

<u>bulletin</u>

Jurong Engineering Limited • Mita(P) No. 216/04/2007 • January 2008



MD'S MESSAGE 2008

Forging New Frontiers

In the New Year with an encouraging message for the Group and a common vision to achieve it. The year 2008 is going to be a very eventful year for the Group. JEL must continue to evolve with the changes of the new world and meet the business challenges in new territories.

Mr. Abiko announced a three-prong strategy on venturing into new territories in the New Year.

New Clients

JEL Group must expand its international presence by strengthening ties with existing partners and linking up with new ones. On the local front, JEL aims to take large steps in building up relationships with diverse plant owners for new business.

New Geographic Markets

Vietnam and India are two markets JEL Group is very keen to build up a strong presence in. The key is patience as we have to first lay down a strong foundation instead of hurrying into jobs. We have to be selective about the types of project to undertake in these two exciting markets. We are in a position to offer fresh and different ideas which can create a win-win situation for our business friends.



Mr. Osamu Abiko, MD & CEO, JEL addressing JEL staff.

New Business Concepts

Strong JEL project teams must continue to give excellent service. Our expertise in engineering and construction will be extended to more upstream work and also engage in jobs which are further downstream. We will witness an integrated business spectrum of upstream and downstream activities which will substantially benefit our clients around the world.

The company is in a strong position to foray into new territories, be it new clients, markets and business concepts. The year 2008 will bring JEL Group to new heights. These are exciting times ahead for JEL Group.

SINGAPORE

Prefabricating Pipe Spools For Lucite Project

JEL Fabrication Division secured a sub-contract for the prefabrication of carbon steel and stainless steel piping spools for the Lucite Alpha 1 Project. Lucite International Singapore is the owner of the new methyl methacrylate manufacturing plant located on Jurong Island.

Foster Wheeler is the engineering, procurement and construction (EPC) contractor and HQSM Engg Pte Ltd is the sub-contractor for shop drawing, fabrication and site erection work.

JEL's scope of work comprises carbon steel and stainless steel piping fabrication work, including painting and packaging in addition to quality document submission during the project schedule from July 2007 to December 2007. To-date, JEL has completed 90 percent of the revised BQ (bill of quantity) and has confidence to complete according to the original schedule.

The plant is expected to be commissioned by January 2008.

IN THIS ISSUE

MD'S MESSAGE 2008: Forging New Frontiers

PROJECT: Prefabricating Pipe Spools For Lucite Project

PROJECT: M & E Work
In Jimah Project by
EESB

IN-HOUSE: Health Talk Well Attended By Staff

3 PROJECT: Work At Sonatrach Project Making Good Progress

IN-HOUSE: Big Turnout At Bowling Tournament

4 PROFILE: JML Focuses
On Overseas Business
Opportunities

5 PROJECT: Success In Tarahan Comes From Experience

6 Focus: JEL's Expertise In Coal-Fired Circulating Fluidised Bed Boiler Power Plants

M & E Work In Jimah Project by EESB

he Jimah coal-fired power plant (two 700 MW units) is an IPP (independent power plant) promoted by Jimah Energy Ventures Sdn Bhd. The project is located near Kula Lukut in Negeri Sembilan, 80 kilometres south of Kuala Lumpur, Malaysia.

The plant is a fast-track project with a 13.5-month cycle from first steel to first fire of the first unit, with a six-month pitch between the two units. Erection of the steel structure started in March 2007 for the first unit and in August 2007 for the second unit. The plant is scheduled to be handed over for commercial operation by end-December 2008 for the first unit and end-June 2009 for the second unit.

Equator Engineering Sdn Bhd (EESB) has been contracted to provide construction management support services and mechanical and electrical erection work for the project.

Construction management support services were provided by JEL to IHI Corporation. Subsequently, similar project management support services are being extended to ISHI Power Sdn Bhd during the entire project construction cycle.

