BULLETIN

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IHI PRESIDENT AND CHIEF EXECUTIVE OFFICER MR TSUGIO MITSUOKA VISITS JEL



On 05 Oct 2017, JEL welcomed Mr Tsugio Mitsuoka, President and Chief Executive Officer of IHI Corporation, Japan, on his visit to JEL. JEL's senior management gathered to give Mr Mitsuoka and his delegation a warm greeting, and presented him with garland and flowers. After an exchange of pleasantries, the guests were briefed on JEL's business operations.

Held in the evening at the Four Seasons Hotel, JEL's reception was in appreciation of Mr Hiroshi Ide's steadfast and dedicated service to JEL and also introduced Mr Masao Akamatsu, who has succeeded Mr Ide as JEL's Managing Director and Chief Executive Officer.

Besides Mr Mitsuoka, more than 200 other distinguished guests, clients and business associates

graced the event, including His Excellency, Mr Kenji Shinoda, Ambassador of Japan to Singapore. After a round of speeches, the guests retreated to a night of drinks, food and networking to mingle and catch up with one another. The guests were also treated to an array of delectable sushi prepared 'live' by chefs from renowned Japanese restaurant, Sushi Kondo.

It was indeed a night of cardinal significance for all present, as we bid farewell to Mr Ide and look forward to a brighter future under the leadership of our new CEO, Mr Masao Akamatsu.



NATIONAL DAY AWARD 2017 - THE MERITORIOUS SERVICE MEDAL (PINGAT JASA GEMILANG)

Proud moment for our Chairman, Mr Bob Tan Beng Hai to receive "The Meritorious Service Medal (Pingat Jasa Gemilang)" from President Halimah Yacob. This is the 3rd highest order he received for his contributions and remarkable service to the Nation.

The Board, management and staff of Jurong Engineering Limited (JEL) and its Group of Companies extend their heartiest congratulations to Mr Bob Tan Beng Hai on being conferred "The Meritorious Service Medal".





RAPID PACKAGE 3 PROJECT: EQUATOR ENGINEERING SDN BHD (EESB) SUCCESS STORY

On 17 January 2017, Técnicas Reunidas (TR) awarded EESB a contract for the erection of two reformers

for the RAPID Package 3 project in Malaysia. During the execution, the team encountered and overcame many challenges.

The first executive Health, Safety, Security & Environment (HSSE) management meeting was organized by Tecnicas Reunidas & Petronas, on 25 May 2017, to foster interaction and comradery among clients, subcontractors and stakeholders.

During the event, TR's management presented the "BEST IN MANAGEMENT ENGAGEMENT" award to EESB in recognition of its excellent project management in Health, Safety, Security & Environment, as well as its commitment in achieving the project HSSE objectives.



This award will serve as a great testament of EESB's good track record when working with other major clients on refinery projects, especially for new and upcoming projects.

EESB's Package 3 project team beamed with pride and everyone in the team felt a great sense of achievement.

SUCCESSFUL COMPLETION OF KHOAKANUN CLEAN ENERGY (KCE) PROJECT

The consortium of IHI Corporation and Thai Jurong Engineering Ltd (TJEL) was awarded the Engineering, Procurement and Construction of Khoakanun Clean Energy project (KCE Project) on 30 September 2014 by the owner, Advance Agro Asia Company Limited (AAA) and commenced execution on 17 November 2014. The project consisted of one block of 2 gas turbine generators, 2 heat recovery steam generators, 1 steam turbine generator and associated BOP mechanical and electrical equipment, generating a net electrical output of 101MW and 15-tonnes per hour process steam. KCE Project comes under Thailand's Small Power Producers (SPP) program and is located in Phanom Sarakham district of Chachoengsao province, 125km east of Bangkok.

The main equipment, consisting of LM6000PD gas turbines, heat recovery steam generators and steam turbine were supplied by IHI. Total plant construction including civil, mechanical, electrical and piping works were under the scope of TJEL.



The project is located away from town in a special environmental protection zone in Thailand. Due to this reason, it was not allowed to tap into ground water and there was no municipal water supply to the project area. Water for construction and commissioning was transported daily by truck to site. Raw water required for the plant operation was pumped from nearby canal during rainy season from August to October and stored in large reservoirs constructed by the owner, beside the power plant.

Due to various schedule constraints, our execution team had to reschedule construction and commissioning activities. Nevertheless, the team managed to achieve the plant commercial operation in a record time of just over two months for gas turbine generator synchronization.

The project also achieved over 2.5 million safe man-hours without lost time injury (LTI).



These achievements would not be possible without the close working partnership between IHI, TJEL, the owner and the owner's engineers, SNC Lavalin Thailand. Presently, the plant is under one-year defect liability period from the commercial operation date of 10 February 2017.

