD is helping provide our great Iraqi partners the tools that they will need to succeed in the years ahead.”

As he relinquished command Walsh said, “Gulf Region Division, you epitomize what is best about America, your willingness to sacrifice to build a better future for others – it has been an honor to work with you. You have sent a clear message every day throughout the world, which is loud and clear – about our patriotism.”

Walsh will be the Special Assistant to the Chief of Engineers – Lt. Gen. Robert Van Antwerp – at U.S. Army Corps of Engineers headquarters in Washington, DC.

# Nasiriyah waits expectantly on hospital

by John Connor  
Gulf Region South district

**NASIRIYAH, Iraq**—Work is nearly finished on a project to renovate the Nasiriyah Maternity and Pediatric Hospital, a facility whose re-opening has been eagerly anticipated by expectant mothers, medical professionals and many others in Dhi Qar Province in southern Iraq.

The largest maternity hospital in Dhi Qar Province, the renovated facility will have 285 beds and a capacity to handle 40 deliveries a day or 1,200 a month, according to information provided by the Ministry of Health for Dhi Qar Province, which said the renovated hospital will host

all the pediatricians and obstetricians in the province.

“Key Government of Iraq officials are working hard to improve services and recently noted that 2008 would be the Year of Services for the people,” said Col. Steve Hill, commander of the Gulf Region South district of the U.S. Army Corps of Engineers. “This project will provide much needed services and is a success for the region around Nasiriyah.”

John Overfield, a resident engineer with the Corps of Engineers, said the hospital should be ready to be turned over to Iraqi authorities in a few weeks.

Navy Cmdr. Michael Lang, officer in charge of Corps’ Adder Area Office

credited Overfield with some “pretty heroic efforts” to jump-start the once-languishing project and to encourage the Iraqi contractor and the Corps’ Iraqi construction engineers to team up and get the project into gear and to meet specifications and timetables. Overfield helped the contractor surmount many hurdles, Lang said.

Overfield said he had lengthy conversation with the contractor and sought at all times to deal with him with respect and as a professional. During a recent visit to the job site, Overfield politely peppered the contractor with questions about tasks remaining to be accomplished before the turnover can be made.

“It’s a beautiful facility,” Lang said. “And it will do a lot of good once it’s open again.”

Renovations include upgrades to 1970-vintage technology of electrical and mechanical systems; roof repairs; sanitary upgrades; and the replacement of four elevators, with two extended to the third floor. The project also entailed provision of an advanced technological oxygen generator; fire alarm system; public address system; nurse call system; and emergency lighting and telephone systems.

The hospital has been closed for about three years, according to Robin Parks, a health sector project manager for the Corps of Engineers. That is why people are so anxious for it to get up and running again, she said.

Renovation of the maternity hospital began in the fall of 2004. The initial \$9.2 million contract was terminated about a year and a half later. At that point, Parks said, renovations were 58 percent complete. Mitch Peterson, a program analyst, said \$5.3 million was paid out under the first contract. Work continued under a bridge contract until a new contract was awarded in May 2006. The current contract is for \$1.9 million, according to Overfield, the resident engineer.

While the maternity hospital was closed, another local hospital provided 15 beds for the maternity ward, said Lang. But this fell far short of being able to handle the case load and many patients had to sleep on the floor, he said.

The hope and expectation among people involved with the renovation project is that having a modern maternity and pediatric hospital open to serve the people of the Nasiriyah area will reduce infant mortality rates.



**Resident Engineer John Overfield looks at a transformer remaining to be installed as the contractor finishes work on the Nasiriyah Maternity and Pediatric Hospital. John Connor, public affairs officer, videotapes the visit.**



**U.S. Army Corps of Engineers and construction contractors look over roof work to be completed on renovation of the hospital.**

USACE photos

# Bringing reliable power

## Basrah cluster pump stations renovation

Story & photos by A. Al Bahrani  
Gulf Region South district

**BASRAH, Iraq**—In one of the U.S. Army Corps of Engineers largest electricity projects in southern Iraq, cluster pump electrical substations are being renovated in a \$76 million effort to help increase oil field production in the North Rumaylah Oil Field.

“The Basrah Cluster Pump Stations are 10 electrical substations in total. They are a part of the overall oil infrastructure and one of the biggest and most costly challenges,” said Shawn Russell, deputy regional manager with the Gulf Region Division electricity sector.

The aim is to bring reliable power to the water injection facilities located within the North Rumaylah Oil Field and help increase Iraqi oil production, Russell said. “The projects are rehabilitated the existing substations which had been severely looted and damaged during the 1991 and 2003 wars.”

Russell said that while these substations are important elements of the Rumaylah oil field infrastructure, they will also provide employment opportunities and further the economic development not only of the Basrah area but the entire country. “An important component of each project is the training of operations and maintenance personnel,” he said. The training will develop individual’s skills



**Iraqi workers prepare to connect power cables to the transmission towers at cluster pump station one, North Rumaylah, Basrah. The project will significantly enhance the reliability of power to the water injection facilities located within the North Rumaylah oil field.**

and increase the Iraqis’ ability to sustain the facilities.

Army Maj. Rick Smith, operations officer with Basrah Oil Area Office, Gulf Region South district said the rehabilitation of the 10 cluster pump stations electrical systems is the biggest USACE electrical project in the southern region of Iraq.

“USACE is working on various projects to ramp up oil production for Iraq and help improve its economy,” he explained. “Right now, Iraq has the world’s second largest proven oil reserves. According to oil industry experts, new explorations could probably raise Iraq’s reserves to 200+ billion barrels of high-grade crude, extraordinary cheap to produce.”

Tom Eidson, chief of Engineering and

Construction for the Gulf Region South district said,

“Improvements at these projects help in the recovery of oil infrastructure and contribute [to the nationwide production capacity of] 3 million barrels of crude per day.”

Work consisted of general maintenance, replacement of damaged transformers and switch gear, and building new control rooms, high voltage switch gear rooms and guard houses, he said.

Eidson explained that the main objectives of the rehabilitation projects are to create a strong and reliable source of income for Iraq, improve Iraqi living conditions and create new opportunities for employment. The project also hired local villagers which helped them make money for their families.

Smith said that “Iraq’s economy is dominated by crude oil production and GRS has been working to improve the country’s ability to enhance oil production through the renovations of key components of the oil infrastructure.

“Basrah is the second largest city in Iraq and Iraqi officials and oil experts believe that completing the reconstruction of oil infrastructure will put the province into competitive alignment with similar Middle East cities,” he continued.

“We are making a big difference here in Iraq,” Smith said “This country was war torn for more than 25 years and the people are tired of it. They want their freedom; they want to be self sufficient. We are putting the country back together to self govern.”



**Engineers check work accomplished on two 63 megavolt amps transformers at cluster pump station one, North Rumaylah, Basrah.**

## أعادة اعمار مضخات دفع المياه في حقول نفط البصرة يساهم في تعزيز الطاقة

أ. البحراني

فرقة منطقة الخليج - المنطقة الجنوبية

البصرة ، العراق — في واحد من اكبر المشاريع الكهربائية لفيق المهندسين الامريكي في جنوب العراق ؛ أعيد اعمار محطات الطاقة لتشغيل مضخات دفع المياه بكلفة \$76 مليون دولار امريكي من اجل زيادة انتاج النفط في حقول نفط الرميثة الشمالية.

