

JEL INSIDER

“The ability for a group of people to do remarkable things hinges on how well those people can pull together as a team.”

- Simon Sinek

New Year Message

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JAN 2024

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RISE TO THE CHALLENGE



Managing Director & Chief Executive Officer New Year Message

I would like to start by wishing everyone a Happy New Year! As we embark on another year filled with promise and possibilities, I want to take a moment to reflect on our journey together and share my aspirations for the year ahead.

First and foremost, I would like to express my heartfelt gratitude to each and every one of you for your unwavering dedication and hard work. 2023 has indeed presented us with unprecedented challenges, but it is your commitment that has propelled JEL Group to greater heights. This pivotal year has seen remarkable expansions in our EPC, construction, and maintenance businesses.

As the influx of projects increases with a multitude of significant projects secured from 682 MW Meranti Power OCGT to 600 MW Sembcorp CCP4 Banyan, it becomes increasingly vital for us to prioritize both safety, project execution and management. We must diligently focus on executing and managing projects with utmost care and efficiency, while also exploring and implementing innovative work approaches, thereby safeguarding the well-being of all workers and staff. Cash-flow management should also be emphasised whereby the adoption of effective financial strategies goes towards ensuring the financial stability and future growth of our organization.

Only through the collective effort and support from all management, subsidiaries, and employees can we navigate future obstacles and emerge stronger as a Group in the coming year. The immense value of our unified group, seamlessly collaborating across geographical boundaries, cannot be overstated. It is this exceptional asset that empowers us to consistently deliver exceptional projects like the SEWA 1,800 MW IPP Combined Cycle Power Plant in Hamriyah, the 200 MW Glow Phase 2 Replacement Cogeneration plant, and the

125 MW BCC2 Combined Cycle Power Plant in Thailand. These accomplishments stand as a true testament to our unwavering expertise and commitment to professionalism.

Furthermore, I am pleased to announce our remarkable completion of multiple solar power projects in Singapore, which has significantly fortified our solar portfolio. It is truly gratifying to have contributed to Singapore's journey towards sustainable and greener energy. As we move forward, I eagerly anticipate further development and expansion of our solar capabilities.

I would also like to take a moment to highlight the outstanding response we received for the i-JEL Safety campaign held in 2023. The ideas and contributions from our employees showcase a genuine commitment to enhancing safety standards. Your dedication in realizing better safety measures is truly commendable. Let us continue to surpass our own expectations by constantly raising the bar in terms of safety standards, especially at all work sites and working towards zero safety accidents!

It gives me immense pride to share that Jurong Engineering Limited has once again been recognized as Singapore's Best Employer. This accolade is a testament to the unwavering spirit and admirable teamwork of our people. This brings to my mind a quote from Simon Sinek: "The ability for a group of people to do remarkable things hinges on how well those people *can pull together as a team*." Just as this quote, I believe the perseverance, adaptability, and collaboration of our people will continue to play a vital role in our collective success.

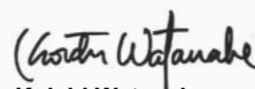
At this juncture, I would like to acknowledge and commend those of you who are amid the Career Development Program or pursued additional courses to enhance your professional skills. Your eagerness to grow

and develop exemplifies the spirit of personal and professional growth that we strive to foster within the Group. Let us continue to nurture this culture where each individual can thrive and reach their full potential.

As we set foot into the New Year, I am filled with confidence and optimism for what lies ahead. Despite the uncertainties that may persist, let us continue to build upon our core businesses of EPC, construction, and maintenance. We will capitalize our robust regional network, anchored by the remarkable foundation of our headquarters in Singapore. Through this steadfast unity, we can better serve our clients, embracing the incredible opportunities that regionalization brings. By synergizing our efforts as one cohesive JEL Group, we will undoubtedly cement our status as a market leader in the power plant industry. With unity as our driving force, there is no limit to what we can achieve.

I would once again like to reiterate my sincere appreciation for the unwavering support we have received from our clients, partners, management, and subsidiaries. Your trust in our capabilities and collaborative spirit have been instrumental in our achievements, and we look forward to further strengthening these relationships in the years to come.

On behalf of the entire management team, I extend my warmest wishes to our clients, partners and last but not the least, employees, a prosperous and fulfilling New Year. May it bring you joy, good health, and continued success in all your endeavors!


Koichi Watanabe

Managing Director & Chief Executive Officer
January 2024

Banyan CCP4 CCGT Project

Jurong Engineering Limited (JEL) together with Mitsubishi Power Asia Pacific Pte. Ltd. (MPW-AP) have been awarded an EPC contract on 18 May 2023 by Sembcorp Cogeneration Pte. Ltd. to build a new cogeneration plant that shall be integrated with the existing plant in Jurong Island (see Figure 1).



Figure 1 Sembcorp Cogen CCP3
@ Banyan located Banyan
Avenue, Jurong Island

Currently, Sembcorp is operating a cogeneration combined cycle plant (CCP3) that has been operational since 2014. Under Phase 1, the single-shaft gas fired cogeneration CCGT cogeneration block (CCP3) with Alstom's GT26 gas turbine has a power output of 393 MW and HP steam generation of 200 tph.

With Phase 2, the new cogeneration combined cycle power plant (CCP4) will host an advanced Mitsubishi Power M701JAC J-class Gas Turbine capable of generating 600 MW and 200 tph of either HP or LP steam. The CCP4 will also be designed for 30% hydrogen co-firing with the possibility of 50% hydrogen co-firing in the future.



30%
Hydrogen co-firing

As part of the EPC consortium, JEL is responsible for the supply of total Balance of Plant (BOP) equipment, custom clearance and inland transportation of imported equipment, civil and structural work, building work, equipment erection/installation work, piping and insulation work, electrical and instrumentation work, power cabling and termination, pre-commissioning and testing and lastly commissioning of BOP system.



ECM Pond constructed



Bore pile rig is assembled and testing in progress.

