

AMP	Title	LAR1C AMP BPCS Configuration Project Serial I/O List - 2 Reformer			By	Xenon OptumPCP	
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AUTOMATION MODERNIZATION PROGRAM

LOS ANGELES CARSON REFINERY

LAR1C AMP BPCS CONFIGURATION PROJECT SERIAL I/O LIST - 2 REFORMER

Revision and Approvals					
Rev.	Date	Reason for Issue	Originated By	Checked By	Approved By
1	21-Jul-23	Issued for Design	AP	NF	JTJ
0	16-Jun-23	Issued for Design	AP	NF	JTJ
B	15-Apr-23	Issued for Approval	PS	RP	JTJ
A	20-Feb-23	Issued for Review	PS	RP	JTJ

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Revision History

Rev.	Description	Section
A	Issued for Review	All
B	Issued for Approval Updated tag list based on modbus datamap (Rev B) received from Horizon on 30-MAR-2023.	5, 6
0	Issued for Design Updated based on observations during configuration.	5, 6
1	Issued for Design Updated tag list based on modbus datamap (Rev C) received from Horizon on 03-JUL-2023. HOLD 1 Cleared	5, 6

Assumptions

No.	Description	Section
1	3rd Party interface IP addresses and interface relevant parameters to be updated and tested during SAT.	4, 5, 6

Holds

No.	Description	Section
1	Device Index/Node ID to be confirmed by LAR.- CLEARED based on Assumption that this will be updated at site	4, 5, 6

1.0 Introduction

1.1 General

The Los Angeles Refinery Carson (LARC) facility is completing an Automation Modernization Program (AMP) to replace obsolete automation equipment and to migrate the existing functionality and operability to the Honeywell Experion Process Knowledge System (EPKS) platform.

The LAR1C project scope is to migrate and/or upgrade the existing functionality and operability of identified Basic Process Control System (BPCS) consoles and controllers as well as operator and engineering stations to comply with current industry standards and practices. The migration will be from the existing Honeywell High Performance Process Manager (HPM)¹, Application Module (AM) controllers, Process Manager Input/Output (PMIO), and Basic Controllers to new Honeywell Experion C300 controllers and Series C and Universal Input/Output (UIO) and (UIO-2). The migration of the existing 3rd-party device serial interfaces to the C300 controllers shall be via either Modbus TCP/IP using Peer Communication Data Interfaces (PCDI), Ethernet Interface Module (EIM), or EPKS Server Supervisory Control and Data Acquisition (SCADA) points and Human Machine Interface (HMI) screens migrated using HMI WebBuilder.

1.2 Purpose of Document

The purpose of this document is to define the Modbus connection implementation requirements for the 2 Reformer.

¹The scope of the HPM migration is limited to specific functions if it is determined to provide a more robust solution of the other control loops migrating to the C300 controllers.

2.0 Acronyms and Definitions

Table 2.1 provides definitions of the acronyms that are used within this document.

Table 2.1. Acronyms and Abbreviations

Acronyms	Description
AI	Analog Input
AM	Application Module
AMP	Automation Modernization Program
AO	Analog Output
BPCS	Basic Process Control System
CB	Control Box (Basic Controller)
CL	Control Language
DI	Digital Input
DHP	Data Hiway Port
DO	Digital Output
EIM	Ethernet Interface Module
EPKS	Experion Process Knowledge System
HG	Hiway Gateway
HLPIU	High-Level Process Interface Unit
HMI	Human Machine Interface
HPM	High Performance Process Manager
I/O	Input/Output
LAR	Los Angeles Refinery
LARC	Los Angeles Refinery Carson
LCN	Local Control Network
LEPIU	Low-Energy Process Interface Unit
LLPIU	Low-Level Process Interface Unit
MPC	Marathon Petroleum Corporation
NA	Not Applicable
PCDI	Peer Communication Data Interface
PMIO	Process Manager Input/Output
SCADA	Supervisory Control and Data Acquisition
TPS	Total Plant Solution
UIO	Universal Input/Output

3.0 Reference Documentation

3.1 Codes and Standards

Table 3.1 gives a list of codes and standards applicable to this document.

Table 3.1. Codes and Standards

Document Number	Rev	Document Title
AMP-GBL-PM-SPC-0009	A3	Third-Party Integration Specification
AMP-GBL-PM-SPC-0012	A0	Experion C300 Configuration Specifications

3.2 Project Documentation

Table 3.2 provides a list of project-specific reference documentation applicable to this document.

Table 3.2. Project-Specific Reference Documentation

Document Number	Rev	Document Title
Software Backup		
Carson LCN1 EBs	-	Carson EB Files - (MAY-2023)
1REF_Modpack	-	HMI graphics backup (Received from LAR AMP in MAY-2023)
2Ref_BU	-	GUS Graphics Backup (Received from LAR AMP in MAY-2023)
EP Documentation		
747002-LAR1C-AUT-IOA-0100	2	LAR1 AMP BPCS Configuration Project I/O List - Carson
ML04-2REF-DCS	C	SIS Modbus Database
LARC_2REF_CE	0	RW-0032 #2 Reformer Heater Cause & Effects
ML04-2REF-DCS	0	RW-0033/34 Desulfurizer Heaters 2A/2B Cause & Effects Cause & Effects



4.0 External Interface Details

External System Interface Vendor Details

Description	Specify
External System Interface / Package Description	2 Reformer
External System Interface Equipment Manufacturer	Schneider Electric
External System Interface PLC Make / Model No	TRICON CX
Communication Module Type / Model Number	-
Software Revision	-
Contact Person Name	-
Address	-
Telephone Number	-
Email Address	-

Modbus Hardware Interface Details

Description	Settings	Specify
Cabinet Number	Vendor Cabinet Number	22SPLC0026
Redundant Communications Link	Yes / No	No
Redundancy Type	Simplex / Dual Simplex / Redundant	Simplex
Transmission Mode	Serial / asynchronous / bi-directional / duplex etc.	-
Interface Standard	Ethernet / RS-232 / RS-422 / RS-485	Ethernet
Interface Connection Type	2 wire / 4 wire / RJ45 / Dtype / 9 pin / male or female etc.	RJ45
Multidrop	Yes/No	-
		-
Media convertors required (include details)	Yes/No	-
Protocol convertors utilized (in package)	Yes/No	-
Isolation Required	Yes/No	-
		-
Interface Cable Details	Twisted Pair / Ethernet / Fiber (include details) etc.	Ethernet
Interface Cable Scope of Supply	Vendor / Contractor	-

Modbus Interface Configuration Details

Description	Settings	Specify
Transmission Protocol	Modbus TCP / RTU / ASCII	Modbus TCP
Primary IP Address / Subnet Mask	xxx.xxx.xxx.xxx / xxx.xxx.xxx.xxx	Note 2
Secondary IP Address / Subnet Mask	xxx.xxx.xxx.xxx / xxx.xxx.xxx.xxx	Note 2
Number of Slaves	1	1
Modbus Slave Address	1 - 247	ASSUMPTION 1
TCP Port		502
Baud Rate (9600/19200bps/100Mb etc.)	100 Mb (Modbus TCP) / 19200 (Modbus RTU)	Modbus TCP
Baud Rate Configurable	Yes / No	-
Parity – Modbus RTU/ASCII	Even / Odd / None	-
No of Start bits - Modbus RTU/ASCII	1	-
No of Data bits - Modbus RTU/ASCII	7 / 8	-
No of Stop bits - Modbus RTU/ASCII	1 / 2	-
Error Checking (include type details)	Yes / No	Yes
Modbus Data Transfer Function Codes Supported	01 / 02 / 03 / 04 / 05 / 06 / 07 / 15 / 16	01 / 02 / 03 / 04 / 05 / 06 / 07 / 15 / 16
Modbus Diagnostic Function Code Supported	08	08
Data Type Formats Supported	Boolean / Signed / Unsigned Integer / Real	Boolean / Signed / Unsigned Integer / Real

