



Employee Name: Jake Ryan Suzon Mallillin

Position: Automation Lead Engineer

“I am an Automation Engineer with hands-on experience in industrial automation systems, building automation, and home automation particularly in PLC-based motor control and multi system data integration projects.”

Passion & Values

- Strong belief in solid fundamentals over memorization.
- Passionate about sharing practical knowledge with beginners.
- Values safety, clarity, and proper control logic design.
- Encourages a mindset of continuous learning in automation.

Expertise & Experiences

- Practical experience in PLC programming and motor control logic.
- Hands-on exposure to HMI & SCADA development, SCADA system monitoring, and BMS data mapping and monitoring systems.
- Involved in real automation projects including:

A. PLC-Based Motor Control Systems

- Design and implementation of Direct-On-Line, Star-Delta Control and Forward-Reverse Control. Integration of multiple switching methods for multiple directional controls.
- Motor protection logic using timers, interlocks, and fault stop conditions.

B. Siemens PLC Profibus/Profinet/Modbus Integration Projects

- Configuration of Siemens S7-1500 series and S7-1200 series with Profibus devices. Verification of control, status, and speed reference signals.

C. Power Meter Communication & Data Mapping

- Profibus integration of Carlo Gavazzi power meters. Decoding and mapping of multi-word input data. Scaling of electrical values (voltage, current, power) inside PLC logic.

D. HMI Development & Operator Interface

- Creation of basic HMI screens for motor control and monitoring. Implementation of Start/Stop commands, status indicators, and alarms. Operator-friendly screen layout for operation and troubleshooting.

E. SCADA & BMS System Monitoring Exposure

- Understanding of real-time monitoring concepts. Alarm handling and system status visualization. Linking PLC process data to higher-level monitoring systems.
- Multiple Servers and Clients PC interconnected with separate control and monitoring system.

F. Allen-Bradley PLC & FactoryTalk HMI Projects

- Programming of Allen-Bradley PLCs for basic machine and motor control logic.
- Development of operator interfaces using FactoryTalk Machine Edition.
- Implementation of motor control commands, status indication, and fault feedback. Basic PLC-to-HMI tag mapping and testing.

G. Schneider Modicon PLC System Projects

- Programming and I/O configuration of Modicon TM V2 and V3 Series PLC.
- Integration of digital and analog input and output modules.
- HMI operation using HMIDT series panels.

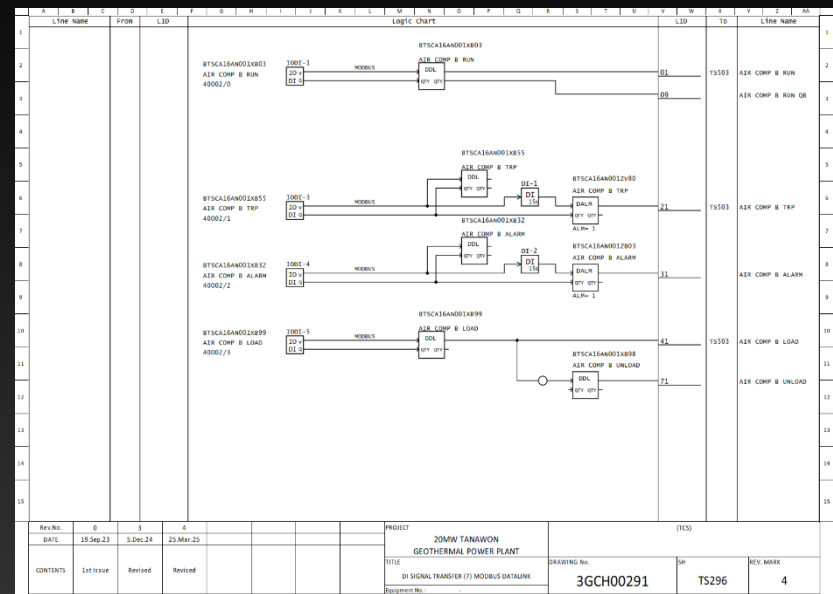
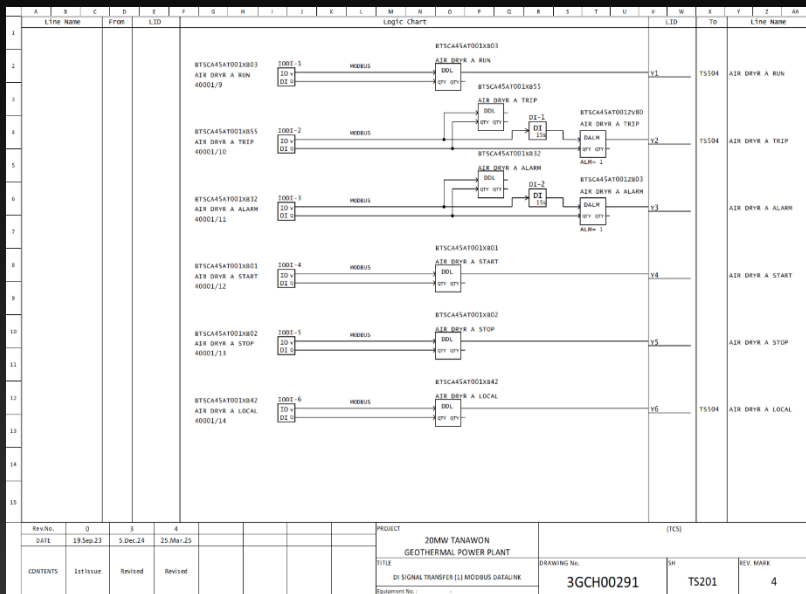
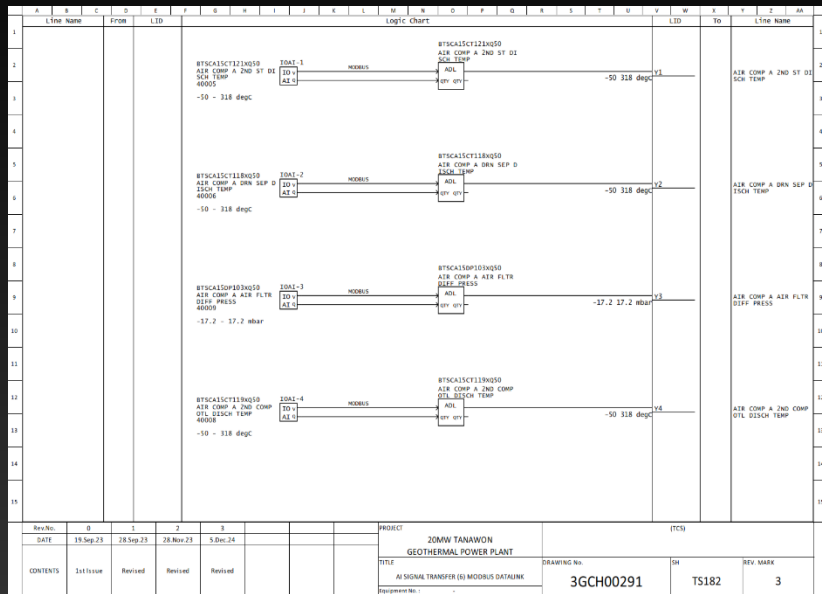
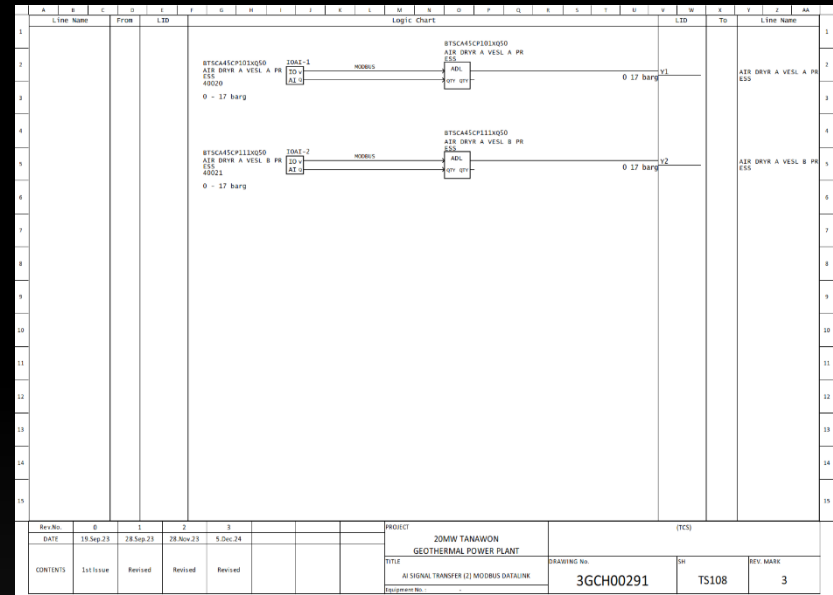
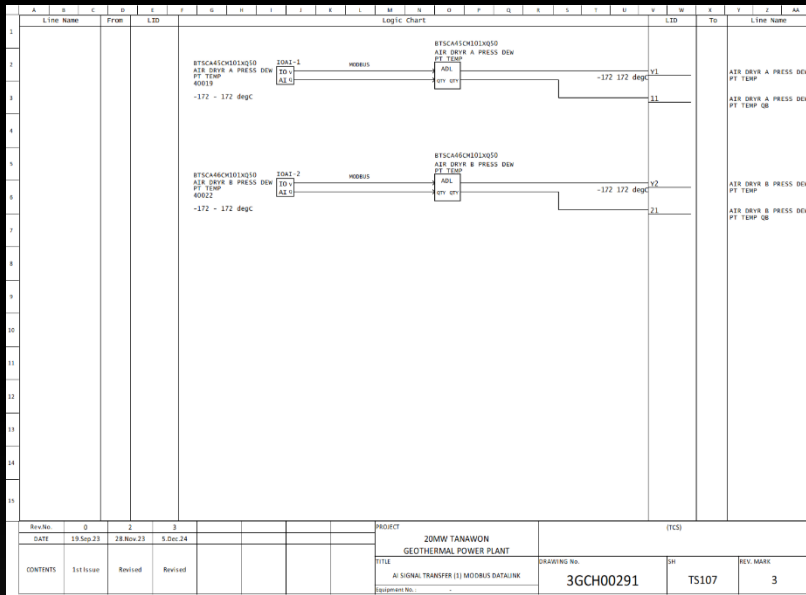
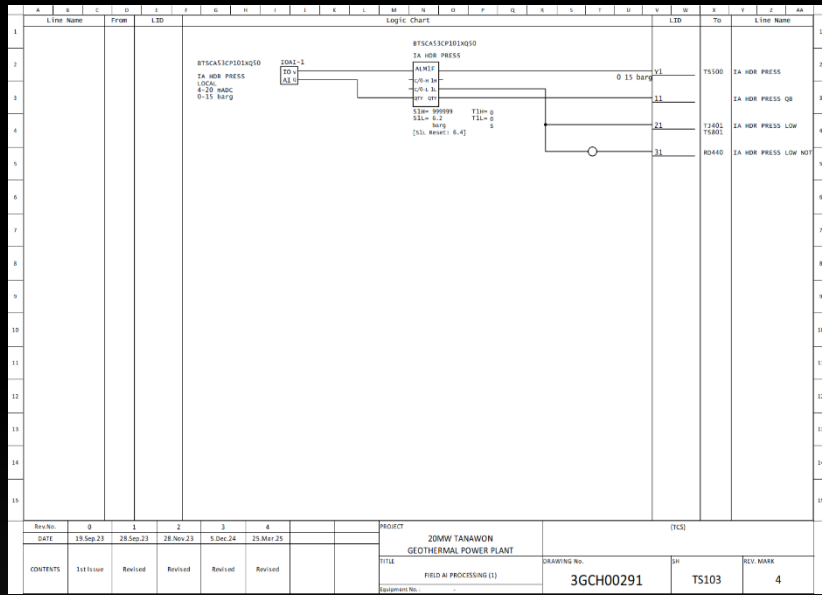
H. PLC-VFD Configuration & Industrial Communication

