



1. SCOPE

This document details SP Energy Networks' Connection Registration and Management Process for Contestable Connection Projects by Independent Connections Providers.



2. ISSUE RECORD

This is a controlled maintained document.

All copies printed via the Intranet or photocopied will be deemed uncontrolled.

Issue Date	Issue No	Author	Amendment Details
4/11/05	Issue 1	A Scott	
03/07/08	Issue 2	S Kelly	Changes to incorporate new SLC

3. ISSUE AUTHORITY

Author	Owner	Issue Authority
<i>S Kelly</i> <i>Process Co-ordinator</i>	<i>A Scott</i> <i>Compliance Manager</i>	<i>A Huthwaite/G Evans</i> <i>Construction Managers</i> <i>(Scotland / E & W)</i>
		
		

4. REVIEW

This document shall be subject to on-going review and no later than 3 years from issue.



5. CONTENTS

1. SCOPE	1
2. ISSUE RECORD.....	1
3. ISSUE AUTHORITY	1
4. REVIEW	1
5. CONTENTS.....	2
6. DEFINITIONS AND ABBREVIATIONS	4
6.1 DEFINITIONS.....	4
6.2 ABBREVIATIONS.....	5
7. RELATED DOCUMENTS	5
8. GENERAL.....	6
9. INTRODUCTION.....	6
10. PROJECT INITIATION / NOTIFICATION.....	7
11. POINT OF CONNECTION DESIGN AND QUOTATION.....	8
12. POC ACCEPTANCE AND DESIGN APPROVAL.....	11
13. CONTRACT ACCEPTANCE	13
14. LIVE JOINTING APPLICATION.....	14
15. PROJECT CONSTRUCTION – DAILY WHEREABOUTS NOTIFICATION	14
16. CONNECTION REQUESTS	15
17. PROJECT CLOSURE AND HANDOVER REQUIREMENTS.....	18
18. APPENDIX 1 – HIGH LEVEL CRAM PROCESS	20
19. APPENDIX 2 – PROJECT NOTIFICATION FORM.....	22
20. APPENDIX 3 – CRAM POINT OF CONNECTION DESIGN AND QUOTATION PROCESS.	23
21. APPENDIX 4 – CRAM DESIGN APPROVAL DOCUMENTATION FORM.....	24
22. APPENDIX 5 – CRAM POC ACCEPTANCE, DESIGN APPROVAL AND CONTRACT ACCEPTANCE PROCESS	25
23. APPENDIX 6 – CRAM LIVE JOINTING AND PROJECT CONSTRUCTION PROCESS.....	26



24.	APPENDIX 7 – CONNECTION REQUEST FORM.....	27
25.	APPENDIX 8 – CRAM CONNECTION REQUESTS AND CONDITIONS PRECEDENT PROCESS.....	28
26.	APPENDIX 9 – CRAM PROJECT CLOSURE AND HANDOVER PROCESS	29

6. DEFINITIONS AND ABBREVIATIONS

6.1 Definitions

The following definitions shall apply throughout this document:

Binder (used in CRAM IT System)	An electronic staple that groups together previously uploaded documents of different types. The system can report on binder creation, rejection or approval times.
Construction and Adoption Agreement	The agreement entitled Construction and Adoption Agreement incorporating the General Conditions (sometimes known as the tri-partite or bi-partite agreement).
CRAM	Connections Registration and Management collaborative internet-based IT System
Handover	A point where all contestable work is complete, transfer of title, ownership, operation and maintenance responsibilities as defined in the Construction and Adoption Agreement has been transferred to the License Holders SP Distribution Ltd or SP England and Wales plc.
Independent Connection Provider (ICP)	A NERS accredited contractor undertaking design and construction works in association with housing and industrial and commercial sites (referred to by Ofgem as the Applicant).
Independent Distribution Network Operator (IDNO)	An independent distribution network operator who can employ ICPs or who can act as an ICP with suitable NERS accreditation.
NERS	National Electricity Registration Scheme operated by Lloyds Register on behalf of the UK Distribution Network Operators (DNOs). Lloyds perform technical assessment of the Service Providers (ICPs) who elect to be assessed for accreditation for contestable works associated with the installation of electrical connections.
SP Energy Networks (SPEN)	The network operator for the Distribution License Holders SP Distribution Ltd and SP Manweb plc.

