



J U R O N G   E N G I N E E R I N G   L I M I T E D



## New Year Message From Mr Hiroshi Ide, MD/CEO

2015 was a significant year for us – we celebrated our 10<sup>th</sup> anniversary since privatisation in 2005.

We achieved a record profit before tax for 2015. Our revenue grew by 18.97%, with total jobs secured of more than S\$750 million. Our three core businesses—Construction, EPC and Maintenance—have contributed to this achievement.

These achievements were possible because of the continuous support and trust from our business partners, the contribution from our Group, and last but not least, the dedication and hard work of our Management team and staff.

In January 2014, we commenced the five-year “JEL Group Management Policies” to strengthen our core competencies, and we have been encouraged by the results so far. We will continue to invest in finance, human resources (“HR”), information technology (“IT”), safety and risk management to update ourselves and improve our processes. Combined with good management policies, this creates a basis for greater organisational efficiency and productivity.

Since the launch of the HR development plans, we have updated the company policy for JEL and also its Group to keep pace with labour markets. We have explored new recruitment channels and comprehensive training programmes to attract talents. Additional headcounts were recruited to complement the increase in jobs secured.

Finance initiatives were implemented over the year and have progressed well. Cost and credit review processes were enhanced, and a more effective and robust financing structure was introduced to support the growth of the Group.

On the technology front, we have improved our system’s reliability and resiliency. The IT team has also established the Sharepoint platform to enhance connectivity and productivity within the Group through the sharing of resources and information.

Safety remains a top priority. We will spare no effort to ensure that safety measures are observed and complied with. We must strive and continue with our efforts to remain accident free in our operations globally. All of us have an important role to play as ultimately safety is everyone’s responsibility.

2016 represents the start of a new decade for our next growth phase. For the next growth phase, our internal corporate structure will be further strengthened and the capabilities of all levels of our staff upgraded. We have to improve our knowledge, capability and skills, and pass it on to the younger generation to ensure continued progress. Though our sales target of S\$1.1 Billion for 2018 remains unchanged, this year, we will focus more on higher quality jobs that yield better returns rather than sales volume.

It has been projected that there will be slower global growth for 2016 due to spillover effects from China’s slow down—where the annual GDP growth dipped below 7% for the first time since 2008-2009—the continued floundering of energy prices and political instability. We foresee new orders to reduce due to slower economic growth. We may have to rely on backlogs and are fortunate enough to have sufficient backlogs to get us through the period of slow economic growth. For 2016, to prepare for the slower economic growth, we will attach greater importance to efficiency and profitability. Thus, focus will be centered on improving efficiency and profitability.

We must remain confident, for there are many more milestones to be accomplished together.

I would like to take this opportunity to wish everyone good health and success in the new year.

## Ratchaburi World Cogeneration Co. Ltd. (RWC) Combined Cycle Cogeneration Plant Project



▲ Grand Opening Ceremony during the start of Block-1 commercial operation

IHI Corporation and Thai Jurong Engineering Limited (TJEL) were awarded the engineering procurement and construction of two blocks of combined cycle cogeneration plants by Ratchaburi World Cogeneration Co. Ltd. (RWC) in the year 2012. Each block consists of 2 Gas Turbines, 2 Heat Recovery Steam Generators, 1 Steam Turbine, and associated BOP electrical and mechanical equipment with net electrical output of 100MW and 15 ton per hour process steam. The RWC project is located inside Ratchaburi Industrial Park in Ratchaburi Province, about 100km South-West of Bangkok.

The main equipment consisting of LM6000PD Gas Turbines, Heat Recovery Steam Generators and Steam Turbine were supplied by IHI under the Offshore Supply Contract. JEL formed an internal consortium with IHI for the supply of, among others, BOP Equipment. Total plant construction including civil, mechanical, electrical and piping works were by TJEL under the Onshore Construction Contract.

In order to complete each block in 26 months and upon receiving the Limited Notice to Proceed (LNTP) on 1 September 2012, we proceeded straight away with the soil backfilling of the project site area to the required elevation and ordering of the long lead equipment. Backfilling with imported soil to an elevation of 1.5 to 2 metres proved to be a difficult task, and was made even more difficult by the peak rainy season in Thailand. Fortunately,

the works were completed in time for the first pile on 4 February 2013.

The second task was the construction of a 35,000m<sup>3</sup> raw water reservoir that we managed to complete during the dry weather spell. Major foundations were completed by mid 2013 and the main equipment erection done by the 4th quarter of 2013. It was a challenge to carry out the erection works of two blocks concurrently, but the experienced team of TJEL rose to the occasion to meet the project milestones one after another, on schedule. Plant power back feed was carried out in the 1st quarter of 2014, while Block-1 first fire was conducted on 28 May 2014 and Block-2 on 7 October 2014. The Scheduled Commercial Operation of Block-1 was successfully achieved on 1 November 2014 and Block-2 on 1 March 2015. The project also achieved over 4 million safe man-hours without Lost Time Injury (LTI). Both blocks have obtained the Provisional Acceptance Certificate (PAC).

