1 SCOPE

This document defines the procedure for assessment of third party low voltage cable jointing systems (where such systems form part of contestable works within the competitive connections market) to determine their acceptability for adoption by ScottishPower Power Systems.

2 ISSUE RECORD

This is a controlled document.

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Issue Date	Issue No	Author	Amendment Details
July 2001	1	R H Bracey	Initial issue: 4 page document

3 ISSUE AUTHORITY

Author	Owner	Issue Authority
R H Bracey Engineering Consultant	A Campbell Senior Engineering Development Engineer	J J Hunt Investment Strategy and Policy Manager .....

4 REVIEW

This document shall be subject to review in the light of technical or other developments and in any case no later than three years after the date of issue.

5 CONTENTS

6 DEFINITIONS

For the purposes of this document the following definitions shall apply:

Joint design - the overall joint requirements (eg encapsulation, connectors, moisture barriers, etc)
Joint type - the four generic joint types - mains only (straight or branch), mains/service, service straight and stop-ends.

7 RELATED DOCUMENTS

The following documents are referred to within this procedure. It is important that all users of related documents are in possession of the current issue together with any amendments.

British Standards (BS)

BS 4579	Performance of mechanical and compression joints in electric cable and wire connectors
BS 6910 part 1	Cold pour resin compound and heat-shrink cable joints in the voltage range up to 1000 V a.c. and 1500 V d.c.
BS 7888	LV and MV accessories for power cables with rated voltage from 0.6/1 kV (Um = 1.2kV) up to and including 20.8/36 kV (Um = 42kV)

EA Engineering Recommendations (ER)

ER C 79	Type approval tests for connectors and terminations for aluminium conductors of insulated power cables
ER C81	Type approval tests for joints for 600/1000 volt cable systems

8 PROPRIETARY JOINT KIT (COMPLETE)

8.1 Requirements

The joint design shall comply with the following requirements:

- It must be fully type tested to BS 7888, BS 6910 part 1 or ER C81 with independent witnessing.
- It must have a service history (minimum of 500 joint-years) with a Distribution Network Operator on the same types of cable that are used by ScottishPower Power Systems.

8.2 Evidence

The following evidence shall be submitted with the assessment application:

- A type test report.
- Evidence of service history. The service history must relate to the joint design offered and types proposed for use. The history must demonstrate that no significant change has been made to the joint design/types during the service period evidenced.

9 IN-HOUSE JOINT KIT

9.1 Requirements

The joint design shall comply with the following requirements:

- The connectors must have been type tested to BS 4579 or ER C 79.
- The encapsulation system must have been type tested to ER C 81 or equivalent.
- It must have a service history (minimum of 1000 joint-years) with a Distribution Network Operator on the same types of cable that are used by ScottishPower Power Systems.

9.2 Evidence

The following evidence shall be submitted with the assessment application:

- Type test reports for connectors and encapsulation system
- Evidence of service history. The service history must relate to the joint design offered and types proposed for use. The history must demonstrate that no significant change has been made to the joint design/types during the service period evidenced.

10 ASSESSMENT PROCESS

Any third party wishing to have their low voltage jointing system assessed to determine its acceptability for adoption by ScottishPower Power Systems shall provide full details of the jointing system including dimensioned drawings, parts lists, jointing instructions, etc, together with the appropriate evidence referred to in section 8 or 9 of this document.

All relevant information should be forwarded to the nominated point of contact within Power Systems to enable the assessment to proceed. A charge will be made for the assessment service.

A period of at least one month should be allowed for the assessment process to be completed. The third party will then be notified in writing as to whether their lv jointing system has been accepted or rejected. In the latter case, the reasons for rejection will be stated. No further technical correspondence or discussion will be entered into following the notification.