MAPUTO POWER PLANT VISITED BY JEL CHAIRMAN AND MD

On 31 October 2017, JEL Chairman, Mr Bob Tan and JEL Managing Director, Mr Akamatsu visited the Maputo power plant in Mozambique owned by Electricidade Moçambique (EDM). The Maputo power plant project is undertaken by consortium of Sumitomo Corporation (SC) and IHI Corporation (IHI). This power plant is the first combined cycle gas fired power plant in Mozambique and will produce up to 110MW to ease the critical nationwide power shortage.



JEL Chairman Mr Bob Tan and JEL MD Mr Akamatsu at the MPT Site

In recent years, Electricidade de Moçambique (EDM) has exerted

efforts to increase power supply capacity, through rehabilitation of existing power plants, purchase of electric power from IPP power supply and capital participation into IPP, aiming to satisfy medium and long-term power demand in the nation.

The country currently has approximately 610MW of maximum generating capacity with 4,025 GWh per year of gross power production but the annual average increase in demand in the past 5 years is a remarkable 13.8%. In particular, the maximum generating capacity in Southern Mozambique is 369 MW, which is 60% of 610MW mentioned above but the annual average increase demand shows a steady 11.3% growth. Current construction progress of the project is around 75%. Commercial operation date is planned for 16 August 2018.



Maputo Gas Fired Combined Cycle Power Plant Development Project site

INTERNSHIP - CREATING OPPORTUNITIES FOR JEL & STUDENTS

Every year, JEL provides internship opportunities to talented undergraduates from local universities in Singapore. This is a mutually beneficial arrangement. JEL gets wider exposure at local universities for future recruitment and builds up a stronger employer branding among the graduating students. More importantly, this arrangement gives the company a great 'first opportunity' to attract and spot talented potential employees by exposing them to our company culture and evaluating their performance during the internship stint. Furthermore, these student interns often bring in fresh perspectives and new ideas too.

On the other hand, students gain valuable practical training and experience from their internship stint with JEL. In May, we provided internship opportunities for two students from Nanyang Technological University during their 3-month summer vacation. One intern was attached to the Civil Engineering department in Thailand while the other was attached to the Human Resource division in Singapore.

Both interns performed well. The HR intern assisted her supervisor on the digitalisation of HR processes while the Engineering intern worked on various assignments, from assisting civil and architectural quantity survey at a project site to preparation of calculations and documents at TJEL's head office.

In addition to learning new skills and valuable work experience, the interns were able to gain an insight into the nature and work environment of the construction industry. This will help them reflect on their future career choices.

JEL takes pride in our mentors, who have made an impact on the lives of the young students as they prepare to step into workforce. When asked about her most memorable experience in IEL, one of the interns highlighted her sessions with her supervisor, saying, "I am very inspired by the way my supervisor leads her team... how she knows each one personally, genuinely understands them, cares for them and is interested in nurturing them."

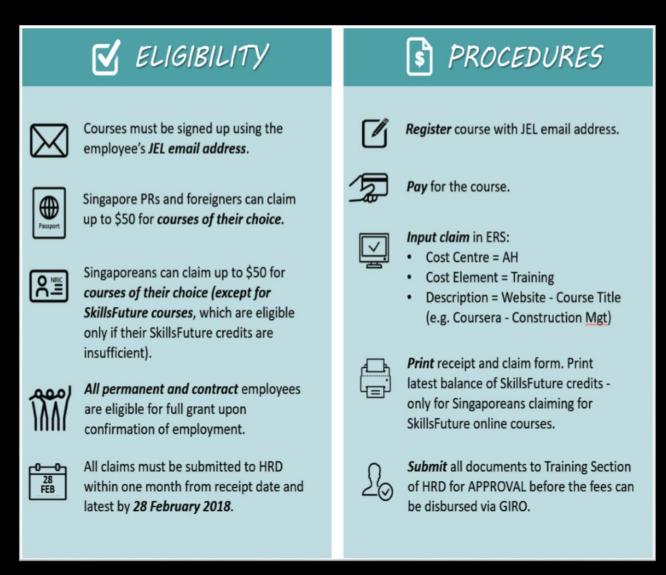


Now and in the future, JEL will continue to provide more internship opportunities and inspire more young people with our exceptional employees.

JEL LEARNING CREDIT

To encourage our employees to learn new skills and upgrade existing ones, JEL's Human Resource division recently launched a Learning Credit scheme. This scheme will facilitate employees to take charge of their own learning and development needs.

Under the scheme, each employee will be given \$50 learning credit for FY2017. They can use the credits for online courses offered on the Massive Open Online Courses (MOOC) platforms, namely, Udemy, edX, Coursera and Udacity. These platforms offer courses by professional experts or top universities for free or at minimal fees.