Modbus Miscellaneous Interface Details

Description	Settings	Specify
Contiguous Data Access	Yes / No	Yes
Bit Packed Data	Yes / No	No
Bit Reversal Required	Yes / No	No
Analog Scaling Required	Yes / No	No
Heartbeat / Watchdog Implementation (include details)	Pulse / Sine Wave / Counter etc.	NA
Time Synchronization Method	NTP / Modbus / Hardwired	-

Datamap Field Definitions

Field Name	Responsibility	Definition	Remarks
REV	VENDOR	Revision at which a modification to Tag information was made	
PROJECT TAG	VENDOR	Tag name on P&ID, C&E or other approved Project document	
VENDOR TAG	VENDOR	Tag name used to identify the signal within the Subsystem	Applicable if different to the Project Tag
LOOP NAME	VENDOR	Loop number associated with Tag	
SERVICE DESCRIPTION	VENDOR	Description of service or function of Tag	32 characters or less
INPUT DOC. P&ID/C&E	VENDOR	Identifies the P&ID/C&E on which the Tag appears.	
RAW RANGE MIN	VENDOR	Tag raw value minimum range	Note 1
RAW RANGE MAX	VENDOR	Tag raw value maximum range	Note 1
ENG RANGE UNITS	VENDOR	Tag Engineering Units of Measure	
ENG UNIT RANGE MIN	VENDOR	Tag engineering value minimum range	Note 1
ENG UNIT RANGE MAX	VENDOR	Tag engineering value maximum range	Note 1
MUL/DIV FACTOR	VENDOR	Scaling factor	
ALARM HH SETPOINT	VENDOR	Tag HighHigh alarm value	
ALARM H SETPOINT	VENDOR	Tag High alarm value	
ALARM L SETPOINT	VENDOR	Tag LowLow alarm value	
ALARM LL SETPOINT	VENDOR	Tag Low alarm value	
STATE TEXT (0)	VENDOR	Tag state description signal is LOW (0)	12 characters or less
STATE TEXT (1)	VENDOR	Tag state description signal is HIGH (1)	12 characters or less
NORMAL STATE	VENDOR	Tag normal state	STATE TEXT (0) or STATE TEXT (1)
MODBUS REGISTER	VENDOR	Tag Modbus address	0xxxx,1xxxx,3xxxx,4xxxx
PACKED BIT NUMBER	VENDOR	Tag bit number in a word (for bit packed Booleans)	1 -16
MODBUS NODE ID	VENDOR	Modbus slave address	1 - 247
MODBUS FUNCTION CODE	VENDOR	Defines the Modbus function code(s) used to Read or Write information	FC01, FC02, FC03, FC04 etc.
DATA TYPE	VENDOR	Tagged item Modbus datatype	BOOLEAN, INT, SINT, REAL, STRING, DWORD
DATA DIRECTION	VENDOR	Direction of data transfer with respect to the BPCS	READ, WRITE
SCADA CH/ PCDI MASTER	VENDOR	SCADA Channel Name or PCDI Master Name	
SCADA RTU/PCDI ARRAY	VENDOR	SCADA RTU Name or PCDI Array CM Name	
PCDI ARRAY FL/NN	VENDOR	PCDI Array Flag/Numeric	
HMI	VENDOR	HMI display if applicable	
REMARKS	VENDOR	Remarks relating to tag configuration i.e. command pulsed for 5 sec	

Notes:
1) Raw Range Min/ Max represent the range of the Tag values read/written between the BPCS and External System. Eng Unit Range Min/Max represents the range of the Tag values to be used within the BPCS (and displayed on the HMI).
If the BPCS is required to scale the range of values from the External System, the Raw Range Min/Max value are set to represent the values within the External Subsystem and the Eng Unit Range Min/Max set to represent the desired scaled range. This is typical when integers are used to represent tag values with decimal places.
For example, if the External System contains a value with a Raw Range Min/Max of -10 to 50, and is required to be displayed one decimal place of accuracy then the corresponding Eng Unit Range Mix/Max is set to -1 and 5, such that a value of 38 would be scaled to 3.8.
2) The IP addresses will be updated based on the site IP schedule. During the CFAT project IP's will be used.



5.0 PCDI & SCADA Configuration Details

PCDI Configuration Details - Master		
Description	Settings	Specify
PCDI Master Block - Main		
Module Name		22_PCDI_21_22SPLC0026
Device Type	Single Modbus TCP Bridge Redundant Modbus TCP Bridge Single Modbus TCP Device Redundant Modbus TCP Device Single Safety Manager Redundant Safety Manager Single Generic TCP Device Redundant Generic TCP Device	Single Modbus TCP Device
PCDI Master Block - Module Configuration		
Primary IP Address	xxx.xxx.xxx.xxx	Note 1
Secondary IP Address	xxx.xxx.xxx.xxx	Note 1
TCP Port		502
Connection to Use	Auto/None	Auto
Preferred Connection to Use	Primary /Secondary	Primary
Connection Switch Period (sec)		0
Use Keep Alive	Enable / Disable	Enable
PCDI Master Block - Slave Configuration Commands		
Modbus Data Transfer Function Codes Supported	01 / 02 / 03 / 04 / 05 / 06 / 07 / 15 / 16	01 / 02 / 03 / 04 / 05 / 06 / 07 / 15 / 16
Unit ID	The device index of a native MODBUS slave device.	ASSUMPTION 1
PCDI Master Block - Slave Configuration Messaging		
Timeout (ms)	Modbus request timeout period in milliseconds. Default 2000.	1000
Max Request Retries	Request Retries - Specifies the maximum number of retry counts the peer device will attempt after a failed read or write. Default 1.	1
Per Slave Requests	Maximum per Slave (Unit ID) Requests. Default 1.	1
Max. Transactions	Maximum per Slave (Unit ID) Requests. Default 1.	2
Message Delay (ms)	Message Delay in milliseconds. Default 0.	0
PCDI Master Block - Slave Configuration Diagnostic Settings		
Rate (ms)	Loop Rate in milliseconds. Default 1000; 1500 (SM)	10000
Address	Loop Address	1
Data	Default 0xA5A5	0xA5A5
Type	Coil Comm Event Log Diag Register Discrete Input Exception Status Holding Reg Input Reg	Coil
Test Mode	Read Only Write/Read	Write/Read
Data Change	Any Value Increment Invert No change	Any Value

PCDI Configuration Details - Arrays							
PCDI Array CM Name	PCDI Array FB Name	Device Address	Starting Element Index	Number of Numerics/Flags	Read/Write Option	Scaling	
22_PCDI_21_22SPLC0026_01	DO_ARRAY01	ASSUMPTION 1	2001	57	WriteOnChg	No	

SCADA Configuration Details - Controller		
Description	Settings	Specify
Name	-	22SPLC26AI
Description	-	2 REFORMER - IR
Associated Asset	-	22
Channel Name	-	22SPLC26CH
Using function code 16 to write Modbus device	Yes/No	No
Marginal Alarm Limit	-	25
Fail Alarm Limit	-	50
Dynamic Scanning	Yes/No	No
Fastest Scan Period	1-3600 Sec	1
PLC station ID	1 - 247	ASSUMPTION 1
Data Table	Digital Input Digital Output Input Register Holding Register	Input Register
Offset	Default	0
Diagnostic Address	Default	0

