



PIVOTING THE BUSINESS

PPGPL'S PANDEMIC STRATEGY FOR **TURNAROUNDS**







PIVOTING THE BUSINESS



PPGPL FACILITY

PPGPL has been strategic in changing the way we operate by embracing risk management and preserving asset integrity without compromising the safety of our workforce.

The COVID-19 pandemic has significantly impacted the way we work and has had a considerable effect on project readiness, planning, and execution in Trinidad and Tobago's energy sector. With the implementation of business and movement restrictions and physical distancing measures, there have been major disruptions to supply chain management, business operations and project management, all of which are essential to the successful execution of field work.

During this pandemic, PPGPL and other companies have been challenged to swiftly adapt to measures implemented by the World Health Organisation and the Ministry of Health, whilst maintaining facility safety and production targets. To accomplish this, PPGPL has been strategic in changing the way we operate by embracing risk

management and preserving asset integrity without compromising the safety of our workforce.

The Onset of the Pandemic

PPGPL's Facility Turnaround (FTAR) was initially planned to be executed between April 20th and May 2nd, 2020. This outage catered for the execution of engineering, obsolescence projects, and maintenance jobs. Based on the initial impact of the COVID-19 pandemic, a decision was taken to defer this shutdown. The required risk assessment reviews were conducted, which supported outage postponement with many jobs being deemed low-to-medium risk, and which could therefore be deferred for 6 months or more with minimal impact. There were, however, several jobs that were deemed high risk with a requirement for execution within a three to six-month period.

Coincident with the pandemic, several plants on the Point Lisas Industrial Estate were taken offline resulting in a 25 - 35% reduction in gas for processing by PPGPL. With this development, PPGPL switched to a strategy of a two-plant operation which allowed critical maintenance jobs to be addressed by shutting down sections of the facility without impacting production targets. Five consecutive plant shutdowns were planned and executed from April to September 2020, targeting critical and opportunity jobs. The latter was done based on innovative approaches to make systems available with integrated teamwork across all disciplines.

Completion of residual maintenance and engineering jobs required a total facility shutdown and two separate FTAR windows were planned for September and November 2020. Due to a surge in COVID-19 cases and the start of community spread in August 2020, it became increasingly difficult to conceptualise how an increase in headcount at the Plant Facility could be managed while implementing social distancing practices and other regulatory requirements.

With stricter guidelines enforced by the Government of Trinidad and Tobago and escalation in cases, an assessment was conducted by the Operations Leadership Team to determine the feasibility of undertaking the intended FTARs. It was assessed that with a major increase of manpower projected, exposure could not be managed even with extensive mitigations. The planned FTARs were subsequently postponed and the strategy of conducting discrete outages with no impact on production was continued through 2020. Additional critical maintenance jobs were completed during this period with reduced manpower at the facility.



MEASURES WERE PUT IN PLACE TO ENSURE COMPLIANCE WITH COVID-19 REGULATIONS

An Adjusted 2021 Turnaround Premise

A turnaround under normal circumstances requires a significant increase in manpower to support job completion in a compressed timeframe for resumption of production as planned. During the pandemic, however, this posed significant safety implications. Many companies, PPGPL included, were forced to manage risk with reinspections and delayed site works if deemed non-critical. Turnarounds are however fundamental events, and they cannot be put off indefinitely. PPGPL Operations, having gained the experience of smaller 'pandemic' outages in 2020, raised the bar in assessing residual critical jobs and restructured planning and execution for 2021.

This task proved to be especially demanding, since deciding to proceed with turnaround execution in 2021 implied making frequent adjustments to job planning to manage changing situations arising from case management.

Furthermore, there were requirements to quickly implement government-imposed restrictions as

well as astute management of the usual complexities of turnarounds.

In 2020 and early 2021, energy companies with multi-plant operations proceeded to perform single plant outages, having the flexibility of extending their shutdowns if impacted by COVID-19 challenges as work progressed.

PPGPL however, remained challenged in exercising this option due to storage limitations for the provision of LPG to the local market, dry gas requirements for downstream customers and other contractual obligations.

The revised 2021 plan was introduced in January with the intention to perform two short-duration FTARs during opportunity periods with the first projected for May 2021. The projected periods were proposed as six days, from production-to-production. Out of necessity, turnaround planning for these short outages was focused on adjustments to turnaround scope, revised execution strategy and continued timely improvements to site COVID-19 safety practices.



Scope Adjustments

With continued focus on the most critical jobs in accordance with assessment reviews, the FTAR job list was centred on core maintenance activities.

The engineering jobs remained low-medium risk and could be deferred. As planning activities were completed, it was resolved that in many instances, scope reductions did not necessarily equate to significant changes to outage durations. Even with more robust planning, the inception of the pandemic and social distancing implementation measures led to lower labour densities and expectations of lower-than-normal labour productivity. Jobs were planned to fit into four maintenance days with considerations made for imposed restrictions and contingency planning.

Execution Strategy Adjustments

As cases surged in early May 2021, PPGPL adopted a modified approach to turnaround execution. PPGPL evaluated that there was an increased need for scenario planning and “What If” exercises to support situations that had a high probability of occurring during job execution. To support this strategy, plans had to be made to permit some variability in job execution. Furthermore, in addition to the usual turnaround contingencies, planning entailed:

- catering for stand-by crews for many of the contracting companies engaged at the facility
- keeping mirrored resources offsite for availability to replace on-site task leads if required
- mobilisation of additional welfare facilities with appropriate screening for separation of crews
- increased welfare facilities to limit utilisation by multiple crews
- continuous mass sanitisation of all areas.

This ultimately resulted in maximised utilisation of all available work areas. Implementation of these measures



WORK IN PROGRESS

became necessary as PPGPL gained insight into the case management process locally.

Site COVID-19 Safety Practices

By May 2020, PPGPL had implemented and rolled out 17 COVID-19 mitigation barriers which quickly became part of daily practice. By May 2021, these practices were updated as the company kept abreast of the latest COVID-19 recommendations as it pertained to the workplace.

For FTAR execution, four main philosophies were implemented. The first was mandatory use of N95 and KN95 or double medical masks by all personnel entering the Plant Facility, for which entry was limited to essential staff. The second was establishing zones for key jobs and for job permitting.

Physical distancing and creation of work bubbles were strictly practiced. Implementation of daily Antigen Testing with re-testing on a three-day interval was rolled out prior to the FTAR and maintained throughout the outage period. Additional stand-by crews were oriented and tested prior to outage start to ensure availability for quick deployment to site, if required.

Lastly, a dedicated FTAR Case Management Support Team was assigned for oversight of positive cases arising from Antigen Testing. This effort was critical to effectively manage the follow-up PCR testing through approved private medical facilities; supporting timely receipt of the required medical advice; and helping to collect and clarify data to support case management by relevant authorities.

Outcome

While execution proved to be exceptionally challenging, the FTAR was successfully and safely completed, inclusive of several emergent jobs that arose during the four-day maintenance window. As the world evolves and continues to adapt to the new realities due to COVID-19, PPGPL continues to learn quickly and innovate to deal with and minimise the disruptions caused by the pandemic. As we seek to develop agile leadership and build a resilient workforce across the Group of Companies, we must all continue to work together, share learnings and leverage efficiencies to quickly change the way we operate. ■