EESB engineers oversaw the construction of steel structure and ducting work, boiler pressure parts and piping work, boiler auxiliaries, balance-of-plant work such as ESP/FGD (electro-static precipitator/fuel gas desulfurisation), coal-handling plant, ash handling and yard piping, plant air system, material control and assistance in project planning and scheduling, site finance and administration functions.

The erection work is being handled by EESB and covers both mechanical and electrical erection work of the ash-handling system, tanks, yard package covering pipe racks and yard piping.

Also included are auxiliary equipments such as ID (inducted draft) fans, flue gas reheat fans, steam air heater, flue ducts and duct supporting structure, boiler main piping in turbine building (main steam, cold and hot reheat, feed water, turbine by-pass) besides miscellaneous piping and electrical and instrumentation work of boiler and ash-handling system. The erection involved 8,500 tonnes and 860 kilometres of cabling work.

Two important milestones events were accomplished in January 2008

- No. 2 boiler drum was lifted up on 6
- No. 1 boiler hydrostatic test was completed on 15 January.



The plant is scheduled to be handed over for commercial operation at the end of the year.

IN-HOUSE

Health Talk Well Attended By Staff

he Workplace Health Promotion Committee organised a health talk for all JEL/SMD/JML staff. Dr. Audrey Heng from WK Koo & Associates was invited to give our staff some general health tips.

Prior to the session, many staff members had many queries about certain health issues, but did not know who and where to

ask the questions. Neither did they have the time to consult health specialists. Thus, staff response for the talk was very encouraging.

Dr. Heng gave an engrossing talk covering many general topics such as high blood pressure and diabetes. She also provided some useful tips on exercising and healthy lifestyle.

The talk was followed by a 15-minute Q&A session. Our staff were certainly not shy to raise questions and were eagerly trying to learn more about certain health issues.

One of the participants, Ms. Cherie Chan, said: "Interesting and informative and I have gained much knowledge. I would certainly like to see many more sessions like this."

JEL continues to be committed to ensuring the well-being of every employee in both mind and body. We can be certain that there will be more programmes focusing on work-life balance given the encouraging reception for this health talk.

Work At Sonatrach Project Making Good Progress

TEL was awarded a contract in June 2006 to carry out the civil, mechanical and electrical erection (M&E) work of 4 x 400 tons/ hour process boiler at two Sonatrach LNG complexes in Algeria, namely two boilers at GL1Z complex and two boilers at GL2Z complex.

At GL2Z complex, six boilers at 60 tons/hour had to be demobilised before installing the two new boilers of 400 tons/hour. In addition, a new electrical building was built. JEL undertook the construction management, civil work and M&E erection at both sites.

The civil foundation was completed ahead of schedule at both sites, enabling the mechanical work to start early. The boiler pressure parts for piping work was completed on schedule with good quality and minimum weld defect.

The electrical and instrumentation work was also completed on time within a compressed erection schedule. The civil and M&E erection work was completed with a good safety record. We have achieved 750,000 man-hours without a loss-time accident.

GL1Z Complex ...smooth commissioning and testing.

The commissioning and testing of the four boilers has been going smoothly and handover of the four units to Sonatrach is expected according to the contractual completion date of December 2007.

Although the overall situation in Algeria has been alarming due to several terrorist bomb blasts during the course of the project execution, JEL has kept the staff morale high and everyone has put in their best effort to complete the project on time with good safety record, quality and customer satisfaction.



The GL2Z complex...two new boilers.



IN-HOUSE

Big Turnout At Bowling Tournament

Tournament for the staff at the Jurong Superbowl @ Taman Jurong in September 2007. This event is an annual tradition of JEL and has always been a joyous event for all staff. Other than the main event itself, SRC organised several practice bowling sessions at the same venue before the tournament day. This enables the staff to get familiar with the venue and polish their skills in preparation for the tournament.

The tournament received an overwhelming response with more than 50 registrations.

Riding on the popularity of the bowling event, SRC will be organising many more such team-bonding events in the near future. This will surely foster a strong sense of belonging among the staff and enhance the unique family environment in JEL.



Thumbs up for a great time at Jurong Superbowl.