SCADA Configuration Details - Channel Main		
Description	Settings	Specify
Name	-	22SPLC26CH
Description	-	2 REFORMER
Associated Asset	-	22
Marginal Alarm Limit	Default	250
Fail Alarm Limit	Default	500
Diagnostic Scan Rate	Default	60 sec
Write Delay	0 ms	0 ms
Connect Timeout	10 Sec	10 Sec
Read Timeout	2 Sec	2 Sec

SCADA Configuration Details - Channel Port		
Description	Port	Redundant Port
Port Type	LANVendor Serial TerminalService	LANVendor
Work Type	Modbus PLUS/TCP	Modbus TCP

SCADA Configuration Details - Controller		
Description	Settings	Specify
Name	-	22SPLC26DI
Description	-	2 REFORMER - DI
Associated Asset	-	22
Channel Name	-	22SPLC26CH
Using function code 16 to write Modbus device	Yes/No	No
Marginal Alarm Limit	-	25
Fail Alarm Limit	-	50
Dynamic Scanning	Yes/No	No
Fastest Scan Period	1-3600 Sec	1
PLC station ID	1 - 247	ASSUMPTION 1
Data Table	Digital Input Digital Output Input Register Holding Register	Digital Input
Offset	Default	0
Diagnostic Address	Default	0

Notes:
1) The IP addresses will be updated based on the site IP schedule. During the CFAT project IP's will be used.

REV	PROJECT TAG	CS TAG	LOOP NAME	SERVICE DESCRIPTION	INPUT DOCUMENT CAE PAID CL LOGIC	EQUIPMENT NAME	RAW RANGE MIN	RAW RANGE MAX	ENG RANGE UNITS	ENG UNIT RANGE MIN	ENG UNIT RANGE MAX	MULDIV FACTOR	ALARM HH SETPOINT	ALARM H SETPOINT	ALARM L SETPOINT	ALARM LL SETPOINT	STATE TEXT (0)	STATE TEXT (1)	NORMAL STATE	INPUT DIRECTION	MODBUS CODE ID	PLC Address	MODBUS REGISTER	PACKED BIT NUMBER	MODBUS FUNCTION CODE	DATA TYPE	DATA DIRECTION	SCADA/PCDI PCDI MASTER	SCADA RTU PCDI ARRAY	SCADA RTU PCDI ARRAY	PCDI ARRAY FLOW	HMI	REMARKS
	a22HS109AA	22HS109AA	-	RW-0032 SUPERHEATER STEAM FLOW BYPASS ON SWITCH		RW-0032											NORMAL	REQUEST	STATE 0	ASSUMPTION 1	22001	22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL11	1	BOOL	WRITE	PCDI 22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL11	-		
1	a22HS111AA	22HS111AA	-	RW-0032 HC FEED PASS 1 CHARGE FLOW BYPASS ON SWITCH		RW-0032											NORMAL	REQUEST	STATE 0	ASSUMPTION 1	22002	22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL12	1	BOOL	WRITE	PCDI 22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL12	-		
1	a22HS112AA	22HS112AA	-	RW-0032 HC FEED PASS 2 CHARGE FLOW BYPASS ON SWITCH		RW-0032											NORMAL	REQUEST	STATE 0	ASSUMPTION 1	22003	22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL13	1	BOOL	WRITE	PCDI 22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL13	-		
1	a22HS126AA	22HS126AA	-	RW-0032 BFW FLOW BYPASS ON SWITCH		RW-0032											NORMAL	REQUEST	STATE 0	ASSUMPTION 1	22004	22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL14	1	BOOL	WRITE	PCDI 22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL14	-		
1	a22HS172AA	22HS172AA	-	RW-0032 H2 FEED PASS CHARGE FLOW BYPASS ON SWITCH		RW-0032											NORMAL	WRITE	STATE 0	ASSUMPTION 1	22005	22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL15	1	BOOL	WRITE	PCDI 22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL15	-		
1	a22HS484A	22HS484A	-	RW-0032 PILOT GAS PRESSURE BYPASS ON SWITCH		RW-0032											NORMAL	REQUEST	STATE 0	ASSUMPTION 1	22006	22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL16	1	BOOL	WRITE	PCDI 22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL16	-		
1	a22HS485AA	22HS485AA	-	RW-0032 FUEL GAS CELL 1 PRESSURE A BYPASS ON SWITCH		RW-0032											NORMAL	REQUEST	STATE 0	ASSUMPTION 1	22007	22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL17	1	BOOL	WRITE	PCDI 22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL17	-		
1	a22HS485BA	22HS485BA	-	RW-0032 FUEL GAS CELL 1 PRESSURE B BYPASS ON SWITCH		RW-0032											NORMAL	REQUEST	STATE 0	ASSUMPTION 1	22008	22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL18	1	BOOL	WRITE	PCDI 22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL18	-		
1	a22HS487AA	22HS487AA	-	RW-0032 FUEL GAS CELL 2 PRESSURE A BYPASS ON SWITCH		RW-0032											NORMAL	REQUEST	STATE 0	ASSUMPTION 1	22009	22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL19	1	BOOL	WRITE	PCDI 22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL19	-		
1	a22HS487BA	22HS487BA	-	RW-0032 FUEL GAS CELL 2 PRESSURE B BYPASS ON SWITCH		RW-0032											NORMAL	REQUEST	STATE 0	ASSUMPTION 1	22010	22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL10	1	BOOL	WRITE	PCDI 22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL10	-		
1	a22HS489AA	22HS489AA	-	RW-0032 FUEL GAS CELL 3A PRESSURE A BYPASS ON SWITCH		RW-0032											NORMAL	REQUEST	STATE 0	ASSUMPTION 1	22011	22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL11	1	BOOL	WRITE	PCDI 22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL11	-		
1	a22HS489BA	22HS489BA	-	RW-0032 FUEL GAS CELL 3A PRESSURE B BYPASS ON SWITCH		RW-0032											NORMAL	REQUEST	STATE 0	ASSUMPTION 1	22012	22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL12	1	BOOL	WRITE	PCDI 22 PCDI 21 22SPCLC0026	22 PCDI 21 22SPCLC0026 01.00 ARRAY01	PVFL12	-		
1	a22HS491AA	22HS491AA																															

