

AL MASDARالمصدر

PUBLICATION OF DUBAI ELECTRICITY & WATER AUTHORITY ■ Issue 42 - December 2011



40 روح الاتحاد
SPIRIT OF THE UNION
اليوم الوطني
NATIONAL DAY
الإمارات العربية المتحدة
UNITED ARAB EMIRATES



**HH Sheikh Mohammed bin Rashid's noble deeds
delight UAE nationals.**

**National identity is a deep-rooted value
inherited from our ancestors.**

**Mohammed bin Rashid explores DEWA's
e-Services at GITEX 2011.**

**Solar Energy: what is it? How does it
make electricity? How can it be stored?**

40th National Day – “Spirit Of The Union”

His Highness Mohammed bin Rashid’s noble deeds to relieve the UAE nationals in Dubai

The current issue of Al Masdar Magazine coincides with two important occasions. Firstly, celebrating the UAE 40th National Day under the slogan “Spirit Of The Union.” On this occasion, we extend our sincere congratulations to His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE, His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, and their Highnesses the members of Supreme Council of the Union, as well as all our Sheikhs and nationals all over our beloved country.

Secondly, the announcement of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, which aims to relieve the UAE nationals of living burdens, as well as providing them with a prosperous and stable life. These noble deeds reflect His Highness’ interest and care for the UAE citizens and close follow-up to their living conditions.

“Spirit Of The Union” has become a distinctive characteristic of our celebrations of the National Day this year, as it is a wellspring of our feelings. Our union really sets a good example of the importance of unity in our lives. Our founder forefathers had realized and adopted this fact, and spared no effort to achieve it. Today, we can clearly see the fruit of this union – a modernized, established and well-secured country that provides a prosperous life for its citizens, and helps and relieves other needy countries.

Prior to the launch of the 40th National Day celebrations, His Highness Sheikh Mohammed bin Rashid Al Maktoum ordered to increase free-of-charge slab levels for UAE nationals, and also exempt UAE nationals who receive social subsidies from the Ministry of Social Affairs from electricity consumption at the maximum limit of 6000 kilowatt/month.

These noble deeds are a real milestone of our devoted leaders’ noble deeds.

His Highness’s noble deeds are a great demonstration of his interest and relentless pursuit to provide citizens with all their needs. In this regard, DEWA has put His Highness’ orders into immediate effect either in terms of connecting electricity to the nationals’ private houses or water consumption of their private houses and farms. Furthermore, DEWA has carried out His Highness’ orders to exempt UAE nationals, who receive social subsidies from the Ministry of Social Affairs from electricity consumption at the maximum limit of 6000 kilowatt/month.

Finally, I would like to thank His Highness Sheikh Mohammed bin Rashid Al Maktoum for his generosity. Moreover, I would like also to call for both Emiratians and residents to conserve water and electricity consumption, conserve our resources, and protect the environment against pollution so as to serve the march of sustainable development in the country.



Saeed Mohammed Al Tayer
MD & CEO of DEWA



This magazine is a result of your contribution, and mean to be available for you. Therefore we welcome further suggestions and valuable thoughts, by which we can then achieve our aim, of open dialogue and easy communication. We thank you for your continuous efforts, and cooperation, with our sincere best wishes to you.

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His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai has ordered a package of noble deeds and exemptions in electricity and water sector to UAE nationals. His Highness stresses that the UAE leadership is keen to help UAE nationals with all their needs and prosperous living for their families.

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Some of the quotes of His Highness Sheikh Mohammed bin Rashid Al Maktoum



"A project is nothing but an inspiration, and a project with no creative inspiration is not welcomed, as it will be a merely traditional one. We do believe that pioneering is the shortest route to reach the bright future we aspire to."



"There are two choices if you are encountered by a challenge that requires finding a solution or taking a decision: you can either apply the ideas of your predecessors or to capitalize on your innovative capacities and mental capabilities, so as to develop a new idea and create a new business."



"You must give if you want to take. If you want to create leaders, you have to encourage promising talents and provide them with opportunities to undergo real-life and hard experiences and practical examinations; teach them how to grasp new opportunities and how to avoid failure. Managing development is nothing but managing people."



"A leader (being a manager in a private company, a public organization, or a project) must develop leadership capabilities of those who demonstrate efficiency, creativity and willingness so that they can, in turn, develop leadership capabilities of their inferiors."



"Some leaders and managers do not prefer another efficient and qualified person in their departments for fear that they will take their place!! We are completely against this way of thinking! Leaders and managers have to delegate responsibilities otherwise they will get involved into less important matters and therefore do not have sufficient time to perform basic assignments, including developing business and staff, and working out new solutions."



GOVERNMENT OF DUBAI



هيئة كهرباء ومياه دبي
Dubai Electricity & Water Authority

DEWA e-Services at Your Service...



DEWA provides round the clock online services to save your effort and preserve the environment...

• Activation of Supply

- Billing Complaints
- Bill Enquiry
- Change of Landlord Info
- Clearance Certificate Request
- Change of Bill Address
- Electronic Billing

• Final Bill Request

- Manage Statement Code
- Request for Callback
- Slab Tariff Calculator
- Statement Code Request
- Submit Tenancy Contract

- Application for Permanent Temporary/Additional Load/Shifting of Electricity & Water Supply
- Building NOC
- Demolition NOC
- Distribution Substation Inspection
- Electronic Building Violation System
- Local Purchase
- LV Design Provisional Approval
- LV Inspection & Release of Supply
- LV Shop Drawing Approval
- Project-Generation Document Submission
- Substation Location & Size Approval
- Substation Layout Drawing
- Tenders
- E-Payment Estimation eService

- Dewa Careers
- Dewa Scholarships
- Dewa Services Feedback
- Dewa Website Feedback
- Contact Us



Payment Channels



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الهاتف المتحرك
mpay.dubai.ae



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المتعاملين
Customer Service
Centers



أجهزة الصراف الآلي
ATM Machines



نوافذ التحصيل
في المصارف
Bank Counter



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Tele Banking



الافتتاح المباشر
من المصرف
Direct Debit



خدمة الدفع
من المركبة*
Drive-Thru*



أجهزة اتصالات للدفع
Etisalat Payment
Machines



مكاتب
بريد الإمارات
Emirates Post



محطات
البنوك/إينوك
ENOC/EPPO



ويندوز 7
Windows 7



تطبيق آي فون
iPhone
Application



تطبيق آي باد
iPad
Application



تطبيق بلاك بيري
BlackBerry
Application



تطبيق بلاك بيري
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حكومة دبي الإلكترونية
Dubai eGovernment



His Highness Mohammed bin Rashid's noble deeds

A package of orders to exempt UAE nationals in Dubai from water and electricity service fees

His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai has ordered a package of noble deeds and exemptions in electricity and water sector to UAE nationals. Further His Highness stresses that the UAE leadership is keen to provide the UAE nationals with all needs and prosperous living for their families.

His Highness's orders increase the free-of-charge slab of UAE nationals' consumption from 10000 gallon/month to 20000 gallon/month for their private houses and farms, and to exempt UAE nationals who receive social subsidies from the Ministry of Social Affairs from electricity consumption at the maximum limit of 6000 kilowatt/month.

Furthermore, His Highness has ordered UAE nationals in the Emirate of Dubai who receive social subsidies from Ministry of Social Affairs be exempt from electricity consumption fees at maximum limit of 6000 kw/hour per month for their own houses. Any extra consumption will be calculated in accordance with the slabs of Emirati nationals.

His Highness has instructed that



these orders must be put into effect and implemented at the earliest so as to relieve limited-income nationals in the Emirate of Dubai of their living costs. His Highness further stressed that water and electricity are national assets that must be protected for the good of the coming generations.

In a blog both in Arabic and English on His Highness's Facebook and Twitter pages, His Highness wrote on Wednesday evening, 5th of October: "Today, I have given my orders to Dubai Electricity and Water Authority to increase water free slab of UAE national, to exempt the UAE nationals in the Emirate of Dubai who receive social subsidies from Ministry of Social Affairs from electricity consumption fees at maximum limit of 6000 kw/hour per month for their own houses, in addition to exempt-

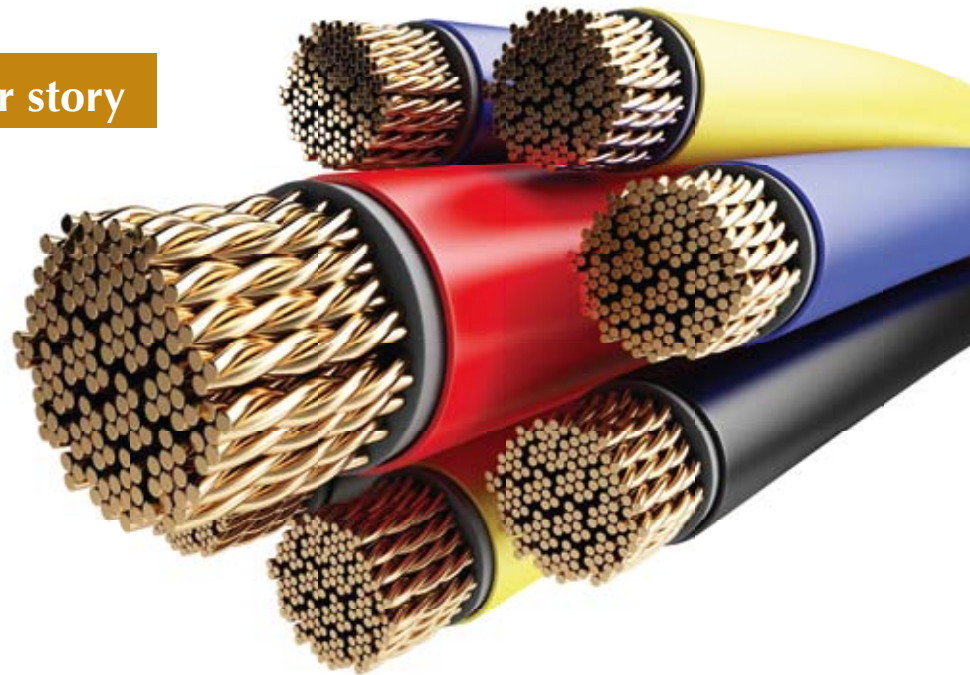
ing Emirati limited-income nationals from the charges of electricity connection to their new houses at the maximum limit of 25000 dirhams per each house."

His Highness's blog on his Facebook page received more than 1200 "likes" and more than 340 comments during the first hours, and more than 100 people have copied His Highness's words on their own pages.

This piece of news was spread among the users of Facebook, Twitter, and Blackberry, and they wrote some comments and replies praised His Highness's orders, which will benefit UAE nationals and provide them with improved standards of living in this country. Furthermore, they said that they have been used to such noble deeds from the UAE's

Exemptions include:

- Increasing the free slab of water consumption to 20,000 gallon/month
- Exempting UAE nationals in Dubai who receive social subsidy from electricity fees up to 6000 kw.
- Exempting UAE limited-income nationals in Dubai from the fees of connecting services to their houses at the maximum amount of 25,000 dirhams.



His Highness orders reduction of costs of living for UAE nationals as soon as possible

In line with the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Dubai Electricity and Water Authority relieves Emirati limited-income nationals of the costs of living, Dubai Electricity and Water Authority has launched a new social initiative to cover the costs of connecting electricity to houses of the Emirati limited-income nationals. This initiative comes in line with the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and

Prime Minister of the UAE and Ruler of Dubai, aiming to relieve Emirati limited-income nationals.