- **Vacon VFD Integration (Profibus & Profinet)** = PLC communication setup using Profibus DP and Profinet, Configuration of drive parameters and network addressing, Mapping of control words, status words, and speed reference, Verification of motor operation, direction control, and fault feedback.
- **Danfoss VFD Integration (Profibus & Profinet)** = PLC-based control and monitoring of Danfoss drives, Assignment of cyclic data for run command, speed setpoint, and drive status, Fault monitoring and integration with motor interlock logic.
- **Altivar 320 VFD (Modbus TCP/IP)** = Configuration of Modbus TCP/IP communication between PLC and VFD, Writing of speed references and run commands via Modbus registers, Reading of operating status, fault bits, and feedback signals, Validation of reliable PLC-VFD communication during operation.
- **Fuji Electric FRENIC-Ace VFD** = Integration of FRENIC-Ace VFD using OPC-PDP3 Profibus communication card, Configuration of Profibus node address and parameter settings, PLC mapping of control commands, speed reference, and drive status, Testing of start/stop control, direction logic, and fault response via PLC, Verification of stable Profibus data exchange between PLC and VFD.
- **Siemens SINAMICS G120 & G220 VFD Integration** = PLC integration of SINAMICS G120 and G220 drives, Configuration of drive parameters for motor operation, Control of run command and speed reference from PLC, Monitoring of drive status, alarms, and fault conditions, Coordination of VFD logic with PLC motor safety and interlocks.
- **Gateway Devices** = Atlas Copco Electronicon, ADF Web Devices, Moxa Gateway Converter.
- **Communication Protocol Used** = Profinet, Profibus, Modbus TCP/IP, Modbus BACnet/IP, OmniCon GEA.

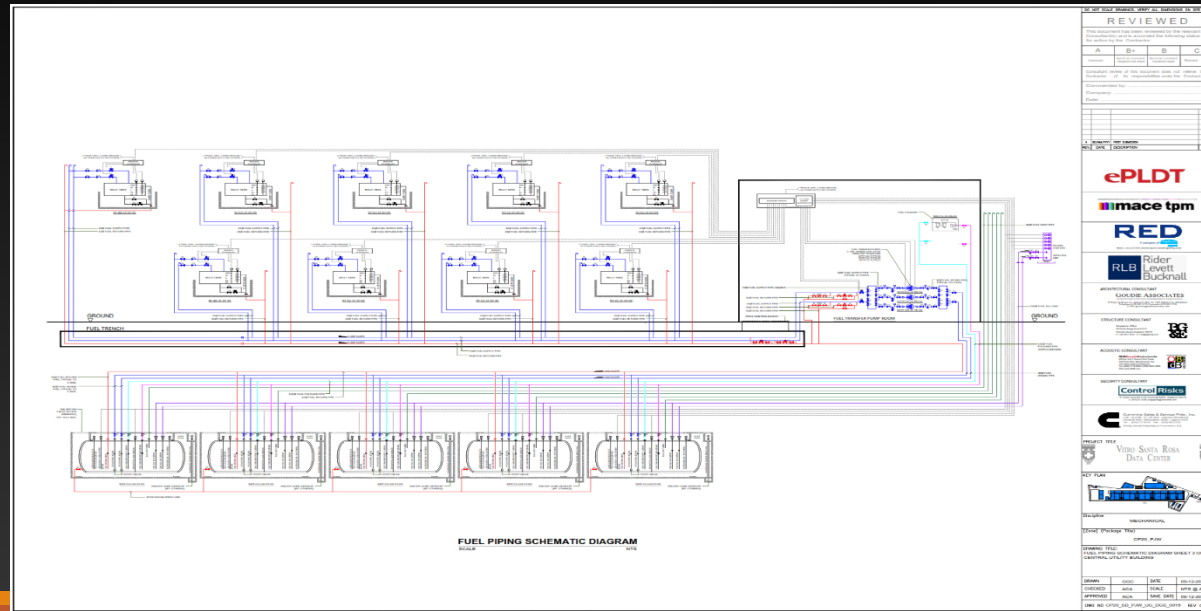
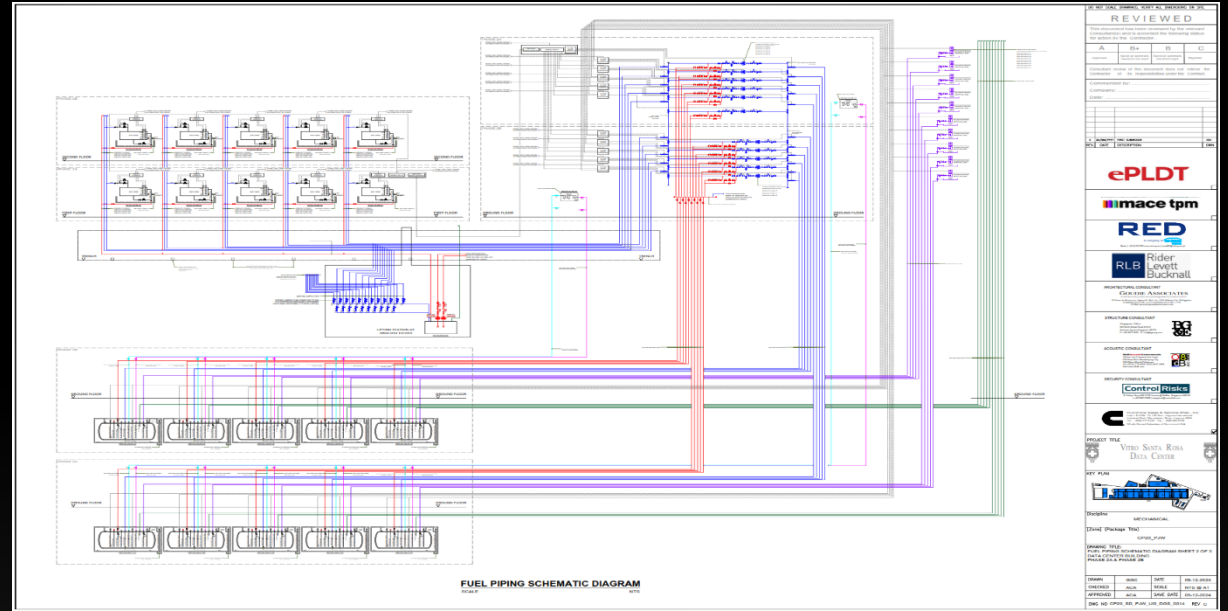
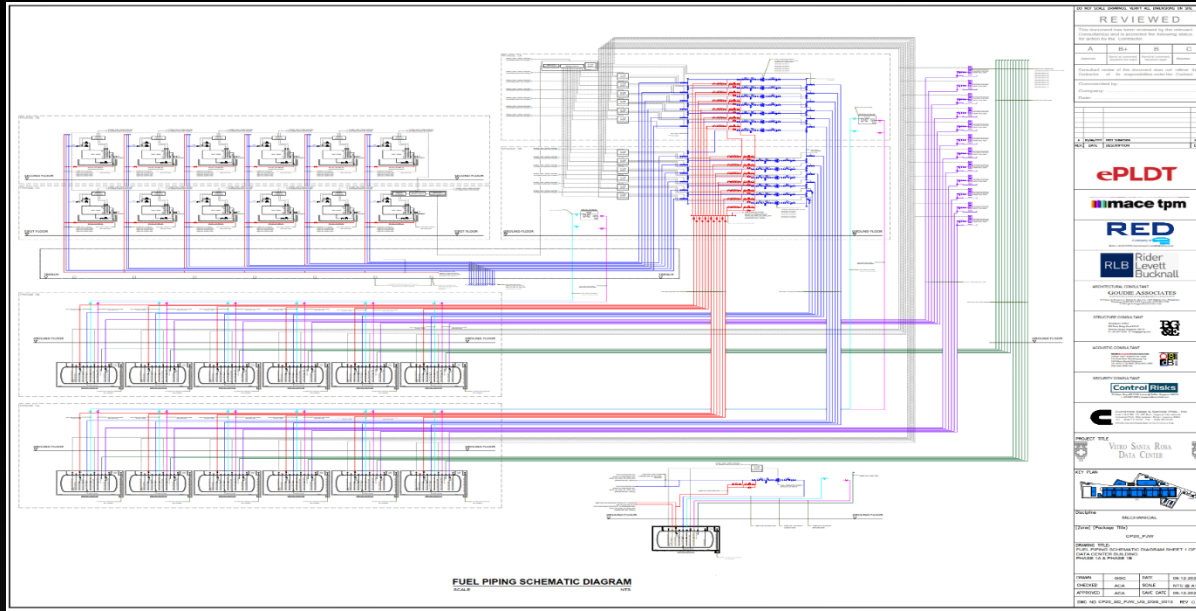
I. Project Documentation & As-Built Preparation