REV	PROJECT TAG	DCS TAG	LOOP NAME	SERVICE DESCRIPTION	INPUT DOCUMENT C&E PAID CL LOGIC	EQUIPMENT NAME	RAW RANGE MIN	RAW RANGE MAX	ENG RANGE UNITS	ENG UNIT RANGE MIN	ENG UNIT RANGE MAX	MULDIV FACTOR	ALARM HH SETPOINT	ALARM H SETPOINT	ALARM L SETPOINT	ALARM LL SETPOINT	STATE TEXT (0)	STATE TEXT (1)	NORMAL STATE	INPUT DIRECTION	MODBUS NODE ID	PLC Address	MODBUS REGISTER	PACKED BIT NUMBER	MODBUS FUNCTION CODE	DATA TYPE	DATA DIRECTION	SCADA/PCDI	SCADA CHANNEL/ PCDI MASTER	SCADA RTU/ PCDI ARRAY	PCDI ARRAY FLN/N	HMI	REMARKS	
0	a22XL111AJ	22XL111AJ	-	RW-0032 HC FEED PASS 1 CHARGE FLOW LOW LOW TRIP FIRSTOUT	-	RW-0032	-	-	-	-	-	-	-	-	-	-	FIRSTOUT	NORMAL	STATE 1	-	ASSUMPTION 1	-	12074	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XL112AJ	22XL112AJ	-	RW-0032 FUEL GAS CELL 3A PRESSURE LOW LOW TRIP FIRSTOUT	-	RW-0032	-	-	-	-	-	-	-	-	-	-	FIRSTOUT	NORMAL	STATE 1	-	ASSUMPTION 1	-	12075	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL489J	22PL489J	-	RW-0032 FUEL GAS CELL 3A PRESSURE LOW LOW TRIP	-	RW-0032	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	-	ASSUMPTION 1	-	12076	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL489K	22PL489K	-	RW-0032 FUEL GAS CELL 3A PRESSURE DEVIATION ALARM	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12077	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL489L	22PL489L	-	RW-0032 FUEL GAS CELL 3A PRESSURE LOW PRE-TRIP	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12078	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL489P	22PL489P	-	RW-0032 FUEL GAS CELL 3A PRESSURE HIGH PRE-TRIP	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12079	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL489Q	22PL489Q	-	RW-0032 FUEL GAS CELL 3A PRESSURE HIGH HIGH TRIP	-	RW-0032	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	-	ASSUMPTION 1	-	12080	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL489S	22PL489S	-	RW-0032 FUEL GAS CELL 3A PRESSURE HIGH TRIP ARMED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NOTARMED	ARMED	STATE 0	-	ASSUMPTION 1	-	12081	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL489R	22PL489R	-	RW-0032 FUEL GAS CELL 3A PRESSURE LOW TRIP ARMED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NOTARMED	ARMED	STATE 0	-	ASSUMPTION 1	-	12082	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XL172AJ	22XL172AJ	-	RW-0032 H2 FEED PASS CHARGE FLOW LOW LOW TRIP FIRSTOUT	-	RW-0032	-	-	-	-	-	-	-	-	-	-	FIRSTOUT	NORMAL	STATE 1	-	ASSUMPTION 1	-	12083	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XL126AJ	22XL126AJ	-	RW-0032 BTW FLOW LOW LOW TRIP FIRSTOUT	-	RW-0032	-	-	-	-	-	-	-	-	-	-	FIRSTOUT	NORMAL	STATE 1	-	ASSUMPTION 1	-	12084	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XL889BF	22XL889BF	-	RW-0033 PILOT GAS VALVE B SOLENOID ON/OFF COMMAND	-	RW-0033	-	-	-	-	-	-	-	-	-	-	OFF	ON	STATE 1	-	ASSUMPTION 1	-	12085	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PAL497S	22PAL497S	-	RW-0033 FUEL GAS PRESSURE HIGH TRIP ARMED MAXIMUM TIMER EXPIRED	-	RW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12086	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL491J	22PL491J	-	RW-0032 FUEL GAS CELL 3B PRESSURE LOW LOW TRIP	-	RW-0032	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	-	ASSUMPTION 1	-	12087	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL491K	22PL491K	-	RW-0032 FUEL GAS CELL 3B PRESSURE DEVIATION ALARM	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12088	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL491L	22PL491L	-	RW-0032 FUEL GAS CELL 3B PRESSURE LOW PRE-TRIP	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12089	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL491P	22PL491P	-	RW-0032 FUEL GAS CELL 3B PRESSURE HIGH PRE-TRIP	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12090	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL491Q	22PL491Q	-	RW-0032 FUEL GAS CELL 3B PRESSURE HIGH HIGH TRIP	-	RW-0032	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	-	ASSUMPTION 1	-	12091	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL491S	22PL491S	-	RW-0032 FUEL GAS CELL 3B PRESSURE HIGH TRIP ARMED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NOTARMED	ARMED	STATE 1	-	ASSUMPTION 1	-	12092	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL491R	22PL491R	-	RW-0032 FUEL GAS CELL 3B PRESSURE LOW TRIP ARMED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NOTARMED	ARMED	STATE 1	-	ASSUMPTION 1	-	12093	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL888A	22PL888A	-	RW-0032 FUEL GAS VALVE SOLENOID #1 PRESSURE FDBK STATUS	-	RW-0032	-	-	-	-	-	-	-	-	-	-	OPEN	CLOSED	STATE 1	-	ASSUMPTION 1	-	12094	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL888B	22PL888B	-	RW-0032 FUEL GAS VALVE SOLENOID #2 PRESSURE FDBK STATUS	-	RW-0032	-	-	-	-	-	-	-	-	-	-	OPEN	CLOSED	STATE 1	-	ASSUMPTION 1	-	12095	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22PL888C	22PL888C	-	RW-0032 FUEL GAS VALVE BYPASS STATUS	-	RW-0032	-	-	-	-	-	-	-	-	-	-	BYPASSED	NORMAL	STATE 1	-	ASSUMPTION 1	-	12096	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA109A	22XA109A	-	RW-0032 SUPERHEATER STEAM FLOW SIF DISABLED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12097	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA111A	22XA111A	-	RW-0032 HC FEED PASS 1 CHARGE FLOW SIF DISABLED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12098	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA112A	22XA112A	-	RW-0032 HC FEED PASS 2 CHARGE FLOW SIF DISABLED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12099	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA126A	22XA126A	-	RW-0032 BFW FLOW SIF DISABLED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12100	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA172A	22XA172A	-	RW-0032 H2 FEED PASS CHARGE FLOW SIF DISABLED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12101	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA484	22XA484	-	RW-0032 PILOT GAS PRESSURE SIF DISABLED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 0	-	ASSUMPTION 1	-	12102	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA485	22XA485	-	RW-0032 FUEL GAS CELL 1 PRESSURE SIF DISABLED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12103	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA487	22XA487	-	RW-0032 FUEL GAS CELL 2 PRESSURE SIF DISABLED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 0	-	ASSUMPTION 1	-	12104	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA489	22XA489	-	RW-0032 FUEL GAS CELL 3A PRESSURE SIF DISABLED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 0	-	ASSUMPTION 1	-	12105	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA491	22XA491	-	RW-0032 FUEL GAS CELL 3B PRESSURE SIF DISABLED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12106	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA887M	22XA887M	-	RW-0032 PILOT GAS VALVE BOTH FAIL TO TRIP	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12107	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA888M	22XA888M	-	RW-0032 FUEL GAS VALVE BOTH FAIL TO TRIP	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12108	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA892	22XA892	-	RW-0032 FULL SHUTDOWN ACTIVE	-	RW-0032	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	-	ASSUMPTION 1	-	12109	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA894	22XA894	-	RW-0032 LEL TEST COMPLETE	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NOT COMP	CMPLT	STATE 1	-	ASSUMPTION 1	-	12110	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA894B	22XA894B	-	RW-0032 PURGE PERMISSIVES MET	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NOT MET	MET	STATE 1	-	ASSUMPTION 1	-	12111	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA894C	22XA894C	-	RW-0032 PURGE IN PROGRESS	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NOT	IN PROG	STATE 1	-	ASSUMPTION 1	-	12112	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA894D	22XA894D	-	RW-0032 PILOT GAS READY TO RESET	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NOT MET	MET	STATE 1	-	ASSUMPTION 1	-	12113	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA894E	22XA894E	-	RW-0032 MAIN GAS READY TO RESET	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NOT MET	MET	STATE 1	-	ASSUMPTION 1	-	12114	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA894EX	22XA894EX	-	RW-0032 POST PURGE TIME EXPIRED	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NORMAL	EXPIRED	STATE 1	-	ASSUMPTION 1	-	12115	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XA894F	22XA894F	-	RW-0032 PURGE COMPLETE	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NOT COMP	CMPLT	STATE 1	-	ASSUMPTION 1	-	12116	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
1	a22XA546	22XA546	-	RW-0032 H2 ONLY MODE	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NORMAL	ACTIVE	STATE 1	-	ASSUMPTION 1	-	12117	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
1	a22XA547	22XA547	-	RW-0032 N2 ONLY MODE	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NORMAL	ACTIVE	STATE 1	-	ASSUMPTION 1	-	12118	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XL109AT	22XL109AT	-	RW-0032 SUPERHEATER STEAM FLOW TX TROUBLE	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12119	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-	-
0	a22XL109AU	22XL109AU	-	RW-0032 SUPERHEATER STEAM FLOW TX INVALID	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12120	-	2	BOOL	READ	SCADA	22SP					