His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA, said: "DEWA considered launching this initiative in compliance with its social responsibility to relieve the Emirati limited-income nationals of living costs. In this regard, DEWA is going to bear AED 25,000 of the costs of connecting electricity to Emirati nationals in Dubai. However, the remaining amount of the costs

(if any) will be borne by the nationals themselves according to the regulations in place."

His Excellency pointed out, "Deducting this amount from the costs of connecting electricity to UAE nationals will contribute to relieving nationals of living burdens, and foster the social ties and unity. We would like to stress the fact electricity connecting costs for the houses of most UAE nationals are within 25,000 dirhams - the amount we contribute."

great leaders who love their country, maintain their dignity and put them at top positions.

Some of them have advised the necessity of conserving electricity and water consumption due to its great effect on the countries' natural wealth.

His Excellency Saeed Mohammed Al Tayer stated, "increasing water free slab, which will be effective starting from October. Further, His Highness pointed out that Government of Dubai subsidizes water and electricity services of the UAE nationals at the amount of 800 million dirhams per year. More than 20,000 UAE na-

tionals out of more than 38,000 will benefit from this noble deed.

Her Excellency Maryam Khalfan Al Roomi, Minister of Social Affairs said that 7016 UAE nationals will benefit from this noble deed.

His Excellency Saeed Mohammed Al Tayer said that the great proportion of the subsidy provided to electricity and water services are directed to consumption tariff through monthly bills.

"DEWA has immediately started receiving the UAE limited-income nationals, as well as those who get

social subsidies. They should bring their documents proving that they get social subsidies so as to be listed on exemption database," His Excellency further added.

Furthermore, His Excellency pointed out that His Highness Sheikh Mohammed bin Rashid Al Maktoum is keen to relieve UAE nationals of the costs of living, as well as providing them with their needs for a prosperous and stable life. His Excellency also noted that His Highness Sheikh Mohammed bin Rashid has issued three orders within two months so as to help UAE nationals.

Al Tayer and Al Kamda sign an MOU



Implementing social initiatives launched by Dubai Electricity and Water Authority in line with the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, aiming to contribute to the costs of electricity connection to UAE low-income nationals' own houses in Dubai. DEWA has signed a Memorandum of Understanding with the Community Development Authority in Dubai with the purpose of setting the required mechanisms to properly implement in compliance with the conditions and criteria approved by DEWA.

The MOU was signed by His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA, and His Excellency Khalid Al Kamda, Director General of CDA.

According to the MOU, CDA will receive aid requests, and carry out social investigation in accordance with its approved conditions and criteria. In case a request meets the conditions and criteria, DEWA will

be provided with the names of those who are eligible for the contribution. Later, DEWA will examine requests through names received from CDA, and then the maximum contribution of AED 25,000 to the costs of electricity connection will be granted, provided that the applicant bears the remaining amount (if any) prior to connecting process.

On this occasion, His Excellency Saeed Mohammed Al Tayer extended thanks and appreciation to CDA for its effective collaboration in implementing this initiative, which represents a milestone of collaboration and coordination among government departments and authorities.

His Excellency also hailed the social role played by CDA, as it works hard to provide good life to the UAE nationals through its strategy of social security.

Further, this initiative comes in line with DEWA's strategy to collaborate and share expertise with other departments, while making the best use of their practices in a way that can

achieve mutual interests and activities of the UAE society.

From his part, His Excellency Khalid Al Kamda, Director General of CDA said: "Signing this MOU with DEWA paves the way for a new era of social initiatives, and strengthens ties of collaboration and communication between both of us. This comes in line with the noble directives of our judicious leadership and achieving its vision aiming to keep society strong and coherent."

CDA receives aid requests, and carries out social investigation in accordance with its approved conditions and criteria

In record time

Connecting water to the docks, which nourish Al Aflaj at Hatta

In compliance with the orders of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, Dubai Electricity and Water Authority has connected water to the docks, which nourish Al Aflaj at Hatta so as to irrigate the heritage farms in the area accordingly.

This was stated by His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA, who put the noble order of H.H. Sheikh Mohammed into immediate effect. H.E Saeed Al Tayer pointed out that water was pumped to the docks of Al Sharea, Al Hail, Jeemah, Leem, and Suhaila so as to nourish Al Aflaj, which irrigate the heritage farms, which used to depend on water from Al Aflaj in the past.

“After executing the project, water quantities, which feed Hatta have risen to 3.4 gallons per day in comparison with the previous quantities of 2.4 gallon per day.” His Excellency further added.

“This project was carried out due to the scarce rain during the few past years and water depletion of some wells. The noble orders of His Highness Sheikh Mohammed bin Rashid Al Maktoum were conducted at a recorded time, as the

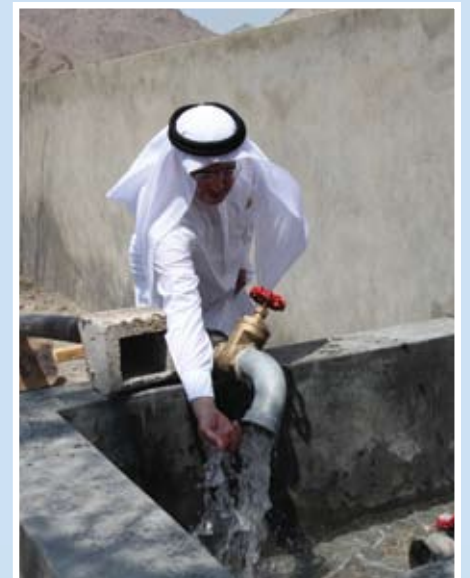
specialist teams at DEWA worked around the clock so as to finish this vital project, which will benefit many Emirati nationals in this area to irrigate their farms,” His Excellency pointed out.

“We have completed the project in such recorded time because of the availability of the advanced infrastructure constructed by DEWA at the cost of AED 340 millions to extend 1200 mm water transmission line to Hatta, in addition to pumping stations and a reservoir of five million gallons capacity.” said His Excellency.

Emirati nationals at Hatta expressed their great euphoria due to the noble deed of His Highness Sheikh Mohammed bin Rashid Al Maktoum, whose directives brought life back to a dead land and farms, which were endangered of drought and waste.

Hatta, which is located at 110 km south-east of Dubai, extends over a unique chain of stony mountains, and contains some towers which were used as forts to defend it against invaders.

Hatta’s history goes back to about 2000 to 3000 years, and it contains a fort established by the Late Sheikh Maktoum bin Hasher Al Maktoum in 1896, which was a centre for meetings of tribes and discussing general affairs.





DEWA DISPLAYS E-SERVICES AT GITEX 2011

Dubai Electricity and Water Authority displayed its latest electronic applications and new systems in customer services. DEWA participated at two stands. Its own stand and the other within Dubai E-Government's stand as one of the leading government authorities in the field of e-services.

H.E. Saeed Mohammed Al Tayer, MD & CEO of DEWA said: "DEWA's participation in GITEX reflects its policy to apply the latest technologies and solutions in different electronic operations in line with the objectives of Dubai Strategic Plan and based on the directives of H.H. Sheikh Mohammed Bin Rashid

DEWA receives more than 1.5 million inquiries via its website and smart phones.

H.H. SHEIKH MOHAMMED BIN RASHID VISITS DEWA'S STAND AT GITEX 2011

H.H. Sheikh Mohammed Bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, visited Dubai Electricity and Water Au-

thority's stand in GITEX and viewed its achievements in the field of electronic services. H.H. unveiled the Grand Prix "Lexus Car" to be given away to its e-services users. H.E.

Saeed Mohammad Al Tayer, MD & CEO of DEWA explained to H.H. the electronic services and the different payment means provided by DEWA to customers.

Al Maktoum, Vice-President, Prime Minister and Ruler of Dubai, to achieve excellence in customer services by applying the best practices and supporting the strategy of the government of the UAE adopt electronic services, encourage the use of the electronic portal, enhance the

role of the government departments in community services, and achieve sustainable and balanced development." Eng. Marwan Bin Haider, VP-Chief Information Officer pointed out "During the past years, technology and new techniques have become

part of daily life. Until the third quarter of 2011, DEWA processed more than 1,400,000 inquiries on monthly bills via its website and more than 100,000 inquiries through smart phones. To meet the increasing demand on e-payment services, DEWA works on developing its



Marwan Bin Haider:
Electronic payment
means are efficient,
easy and time saving.
DEWA is a leading
authority in applying
modern electronic so-
lutions for supporting
Dubai Government's
objectives.

technological base to cope with constant changes in IT sector in line with DEWA's vision and pursued position as a leading utility provider according to highest and international standards along with speed, flexibility and security."

"Time is one of the factors we are keen to take into consideration through providing different channels of payments which are efficient and easy to use. E-services will save time and cost for customers and will preserve the environment through cutting down emissions of carbon dioxide by reducing the number of visits to customer services centers. We are working on preserving our natural resources for the generation to come by applying such technological initiatives".



During the past two years, electronic services provided by DEWA have positively contributed in reducing carbon dioxide emissions. In 2009, DEWA succeeded reducing carbon dioxide emissions equivalent to 1.615 tonnes by saving a distance of 4.723.900 km made by cars to visit customer services. In 2010, the saving ratio increased to 1.868 tonnes (equivalent to a distance of 5.464.890 km).

DEWA launched a number of electronic services to develop its technological base of services. Also DEWA was the first government authority to introduce HTML VIEW Mobile service for its website which is correlated with all smart phones and devices to enable all customers to browse its website

easily. DEWA also launched Push Notification Service which allows to receive SMS free of charge and to receive latest services and news and new customer services offices, in addition to notifying customer with different methods and means of payments, power saving guidelines and other useful information. Also DEWA has developed and launched the BlackBerry BlackBook application which allows customers to access electronic services and reading DEWA's news, view video gallery, send notes to Customer Service Center and to locate the nearest payment center by using Google Maps applications.

DEWA launched link feature with Microsoft browser (9 IE) which allows users to browse and review

DEWA's website directly on their personal computers and open any required pages without searching the main site or opening the ninth edition of Microsoft browser.

A number of agreements were signed by DEWA with several leading banks in the Emirate of Dubai to apply direct payment services from bank account which allows electronic payment of bill via the bank. This services is available with First Gulf Bank, Dubai Commercial Bank, Emirates Islamic Bank, Emirates National Bank of Dubai, Standard Chartered Bank and Sharjah Islamic Bank. DEWA also is looking to enhance this service in cooperation with more banks to allow wider number of customers to use this service.





A Lexus, as a prize for DEWA's e-Services users



Dubai Electricity and Water Authority signed a memorandum of understanding with Emirates Telecommunication Corporation (Etisalat) to enhance joint work and promote bilateral strategic relations to provide and facilitate electronic payment services and to introduce and apply innovative solutions for customers of both sides. On signing this MOU on GITEX 2011, H.E Saeed Al Tay-

er MD and CEO of DEWA said "This agreement aims to enhance joint cooperation between the two parts through applying alternative payment means such as kiosks, IVR, IPTV elife, NFC and proposing strategic partnership to allow both parts to conduct new experimental tests to activate bills and fees payment and services provided by DEWA to its customers.

DEWA SIGNS EXCLUSIVE PARTNERSHIP AGREEMENT WITH SAMSUNG



Dubai Electricity and Water Authority signed an exclusive partnership agreement with Samsung Electronics to allow DEWA's customers to benefit from services provided by Samsung My Service application which will be specially developed for smart TV systems produced by Samsung. DEWA will be the first government department in the region to develop services application that is compatible with these systems. This application will allow DEWA's customers to view and pay their bills, to view the latest news and activities at home and to obtain information on the location of customer services center and on more than 200 locations for bill payments. This application will also allow customers to apply for new connections services and many other services.

