



पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)



केन्द्रीय कार्यालय : "सौदामिनी" प्लॉट सं. 2 सैक्टर-29, गुडगाँव-122 001, हरियाणा
फोन : 2571700 - 719, फैक्स : 2571760, 2571761 तार 'नेटग्रिड'
Corporate Office : "Saudamini" Plot No. 2, Sector-29, Gurgaon-122 001. Haryana
Tel. : 2571700 - 719, Fax : 2571760, 2571761 Gram : 'NATGRID'

संदर्भ संख्या/Ref. Number

CIN: L40101DL1989GOI1038121

संदर्भ / Ref: C-ENG/Tr. Core/IZOLYATOR/BSG/420-1250/TT/AUG/01

दिनांक / Date: 08.08.2016

सेवा में /To **M/s Izolyator High Voltage Electrical Equipment
Massa Ltd. Company, Lenina Street 77, Pavlovskaya
Sloboda village, Istra District,
Moscow region, Russia, 143581**

**Kind Attn: Mr. Andrey Shornikov, International Business Development Manager
Dr. Ashok Singh, Chief Representative Massa, India**

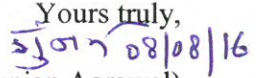
विषय / Sub: **Type Test approval of 420kV/1250A RIP Bushing - M/s Izolyator, Russia Make**
Dear Sir,

Please refer to your letter ref NIL dated 02/08/2016 & dated 04/01/2016 and email dated 08/08/2016 regarding the submission of type test reports of above subject bushing. The type test were carried out at M/s Izolyator, Russia, M/s VEI, Russia and M/s CESI, Italy in line with IEC 60137-2008 and witnessed by POWERGRID.

| Sr. No | Test Description as per IEC 60137-2008 On 420kV/1250A (SI/LI/AC=1050kVp/1425kVp/695kVrms) RIP Bushing Drawing/GTP No. 686354.603 Type:TCSIV-90-420/1250 Bushing Sr. No. n-65934 | TEST REPORT | Remarks |
|--------|---|-----------------------------|--------------------------|
| 01 | Long Duration Power Frequency voltage withstand test (ACLD) | 325 Part 1 | Found generally in order |
| 02 | Dry Lightning Impulse withstand test | 325 Part 1 | |
| 03 | Dry & wet switching impulse voltage withstand test. | 325 Part 1 & 11020-092-2015 | |
| 04 | Temperature Rise Test | 325 Part 2 | |
| 05 | Thermal Stability Test | 325 Part 1 | |
| 06 | Electromagnetic compatibility test | 325 Part 1 | |
| 07 | Verification of Thermal Short Time current withstand | Enclosed | |
| 08 | Cantilever Load withstand Test | 325 Part 1 | |
| 09 | Verification of Dimension | 325 Part 1 | |
| 10 | Snap Back Test | B6012361 | |
| 11 | Seismic Test | B6012361 | |
| 12 | Routine Tests | 325 Part 1 & after seismic | |

With these the requirement of type test on above bushing is completed.

Thanking you.

Yours truly,

(Gunjan Agrawal)
Ch. Manager (Engg-S/s)