REV	PROJECT TAG	DCS TAG	LOOP NAME	SERVICE DESCRIPTION	INPUT DOCUMENT C&E, PAID, CL, LOGIC	EQUIPMENT NAME	RAW RANGE MIN	RAW RANGE MAX	ENG RANGE UNITS	ENG UNIT RANGE MIN	ENG UNIT RANGE MAX	MULDIV FACTOR	ALARM HH SETPOINT	ALARM H SETPOINT	ALARM L SETPOINT	ALARM LL SETPOINT	STATE TEXT (0)	STATE TEXT (1)	NORMAL STATE	INPUT DIRECTION	MODBUS NODE ID	PLC Address	MODBUS REGISTER	PACKED BIT NUMBER	MODBUS FUNCTION CODE	DATA TYPE	DATA DIRECTION	SCADA/PCDI SCADA CHANNEL/ PCDI MASTER	SCADA RTU/ PCDI ARRAY	PCDI ARRAY FLNUM	HMI	REMARKS
0	a22XL892BT	22XL892BT	-	RW-0032 ESD LOCAL SWITCH TROUBLE	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12182	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22XL892T	22XL892T	-	RW-0032 ESD CONSOLE SWITCH TROUBLE	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12183	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22XS887	22XS887	-	RW-0032 PILOT GAS VALVES COMMAND STATE	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	ASSUMPTION 1	-	12184	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22XS888	22XS888	-	RW-0032 FUEL GAS VALVES ASCO 2002D COMMAND STATE	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	ASSUMPTION 1	-	12185	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22ZL887AA	22ZL887AA	-	RW-0032 PILOT GAS VALVE A CONFIRMED OPEN	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	NOTOPEN	OPEN	STATE 1	ASSUMPTION 1	-	12186	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22ZL887AB	22ZL887AB	-	RW-0032 PILOT GAS VALVE A CONFIRMED CLOSED	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	NOT_CLSD	CLOSED	STATE 1	ASSUMPTION 1	-	12187	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22ZL887AC	22ZL887AC	-	RW-0032 PILOT GAS VALVE A POSITION TROUBLE	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 0	ASSUMPTION 1	-	12188	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22ZL887BA	22ZL887BA	-	RW-0032 PILOT GAS VALVE B CONFIRMED OPEN	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	NOTOPEN	OPEN	STATE 0	ASSUMPTION 1	-	12189	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22ZL887BB	22ZL887BB	-	RW-0032 PILOT GAS VALVE B CONFIRMED CLOSED	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	NOT_CLSD	CLOSED	STATE 0	ASSUMPTION 1	-	12190	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22ZL887BC	22ZL887BC	-	RW-0032 PILOT GAS VALVE B POSITION TROUBLE	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 0	ASSUMPTION 1	-	12191	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22ZL888AA	22ZL888AA	-	RW-0032 FUEL GAS VALVE A CONFIRMED OPEN	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	NOTOPEN	OPEN	STATE 1	ASSUMPTION 1	-	12192	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22ZL888AB	22ZL888AB	-	RW-0032 FUEL GAS VALVE A CONFIRMED CLOSED	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	NOT_CLSD	CLOSED	STATE 1	ASSUMPTION 1	-	12193	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22ZL888AC	22ZL888AC	-	RW-0032 FUEL GAS VALVE A POSITION TROUBLE	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12194	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22ZL888BA	22ZL888BA	-	RW-0032 FUEL GAS VALVE B CONFIRMED OPEN	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12195	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22ZL888BB	22ZL888BB	-	RW-0032 FUEL GAS VALVE B CONFIRMED CLOSED	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	NOT_CLSD	CLOSED	STATE 1	ASSUMPTION 1	-	12196	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22ZL888BC	22ZL888BC	-	RW-0032 FUEL GAS VALVE B POSITION TROUBLE	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12197	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22FL110AJ	22FL110AJ	-	RW-0033 BFW FLOW LOW LOW TRIP	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	ASSUMPTION 1	-	12198	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22FL110AL	22FL110AL	-	RW-0033 BFW FLOW LOW PRE-TRIP	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12199	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22FL109AJ SD	22FL109AJ SD	-	RW-0032 SUPERHEATER STEAM FLOW LOW LOW TRIP	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	ASSUMPTION 1	-	12200	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22HA110A	22HA110A	-	RW-0033 BFW FLOW BYPASS ON STATUS	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	NORMAL	BYPASS	STATE 1	ASSUMPTION 1	-	12201	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22HA403	22HA403	-	RW-0033 PILOT GAS PRESSURE BYPASS ON STATUS	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	NORMAL	BYPASS	STATE 1	ASSUMPTION 1	-	12202	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22HA495A	22HA495A	-	RW-0033 FUEL GAS PRESSURE A BYPASS ON STATUS	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	NORMAL	BYPASS	STATE 1	ASSUMPTION 1	-	12203	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22HA495B	22HA495B	-	RW-0033 FUEL GAS PRESSURE B BYPASS ON STATUS	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	NORMAL	BYPASS	STATE 1	ASSUMPTION 1	-	12204	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22HA895B	22HA895B	-	RW-0033/34 ESD LOCAL TRIP	-	RAW-0033/34	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	ASSUMPTION 1	-	12205	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22HA896DA	22HA896DA	-	RW-0033 ALL PILOTS LIT VERIFIED	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12206	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22HL895BX	22HL895BX	-	RW-0033/34 ESD LOCAL SWITCH 1 STATUS	-	RAW-0033/34	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12207	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22HL895BY	22HL895BY	-	RW-0033/34 ESD LOCAL SWITCH 2 STATUS	-	RAW-0033/34	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12208	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PAL495S	22PAL495S	-	RW-0033 FUEL GAS PRESSURE HIGH TRIP ARMED MAXIMUM TIMER EXPIRED	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12209	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PL493J	22PL493J	-	RW-0033 PILOT GAS PRESSURE LOW LOW TRIP	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	ASSUMPTION 1	-	12210	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PL493L	22PL493L	-	RW-0033 PILOT GAS PRESSURE LOW PRE-TRIP	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12211	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PL493R	22PL493R	-	RW-0033 PILOT GAS PRESSURE LOW TRIP ARMED	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	NOTARMED	ARMED	STATE 1	ASSUMPTION 1	-	12212	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PL111AJ SD	22PL111AJ SD	-	RW-0032 HC FEED PASS 7 CHARGE FLOW LOW LOW TRIP	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	ASSUMPTION 1	-	12213	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PL112AJ SD	22PL112AJ SD	-	RW-0032 HC FEED PASS 2 CHARGE FLOW LOW LOW TRIP	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	ASSUMPTION 1	-	12214	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PL126AJ SD	22PL126AJ SD	-	RW-0032 BFW FLOW LOW LOW TRIP	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 0	ASSUMPTION 1	-	12215	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22FL172AJ SD	22FL172AJ SD	-	RW-0032 H2 FEED PASS CHARGE FLOW LOW LOW TRIP	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	ASSUMPTION 1	-	12216	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PL495J	22PL495J	-	RW-0033 FUEL GAS PRESSURE LOW LOW TRIP	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	ASSUMPTION 1	-	12217	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PL495K	22PL495K	-	RW-0033 FUEL GAS PRESSURE DEVIATION ALARM	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12218	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PL495L	22PL495L	-	RW-0033 FUEL GAS PRESSURE LOW PRE-TRIP	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12219	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PL495P	22PL495P	-	RW-0033 FUEL GAS PRESSURE HIGH PRE-TRIP	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12220	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PL495Q	22PL495Q	-	RW-0033 FUEL GAS PRESSURE HIGH HIGH TRIP	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	ASSUMPTION 1	-	12221	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PL495S	22PL495S	-	RW-0033 FUEL GAS PRESSURE HIGH TRIP ARMED	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	NOTARMED	ARMED	STATE 1	ASSUMPTION 1	-	12222	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22PL484J SD	22PL484J SD	-	RW-0032 PILOT GAS PRESSURE LOW LOW TRIP	-	RAW-0032	-	-	-	-	-	-	-	-	-	-	TRIP	NORMAL	STATE 1	ASSUMPTION 1	-	12223	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22XA110A	22XA110A	-	RW-0033 BFW FLOW SIF DISABLED	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12224	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22XA493	22XA493	-	RW-0033 PILOT GAS PRESSURE SIF DISABLED	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12225	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22XA495	22XA495	-	RW-0033 FUEL GAS PRESSURE SIF DISABLED	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12226	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22XA89M	22XA89M	-	RW-0033 PILOT GAS VALVE BOTH FAIL TO TRIP	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	ASSUMPTION 1	-	12227	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22XA896A	22XA896A	-	RW-0033 LEL TEST COMPLETE	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	NOT_COMP	CMPLT	STATE 1	ASSUMPTION 1	-	12228	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22XA896BA	22XA896BA	-	RW-0033 PURGE PERMISSIVES MET	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	NOT_MET	MET	STATE 1	ASSUMPTION 1	-	12229	-	2	BOOL	READ	SCADA	22SPCLC26	CH	22SPCLC26DI	-	-
0	a22XA896CA	22XA896CA	-	RW-0033 PURGE IN PROGRESS	-	RAW-0033	-	-	-	-	-	-	-	-	-	-	NOT	IN PROG	STATE 1	ASSUMPTION 1	-	12230	-	2	BOOL	READ	SCADA	22SPCLC26</				