- Preparation of AS-built Shop Drawing Design, PLC diagram and Control System documentation.
- Communication settings, signal mapping, Control Philosophy and Sequence Operation.
- Structured documentation for maintenance and future upgrades references.

Sample Approved PLC & MCC Control Panel Designs & Diagrams



Sample Approved PLC & MCC Control Panel Designs & Diagrams



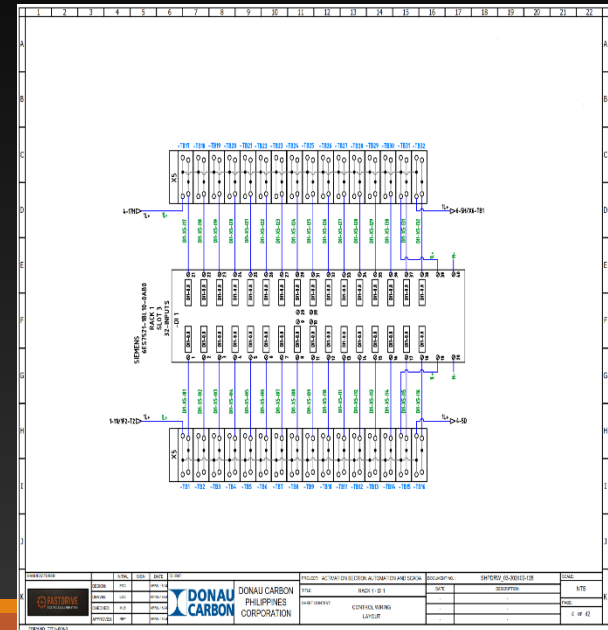
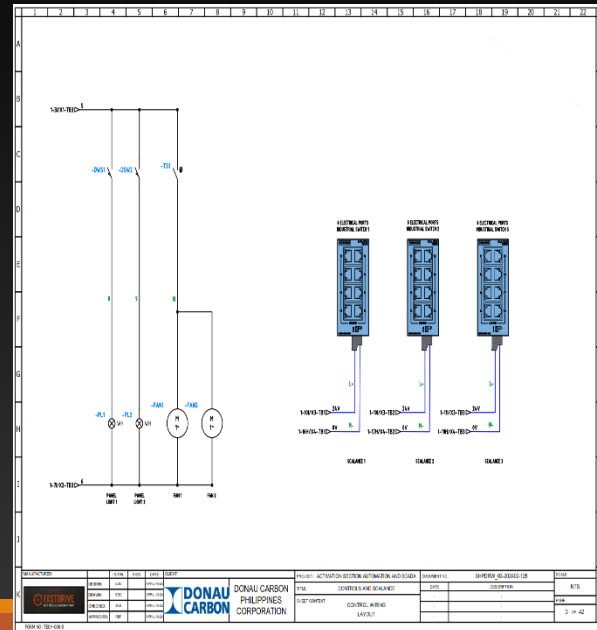
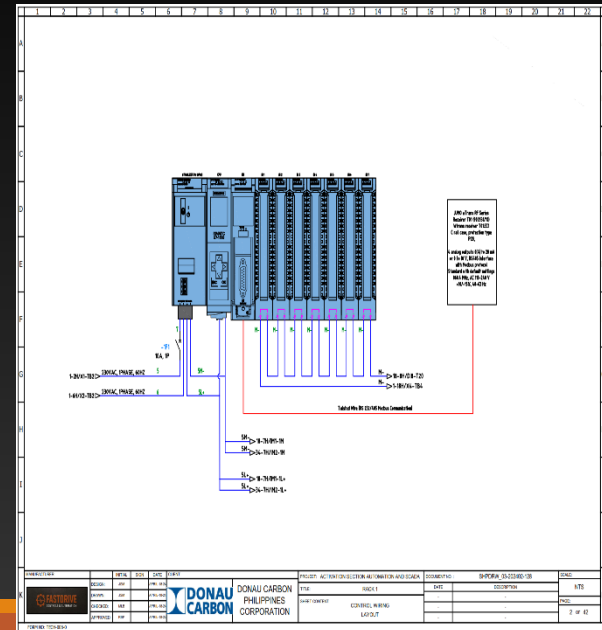
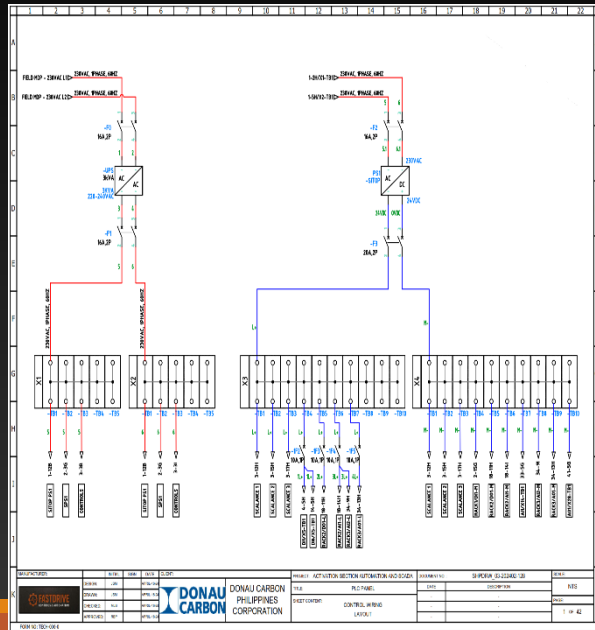
Sample Approved PLC & MCC Control Panel Designs & Diagrams