6.2 Abbreviations

The following abbreviations shall apply throughout this document:

CDM	The Construction (Design and Management) Regulations 1994.
NRSWA	The New Roads and Street Works Act, 1991.

7. RELATED DOCUMENTS

This document is one of a suite of specifications relating to this subject area and should be read in conjunction with:

a) **Electricity Association Documents:**

Engineering Recommendation G81 - Framework for design and planning, materials specification and installation and record for low voltage housing estate installations and associated, new, HV / LV distribution substations.

- Part 1: Design and Planning
- Part 2: Materials Specification
- Part 3: Installation and Records
- Part 4: (Design & Planning) – Framework for design and planning of industrial and commercial underground connected loads up to and including 11kV
- Part 5: Framework for material specifications for industrial and commercial underground connected loads up to and including 11kV
- Part 6: Framework for installation and Records of industrial and commercial underground connected loads up to and including 11kV
- Part 7: Framework for contestable diversionary and reinforcement underground and overhead works not exceeding 33kV and HV/LV distribution substations

b) **SP EnergyNetworks' Technical Framework Documents:**

- Design and Planning framework for low voltage housing estate installations and associated new HV/LV distribution substations.
(Ref. ESDD-02-012).
- Materials Specification framework for greenfield low voltage housing estate installations and associated new HV/LV distribution substations.
(Ref. EPS-03-027).
- Installation and Records framework for greenfield low voltage housing estate installations and associated new HV/LV distribution substations.
(Ref. EPS-02-005).



-
- c) **SP EnergyNetworks' Operating Regime Document:**
- Operating Regime for Contestable Network Construction on Greenfield Housing Sites. (Ref. ASSET-04-015).
- d) **SP EnergyNetworks' Quality Document:**
- Recording of Electrical Assets by Contractors (Ref. BUPR-22-015).
- e) **SP EnergyNetworks' Auditing Document:**
- Auditing and Escalation Regime for Networks Constructed by Third Parties. (Ref. ASSET-04-020).
- f) **SP EnergyNetworks' Completion Process**
- Project Completion Process For Contestable Works (Ref: ASSET-04-025)

8. GENERAL

The data and guidance contained within this document remains the property of SP EnergyNetworks and may not be used for purposes other than that for which it has been supplied. It may not be reproduced either wholly, or in part, in any way whatsoever, nor may it be used by, or its contents divulged to, any other person whatsoever, without the prior written permission of SP EnergyNetworks.

This document applies to new installations and is not to be applied retrospectively.

SP EnergyNetworks reserves the right to change the data contained within this document. SP EnergyNetworks accepts no responsibility for any inaccuracies in, or omissions from the document.

9. INTRODUCTION

The 4Projects CRAM system is used by SP EnergyNetworks (SPEN) to facilitate the transfer of information between Independent Connection Providers (ICPs) and SPEN. It is an internet-based collaborative IT system which enables documents to be posted and shared with registered users. The system is also configured to allow restricted access so users must be invited to view information on any individual project.

This document details the business processes to be followed by ICPs for contestable projects. These processes include the timing of the transfer of information, how that information will be configured in the CRAM system and the details of what information must be posted for each project.



To enable SPEN to meet its regulatory obligations under the Standard Licence Condition for providing non-contestable connection services and to facilitate the connections market, the processes detailed must be followed in full.