Rev. 1, 07/21/2023

REV	PROJECT TAG	DCS TAG	LOOP NAME	SERVICE DESCRIPTION	INPUT DOCUMENT C&E, PAID, CL, LOGIC	EQUIPMENT NAME	RAW RANGE MIN	RAW RANGE MAX	ENG RANGE UNITS	ENG UNIT RANGE MIN	ENG UNIT RANGE MAX	MULDIV FACTOR	ALARM HH SETPOINT	ALARM H SETPOINT	ALARM L SETPOINT	ALARM LL SETPOINT	STATE TEXT (0)	STATE TEXT (1)	NORMAL STATE	INPUT DIRECTION	MODBUS NODE ID	PLC Address	MODBUS REGISTER	PACKED BIT NUMBER	MODBUS FUNCTION CODE	DATA TYPE	DATA DIRECTION	SCADA/PCDI SCADA CHANNEL/ PCDI MASTER	SCADA RTU/ PCDI ARRAY	PCDI ARRAY FLW/N	HMI	REMARKS
0	a22DESULF_FULLFO_ACT	22DESULF_FULLFO_ACT	-	RW-0033/34 FULL FIRSTOUT ACTIVE	-	RW-0033/34	-	-	-	-	-	-	-	-	-	-	FIRSTOUT	NORMAL	STATE 1	-	ASSUMPTION 1	-	12406	-	2	BOOL	READ	SCADA	22SPCLC26 CH	22SPCLC26DI	-	-
0	a22DESULF_PGFO_ACT	22DESULF_PGFO_ACT	-	RW-0033/34 PILOT GAS FIRSTOUT ACTIVE	-	RW-0033/34	-	-	-	-	-	-	-	-	-	-	FIRSTOUT	NORMAL	STATE 1	-	ASSUMPTION 1	-	12407	-	2	BOOL	READ	SCADA	22SPCLC26 CH	22SPCLC26DI	-	-
0	a22DESULF_FGFO_ACT	22DESULF_FGFO_ACT	-	RW-0033/34 FUEL GAS FIRSTOUT ACTIVE	-	RW-0033/34	-	-	-	-	-	-	-	-	-	-	FIRSTOUT	NORMAL	STATE 1	-	ASSUMPTION 1	-	12408	-	2	BOOL	READ	SCADA	22SPCLC26 CH	22SPCLC26DI	-	-
0	a22REF2_FULLFO_ACT	22REF2_FULLFO_ACT	-	RW-0032 FULL FIRSTOUT ACTIVE	-	RW-0032	-	-	-	-	-	-	-	-	-	-	FIRSTOUT	NORMAL	STATE 1	-	ASSUMPTION 1	-	12409	-	2	BOOL	READ	SCADA	22SPCLC26 CH	22SPCLC26DI	-	-
0	a22REF2_PGFO_ACT	22REF2_PGFO_ACT	-	RW-0032 PILOT GAS FIRSTOUT ACTIVE	-	RW-0032	-	-	-	-	-	-	-	-	-	-	FIRSTOUT	NORMAL	STATE 1	-	ASSUMPTION 1	-	12410	-	2	BOOL	READ	SCADA	22SPCLC26 CH	22SPCLC26DI	-	-
0	a22REF2_FGFO_ACT	22REF2_FGFO_ACT	-	RW-0032 FUEL GAS FIRSTOUT ACTIVE	-	RW-0032	-	-	-	-	-	-	-	-	-	-	FIRSTOUT	NORMAL	STATE 1	-	ASSUMPTION 1	-	12411	-	2	BOOL	READ	SCADA	22SPCLC26 CH	22SPCLC26DI	-	-
0	a22XL888AY	22XL888AY	-	RW-0032 FUEL GAS VALVE A FAIL TO OPEN	-	RW-0032	-	-	-	-	-	-	-	-	-	-	FTO	NORMAL	STATE 1	-	ASSUMPTION 1	-	12412	-	2	BOOL	READ	SCADA	22SPCLC26 CH	22SPCLC26DI	-	-
0	a22XL889BY	22XL889BY	-	RW-0032 FUEL GAS VALVE B FAIL TO OPEN	-	RW-0032	-	-	-	-	-	-	-	-	-	-	FTO	NORMAL	STATE 1	-	ASSUMPTION 1	-	12413	-	2	BOOL	READ	SCADA	22SPCLC26 CH	22SPCLC26DI	-	-
0	a22XL887AY	22XL887AY	-	RW-0032 PILOT GAS VALVE A FAIL TO OPEN	-	RW-0032	-	-	-	-	-	-	-	-	-	-	FTO	NORMAL	STATE 1	-	ASSUMPTION 1	-	12414	-	2	BOOL	READ	SCADA	22SPCLC26 CH	22SPCLC26DI	-	-
0	a22XL887BY	22XL887BY	-	RW-0032 PILOT GAS VALVE B FAIL TO OPEN	-	RW-0032	-	-	-	-	-	-	-	-	-	-	FTO	NORMAL	STATE 1	-	ASSUMPTION 1	-	12415	-	2	BOOL	READ	SCADA	22SPCLC26 CH	22SPCLC26DI	-	-
0	a22UA664D	22UA664D	-	RW-0032 SIS COMMON BYPASS ALARM	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12416	-	2	BOOL	READ	SCADA	22SPCLC26 CH	22SPCLC26DI	-	-
0	a22UA665D	22UA665D	-	RW-0033 SIS COMMON BYPASS ALARM	-	RW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12417	-	2	BOOL	READ	SCADA	22SPCLC26 CH	22SPCLC26DI	-	-
0	a22UA667D	22UA667D	-	RW-0034 SIS COMMON BYPASS ALARM	-	RW-0034	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	12418	-	2	BOOL	READ	SCADA	22SPCLC26 CH	22SPCLC26DI	-	-
1	a22K1548	22K1548	-	RW-0032 H2 ONLY MODE AUTO REJECT TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31001	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22K1547	22K1547	-	RW-0032 N2 ONLY MODE AUTO REJECT TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31002	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22HA893TR	22HA893TR	-	RW-0032 SIS MASTER BYPASS ENABLED TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31004	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22K1894C	22K1894C	-	RW-0032 PURGE TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31005	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22K1894E	22K1894E	-	RW-0032 POST PURGE TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31006	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PAL485STR	22PAL485STR	-	RW-0032 FUEL GAS CELL 1 PRESSURE HIGH TRIP ARMED MAX TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31007	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PAL487STR	22PAL487STR	-	RW-0032 FUEL GAS CELL 2 PRESSURE HIGH TRIP ARMED MAX TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31008	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PAL489STR	22PAL489STR	-	RW-0032 FUEL GAS CELL 3A PRESSURE HIGH TRIP ARMED MAX TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31009	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PAL491STR	22PAL491STR	-	RW-0032 FUEL GAS CELL 3B PRESSURE HIGH TRIP ARMED MAX TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31010	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL484RTR	22PL484RTR	-	RW-0032 PILOT GAS PRESSURE LOW TRIP ARMED TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31011	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL485STR	22PL485STR	-	RW-0032 FUEL GAS CELL 1 PRESSURE HIGH TRIP