Distribution of prizes

On the last day of the exhibition, the Head of IT Division distributed the daily prizes to customers who paid their bills during the period from July 2011 to 12 October 2011 through electronic means. The prizes included 2 Galaxy Tab sets, and 3 iPads, and 3 BlackBerry BlackBooks. The Grand Prize "Green Lexus Car" will contribute to conserving the environment and reduce the carbon dioxide emissions, encourage the use of electronic services. All customers who pay their bills via DEWA's website or mobile service "mpay" during the period from the month of October until December will be qualified to enter the raffle to win this prize.



Winners of DEWA's awards at Gitex

Assuring the importance of strategic leadership and innovation in the government sector

DEWA actively participates in the International Conference for the Mohammed bin Rashid Al Maktoum Business Award 2011



H.E. Abdelrahman Seif Al Ghaurair while handing over a trophy to Khawla Al Mehairi, for DEWA's participation in the conference.

In a speech delivered at the the International Conference for the Mohammed bin Rashid Al Maktoum Business Award 2011 entitled "Strategic Leadership and Innovation in Public Sector," Dubai Electricity and Water Authority has stressed that relying on strategic leadership and innovation are the main factors behind its success as "A Recognized World-Class Utility."

Khawla Al Mehairi, VP - Marketing and Corporate Communication at Dubai Electricity and Water Authority, stressed that relying on strategic leadership and innovations are of the

Saeed Al Tayer: we are one of the best recognized world-class utilities.

key drivers behind DEWA's success as "A Recognized World-Class Utility" as leadership plays an important role in promoting its continuous march for excellence.

Khawla Al Mehairi also noted that leadership and innovation are two concepts required in the world, which

is witnessing unprecedented changes fueled by a number of environmental, climatic and economic challenges, as well as the accelerated interest in alternative and sustainable sources of energy, and the importance of maintaining investors' confidence and the continuous communication with stakeholders so as to enhance sustainable growth.

Khawla Al Mehairi stressed DEWA's continuous interest and commitment to best practices in the field of strategic planning and implementation, leadership and innovation in strategy as the milestones which contributed to

DEWA's growth and development as a strategy-focused organization in line with the trends and aspirations of Dubai. She stressed that Dubai has still distinguished itself with its economic policy aiming to attract investors and encourage partnerships between both public and private sectors.

This was emphasized by His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA, who said: "DEWA is regarded as one of the best and recognized utilities in the world after conducting benchmarks with similar authorities in developed countries, as customers' lost minutes has amounted to 8.7 minute in 2010 in comparison with 24 lost minutes in European Union countries. As for efficiency and reliability, DEWA comes first at international level in terms of reduction of electricity loss, which reached 3.8% in 2010; which is considered one of the lowest and best percentages at world level when compared with 6% in Europe and America."

On his part, Hamad Buamim, Director General, Dubai Chamber of Commerce and Industry, said: "The International Conference for the Mohammed bin Rashid Al Maktoum Business Award is an initiative launched by Dubai Chamber of Commerce and Industry to encourage organizations to achieve business excellence and ensure sustainable business performance in the UAE. This Awards helps integrate the basic fields of business performance in accordance with best models and methods, while assuring business sustainability principles including corporate social responsibility (CSR), governance of companies and innovation.

The conference was held at Jumeirah Beach Hotel – Dubai at the end of September 2011.

Khawla Al Mehairi: leadership and innovation are two necessary concepts in a changing world.

A new DEWA achievement Dubai Electricity and Water Authority garners ISO certification in Information Security

Dubai Electricity and Water Authority (DEWA) has made a new success by obtaining the highest ISO certification (ISO 27001:2005) in Information Security. This certification is ranked as the highest standard of quality Information Security and Protection all over the world. For the third time in a row, DEWA's Information Technology Division has passed processes of assessment, auditing and monitoring conducted by Lloyd's Register Quality Assurance Limited (LRQA).

The selection mechanism adopted by the committee delegated by "Lloyd's Register," offering ISO (27001:2500) depend on accurate criteria, which include reviewing employees' acquired skills, training courses and workshops provided to them, as well as a detailed review of the policies and mechanisms of applied work procedures, so as to know how far requirements of the standard levels of Information Security are implemented. On this occasion, His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA said: "DEWA is committed to implementing the vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of UAE and Ruler of Dubai. His Highness's vision stresses the necessity of combining efforts

of all the departments so as to achieve Dubai's strategic plan for sustainable development through attracting the most state-of-the-art technologies and solutions and combining them into its various electronic operations."

"To achieve its vision to be "a recognized World-Class Utility" and in support of the electronic integration in all services, DEWA relies on implementing the most up-to-date criteria necessary to keep pace with developments in the field of e-services, especially Information Security. This world approved system manages Information Security of Information Technology and Risk Management related to the procedures of safeguarding data and assets, which in turn sheds light on its compliance with quality enforcement so as to achieve the highest criteria in its various operations," His Excellency further added.

DEWA takes pride in its achievements in the field of e-services provided to its customers. The percentage of the accomplished transactions via the internet reached 546,489 in 2010. DEWA's continuous keenness and interest to provide and develop its services has enabled it to obtain several awards and certifications, including the Best IT Division Award 2010 in the Middle East offered by CAN Magazine specialized in the field of IT, Middle East 16th Excellence Award for government and e-services as the best corporation in providing e-services 2011 offered by Datamatrix, and finally Government Application Award 2011 in Social Communication for its applications of smart phones and devices because of its excellence in the field of achievements and innovations in government and e-services.

Nakheel Properties honors Dubai Electricity and Water Authority



Nakheel Properties' Board of Directors has honored Dubai Electricity and Water Authority for its efforts to provide the electricity and water needs of Nakheel projects. His Excellency Saeed Mohammed Al Tayer, MD & CEO, has received The Honorary Shield from His Excellency Ali Rashid Lootah, Chairman of Nakheel Properties, in a ceremony attended by

a number of officials from both sides. His Excellency Saeed Al Tayer, MD & CEO of DEWA, expressed his pleasure for this recognition. HE further stressed the importance of promoting collaboration between DEWA and Nakheel in different fields of mutual interest so as to serve national economy. On this occasion, His Excellency Ali

Rashid Lootah, Chairman of Nakheel Properties, said: "This successful collaboration reflects the importance of implementing the vision and making it a reality. We are really delighted because of the continuous efforts between Nakheel and DEWA to deliver and streamline services in compliance with the requirements of Nakheel's existing projects."

Dubai Electricity and Water Authority wins "Investor In People" Award – Gold Category

Dubai Electricity and Water Authority has won "Investor in People" Award – Gold Category after having successfully passed the successful evaluation process conducted by the Awards Evaluation Committee in the UK during June 2011. DEWA has been selected among six winners from outside the UK, and the first in the Middle East. This Award is regarded as an international criterion, which relies on

determining the level of distinguished participation of training and development through human resources with the purpose of achieving the objectives of business. It's noteworthy that the award evaluation process is comprised of three stages; planning, implementation and review. Planning comprises preparing strategies to improve performance, business strategy, learning and devel-

opment, human resources management, leadership and management. Implementation includes performing procedures so as to improve performance. These procedures include effective management, appreciation, awards, participation and empowerment, learning and development. Review is based on evaluating and improving performance, measuring performance and continuous improvement.



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Laila Abdullah for "Distinguished Female Employee" Category



Faisal Abdul Khaliq Mohammed for nationals' Category

Dubai Electricity and Water Authority has honored 19 of its distinguished employees within the two categories – Distinguished Employee Award and The Best Cable Jointer Award for the 1st quarter of 2011 during a ceremony held at its Headquarters at Zabeel East. His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA, accompanied by Maryam Al-Mutaiwei, Senior Manager of Personnel Management – HR Division, honored the employees, with DEWA's senior officials and employees in attendance.

During the ceremony, Nabil Abdu Malik Ahli received – Distinguished Employee – DEWA, Tariq Hussain Amin – Distinguished Employee Finance, V Nazeer Ahmed – Distinguished Employee - Specialized Fields, Sivakumar Sithambaram won first place of Distinguished Employee – Technical / Engineering, and Imran Haider Chattha won the second place for the same category.

Walter Devaraj Martin De Porre was awarded Distinguished Employee - Field Services, Layla Abdulla Ali Sultan and Shamsa Matar Humaid Al Muhairi – Distinguished Employee – Female, Chandradasan Cherungottlile – Distinguished Employee – Supervisory Jobs, Abdul Hakkeem T K – Distinguished Employee – Unknown Soldier, Fatma Abdulla Albalooshi – Distinguished Employee – New Recruit, Faisal A Khaliq Mohammed Ali and Abeer Qambar Almaazmi – Distinguished Employee – UAE National, Leopoldina Fernandes – Distinguished Employee – Secretary, and Islam Fakhri Mohammed – Distinguished Employee – Creativity.

His Excellency Saeed Mohammed al Tayer recognized the winners of The Best Cable Jointers from Projects Execution Department and Distribution – Power Division, including Mohammed Kaippally, Abdul Samad Thayath, and Venkata Sai Babu Konda.

Maintenance Department organizes a luncheon for its staff

Water Maintenance Department has organized a luncheon for its staff at Atlantis The Palm Hotel – Dubai. This luncheon was attended by a number of managers from Water & Civil Engineering Division, managers of Maintenance Department, as well as management staff.



HR DIVISION ORGANIZES 7 DISCUSSION SESSIONS FOR NATIONAL EMPLOYEES



In line with its new innovative initiatives to communicate with national employees, the Human Resources in Dubai Electricity and Water Authority organized seven discussion sessions up to this moment confirming the success of this initiative for attracting national employees from different departments.

During these sessions, several positive suggestions were discussed to improve services and develop the performance of national staff to reflect on DEWA and its activities. During these sessions, the officials of the Human Resources Division answered the questions of the employees and confirmed the continuation of such session to promote communication and work relations among the employees of DEWA and Human Resources Division.

A Fun Day for Transmission Services Department

In line with its own social communication initiative, the Transmission Services Department, DEWA organized a Fun Day for its employees in Dubai Hotel on Saturday 17/9/2011 attended by a number of DEWA's senior directors, engineers and staff.



Eng. Khalid Al Roken

Senior Manager – Transmission Commissioning:

We have a shortage in the numbers of qualified national staff and we are working hard to attract and maintain qualified labor

He has the power of leadership, power, and determination that enabled and qualified him to gain the trust of his superiors who appointed him as Senior Manager, Transmission Commissioning in DEWA. After six years of hard and continuous work, he convinced all with his capabilities and powers, and attracted the attention of the senior management. The SOURCE magazine interviewed Engineer Khalid Al Roken to talk about his work in DEWA and the services provided by his Department.

What are the responsibilities of your job and how important are they?

My word responsibilities are divided into two parts: the first one is to supervise the execution of projects related to main power plants in the Emirate of Dubai and the commissioning of the equipment used in these plants. The second part of my duties is administrative assignments and it's related to administrative personnel and working on any obstacles preventing employees from performing their duties or affecting the achievement of DEWA's objectives.

How did you get to your current position? What are the challenges your department faces?

I started my career in DEWA as a trainee engineer. Then, I was appointed as an engineer. Later on, I was promoted to Head of Section, and Assistant Department Director. In 2005, I was appointed as Director of the Transmission Plants Department. As for the challenges that face our department, the lack of highly qualified and trained staff is considered our major challenge, especially the national expertise in light of continuous attracting of trainee engineers by other entities working in the same field. This constitutes a huge burden on our staff especially with the difficult work environment and working on high voltage networks.

What are these difficulties are located and how can you overcome them?