The processes and information requirements will be detailed in the following stages of connection project lifecycle:

- Email Project Initiation / Notification
- Binder 1 Point of Connection Design and Quotation
- Binder 4 POC Acceptance and Design Approval
- Binder 5 Contract Acceptance
- Binder 6 Live Jointing Application
- Email Project Construction – daily/weekly whereabouts notification
- Binder 7 Connection Requests
- Binder 8 Conditions Precedent Information
- Binder 9 Live Jointing Completion
- Binder 10 Project Closure and Handover

Appendix 1 shows the high level CRAM process depicting the stages above.

10. PROJECT INITIATION / NOTIFICATION

As soon as an ICP becomes interested in a connection project SPEN must be informed so SPEN can enable the ICP to have access to CRAM connection project.

Prior to providing an ICP with access to the CRAM project, the following information is required for every POC requested:

- Name of ICP, ICP reference and contact details for administration and design
- Name of developer, architect and consultants
- Site address, street name and number, area, town, county, postcode
- OS Grid Co-ordinates for the site (use Plot 1 where applicable, or the centre of the site)
- Domestic / Commercial / Domestic and Commercial development
- Number and type of units – this is required for adopted and IDNO sites to assist in identifying unique projects
- Fully adopted/Section 16 to IDNO/Adopted to IDNO
- Name of proposed Asset Owner if not SPM or SPD
- Estimated load(s) including total and type of load

This information is required by SPEN to identify the specific development.

The Project Notification Form in which the above information is to be provided is located on the SPEN website and is included in Appendix 2 of this document.

In addition to this information, SPEN also requires a good quality location/boundary plan together with a site plan as per ESDD 02-012 Appendix A. The surrounding areas to the site must be visible on at least one of the plans. All plans submitted electronically must be provided in pdf format.

The completed Project Notification Form and associated plans must be emailed to:

CRAMAdminNorth@scottishpower.com for Scotland, and
CRAMAdminSouth@scottishpower.com for England and Wales.

SPEN will then invite the ICP to the CRAM project and confirm the CRAM Project number by email to the ICP. The ICP is then required to quote the unique CRAM project number and project title on all further correspondence.

11. POINT OF CONNECTION DESIGN AND QUOTATION

The ICP is required to collate the relevant details as requested in Appendix B of the 'Framework for design and planning for low voltage housing developments underground network installations and associated, new, HV/LV distribution substations' Ref: ESDD-02-012. This information is then required to be uploaded into the CRAM project documents folder.

The following need to be provided with a POC request:

- The Project Notification Form (see Appendix 2) – confirming details post any site meetings and discussions with developer / consultant / architect / client, etc. This should include street lighting, interim supply and landlord connection requirements.
- Details and electrical characteristics of the proposed load, as per project form (Appendix 2 & 3).
- 1:500 and 1:2500 site layout and boundary plans clearly marked and indicating proposed point of connection. The site layout must be presented in a .dwg 2005 format with minimum layers. The boundary plan may be either .dwg 2005 or .pdf.

The ICP must create a **Binder 1 - Point of Connection Quotation Request Binder (POCQR)** and attach the above documents to Binder 1 POCQR to enable SPEN to track the timescales associated with the following activities:



- Assessing the minimum information is provided with the request
- Carrying out the point of connection non-contestable design
- Costing and quotation preparation

SPEN will assess the categorisation of the point of connection in accordance with Ofgem's Standard Licence Condition. The definition of the point of connection categories and time-scales for provision of POC quotations are shown below in Table 1.