وقال شون راسل نائب المدير الاقليمي لمنطقة الخليج -قطاع الكهرباء " ان عدد محطات الطاقة لتشغيل مضخات دفع المياه هو عشر محطات ، وتعتبر عملية اعادة الاعمار هذه عملية اعمار شاملة للبنية التحتية لقطاع النفط وواحدة من اكبر واضخم التحديات المالية".

أن الهدف من المشروع هو تزويد مضخات دفع المياه ضمن حقول نفط الرميثة الشمالية بمصدر طاقة مستمر من اجل زيادة انتاج النفط العراقي ، كما قال راسل " ان المشروع يتضمن اعادة اعمار المحطات الكهربائية والتي قد عانت وبشكل كبير من عمليات النهب والدمار خلال الحربين للعامين 1991 و 2003".

واضاف راسل بالاضافة الى ان هذه المحطات من العناصر المهمة لحقول نفط الرميثة الشمالية فهي ايضا ستوفر المزيد من فرص العمل و تساهم في تطوير الاقتصاد، ليس في مدينة البصرة فحسب بل في العراق ككل .

" يعد التدريب على عمليات التشغيل والصيانة واحد من العناصر المهمة ،" كما قال راسل أن التدريب سوف يساعد على تطوير المهارات الفردية للعراقيين ويساعدهم على ادامة هذه المشاريع .

وقال الرائد رك سمث ، ضابط العمليات ضمن فرقة منطقة الخليج – المنطقة الجنوبية يعتبر مشروع اعادة اعمار المحطات العشر من المشاريع الضخمة لفيق المهندسين الامريكي في جنوب العراق.

" ان فيق المهندسين الامريكي يعمل في مشاريع مختلفة من اجل زيادة انتاج النفط العراقي مما يساعد على تطوير الاقتصاد العراقي ." كما اوضح سمث " ان العراق يحتل المرتبة الثانية من حيث المخزون النفطي طبقا لخبراء النفط مع ان اكتشافات جديدة ستؤدي الى ارتفاع المخزون النفطي الى 200 بليون برميل من النفط الخلم على الجودة وقليل الكلفة في الانتاج."

وقال توم اسون رئيس المهندسين ضمن منطقة الخليج – فرقة الجنوب " ان التطوير في مثل هذه المشاريع يساعد على نمو القطاع النفطي ومن شأنه زيادة الانتاج الوطني ليصل الى 3 ملايين برميل من النفط الخام في اليوم".

و تضمن العمل صيانة شاملة ، استبدال المحولات والمحولات الذاتية المتضررة ، بناء غرف سيطرة جديدة ، بناء غرف للمحولات الذاتية ذات الفولتية العالية و غرف خاصة للحماية.

وأوضح اسون ان من الجوانب الايجابية لمشروع اعادة الاعمار هو خلق مصدر دخل قوي و مستمر للاقتصاد العراقي و تحسين مستوى المعيشة للمواطن العراقي و خلق فرص عمل له .

واستثمر المشروع القوى العاملة المحلية مما ساعد في زيادة الدخل المادي لعوائلهم.

وقال سمث " ان الاقتصاد العراقي يعتمد بشكل كبير على انتاج النفط وان فيق المهندسين الامريكي يعمل على تطوير قدرة البلد على انتاج النفط من خلال اعمار المشاريع المهمة للقطاع النفطي العراقي

وأضاف سمث قائلا " تعتبر البصرة ثاني اكبر مدينة عراقية ويعتقد خبراء النفط عند الانتهاء من مشاريع اعادة اعمار القطاع النفطي في المحافظة سوف يجعلها في منافسة مع مثيلاتها من مدن الشرق الاوسط"،

" نحن نعمل من اجل خلق تغيير جذري في العراق " قال سمث " ان هذا البلد قد عانى كثيرا من وطأة الحروب

لما يزيد على 25 عاما" وان معظم المواطنين قد تعبوا من تلك الحروب ، فهم يريدون حريتهم ، يريدون الرخاء و نحن هنا نعمل على مساعدتهم على تحقيق ذلك "



USACE photo by Grant Sattler

### Arabic media round table

U.S. Air Force Col. Anthony Foti, center, U.S. Army Corps of Engineers Gulf Region Division Facilities Sector lead, and David Dawson, right, GRD program manager for capacity development and sustainment, speak to Arabic media at a round table on education and vocational training in Baghdad, Oct. 23, 2007. At far left is Erich Langer, GRD Public Affairs moderator for the round table.



USACE photos

## Sadr City to see increase in potable water

by Norris Jones

Gulf Region Central district

**BAGHDAD, Iraq**—Sadr City residents will soon see a significant improvement in potable water availability.

Construction is nearing completion on more than \$75 million in work, including a new water treatment plant and new water lines to more than 80 percent of Sadr City's 2.5 million population. The R-3 Water Treatment Plant will have the capacity to produce 4,000 cubic meters of potable water per hour (25 million gallons each day), which will significantly supplement the existing water supply.

U.S. Army Corps of Engineers along with the Baghdad Amanat / Baghdad Water Authority are involved in this undertaking and the work is scheduled to be completed by January. The Ministry of Electricity is ensuring that R-3 is hooked up to the national grid and the Ministry of Oil is allocating diesel fuel for the back-up generators available for emergencies.

Mohammad Juwaree, the USACE Iraqi project engineer overseeing the work at R-3 as well as the new water lines going in at Sadr City, says it has definitely been a joint effort and, because of everyone's support, "we've overcome numerous challenges and are making great progress."

More than \$20 million is being invested to install new water lines in 68 of Sadr City's 79 sectors. The majority of that work is already finished.

The Tigris River is the source of raw water supplied by the Al Sadr Qana'at Pump Station. More than \$5 million was allocated to rehabilitating that facility including the installation of four new large intake pumps and renovation of four existing ones.

The new \$50 million R-3, located on the



**Above: A concrete form anchoring a raw water elbow is put in place.**

**Left: A welder gets a pipe joint ready for connection at the new R-3 water treatment plant.**

west side of Sadr City, has been under construction for three years and will soon be in the "wet test commissioning" phase when water is pumped through the various treatment stages to ensure everything is operating as required. "Once it passes those inspections and testing, it will ready to go on line," Juwaree explained.

"Sadr City residents are anxiously awaiting that day. They've historically had low or no water pressure and this effort definitely will improve their quality of life.

This is huge news for everyone in Baghdad," he added.

Juwaree earned a civil engineering degree from Baghdad University and has worked for USACE for two years. As a proud member of the team overseeing the Sadr City improvements, he said, "It clearly demonstrates the Iraqi government is taking the lead helping residents with their essential service needs. It's a great example what can be accomplished when everyone works together."



# زيادة ضخ المياه الصالحة لمدينة الصدر

البناء اوشك على الانتهاء في المشاريع بقيمة 75 مليون دولار في الاعمال التي تشمل محطة معالج المياه وخطوط المياه الجديدة حيث ستعود بالفائدة الى اكثر من 80% من مدينة الصدر .