| ITEM | QUANTITY | PART NUMBER | DESCRIPTION | MANUFACTURER |
|------|----------|------------------------|--|-----------------|
| 1 | 1 | 18AB00000000000 | MST18-4-CH0PT111 Manual Motor Starter 3.5 & 4.0 A | ABB |
| 2 | 1 | 18BL0014R0010 | AX 03-35-102 Contactor 3A | ABB |
| 3 | 3 | 20C01200100000 | MCB 6A 3P | ABB |
| 4 | 10 | RMAA220VAC-2R0A0A | Control Relay - Relay Socket | Carlo Gavazzi |
| 5 | 1 | SPF0242401 | Switching Power Supply AC/DC 24VDC 24V 24V | Carlo Gavazzi |
| 6 | 1 | 8ES714-6EG00-0AB0 | PSU 17.5VDC terminal 15VDC/20VDC | Siemens |
| 7 | 1 | 8ES714-6EG00-0AB0 | Digital Input SM 1211 16 DI 24VDC | Siemens |
| 8 | 1 | 8ES714-6EG00-0AB0 | Control Unit Power Converter | Siemens |
| 9 | 1 | 175-3011 | 6 Port LC Multimode Duplex Distribution Box | RS-PRO |
| 10 | 1 | 8ES716 | 16-port Fast Ethernet Unmanaged Layer 2 Industrial Ethernet switch | Siemens |
| 11 | 5 | PL20CL17020A | Red Light Red 220V | Carlo Gavazzi |
| 12 | 2 | PL20CL17020A | Red Light Red 220V | Carlo Gavazzi |
| 13 | 4 | PL20CL17020A | Blue Light Blue 220V | Carlo Gavazzi |
| 14 | 1 | PT1020FR-220C | Terminal Block | Phoenix Contact |
| 15 | 1 | PT1020FR-220C | Terminal Block | Phoenix Contact |
| 16 | 1 | PT1020FR-220C | Terminal Block | Phoenix Contact |
| 17 | 1 | PT1020FR-220C | Terminal Block | Phoenix Contact |
| 18 | 1 | PT1020FR-220C | Terminal Block | Phoenix Contact |
| 19 | 1 | PT1020FR-220C | Terminal Block | Phoenix Contact |
| 20 | 1 | PT1020FR-220C | Terminal Block | Phoenix Contact |
| 21 | 1 | PT1020FR-220C | Terminal Block | Phoenix Contact |
| 22 | 10 | RL04M01021+2R012-12V1A | PLC Relay | Carlo Gavazzi |

| REVISION | DATE | BY | CHKD | DESCRIPTION |
|----------|------------|-----------|--------------|----------------------|
| 01 | 2024-01-15 | J. CARLOS | M. DELA CRUZ | INITIAL DESIGN |
| 02 | 2024-01-20 | J. CARLOS | M. DELA CRUZ | REVISED FOR APPROVAL |
| 03 | 2024-02-01 | J. CARLOS | M. DELA CRUZ | FINAL APPROVAL |

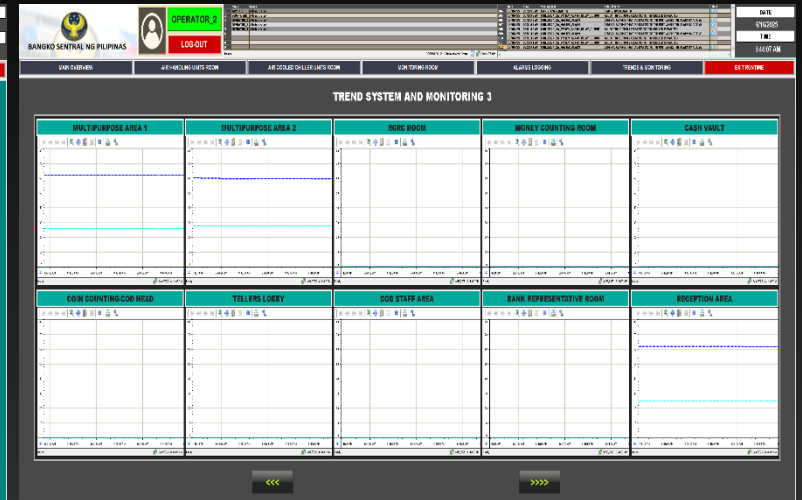
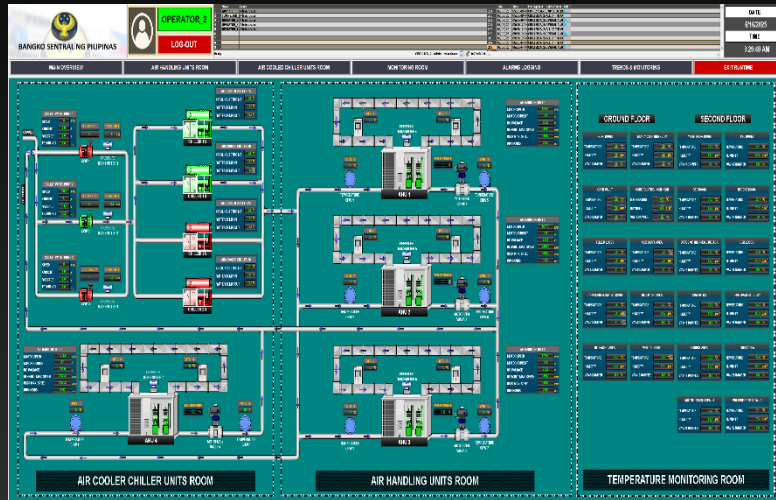
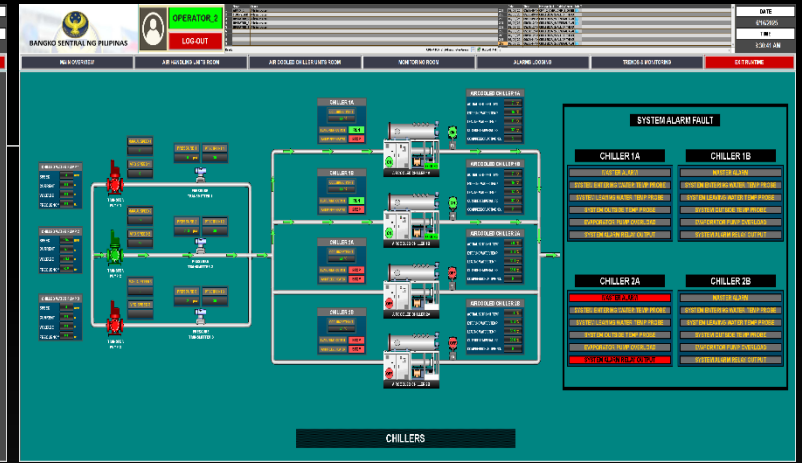
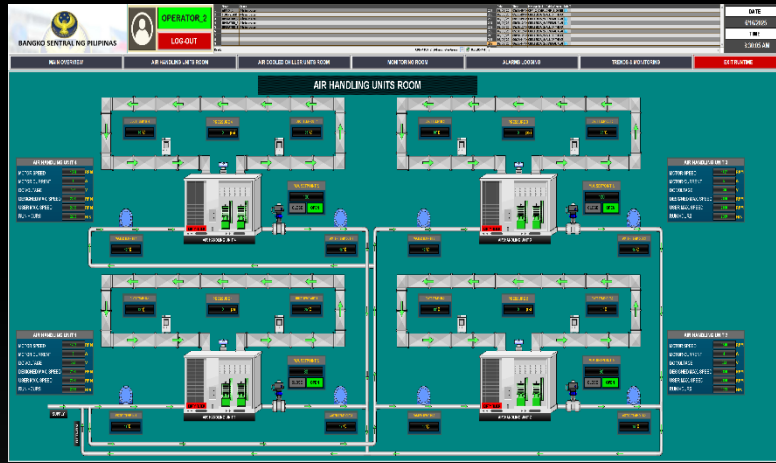
| ITEM | QUANTITY | PART NUMBER | DESCRIPTION | MANUFACTURER |
|------|----------|-------------------|---|-----------------|
| 1 | 2 | Z0001001000000 | MCB 6A 3P | ABB |
| 2 | 1 | SP02012010P | Power Supply 100W 24VDC 5A | Carlo Gavazzi |
| 3 | 1 | 8ES716-6A002-0B00 | Interface Module IM 154-4 PN ST | Siemens |
| 4 | 2 | 8ES714-6EG00-0AB0 | PSU 17.5VDC terminal 15VDC/20VDC | Siemens |
| 5 | 1 | 8ES714-6EG00-0AB0 | DO 16x 24V DC/0.5A ST PV 1 | Siemens |
| 6 | 1 | 8ES714-6EG00-0AB0 | Compact Area Media Converter | Siemens |
| 7 | 1 | 175-3011 | 6 Port LC Multimode Duplex Distribution Box | RS-PRO |
| 8 | 1 | 8ES716 | 16-port Fast Ethernet Unmanaged Layer 2 | Siemens |
| 9 | 10 | RMAA220VAC-2R0A0A | Control Relay - Relay Socket | Carlo Gavazzi |
| 10 | 10 | PT1020 | PT 2.5 Terminal Block | Phoenix Contact |
| 11 | 10 | PT1020 | PT 2.5 Terminal Block | Phoenix Contact |
| 12 | 10 | PT1020 | PT 2.5 Terminal Block | Phoenix Contact |
| 13 | 10 | PT1020 | PT 2.5 Terminal Block | Phoenix Contact |
| 14 | 4 | PL20CL17020A | Red Light Yellow 220V | Carlo Gavazzi |
| 15 | 1 | PL20CL17020A | Red Light Yellow 220V | Carlo Gavazzi |
| 16 | 1 | PL20CL17020A | Red Light Red Flashing Buzzer | Carlo Gavazzi |
| 17 | 1 | PL20CL17020A | Red Light Red 220V | Carlo Gavazzi |
| 18 | 1 | PL20CL17020A | Red Light Red 220V | Carlo Gavazzi |

| REVISION | DATE | BY | CHKD | DESCRIPTION |
|----------|------------|-----------|--------------|----------------------|
| 01 | 2024-01-15 | J. CARLOS | M. DELA CRUZ | INITIAL DESIGN |
| 02 | 2024-01-20 | J. CARLOS | M. DELA CRUZ | REVISED FOR APPROVAL |
| 03 | 2024-02-01 | J. CARLOS | M. DELA CRUZ | FINAL APPROVAL |