Table 1: Ofgem Standard Licence Condition for Non-Contestable Project Quotations

Point of Connection Type	Standard	Service	Timescale to provide quotation (from receipt of request)
LV Demand	1a	For a new demand connection to the licensee's distribution system where the highest voltage of the assets at the point of connection and any associated works is not more than 1 kilovolt	Within 15 working days
LV Generation	1b	For a new generation connection to the licensee's distribution system where the highest voltage of the assets at the point of connection and any associated works is not more than 1 kilovolt	30 working days
HV Demand	1c	For a new demand connection to the licensee's distribution system where the highest voltage of the assets at the point of connection and any associated works is more than 1 kilovolt but not more than 22 kilovolts	Within 20 working days
HV Generation	1d	For a new generation connection to the licensee's distribution system where the highest voltage of the assets at the point of connection and any associated works is more than 1 kilovolt but not more than 22 kilovolts	50 working days
EHV Demand	1e	For a new demand connection to the licensee's distribution systems where the highest voltage of the assets at the point of connection and associated works is more than 22 kilovolts but not more than 72 kilovolts	50 working days
Other Connections	1f	For a new connection to the licensee's distribution system that is not included within the preceding sub-paragraphs	3 months



All Binder 1 POCQR binders must be entitled as follows: CRAM project number, B1 v1 (where version control needs to be identified).

All documents uploaded into the CRAM project must be entitled as follows: CRAM number, categorised as a POC document and then the document type identified. For example '12345 POC 1:500 layout drawing'

SPEN will assess the information provided in the binder. If the minimum information has not been provided by the ICP, SPEN will update the Binder 1 POCQR status to 'rejected', confirming it is a non-compliant request and indicating the deficiencies.

If the minimum information has been supplied, the Binder 1 POCQR status will remain at 'pending'. Having assessed the information and the associated network SPEN will assign the project category and will update the binder category with the appropriate POC type, i.e. LV Demand, HV Demand, etc.

Where the POC type is EHV, SPEN will upload the point of connection information into the CRAM project documents folder and inform the ICP in accordance with Ofgem's Standard Licence Condition (Standard 2a).

Table 2: Ofgem Standard Licence Condition for Non-Contestable Project Quotations

Point of Connection Type	Standard	Service	Timescale to provide quotation (from receipt of request)
EHV Demand	2a	Provide technical information necessary to enable the applicant to identify the proposed location and characteristics of the point of connection of the premises to the licensee's distribution system, where the highest voltage of the assets at that point or any associated works is more than 22 kilovolts but not more than 72 kilovolts	Within 30 working days

Once SPEN complete the non-contestable point of connection design and quotation, the quotation and acceptance will be uploaded into the CRAM project. The Binder 1 POCQR status will be updated to 'approved' and the ICP informed.

The timescales for SPEN to complete the point of connection quotation process are detailed in Table 1. The timing will start once Binder 1 POCQR has been created. The timing stops when Binder 1 POCQR is either approved or rejected. Appendix 3 shows the CRAM POC design and quotation process diagram.

12. POC ACCEPTANCE AND DESIGN APPROVAL

Once the developer has decided which ICP will deliver the contestable element of the project, the successful ICP must submit their proposed contestable design for approval.

Additionally, the ICP can accept the non-contestable POC quotation, if it is still valid. If the POC quotation has expired, a new POC quotation may have to be obtained.

To accept the POC quotation, the ICP must upload the following information into the CRAM project and attach to a **Binder 4 – Acceptance and Design Approval (ADA)** binder:

- Signed and dated POC Quote Acceptance section included with the quotation
- Submit their contestable works design to SPEN for approval, and
- Provide SPEN with confirmation from the developer of their appointment as the preferred accredited connection installer.

The successful ICP must upload the design information as detailed in Appendix C of ESDD-02-012. This information is required to be uploaded into the CRAM project design folder and grouped to Binder 4 ADA. The design approval requirements are detailed in the Design Approval Documentation Form in Appendix 4.

Binder 4 ADA must be entitled as follows: CRAM project number, B4 v1 (where version control needs to be identified).

All documents uploaded into the CRAM project must be entitled as follows: CRAM number, categorised as a design document and then the document type. For example, '12234 ADA 1:500 layout drawing'.

All drawings uploaded into CRAM must be presented in .dwg 2005 with minimum layers. Boundary plans may be presented in .pdf format.

SPEN will assign the point of connection category to the Binder ADA in accordance with Ofgem's Standard Licence Condition. The definition of the design submission categories and timescales for approval of designs are shown below in Table 3.