وتبلغ القدرة الانتاجية لمحطة معالجة المياه اكثر من 4,000 متر مكعب من المياه الصالحة للشرب لكل ساعة (25 مليون غالون يوميا) ويعمل فيلق المهندسين الاميركي جنبا الى جنب مع امانة بغداد في هذا المشروع ومن المقرر انجاز هذا المشروع بحلول كانون الثاني. هذا بالإضافة الى التعاون بين وزارة الكهرباء لا يصلح الكهرباء المضمونة وكذلك وزارة النفط من حيث تخصيص (الوقود) الديزل للمولدات الاحتياطية والموجودة لحالات الطوارئ.

وهناك العديد من المشاريع الخدمية والتي تم العمل بها في مدينة الصدر واكثر من عشرون مليون دولار يتم تخصيصها واستثمارها لترتيب خطوط جديدة للمياه في مدينة الصدر. ويعتبر نهر دجلة هو مصدر المياه الخام حيث يتم تزويد المياه عن طريق محطة ضخ مياه القناة والمبلغ الذي خصص اكثر من خمسة ملايين دولار لاعادة تاهيل هذه المنشأة وبضمنها تنصيب اربع مضخات كبيرة واعادة تاهيل الاربع الاخريات.



USACE photo by Norris Jones

## Fallujah's first Waste Water Treatment Plant

Project Manager Peter Collins, Gulf Region Central district, briefs Gulf Region Division Commander Brig. Gen. Jeffrey Dorko and Col. Robert Vasta, GRC commander, Oct. 20 on the construction of Fallujah's first waste water treatment plant and collection system. The community of 200,000

residents has long relied on septic tanks and raw sewage frequently spilled into streets and the Euphrates River, posing health risks. The new facility includes the construction of pump stations, trunk mains and the treatment plant and is currently USACE's largest project in Al Anbar province.

## فيلق المهندسين ينجز محطة كهرباء الكرمه 132 كيلو فولت في محافظة البصرة

أ. - البحراني

محمد الشامي

منطقة الخليج - فرقة الجنوب

البصرة، العراق - لقد تم وبجاح انجاز محطة كهرباء الكرمه 132 كي في الثالث من تشرين الاول حيث تعتبر هذه المحطة واحدة من اهم المشاريع الكهربائية لفيلق المهندسين الاميركي.

حيث قال المهندس المقيم في فيلق المهندسين الاميركي (مكتب البصرة) - اندرو شمأيدر بان هذا المشروع والبالغ كلفته 8.8 مليون دولار يتضمن اعادة تأهيل وأصلاح وتركيب الشبكات الكهربائية لمحطة 132 كي في والتي تقوم بعزل الغاز عن النفط وكنكك تزويد منطقة الكرمه شمال البصرة بالطاقة الكهربائية والتي تعود بالفائدة الى اكثر من 13,000 مواطن.

وقال شمأيدر " أن هذا المشروع سيزود وزارة الكهرباء العراقية بمصدر ثابت و مستمر للطاقة للمنطقة الجنوبية من القطر, " وأضاف " بأن شركة سأمبيون للطاقة بدأت بمشروع إعادة تأهيل محطة الكرمه 132 كي في / في شهر فبراير 2006 والأن 90% من المشروع قد انجز ."

ووفقا لما ادلى به شمأيدر فإن محطة الكرمه هي الاولى من خمسة محطات 132 كي في - تنجزها شركة سأمبيون للطاقة في محافظة البصرة ومحطتين يتوقع انتهاء العمل فيها نهاية هذا الشهر . اما المحطتين الأخريتين فيتوقع انجازهما في شهري تشرين الثاني وكانون الاول. والمحطة الاخيرة فيتوقع انجازها في كانون الاول حال الانتهاء من اصلاح محولات العزل الذاتية حيث سيتم ارسالها الى اوربا من اجل اصلاحها .

وقال توماس ادسون رئيس المهندسين - فيلق المهندسين الاميركي - منطقة الخليج - فرقة الجنوب أن وجود توزيع ثابت ومستمر للطاقة الكهربائية مهم لمحافظة البصرة .

وتعد محافظة البصرة واحدة من اكبر المدن العراقية بمساحة تقدر بحوالي 19,070 كيلومتر مربع وعدد السكان يقارب 2,600,000 . بحيث يعتمد اقتصادها على تكرير النفط وتصدير النفط والمنتجات الكيماوية .

وصرح ادسون قائلاً بان وجود مصدر مستمر وقوي للطاقة سيعزز من الاقتصاد العراقي عن طريق رفع نسبة صادرات النفط والمواد الكيماوية مما يؤدي الى زيادة الثروات والرخاء للشعب العراقي وتحسين المستوى المعاشي للمواطنين ويخلق فرص عمل جديدة .

وقال شمأيدر " ان إعادة تأهيل محطات البصرة 132 كي في هو جزء من اعادة تأهيل شامل لقطاع الكهرباء الذي دمر بشكل كبير خلال حرب عام 2003 ."

ونقلا عن المهندس العراقي المقيم - لفيلق المهندسين الاميركي - منطقة الجنوب , أن عملية الاعمار تضمنت إنشاء غرفة للسيطرة و محولاتان بقدره 63 ميكا فولت وغرفة للمحولات الذاتية عالية الفولتية وغرفة حراسة وسور للحماية بالإضافة الى تأهيل الخدمات الاضافية .



Left: Al-Garma 132kV substation project will serve more than 13,000 residents north of Basrah city.

Below left: The new control room is one of the key components of the Iraqi electrical system infrastructure.

Below: Iraqi workers and engineers prepare to test the electrical system at the high voltage switch gear room.

USACE photos





USACE photos

**Iraqi workers prepare to connect power cables to one of the transformers at Al-Garma substation. The 132kV substation will enhance the quantity and reliability of power to Gas/Oil Separation Plants and residents in the region.**

# ***Al-Garma substation energized***

*by A. Al Bahrani and Mohammed Aliwi  
Gulf Region South district*

**BASRAH, Iraq**—The Al-Garma 132 kV substation, one of the key electrical projects of the U.S. Army Corps of Engineer in Basrah Province, was successfully energized Oct. 3, 2007.

Andrew Schmieder, Basrah area resident engineer, said the \$8.8 million project entailed assessing, evaluating, rehabilitating, repairing and installing electrical systems in an existing 132kV substation that supplies electricity to a gas/oil separation facility and serves the Al-Garma district north of Basrah city, benefiting more than 13,000 residents.

“This project will help provide the Iraqi Ministry of Electricity with a more reliable and secure transmission network in the south of the country,” he said. “Symbion Power LLC started construction on Al-Garma 132kV Substation Rehab on February 2006 and is currently 90 percent complete.”

Schmieder said the Al-Garma substation is the first of five Symbion Power Basrah 132kV substation projects. He said two more substations are expected to be energized later this month, with the energization of the final two expected in November and December. The final substation is Al Harmar, which is delayed until December due to a faulty disconnect switch that must be returned to Europe for repairs.

Thomas Eidson, chief of Engineering and Construction with the Gulf Region South district, said a reliable distribution of electricity is critical for Basrah Province.

The city of Basrah is one of the largest in Iraq, with an area of

19,070 square kilometers and an estimated population of about 2,600,000 residents. The economic base of Basrah is refining and exporting oil and chemicals.

Eidson said strong and reliable delivery of power will strengthen the Iraqi economy by increasing Iraqi oil and chemical exports, bringing wealth and prosperity to Iraqi people, improving the quality of life for Iraqis, and creating new opportunities for employment.

“The rehabilitation project of Basrah 132kV substations is a part of the overall electric infrastructure, which was severely looted and damaged during the 2003 war.” Schmieder said.

