Phoenix Park Gas Processors Limited

POSITION DESCRIPTION

Position Identification

Position Title:	Control System Specialist
Department:	Operations – Maintenance: Instrumentation and Electrical (I&E)
Status:	Permanent
Position reports to:	I&E Superintendent
Work coordinated by:	I&E Superintendent
Position supervises:	None
Coordinates the work of:	None
Date JD Revised:	October 2026

Job Summary:

Reporting to the I&E Superintendent, the Control System Specialist provides specialist technical expertise and hands-on maintenance support to sustain availability, reliability, lifecycle management and cybersecurity of the Plant's control systems and associated hardware, software and infrastructure. The scope of support includes Distributed Control Systems (DCS); Safety Instrumented Systems (SIS); Process Historian; System Administration; Programmable Logic Controllers (PLCs); Compressor controls; turbomachinery control systems; and associated third-party controllers, SCADA systems, process control networks, servers and advanced control applications. It collaborates with relevant stakeholders to establish and maintain business continuity and recovery plans, and works with internal stakeholders and external vendors to sustain system availability, assess cybersecurity risks and implement appropriate mitigation measures.
The incumbent also provides support to PPGPL subsidiaries, affiliated companies and Business Development initiatives, as required.

Dimensions

The Control System Specialist is the Maintenance Department's specialist technical resource for plant control systems, including mature, legacy and obsolete platforms whose supportability, spares availability and recovery capability require active management. The position combines day-to-day preventive and corrective maintenance support with long-term lifecycle planning, technical risk assessment, cybersecurity coordination and upgrade readiness. It maintains an integrated view of system condition,

hardware and software versions, vendor support status, vulnerabilities, critical spares, recovery dependencies and replacement priorities, and translates findings into actionable reports and recommendations for the I&E Superintendent.

The position exercises specialist judgement within approved maintenance strategies, procedures, Management of Change requirements and delegated authority. It provides technical direction for assigned control systems work without direct supervisory responsibility. Significant technical deviations, residual risks, expenditure commitments and resource priorities are referred to the I&E Superintendent. The position prepares technical and budgetary recommendations and monitors assigned work costs but has no independent financial approval authority.

Nature & Scope:

The Control System Specialist provides specialist technical support for the Plant's control systems without direct supervisory responsibility. The scope includes routine and corrective maintenance, complex fault diagnosis, lifecycle and obsolescence management, compliance with adopted Company standards, development of Control Systems procedures, business continuity and recovery planning, cybersecurity risk management, and maintenance coordination for control system upgrades. The Specialist collaborates with the internal stakeholder and works with the DCS Administrator and external vendors on system health, maintenance, configuration, backups and recovery to sustain control system availability. The position places particular emphasis on managing risks associated with mature and obsolete systems, including unsupported hardware and software, limited availability of spares and vendor support, compatibility constraints and dependencies affecting system recovery. The control systems supported include Honeywell Experion and TPS Distributed Control Systems (DCS); Honeywell Fail Safe Controller (FSC) and Safety Manager (SM) Safety Instrumented Systems (SIS); Process Historian; Rockwell Programmable Logic Controllers (PLCs); Compressor Controls Corporation (CCC) controls; turbomachinery control systems; and associated third-party controllers, SCADA systems, process control networks, servers and advanced control applications.

The Specialist works with the Senior I&E Engineer on engineering and multidisciplinary interfaces and with the DCS Administrator on system health, maintenance, configuration, backups and recovery. The position also interfaces with Operations, Engineering, Finance, Risk, Digital Transformation/IT, Supply Chain Management and HSS, as well as equipment vendors, specialist service providers and consultants.

The position develops technical recommendations and escalates significant availability, process safety, cybersecurity, cost and schedule risks to the I&E Superintendent for decisions within the Company's approval framework.

Health, Safety and Environmental Responsibility:

Every employee has a personal responsibility to exercise reasonable care for their own safety and health and that of others who may be affected by their acts or omissions. Employees are required to comply with the Company's health, safety and environmental policies, procedures and safe work practices, and to actively support the maintenance of a positive safety culture. Further guidance is contained in PPGPL's Safety Manual.

