HITACHI
Inspire the Next

To Sh. Chanchal Mukherjee, GGM
Bridge and Roof Co (India) Ltd

Cc Sh. Sanjay Paul, GM (Bridge and Roof)
Sh. VK Soni, DGM (Bridge and Roof)
Mr. Jan.G Karlstrom (Hitachi Energy)
Mr. Saji. S (Hitachi Energy)

From Ann-Christine Gudmundsson
Business area Lead Engineers
Phone direct +46702403960
E-Mail ann-christine.gudmundsson@hitachienergy.com
Fax direct

Doc. Id 1JNL1205780
Reference No ±800 kV, 6000 MW HVDC Multi Terminal NER/ER - NR/WR Interconnector - I
Page 1/1
Date

Title: Immediate rectification of APD Valve halls for contract closure

Reference:

1. Email communications dated – 13th Dec'2021, 7th Dec'2021, and 17th Nov'2021

Dear Sir,

With reference to the various emails and telephonic communications regarding the rectification methodology and rectification work for Alipurduar valve halls, please note that POWERGRID has approved the rectification procedure/methodology as discussed with you (Attached).

Now, please start the site work as per the attached approved procedure/methodology on immediate basis.

We once again re-iterate that, the HVDC system is under reverse power flow and we have enough working fronts available to complete the work. If we lose the time further, then we may not get the enough time to complete the work and consequently your contract closure shall be delayed by 1 more year.

Therefore, we request you to take immediate action on mobilization of manpower, material and
other resources.

Yours sincerely,

Ann-Christine Gudmundsson
Project Manager

±800 kV, 6000 MW HVDC Multi Terminal NER/ER - NR/WR Interconnector - I Alipurduar	Document number, revision: 1JNL1202009, B	Page: 1 of 3	Language: en
	Status: Approved	Owning Organization: Lead Engineers	
Prepared: Ann-Christine Gudmundsson, 2021-12-06	Approved: Ann-Christine Gudmundsson, 2021-12-06	Class.no: 623	
Title: Report on technical solution for repair of Valve Hall cracks in Alipurduar, including additional long term durability measures			

Summary

1. General

Alipurduar Station is located in an area of excessive rain and characteristic of external drainage system also leads to often water clogging in this site.

Water ingress were earlier observed into the Alipurduar Valve hall. Based on the discussions in various meetings between POWERGRID and Hitachi Energy to jointly look into the technical solutions for rectifications of wall cracks on APD Valve halls. Hitachi Energy have reached out to waterproofing experts (Bostik) and the methodology proposed by them is as per below. The products mentioned below, or equivalent may be used for purpose.

This report also covers additional long terms weather protection, which is also recommended as additional measure, though beyond Technical Specification, in case Owner would like to consider the same.

2. Methodology and material

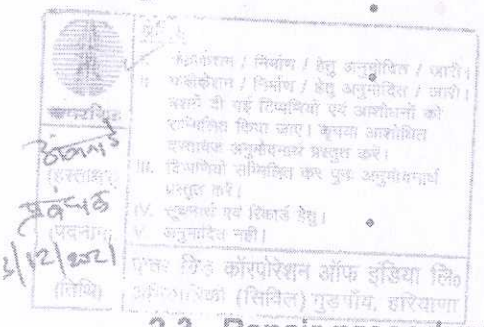
2.1 Sealing/repairing material to be used (products recommended from BOSTIK)

Bostik Damp fix Gold/Bostik Elastocoat -Single component highly elastic water based Polyurethane coating.

Bostik Sealer coat - Primer

Bonding agent /Crack Filler for repairing of joints and Cracks - Bostik Seal 'N' Flex / Seal 'N' Flex P590 / Bostik Hydromet 476

2.2 Surface Preparation



Identify the location of cracks by visual inspection.

The existing plastering surface to be chipped to remove loose mortar. The surface should then be rubbed vigorously to remove all dust etc.

The surface thus prepared shall then be washed with clean potable water before laying the crack filler/bonding agent

2.3 Repair procedure

Providing chamfers at interfacings between bricks and steel members along the wall with 30 x 30mm fillet with cement sand

mortar 1:3 mixed with crack filler/bonding agent specified by the manufacturer (Bostik).

- All other visible cracks can also be treated with the procedure as per above.
- Repaired surfaces shall be then be provided with water based elastic paint coating

3. Vendors additional recommendation for longer durability

- Post repair of cracks, applying a sufficient thickness coat of single component polyurethane liquid coating
- Visual inspection to be made every half-yearly specially after rains to observe any leakages.
- The procedure recommended to be repeated every five years to ensure performance and durability.