JML Focuses On Overseas Business Opportunities

EL Maintenance (JML), a subsidiary of JEL since 2001, focuses on maintenance and rehabilitation/modification projects. This includes periodical/routine maintenance, shutdown maintenance, rehabilitation/modification projects, major overhauling and life extension work and term contracts.

Sales turnover for JML has increased from SS5 million in 2001 to S\$25 million in 2007.

JML is experienced in value-added jobs such as turbine overhaul, boiler rehabilitation, modification and expansion with extended scope of supply and shutdown maintenance (SDM) to plants where JML provides maintenance services.

JML's Managing Director, Mr. Mohd Anwardeen, said: "Our business focus today is to expand overseas, especially in turbine and boiler maintenance in the Middle East. With its expertise and experience, we are aiming to attain ISO 9001 certification in 2008."

Apart from regular maintenance activities, JML has plans to expand its business in the oil and gas sector by securing piping work for off shore platforms and for Floating Production Storage & offloading when required by clients.

JML's aim is to develop its maintenance capabilities and be recognised by important clients as a strong, potential and competitive value-added company both in Singapore as well as overseas.



Turbine overhaul work in progress.

JML Contracts

- Major overhauling of a steam turbine at Tuas South incineration plant by Mitsubishi Heavy Industries, Japan (from September to October 2007).
- Rehabilitation of two boilers at Ashuganj power plant in Bangladesh by IHI Corporation, Japan (from January 2006 to September 2008).
- Maintenance inspection of four gas turbines at Al Aweer power plant by Mitsubishi Heavy Industries, Japan (from March to May 2007).
- Onshore piping work and offshore hook-up work by S M O E Pte Ltd (from November 2005 to October 2006).
- Piping work for SMP II plant expansion and integration works from Sumitomo Chemicals Engineering Co Ltd (from December 2006 to October 2007).



Plans to expand business in the oil and gas sector.

JML MD, Mr. Anwardeen (seated centre), with his staff...aiming for ISO 9001 certification.



Success In Tarahan Comes From Experience

JEL's Tarahan project in Indonesia has been a big success. This is achieved due to the strong working relationship JEL has with the various parties involved. We speak with four key members of this project on their experiences.

- Mr. Narcisco M. Austria, Site Manager, JEL Tarahan Project Office;
- Mr. Philip Mason, Site Technical Coordinator, Marubeni Corporation Indonesia Power Project Office;
- Mr. Yoshitmitsu Ishimaru, Project Manager, TEPSCO Tarahan Project Office; and
- Mr. Fitra Ayuza, Project Manager, PT PLN (Persero).

Q: Who are the parties involved for this project and how is the working relationship?

Austria: Marubeni Corporation is our client in this project. The boilers (Lot-3) are of the circulating fluidised bed (CFB) type supplied by Alstom Power Inc. of the United States; the steam turbine generator (Lot-4) was supplied by Fuji Electric Systems Co. Ltd., Japan. The owner is PT PLN (Persero) and the consultant for the project is TEP-SCO. Our working relationship with them is fantastic. In fact, I would attribute the

success of the Tarahan project mainly to the great understanding between all parties.

Q: Please share with us your experience working with JEL in this project?

Austria: JEL's scope of work in this project is the erection of two 100 MW coal-fired thermal power project of PT PLN (Persero) at Tarahan, Indonesia. JEL has completed many critical milestones ahead of the revised schedule. It has been a very good experience for me working on this project.

Ayuza: As the owner, we are glad that the project is able to achieve its targeted deadline, and we are especially satisfied with the quality of the work that JEL has done.

Ishimaru: I have enjoyed myself working with JEL on this project. TEPSCO is very happy to be working with the experienced team under Mr. Austria and Mr. Babu.

Mason: It has been an eventful ride, and I am very glad that the project has been completed on time. I believe we have worked well together with the owners and with JEL on this project.

Q: Please tell us more about the success in Tarahan?