Major Project Turnovers

- Bangko Sentral Ng Pilipinas – PLC SCADA & BMS Project



Major Project Turnovers

- Universidad De Zamboanga – PLC SCADA Project

PROJECT OVERVIEW - NON-POTABLE WATER

| Date | Time | Number | Message | Rank of Error | Order of Error |
|------------|-------------|--------|--|---------------|----------------|
| 11/20/2023 | 10:58:59 PM | 7 | The Transfer Pump Transfer Pump 1 is Tripped | Low | 1 |
| 11/20/2023 | 10:58:59 PM | 7 | The Transfer Pump Transfer Pump 2 is Tripped | Low | 2 |
| 11/20/2023 | 10:58:59 PM | 7 | The Transfer Pump Transfer Pump 3 is Tripped | Low | 3 |
| 11/20/2023 | 10:58:59 PM | 7 | The Transfer Pump Transfer Pump 4 is Tripped | Low | 4 |
| 11/20/2023 | 10:58:59 PM | 7 | The Transfer Pump Transfer Pump 5 is Tripped | Low | 5 |
| 11/20/2023 | 10:58:59 PM | 7 | The Transfer Pump Transfer Pump 6 is Tripped | Low | 6 |
| 11/20/2023 | 10:58:59 PM | 7 | The Transfer Pump Transfer Pump 7 is Tripped | Low | 7 |

GROUND FLOOR

ROOF DECK

ACAD BLDG. NORTH WING POTABLE WATER

| Transfer Pump 1 Running Hours | Transfer Pump 2 Running Hours | Booster Pump 1 Running Hours | Booster Pump 2 Running Hours |
|-------------------------------|-------------------------------|------------------------------|------------------------------|
| 1.05 | 0.50 | 16.37 | 40.32 |

STP CONTROL & MONITORING

MONITORING AND INDICATORS

STP FACEPLATE CONTROLS

SEQUENCING BATCH MONITORING

| Batch | Start Time | End Time |
|-----------|--------------------|--------------------|
| 1ST BATCH | 8:00 AM - 12:00 NN | 12:00 NN - 2:00 PM |
| 2ND BATCH | 2:00 PM - 6:00 PM | 6:00 PM - 8:00 PM |
| 3RD BATCH | 8:00 PM - 12:00 AM | 12:00 AM - 2:00 AM |
| 4TH BATCH | 2:00 AM - 6:00 AM | 6:00 AM - 8:00 AM |

DATA TOTALIZER SUMMATION TABLE

| ACAD BLDG POTABLE NORTHWING | ACAD BLDG POTABLE SOUTHWING | SUMMIT POTABLE |
|--|--|--|
| TOTAL WATER CONSUME PER DAY (LITERS) | TOTAL WATER CONSUME PER DAY (LITERS) | TOTAL WATER CONSUME PER DAY (LITERS) |
| 23128.0 | 14618.0 | 6.0 |
| TOTAL WATER CONSUME PER MONTH (LITERS) | TOTAL WATER CONSUME PER MONTH (LITERS) | TOTAL WATER CONSUME PER MONTH (LITERS) |
| 779910.0 | 70113.0 | 180.0 |
| TOTAL WATER CONSUME PER YEAR (LITERS) | TOTAL WATER CONSUME PER YEAR (LITERS) | TOTAL WATER CONSUME PER YEAR (LITERS) |
| 929210.0 | 100710.0 | 6.0 |
| TOTAL WATER CONSUME PER QUARTER (LITERS) | TOTAL WATER CONSUME PER QUARTER (LITERS) | TOTAL WATER CONSUME PER QUARTER (LITERS) |
| 64605.0 | 4596.0 | 6.0 |
| TOTAL WATER CONSUME PER WEEK (LITERS) | TOTAL WATER CONSUME PER WEEK (LITERS) | TOTAL WATER CONSUME PER WEEK (LITERS) |
| 60.0 | 3554.0 | 180.0 |
| TOTAL WATER CONSUME PER DAY (LITERS) | TOTAL WATER CONSUME PER DAY (LITERS) | TOTAL WATER CONSUME PER DAY (LITERS) |
| 3148.0 | 261.0 | 6.0 |

TOTAL SUM OF WATER CONSUMED PER WING FOR POTABLE WATER

| ACAD BLDG NORTHWING | ACAD BLDG SOUTHWING | SUMMIT POTABLE |
|---------------------|---------------------|----------------|
| 16530.0 x10 | 11531.0 x10 | 12.0 x10 |

