CROSSWIND

TECHNICAL QUERY
Hollandse Kust Noord

No. TQ :	CW-BALL-TQ-0006	Rev:	A

Originating Party	CrossWind					
Subject	Communication protocol for interfacing the Central Control System with CPI UCP- FUEL CELL					
Author	S. Bremner	TQ Aconex unique number: CWHKN-INN-BPH-TQ-00027				
Interface TQ - from	Rosetti	TQ interface source Aconex unique number: ROSMA-INN-BPH-TQ-00047				
Type	Query		X	Interface		X
	Deviation			Derogation (SHALL[PS])		
	Note: No deviations nor derogations which have an adverse effect on HSSE will be granted					
Workpackage						
Area(s) of application	Design & Eng.	x	Procurement		Construction	
	Commissioning		Operations		Other	
Issue date			Urgent reply 5 days		Routine reply 10 days	x
Close-out date	03-11-2023					
Closed-out by			TQ status:		Closed-out	

1. Description

Reference documents / Aconex unique numbers:

Basic Design Engineering Package, doc. N. K559-2254-PM-PLN-003, sect. 9.7.2.3 Interfacing Control Systems Philosophy, doc. N. K559-2254-IC-PHI-001, sect. 6.3.1 UCP Controlled

Above referenced FEED requirement states: *«The Electrolyser, the BESS and the Fuel Cell shall all be controlled via UCPs. The communication protocol between the CCS and the Electrolyser, BESS and Fuel Cell systems shall be in accordance with IEC 61158, preferably Modbus. »*

Control System manufacturer ABB is suggesting to interfacing Company Provided Items with CCS employing the Profinet communication protocol instead of Modbus. Despite CCS can provide Modbus interfacing, Profinet is proposed by ABB as preferrable in terms of set-up and troubleshooting.

Company is kindly required to assess and confirm if Profinet communication protocol can be provided by BALLARD for interfacing the Fuel Cell UCP.

2. Response

Reference documents / Aconex unique numbers

This communication is issued for the recipient's information and to facilitate the obligations of the Parties under the Contract. This communication has no authority to amend or vary the Contract nor relieve either Party of any duties, obligations or responsibilities.

As above referenced Feed documentation requires, the interface is designed with Modbus TCP/IP communication between FC package and BLPH control system.

Ballard can provide a Profinet interface if so desired, on the following conditions:

1. This will be outside the scope of the existing contract and be subject to a change order.
2. Due to the timeline for Ballard delivery, the change order will not be implemented on the system as delivered to RM after FAT testing at Ballard.
3. The Profinet interface will be installed/updated at a later date after delivery of the FC package to RM.
4. The Profinet interface will present the same data and other control functions as the Modbus interface.

Response acknowledged. Please proceed as planned with Modbus TCP/IP

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