These achievements would not have been possible without the close working partnership the IHI-JEL-TJEL team had with the project owner, Ratchaburi World Cogeneration Co. Ltd., and their engineers from EEC Engineering Company.

Ratchaburi World Cogeneration Company Limited's Corporate video clip can be viewed at <http://youtu.be/KlFF8w4nsb8>

*Scintillating night view of the power plant*





## Completion of the Combined Cycle Power Plant Project in Ashuganj

In April 2014, JEL was awarded a contract for the construction of a 450MW combined cycle gas-fired power plant located in the small town of Ashuganj—approximately 90km north east of the capital city of Dhaka, Bangladesh—as part of the effort to contribute to the growing power demand of that country. The plant was initially proposed to be a fast-track project with a 10-month cycle span from erection to testing. However, due to a delay in handing over of the civil foundation, the commencement of erection works which was scheduled to commence in May was delayed for around three months.

JEL was also awarded an additional order for Balance of Plant Alloy Steel Piping installation in the month of November that year. The Bangladesh arm of JEL, Jurong Engineering (Bangladesh) Limited (JEBL), executed the work with support from the JEL (Overseas) team. Despite various external reasons, we managed to keep up with the planned schedule. Nevertheless, we finally reached the completion milestone in the month of December 2015. All through the course of the project, there were no recordable or lost-time accidents.

Foraying into a new country presented new challenges every day and at times, we were confronted with scenarios which demanded our swift response. One such challenge was in the area of manpower. Despite the obstacles, our team still managed to perform their work efficiently and operated within safety limits.

▼ Front view of HRSG



Due to the influence of the Himalayan Mountain Ranges and Bay of Bengal nearby, the climate was mostly subtropical. It was incredibly hot and humid during summer, with frequent rains occurring during the months of July and August.

There weren't many roads around the area and most of them were not paved. Thus, travel to and from the capital city would take a lot of time. Common forms of transportation within the city were buses, which were often crowded, rickshaws and three-wheeled motor scooters.

One of the major accomplishments of the project was the successful completion of the heavy lifting of 15 modules such as steam drum, by-pass stack chimney, etc., within 18 days—ahead of the planned schedule of 45 days—thus cutting down the Client's usage of their crane for that period, saving them time and money.

Bangladesh remains an important market, and we will continue to build on experiences gained through this project, expand our capabilities, and forge relationships to deepen our presence in this market. The project successfully completed its first fire on 19 December 2015.



▲ Left view of HRSG

▼ Rear view of HRSG



## ZCS-SBR2 Project

On 20 November 2014, JEL secured a contract from Mitsubishi Heavy Industries Asia Pacific Pte Ltd for the ZCS-SBR2 Project—civil & building works, supply of fabricated steel, and temporary facility work. The project—located at Banyan Drive, Jurong Island, Singapore—started on 15 December 2014 and was slated to be completed by the end of March 2016. During the project peak in October 2015, manpower numbers—inclusive of both staff and workers—reached about 100.

Currently the project is at its completion stage. As at 1 March 2016, the overall ZCS-SBR2 project had achieved 1,000,000 man-hours without Lost Time Injury (LTI). This achievement was celebrated on 1 March 2016 at the project site. Awards were presented to the workforce as a sign of recognition and encouragement. In fact, this was the 4<sup>th</sup> safety milestone after achieving 250 thousand, 500 thousand and 750 thousand man-hours without LTI in September, November and December 2015, respectively.

Since the project is adjacent to an existing live plant, we encountered many problems and had to consider key factors such as how to carry out hot work safely in the live plant. However, we managed to accomplish this with the continuous effort of the site project team. A great deal of coordination work had to be carried out daily, in order to adhere to our planned schedule.

We are now within a month of reaching our target goal of “project completion and handover”; and we are trying our best to achieve our goal in a safe manner without any LTI.



## Celebrating JEL's 10th Anniversary

On 3 December 2015, JEL hosted a dinner to mark its 10th anniversary at the Sentosa Golf Club. The celebration was timely, as the company had just achieved yet another year of record-breaking sales and profits.

In 2005, IHI Corporation acquired majority ownership of JEL. The few years preceding the takeover were the most turbulent in JEL's history. IHI's decision breathed new life into the company and ever since, the company has grown from strength to strength.

The event was attended by some 200 JEL staff and guests, including representatives from JEL's subsidiaries in Malaysia, Thailand, Indonesia, etc. We were honoured to have Mr Domoto,

Managing Executive Officer and President of IHI's Energy & Plant Operations, to grace the occasion.

In his speech, Mr Domoto congratulated JEL for its remarkable performance in the past decade and thanked JEL's management and staff who have made this possible. He ended his speech by presenting a letter of appreciation and a special gift from Mr Saito—President of IHI Corporation—to JEL's Chairman, Mr Bob Tan, and our Director, Mr Andrew Lim.