TOTAL SUMMATION OF WATER CONSUMED FOR POTABLE WATER

ACAD BLDG POTABLE FOR NORTH WING AND SOUTH WING SUMMIT BLDG. POTABLE

9358.0 x3

POWER METER READING & TRENDS SYSTEM

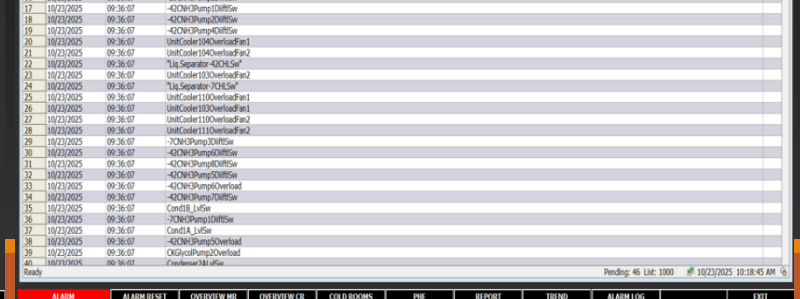
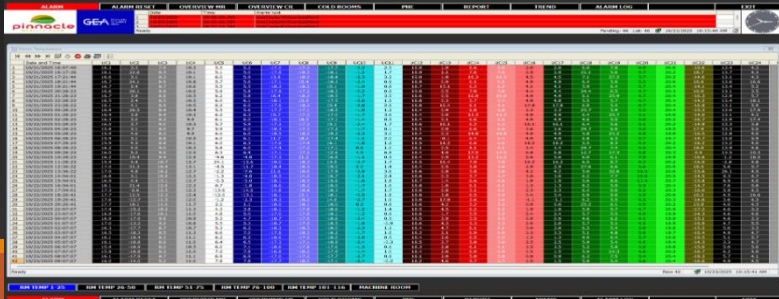
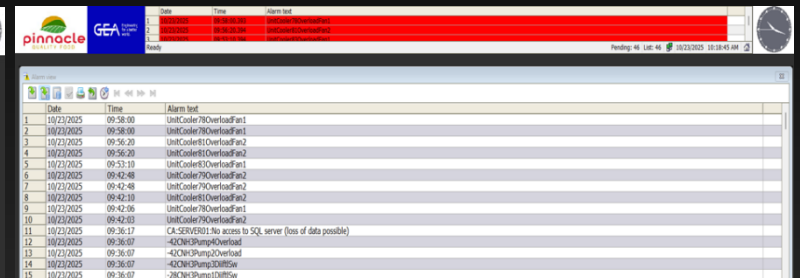
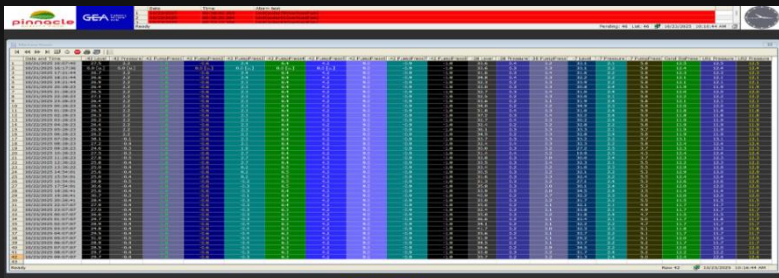
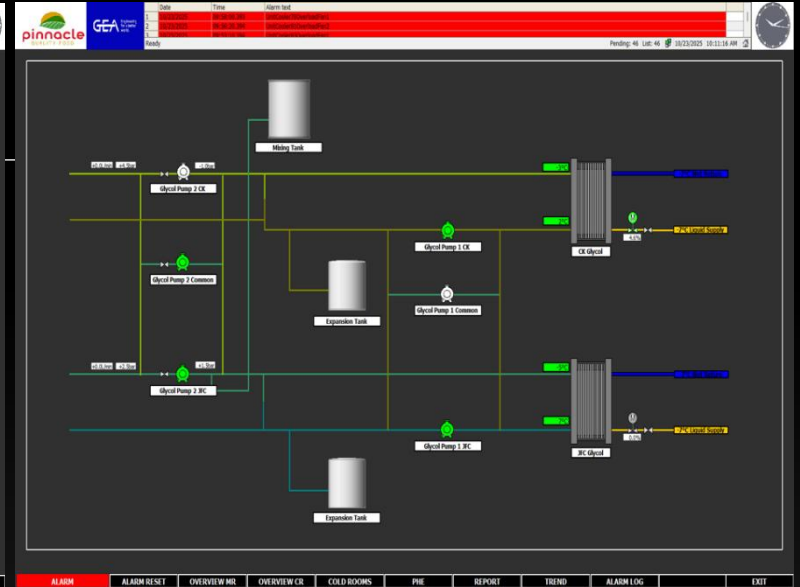
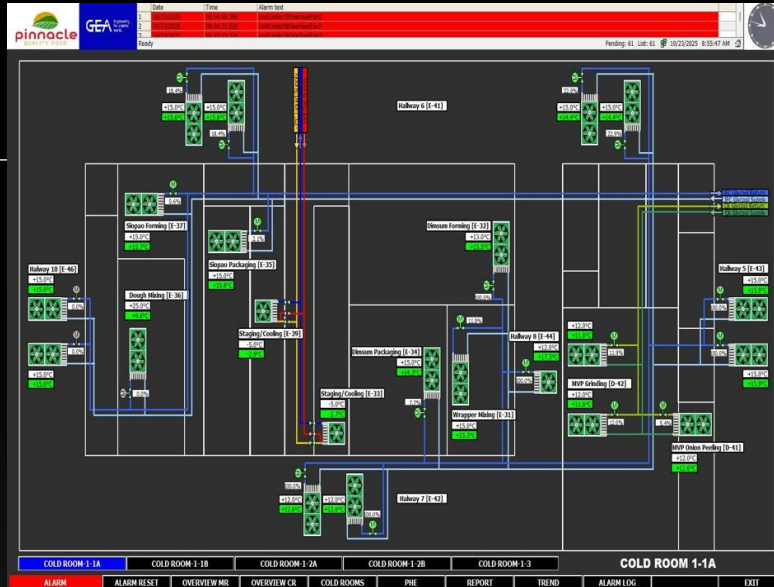
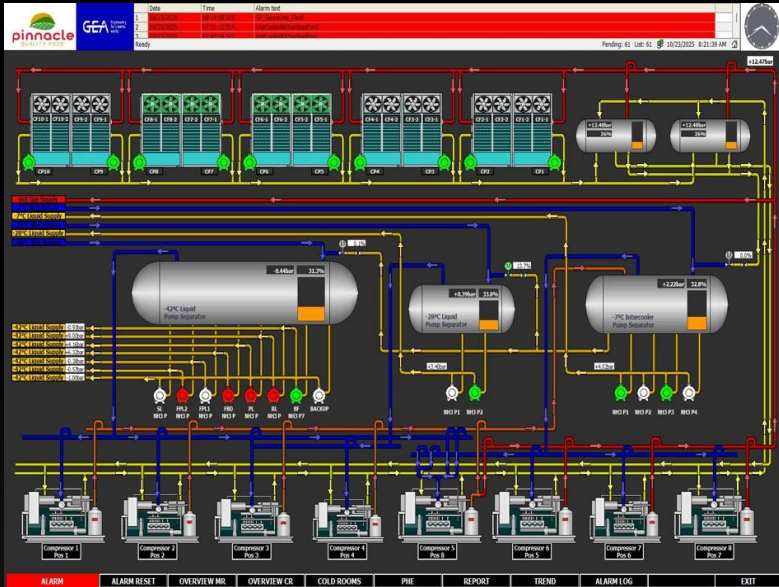
ACADEMIC BUILDING GROUND FLOOR AND ROOF DECK - POWER METER READING

ACADEMIC BUILDING GROUND FLOOR AND ROOF DECK - POWER METER VOLTAGE READING

ACADEMIC BUILDING GROUND FLOOR AND ROOF DECK - POWER METER CURRENT READING

Major Project Turnovers

- Jollibee Pinnacle Foods GEA Cold Storage – PLC SCADA Project



Major Project Turnovers

- Siruna Manila Water – PLC SCADA Project

SIRUNA PUMPING STATION

01:33:22

OVERALL PLANT EFFICIENCY

| | |
|---------------------|------|
| ENERGY (KWH) | 0.00 |
| PRODUCTION (ML) | 0.00 |
| EFFICIENCY (KWH/ML) | 0.00 |

PRODUCTION

| | |
|-----------------|---------|
| FLOWRATE (ML/S) | NORMAL |
| FLOWRATE (ML/S) | 5232.31 |
| TOTALIZER (ML) | 0.00 |

SIRUNA PUMPING STATION

01:34:19

LEGEND

| SYMBOL | DESCRIPTION |
|--------------|---------------------------------------|
| [Motor icon] | Motor not running Not ready to run |
| [Motor icon] | Motor not running Ready to run |
| [Motor icon] | Motor is starting |
| [Motor icon] | Motor is running |
| [Motor icon] | Motor is stopping |
| [Motor icon] | Motor is faulted |
| [Valve icon] | Local control mode |
| [Valve icon] | Remote control mode |

SIRUNA PUMPING STATION

01:34:22

LEGEND

| SYMBOL | DESCRIPTION |
|--------------|---|
| [Valve icon] | Valve not ready |
| [Valve icon] | Valve ready |
| [Valve icon] | Motor running Valve is opening |
| [Valve icon] | Motor not running Valve fully opened |
| [Valve icon] | Motor running Valve is closing |
| [Valve icon] | Valve is faulted |

SIRUNA PUMPING STATION

01:34:26

LEGEND

| SYMBOL | DESCRIPTION |
|-------------------------|--|
| [Connection Error icon] | Connection Error No reading |
| [Connection Error icon] | Normal reading level |
| [Alarm present icon] | Alarm present: Either high-high, high-low or low-low |

SIRUNA PUMPING STATION

01:43:49

PUMP STARTER

STARTER CONTROL

START STOP RESET

SIRUNA PUMPING STATION

01:45:07

Pump Discharge Valve

VALVE CONTROL

OPENING CLOSING RESET

Major Project Turnovers

- Arcadis Energy Suntrust – PLC SCADA & BMS Project

USER NAME: **SUNTRUST** DATE: 9/9/2024 TIME: 9:34:38 AM

HV ELECTRICAL - HV SWITCH ROOM FOR DIESEL GENERATOR 1/F PG 1

13.8KV 1200VA 2.8MW CONTINUOUS DIESEL GENERATOR 1
 13.8KV 1200VA 2.8MW CONTINUOUS DIESEL GENERATOR 2
 13.8KV 1200VA 2.8MW CONTINUOUS DIESEL GENERATOR 3
 13.8KV 1200VA 2.8MW CONTINUOUS DIESEL GENERATOR 4
 13.8KV 1200VA 2.8MW CONTINUOUS DIESEL GENERATOR 5

REMOTE CONTROL STATUS: AUTO MODE, MANUAL MODE, ON STAT, OFF STAT, TRIP STAT, SUM READING, ON, OFF

USER NAME: **SUNTRUST** DATE: 9/9/2024 TIME: 9:34:38 AM

HOME - LIGHTS-OUT

SETPOINT - SWITCH TIMER DELAY

| | |
|---------------------------|-------|
| 13.8KV DIESEL GENERATOR 1 | 0.000 |
| 13.8KV DIESEL GENERATOR 2 | 0.000 |
| 13.8KV DIESEL GENERATOR 3 | 0.000 |
| 13.8KV DIESEL GENERATOR 4 | 0.000 |
| 13.8KV DIESEL GENERATOR 5 | 0.000 |
| 13.8KV DIESEL GENERATOR 6 | 0.000 |
| 13.8KV DIESEL GENERATOR 7 | 0.000 |
| 13.8KV DIESEL GENERATOR 8 | 0.000 |

SLD - FEEDBACK INDICATORS

| | | | | | | | | | | |
|---------------------------|------|--------|----|-----|------|------|------|------|------|------|
| 13.8KV DIESEL GENERATOR 1 | AUTO | MANUAL | ON | OFF | TRIP | MODE | MODE | STAT | STAT | STAT |
| 13.8KV DIESEL GENERATOR 2 | AUTO | MANUAL | ON | OFF | TRIP | MODE | MODE | STAT | STAT | STAT |
| 13.8KV DIESEL GENERATOR 3 | AUTO | MANUAL | ON | OFF | TRIP | MODE | MODE | STAT | STAT | STAT |
| 13.8KV DIESEL GENERATOR 4 | AUTO | MANUAL | ON | OFF | TRIP | MODE | MODE | STAT | STAT | STAT |
| 13.8KV DIESEL GENERATOR 5 | AUTO | MANUAL | ON | OFF | TRIP | MODE | MODE | STAT | STAT | STAT |
| 13.8KV DIESEL GENERATOR 6 | AUTO | MANUAL | ON | OFF | TRIP | MODE | MODE | STAT | STAT | STAT |