With the Temporary Occupation License issued in June 2023, site clearance and preparation for subsequent construction have commenced.

As this project will be performed on both greenfield and brownfield, the duality of this situation engenders a high degree of complexity. For instance, the constrained and congested CCP4 site plot means limited space for construction laydown and height restrictions result in a more challenging transportation of heavy or large equipment. Nonetheless, JEL believes the experience and tenacity of our people will allow them to overcome any adversities. We look forward to the safe and quality completion of the CCP4.

Van Phong Project



2x660MW Van Phong 1 BOT Thermal Power Plant Project is in Ninh Phuoc Commune, Ninh Hoa District, Khanh Hoa Province, Vietnam. The project owner Van Phong Power Company Limited has awarded the project to a consortium consisting of IHI, TOSHIBA, CTCI, and DOOSAN. JEL is working as a subcontractor to IHI and handles the construction of a 660 MW boiler and auxiliaries (2 Units), mechanical, electrical, controls & instrumentations, and erection of the power plant on a lump sum/remeasurement basis.

As a testimony of the VP1 team's exceptional dedication, expertise, and collaborative spirit, they have conquered the challenges arising from the COVID-19 pandemic and managed to achieve an outstanding 28 million manhours without LTI. We would like to extend our heartfelt appreciation to each member of the VP1 team for their hard work and commitment.



Pulau Indah Power Plant (PIPP)

Pulau Indah Power Plant (PIPP) is a 1,200 MW natural gas-powered combined cycle gas turbine power plant – with an efficiency of more than 60%, much higher than its coal or oil equivalent, in Pulau Indah, Selangor, Malaysia. The gas-fired power station is developed by PIPP, a consortium of Worldwide Company and Korea Electric Power Corporation. EPC services are headed by Mitsubishi Corporation, PEC Powercon Sdn Bhd and POSCO Engineering & Construction.

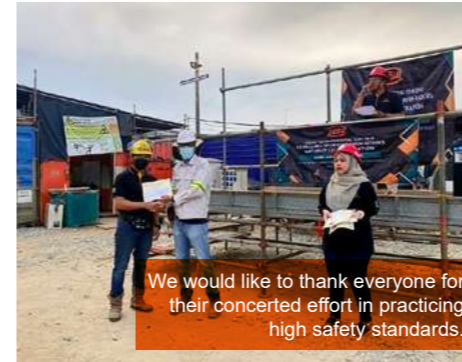
Since 2018, EESB has worked closely with POSCO Engineering & Construction for cost estimation, gaining their trust and confidence in EESB's capabilities. EESB then went on to secure 3 separate packages in PIPP with PEC Powercon Sdn Bhd. Notice to Proceed was issued on 1 January 2021 and construction works subsequently commenced on 1 May 2021.

The 3 packages secured are:

1. Heat Recovery Steam Generator (HRSG) Mechanical Work on 26 December 2021
2. Power Piping Work on 21 April 2022
3. Turbine Mechanical Work on 21 April 2022

Today, the overall physical progress stands at 84%. The sea water intake including CWP installation was completed in June with the HRSG#1 official hydrotest and Turbine#1 lube oil flushing kicking off in September.

Praises to the EESB team for their dedication to safety and achievement of 1.5 million safe manhour without LTI in June.



2EHAcid Plant II Project



Equator Engineering Sdn Bhd (EESB) has been awarded with Civil and Structure scopes for the 2EHAcid Plant II Project. It is a 2-Ethylhexanoic Acid (2-EHAcid) plant expansion project located at BPC's integrated site in Kuantan, Malaysia. BASF PETRONAS Chemicals Sdn. Bhd. (BPC) is a joint venture between BASF SE of Germany and Malaysia's PETRONAS Chemicals Group. Incorporated in August 1997, the company operates an Integrated Chemical Site (ICS) situated at the Gebeng Industrial Estate, Pahang that currently comprises 14 fully integrated plants, of which the first 2-EHAcid plant was commissioned in 2016. The second 2-EHAcid plant that is undergoing construction will be built next to the first plant and located within BPC's existing ICS at Gebeng Industrial Estate.

To date, piling and major foundation work have been completed and the project is well underway with the steel structure fabrication work, steel structure erection and civil works reaching the final stages.

Over the months, the EESB team contested with various obstacles. Notably, the unavailability of certain design materials in the local market led to unprecedented changes in drawings and materials that affected the progress of commencement of steel structure work. Furthermore, the congested site posed a strain on the allocation of construction equipment that

is especially challenging when civil and steel structure erection works have to be carried simultaneously with mechanical contractor erection work. Ultimately, these compounding factors resulted in a month of delay especially for steel structure works.

Nonetheless, the team's spirit remain high and rapid progress for steel structure works is expected to resolve the initial delay. The team remains confident in their ability to deliver the project as scheduled before year end.



Bataui Hijau Combined Cycle Power Plant Project (BHCCPP-1) Project



Compliments to the BHCCPP team for reaching 1 million safe manhours without LTI.

One of the largest mining companies in Indonesia, PT Amman Mineral Nusa Tenggara (AMNT) has awarded an Equipment Supply Contract to Jurong Engineering Limited and a Construction Contract to PT Jurong Engineering Lestari to build a 450 MW Gas Based Combined Cycle Power Plant, also named, Batu Hijau CCGT-1 Power Plant. The plant shall serve as a captive plant for AMNT's mining operations, located at West Nusa Tenggara, Indonesia.

With flexibility in terms of power demand arising from existing mining operation, new smelter plant and the process plant expansion a prime area of concern, the power plant will feature two blocks of plants in 3-3-1 configuration using Siemens' state-of-the-art SGT-800 B5 Gas Turbines (GT). This configuration allows the plant to generate a wider range of power and adjust to varying circumstances. The plant will be completed in two phases – simple cycle phase and combined cycle phase. For the simple cycle phase, two GTs in the first block possess dual fuel capability to facilitate diesel and LNG firing, fulfilling the essential power requirement.

