

POWERLINK

Our Ref: SSL1/PL01/EN02/0002

Your Ref:

Enterprise Managed Services
Endeavour House,
1 Lyonsdown Road,
New Barnet,
Herts,
EN5 1HU



20-Aug-2010

For the attention of Jason Simkins

Dear Sirs

**SSR Project Package 1A
Midel Filled T&R Traction Converters/Rectifier Transformers Equipment
Approval**

Following a detailed review of the Technical Dossier and Compliance Matrix submission ref. MNL-ELC-A001-009752.zip, the Equipment Approval Panel meeting have recommended the following equipment for approval.

Transformers & Rectifiers Limited, 11kVac / 630/750Vdc 2.5MW AN cooled Midel Filled Traction Converters, comprising:

- 12 pulse, series bridge (fuseless) diode rectifier (indoor use at Neasden Substation and Marlborough Road Substation (New)) / (outdoor use - in external weatherproof enclosure at Neasden Depot Substation (New) and Hammersmith Depot Substation), with..
- Midel filled double wound rectifier transformer (indoor/outdoor) – for use above ground.

Approval is subject to provision of detailed O&M manuals and the following concessions against Powerlink Specification SP80101v2 (Traction Converter Groups for use on the System) for:

- 11.11.4 – Short Circuit Performance
- 11.11.5 – Converter Group Parallel Operation (Load Sharing)
- 11.11.7 – Converter Output Voltage Waveform (Harmonics)
- 12.2 – Enclosures and Compartments (height) – working platform to be provided

File code:
Keywords:
Document: \\NETWORKS\PEMS1\CSSL1\EN02\00002.doc
Reply Required: No
Originator:



EDF Energy Powerlink
49 Southwark Bridge Road
London SE1 9HH

Tel +44 (0) 20 7089 0000
Fax +44 (0) 20 7089 0132

edfenergy.com

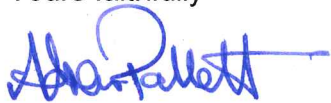
- 12.10 – Earthing Arrangements
- 13.1.5 – Open Circuit Arm Detection

There is a further concession requirement against SP80001 v1 (General Requirements for Fixed Installation Power Supply Equipment) for:

- 13.15 – Wire Identification

The formal process requires a Powerlink equipment approval document (which is under preparation) and ratification by the DRP, but in view of the time constraints, please accept this letter as approval.

Yours faithfully



Andrew Pallett
Power Manager

cc. (LU/SSR:) David Rushton, Daren Stinton, Don Bootle, David Elliott
(Powerlink:) I Draper, P Smith, N Gardner, G Lennon