The dinner and drinks that followed were fabulous. A myriad selection of seafood, Japanese food and local delights lined the tables; and free flow of wine made for a perfect end to the night.





## JEL's Annual Staff Party 2016

This year's staff party was held on 26 February 2016 at the Pan Pacific Hotel. This time round, the theme for the event was "Rock and Roll Night". Many of our staff came dressed to the theme as rock stars from different eras. Even our Managing Director's wife sportingly dressed for the occasion as a pretty and cool rock star!

Prior to the commencement of the dinner, we had pre-activities set up at the foyer for our guests and staff to enjoy. There was an instant photo booth with props, temporary tattoo counter, and light sticks for guests and staff to play with. Our Managing Director and CEO, Mr Hiroshi Ide, made his speech before dinner commenced with Lou Hei—with everyone joining in unison to wish for luck and prosperity for the new year.

Mr Hiroshi Ide then proceeded to present the Excellent Safety Performance Awards for the year 2015 to the following projects—Az-Zour North, Kuwait; GSK Singapore; North Bangkok Combined Cycle Power Plant Project; and Manjung Track 3A and BLNG Cogen II Project. The top honour, however, went to the BLNG Cogen II Project, which won the "Champion of Champions" title for having the best Health, Safety and Environment (HSE) performance amongst all the JEL work sites in 2015.

A live band kept the guests and staff entertained during the dinner with many familiar and catchy rock songs, much to the delight of the audience. In addition, we also had a Karaoke Competition for our staff. Eight finalists showed off their singing and dancing talents on stage. Eventually, Mr. Taishi Sumida won the judges over with his entertaining and humorous performance. All in all, it was a wonderful night where everyone got to relax, have fun and got to know each other better!





## Lion Dance Performance to Usher in Luck and Prosperity in the Year of the Monkey



Lion Dance is a traditional art form that incorporates physical training commonly associated with martial arts and esthetic expressions. The lion dance is an excellent example of Chinese folk culture, which has spread across the world with Chinese immigration. Overseas Chinese in Europe, America, etc., have established many lion dance clubs, performing on Chinese festivals or big occasions, particularly Chinese New Year for good luck, as it is believed that the lion is an auspicious animal.

Performed in a resplendent lion costume, accompanied by the beating of drums, clashing of cymbals and resounding gongs, the dance imitates a lion's movements and agility.

At the invitation of our recreation club, the dragon and lions from a Lion Dance Troupe took centre stage at the stroke of 11.00am on 18 February 2016, to usher in good luck and fortune in the Year of the Monkey—much to the delight of the Management and staff, who were present to revel in the lunar new year celebratory mood.

The lions danced to the beat of the drums and gongs. The eyelids of the lions twinkled with bobbing head movements supposedly to enhance their vitality and longevity. Close to a hundred JEL staffs gathered at the JEL compound near the lobby, enthralled and entertained by the acrobatic moves of the two lions.

Performed by a dozen dancers, the dragon made wave-like movements in chase of a pearl, symbolising the pursuit of wisdom. This was followed by the lions performing the traditional custom of “cai qing” or “picking of greens”. The dance routine involved the picking of auspicious vegetables which were hung high up—a symbolic act which signified abundance for the year. The lions were then rewarded with mandarin oranges; after which, they spat out the orange skin and pith, representing good luck. The fruits were arranged into auspicious words and numbers before being presented to our MD & CEO, Mr Hiroshi Ide, with wishes for a year of stability and prosperity.

After the dance performance, staff crowded round the display of mandarin oranges in an attempt to figure out the combination of numbers to try their lottery luck. Perhaps, there were a few lucky winners amongst us?







## Lucky Draw Contest

For the first five (5) correct entries picked, the winners will each receive NTUC Vouchers worth S\$30.00, 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](mailto:dewie@jel.com.sg) or 25 Tanjong Kling Road, Singapore 628050.

(Hint: answers can be found in this issue.)

**Name :** \_\_\_\_\_ **NRIC No:** \_\_\_\_\_

**Address:** \_\_\_\_\_

The questions for the contest are:

1. How many man-hours without LTI did we achieve for the Ratchaburi project?  
\_\_\_\_\_
2. Name the theme for this year's staff party and the name of the person who won the karaoke competition.  
\_\_\_\_\_
3. What does "cai qing" or "picking of the greens" symbolize?  
\_\_\_\_\_
4. In his New Year Message, JEL Managing Director, Mr Hiroshi Ide, stressed on the need to improve on two key areas to prepare for the slow economic growth anticipated for the year 2016. Name the two areas of focus.  
\_\_\_\_\_
5. As at 1 March 2016, how many man-hours without LTI did the overall ZCS-SBR2 project achieve?  
\_\_\_\_\_



Marketing enquiries, comments and feedback should be addressed to the Corporate Affairs Division at [marketing@jel.com.sg](mailto:marketing@jel.com.sg)  
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