Today, most of the engineering work has been completed for the simple cycle operation and the major equipment has been procured, leaving only the bulk equipment to be procured. Construction is also underway with the Block 1 HRSG

foundations laid and on-base works for Units 1 and 2 GT and Generator set completed. With piling almost completed, the teams are steadily progressing on other fronts, such as the civil works, field erection tank works, pipe rack installation and more.

In anticipation of the commissioning for the simple cycle phase, the commissioning team has been mobilized and discussions with the client to finalize plant operation philosophy, schedule and procedure are ongoing.

In October, a celebration was held to mark the first HSE milestone of the project of 1 million safe man hours without lost time injury. The PMC Project Director, Mr Mike Stephenson who graced the celebration emphasized the significance of this event:

“ It is indeed a very important celebration. Let's make sure we get to 2-3 million by doing what we have done, especially with more people on site now. We must not let our guard down and keep on top of the safety items.

While this project is not without its difficulties, under the perseverance and expertise of our people, we are certain it will culminate positively.



Congratulations to Liang Xiao who successfully set in motion the idea of using pre-cast to significantly reduce the weeks required to cast roof beams on the Gas Insulated Substation.



The team has successfully brought GT Unit 1 On-base.

Project Aurora

NUR Generation Sdn Bhd is Malaysia's first and only privately owned independent power utility provider with an exclusive right to sell electricity to industrial and residential customers of Kulim Hi-Tech Industry Park (KHTP) in Kedah.

The company currently owns, operates and maintains a 220 MW Combined Cycle Gas Turbine (CCGT) Plant in a 115-acre zone of KHTP. To meet the increasing demand from KHTP, Project Aurora was born.

Project Aurora will develop a 130 MW CCGT with two gas turbines (Siemens SGT 800), two HRSGs, a steam turbine (Siemens SST-300) and air-cooled condenser (ACC), among various balance of plant. The project consists of two phases – Simple Cycle comprising the installation of 2 gas turbines with bypass stack as Phase 1 and Combined Cycle with steam turbine and HRSGs as Phase 2.

The project was awarded to both JEL and EESB in March. JEL's scope entails the plant's engineering and supply of major equipment. EESB's scope encompasses the supply of locally procured items/equipment, complete site civil construction works, complete plant M&E installation work including extension of 132 KV switchyard, start up, testing and commissioning.

The project stands at 18.76% in September with the first piling driving carried out in June and purchase orders for major equipment issued. Siemens has also shipped out the 2 units of gas turbine and generators in September. Today, manufacturing by vendors, civil works for piling and foundation, GT & GTG foundations are gaining ground.

As of September, the project has attained over 165,000 manhours without LTI. We would like to applaud the teams from JEL and EESB and continue to encourage everyone to uphold high safety standards while delivering quality work. Come next year July, we look forward to the fulfilment of Phase 1!



Site Possession Ceremony



Gas Turbine Generator #2 foundation (curing)



Electrical Building (Column)

Sahacogen SPP Renewal Project

JEL and TJEL first worked for Sahacogen (Chonburi) PCL 25 years ago on the Phase 1 122 MW Combined Cycle Cogeneration Power Plant project (CCCPP). Since then, Sahacogen has expanded the plant capacity three more times to meet the increasing industrial users' demand. Testament of the client's trust and confidence in our capabilities, JEL and TJEL have remained the EPC contractor for all 3 phases.

As Sahacogen CCCPP Phase 1 Power Purchase Agreement (PPA) with the Electricity Generating Authority of Thailand is expiring in 2024, the client has applied for a new PPA with the intention of building a new plant. Thus, in 2021, Sahacogen entrusted JEL and TJEL once again as the EPC contractor for the Sahacogen SPP Renewal Project (SCGRP). JEL will be responsible for the plant's basic, conceptual, and detailed engineering including the supply of major equipment. TJEL will take charge of the supply of locally procured items/ equipment, complete site civil construction works, and complete plant M&E installation work. Construction started in 2022 with the demolishing of the existing Expansion #1 Plant Gas Turbine Unit-3 and other adjacent office and facilities.

SCGRP will bear a plant configuration of one Gas Turbine Generator (Siemens SGT-800 57 MW), one supplementary fired HRSG (Vogt Power

International) and one Steam Turbine Generator (Siemens SST-600, three Pressure & condensing 22.5 MW). When built, it will have a gross power output of 79.5 MW and 75 ton/hour process steam for supply to Industrial Park users (IUs).

The project requires proficient engineering dexterity with the integration of differing pressure levels between the existing plant steam system and the new steam turbine and new control system that is crucial when it comes to the piping and cabling of SCGRP. Apart from that, the demolition and installation of SCGRP is carried out in a very narrow and congested space. Coupled with the fact that the existing plant is still in operation, careful planning and foresight are necessary for work to run smoothly.

Despite these challenges, under the joint effort between JEL and TJEL, the back energization went favorably in September and balance of plant systems began commissioning in October. The project has also achieved 1 million safe manhours without LTI in September. We look forward to the first firing and synchronization of SCGRP this December.



**JAN
2023**

HRSG module lifting & erection



**APR
2023**

GSUT GTG#6 Replacement



**JUN
2023**

Steam turbine package & condenser on base



**SEP
2023**

1 million man-hours without LTI



Keppel Sakra Cogen 600 MW

Advanced Gas Turbine Cogeneration Combined Cycle Plant

On 30 August 2022, Keppel Energy Pte Ltd awarded a consortium comprising Jurong Engineering Limited (JEL) and Mitsubishi Power Asia Pacific Pte Ltd (MPW AP) an EPC contract for the engineering, procurement, and construction of the Keppel Sakra Cogen (KSC) Plant, to be built on Jurong Island. The KSC Plant will be capable of generating an impressive 600 MW (gross) and is designed to run initially on natural gas as primary fuel but has the capability to run on fuel gas mixed with 30% hydrogen – a cleaner energy source. This makes the KSC Plant Singapore's first ever hydrogen-ready power plant.