These difficulties were emerged due to the imbalance in economic growth and the large number of projects in the Emirates of Dubai, the outcomes of education and the number of new qualified human resources. This led to a "hidden war" among entities and companies to attract highly qualified electrical engineers. We could have encountered a huge and complicated problem thanks to the relative economic stability after the remarkable rate of growth in the past few years.

What are the key projects achieved during your management and how many plants do you have in the Emirate of Dubai?

The huge and increasing economic growth has increased the demand on electricity and therefore, the production capacity of plants was increased. Before 2005, we had 40 main plants and during the next six years 120 plants were added with the cost of AED 12 billion where the total number of main plants reached 160 high efficient power plants.

How many staff are working at your Department and how do you describe the relations between the director and his employees?

We have six sections operated by 114 female and male engineers and administrators. As for the second part of the question, we are all working as a team and each employee is doing his job on the right way and this help removing all differences that might separate between the management and employees. Everyone in my Department is working hard with the values of compassion and dedication.

You have mentioned female employees at work, do you think that women have proven themselves in performing hard work?

Women have not just proven themselves in the workplace, but have outperformed men sometimes. In our department we have highly-qualified and hardworking female engineers that made us convinced about the role of women as key partners in community development. For example, we have in our Department a national female engineer who is driving every day from Ras Al Khaimah to Dubai for work and she has not taken any vacation for three consecutive years. Also, there are many hard working and dedicated female employees.

What are the achievements of your Department that enabled DEWA to win awards?

We have launched 120 new plants which are fully operating without interruption, errors or malfunction. This is considered a great achievement and success and we are also proud to say





We operate 160 plants of which 120 plants were implemented during 6 years with an investments amounted to AED 12 billion.

partment has won awards related to best suggestions that assist DEWA to save millions of dirhams per year.

What's your impact on your work place?

The success imprint in any work is to gain employees' satisfaction and for me, the true success is the stratification smile

on the faces of my employees due to good treatment and non discrimination between them.

What do you want most to achieve both in your career and personal life?

I hope that our Department is supplied with a large number of highly qualified national engineers and that the Engineering Division will cover the needs of this sector and that our Department is transformed into an independent government entity which runs local,

regional and international projects. At the personal level, it's enough for me to be loved and respected by other people.

What is the role of your family in your life?

My work kept me busy and away from my family. However, my affectionate wife has successfully managed to bridge this gap and raised my six children in an excellent manner. She has all the credit, in addition to my mother who also played a major role in raising them.

Is anyone in your family also looking to be engineers?

Soon, we will have two engineers in the family, the first is my niece who is already studying electrical engineering in the second year and she always says, "I want to be like my uncle Khaled." The second is my daughter Alia who is wishing to pursue her study in engineering after finishing the secondary education.

Do you have any advice you would like to share with us?

My advice is to follow the Holy Qur'an and the traditions of his Messenger. This was the advice of my father to me since I was a child and I say if every Muslim applies this advice, our ethics would be better and we will be the leaders of the world.



His Excellency MD & CEO of Dubai Electricity and Water Authority is an official speaker at

"Ideas Arabia 2012"



HE Saeed Mohammed Al Tayer while receiving participation shield at the conference

Being keen to attract best expertise in the world of suggestion systems, during the "Arabian Ideas 2011" Conference, Dubai Electricity and Water Authority hosted Tom Dobry, a member of the Board of "Ideas UK" and one of the key speakers who chaired some workshops and sessions, which took place at the three-day conference. DEWA has participated in the conference, as a main sponsor, for the third consecutive year.

His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA stated: "DEWA's participation in this conference comes in line with the vision of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, which aims to disseminate innovation as being a culture that must prevail our society. Every year, we discuss and tackle the best practices and trends either present or future related to the systems of sugges-

tion."

"DEWA participates in the conference every year to closely look at and be acquainted with everything related innovation and creativity that participants raise, the requirements to achieve this as it is necessary to equip employees with everything necessary including training in the systems of suggestion and stimulating employees to work harder to reach innovation and creativity. DEWA encourages its employees to participate in its suggestion system "Tawasol" and to offer their innovative suggestions," His Excellency added.

During an internal training workshop with DEWA's employees, Dobry has reviewed the importance of the benefits which organizations achieve through implementing the systems of suggestion and rewards so as to ensure quality and activate

the bases of innovation and excellence in performance.

On his part, Dr. Yossef Al Akraf, VP- HR Department, said, "This sixth consecutive edition of the conference is solid proof of its striking success, which emphasizes the importance of innovation and creativity and that all DEWA staff must possess them."

Fatima Deemas, Sr. Manager of Employees' Relations – HR Department, and Vice Chairperson of the Executive Committee of "Arabian Ideas" said, "DEWA intends to realize some objectives out of participation in such conference including exchanging visions and knowledge and keeping pace with the latest developments of suggestion systems world. It also seeks to realize and disseminate awareness of the importance of suggestions in facilitating procedures, achieving the best results for DEWA, and providing its employees with all needs including training, stimulating campaigns, and rewards to encourage them to effectively participate in the suggestion system "Tawasol".



During the workshop

During his discussions with a US visiting delegation An invitation to Al Tayer to look at the US projects of diversifying sources of energy ...



His Excellency Saeed Mohammed Al Tayer, Vice Chairman of the Dubai Supreme Council of Energy, has discussed with Michael C. Camunez, Assistant Secretary of Commerce, U.S. Department of Commerce, USA, the partnership and projects intended for diversifying sources of energy, especially renewable and alternative sources. His Excellency Saeed Mohammed Al Tayer welcomed the delegation and stressed the importance of coordination and collaboration among different parties concerned with commerce.

"We have explored the responsibilities of Dubai Supreme Council of Energy which works in line with the vision and perspective of energy sector and its sustainability in the Emirate of Dubai. Further, we have discussed all issues related to partnership, commercial, economic and financial dealings through establishing and promoting a long-term partnership in the field of energy. The US delegation has invited us to visit the USA to foster the frameworks of collaboration between the two sides and look at their projects in this field. Besides, we have tackled the projects of diversifying sources of energy, especially renewable and alternative sources including solar energy projects," said His Excellency.

Al Tayer and Lootah discuss infrastructure projects in Dubai



His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA received in his office His Excellency Hussain Nasser Lootah, Director General of Dubai Municipality. The two sides discussed infrastructure-related projects in the Emirate of Dubai.

HE Saeed Mohammed Al Tayer MD & CEO of DEWA welcomed his guest briefing him on DEWA's activities and work, the constant progress of its services, and emphasized that DEWA is keen to promote high-level collaboration and coordination with Dubai Municipality. On this occasion, HE Saeed Mohammed Al Tayer said, "In line with the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, regarding combining efforts in all government departments, organizations and agencies to optimize their performance in terms of excellence and integration, DEWA is relentlessly working to establish communication with all government departments, especially Dubai Municipality."

Al Tayer invites Korean companies to participate in privatization of power production and water desalination



His Excellency Saeed Mohamed Al Tayer, MD & CEO of Dubai Electricity and Water Authority, received in his office a delegation from the South Korean company Samsung - Engineering and Construction. The delegation was presided by Mr. Howard Kim, EVP and Director of the company in MENA. The delegation briefed HE Al Tayer on the company's services which are based on engineering and construction projects, as the company was one of the most salient companies which participated in building Burj Khalifa in Dubai.

HE Al Tayer said: "This meeting aims to promote strategic cooperation between DEWA and Samsung with the participation of the South Korean companies in privatization projects to produce electricity and water.

At the end of the visit, the delegation extended their thanks to HE Saeed Mohammed Al Tayer MD & CEO of DEWA for the warm reception and the opportunities given to closely look at DEWA and its projects.

Libyan Minister of Electricity: Working at Dubai Electricity and Water Authority adds a lot to one's expertise and experience



H.E. Saeed Mohammed Al Tayer and Top DEWA officials with Dr. Awad Ebrik during the honoring ceremony

Dr. Awad Ebrik Ibrahim, Libyan Minister of Electricity and Renewable Energy in the Libyan transitional government, praised the UAE's attitude towards Libya and the support given, as well as the UAE's relentless pursuit to support this Arab nation.

Dr. Awad, who went back to Libya three months ago after nine years at DEWA, during which he held the post of Vice President - Power Transmission Planning, said that he had made the best use of his past expertise and successful experiences he encountered while he was working at DEWA. Furthermore, Dr Awad said this helped him a lot to rehabilitate power generation plants in Libya, provide them with fuel on a regular basis, enhance power distribution grids, and handle power transformation plants after the damages they had exposed to as a result of the military operations.

Dr. Awad further added that his work at DEWA had qualified him to work under pressure to make rapid and remarkable achievements, especially during the challenging phase of providing power and water for the kick-off of sustainable development march in Dubai during past decade.

Finally, Dr. Awad stressed the fact that Dubai Electricity and Water Authority is one of the best places where one can acquire knowledge, learning and expertise. It is also a world-class utility and a story

of endless success - a good testimony to this is its world-wide reputation. DEWA always adopts unprecedented initiatives, implement state-of-the-art technologies, and qualify its manpower to pursue constructive plans. He also said that his experiences at DEWA had really enriched his scientific and practical life.



H.E. Saeed Mohammed Al Tayer while honoring



8 Dubai Electricity and Water Authority launches main transformation substations at a cost exceeding one billion dirhams

Dubai Electricity and Water Authority going ahead with its development projects to raise and upgrade the power capacity of its infrastructure; to keep pace with the growth of demand for its services, to meet its aspirations to optimize these services so as to achieve efficiency and reliability.

HE Saeed Mohammed Al Tayer MD & CEO of DEWA stated: “DEWA’s efforts come within the framework of enhancing the efficiency of the grids to meet the growth of demand for DEWA’s services and going on with implementing its vital projects especially in the field of infrastructure. These efforts are in line with the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum which aim to consolidate Dubai’s

leading position in the region and enhancing its role as a world hub for economy and finance.” As part of this relentless pursuit, DEWA continues supporting its high voltage 400/132 KV transmission network. His Excellency Saeed Mohammed Al Tayer pointed out: “These substation apply and use the most state-of-the-art digital technologies of transformation substations, contributing to

promoting their efficiency and reliability. All these relentless efforts will eventually serve Dubai’s ambitious urban and economic plans in line with the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum which aim to consolidate Dubai’s leading position in the region and enhancing its role as a world hub for economy and finance.” Below are details of the newly launched projects and substations

Dubai Electricity and Water Authority launches a main transformation substation at Al Barshaa at a cost up to AED 400 million

As part of this relentless pursuit, DEWA continues supporting its high voltage 132/400 KV transmission network. It has launched a main substation with a transformation capacity of 202 Megavolt Ampere at Al Barshaa during the second quarter of this year. The cost of this substation is around AED 400 million so as to secure the ever-growing demand for electricity for different purposes. His Excellency said “With a cost up to AED 400 million, the project aims to extend enhance the capacity of DEWA’s grids of power transmission at Al Barshaa. DEWA has extended overhead lines at the length of 1200 m to join te lines connecting the main transformation substation at Al Barshaa with generation substations at Jebel Ali, whose length reaches around 43 Km. this will definitely optimize its efficiency and reliability and ensure an uninterrupted and stable power supply to all various segments of consumers at all times.” His Excellency Saeed Mohammed Al Tayer pointed out: “These substations apply and use the most state-of-the-art digital technologies of transformation substations, contributing to promoting their efficiency and reliability. All these relentless efforts will eventually serve Dubai’s ambitious urban and economic plans. Furthermore, there are still 5 transformation substations underway. Also, the existing substations in the grid are being developed through raising the transformational capacity and introducing the latest approved world technologies.”