According to Al, an Iraqi deputy resident engineer with Basrah Area Office, the major facility reconstruction includes a building control room, two 63 megavolt transformers, a high voltage switch gear room, a guard house, a security fence and essential service improvements.

“This substation is a critical element of gas /oil separation facility and will help provide more employment opportunities and support the economic development of the entire country of Iraq,” Eidson explained. He said the rehabilitation project at Al-Garma 132kV substation will improve reliability and safety for the electrical distribution network and reduce electrical outages.

Schmieder described the project as one of the key components of the Iraqi electrical system infrastructure, which, when completed, will support the electrical system and reduce the electrical outages. “This project is scheduled to be completed by the end of this year and will effectively ease and lower the electrical load rates on the existing substations.” he said.

## Postcards from Iraq

### Passion you develop working with the courageous Iraqi people

By Joanne Gibbs

Vicksburg District, U.S. Army Corps of Engineers

Initially, I come to Iraq for a six-month deployment. Many months after that original obligation, I'm still here. Some of us go through life believing we have it all figured out, that we have all the answers. Suddenly God intervenes and we realize that he has greater things in store for us as we embark on a new journey, to a place he wants us to be. So, here I am still in Iraq.

There is a passion that you soon develop especially after meeting and interacting with the Iraqi people, and seeing the incredible courage they display every day helping rebuild their country and safeguarding their newborn democracy. The Iraqi people, who represent a blend from different tribes, have a genuine pride and love for their country. They definitely believe in freedom.

In addition, there is nothing like the patriotism you feel each time you see our soldiers unselfishly giving of themselves and the sacrifices they make each and everyday in support of Operation Iraqi Freedom. Being the mother of a soldier who has served two deployments supporting this effort, you can't help but want to support them in some way. So, it's with honor that I am still here contributing to this historic effort of helping Iraq move forward.

This is a very incredible, interesting and unique work experience. One of the greatest rewards has been interacting with such a unique, diverse group of professional people from throughout the world. It's not too often that such opportunities come along.

This has been an experience that has forever altered my course. On a personal note, I have finally learned to relax, and I have learned that there are some things in life that are not the great sense of urgency as I once thought. Sometimes in our daily challenges, we miss and/or forget what is really important. There are times we must re-evaluate and determine what are the true priorities, focusing on the bigger picture.

We take for granted that we will have power, water, heat, etc.; nothing here can be assumed; just appreciated. Your AHA! moment really comes when you see people without those basic essential services still finding a way to smile. I read something that said "ask a person his occupation, and you have learned how he pays his bills. Ask a person his preoccupation, and you have discovered the passion of his life." My preoccupation is, and has always been helping and serving others. From another personal note, being here in Iraq has given me the chance to assist in improving the quality of life for others which I am so grateful to do.



Each office in the U.S. Army Corps of Engineers has its own uniqueness, however, being here has allowed me to see the Corps at work full force, and what a difference the Corps has made. The schools, the hospitals, roads, bridges and all the other logistical and engineering work the Corps has overseen in Iraq has really increased my pride in what USACE is all about.

One question I get asked a lot from people back stateside is "aren't you scared?". The answer is "no." Actually, there is nothing to be afraid of. There are so many safety measures in place. In addition, there is a certain element of danger where ever you are. Many individuals are allowing fear of the "unknown" to cause them to miss an opportunity of a lifetime. PLEASE DO NOT BE OR BECOME ONE OF THOSE INDIVIDUALS.

I know that a lot of you are considering stepping up to the plate and assisting the Corps in its efforts. The Corps has an important mission here in Iraq and you could be an important player. Please consider joining our team.

I am highly honored to be an American, highly honored to be a member of the United States Army Corps of Engineers, and highly honored to serve.

"BE KINDER THAN NECESSARY; FOR EVERYONE YOU MEET IS FIGHTING SOME KIND OF BATTLE." ~ Unknown

Joanne Gibbs

Project Closeout, Victory Area Office, Baghdad

Gulf Region Division Central District, U.S. Army Corps of Engineers



Joanne Gibbs says hello to Gen. David Petraeus, Multi-National Force-Iraq Commander.

# Samarra, Kirkuk: Strategic cities update

by LuAnne Fantasia

Gulf Region North district

In the city of Samarra, Iraq, the U.S. Army Corps of Engineers has completed 40 of the 45 planned projects in the Iraq Reconstruction Program.

"We're joining the Iraqi people in reconstructing their country," said Col. Michael Pfenning, commander of the Corps' Gulf Region North district. "We're executing construction and project management in a dynamic environment in terms of security, market capability, material delivery challenges, quality of workmanship, and immediate need of the Iraqi people."

As one of four strategic cities in Pfenning's seven-province, 66,000 square mile area of responsibility, Samarra is steadily making a comeback to its days as a trade center of the region.

With a population of approximately 200,000, Samarra lies on the east bank of the Tigris River, and was the capital of the Muslim world for 56 years in the 9<sup>th</sup> century. Today the ancient city benefits from upgrades to its electrical grid, and water and sewage projects, totaling more than \$37 million—in both the Iraq Reconstruction Program and the Commander's Emergency Response Program.

There are nine electrical projects budgeted for this city of 200,000, with eight of those completed and one still ongoing; with most of the homes and businesses receiving power at least 12 hours a day. This meets the goal at the time of Iraq's sovereignty in 2004 and the simultaneous start of the Iraq Reconstruction Program, which was to increase hours of power in Iraqi homes to an average of 12 hours of electricity daily.

The city pumps river water to treatment facilities and then into the city via main water lines. It has no operating water department to maintain or repair the existing system, which is only 20 percent operational. With no sewage system in Samarra, citizens rely on septic tanks and open drainage. To help alleviate these problems, more than \$5 million is budgeted in public works and water projects; with nine projects finished and one left to start.

Recently a contract was awarded to repair an existing pump station, install new pumps, and install a new rural water line by extending the existing network located in Samarra. The new water network extension of 21,000 meters will provide raw water from the Tigris River to nearly the entire population of Samarra.

The city of Kirkuk has always been "strategic"—whether as a crossroad for three empires or since its first oil gusher in 1927 or for its historic reputation as a city where people of different ethnic groups lived together in peace.

Today, the city's population is well over 750,000. The city receives a helping hand from the Iraq Reconstruction Program with 74 projects; 62 complete; eight ongoing; and four that remain to start. This effort totals more than \$218 million in reconstruction projects in this city where, according to current estimates oil fields produce up to one million barrels of oil a day, or almost half of all Iraqi oil exports.

Pfenning said a large part of the mission here is capacity-building, or enabling Iraq's capability to sustain. "Our Provincial Reconstruction Teams work directly with their

# التحديث الستيراتيجي لمحافظة سامراء وكركوك

لوان فانازيا

قرعة منطقة الخليج – قبلى المهندسين / الشمال

ترجمة شهرزاد

انجز قبلى المهندسين التابع لقرعة منطقة الخليج اربعون مشروعاً من بين 45 مشروعاً مخططاً لانجازها ضمن برنامج اعمار محافظة سامراء.