MPW AP will supply major equipment including the state-of-the-art J-class gas turbine manufactured in their facility in Takasago, Japan. The balance of plant equipment will be engineered and supplied by JEL on top of the complete plant construction.

In January, Notice to Proceed was issued to the consortium and EPC work officially commenced in February. Plant site area was shortly handed over to the consortium in late February allowing JEL to kick start the construction of temporary site facilities and site preparation in the following month.

On 19 July 2023, the groundbreaking ceremony was officiated by Minister for Manpower and Second Minister for Trade

and Industry Mr. Tan See Leng; CEO of the Energy Market Authority (EMA) Mr. Ngiam Shih Chun; Chairman of Keppel Mr. Danny Teoh; CEO of Keppel Mr. Loh Chin Hua; and CEO of Keppel Infrastructure Ms. Cindy Lim. The groundbreaking ceremony is symbolic of Singapore's commitment to achieving net zero emissions by 2050.

Today, engineering design and compliance work are in progress and at various stages of completion. Vendor selections have been finalized for most major equipment while the procurement for the rest of the equipment and bulk materials are underway.

To add, site clearance, elevation and ECM system have been completed, alongside, temporary site office, carpark, warehouse, and worker rest shelter. The owner, owner's engineers, and consortium have been mobilised to site offices as of August.

JEL is glad to be given the opportunity to work together with Keppel Energy and MPW AP to reduce Singapore's carbon footprint. We are confident that when completed, this project shall elevate our reputation as an EPC solution provider and seasoned construction company in the region.





Gas turbine & generator on base

IRPC CHP III Project

IRPC Clean Power Company Limited (IRPCCP), a subsidiary of IRPC and GPSC, is a power and industrial utilities provider. Under the SPP Firm Cogeneration with EGAT and Industrial Users Supply Agreement, IRPCCP's current plant supplies 247 MW of electricity and 300 tons per hour of steam.

IRPCCP intends to further strengthen their power capacity by developing the CHP III 70 MW Cogeneration Combined Cycle Power Plant, adjacent to the existing power plant CHP II of IRPCCP situated in IRPC Eco industrial estate, Mueang Rayong District, Rayong province, Thailand.

The new CHP III Project boasts a 1x1x1 combined cycle configuration consisting of one Siemens SGT-800 Gas Turbine Generator, one Heat Recovery Steam Generator and one Siemens SST-300EP extraction-condensing Steam Turbine Generator. When completed, the power plant shall provide 70 MW of electricity and 70 tons per hour of steam for export to neighboring industrial plants.

On 31 March 2022, the engineering, procurement, construction, and commissioning responsibilities have been entrusted to Jurong Engineering Limited and Thai Jurong Engineering Limited, with the EPC contract awarded by IRPC Clean Power Company Limited.

JEL is responsible for the plant's basic, conceptual and detailed engineering including the supply of major equipment. While TJEL is overseeing the supply of locally procured items / equipment, site civil construction works and plant M&E installation work.

Since commencement, the teams have been working tirelessly. Major components like the GSUT, HRSG modules, gas turbine and generator equipment, steam turbine and generator equipment are finally on base. As of August, the project has carried out the HRSG hydrotest, successfully received power at 6.3kV for system and 400V for system energization and witnessed a smooth DCS energization. The teams' commitment to both quality work and safety has borne fruits with the remarkable achievement of 1.3 million man-hours without LTI in September.

With the various milestones achieved as per schedule, it has paved the way for GT first fire as planned in November and commercial operation date a few months later. We would like to acknowledge the accomplishments of the teams and look forward to the smooth delivery of the CHP III project.

JEL Maintenance Updates

MHI Senoko Maintenance

JML was entrusted with turbine blades replacement, Non-Destructive Testing (NDT) inspection and rotor alignment work including auxiliary systems for Senoko Energy Pte Ltd. Work commenced on 17 August and mechanical completion was achieved on 29 September on target. Throughout, JML's team remained on standby for the testing and commissioning with performance tuning testing.

As of 7 October, JML completed MHI 701 F4 Gas turbine Major inspection GT61 without a hitch, successfully meeting their client's expectations.



Lifting operation to reinstate the casing



Safety talk after the successful rotor lifting from the casing.



JEL MD, Mr Watanabe and JML CEO, Mr Nagappan witnessing the turbine blade ring alignment during their site visit.

Novartis BioNTech Project

JML has been entrusted with electrical and instrumentation work on a total of 4 levels of Novartis by BioNTech SE in July. Under the electrical scope, JML is responsible for the LV panels and distribution boards, dismantling and modification works, socket outlets and switches installation and more. Under the instrumentation scope, JML will cover the installation of the Building Management System, supply, and installation of field instruments such as transmitter and gas detector, and finally supply and installation of gas detection system, cables, and conduits.

The progress has reached its half-way mark and is due for completion in February 2024.



Cable laying work and junction box installation

Repeat Client for Jurong LOBP Expansion Project

As a testament of JML's capability and aptitude in providing maintenance solutions, Wood (Amec Foster Wheeler Asia Pacific Pte Ltd) has once again entrusted JML with the ABB Module 1 & 2 Installation and MPR-18 (Modularised Pipe Rack) Fabrication and Installation package under Jurong Lube Oil Base Plant Expansion Project owned by Exxon Mobil Asia Pacific Pte Ltd.

Since commencement in February, the team has diligently put in the hours to ensure a smooth and smooth completion that is due before year end. Their hard work has paid off with the achievement of 250,000 safe manhours without LTI.



250,000
Safe Man-hours without LTI

Boiler Demolition Works

Sembcorp Cogen Pte Ltd has awarded JML with a Very High Pressure (VHP) Boiler Demolition works in August whereby safety is paramount as the boiler is of an immense pressure.