Table 3: Ofgem Standard Licence Condition for Non Contestable Design Approvals

Design Approval Type	Standard	Service	Timescale to approve design (from receipt of proposed design)
Design Submissions for LV and HV connections	2b	In response to a design submitted by the applicant for the licensee’s approval, outlining a new proposal for connecting premises to the licensee’s distribution system, provide a written approval of the proposed design, or a written rejection stating reasons for rejection	10 working days (unless any part of it would require or directly affect the use of EHV assets)
Design Submissions for EHV and other connections	2c	In response to a design submitted by the applicant for the licensee’s approval, outlining a new proposal for connecting premises to the licensee’s distribution system, provide a written approval of the proposed design, or a written rejection stating reasons for rejection	20 working days

SPEN will assess the information provided in the binder. If the minimum information has not been supplied by the ICP, SPEN will update the Binder 4 ADA status to ‘rejected’, confirming it is a non-compliant request and informing the ICP of the deficiencies. If the minimum information is supplied, the Binder 4 ADA status will remain as ‘pending’.

Once the design has been assessed as satisfactory, SPEN will upload the Construction and Adoption Agreement into the CRAM project. SPEN will update the Binder 4 ADA status to ‘approved’ and the ICP informed. If the design has been assessed as not meeting SPEN requirements, the Binder 4 ADA will be rejected and the ICP informed of the reasons why.

The timescales for SPEN to complete the design approval process are as detailed in Table 3. The timing will start once Binder 4 ADA has been created. The timing stops when Binder 4 ADA is either approved or rejected.

Appendix 5 shows this CRAM POC acceptance and design approval process diagram.

13. CONTRACT ACCEPTANCE

The ICP will upload the following documentation to the CRAM project within the requisite period as stated in the POC quotation, i.e. 10 days from approval of Binder 4 Acceptance and Design Approval binder):

- Signed Construction and Adoption Agreement
- Copy of payment of non-contestable connection charge
- Copy of completed contract acceptance form
- CDM information
- Sub-contractor details
- Draft Site Responsibility Schedule
- Signed Connection Agreement (HV only)
- Signed CuOSA (IDNO only)

This information is attached to **Binder 5 Contract Acceptance Binder (CA)**.

The ICP will send the signed Contract Acceptance form, together with payment of the non-contestable connection charge, to SPEN Shared Service Centre, Bellshill.

The ICP will send the actual signed hard copies of the Construction and Adoption Agreement, the CUoSA and the Connection Agreement to the Competition in Connections offices at either Leven Street, Motherwell for Scotland or Prenton Way, Birkenhead for England and Wales.

Binder 5 – Contract Acceptance Binder must be entitled as follows: CRAM project number, B5 v1 (where version control needs to be identified).

All documents uploaded into the CRAM project must be entitled as follows: CRAM number, categorised as a non-contestable project acceptance document and then the document type. For example, '12234 CA Construction & Adoption Agreement'.

Once the above requirements have been satisfied, SP EnergyNetworks will release the project for construction and allocate to a Project Manager/Engineer. Binder 5 CA will be marked as 'approved'.

Appendix 5 shows the project contract acceptance process.

14. LIVE JOINTING APPLICATION

If the ICP wishes to apply to enter the Live Working Regime they must complete the 'Entering Live Working Regime form, from the internet, and upload it into the CRAM project. The ICP must also upload the Live Working Regime site plan into the CRAM project. These documents must be grouped to **Binder 6 Live Jointing Application (LJA) Binder**.

Binder 6 - LJA must be titled as CRAM project number, B6 v1 (where version control needs to be identified).

All documents uploaded into the CRAM project must be titled with the CRAM project number, categorised as a construction document then the document type. For example; '12345 Form LJA Entering Live Jointing Regime'.