هذا وقال العقيد ميشيل بيغنتك القائد في قبلى المهندسين المنطقة الشمالية باننا نشارك العراقيين في اعادة اعمار العراق ، واننا ننجز المشاريع ونديرها في بيئة دابتمكية في ظل الوضع الامنى الراهن والمعوقات التي نواجهها من حيث اوصول المواد وانجاز العمل بنوعية عالية هذا اضافة الى اهمية وجود الابدي العاملة العراقية وما يترتب على ذلك من خطورة .

وستشهد مدينة سامراء عودة ثانية الى ماكانت عليه في ابامها التاريخية المشرفة من حيث اهميتها كمركز تجاري في المنطقة. وتناول الاعلام العراقي مسألة اعادة اعمار الضريحين الشريفيين للامامين العسكريين ( الامام علي الهادي والحسن العسكري ) عليهما السلام بعد ما تم استهدافهما في الاعتداء الاخير ، وسيبدأ العمل فيهما بعد شهر رمضان ويتمويل من الاتحاد الاوربي والحكومة العراقية .

تقع مدينة سامراء على الضفة الشرقية لنهر دجلة حيث كانت عاصمة الدولة الاسلامية لمدة 56 عاماً في القرن التاسع ويبلغ عدد سكانها 200,000 نسمة وفي يومنا هذا تشهد مدينة سامراء عمل متواصل لا عمارها وفي مختلف القطاعات الخدمية كالكهرباء والمياه والمجاري تبلغ الكلفة الاجمالية لهذه المشاريع 37 مليون دولار ويتمويل من برنامجي اعمار العراق وبرنامج الاستجابة للطوارئ . تم الانتهاء من ثمان مشاريع كهربائية من بين تسعة مشاريع ومازال واحد قيد الانجاز ، ويبلغ عدد الساعات التي تتوفر فيها الطاقة الكهربائية في اغلبية المنازل ومراكز الاعمال هو اثنا عشر ساعة وهذا تقريبا يتلقى مع خطة الحكومة العراقية في 2004 . اما في قطاع المياه فيتم ضخ مياه من نهر دجلة في مدينة سامراء الى وحدات معالجة المياه ومن ثم الى المدينة عن طريق خطوط وانابيب نقل المياه ولا توجد هنالك اقسام لادامة واصلاح الانظمة الموجودة علما ان مايعمل من هذه الانظمة هو بنسبة 20% ويعتمد سكان سامراء على خزانات الصرف الصحي وذلك لانعدام نظام المجاري وتبلغ ميزانية العمل في الاشغال العامة ومشاريع المياه خمسة ملايين دولار حيث تم الانتهاء من تسعة مشاريع ومشروع واحد سيتم العمل به . وقد تم عقد اصلاح محطة ضخ المياه وتنصيب مضخات جديدة وخطوط المياه وكذلك توسيع شبكة المياه في سامراء الى 21,000 ميترًا لتزويد الماء الخام من نهر دجلة الى مدينة سامراء .

اما مدينة كركوك فتعتبر مركزا تجاريا استراتيجيا من عدة نواحي سواء اكانت من الناحية التاريخية او الثروة النفطية التي اكتشفت في عام 1972 او من ناحية التنوع الجغرافي لسكانها حيث يوجد في هذه المحافظة العديد من الحرفيات المتألفة مع بعضها وعاشت منذ زمن بعيد في وئام وسلام

ويبلغ عدد سكانها 750,000 نسمة وتتلقي المدينة يد العون من برنامج اعادة اعمار العراق لاربع وسبعون مشروعاً ، ثمانية من هذه المشاريع ما زالت قيد الانجاز في حين تم انجاز 62 مشروعاً واربع مشاريع سيتم البدء بها . وهنالك جهود حثيثة للاعمار وعن اجمالي من النفقات والتي تبلغ 218 دولار ووفقاً للتقييم الحالي فان الحقول النفطية تنتج مايزيد عن مليون برميل يوميا من النفط او مايقرب من نصف جميع الصادرات النفطية اصاف بيغنتك قائلاً بان بناء القدرات والقابليات العراقية بحثل جزءا كبير من اهتمامنا وكذلك النهوض بالمشاريع الخدمية ومشاريع الاعمار حيث قال بان فريق اعادة اعمار المحافظات يعمل وبشكل يومي مع الحكومة العراقية من ناحية المشاريع الخدمية فيمكن استدلالها من الاتي :

\*الطاقة الكهربائية : فقد ارتفع معدل تزويد الطاقة الكهربائية الى 16 ساعة يوميا وكذلك تركيب مولدات جديدة في المحطة في شهر شباط في العام الماضي

\*النفط : من المقرر انجاز 12 مشروعاً في القطاع النفطي حيث تم انجاز ثمانية مشاريع وثلاث مشاريع ما زال قيد الانجاز ومشروع واحد سيتم بدئه .

\*المجاري : لا يوجد نظام المجاري في كركوك والمواطنون يعتمدون على خزانات الصرف الصحي فهنالك ثمانية مشاريع ممولة من ثلاث مصادر مختلفة ثلاثة منها تم انجازها واربع مشاريع ما زالت قيد الانجاز ومشاريع اخرى خطط لها ولم يتم بدئها بعد .

## Strategic cities update

continued from page 12

local Government of Iraq representatives daily... on government, legal and business processes.”

Electrical power has risen from four to 16 hours daily, with the installation of new generators at the power plant in February of last year.

Of the 12 planned projects to improve

the oil infrastructure in Kirkuk, eight are complete; three are ongoing and one remains to start.

There is no sewage system in Kirkuk and citizens rely on septic tanks and open drainage. There are eight projects funded through three different sources; three are completed; four are ongoing; and one planned but not started.

Forty-six facilities and transportation projects are planned for Kirkuk; with 43

complete; one ongoing; and two planned but not started.

“In the United States, we don’t have to extend the post-construction timeline on projects as we do here,” Pfenning added. “Here, we continue the coaching, teaching and mentoring the young Iraqi government. Each Iraqi Governorate knows and trusts one of our local engineers on the PRT or in one of our area offices as their local ‘go to’ person.”

# Al Mamoon center foundation future for telecommunications



USACE photo by Norris Jones

U.S. Army Corps of Engineers is overseeing the construction of the \$22.7 million Al Mamoon Exchange and Telecommunications Center in Baghdad. Shown above are a few of the 175 Iraqis on the construction crew positioning 270 tons of rebar in preparation to place 2,635 cubic meters of concrete for the seven-story structure's foundation. The facility also includes a 250-car covered garage and a 1,300 square meter post office.

*by Norris Jones  
Gulf Region Central district*

**BAGHDAD, Iraq** –“It represents the heart of Baghdad’s telecommunications system and will allow Iraq to connect to the world,” says an Iraqi engineer overseeing construction of the \$22.7 million Al Mamoon Exchange and Telecommunications Center.

Currently, the project is 27 percent complete and is scheduled to open next February. Mohammad Abdula, a lifelong resident of Baghdad, says phone service in Baghdad is available locally allowing residents to call those in their immediate neighborhood. “But unless you use a cell phone, you can’t call

friends and family on the other side of the Tigris River or to other cities in Iraq. This facility is the first step in restoring and improving phone service here.” He looks forward to the day when Iraqis can make international calls using their home phones, as well as connecting to the internet.

The new facility will include a seven-story structure that will house communication switch gear and telecommunication offices. It will also include a 1300 square meter post office, a loading dock for delivery trucks, a 250-car covered garage, and a cafeteria capable of serving 150 people. Currently, 175 Iraqi construction workers are employed at the site.

see **Exchange**, page 15

## Exchange

continued from page 14

The contractor has his own concrete plant capable of producing 90 cubic meters of concrete per hour.