For work to be carried out safely, the team must blind all pipelines connected to the VHP boiler and capped the HP steam with a butt weld. All power and instrument cables will be isolated and demolished and the cables from panels, junction boxes and field instrumentation disconnected.

With this done, the team can proceed with demolition and reinstatement work encompassing the scopes for mechanical (piping, vessel, drums etc.), electrical (panels, trays, cable re-routing etc.), instrumentation (control valves, analysers etc.) and civil/structural (demolition of concrete foundation, excavation etc.).

Work has been running smoothly and the project is on target for completion come January 2024.



Duct bank for underground cable re-routing



Cable tray installation



Isolation and blinding for steam lines for the VHP boiler

2 x 340 MW Open Cycle Gas Turbine Project

On 28 February, the consortium comprising of JEL and Mitsubishi Power Asia Pacific has been awarded the turnkey development of the 2 x 340 MW Open Cycle Gas Turbine (OCGT) by Meranti Power Pte Ltd. The OCGT is characterized by its fast start generation capacity compared to Combined Cycle Gas Turbine, whereby it can be brought online in less than 10 minutes. The OCGTs are especially important to maintain the integrity of our power grid with more older generating units retiring coupled with an anticipated increase in power demand over the next few years.

The groundbreaking ceremony in May officiated the commencement of work. Today, with the diesel tank and switch house piling work completed and the foundation work for diesel tank-1 laid, site work has picked up its momentum.

JEL is grateful for the opportunity to help buffer against any potential shortfalls in electricity in a timely manner – further reinforcing Singapore's grid security and reliability. We are certain the expertise and experience of our people will translate to a safe and timely completion of the OCGTs come June 2025.



Asphalt laying in progress for diesel tank-1



Switch house building excavation, lean concreting, and pile cap casting work underway.

First EPC In-House Training on Turbine Bypass Control



Mr Wong Chow Yee



Mr Daisuke Muraoka



In line with JEL’s Continuous Learning core value, Mr Daisuke Muraoka, JEL’s P&E HOD, has taken the initiative to prepare a series of technical training material related to the power plant design.

The topics include Turbine Bypass Control, Compressibility Factor, Performance Test (overall), Performance Correction, Uncertainty Calculation, Gas Turbine Characteristics, Insulation and Noise.

The first In-House Training session on Turbine Bypass Control was held on 23 September, led by Mr Muraoka. While it was a weekend, the session received great enthusiasm with 30 EPC staff attending in person and 70 joining virtually – with the latter including project site and IHI staff. Mr Wong Chow Yee, JEL EPC GM, kicked off the session with a welcome speech and brought up his appreciation for Mr Muraoka who has meticulously prepared the training despite his busy schedule. He further praised Mr Muraoka for his standardisation efforts and development of various engineering software tools.

For the curious, a Turbine Bypass System (TBS) is used to divert the steam around the steam turbine to the condenser and the role it plays in power plants cannot be downplayed. From this session, our staff got to understand the typical configuration of a TBS, its functions, and how major components operates. Mr Muraoka called attention to the in-house tool called “JEL Turbine Bypass Calc” developed by him. With this tool, it can simulate the conditions of a Turbine Bypass Operation for both design and off-design cases, making it undoubtedly useful for engineers. Before concluding the session, Mr Muraoka highlighted some recent projects executed by JEL to share valuable engineering tips on their TBS designs.

The session ended with a Q&A section and lunch provided to all staff who attended physically. Much appreciation to Mr Muraoka in leading this informative session and our staff look forward to the next session!

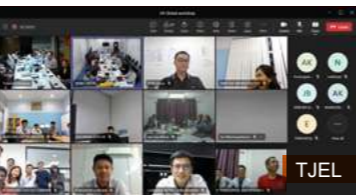
IHI Global Workshop

Our parent company, IHI Group, initiated a global workshop to inculcate all member companies its Global Management Policy and Group Human Capital Strategy.

From September to October, JEL HR conducted this workshop for all Management Committee, Head of Departments, Employees holding the Job Grade M1 and JEL subsidiaries.

This workshop provides the opportunity for employees to reflect upon their work and empower them to actively contribute to the realization of the Group’s strategies by adopting incremental changes. By leveraging IHI Group Management Policies and JEL Group Management Policies, JEL Group shall continue to head in the direction of the Group’s business goals of increased profit and zero safety accidents.

In the coming year, HR will continue to progressively roll out this workshop to the rest of the staff.



Unveiling the New Look of Jurong Engineering (India) Private Limited

As of September, Sinmado Engineering (India) Private Limited has officially been renamed Jurong Engineering (India) Private Limited.

To commemorate the start of a new chapter, JEL Chairman, Mr Bob Tan, JEL MD, Mr Koichi Watanabe and JEL India MD, Mr TJ Khor graced the company on 3 October. Upon reaching, the guests of honour were greeted warmly by the staff before being invited to participate in the Pooja ceremony – a beautiful reflection of Tamils’ culture and spirituality.

The ceremony was conducted by local priests with a series of rituals that gradually imbued the atmosphere with a sense of

sanctity. One of the rituals included the “Poorna Kumbha” symbolising respect to the three guests of honour. The ceremony reached its zenith with the lighting of a lamp, exemplifying enlightenment, and knowledge. At this moment, Mr Bob Tan unveiled the new “JEL India” logo and was met with resounding applause. The new logo now ties in better with JEL India’s parent company, JEL, with an alignment of identity, core values, and aspirations. Following the ceremony, the guests embarked on an office tour that gave them a glimpse of the company’s daily operations as they visited the various departments and its employees.

Come evening, a celebration took to the grand Hotel Leela Palace which kicked off

with a brief video tracing the company’s remarkable journey over the decade. Mr Bob Tan then delivered a heartfelt speech on the significance of JEL India’s new logo during this pivotal transition and underscored the integral role JEL India plays within JEL Group. He went on to express his appreciation for the employees’ innovation effort in supporting JEL EPC centre and hopes to continue to witness JEL India flourish. The evening concluded with a lavish dinner, whereby laughter can be heard as employees celebrated this new chapter of the company.