Duties & Responsibilities:

1. Control System Maintenance and Reliability

I. Develop and implement preventive and corrective maintenance strategies for the Plant's control systems, including Honeywell Experion and TPS Distributed Control Systems (DCS), Honeywell Fail Safe Controller (FSC) and Safety Manager (SM) Safety Instrumented Systems (SIS), Rockwell Programmable Logic Controllers (PLCs), CCC controls, turbomachinery controls and associated hardware, software and infrastructure.
II. Perform specialist maintenance, troubleshooting, testing and fault diagnosis to maintain system availability and reliability.
III. Investigate complex or recurring faults with the Senior I&E Engineer, DCS Administrator, relevant stakeholders and vendors, and recommend corrective actions.
IV. Resolve problems with regulatory and advanced control functions.
V. Troubleshoot and resolve problems with configured logic and sequencing programs.
VI. Conduct DCS/SIS system modifications and configuration including plant graphics.
VII. Conduct system administration and routine system health checks to identify faults, abnormal conditions, communication issues, capacity limitations and redundancy problems.
VIII. Coordinate vendor interventions and follow up on corrective actions to resolve system issues.
IX. Review and comply with adopted Industry and Company standards.
X. Development of related Control System procedures.

2. System Lifecycle and Obsolescence Management

I. Maintain an up-to-date register of control systems, including equipment details, software and firmware versions, operating systems, licences, dependencies, criticality, condition and vendor support status.
II. Monitor system lifecycle information, vendor support arrangements and obsolescence risks, and recommend actions for systems approaching end of support.
III. Assess options for extending system life, including continued support, repairs, partial upgrades, migration or replacement.
IV. Develop risk-based plans for upgrades, migrations and replacements, considering operational risks, system dependencies, outage requirements and available support.

3. Spares, Vendor Support and Technical Resources

I. Coordinate with vendors and relevant stakeholders to identify critical spare parts, repair options, lead times, software licences and specialist support requirements.
II. Support arrangements for maintaining critical spares and technical support for legacy systems.
III. Monitor vendors support limitations and recommend measures to reduce the risk of prolonged system downtime.

4. Backup and Disaster Recovery

I. Maintain secure and current backups of control system configurations, application software, controller logic, databases, recovery images, installation media and licences.
II. Maintain restoration instructions and supporting documentation and coordinate approved restoration tests to confirm recovery capability.
III. Support the development and maintenance of business continuity and disaster recovery plans with Operations, Finance, Risk, Digital Transformation/IT, the DCS Administrator and relevant vendors.

IV. Document recovery scenarios, system dependencies, recovery priorities, responsibilities, escalation arrangements and restoration procedures.
V. Coordinate recovery exercises, document findings and limitations, and follow up on corrective actions.

5. Operational Technology Cybersecurity

I. Monitor cybersecurity risks affecting operational technology (OT) control systems and maintain a register of threats, vulnerabilities, mitigation measures and outstanding actions.
II. Review vendor security advisories and support approved cybersecurity measures relating to network segregation, user access, remote vendor access, removable media, endpoint protection, system logging and incident response.
III. Assess the compatibility and potential impact of security patches and updates before approved implementation.
IV. Recommend compensating controls where legacy systems cannot be safely updated and escalate unresolved cybersecurity risks to the I&E Superintendent and relevant stakeholders.

6. Advanced Control Applications and System Interfaces

I. Provide technical support for advanced control applications, including Advanced Process Control, Alarm Management and Process Historian
II. Support approved interfaces with the Business LAN while ensuring that connections are managed in accordance with requirements for protecting the process control network.

7. Technical Documentation and Reporting

I. Maintain technical documentation, including functional specifications, system architecture and network drawings, equipment inventories, configuration baselines, maintenance procedures, test records, cybersecurity documentation and recovery plans.
II. Update documentation following system changes, upgrades, projects and handovers.
III. Prepare technical reports and management papers on system condition, reliability, lifecycle status, vendor support, cybersecurity, recovery capability and identified risks.
IV. Recommend corrective actions, upgrades, replacement options, mitigation measures, costs and priorities, including the risks of deferring required work.