EMERGENCY DIESEL GENERATOR - ENERGY READING

| 13.8KV DIESEL GENERATOR 1 | 13.8KV DIESEL GENERATOR 2 | 13.8KV DIESEL GENERATOR 3 | 13.8KV DIESEL GENERATOR 4 | 13.8KV DIESEL GENERATOR 5 |
|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| VL1-L2: +0.00 | VL1-L2: +0.00 | VL1-L2: +0.00 | VL1-L2: +0.00 | VL1-L2: +0.00 |
| VL2-L3: +0.00 | VL2-L3: +0.00 | VL2-L3: +0.00 | VL2-L3: +0.00 | VL2-L3: +0.00 |
| VL3-L1: +0.00 | VL3-L1: +0.00 | VL3-L1: +0.00 | VL3-L1: +0.00 | VL3-L1: +0.00 |
| VL2-N: +0.00 | VL2-N: +0.00 | VL2-N: +0.00 | VL2-N: +0.00 | VL2-N: +0.00 |
| VL3-N: +0.00 | VL3-N: +0.00 | VL3-N: +0.00 | VL3-N: +0.00 | VL3-N: +0.00 |
| Hz: +0.00 | Hz: +0.00 | Hz: +0.00 | Hz: +0.00 | Hz: +0.00 |

LOG OUT NAVIGATION SCREEN

USER NAME: **SUNTRUST** DATE: 9/9/2024 TIME: 10:01:49 AM

ENERGY METERING 1 - DIESEL GENERATORS

13.8KV DIESEL GENERATOR 1

| |
|---------------|
| VL1-L2: 0.000 |
| VL2-L3: 0.000 |
| VL2-N: 0.000 |
| VL3-L1: 0.000 |
| VL2-N: 0.000 |
| Hz: 0.000 |

13.8KV DIESEL GENERATOR 2

| |
|---------------|
| VL1-L2: 0.000 |
| VL2-L3: 0.000 |
| VL2-N: 0.000 |
| VL3-L1: 0.000 |
| VL2-N: 0.000 |
| Hz: 0.000 |

13.8KV DIESEL GENERATOR 3

| |
|---------------|
| VL1-L2: 0.000 |
| VL2-L3: 0.000 |
| VL2-N: 0.000 |
| VL3-L1: 0.000 |
| VL2-N: 0.000 |
| Hz: 0.000 |

13.8KV DIESEL GENERATOR 4

| |
|---------------|
| VL1-L2: 0.000 |
| VL2-L3: 0.000 |
| VL2-N: 0.000 |
| VL3-L1: 0.000 |
| VL2-N: 0.000 |
| Hz: 0.000 |

13.8KV DIESEL GENERATOR 5

| |
|---------------|
| VL1-L2: 0.000 |
| VL2-L3: 0.000 |
| VL2-N: 0.000 |
| VL3-L1: 0.000 |
| VL2-N: 0.000 |
| Hz: 0.000 |

13.8KV DIESEL GENERATOR 6

| |
|---------------|
| VL1-L2: 0.000 |
| VL2-L3: 0.000 |
| VL2-N: 0.000 |
| VL3-L1: 0.000 |
| VL2-N: 0.000 |
| Hz: 0.000 |

13.8KV DIESEL GENERATOR 7

| |
|---------------|
| VL1-L2: 0.000 |
| VL2-L3: 0.000 |
| VL2-N: 0.000 |
| VL3-L1: 0.000 |
| VL2-N: 0.000 |
| Hz: 0.000 |

13.8KV DIESEL GENERATOR 8

| |
|---------------|
| VL1-L2: 0.000 |
| VL2-L3: 0.000 |
| VL2-N: 0.000 |
| VL3-L1: 0.000 |
| VL2-N: 0.000 |
| Hz: 0.000 |