"The old Al Mamoon tower is a landmark known throughout Iraq. This new structure will provide reliable communications and be a focal point for the City of Baghdad. Architecturally, it's a signature project that all Iraqis can look to with pride."

Abdula is working with Ministry of Communications officials who will take ownership of the facility when finished. "They're anxious to move in," he noted. "They know what this facility means to Iraq." Abdula, who earned a civil engineering degree from Baghdad University, has been working for the U.S. Army Corps of Engineers (USACE) for three years and is currently overseeing 16 projects.

He's part of USACE's Baghdad Area Office that is currently managing over 100 projects valued at nearly \$400 million including new water and sewer lines, electrical distribution networks, road paving, hospital renovations, and new courthouses.



Courtesy

## بدالة المأمون للاتصالات بحلتها الجديدة وبكلفة مليون دولار

نوريس جونس

فيلق المهندسين المنطقة الوسطى

"يعتبر مركز المأمون للاتصالات قلب بغداد والذي سيتمكن الاتصال مع العالم"

هذا مقالته احد المهندسين العراقيين والمشرف على العمل في مشروع اعمار بدالة المأمون الذي تبلغ كلفته 22.7 مليون دولار .

وقد تم انجاز 27% من المشروع ومن المؤمل الانتهاء منه في شهر شباط القادم ، وقال المواطن محمود عبدالله، من مدينة بغداد، ان الخدمات الهاتفية متوفرة ضمن المنطقة الواحدة وعلق قائلاً اذا اردت الاتصال باحد الاشخاص خارج المنطقة او المناطق عبر نهر دجلة فعليك استخدام الهاتف النقال وتعتبر هذه البدالة خطوة للنهوض وتحسين وسائل الاتصالات واصلاحها وانه يتطلع الى اليوم الذي سيكون بإمكان المواطنين العراقي استخدام الهواتف واجراء المكالمات الدولية وكذلك استخدام الانترنت عن طريق خطوط الهاتف.

ويتكون مشروع بدالة المأمون من مبنى يتألف من سبعة طوابق والتي تتضمن مكاتب الاتصالات وسيكون هنالك مكتب بريد بمساحة 1300 متر مربع ورصيف للتحميل ومراب يتسع لـ 250 سيارة وكافتيريا تقدم الخدمة لـ 150 شخصاً .

ويعمل في هذا الموقع 175 عاملاً عراقياً . ويعتبر برج المأمون من الرموز المهمة في عموم القطر وسيقوم هذا البرج بتوفير خدمات الاتصالات المعتمدة اما من الناحية العمرانية فان جميع العراقيين سينظرون بفخر الى هذا الانجاز .

وقال السيد عبدالله، الذي يعمل بالتنسيق مع مسؤولي وزارة الاتصالات والذي سيستلم الادارة عند الانتهاء من المشروع حيث عبر عن سعائه بهذا المشروع، ان هذا المشروع من المشاريع المهمة بالنسبة للعراقيين.

و السيد عبدالله هو احد المهندسين العاملين مع فرقة منطقة الخليج ، فيلق المهندسين منذ ثلاثة سنوات والمسؤول حالياً عن الاشراف على ستة عشر مشروعاً.

ويتولى مكتب فرقة منطقة الخليج التابعة لفيلق المهندسين الامريكى- المنطقة الوسطى حالياً ادارة مايزيد على مئة مشروع وبقيمة 400 مليون دولار بضمنها الخطوط الجديدة للمياه والمجاري وشبكات توزيع الطاقة الكهربائية وتعميد الطرق واعادة تاهيل المستشفيات وبناء المحاكم الجديدة.

انتهى



The two, 31-megavolt transformers will upgrade the area's electrical distribution benefiting more than 785,000 residents.

## فيلق المهندسين الامريكى يعمل لتطوير الشبكة الكهربائية في محافظة ميسان

أ-البحراني  
منطقة الخليج - فرقة الجنوب

ميسان العراق \_ يحمل فيلق المهندسين الامريكى بجد من اجل تطوير وتحسين الشبكة الكهربائية في محافظة ميسان والتي تقدر كلفتها بحوالي 20 مليون دولار امريكى . فقد قال الرائد ستيفن هيردا , المهندس المقدم ضمن فيلق المهندسين , منطقة الخليج - فرقة الجنوب , ان عملية انشاء سبعة محطات ثانوية "11/33 كيلو فولت " سوف عزز من الابنية التحتية لقطاع الكهرباء في المحافظة.

وأضاف هيردا قائلا بان المحطات الموجودة والتي تحمل حاليا في المحافظة هي محطات قديمة وتحتاج من نقصا في المواد الاحتياطية والصيانة , مما يؤدي الى عطلها او عدم قدرتها على الحمل بكفاءة عالية . اما المحطات الجديدة سوف تساعد على توفير الطاقة الكهربائية لمحافظة ميسان التي تحدها شمالا بمدينة البصرة وشرقا "الحدود العراقية - الايرانية" . وقال هيردا الذي يحمل ضمن منطقة الخليج - فرقة الجنوب لفيلق المهندسين الامريكى " أن هذه المشاريع تعتبر من المشاريع المهمة في محافظة ميسان وذلك لكثرة المشاكل الكهربائية التي تعاني منها المحافظة "

وأضاف ايضا بالقول " المحطات الجديدة ستساعد على زيادة الطاقة الكهربائية وان المعدات والاجهزة الحديثة سوف توفر طاقة كهربائية مستقرة لمدة سنوات فادمة " . أن هذه المشاريع ستحسن من قدرة توزيع الطاقة الكهربائية بدلا عن كونها تزيد من الطاقة الكهربائية , اوضح هيردا " أن الهدف من انشاء هذه المحطات هي خفض الفولتية العالية الموجودة في مرسلات الطاقة ومن ثم ارسالها الى المواطنين والاحياء السكنية للاستخدام المنزلي " . بالنسبة الى المهندس العراقي المقدم للمشروع - مكتب البصرة - " أن المشاريع الجديدة سوف توفر مصدر ثابت للطاقة المنزلية والاعمال الصناعية في المنطقة مستفيدا منها اكثر من 785,000 الف مواطن "

وقال هيردا أن من اهم التحديات التي يواجهها فيلق المهندسين في محافظة ميسان هو زيارة مواقع العمل . " هذا ان نظمت السلطة الى المحافظة في نهاية عام 2006 . تحذر على فيلق المهندسين الامريكى زيارة مواقع العمل من اجل تحقيق شروط المتانة ومراقبة العمل " . وقال " مهما يكن فإن فيلق المهندسين لديه فريق عمل جيد وفريق من المهندسين العراقيين الذين يتابعون العمل في هذه المواقع ويتحققون من شروط المتانة ويتابعون اعمال الشركات المنفذة ومطابقتها للمواصفات الملزمة في العقد " .