Dubai Electricity and Water Authority launches a main transformation substation at Al Farjan to serve the newly planned areas

Dubai Electricity and Water Authority has launched a 132 KV main substation with a transformation capacity of 150 Megavolt Ampere at Al Farjan during the second quarter of this year. The cost of this substation

Saeed Al Tayer:

“These projects meet increase in demand, provide high reliability, apply most state-of-the-art technologies, serve development plans, and strengthen Dubai’s stand a world hub for economy”

is around AED 130 million so as to support power transmission grid with 11/132 KV so as to secure the ever-growing demand for electricity for different purposes in new areas so as to achieve the highest levels of reliability and efficiency. “With a cost up to AED 130 million, the project aims to extend and enhance the capacity of DEWA’s grids of power transmission to Al Farjan. DEWA has extended ground cables with capacity of 132 KV at the length of 10.20 Km to connect it to the main transformation substation 132/400 KV at the Gardens area. This will definitely optimize its efficiency and reliability and ensure an uninterrupted and stable power supply to all various segments of consumers at all times. This substation is part of the grid comprising the main 132KV transformation substation with transformational capacity of 150 MV/ Ampere north of Jumeirah Village, which was also launched during the second quarter of this year at a cost of AED 120 million,” His Excellency further added.

.. Dubai Electricity and Water Authority launches a main transformation substation at Jumeirah Village applying the most up-to-date world technologies

DEWA has extended ground cables with capacity of 132 KV at the length of 6 Kilometer to connect it to the 400/132 KV Am-

pere. This will definitely optimize its efficiency and reliability and ensure an uninterrupted and stable power supply to all various segments of consumers at all times

His Excellency Saeed Mohammed Al Tayer pointed out: “This substation applies and uses the most state-of-the-art digital technologies of transformation substations, contributing to promoting their efficiency and reliability. Furthermore, there are still 43 transformation substations with capacity of 132 KV underway. Also, the existing substations in the grid are being developed through raising the transformational capacity and introducing the latest approved world technologies.”

Transformation capacity of the main transformation substation at Jebel Ali airport station is 150 Megavolt Ampere

Dubai Electricity and Water Authority has launched a main 132 KV substation with a transformation capacity of 150 Megavolt Ampere at Jebel Ali Industrial Area (Al Maktoum Airport for Freight – Dubai Airports Company). DEWA continues with implementing its developmental projects to raise and upgrade the power capacity of its infrastructure to keep pace with the growth of demand for its services and to meet its aspirations to optimize these services so as to achieve efficiency and reliability. This new substation has been connected to DEWA’s power transmission grid so as



■ Projects

to secure the ever-growing demand of electricity to Al Maktoum Airport.

A substation for Falcon City in compliance with DEWA's specifications and connected to its grid

Also, Dubai Electricity and Water Authority has launched a 132 KV main substation with a transformation capacity of 150 Megavolt Ampere dependant to Falcon City at Dubai Land during the second quarter of this year. The new substation is connected to DEWA's power transmission grid so as to secure the ever-growing demand for electricity for different purposes in the area.

His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA said: "DEWA spares no effort to support 132/11 KV power transmission grid so as to enhance the efficiency of grids to meet the growing demand for DEWA's services."

"The project aims to enhance the capacity of DEWA's power transmission grids to Dubai Land. 132 KV ground cables were extended at the length of 500 meter to join 132 KV ground cables, which connect the 400/132 KV main transformation substation at Warsan and 132/11 KV/ Ampere main transformation substation at Al Brary, which reaches a

Costs:

- Al Barshaa substation - 400 million dirhams

- Al Quoz, Warsan and Al Qusais Centres – 259 million dirhams

- Consulate Area substation – 135 million dirhams

- Al Farjan Project – 130 million dirhams

- Jumeirah Village project – 120 million dirhams

- Hatta Substation – 140 million dirhams

length of 15 km. this will definitely ensure uninterrupted and stable supplies to all customers," His Excellency further added.

His Excellency pointed out: "This substation, which is in line with the approved specifications of DEWA substations, is equipped with the most up-to-date digital technology so as to contribute to enhancing its reliability and efficiency."

.. a main transformation substation at Consulate area, Bur Dubai

Dubai Electricity and Water Authority has launched a 132 KV main substation with a transformation

capacity of 150 Megavolt Ampere Consulate area, Bur Dubai during the second quarter of this year. The cost of this substation is around AED 135 million.

"With a cost up to AED 135 million, the project aims to enhance the capacity of DEWA's grids of power transmission to Bur Dubai. DEWA has extended ground cables with capacity of 132 KV at the length of 14 Kilometer to connect it to the 400/132 KV Ampere. This will definitely optimize its efficiency and reliability and ensure an uninterrupted and stable power supply to all various segments of consumers at all times," His Excellency further added.

a main transformation substation at Hata connected to Al Aweer substation

Dubai Electricity and Water Authority launched last July a 132 KV main substation with a transformation capacity of 150 Megavolt Ampere at Hata

"With a cost up to AED 140 million, the project aims to extend enhance the capacity of DEWA's grids of power transmission to Hata. DEWA has extended ground cables with capacity of 132 KV at the length of 300 metre to connect it to the 132 KV overhead grid connecting the main transformation substation at Hata with the main transformation substation at Al Aweer, whose length reaches around 115 Km. This will definitely optimize its efficiency and reliability and ensure an uninterrupted and stable power supply to all various segments of consumers at all times," His Excellency further added.

At a cost up to AED 85 million Dubai Electricity and Water Authority launches a main transformation substation at JLT

Dubai Electricity and Water Authority has launched a main 132 KV substation with a transformation capacity of 150 Megavolt Ampere at Jumeirah Lake Towers. The cost of this substation is around AED 85 million. DEWA continues with implementing its developmental projects to raise and upgrade the power capacity of its

A main transformation substation at Al Maktoum Airport

infrastructure to keep pace with the growth of demand for its services and to meet its aspirations to optimize these services so as to achieve efficiency and reliability.

"With a cost up to AED 85 million, the project aims to enhance the capacity of DEWA's grids of power transmission to Jumeirah Towers and Jebel Ali Industrial Area. DEWA has

extended underground cables with capacity of 132 KV at the length of 21 km to be connected with the main 400/132 KV transformation substation. This will definitely optimize its efficiency and reliability and ensure an uninterrupted and stable power supply to all various segments of consumers at all times," His Excellency further added.

His Excellency Saeed Mohammed Al Tayer pointed out: "These substations apply and use the most state-of-the-art digital technologies of transformation substations, contributing to promoting their efficiency and reliability. All these relentless efforts will eventually serve Dubai's ambitious urban and economic plans. Furthermore, the existing substations in the grid are being developed through raising the transformational capacity and introducing the latest approved world technologies."

Control Centers at Al Quoz, Al Qusais and Warsan

Dubai Electricity and Water Authority continues steadily carrying out its vital projects such as the Electricity SCADA Distribution Control Centers (DCC) at Qusais and Warsan and Transmission Control Centers (TCC) at Al Quz and Warsan to meet the growing needs of the Emirate of Dubai, and to support the projects of production and development in different fields.

The works include building two DCC centres at Al Qusais and Warsan at the cost of AED 150 million, as well as two TCC centres at Al Quoz and Warsan at a cost up to AED 109 million.

His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA said: "We go steadily with our developmental projects to provide the necessary resources of electricity so as to meet the ever-increasing needs of the Emirate of Dubai in various fields. In this regard, DEWA is setting up such centres in order to effectively control Power transmission and distribution grid in the Emirate of Dubai."

"Constructions of two identical Control Centers for Distribution Network at Qusais and Warsan in multisite configuration with associated facilities started in 2008. While in 2009, we started construction works for two transmission control centres with the capacity of 132 & 400 KV at Al Quoz and Warsan. Each Control Centre is designed to control and monitor specified region but ready to take over the control of entire distribu-



tion network at any time or in case of one control center fails," His Excellency further added.

His Excellency pointed out that DCC Qusais building has been completed and parts of SCADA Network Department and Distribution Operation Offices have been shifted. Control Room and associated technical rooms works have been completed. Final Preparation for SCADA System acceptance test is in progress. Major part of field works also completed. At Warsan, DCC system equipment have been installed. Commissioning activities are in progress.

His Excellency concluded: "Each centre comprises a main control room including 7 workstations, a hall designated for the system of control simulation for the purpose of training, rooms for equipment, rooms for the staff and multipurpose halls. The approximate total cost of the two centres is AED 259 million. Commissioning works of both TCC and DCC projects are in final stages and it is estimated that the two Transmission and Distribution Control Centers will be in operation by December 2011.

Major achievements in the project of water transmission network

Dubai Electricity and Water Authority has achieved, since the last July, 35.8 km of water pipelines at ranging from 1200 mm and 600 mm, out of the total extensions of 43.75 km, so as to connect pumping station at Al Quoz with various areas in Dubai. This step is part of DEWA's strategic plan to enhance the operational efficiency of its water networks to meet the ever-increasing demand for water.

The project is intended to extend and commission water transmission networks with 1200 mm diameter, and other pipelines with 600 – 900 mm diameter along Maskat Road, Nakheel Road, Al Aweer, Nad Al Hamra and Ras Al Khor. Moreover, the project covers areas of Business Bay and Oud Metha, and it also includes supplying water to Dubai Marine City through Sheikh Zayed Road.

HE Saeed Mohammed Al Tayer MD & CEO of DEWA stated: "DEWA is seeking to raise both efficiency and operational capacity of its water networks so as to meet the growth of demand in a way that can contribute to Dubai's march towards sustainable development."

The cost of the project amounts to 416 million dirhams. Works of the project started on 15th June, 2008, and it is expected to be finished and commissioned during December of current year.

MD & CEO of Dubai Electricity and Water Authority explores construction works of Control Centers for power distribution and transmission at Warsan

His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA, has explored the current works at Warsan Compound, which comprises two buildings; one building for power distribution control with the capacity of 33 and 11 KV, and the other for monitoring and controlling power generation and transmission with the capacity of 400 and 132 KV, as well as an administrative building. The two centres will work simultaneously, as control in the two buildings will be conducted separately according to areas. Moreover, each centre will receive monitoring signals from the entire Dubai Electricity Grid.

Accompanying His Excellency on his trip were Abdullah Obeidullah, EVP – Water & Civil Engineering, Mohammed Al Shamsi, Sr. Manager – Civil Engineering Projects, and Arif Abdulkarim Julfar, Media & Marketing Manager.

DSCE delegation finishes a successful visit to UK



A group photo during H.E.'s visit to London

The Supreme Council of Energy (DSCE) delegation, led by HE Saeed M. Al Tayer, Vice Chairman of DSCE completed successfully the visit program in London on Thursday 20th October, 2011 and achieved the objectives to gain insights on UK PPP experience, learning and best practices, and exchange views on the challenges and opportunities in Energy Strategy implementation with UK Government representatives and private sectors.

HE. Ali Al Owais, Chairman of the Board, Regulatory Supervisory Bureau for Water and Electricity; Mr. Nejib Zaafrani, Secretary General and CEO, Dubai Supreme Council of Energy (DSCE); and Mr. Waleed Salman, Chairman of Dubai Carbon Centre of Excellence and DSCE Board Member were part of the delegation.

His Excellency Saeed Al Tayer expressed on behalf of Dubai Government and the DSCE delegation the sincere appreciation to the UK Government entities and the business community for the fruitful and valuable open discussions on PPP and energy that took place during the three day visit.



HE Saeed Al Tayer with Lord Mayor, while exchanging souvenirs, with Ali Al Owais, Nejib Zaafrani, and Waleed Salman in attendance.