If the ICP's request to undertake live jointing works on the project is approved by SPEN, the Binder 6 LJA status will be set to 'approved' and the countersigned document will be uploaded into the ICP Live Working project folder.

If the ICP's request to undertake live jointing works on the project is declined by SPEN, the Binder 6 LJA status will be set to 'rejected' and the ICP notified of the reasons why.

Appendix 6 shows the CRAM Live Jointing process diagram.

15. PROJECT CONSTRUCTION – DAILY WHEREABOUTS NOTIFICATION

To enable SPEN auditing of the adopted works, the ICP will pass their weekly and daily work programmes to SPEN via the following email addresses:

- CiCNorth@scottishpower.com
- CiCSouth@scottishpower.com

Failure to notify SPEN about installation works may require the contractor to satisfy SPEN that the installation meets SPEN specifications.

As laid/constructed plant, equipment and overhead line and underground cable records must be passed to SPEN Data Management in accordance with BUPR-22-015 at the following locations:



Scotland

Data Management
SP EnergyNetworks
St Vincent Crescent
Glasgow G3 8LT

datamanagementnorth1@scottishpower.com

England and Wales

Data Management
SP EnergyNetworks
Prenton Way
Prenton CH43 3ET

datamanagementsouth1@scottishpower.com

Completion certificates, commissioning results and as laid records associated with live works must be loaded into the CRAM project in the Construction folder.

On completion of each stage of the live works, these documents must be grouped to **Binder 9 - Live Jointing Completion Information (LJCI) Binder**.

Binder 9 LJCI must be entitled as follows: CRAM project number, B9 v1 (where version control needs to be identified).

When creating Binder 9 LJCI, the ICP must ensure that CiCNorth@scottishpower.com & DataManagementNorth1@scottishpower.com for Scotland and, CiCSouth@scottishpower.com & DataManagementSouth1@scottishpower.com for England and Wales are notified by email.

All documents uploaded into the CRAM project must be titled with the CRAM project number, categorised as a construction document then the document type. For example, 12345 Form LJCI Live Jointing Completion Information.

For ICPs completing greater than 2,000 live joints per year, a separate process will be agreed for the transfer and sharing of live jointing information.

Appendix 6 shows the project construction process diagram.

16. CONNECTION REQUESTS

When the ICP is ready to request final connection works or phased energisation of the assets installed, the ICP must complete a Connection Request form, stating the preferred connection date, upload it into CRAM and create a **Binder 7 – Non-Contestable Connection Request (NCCR) binder** within the project. The Connection Request form is attached to Binder 7 NCCR and the ICP must specify the type of connection required (Final or Partial) and the extent of network to be energised on the Binder 7 NCCR.

Please refer to Appendix 7 for the Connection Request form.



Binder 7 NCCR must be titled as CRAM project number, B7 v1 (where version control needs to be identified).

SPEN will assign the category of connection in accordance with Ofgem’s Standard Licence Condition. The timescales for Final Connections or Phased Energisations is shown below in Table 4.

Table 4: Ofgem Standard Licence Condition for Final Connections and Phased Energisations (subject to satisfactory compliance with all conditions precedent)

Connection/ Energisation Type	Standard	Service	Timescale to provide connection (from receipt of request)
LV Connections	3a	Complete the final works for a low voltage connection	Within 10 working days
HV Connections	3b	Complete the final works for a high voltage connection	Within 20 working days
EHV Connections	3c	Inform the applicant of the date by which it is proposed to complete the final works for an extra high voltage connection	Within 20 working days (and complete the works as soon as reasonably practicable)
LV Energisations	3d	Complete low voltage phased energisation works	Within 5 working days
HV Energisations	3e	Complete high voltage phased energisation works	Within 10 working days

The timing will start once Binder 7 NCCR has been created in CRAM.

On receipt of a Binder 7 NCCR, SPEN will provide a planned connection date, subject to conditions precedent being met in sufficient time prior to commencement of the SPEN connections works. SPEN will approve Binder 7 NCCR and enter the planned connection date in the comments field.