وقال أن فيلق المهندسين لم يكن باستطاعته تنفيذ هذه الاعمال في محافظة ميسان من دون دعم واسناد هذا الفريق ووفقا لما ادلى به هيردا فان مشاريع العشرين مليون دولار سيكون له اهمية كبرى للشعب العراقي حيث سيكون لديهم نظام شبكة كهربائية جديدة سيساعد من توفير مصادر اضافية للطاقة مما يساعد في تقديم خدمات اكثر للمواطنين من النظام الشبكة الكهربائية الحالية . وبالامكان اضافة مشاريع مستقبلية للشبكة الكهربائية الحالية والتي ستساعد المواطنين ايضا الحصول على زيادة في عدد الساعات من الطاقة الكهربائية .

وقال المهندس العراقي المقدم في المشروع " أن هذه المشاريع سوف تضمن مصدر ثابت من الطاقة للمحافظة وستوفر الطاقة الكهربائية للمواطنين في محافظة ميسان , الذين عانوا بشكل كبير خلال الحرب العراقية الايرانية حيث كانت المحافظة ساحة معركة في حينها , والى وقت لاحق وبعد الانتهاء الانتفاضة الشجيرة عام 1991 . "

فقد قال هيردا أن عملية الانشاء لكل محطة تتطلب عدة فترات . فهناك غرف للسيطرة ومفاتيح التحول وتستخدم كمقر للمفاتيح الكهربائية والتي تتحكم بعملية التشغيل للمحطة . وهناك ايضا على ما لا يقل عن اثنين من المحولات بقدرة 31

ميگا فولت . أن العرض الرئيسي من المحولات هو تغير الفولتية الكهربائية الموجودة وذلك اعتمادا على المغذيات الرئيسية للطاقة . فأن الفولتية تنخفض من 132 كيلوفولت الى 33 كيلوفولت ومن ثم الى 11 كيلوفولت والتي تصلح للاستخدام المنزلي . ومن الفترات الاضافية المهمة هي التفرغ الارضي (مانع الصواعق) الذي يحمي المحطات من الدمار اثناء حدوث صواعق ويحمي على تحويلها الى الارض مباشرة .

وقال المهندس العراقي المقدم في المشروع " أن هذه المشاريع هي ليست الوحيدة التي يحمل عليها فيلق المهندسين الامريكى في محافظة ميسان " , " فهناك مشروع بنفص الاهمية وهو مشروع انشاء محطة 400 كيلوفولت . في حال الانتهاء فأن هذه المشاريع سوف تزيد من قدرة توزيع الطاقة الكهربائية لمحافظة ميسان والمناطق الريفية التي تقع ضمن المحافظة " .



# Maysan electrical system improves

*Story & photos by A. Al Bahrani  
Gulf Region Southern district*

**MAYSAN, Iraq**—The U.S. Army Corps of Engineers is hard at work on \$20 million worth of projects to improve the electrical system throughout Iraq’s Maysan Province.

Maj. Steven Herda, resident engineer at USACE’s Basrah Area Office, said the construction of seven “33/11” electric substations in Maysan will provide a more reliable and up-to-date electric transmission infrastructure.

Herda said the existing electric substations are aging and suffer from a lack of maintenance and spare parts, causing them to break down or not operate at full capacity. He said the new substations will enhance the ability to supply power across southern Iraqi Maysan Province encompassing the area north of Basrah and east to the Iran-Iraq border.

“These projects are important because in all areas of Maysan there are problems with the transmission lines and substations that the people rely on for power,” said Herda, whose office is part of the Gulf Region South district. “The new substations will provide increased transmission capacity and the up-to-date equipment should provide reliable service for many years to come.”

The projects improve distribution capacity rather than provide additional power, Herda explained. “The purpose of a substation is to step down electric current from high voltage transmission lines to lower voltage lines, and then send the lower voltage electric power out to users in the neighborhoods,” he said.

“These projects will provide more reliable power to homes and business in the region, benefiting more than 785,000 residents,” said an Iraqi deputy resident engineer in the Basrah Office.

Herda said the biggest challenge the Corps of Engineers faces in Maysan Province is access to project sites.

“Since Maysan went PIC (Provincial Iraqi Control) in late 2006, USACE has not been able to perform quality assurance inspections of the project sites,” he said. “However, USACE

has a very strong group of Iraqi associates that performs quality assurance site visits to ensure that the contractors are performing the work according to the specifications in the contract.”

He said USACE would not be able to do its projects in Maysan without the support of these Iraqi associates.

For Herda, the significance of the \$20 million worth of projects to the Iraqi people is that they will have a newly-installed electric transmission capacity that will enable additional electric power generation to reach more people than the current system can. Future projects to build electric generation capacity will then be able to tie directly into the existing power grid and supply the people with additional hours of electricity, he said.

“These projects will ensure stable electrical supply within the Maysan province and supply more electricity to the people of Maysan, who suffered greatly during the Iraq–Iran War during which it was the battlefield, and subsequently the 1991 Shia uprising,” said the Iraqi deputy engineer.

Herda said the construction of each substation requires several items. There is a control and switch building, which is used to house the electric switches; and controls and fusing, which control the operations of the substation.

There also are at least two electric 31 megavolt transformers. The purpose of the transformer is to change the voltage of the electric current. Depending upon the feeder, the voltage is stepped down from 132 kilovolts to 33 kilovolts and then to 11 kilovolts, which is the normal voltage supplied to neighborhoods.

An additional part is the earthing grid, which is used to ensure that lightning strikes will not damage the substation but will discharge to the ground.

“These are not the only projects of this magnitude that the GRS is working on in Maysan Province,” said the Iraqi deputy engineer. “There is one other similar project which is 400kV substation. Once completed, these projects will increase distribution capacity of electric power for Maysan and the rural areas within the province.”



**The control room at Maysan Plastic 33/11 kV substation project will ensure stable electrical supply within the Maysan province and supply more electricity to the people of Maysan.**

# Roll-on/Roll-off berth turned over to the Iraqi Port Authority

by Mohammed Aliwi  
Gulf Region South district

**BASRAH, Iraq**—The U.S. Army Corps of Engineers Gulf Region South district has completed and turned over the Roll-on / Roll-off berth of Umm Qasr Port in Basrah Province on Sept. 25 to the Iraqi Port Authority.

Known as RoRo, the \$2.7 million project doubles the number of the ships that can dock and unload simultaneously. Rebecca Wingfield, GRS project engineer with Thi Qar Resident Office, said that mean more goods delivered and more income for the port and its workers.

“Another aspect of this project is that it was Iraqi designed and constructed. The Iraqi people can be proud of this project because it is theirs alone. The Corps funded the project and provided guidance and project management to see this project through to completion,” she said.

Natalie Sudman, project manager with GRS and the former project engineer on RoRo explained the project scope. “The objective of this project was to design and construct a second Roll-On/Roll-Off berth facility at north port and jetty fenders at Berth 5 at the Umm Qasr Port and replace existing fenders to enhance berth protection and energy absorption,” she said.

“The contract of this project was awarded on Dec. 17, 2005, and the beneficial occupancy of the berth occurred on July 31,

2007, when a ship was berthed,” Sudman said. The contract was modified for a time extension for construction due to the necessity of repairing a jetty fender damaged during a storm in the construction phase.

“The RoRo will double the port’s cargo capacity from RoRo ships, where it will duplicate the facilities, which are currently being used to load and unload ships. For the shipper, the RoRo vessel offers a number of advantages over traditional ships, notably speed,” Sudman said. “As the name of the system implies, cars and lorries can drive straight onto a RoRo ship at one port and off at the port on the other side of the sea within a few minutes of the ship docking.”