8. Projects, Procurement and Management of Change

I. Prepare technical scopes, specifications, bid packages and acceptance criteria for control system maintenance, upgrades, replacements and related projects.
II. Review technical submissions and assess vendor proposals for compatibility, reliability, maintainability, cybersecurity, recovery capability and lifecycle value.
III. Support the Management of Change (MOC) process for control system modifications and upgrades by identifying potential impacts on operations, process safety, functional safety, cybersecurity, maintenance, training and documentation.
IV. Ensure that required technical reviews, approvals, testing, validation and closeout documentation are completed for system changes.

9. Project Implementation and Handover

I. Support control system projects through design, procurement, Factory Acceptance Testing (FAT), Site Acceptance Testing (SAT), installation, commissioning, start-up and handover.

II. Coordinate upgrade and migration activities with relevant teams, including outage planning, backups, rollback arrangements and operational readiness.
III. Ensure that required documentation, spare parts, training and recovery arrangements are addressed before handover.

10. Budgeting and Technical Recommendations

I. Prepare preliminary economic analyses, business justifications and operating and capital budget inputs for the I&E Superintendent.
II. Provide information on lifecycle costs, expected benefits, technical constraints and the risks associated with deferring proposed work.

11. Technical Capability and Assurance

I. Provide technical guidance and knowledge transfer to I&E personnel on control system maintenance, troubleshooting, upgrades and recovery.
II. Support vendor training and other activities to maintain personnel capability.
III. Support the technical closeout of audit findings and actions arising from Process Hazard Analyses (PHAs), cybersecurity assessments and other relevant reviews.
IV. Maintain evidence of completed actions, follow up on outstanding items and escalate overdue or unresolved actions.

12. Collaboration & Organizational Support

I. Lead and/or participate in committees, cross-functional teams and special initiatives, as required, in accordance with team charters, assigned responsibilities and approved work plans.

Job Specifications:

Minimum Acceptable Academic Qualifications

A Bachelor of Science (BSc) degree in Electrical & Computer Engineering or related discipline from a recognized tertiary institution.

OR

A Bachelor's degree in Electrical & Computer Engineering or related discipline from a recognized tertiary institution and; A registered Engineer with the Board of Engineering of Trinidad and Tobago (BOETT)

AND

Minimum Number of Years of Relevant Experience

Minimum of seven (07) years' applicable control systems experience in an oil and gas processing or petrochemical environment.

The following will be considered as asset:

- Cybersecurity Certification - ISA/IEC 62443
- Safety Instrumented System Certification -ANSI/ISA-84.00.01/IEC 61511-1 OR TuV

Specific Skills and Knowledge Requirements:

- Strong knowledge of continuous-process plant operations and the application of control systems within hydrocarbon and/or petrochemical environments.
- Demonstrated hands-on expertise in Honeywell Experion and TPS Distributed Control Systems (DCS), including system maintenance, configuration, diagnostics and troubleshooting.
- Working knowledge of Safety Instrumented Systems (SIS) and PLC-based control systems; experience with Honeywell FSC/Safety Manager and Rockwell systems would be an asset.
- Working knowledge of CCC compressor and turbomachinery control systems and their interfaces with DCS, SIS and other control systems.
- Sound knowledge of process control networks, system architecture, servers, communications and associated control system infrastructure.
- Experience in control system upgrades and migrations, including scope development, design review, technical evaluation, testing, commissioning, cutover planning and handover.
- Knowledge of control system lifecycle and obsolescence management, including system supportability, critical spares, upgrades and replacement planning.
- Working knowledge of industrial control system cybersecurity principles and relevant ISA/IEC 62443 requirements.
- Sound knowledge of ISA/IEC Standards including ANSI/ISA-84.00.01/IEC 61511-1
- Knowledge of system backup, recovery, configuration management and business continuity principles for control systems.
- Knowledge of maintenance and project management practices, including Management of Change (MOC), risk assessment, technical evaluation and vendor coordination.
- Strong analytical, problem-solving, technical report-writing and communication skills.
- Proficiency in relevant Microsoft Office, computerized maintenance management, engineering document-control and project scheduling applications.

Disclaimer

"The above statements are intended to describe the general nature and level of work being performed by people assigned to this job. They are not intended to be an exhaustive list of all responsibilities, duties and skills required of personnel so classified"