ARMED TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31012	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL485RTR	22PL485RTR	-	RW-0032 FUEL GAS CELL 1 PRESSURE LOW TRIP ARMED TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31013	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL487STR	22PL487STR	-	RW-0032 FUEL GAS CELL 2 PRESSURE HIGH TRIP ARMED TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31014	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL487RTR	22PL487RTR	-	RW-0032 FUEL GAS CELL 2 PRESSURE LOW TRIP ARMED TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31015	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL489STR	22PL489STR	-	RW-0032 FUEL GAS CELL 3A PRESSURE HIGH TRIP ARMED TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31016	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL489RTR	22PL489RTR	-	RW-0032 FUEL GAS CELL 3A PRESSURE LOW TRIP ARMED TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31017	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL491STR	22PL491STR	-	RW-0032 FUEL GAS CELL 3B PRESSURE HIGH TRIP ARMED TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31018	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL491RTR	22PL491RTR	-	RW-0032 FUEL GAS CELL 3B PRESSURE LOW TRIP ARMED TIME REMAINING	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31019	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22XV885STATUS	22XV885STATUS	-	RW-0032 FUEL GAS VALVES ASCO 2002D STATUS	-	RW-0032	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31020	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22K1896CA	22K1896CA	-	RW-0033 PURGE TIME REMAINING	-	RW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31021	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PAL495STR	22PAL495STR	-	RW-0033 FUEL GAS PRESSURE HIGH TRIP ARMED MAX TIME REMAINING	-	RW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31022	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL493RTR	22PL493RTR	-	RW-0033 PILOT GAS PRESSURE LOW TRIP ARMED TIME REMAINING	-	RW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31023	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PAL497STR	22PAL497STR	-	RW-0033 FUEL GAS PRESSURE HIGH TRIP ARMED MAX TIME REMAINING	-	RW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31024	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
1	a22K1548	22K1548	-	RW-0033/34 H2 ONLY MODE AUTO REJECT TIME REMAINING	-	RW-0033/34	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31026	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22HA893ATR	22HA893ATR	-	RW-0033/34 SIS MASTER BYPASS ENABLED TIME REMAINING	-	RW-0033/34	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31027	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22K1896EA	22K1896EA	-	RW-0033 POST PURGE TIME REMAINING	-	RW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31028	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22K1896EB	22K1896EB	-	RW-0034 POST PURGE TIME REMAINING	-	RW-0034	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31029	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22XV891STATUS	22XV891STATUS	-	RW-0033/34 FUEL GAS VALVES ASCO 2002D STATUS	-	RW-0033/34	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31030	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22K1896CB	22K1896CB	-	RW-0034 PURGE TIME REMAINING	-	RW-0034	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31031	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL494RTR	22PL494RTR	-	RW-0034 PILOT GAS PRESSURE LOW TRIP ARMED TIME REMAINING	-	RW-0034	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31033	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL497STR	22PL497STR	-	RW-0034 FUEL GAS PRESSURE HIGH TRIP ARMED TIME REMAINING	-	RW-0034	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31034	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL497RTR	22PL497RTR	-	RW-0034 FUEL GAS PRESSURE LOW TRIP ARMED TIME REMAINING	-	RW-0034	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31035	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22PL495RTR	22PL495RTR	-	RW-0033 FUEL GAS PRESSURE LOW TRIP ARMED TIME REMAINING	-	RW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31036	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
1	a22PL495STR	22PL495STR	-	RW-0033 FUEL GAS PRESSURE HIGH TRIP ARMED TIME REMAINING	-	RW-0033	-	-	-	-	-	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	31037	-	4	INT	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22FI109A	22FI109A	-	RW-0032 SUPERHEATER STEAM FLOW SCALED EU VALUE	-	RW-0032	-	-	MLB/HR	0	130	-	-	-	-	-	ALARM	NORMAL	STATE 1	-	ASSUMPTION 1	-	45001	-	3	REAL	READ	SCADA	22SPCLC26 CH	22SPCLC26AI	-	-
0	a22FI111A	22FI111A	-	RW-0032 HC FEED PASS 1 CHARGE																												