The scheme offers employees the flexibility to learn subjects both within and outside of their job scope, at their own pace and convenience. By taking up courses that facilitate personal or professional development, they can be ready for the changing needs of the market and workplace.

Through this exciting new scheme, we hope to help employees achieve their learning goals with online learning and look forward to our employees utilising their Learning Credits to enhance their knowledge.

PARTNERING THE BUSINESS



The Group Finance has come a long way in the recent years under the guidance and leadership of former CFOs - Ms Tay Nam Lay and Mr Soh Chee Kok. We would like to thank Mr Soh for leading the JEL's Finance Division which is now well established and strong.

Effective from 19 October 2017, Mr Michael Chang has succeeded Mr Soh Chee Kok as General Manager of Finance division / Chief Financial Officer (CFO). Mr Soh will continue in JEL's Finance division as an advisor.

Mr Chang joined JEL with experience from large multinationals and SMEs. He started his career at Otis Elevator in Bloomington, Indiana USA as a factory cost accountant. He also worked in industries such as Oil and Gas, Building Systems and Medical Services. His finance

experience covers from Financial Planning and Analysis, Controllership, Plant Accounting and Financial Systems implementation. In his previous role before joining JEL, he was the CFO of Jurong Aromatics Corporation. He has lived and worked in the US, Hong Kong and Taiwan for a combined period of over 10 years.

Financial compliance and regulations today have evolved significantly as there are now more statutory and international accounting standards and requirements due to the recent financial and economic events. As JEL operates from numerous jurisdictions, it is imperative that we become adaptive and proactive to cater for change.

Change is never a comfortable process, but it is nevertheless essential. JEL's finance division must undergo change, in order to stay relevant in our industry.



Firstly, we should seek process improve financial flows and reporting which will allow us to integrate business processes our with financial systems more efficiently from the use of digitalization and data management. The development of business intelligence tools could help to give realistic projections of our future profitability.

Secondly, we aim to nurture our induvial

skillsets in order to be better informed and prepared to manage and educate our various business partners within JEL on the correct methods to comply. At the same time, we need to work in conjunction with the business to apply what is required.

Thirdly, we will also need to relook at cost efficiency and to re-evaluate the way we utilize our resources. For instance, do we spend because we have always been spending that way? What are the assumptions behind our spending? These are not easy questions to answer but with the cost escalation that JEL faces yearly, it is imperative for our company's survival and profitability that we begin asking ourselves these tough questions.

THE JOURNEY TO SAFETY EXCELLENCE

The theme for HSE Conference 2017 was "A Journey to Safety Excellence," reflecting our pursuit for continual reduction of risks and zero injuries!

The team identified 4 key areas which are critical to achieve the "Safety Excellence" goal, namely:

Leadership and Employee Engagement:

Fostering a culture in which safety is fully integrated in the business and is a shared responsibility among all employees.

Site management to lead by motivating the diversified workforce to achieve its safety management system objectives - engaging, directing and supporting all employees to believe in what they are being asked to do.

All engineers and supervisors shall fully comply with the safety management system requirements and diligently motivate their subordinates to comply with the safety requirements and to ensure their employees well-being when carrying out their tasks. Also, every effort should be taken to demonstrate safety activities clearly to their subordinates to make sure they understand the requirements before carrying out any task.

Employees shall contribute to the effectiveness of the safety management system and embrace the safety culture by actively displaying their firm commitment and focus on safety.

Safety Management System:

Upgrading and enhancing of JEL's Safety Management System to ensure all the processes and procedures are whole and objectives are met.

Risk Management:

To ensure all risks and hazards are identified and regularly reviewed and to regularly review and update any new risks or hazards;

To strive to reduce the likelihood of an accident and the severity of injury that may result;

To provide assistance to all job sites. To prepare a comprehensive and strategic risk assessment for every activity as an eliminative or preventive measure to workplace accidents.

Performance Measurement:

To regularly update and track progress of safety performance using leading and lagging indicators. And to introduce safety initiatives for improvement and enhancement of safety performance.

With the above measures, JEL is set firmly on "A Journey to Safety Excellence" in 2017 and beyond!







JEL MAINTENANCE UPDATES, AWARDS AND RECOGNITION

MR AKAMATSU'S VISIT TO JML KUWAIT

JML was awarded the major turnaround project by Equate Petrochemical Company, Kuwait.



The shutdown is scheduled from 22 October to end November 2017, JML's scope of work includes overhaul and repair of heat exchangers, columns, vessels, furnace, finfans, reactors and other miscellaneous piping and equipment. JEL's MD, Mr Akamatsu and JML's MD, Mr Nagappan visited the Equate plant for contract signing and formal meetings.