Mason: The teamwork between all parties

in resolving problems is good. We have had our fair bit of problems at the start of the project. Initially, the scope of the project was not clear and different parties had different ideas as to where certain responsibilities lie. This dragged on for a while but, finally, we realised work could not be compromised due to the disagreements. Very quickly, Mr. Austria and Mr. Babu from JEL and I came up with a system to ensure that all the work was safely completed on time and with good quality. Since then, our working relationships have strengthened with each obstacle faced and overcome.

Q: Are there any other challenges which this project faced and how did you overcome them?

Austria: It has been a remarkable achievement for JEL to concurrently execute erection work of two units of boilers, steam turbine generators and auxiliaries, in addition to the EPC (engineering, procurement and construction) of the balance-of-plants within a very tight schedule. This project is another example in which JEL is able to demonstrate its various functions working together to meet and satisfy customer's requirements.

Ayuza: Success in Tarahan is not a mere coincidence or luck. We had our fair share of challenges as well. For instance, there were some problems with the waste-water treatment equipment. This is a grave matter at a critical stage of the project. The entire team members cracked their heads to find a solution. After much discussion, we made a decision to purchase water from a nearby plant. Had we persisted in thinking only of our own selves and not been able to work as a team, the project would be drastically delayed. I am very glad we made a quick decision together. After all, time is critical in project management and quick decisions must be made when necessary.

(Continued on page 6)



The team that manages the project...JEL has completed many critical milestones ahead of the revised schedule.

JEL's Expertise In Coal-Fired Circulating Fluidised Bed Boiler Power Plants

JEL's success in Indonesia in the erection of the Tarahan 2x100 MW coal-fired fluidised bed (CFB) power plant stems from our prior experiences in two other CFB projects. They are the Ajinomoto PTT 10 MW CFB power plant in Thailand and the Na Duong 2x50 MW CFB thermal power plant in Vietnam.

JEL's strength is its ability to adapt operations to any form of new technology as required by our clients. A good example is when JEL took on projects involving CFB boilers since 2003.

Ajinomoto PTT 10 MW CFB Cogeneration Power Plant, Thailand

JEL completed the 10 MW CFB Combined Cycle Cogeneration Power Plant in 2007, Thailand. JEL was fully responsible for engineering and procurement of all the mechanical, electrical and instrumentation equipment of this project.



CFB is a relatively new and evolving technology that has become a very efficient method of generating low-cost electricity while generating electricity with very low emissions and environmental impacts. "Dirty coal" can be used in CFB and the quality of emission is still environmentally friendly.

JEL will continue to venture into new territories and technologies together with our clients to serve the needs of consumers.

Na Duong 2x50 MW CFB Thermal Power Plant,

This project applies a sophisticated and modern technology of Foster Wheeler's CFB as a first unit in Vietnam in 2003. JEL was selected to provide project management services and balance-of-plant work in this project.



(Continued from page 5)

Q: How can we sustain this success we achieved in this project?

Ishimaru: The quality of the team is very important. The team should have relatively experienced personnel who can lead the members. Most importantly, as shown in this project, communication among all the parties, from owners and clients to consultants and suppliers, must be very good so as to overcome challenges. We are very happy that JEL has put together a good team with strong

leadership under Mr. Austria and Mr. Babu. Austria: A keen focus on deadlines and objectives is critical. When everyone is on the same page, everyone will have the same motivation to achieve a common goal. I have immensely enjoyed this experience at Tarahan working with such delightful partners. In fact, the whole team will be working together again very soon on the Muara Tawar gas-fired power plant extension project in Indonesia. Given our excellent working

relationship, I am very sure the new project will also be a huge success.

Footnote: Our site manager Mr. Austria, age 62, has been a committed employee of JEL since 1990. For the past 17 years with JEL, Mr. Austria has been closely involved in many of JEL's projects in the region. His vast experiences, for example in the Paiton project in East Java and the Naduong project in Vietnam, have been an indispensable resource in JEL project execution.

Contact

Marketing inquiries, comments and feedback should be addressed to the Business Development Section at marketing@jel.com.sg tel: 65 6265 3222, fax: 65 6265 9842