REV	PROJECT TAG	DCS TAG	LOOP NAME	SERVICE DESCRIPTION	INPUT DOCUMENT C&E PAID CL LOGIC	EQUIPMENT NAME	RAW RANGE MIN	RAW RANGE MAX	ENG RANGE UNITS	ENG UNIT RANGE MIN	ENG UNIT RANGE MAX	MULDIV FACTOR	ALARM HH SETPOINT	ALARM H SETPOINT	ALARM L SETPOINT	ALARM LL SETPOINT	STATE TEXT (0)	STATE TEXT (1)	NORMAL STATE	INPUT DIRECTION	MODBUS NODE ID	PLC Address	MODBUS REGISTER	PACKED BIT NUMBER	MODBUS FUNCTION CODE	DATA TYPE	DATA DIRECTION	SCADA/PCDI	SCADA CHANNEL/ PCDI MASTER	SCADA RTU/ PCDI ARRAY	PCDI ARRAY FLNN	HMI	REMARKS
0	a22PH497A	22PH497A	-	RW-0034 FUEL GAS PRESSURE TX A SCALED EU VALUE	-	RW-0034	-	-	PSIG	0	40	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45129	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22PH497B	22PH497B	-	RW-0034 FUEL GAS PRESSURE TX B SCALED EU VALUE	-	RW-0034	-	-	PSIG	0	40	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45131	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22PN494G	22PN494G	-	RW-0034 PILOT GAS PRESSURE LOW PRE-TRIP SETPOINT	-	RW-0034	-	-	PSIG	0	85	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45133	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22PN494H	22PN494H	-	RW-0034 PILOT GAS PRESSURE LOW LOW TRIP SETPOINT	-	RW-0034	-	-	PSIG	0	85	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45135	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22PN497G	22PN497G	-	RW-0034 FUEL GAS PRESSURE LOW PRE-TRIP SETPOINT	-	RW-0034	-	-	PSIG	0	40	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45137	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22PN497H	22PN497H	-	RW-0034 FUEL GAS PRESSURE LOW LOW TRIP SETPOINT	-	RW-0034	-	-	PSIG	0	40	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45139	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22PN497N	22PN497N	-	RW-0034 FUEL GAS PRESSURE HIGH PRE-TRIP SETPOINT	-	RW-0034	-	-	PSIG	0	40	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45141	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22PN497V	22PN497V	-	RW-0034 FUEL GAS PRESSURE HIGH HIGH TRIP SETPOINT	-	RW-0034	-	-	PSIG	0	40	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45143	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22X663A	22X663A	-	22SPLC-0026 TMR MAJOR PROGRAM VERSION	-	TRX-DIAG	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45145	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22X663B	22X663B	-	22SPLC-0026 TMR MINOR PROGRAM VERSION	-	TRX-DIAG	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45147	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K891AO	22K891AO	-	RW-0033/34 FUEL GAS VALVE A OPEN TIME	-	RW-0033/34	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45149	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K891AC	22K891AC	-	RW-0033/34 FUEL GAS VALVE A CLOSE TIME	-	RW-0033/34	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45151	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K891BO	22K891BO	-	RW-0033/34 FUEL GAS VALVE B OPEN TIME	-	RW-0033/34	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45153	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K891BC	22K891BC	-	RW-0033/34 FUEL GAS VALVE B CLOSE TIME	-	RW-0033/34	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45155	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K889AO	22K889AO	-	RW-0033 PILOT GAS VALVE A OPEN TIME	-	RW-0033	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45157	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K889AC	22K889AC	-	RW-0033 PILOT GAS VALVE A CLOSE TIME	-	RW-0033	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45159	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K889BO	22K889BO	-	RW-0033 PILOT GAS VALVE B OPEN TIME	-	RW-0033	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45161	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K889BC	22K889BC	-	RW-0033 PILOT GAS VALVE B CLOSE TIME	-	RW-0033	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45163	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K890AO	22K890AO	-	RW-0034 PILOT GAS VALVE A OPEN TIME	-	RW-0034	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45165	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K890AC	22K890AC	-	RW-0034 PILOT GAS VALVE A CLOSE TIME	-	RW-0034	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45167	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K890BO	22K890BO	-	RW-0034 PILOT GAS VALVE B OPEN TIME	-	RW-0034	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45169	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K890BC	22K890BC	-	RW-0034 PILOT GAS VALVE B CLOSE TIME	-	RW-0034	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45171	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K888AO	22K888AO	-	RW-0032 FUEL GAS VALVE A OPEN TIME	-	RW-0032	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45173	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K888AC	22K888AC	-	RW-0032 FUEL GAS VALVE A CLOSE TIME	-	RW-0032	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45175	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K888BO	22K888BO	-	RW-0032 FUEL GAS VALVE B OPEN TIME	-	RW-0032	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45177	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K888BC	22K888BC	-	RW-0032 FUEL GAS VALVE B CLOSE TIME	-	RW-0032	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45179	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K887AO	22K887AO	-	RW-0032 PILOT GAS VALVE A OPEN TIME	-	RW-0032	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45181	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K887AC	22K887AC	-	RW-0032 PILOT GAS VALVE A CLOSE TIME	-	RW-0032	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45183	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K887BC	22K887BC	-	RW-0032 PILOT GAS VALVE B OPEN TIME	-	RW-0032	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45185	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
0	a22K887BO	22K887BO	-	RW-0032 PILOT GAS VALVE B CLOSE TIME	-	RW-0032	-	-	-	0	3600	-	-	-	-	-	-	-	-	-	ASSUMPTION 1	-	45187	-	3	REAL	READ	SCADA	22SPLC26 CH	22SPLC26AI	-	-	-
1	a22HS105AB	22HS105AB	-	RW-0033/34 FEED PASS CHARGE FLOW BYPASS OFF SWITCH	-	RW-0033/34	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2034	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[34]	-	-
1	a22HS119AB	22HS119AB	-	RW-0033/34 FEED PASS RECYCLE GAS FLOW BYPASS OFF SWITCH	-	RW-0033/34	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2035	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[35]	-	-
1	a22HS110AB	22HS110AB	-	RW-0033 BFW FLOW BYPASS OFF SWITCH	-	RW-0033	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2036	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[36]	-	-
1	a22HS124AB	22HS124AB	-	RW-0034 BFW FLOW BYPASS OFF SWITCH	-	RW-0034	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2037	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[37]	-	-
1	a22HS493B	22HS493B	-	RW-0033 PILOT GAS PRESSURE BYPASS OFF SWITCH	-	RW-0033	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2038	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[38]	-	-
1	a22HS494B	22HS494B	-	RW-0034 PILOT GAS PRESSURE BYPASS OFF SWITCH	-	RW-0034	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2039	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[39]	-	-
1	a22HS495AB	22HS495AB	-	RW-0033 FUEL GAS PRESSURE A BYPASS OFF SWITCH	-	RW-0033	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2040	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[40]	-	-
1	a22HS496BB	22HS496BB	-	RW-0033 FUEL GAS PRESSURE B BYPASS OFF SWITCH	-	RW-0033	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2041	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[41]	-	-
1	a22HS497AB	22HS497AB	-	RW-0034 FUEL GAS PRESSURE A BYPASS OFF SWITCH	-	RW-0034	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2042	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[42]	-	-
1	a22HS497BB	22HS497BB	-	RW-0034 FUEL GAS PRESSURE B BYPASS OFF SWITCH	-	RW-0034	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2043	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[43]	-	-
1	a22HS109AB	22HS109AB	-	RW-0032 SUPERHEATER STEAM FLOW BYPASS OFF SWITCH	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2044	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[44]	-	-
1	a22HS111AB	22HS111AB	-	RW-0032 HC FEED PASS 1 CHARGE FLOW BYPASS OFF SWITCH	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2045	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[45]	-	-
1	a22HS112AB	22HS112AB	-	RW-0032 HC FEED PASS 2 CHARGE FLOW BYPASS OFF SWITCH	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2046	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[46]	-	-
1	a22HS126AB	22HS126AB	-	RW-0032 BFW FLOW BYPASS OFF SWITCH	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2047	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[47]	-	-
1	a22HS172AB	22HS172AB	-	RW-0032 H2 FEED PASS CHARGE FLOW BYPASS OFF SWITCH	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2048	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[48]	-	-
1	a22HS484B	22HS484B	-	RW-0032 PILOT GAS PRESSURE BYPASS OFF SWITCH	-	RW-0032	-	-	-	-	-	-	-	-	-	-	NORMAL	REQUEST STATE 0	-	-	ASSUMPTION 1	-	2049	-	1	BOOL	WRITE	PCDI	22_PCDI_21_22SPLC0026	22_PCDI_21_22SPLC0026_01.DO ARRAY01	PVFL[49]	-	-
1	a22HS485AB	22HS485AB	-	R																													