50MW SOLAR POWER PLANT PROJECT AT SHAGAYA, KUWAIT



JML was awarded the piping fabrication and erection works for at Shagaya Solar power plant in Kuwait by TSK Electronica Y Electricidad, SA (TSK).

The owner of the plant, Kuwait Institue of Scientific Research (KISR) - the Kuwait government's R&D Institute is developing a renewable energy multi-technology power park at Shagaya. TSK was awarded the EPC contract by KISR and JML was selected as the subcontractor of TSK to execute the power block piping and turboset BOP works.

FORMGIVING + PACKAGING PROJECT AT BASF

JML was awarded a brown field project from WorleyParsons for the extension of existing manufacturing facilities and addition equipment at BASF Plant in Jurong Island. Scope of work is to deconstruct and construct structure, piping, civil foundation, electrical & instrumentation and fire protection works. The project commenced in July 2017 and was scheduled to complete by December 2017. JML celebrated the achievement of 50,000 safe manhours on 22 Sep 2017 with safety promotional activities including rewarding employees with outstanding safety performance.



REFURBISHMENT OF UNDERGATE SHIFTING SYSTEM

JML was awarded the refurbishment project from National Environmental Agency(NEA) for the removal, supply, installation and testing & commissioning of undergrate sifting system and its axilliary equipments. Work commenced in April 2017 at Tuas south incineration plant involving 6 boiler units and is scheduled to complete by April 2018.

USP EXPANSION PROJECT

JML was awarded the piping (SS, CS and UPVC), equipment erection, electrical & instrumentation works from Sumitomo Chemical Engineering Company (SCEC) for their Unimatec expansion project. This plant is being constructed as an expansion project to add facilities to their current synthetic rubber plant.

The project began in August 2017 and is scheduled to complete by February 2018. To-date, JML has clocked 250,000 safe man-hours without loss time injury.



JEL'S SOCIAL & RECREATION COMMITTEE (SRC)

A HEALTHY LIFESTYLE EVENT

To promote a healthier lifestyle, JEL's Social & Recreation Committee (SRC) organises 'Birthday walks' to celebrate employees' birthdays. Held once bi-monthly, staff whose birthday fall within the respective months are invited to join the walk.



For this year, the walk will be held at the Botanic Gardens, Singapore's first UNESCO World Heritage Site. The five-kilometer walk, along lush landscape of tropical plants, sculptures, lakes and rain forest will allow the participants to enjoy the wide range of flora and fauna and also get the chance to catch a glimpse of wild birds, squirrels, and unique insects in their natural habitat.

Walking in such serene and natural surroundings is a great way to release stress. Staff who participated in the June birthday walk enjoyed the walk along the swan lake and admired the beautiful swans and fishes which swam and meandered gracefully in the lake. The birthday walk in April 2017 was the first time our MD, Mr Masao Akamatsu, participated in the walk. In his speech after the walk, he touched on the issue of health problems and advocated the health benefits of walking and engaging with nature.

To promote a healthier lifestyle for staff, SRC organises various health and fitness activities such as



cardio fitness, zumba classes, cycling and walks at various parks. These activities together with the upcoming bowling tournament, will provide opportunities for staff bonding.

LUCKY DRAW QUESTIONS:

Five (5) randomly picked entries, with all correct answers, will each win NTUC Vouchers worth S\$30, sponsored by the Corporate Affairs Division.

Simply answer all five questions and send your answers together with your name and address to dewie@jel.com.sg or to Jurong Engineering Ltd, 25 Tanjong Kling Road, Singapore 628050.

1) When was "The Journey to Safety Excellence" initiated in JEL?
2) Give 2 reasons why EESB was presented with the 'Best in Management Engagement' award?
3) Our MD Mr Akamatsu participated in the April 2017 birthday walk for the first time. What issues did he touched on in his inaugural speech?
4) How does JEL's internship scheme help students reflect on their career choices?
5) How did the KCE project manage their water requirements during project execution?





DILIGENCE

We work hard with dedication and perseverance to achieve success and excellence.



CONTINUOUS LEARNING

We **constantly improve** our knowledge and skills to stay ahead of competition in the changing global market.



SHARED OWNERSHIP

We strive to be **proactive** and act with **accountability** and **integrity** for the company's growth and success.



CUSTOMER SATISFACTION

We promise *quality* and *on-time* delivery, without compromise on *safety*, forging customers' *trust* to win repeat business and new customers.



RESPECT

We treat one another with **respect** and **dignity**, fostering a harmonious and cohesive environment that promotes well-being and **happiness** for all.

Marketing enquiries, comments and feedback should be addressed to the Corporate Affairs Division at Email: marketing@jel.com.sg. Tel: 65 6265 3222. Fax: 65 6265 9842

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Every reasonable care has been taken to ensure the accuracy of the information printed in this bulletin.

No responsibility can be accepted therefore.

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