Wingfield said that the port was using an old, smaller RoRo situated at the north end of the current berthing area of the port. The existing ramp is unable to handle the increasing cargo demands and traffic congestion in the port was a problem because vessels had to wait.

Wingfield said that the project will expand cargo and passenger use of the port which is critical to the Iraqi government, industry and the Multi-National Forces.

The new Roll-on / Roll-off berth facility will add additional berth capacity increasing the efficiency and effectiveness of the Umm Qasr Port. The types of cargo that will be offloaded will be primarily consumer goods (food, cars, electronics) and passengers with and without automobiles.

A forklift drives off a RoRo ship onto the new RoRo berth that doubles the Umm Qasr port’s cargo capacity for rapid loading and unloading of Roll On/Roll off cargo vessels.



USACE photos



USACE photo by Erich Langer

Workers bend reinforcing bar in preparation for concrete placement during construction of the RoRo berth.

## مشروع مرسى التفريغ والتحميل لميناء ام قصر في البصرة يسلم الى السلطات العراقية

بقلم وترجمة محمد الشامي

منطقة الخليج القسم الجنوبي

البصرة , العراق - قام فيلق المهندسين الامريكي في الخامس والعشرين من شهر سبتمبر الماضي بكمال مشروع مرسى سفن ميناء أم قصر لتحميل والتفريغ في محافظة البصرة وتسليمه الى السلطات العراقية.

ذكرت ريكا ونكفيلد, مهندسة مشاريع في فرقة منطقة الجنوب بأن المشروع الذي تبلغ كلفته 2.7 مليون دولار سيزيد مرتين السعة الاستيعابية لميناء السفن ورسوها وتفريغها للحموله ولقد ذكرت ان هذا المرسى سيزيد من البضائع الواردة ودخل الميناء وعماله.

وذكرت ايضا ان هذا المرسى قد صمم وبني من قبل العراقيين انفسهم الذين سيفخرون به لانه مشروعهم وان فيلق المهندسين الامريكي قام بتمويل المشروع وادارته الى ان تم بنجاح.

هذا وذكرت تنالي سدمن مديرة مشاريع في فرقة منطقة الجنوب ومهندسة سابقه في الميناء بأن الهدف من المشروع كان تصميم وبناء مرسى تفريغ وتحميل في الميناء الشمالي ونصب حواجز ارضفه في المرسى الخامس لام قصر واستبدال حواجز الارصفه القديمه بجديده لحماية السفن اثناء الرسو وزيادة الامتصاص.

ذكرت ايضا ان العقد قد احيل في 17 من شهر كانون الاول لسنة 2005 وتم استخدام المرسى فعليا في 31 من شهر تموز من السنة الحاليه. لقد تم تعديل العقد اثناء بناء المرسى لزيادة فترة العمل وذلك لاصلاح حواجز الارصفه التي تحطمت بسبب عاصفه ضربت المرسى اثناء بناء الحواجز .

سيزيد مرسى التفريغ والتحميل من سعة المرسى لاستقبال السفن. حاليا يتم استخدام المرسى لتفريغ وتحميل السفن الراسيه بالنسبة للملاحين فان المرسى يوفر اكثر من فئده لهم, ذكرت سدمن, حيث ان ما يحمل في المرسى هو بضائع ثقيله كالسيارات والشاحنات التي تفرغ وتحمل من والى السفن في الميناء حيث لا يستغرق ذلك دقائق بعد رسو السفن. ان اشهر مراسي السفن هي العبارات العائمه التي صممت لنقل المركبات التجاربه والسيارات الخاصه مع اعداد كبيره من المسافرين لرحلات بحريه قصيرة.

ذكرت سدمن بان مراسي التفريغ والتحميل تقسم إلى عدة أنواع فمنها السفن التي تصمم لحمل المركبات او لحمل الحاويات مع السيارات او لنقل السيارات بدون مسافرين . وذكرت بان سفن حمل السيارات تشكل ثلثي العالم من سفن المراسي في الوقت الحاضر.

قالت ونكفيلد بأن مرسى ام قصر كان صغير وقديم في جزءه الشمالي. وكان المرسى غير كافيا على استيعاب اكم المتصاعد من البضائع الواردة وكان هناك ازحام مروري في الميناء بسبب عدم وجود اماكن كافيه لرسو وتفريغ الحموله .

وينكفيلد قالت بان المشروع سيزيد من سعة استيعاب المسافرين والبضائع التي تعتبر من الضروريات للحكومة العراقيه. سيزيد المرسى الجديد كفاءة وتأثير ميناء ام قصر بالاقتصاد العراقي. أما بالنسبة لأنواع البضائع فتكون اما بضائع مستهلكه ( كالأغذاء أو السيارات او اجهزة الكترونيه الخ) او مسافرين بسيارات او بدون سيارات.



# Hail and Farewell

## Hailing:

Michael Bloom, GRN  
 SCPO Foster Nickel, GRN  
 Jim Hilario, GRN  
 Stephen Thomas, GRN  
 Christina Richie, GRN  
 Onisem Gomex, GRN  
 Mohammad Dadkhah, GRN  
 James Algie, GRN  
 James Hodges, GRS  
 Nelson Reyes, GRS  
 Winbourne Drake, GRS  
 James Myers, GRS  
 Michael Rea, GRS  
 Stephen Pitts, GRS  
 Nick Evanco, GRS  
 Ulysses Garcia, GRS  
 Nancy Brighton, GRS  
 Danielle Billings, GRS  
 Jarrod Bonnick, GRS  
 Jeff Armstrong, GRS  
 Greg Starks, GRC  
 Senior Chief William Miller, GRC  
 Chief Kenneth Baker, GRC  
 Lt. Cmdr. Michael Comstock, GRC  
 Jeff Quay, GRC  
 Kevin Casey, GRC  
 Manuel Bejarano, GRC  
 Jeff Daniels, GRC  
 Michael Funk, GRD  
 Lloyd Caldwell, GRD  
 Natasha Priddle, GRD  
 Ed Pennington, GRD  
 Danny Makalena, GRD  
 Jill Murphy, GRD  
 James Boyette, GRD  
 Bruce Nelson, GRD  
 Thomas Cain, GRD

## Farewelling:



Chima Ume  
GRN



Army Capt.  
Sarah Sinclair  
GRN



Kraig Berberich  
GRN



Navy Lt. Cmdr.  
Alex Barlas  
GRN



Everitt Scott  
GRN



David Crumpton  
GRS



Eileen Lodge  
GRS



Cheryl Hodge-Snead  
GRS



Andrew Frank  
GRS



Army Staff Sgt.  
Thomas Washington  
GRS



Kelly Bertoglio  
GRS



Amy Williams  
GRS



Mohammad Dadkha  
GRC



Larry King  
GRC



Navy Lt. Cmdr.  
Joshua Malkin  
GRC



Sandi Williams  
GRC



Roger Nowicki  
GRC



James Sager  
GRC



Navy Lt.  
Robert Leines  
GRC



Army Col.  
Michael Gunn  
GRD



Air Force Capt.  
Jason Kalin  
GRD



Air Force Capt.  
Dara Hobbs  
GRD



Army Col.  
Richard Kilburn  
GRD



Florine Jordan  
GRD



Army Col.  
John Scocos  
GRD



Army Capt.  
Asfandyar Khan  
GRD

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