As a unified JEL Group, JEL India remain committed in working towards a brighter future.



My Hopes! My Aspirations! My JEL!

Our new colleagues share their hopes and aspirations. Through their stories, long or brief, we hope to get to know them better.

After graduating from university, I could not wait to apply what I have learned. Hence, when I came across JEL, I was intrigued by the opportunity to glean greater insights into the power plant industry. From my short time here as a Design Engineer, I have come to find JEL a great place for engineers to grow as there are ample opportunities to be exposed to various project packages.

I look forward to continuing honing my technical knowledge under the guidance of my senior colleagues who have been more than helpful in addressing my doubts whenever I have any. Hopefully, along the way, I will develop to become a valuable team member and forge meaningful, lasting connections in JEL!



Chen Xing Hui
Design Engineer

While I have worked in the construction industry for 18 years, joining JEL has been daunting as I had no prior experience in power plants. The initial uncertainty quickly vanished after interacting with my colleagues who have been helpful and understanding throughout my onboarding. Most importantly, my immediate supervisor has not only been incredibly supportive, but our working style and mindset are closely aligned.

I am glad to have set foot on this interesting career path and look forward to broadening my knowledge in power plants while progressing in JEL.

PS. I am happy to share that the biggest difference between JEL and the other companies I have worked in was that people here smile a lot more!



Audrey Tan
Site Engineer

Since joining, I have visited the Thailand GSPPR site for a month where I gained better insight into the operational aspect of power plants and got to witness my seniors resolving issues steadfastly. This experience renewed my desire to elevate my electrical engineering knowledge which I believe would benefit my career.

While working at the site has been a test of my mental fortitude, I remain eager for the opportunity to be exposed to situations where I can hone my communication skills and grow to become a person who can tackle problems calmly and effectively.

This job is undoubtedly highly demanding and necessitates a work-life balance. As such, I am determined to exercise more and improve my current state of flexibility – for which the latter resembles that of an old lady. Currently, my go to exercise is aerial yoga which I find to be an immensely wonderful way of relieving stress while gaining strength!



Melvin Wee Jian Pang
Senior Manager

INSIDER Conversations

Let us hear from **Mr Jack Putra**, a Finance Manager from PT Jurong Engineering Lestari, as he shares his story.

When did you first join PTJEL and what did you join PTJEL as? What is your current role?

I first joined PTJEL on 1 December 2008 as a Finance officer and handled PTJEL Head Office petty cash and bank, vendors' invoices payments, and monthly tax payments and reporting.

Today, I am currently heading PTJEL's Finance. Together with my team, we help to safeguard PTJEL's operation by overseeing the projects' cash flow, comply with tax regulations to minimize tax audit findings, ensure timely financial reporting to JEL HQ Finance and report to local statutory authorities among other fulfillment of regulatory reporting requirements.

What are some difficulties you face in your job?

Despite working in the finance industry for more than a decade, I still find the reporting period to be particularly demanding. During this period, I not only have to prepare documents for reporting but must also attend to other urgent matters – typically time-sensitive issues related to projects' operations that mandates a prompt follow-up.

Apart from that, a project's cash flow is challenging to say the least, typically due to delay in payment collection arising from varying unprecedented factors at site. Coupled with payment to subcontractors and vendors that are usually performed earlier, this mismatch tends to lead to a higher cash flow deficit.

Finally, the changes in tax regulations have been a source of concern as the regulations often come into effect at short notice.

To overcome these challenges, I have learned to manage my time more efficiently and delegate tasks to my team. Under the steadfast support of my finance, accounting, and tax teams, I have been able to fulfil my responsibilities. I would like to take this opportunity to express my immense gratitude to my teams who have been a pillar of support, and I am assured we will successfully overcome any challenges that may come our way.

What is your most memorable experience over the years working in PTJEL and why?

One of the experiences that stands out was the year PTJEL had to change our Financial Year period and functional currency. We went from 1 January – 31 December to 1 April – 31 March and USD to IDR respectively. This transition was not an easy feat whereby we had to prepare copious documents and fulfil their requirements. When we first submitted our proposal to change our functional currency, it was rejected by the Tax Office. Despite this initial setback, we were not discouraged and set to improve our proposal to meet their stringent requirements. On 13 February 2017, we managed to gain the Tax Office's approval. PTJEL has then successfully changed our functional currency from USD to IDR with effect from FY2017.

What has been the biggest adjustment point when you first became the Finance Manager of PTJEL?

When I became the Finance Manager in November 2013, I had to quickly adapt to a myriad of changes and bear the additional responsibilities that came with my new role.

Back then, PTJEL freshly adopted a new financial reporting method – SAP, which required my team to prepare a FY2013 year-end audit report with an external auditor. Furthermore, with the financial year-end fast approaching, I had to resolve outstanding financial matters with various Project Managers to close the financial year smoothly. On top of that, we had to prepare monthly and annual report submissions to JEL HQ Finance to keep them abreast with PTJEL's financial situation. Adjusting to my new role during a period of change was tumultuous but with the robust support from my team, we successfully rose to the challenge.

What are the qualities/values you find most important in your line of work?

I find integrity, accountability, honesty, loyalty, and respect to be the five most important values pertaining to my line of



work. Throughout my career, I have always done my best to uphold those values and it is my belief that these values have been able to help me establish a team whose members can support each other during times of distress and provide a robust and informative financial report to our JEL HQ Finance.

How do you typically unwind after work?

After a long day, I enjoy listening to music to relax. Some of my favorite musicians are Celine Dion, Kenny G and Andy Lau. I also like to watch YouTube videos whereby I follow R66 Newlitics and Deddy Corbuzier to keep up with current affairs. Being a passionate car lover, I enjoy watching Oto Driver and Fitra Eri too.