Dubai Supreme Council of Energy discusses Dubai Integrated Strategy 2030, and considers appointing a consultant for natural gas-based energy



The council has reviewed, in its 12th meeting, the latest updates and developments related to implementing Dubai's Integrated Strategy of energy 2030. This strategy includes all the requirements and elements that can serve the council and the government's aspirations. Further, we have focused on the effective policies in the field of energy, diversifying its sources, as well as demand management and resources sustainability

His Highness Sheikh Ahmed bin Saeed Al Maktoum, Chairman of Dubai's Supreme Council of Energy chaired the 12th meeting of the council at DEWA's Headquarters, with His Excellency Saeed Mohammed Al Tayer, Vice Chairman of the council, and the Secretary General and CEO of the council, in attendance.

Al Tayer: Initiating the plan of converting to gas in 2012

"In line with the strategy of the SCE regarding management of energy demand, it has been agreed to continue

with Dubai Integrated Gas Plan 2030, which is in compliance with Dubai Integrated Strategy of Energy 2030. The plan, which deals with pipelines of liquidated natural gas, and storing it underground in the second quarter of 2012 will be initiated. This plan aims to apply all possible means so as to meet the increasing demand for

energy," HE further added.

HE pointed out that all the measures of conserving energy consumption, which has been applied in all the authorities working under the SCE, have been tackled. These procedures include adjusting air conditions to 24 degrees centigrade during office timings and raising it to 27 degrees centigrade after working hours, switching off lights and apparatus after working hours, replacing traditional lights with other high efficiency ones, in addition to using solar energy for heating water.

His Excellency concluded: "We have also reviewed some practical cases and examples of conserving electricity consumption, and paying great attention to power consumption by implementing green buildings' standards in Dubai in residential, business and industrial buildings. These examples comprise conserving the consumption of AC's, lightning, and electrical apparatus and water. The best policies and practices related to conserving power consumption and raising the awareness of both customers and the society will be implemented. We aim through this to decrease demand for energy, and consequently reduce the carbon dioxide emissions at 30% by 2030."

His Excellency Saeed Mohammed Al Tayer, Vice Chairman of the Dubai's supreme Council of Energy (DSCE) chaired the 13th meeting of the council at DEWA's Headquarters. The Council has discussed, the latest updates and developments in the field of energy, especially solar energy. Also, the Council has approved a number of projects and initiatives and discussed the financial mechanisms and funding pertaining to the implementation of Dubai's Integrated Energy Strategy 2030. In this regard, the Council agreed on appointing a consultant for the connection of renewable resources generation to the distribution and

transmission system in order to develop the technical, regulatory and economic framework in relation with these connections.

"The Council reviewed the progress of the tender preparations to appoint before end of the year, a specialist consultant to develop Dubai's Integrated Gas Strategy 2030 (DIGS 2030) which is in compliance with Dubai's Integrated Energy Strategy 2030. The strategy will cover the supply of gas pipelines, Liquefied and Natural Gas (LNG) combined with underground gas storage, the delivery of the DIGS 2030 is planned for the second quarter of 2012. The plan also aims to search for all different methods and sources to meet the increasing demand for energy." HE said.

The Council reviewed also the extension of the closing final date for receiving bids for the Independent Power Project of Hassyan-1 till December, 2011, on the basis of requests received from some bidders. The current plan for the selection of the successful bidder and signing of the Power Purchase Agreement will be by the second quarter of 2012. This reflects how serious and keen the bidding companies are.

The Council has also reviewed the progress of the feasibility study for the first clean coal fired power plant, along with the requests for proposals, and the assessment and development of new regulatory elements for clean coal-based power plants and finally the Dubai's Supreme Council of Energy approved the 2012 budgets.

Conservation procedures include:

- adjusting temperatures
- adjusting AC temperatures
- switching off lights and devices
- replacing traditional bulb lights
- using solar energy

DSCE signs an MOU with UNDP



His Excellency Saeed Mohammed Al Tayer, Vice-Chairman of Dubai Supreme Council of Energy, and Dr. Elisar Sarouh, UN Resident Coordinator and UNDP Resident Representative in the UAE, have signed a Memorandum of Understanding to provide a regulatory framework and facilitate collaboration between the two entities. This MOU aims to promote sustainable development in Dubai and the Gulf region through organizing and hosting next year in Dubai "The Sustainable Arabia Conference" under the patronage of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai. It also aims to develop and update an e-portal for reducing carbon emissions.

This MOU comes as part of the preparations for the forthcoming United Nations Conference on Sustainable Development (UNCSD / Rio 20), as UNDP addresses global challenges of climate change and environmental sustainability related to the integrated policies and frameworks so as to provide safer and low-carbon sources of energy.

"Both of us have agreed to coordinate for organizing and hosting in Dubai "The Sustainable Arabia Conference" intended to be held in March 2012. This Conference aims to promote sustainable development and update the e-portal for monitoring carbon emissions. This will definitely enhance Dubai's transition to a low-carbon economy in view of the preparations for the forthcoming United Nations Conference on Sustainable Development (UNCSD / Rio 20)," His Excellency further added.

The first of its kind in the region Dubai carbon Center of Excellence an environmental initiative for a sustainable development

His Excellency Saeed Mohammed Al Tayer, Vice-Chairman of DCCE said, “DCCE, which is the first of its kind in the Middle East in terms of specialty in fields of carbon emissions reduction, provides cutting-edge expertise aiming to develop eco-friendly initiatives and assuming an effective role for a cleaner and purer environment, that can strengthen development plans.”

“DCCE works correlatively to strengthen Dubai’s capabilities in the field of reducing carbon emissions through the mechanism of clean development. The issue of reducing carbon emissions has become one of

the most serious problems which the world faces due to its negative impacts on the environment, economy and quality of life,” His Excellency further added. His Excellency Saeed Mohammed Al

Tayer, Vice Chairman of Dubai Supreme Council of Energy, received Dr. Alissar Sarrouh – representative of UN Secretary General, and resident representative of the United Nations Development Programme in the UAE in the



Waheed Salman while receiving Jordan Johnson

presence of Engineer Waleed Ali Salman, Chairman of Dubai Carbon Centre of Excellence (DCCE). This meeting aims to foster strategic collaboration between Dubai Supreme Council of Energy and the United Nations Development Programme, especially in the field of reducing carbon emissions.

His Excellency Saeed Mohammed Al Tayer, Vice Chairman of Dubai Supreme Council of Energy stated: “The meeting has focused on ways of promoting mutual collaboration and future projects to deal with carbon emissions in the Emirate of Dubai. Dubai Supreme Council of Energy signed a Memorandum of Understanding with United Nations Development Program to establish Dubai Carbon Centre of Excellence (DCCE), which is the first of its kind in the region in the field of reducing carbon emissions via the mechanism of clean development. Reducing carbon emissions has become one of the topics that receives great attention due to their negative impacts on the environment, economy and quality of life.”

DCCE was set up as a mutual project between public sector and private sector. This centre encompasses Dubai Electricity and Water Authority, Dubai, ENOC and Istidama. This Centre aims to push forward the wheel of projects during the last years of the

KYOTO Protocol. DCCE is regarded as the first of its kind in the region, and it aims to make the best use of carbon in the Emirate of Dubai through the mechanism of clean development, and implement the best practices in the field of reducing carbon emissions. Dubai Carbon Centre of Excellence is a key component of the Dubai Supreme Council of Energy, which spares no effort to develop an economy based on sustainable energy. DCCE was launched in 2011 as per the directives from His Highness Ahmed bin Saeed Al Maktoum, Chairman of Dubai’s Supreme Council of Energy, through an agreement executed between the Dubai SCE and the United Nations Development Fund.”

Within the framework of mutual collaboration between Dubai Carbon Centre of Excellence (DCCE) and the United Nations Development Programme in the UAE, Engineer Waleed Ali Salman, Chairman of DCCE received Jordan Johnson, deputy of resident representative of the United Nations Development Programme in the UAE, person in charge of carbon activities, who has just assumed his office in the UAE. The two sides discussed the latest developments and updates regarding carrying out projects between DCCE and UN Development Programme. Also, ways of developing

and expanding the fields of common collaboration between the two sides were tackled.

“This meeting comes within the framework of common collaboration to address the risks of climate changes and their negative impacts on natural resources as well as the initiative of clean development mechanism. Dubai Carbon Centre of Excellence (DCCE) will provide the best expertise to determine the eco-friendly initiatives and play an effective role to provide a clean environment both locally and regionally. There will be incentives to encourage big companies in Dubai to comply with reducing their emissions, provide consultancy on carbon emission projects, and achieve “carbon neutral” to meet the needs of the emirate of Dubai as well as the region.

The initiative of “Dubai Carbon Centre of Excellence (DCCE)”, which was launched in November 2009 with the participation of investors from different sectors and in collaboration with UN Development Programme within the framework of facilitating Dubai’s trends towards an economy in which carbon emissions are environmentally, economically and socially minimized, and at the same time responding, in an unprecedented way, to Dubai’s international responsibilities to meet climate changes.





GRAND HYATT DUBAI

Dubai Electricity and Water Authority hosts a conference for bids of Hassyan 1 Independent Power Project
Al Tayer: we seek a strategic partnership with private sector to enhance power production and water desalination

In line with the strategy of the Government of Dubai aiming to support sustainable economic development, establishing unique relationships and partnerships with private sector, as well as building up a competitive base, The Dubai Electricity and Water Authority welcomed today at Grand Hyatt Hotel eighteen of the world's leading global power developers to Dubai for the pre-bid conference for the Hassyan 1 Independent Power Project.

Interest in the project remains strong with attendees representing companies from Japan, Korea, South East Asia, India, Europe, the USA and the GCC. This conference was attended by His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA, Abdullah Obeidullah, EVP – Water & Civil Engineering, Waheed Salman, EVP – Strategy & Business Development Division, as well as a big number of DEWA's employees.

During his speech, H.E. Saeed Mohammed Al Tayer MD & CEO of DEWA stated: "DEWA's achievements come in line with the directives of His Highness

Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to strengthen and consolidate Dubai's leading position as a world economic and financial centre. Efficient, modern and reliable infrastructure has always been one of Dubai's key strengths and attractions and is a pre-requisite for sustainable economic growth".

As Dubai looks to the future, the Emirate's development is guided by the 'Dubai Strategy 2015', a key theme of which is to build Dubai's future through prosperous and harmonious partnerships between the public and private sectors.

"Existing installed production capacity is 8519 Megawatt and 400 million gallons of desalinated water per day. To enhance this capacity, DEWA earlier this year formed an independent regulatory authority, the issuing of Law No 6 (2011) and the amendment to the DEWA decree in order to facilitate and encourage public-private partnerships in the power and water sectors. The Independent Power Programme is an inte-

gral part of DEWA's strategic direction moving forward. We look forward to building a unique and strong relationship with the private sector and adopting the best practices available internationally," H.E. Saeed Mohammed Al Tayer further added.

The Hassyan 1 Project is the first project under the Independent Power Programme launched by DEWA on 22 May 2011. Bidders are being invited to design, finance, construct and operate a new 1600MW gas fired power plant which will commission in phases through November 2014 to 2016 and will guarantee the future security of power supplies for the Emirate of Dubai. Tenders are due on 18th October 2011 with selection of the preferred bidder expected before the year end.

The programme furthers DEWA strategic vision to be "A world class regional utility through carefully selected strategic, commercial, technical and financial partnerships with the private sector" DEWA will retain a 51% ownership in the Hassyan 1 Project Company.