PG 2

USER NAME: **SUNTRUST** DATE: 9/9/2024 TIME: 10:03:40 AM

SYSTEM NETWORK - DIESEL GENERATOR 1

13.8KV DIESEL GENERATOR SWITCH 1

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

13.8KV DIESEL GENERATOR SWITCH 2

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

13.8KV DIESEL GENERATOR SWITCH 3

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

13.8KV DIESEL GENERATOR SWITCH 4

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY 1

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY 2

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY 3

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY 4

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY FEEDER 1

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY FEEDER 2

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY FEEDER 3

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY FEEDER 4

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY BUS DIFF 1

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY BUS DIFF 2

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY BUS DIFF 3

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY BUS DIFF 4

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY BUS QC 1

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY BUS QC 2

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY BUS QC 3

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PROTECTION RELAY BUS QC 4

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

FAULT RECORDER 1

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

FAULT RECORDER 2

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

FAULT RECORDER 3

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

FAULT RECORDER 4

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

BUS COUPLER 1

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

BUS COUPLER 2

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

BUS COUPLER 3

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

BUS COUPLER 4

| | | | |
|------|------|------|------|
| 1CH1 | 1CH2 | 2CH1 | 2CH2 |
|------|------|------|------|

PG 2

USER NAME: **SUNTRUST** DATE: 9/9/2024 TIME: 10:05:16 AM

TREND SYSTEM CONTROL - DIESEL GENERATOR 1

13.8KV DIESEL GENERATOR 1

13.8KV DIESEL GENERATOR 2

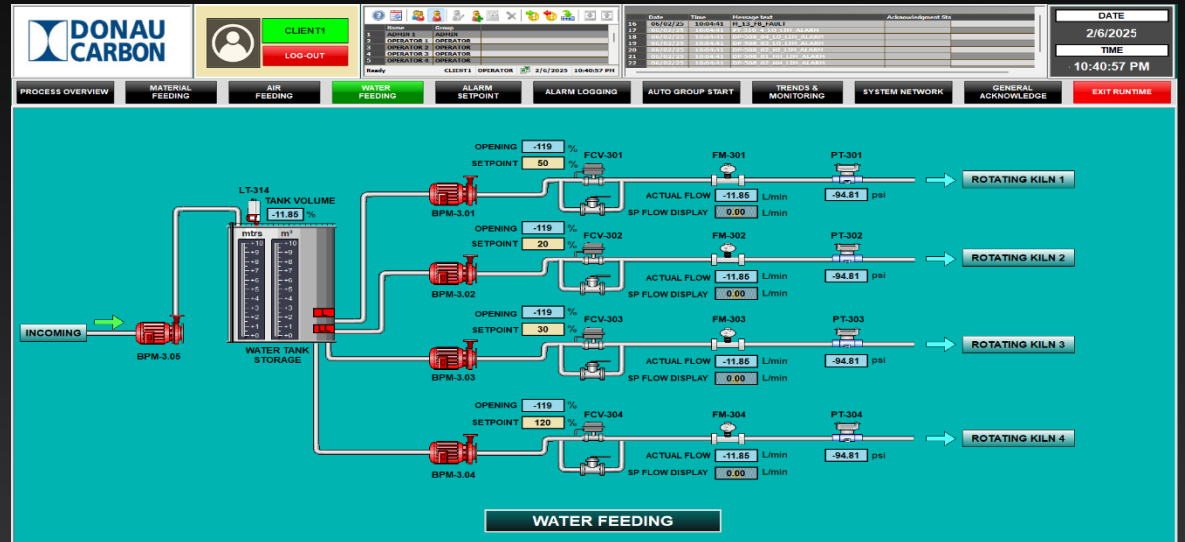
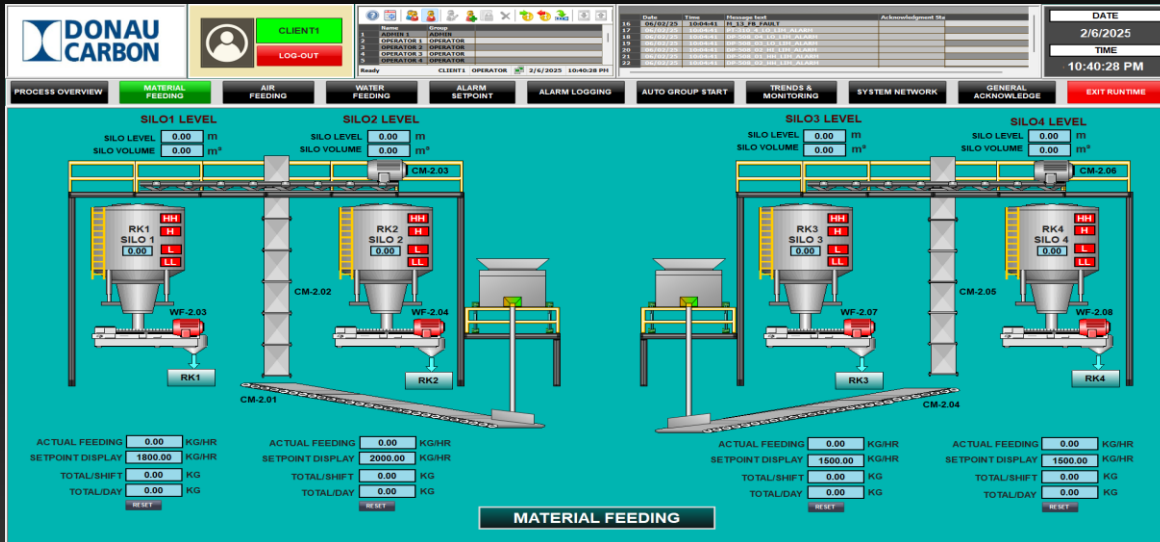
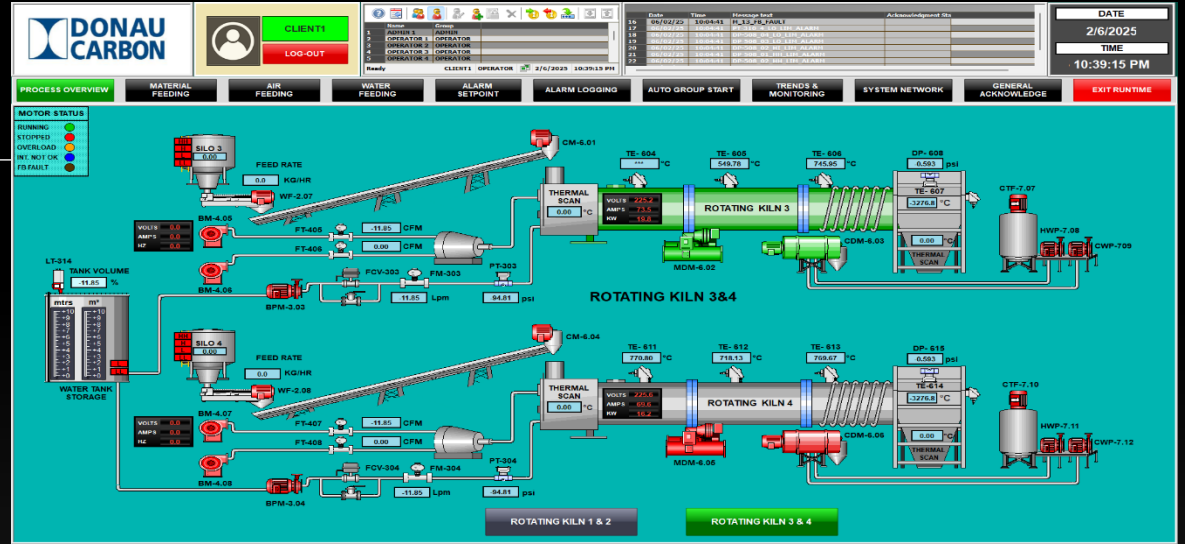
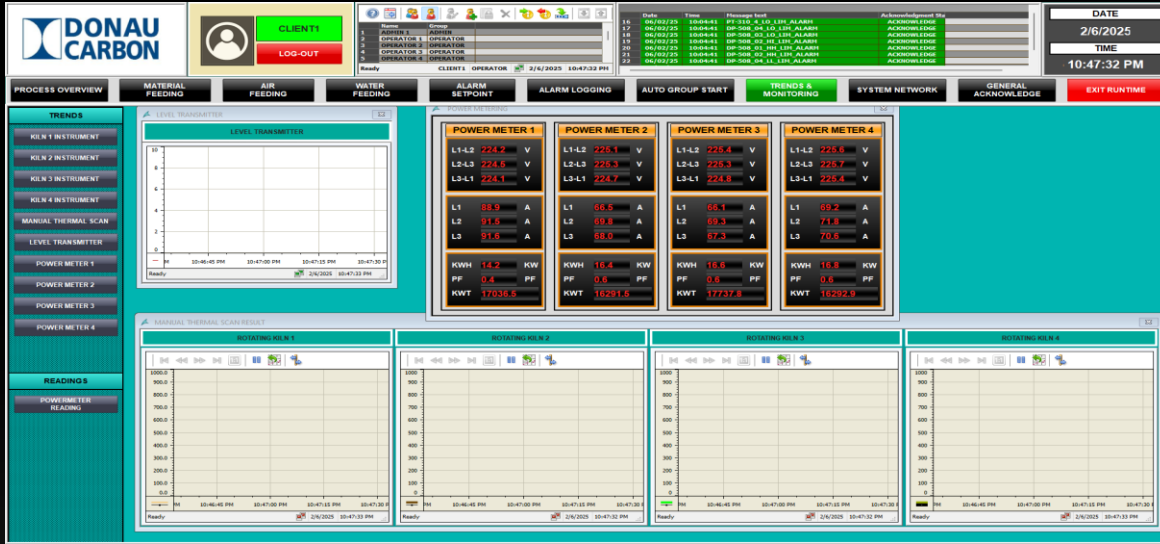
13.8KV DIESEL GENERATOR 3

13.8KV DIESEL GENERATOR 4

PG 2

Major Project Turnovers

- Donau Carbon Cagayan De Oro – PLC SCADA & BMS Project



Major Project Turnovers

- M.Y. San Monde Line Sheet – PLC HMI Project

OPER OVERVIEW SCREEN **Monde M.Y. San Corporation** ALARMS **TIME:** 9:30am **DATE:** 07/29/2025

OVERVIEW SCREEN SUBVIEW SCREEN 1 SUBVIEW SCREEN 2 ALARMS VIEW SCREEN DESIGN INFO **PRODUCT SELECTION**

LINE 2 - FIRST SET

LINE 2 - SECOND SET

BANDFEED PROCESS FIRST GROUP CONTROL FINISH GAUGE CONTROL

MOTOR CONVEYOR CONTROL INTERMEDIATE GAUGE CONTROL PRIMARY GAUGE CONTROL LAST GROUP CONTROL

OPER SUBVIEW SCREEN 1 **Monde M.Y. San Corporation** ALARMS **TIME:** 9:32am **DATE:** 07/29/2025

OVERVIEW SCREEN SUBVIEW SCREEN 1 SUBVIEW SCREEN 2 ALARMS VIEW SCREEN DESIGN INFO

INTER. GAUGE APRON IND/CAS 0 INTER. GAUGE APRON E-STOP

PRIMARY GAUGE APRON IND/CAS 0 PRIMARY GAUGE APRON E-STOP

SIDE SCRAP SHORT INDIVIDUAL 0 SIDE SCRAP LONG INDIVIDUAL 0

MOTOR CONVEYERS LAPPING MACHINE IND/CAS 0 LAPPING MACHINE E-STOP MD-STOP

INTER. GAUGE ROLL IND/CAS 0 INTER. GAUGE ROLL E-STOP

PRIMARY GAUGE ROLL IND/CAS 0 PRIMARY GAUGE ROLL E-STOP

LAMINATOR ROLL IND/CAS 0 LAMINATOR ROLL E-STOP

LS SHEETER IND/CAS 0 LS SHEETER E-STOP

OPER SUBVIEW SCREEN 2 **Monde M.Y. San Corporation** ALARMS **TIME:** 9:35am **DATE:** 07/29/2025

OVERVIEW SCREEN SUBVIEW SCREEN 1 SUBVIEW SCREEN 2 ALARMS VIEW SCREEN DESIGN INFO

SALTING MACHINE INCL. SCRAP SEPARATOR

FIRST GROUP MACHINE CONTROL

SALTING MACHINE IND/CAS 0 E-STOP

INCL. SCRAP SEPARATOR IND/CAS 0 E-STOP

ROTARY CUTTER IND/CAS 0 E-STOP

CUTTING APRON IND/CAS 0 E-STOP

BANDFEED INDIVIDUAL 0

FINISH GAUGE APRON IND/CAS 0 E-STOP

FINISH GAUGE ROLL IND/CAS 0

ROTARY CUTTER IND/CAS 0

CUTTING APRON IND/CAS 0

START M.STOP RESET CONTROL OFF RESET

OPER SUBVIEW SCREEN 2 **Monde M.Y. San Corporation** ALARMS **TIME:** 9:37am **DATE:** 07/29/2025

OVERVIEW SCREEN SUBVIEW SCREEN 1 SUBVIEW SCREEN 2 ALARMS VIEW SCREEN DESIGN INFO

FINISH GAUGE PROCESS

FINISH GAUGE APRON IND/CAS 0 E-STOP

FINISH GAUGE ROLL IND/CAS 0 E-STOP

BANDFEED INDIVIDUAL 0

FINISH GAUGE APRON IND/CAS 0 E-STOP

FINISH GAUGE ROLL IND/CAS 0

START STOP TRIP RESET CTRL OFF RESET

ROTARY CUTTER IND/CAS 0

CUTTING APRON IND/CAS 0

Major Project Turnovers

- Tanawon Powerplant Toshiba – PLC DCS7 Plant Project