Apart from that, I enjoy relieving my stress through some form of physical activity like swimming, table tennis, futsal, and volleyball. They are not only beneficial for my health but also a good way to bond with my family and friends!



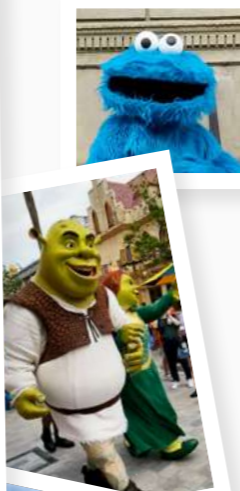


Universal Studios Singapore

Our colleagues were in for a treat at Southeast Asia's first and only Universal Studios theme park for the weekend. At the Universal Studios Singapore, many of our colleagues turned up for an action-packed day.

The theme park features immersive 3D rides to interactive plays and rollercoasters – hailing from iconic movies like Transformers, Shrek, Revenge of the Mummy and more, there were rides for everyone. Piercing screams could be heard as our braver colleagues took on the thrilling Battlestar Galactica: Human vs. Cylon. With speeds boasting up to 90km/h, these were certainly not rides for the faint-hearted!

In the words of some colleagues, the day was exhilarating, hair-raising and mesmerizing!



Durian Feast

August is synonymous with the King of Fruits, Durian, and this year is no exception.

With plenty of Mao Shan Wang going around, everyone spared no thoughts and enjoyed heartily.

This year's feast was also paired with the Queen of Fruits, Mangosteen. These two fruits are frequently eaten together as the cooling properties of mangosteen are thought to be able to effectively neutralize the heatiness of durians and prevent a sore throat. This is certainly a great addition for those who want to eat as many durians as possible!



Chinese 7th Month Prayer

The Chinese 7th Month Prayer, otherwise, also commonly known as Hungry Ghost Festival, falls on the seventh month according to the Lunar calendar. The event kickstarted with the usual ceremonial proceedings. During which, colleagues who share the common belief of caring for the material needs of the deceased in their afterlife were observed burning the paper money for this purpose. The event concluded with a scrumptious buffet.



Bowling Tournament

This year's Bowling Tournament took an unexpected turn with 2 teams qualifying for 3rd place. The tensions were palpable as the teams bowled a final decisive round with the higher scoring team awarded the 3rd place. Congratulations to the teams and players who won.

Thank you to Mr Watanabe and Mrs Watanabe for joining and gifting the awards. We hope everyone had fun. Till next year!



East Coast Cycling

On the last Saturday of September, our colleagues set off on a leisure ride from East Coast Park to Marina Barrage. Before cycling, everyone had a hearty breakfast consisting of cakes and pastries.

The scenic route leading up to Marina Barrage was wonderful whereby photos with the iconic Marina Bay skyline comprising of the Singapore Flyer and Gardens by the Bay, cannot be missed. The weather was also in our favor making the cycling route even more pleasant. We cannot wait for the next cycling trip!

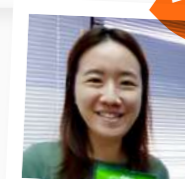


National Day Quiz

This year's National Day was a little different from previous years. To celebrate, we quizzed our colleagues on how well they think they know Singapore!

The quiz was conducted virtually whereby the fastest correct answers gained the most points. Spirits were high as we concluded the quiz, and the top 3 winners were subsequently awarded Capital vouchers that can be used at CapitaLand Malls.

We hope everyone enjoyed the quiz and learned some interesting facts about Singapore!



Hong Wei Xun



Raymond Thiang

Emiley Tan

The Tale of All Hallows' Eve

In today's modern culture, the month of October has become synonymous with pumpkins, trick-or-treating, and horror films. Even if you do not celebrate Halloween, you will be hard pressed to not have heard of this day.

The origins of Halloween traces back around 2000 years ago to the Celtic celebration of Samhain (pronounced "sow-win") in Europe, a festival that marked the end of the harvest season and ushered in a new year. During Samhain, the Celts believed the veil between the worlds of the living and the dead became especially thin, so people could communicate with loved ones who had passed on and that spiritual communication becomes easier for Celtic priests or druids. To ward off evil spirits, Celts donned disguises and costumes to ward off spirits. This could explain how the tradition of Halloween costumes came about.

On Samhain, to appease the deities, Celts built bonfires and sacrificed crops and animals. These bonfires frequently attracted bugs and thus bats who feasted off them. Over the years, bats came to be seen as the harbingers of death.

The 8th century brought about a change in this pagan holiday when Pope Gregory III designated 1st November as a time to honor saints – known as "All Saints Day". Coupled with the rising popularity of Christianity in Europe, Samhain was gradually displaced. As All Saints Day came to incorporate some of the traditions of Samhain, All Hallows' Eve that falls on 31st October eventually came to be known as the Halloween we know of today. For which, "Hallow" is an old English word for "Saint".

While today's Halloween has evolved vastly since its conception, many still believe in the deceased that wonder the Earth.

We hope everyone had a spooky and fun Halloween!



We Care @ JEL

A massive thank you to all the volunteers who joined us in 2023!

The joy we derived from seeing our colleagues band together for a better cause is immeasurable. We are positive that when the opportunity arises, JEL will not fail to extend our helping hands!

Food Bank



In Singapore, an estimated 1 in 10 households has suffered from at least one instance of food insecurity in the last 12 months. From this, only a worrying 22% of households receive food support. Hence, this year we have decided to work with Food Bank Singapore to organize and pack food inventory.

Food Bank Singapore aims to close the gaps by offering support and ending food insecurity in Singapore. One way they do this is by accepting food donations which are subsequently distributed to households in need.

Under their initiative, we held our first session in June 2023. Our volunteers were briefed on the protocols and safety measures before commencement. In pairs, we retrieved the listed inventory from the shelving according to the listed requirements, occasionally putting our heads to use to work out some simple math when a certain item is unavailable. Over 2 hours, our volunteers diligently packed all the inventory into boxes that will subsequently be delivered to households in need.