MD & CEO of DEWA, EVPS AND SENIOR STAFF USE PUBLIC TRANSPORT MEANS TO GET TO WORK



In line with the directives of His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to encourage the use of public transport means, to enhance its role in the Emirate of Dubai and to promote Dubai's vision for environment conservation and sustainable development, HE Saeed Mohammed Al Tayer, MD & CEO of DEWA accompanied by a number of EVPs and Senior staff used Dubai Metro to get to work on the occa-

sion of the Public Transport Day. On this Initiative, His Excellency said "This initiative aims to encourage employees to use means of public transport such as the metro, buses and marine transit to enhance a public-transport culture and raise awareness of its importance for users in particular, and for Dubai in general, and its role in reducing traffic congestion and attaining a sustainable environment through having an integrated solutions. The public transport system in Dubai constitutes

one of the major elements for improving the environment, reducing traffic congestions and saving resources that in return assist in supporting the sustainable development." Since the opening of Dubai Metro Green Line which serves DEWA through Dubai Healthcare City Station, DEWA is encouraging its employees to use the metro and promoting its benefits in terms of reducing the rates of carbon emissions from vehicle's exhaust which are harmful to the environment.



Financed by DEWA at the annual sum of 500,000 dirhams

DEWA sponsors University Chair in electrical engineering at the Higher Colleges of Technology

Promoting the relations of strategic partnership between Dubai Electricity and Water Authority and various educational institutions, and supporting the efforts aiming to serve development plans in line with the UAE ambitious vision based on the economy of knowledge, Dubai Electricity and Water Authority has signed a Memorandum of Understanding with the Higher Colleges of Technology. This MOU comes within the framework of providing valuable opportunities for colleges students as well as developing their skills in the sector of electrical engineering.

This MOU was signed, at DEWA's Headquarters, by His Excellency Shaikh Nahyan Bin Mubarak Al Nahyan, Minister of Higher Education and Scientific Research, Chancellor of the Higher Colleges of Technology, and His Excellency

Saeed Mohammed Al Tayer, MD & CEO of DEWA. This ceremony was attended by Dr. Tayeb Kamali, Vice Chancellor of the Higher Colleges of Technology, Dr. Yousef Al Akraf, EVP – Business Support, as well as a number of top official

from both sides

His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA said: "This MOU comes in compliance with the directives of His Highness Sheikh Mohammed



HE Shaikh Nahyan bin Mubarak during his tour at DEWA, with H.E. Saeed Al Tayer and other top officials.



Sheikh Nahyan bin Mubarak and MD & CEO with DEWA's Female employees

bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, which stresses the necessity of combining efforts among different authorities, bodies and departments so that government performance can reach the highest possible levels of integration and excellence. This can be achieved through improving and developing our human resources. DEWA aims to provide the students of the Higher Colleges of Technology with educational and training opportunities with the purpose of sharpening their skills in the sector of electrical engineering."

His Excellency concluded: "This MOU with the Higher Colleges of Technology is part of the strategy of emiratizing and qualifying jobs at DEWA, as we are keen to attract UAE youth and provide them with all necessary things so as to efficiently perform their jobs."

On his part, Dr. Tayeb Kamali, Vice Chancellor of the Higher Colleges of Technology, expressed his great delight for the signing of this MOU with DEWA. He added that such an MOU will achieve

two positive results – the first one is setting up a university chair in electrical engineering, and the second one is offering the programme of "Electrical Engineering Bachelor" at Dubai College. This MOU and the programme, which receive the sponsorship of such a UAE reputable organization, reflect the commitment of the Higher Colleges of Technology to set up professional partnerships with different organizations of the society with the purpose of promoting the educational process as well as providing students with opportunities to optimize their utmost potential capabilities," Dr. Kamali further added. On his part, Dr. Yousef Al Akraf, EVP – Business Support, pointed out: "Cooperation with the Higher Colleges of Technology has been going on for years now. This is apparent through the programme of "Electrical Engineering Diploma". According to this MOU, the Higher Colleges of Technology will launch a new academic programme – "A University Chair in Electrical engineering". This new programme will be fully financed by DEWA at a total cost of AED 500,000 per year. Students will be selected in compliance with the HCT's approved standards of admission."

Dubai Electricity and Water Authority finances a graduation project to make a wheelchair for the handicapped

In line with its responsibility towards UAE society, and in pursuit to foster constructive initiatives, Dubai Electricity and Water Authority has agreed to sponsor a graduation project of four students at Emirates University, Department of Mechanical Engineering, as part of the requirements of graduation for those students. The project is about making a voice-activated wheelchair for the physically handicapped. Stressing DEWA's social role, which constitutes a basic pillar of its strategy, His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA, said: "Our social role is multi-dimension and serves different segments of society. Spon-

soring such a graduation project is the culmination of many considerations; it aims to promote the innovative,

technical and creative sides of our students; it serves people with special needs; and it is one of the pioneering projects as it comprises the operations of designing and manufacturing an automatic device, which can be operated via voice instructions to move and guide a wheelchair for physically disabled people.

On his part, Dr. Yousef Al Akraf, EVP – Business Support, said: "DEWA has adopted this graduation project and donated around AED 33,000 - the costs of materials used, manufacturing, and testing the device. This project is of a prime importance as it serves an important segment of society, people with special needs. It also enables those people to be adjusted to their surroundings, and to do without help from other people".

The wheelchair can be operated via voice instructions

FROM MONACO TO BRISBANE
IN 250 DAYS

CROSSING 27,000 NAUTICAL MILES ABROAD A SOLAR BOAT



After a few months from the first successful international flight of a solar airplane Solar Impulse, a cruise journey was started for a boat powered by solar energy (Turner PlanetSolar) from Monaco to Brisbane, Australia via the Mediterranean, the Atlantic Ocean, and Panama Channel to the Pacific in 250 days.

Measuring 31 meters long and 15 meters wide, and weighing 60 tons and powered by 537-square meters of photovoltaic solar panels, Turanor PlanetSolar will circumnavigate the globe crossing 27000 nautical miles in its maiden voyage.

The Captain of the Swiss boat, Raphael Domjan said "After 250 days from the beginning of the journey, who started his journey from Monaco on September 2010 and docked the boat at Brisbane, Australia, this journey has proven the huge poten-

tial and potent opportunities of the solar energy as a renewable and reliable energy."

He added "During this journey, we have encountered severe atmospheric conditions where winds were strong (up to 40 knots) and the waves were 9 meters high as we are approaching Australia."

On the other hand, the Solar Impulse plane departed from Bayern Airport west of Switzerland and landed on Brussels Airport after 12 hours from departure.

Andria Bouchabragh, the pilot and Co-founder said about the flight of the solar plane, "We aim to demonstrate what can be achieved by available technologies in terms of renewable energy and the provision of energy indicating that technology using solar energy can be applied to provide cars and houses with energy. He added "It's a symbolic thing to move from one point to another using the solar energy.

The project "Solar Impulse" was launched in 2003 with a ten year

budget amounted to 90 million Euro (US \$128.6 million) in partnership with engineers from the Swiss lifts company "Schindler" and Sulvai Chemical Group, Belgium participated in the research.

The plane, which required 12,000 solar cells for its maiden flight, departed on April 2010 and after three months another flight was made for 26 hours which is considered a new record flying time for a solar powered aircraft.

The average cruising speed of Solar Impulse is 70 km/hour and it's a real threat to commercial aircraft which can easily go for ten times this speed.

The Solar energy is the light and

heat from the sun which form the majority of the renewable source of energy on earth in addition to the secondary sources of energy such as wind, waves, hydroelectricity and the biomass.

In fact, little amount of the solar energy provided by the nature was harnessed where electrical energy is generated by thermal or photovoltaic engines which are used in heating, cooling, distillation and disinfection of water.

The Earth receives 174 petawatts (PW) of incoming solar radiation (insolation) at the upper atmosphere. Approximately 30% is reflected back to space while the rest is absorbed by clouds, oceans and land masses. The spectrum of solar

light at the Earth's surface is mostly spread across the visible and near-infrared ranges with a small part in the near-ultraviolet.

Earth's land surface, oceans and atmosphere absorb solar radiation, and this raises their temperature.

Warm air containing evaporated water from the oceans rises, causing atmospheric circulation or convection. When the air reaches a high altitude, where the temperature is low, water vapor condenses into clouds, which rain onto the Earth's surface, completing the water cycle.

The latent heat of water condensation amplifies convection, producing atmospheric phenomena such as wind, cyclones and anti-cyclones. Sunlight absorbed by the oceans and land masses keeps the surface at an average temperature of 14 °C. By

Alternative energy



lar radiation, it absorbs the radiation and heated. This temperature can be used in heating, cooling, heating water, and power generation. The solar heaters are the most used application in the field of thermal transformation into solar energy. Solar dryers are used in drying agricultural crops such as dates. There are researches conducted to produce solar cooking ware inside the house instead of sitting under the sun during cooking.

photosynthesis green plants convert solar energy into chemical energy, which produces food, wood and the biomass from which fossil fuels are derived.

Solar technologies are broadly characterized as either passive or active depending on the way they capture, convert and distribute sunlight. Active solar techniques use photovoltaic panels, pumps, and fans to convert sunlight into useful outputs. Passive solar techniques include selecting materials with favorable thermal properties, designing spaces that naturally circulate air, and referencing the position of a building to the Sun.

Energy Transformation

Solar power can be transformed into electricity using photovoltaics (PV), or using solar power conversion. The transformation of solar energy by photovoltaics is to transform solar or light radiant directly into electrical energy through solar cells. It's known that there are some material which work as transformers of photoelectrics called semi conductors like silicon and germanium and other. This phenomenon was discovered by some physicists in the late

19th century where they found out that light can release electrons from some metals. They also knew that blue light has more capability over yellow light to release electrons. Einstein has won Nobel Prize in 1921 for explaining this phenomenon.

Several forms for solar cells were manufactured to produce electricity in a scientific method. These cells are featured with not containing movable parts and do not consume fuel, clean and durable and require low maintenance. The vest use of this technology under solar radiation unit (solar unit) without any concentrators or photo lenses, therefore they can be fixed on the roofs of building to generate power and they are efficient by 20%. The remains can be utilized in saving temperature for heating and water heating. The solar cells also used in operating various telecommunications, road lights and premises and pumping waters and others.

The thermal transformation of the solar energy relays on transforming the solar radiation into thermal energy through solar complexes (plates) and thermal materials. If a dark and insulated material is exposed to so-

Although the solar energy has acquired a significant position in terms of alternative sources of renewable energy, however, the use of solar energy is linked to the existence of the sun rays during its use as in the traditional energy. Therefore, we need methods of storing this energy to be used when needed.

There are several methods to store solar energy including the electrical thermal, mechanical, chemical and magnetic storage. Researches on solar energy storage are one of the major necessary areas of development in solar energy application. Solar energy is not accessible and not free. The actual cost of equipment used to transform the solar energy from electromagnetic into electrical or thermal energy and storing them if necessary. Despite these costs are higher than the cost of traditional energy production, it doesn't give a sufficient idea on its future as it's reducing thanks to researches.

Energy Storage

Thermal mass systems can store solar energy in the form of heat at domestically useful temperatures for daily or seasonal durations. Thermal storage systems generally use readily available materials with high spe-

cific heat capacities such as water, earth and stone. Well-designed systems can lower peak demand, shift time-of-use to off-peak hours and reduce overall heating and cooling requirements.