This session successfully brought our colleagues closer as we worked towards a common cause while also providing a short workout. We look forward to our next session!

Meals-on-Wheels

The Meals-on-Wheels (MoW) programme collaborates with TOUCH Home Care to help deliver hot meals to beneficiaries.

Since 2020, we have delivered over 943 meals to the beneficiaries residing in Bukit Batok, Bukit Panjang, Choa Chu Kang, and Jurong.

We are immensely grateful for the familiar faces who continue to stand by us and for the new supporters who have joined us.



Mid-Autumn Festival



For this year's Mid-Autumn Festival, we collaborated with Bukit Gombak CCC and Hillgrove Residents' Committee to celebrate this special day with the families at Hillgrove. The event was graced by Ms Low Yen Ling, the Minister of State for Culture, Community and Youth, Minister of State for Trade and Industry and Mayor of South-West District.

As the residents ebbed in, friendly smiles and chatter were exchanged. Reveling in the infectious kampung spirit, the celebration turned up a notch with food at the table and an exciting lineup of performances by some of the residents.

Our colleagues who volunteered their time were glad to not only have been able to help by distributing goodie bags, setting up the event and the likes, but also thoroughly enjoyed their interaction with the friendly residents!



*The more you practice the art of thankfulness,
the more you have to be thankful for.*

- Norman Vincent Peale

Turning Appreciation into Words

Celebrate the power of gratitude as our colleagues share their heartfelt appreciation for the individuals who have touched their lives in the past year. Read on to be inspired by their words of thanks.

I am thankful to Mei Wei for her warmth and hospitality!

I would like to thank to Ngai Sek Kee and my colleagues

Dear Shanthi san & Ram san,
I want to express my gratitude for your support.

I would like to say here that I'm incredibly grateful and thankful to all the JEL staff & employees. Especially to Mr. Ramanan, C&S HOD. I feel very blessed, grateful and would like to also give thanks to God.

Thank you to Mr Derick & Mr Yap for giving me opportunity to join JEL. They are very helpful and patience to guide me step by step on my job task.

I'm very happy to work in JML and I want to thank my boss and colleagues for making me very comfortable and their guidance in my work.

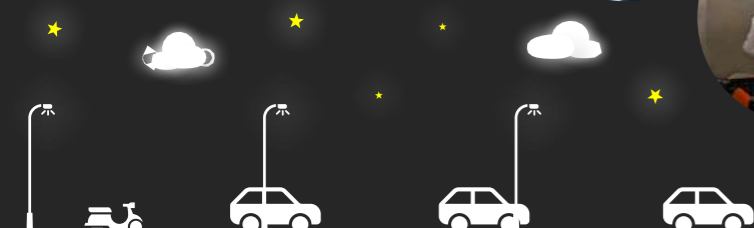
To Anil, thank you for the warm welcome and strong guidance you have provided. To more projects together. Cheers!

Thanks Audrey for being my companion both in the company and on the company bus! Grateful to have met you!

I would like to extend my gratitude to Kishen, my colleague in the same department. His unwavering support and guidance through each stage of my work have truly showcased his incredible patience.

I want to express my heartfelt appreciation to Su Ming. From the moment of our initial interview up to this day, she has consistently extended her warm support, making me feel exceptionally welcome.

Thanks, Xing Hui, for being my bus buddy. Always enjoy the bus ride by napping with me in the bus ride and even chose seat for me! 😊



Insider Picks

Let's draw inspiration from two of our colleagues who have graciously shared their experiences of visiting incredible locations for hiking and running.



P. Saravanan

Driver
Jurong Engineering Limited



Marina Beach, Chennai, India



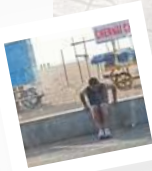
5 km



41 minutes



Difficulty



As running is one of my passions, running abroad has long been on my wish list. It was not until my holiday last May in Chennai that I spontaneously decided to bring along my running attire.

Having been to the Marina Beach in the evening, I decided to jog leisurely along it. As it was my first time running there in the wee hours of the morning, I was surprised to see so many young children and elderly participating in some form of exercise. The run proved to be great whereby it was also a way for me to remain active even while on a holiday.

I will highly recommend those in Chennai to walk or run along the Marina Beach if they have the chance. The beach is not only picturesque – more so during sunrise and sunset, but there are also famous landmarks there. For instance, the Triumph of Labor is a statue erected to commemorate India's first ever May Day rally, located at the northern end of the beach.



Coney Island, Singapore



17 km



3 hours



Difficulty



James Cheong Chee Wai

Head Risk Management Section
Jurong Engineering Limited

In its early days, Coney Island was privately owned by the two brothers behind the Tiger Balm brand. Subsequently, it was developed into a leisure resort in the 50s before being acquired by the government in the 70s. At that point, Coney Island was only accessible via water transportation – I too visited Coney Island when I was water skiing in the vicinity. However, when 2015 came about, Coney Island Park officially opened, and the public can now easily visit the park using the connecting bridge from Punggol.

For many years, I have heard of Coney Island Park but did not really explore it. Hence, being restless at home during the COVID-19 circuit breaker, I decided to explore the Park further.

Today, as part of my healthy regime, I would walk from my home to Coney Island and back every weekend. While some may find walking the same route every weekend boring, I enjoyed this routine and personally find there are always something new to discover. I remembered once when saw a woodpecker pecking on a tree. Something most Singaporeans only get to witness on the Discovery Channel, I managed to see in real life. That experience was priceless!

Apart from Coney Island, there are other charming spots that I would pass by along the way:

- Punggol Waterway Park
- Lorong Halus Bridge
- Lorong Halus Wetland

Through these walks, I have gained a better appreciation for our government's active effort to integrate nature into our urban landscape despite our limited land space. Parks, reserves, and green spaces can continue flourishing, offering residents like me who enjoy the outdoors and nature, a moment of reprieve from the urban jungle.

Editorial Notes

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