Phase change materials such as paraffin wax and Glauber's salt are another thermal storage media. These materials are inexpensive and readily available. The "Dover House" (in Dover, Massachusetts) was the first to use a Glauber's salt heating system, in 1948. Salts are an effective storage medium because they are low-cost, have a high specific heat capacity and can deliver heat at temperatures compatible with conventional power systems. The Solar Two used this method of energy storage, allowing it to store 1.44 TJ in its 68 m³ storage tank with an annual storage efficiency of about 99%. Off-grid PV systems have traditionally used rechargeable batteries to store excess electricity. With



grid-tied systems, excess electricity can be sent to the transmission grid. Pumped-storage hydroelectricity stores energy in the form of water pumped when energy is available

from a lower elevation reservoir to a higher elevation one. The energy is recovered when demand is high by releasing the water to run through a hydroelectric power generator.





DEWA ORGANIZES ENERGY-SAVING CAMPAIGN AT RTA

Within its comprehensive awareness campaign to promote a culture of reducing the consumption of water, electricity and environment protection, Dubai Electricity and Water Authority installed a prototype for an energy-saving house at the RTA's headquarter In Umm Al Ramool, Dubai. The representatives of DEWA explained the techniques of the energy-saving house and answered the visitors' questions and distributed booklets containing instructions for reducing electricity and water consumption at homes. They also distributed 55 saving cans containing two energy-saving bulbs and a set of Air Saturation Systems "Areators" free of charge over visitors to encourage them on the use of such products.



The carton prototype of the energy-saving house which is one of the creative means to promote the protection of the environment by reducing the consumption of water and electricity included

four components: the bedroom, living room, kitchen and bathroom. These components contain prototypes for electrical and electronic devices and instructions on how to use them.

Dubai Electricity and Water Authority participates in relieving victims of drought and starvation in Somalia

In line with the directive of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to relieve the victims of starvation in Somalia and the Horn of Africa, Dubai Electricity and Water Authority has launched a campaign for raising donations from its employees and customers.

DEWA has raised around 239,000 dirhams, in addition to a 500,000 dirhams cheque from WETEX which was submitted by His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA to His Excellency Ibrahim Bu Melha, Vice-Chairman, Board of Trustees for Mohammed bin Rashid Al Maktoum Humanitarian and Charity Foundation, at DEWA's Headquarters.

The campaign reflects DEWA's social solidarity and keenness to contribute to such campaigns in compliance with the directives of our judicious government and as part of the social initia-



tives programmes, which it adopts.

On this occasion, His Excellency Saeed Mohammed Al Tayer, MD & CEO of DEWA said: "We are pleased to take part in the wide humanitarian campaign to save the victims of drought and starvation in Somalia and the Horn of Africa, especially in the

holy month of Ramadan, the month of goodness and blessings, to offer help and relief the impacts of this serious humanitarian disaster, which afflicted our brethren in Somalia, which suffers from drought and starvation. We are keen to effectively participate in eliminating starvation and diseases."

Dubai Electricity and Water Authority Opens New Customer Service Centre at Jebel Ali Industrial Area



The opening of the new customer service centre, which will provide convenient and helpful face-to-face customer service and assistance regarding water and electricity matters, brings the number of dedicated DEWA centre's in the Emirate to 13 and is the second in Jebel Ali following the recent opening of the DEWA Centre at the General Directorate of Residency & Foreigners Affairs.

The opening ceremony, which took place on Thursday 16th June was attended by HE Saeed Al Tayer, Managing Director & CEO of DEWA, Abdulla Obeidullah, Executive Vice President- Water & Civil Engineering, Yousef Al Akraf, Execu-

tive Vice President – Business Support, Rashid Humidan, Executive Vice President – Power Distribution, as well as other DEWA top officials.

Commenting on the opening, Al Tayer said: "Opening this new centre comes in line with the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, which aim to facilitate and streamline the services delivered to customers of Government Departments. It is also part of DEWA expansion plans to increase our customer-facing services across Dubai. By addressing the needs of the city's growing population and

seeking to continuously improve our products and services quality DEWA is able to exceed customer expectations."

At the new centre in Jebel Ali the DEWA customer relations team provides a comprehensive range of services to residents and businesses seeking water and electricity assistance in Dubai, including registration of new customers, bill payment, clearance certificates, security deposit refunds, change of billing address, suggestions and a variety of other services. The Centre serves customers Sunday through to Thursday from 9am to 3:30 pm and it is close to Landmark Group in Jebel Ali Industrial Area.

DEWA launches Notification Push Service for smart phones

In line with its strategy to establish active electronic infrastructure and promote the use of electronic means, DEWA launched the Notification Push service for the users of DEWA's smart phones applications. This service en-

ables the sending of SMS via the new generation of internet networks to smart phones without additional cost.

Through this service, customers will be able to receive latest news, events and services provided by Customer Services

Centers, in addition to locate new sites of customer services offices, to introduce customers with various payment means, to communicate instructions with regard to energy saving, and more information with Arabic and English support.



Ergonomics

An Exercise Perspective

A lot has been said and read about ergonomics, some confusing, some too knowledgeable and some vaguely attributed to compliant facts. In simple words, Ergonomics is the science of designing the workplace environment to fit the user. Proper ergonomic design is necessary to prevent repetitive strain injuries, which can develop over time and can lead to long-term disability.

By: Dr. Romit Purohit
Manager Health
HSE department DEWA

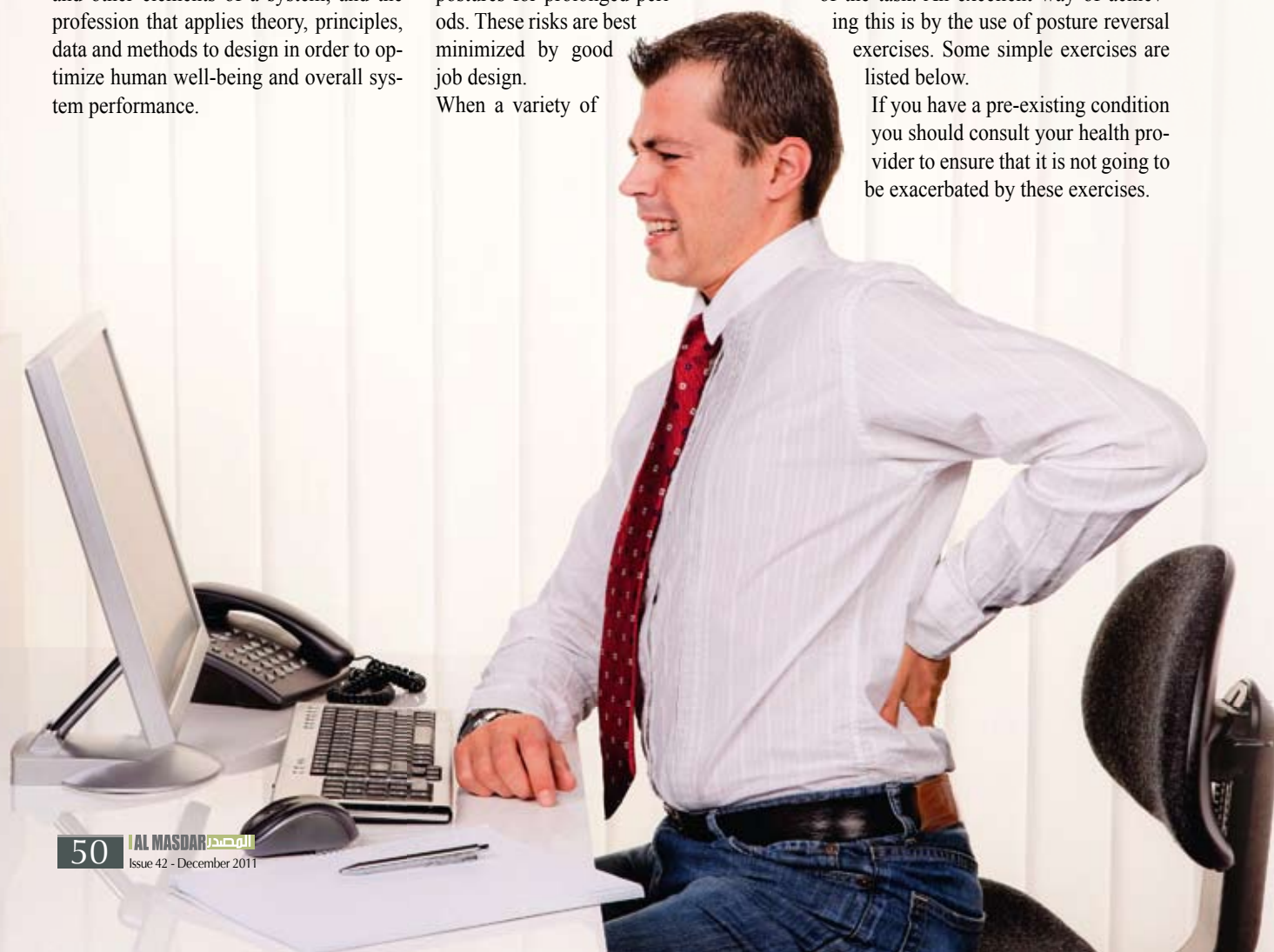
The International Ergonomics Association defines ergonomics as follows: Ergonomics (or human factors) is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance.

Why exercises are recommended?

It is now well accepted that office work has many inherent health risks. This is largely to do with the repetitive nature of many office tasks and the tendency to maintain postures for prolonged periods. These risks are best minimized by good job design. When a variety of

tasks are not available it is important to take more pauses such that the muscles performing the task have a chance to recover. It is also important to reverse the postures that have been adopted as part of the task. An excellent way of achieving this is by the use of posture reversal exercises. Some simple exercises are listed below.

If you have a pre-existing condition you should consult your health provider to ensure that it is not going to be exacerbated by these exercises.



Stop! S-t-r-e-t-c-h... Check! Head rolls

Gently lower ear to shoulder and hold for 10 seconds. Slowly roll chin to chest and up to other shoulder and hold for 10 seconds. Repeat several times and be careful not to extend your neck back too far.

Head turns

Turn head to look over left shoulder and hold for 10 seconds. Turn head the other way and hold for 10 seconds. Shoulder rolls Circle shoulders forward several times, then backward. Repeat 3 to 5 times.

Shoulder stretch

Stretch arm above head, cradle elbow with hand and gently pull elbow behind the head. Hold for 10 seconds and repeat several times.

Check shoulder posture whilst seated

Relax your shoulders and rest your hands on your lap. Bend your elbows to 90 degrees and check the height of your finger tips against your current work height. If the work (keyboard or desk) is higher than your hands you may be hunching your shoulders unnecessarily.

If so, try and raise your chair height or lower your desk height and try and relax your shoulders while working.

Back arching

Stand up. Support lower back with hands, gently arch back and hold for 5 to 10 seconds. Repeat as often as is needed.

Check back support whilst seated

Sit well back in your chair - if your feet need support, use a foot rest.

Adjust the back rest on your chair to support your lower back.

Foot rotation

Hold onto the chair with hands either side. Straighten leg and lift foot a few centimeters off floor. Rotate foot and ankle both ways (point toes up) and extend (point toes down). Repeat several times per foot.

Check leg comfort whilst seated

If the seat of your chair is digging into the back of your thighs check that it is not too high, or whether it is tilted backwards. If the seat is too high lower the chair and desk or use a foot rest to support your feet. Also check the tilt of the seat and if necessary adjust it to a horizontal position.

Eye exercise

Sit up straight, face forward and repeat this sequence several times without moving head.

Visual rest

Look up and away from screen. Focus on a distant object (more than 3 meters). For example, look out of the window or at a picture on a far wall. Shift vision back to

screen and refocus.

Check eye comfort

Is there enough light falling on your documents? Do windows or light fittings cause glare or reflection on the screen? If so, try turning the screen or blocking the path of the light. Use a screen with a light background when working with text. Software with a light background for text is more comfortable for the eyes. Follow the "KISS" principle, that is "Keep It Simple and Sweet"...