The provision of final works and phased energisations by SPEN are subject to all conditions precedent being met by the ICP. The ICP must therefore upload the following documentation

into CRAM and attach it to a **Binder 8 – Conditions Precedent Information (CPI) Binder** in order to meet SPEN’s conditions precedent criteria:

- ASSET-04-015 Appendix 2 Completion certificate for new cable installation
- As-laid drawings
- Electrical Test results
- W33/2 Confirmation of Electrical Installation/Extension (*SP Manweb only*)
- Confirmation of legal consents granted to SP EnergyNetworks
i.e. copy of Job Release Form
- Audit failures notified on QUAL-32-001 – details of remedial works completed
- OPSAF-11-024 Appendix 1 & 3 (*HV only*)
- SUB-02-013 Appendix 2 (*IDNO only*)

All documents uploaded into Binder 8 CPI must be titled with the CRAM project number, categorised as a construction document then the document type. For example; ‘12345 CPI Connection Request Form’.

The ICP must meet all conditions precedent within the following timescales:

LV Connections – 5 working days from receipt of the connection request

HV Connections – 10 working days from receipt of the connection request

Binder 8 CPI must contain all documents required to meet conditions precedent. Where the ICP fails to provide all conditions precedent in Binder 8, then SPEN will reject Binder 8 CPI and inform the ICP of the reasons why. A subsequent Binder 8 uploaded must include all documents required to meet conditions precedent.

SPEN will check all conditions precedent documentation. Where all conditions precedent have been met by the ICP within the timescales, SPEN will approve Binder 8 CPI, thereby providing the ICP with confirmation that all conditions precedent have been met.

If the ICP has not met Conditions Precedent within the timescales, SPEN will reject Binder 8 CPI. SPEN will also update Binder 7 NCCR Completion Date and Delivery Outcome fields. The planned connection date provided previously will be cancelled. The ICP must then re-apply for a new connection request by uploading a new Binder 7 NCCR and a Binder 8 CPI with all associated conditions precedent documentation.

SPEN will provide the connection within the timescales. Once the connection has been provided, SPEN will update the Completion Date and Delivery Outcome in Binder 7 NCCR. The timing stops when the connection date is entered into Binder 7 NCCR on CRAM.

Where an EHV connection is requested, SPEN will approve Binder 7 NCCR within 20 working days and inform the ICP of the proposed completion date in the Comments field.

The timing stops when Binder 7 – NCCR is approved and the ICP is notified of the proposed completion date.

The ICP is required to upload all conditions precedent documentation into CRAM and inform SPEN when conditions precedent have been met by creating a **Binder 8 – Conditions Precedent Information (CPI) binder**. SPEN will then check all conditions precedent documentation. If all conditions precedent have been met by the ICP, SPEN will approve Binder 8 CPI, thereby providing the ICP with confirmation that all conditions precedent have been met.

SPEN will provide the EHV connection as agreed/proposed with the ICP. Once the connection has been provided, SPEN will update the Completion Date and Delivery Outcome in Binder 7 – NCCR.

Appendix 8 shows the connection requests and conditions precedent process diagram.

17. PROJECT CLOSURE AND HANDOVER REQUIREMENTS

On completion of all the live works, as laid/constructed plant, equipment and overhead line and underground cable records must be grouped into a final **Binder 9 - Live Jointing Completion Information (LJCI) Binder**, together with the 'Exiting the Live Working Regime' notification form.

From this point onwards, no further live work can be undertaken by the ICP.

SPEN will approve Binder 9 LJCI once in receipt of the Exiting Live Working Regime form.

Once the ICP has determined that the connections project has been completed in accordance with the Construction and Adoption Agreement, the requirements of 'Project Completion Process For Contestable Works' (Ref: ASSET-04-025) have to be met in full.

The information and forms specified in this document not already uploaded must be uploaded into the CRAM project adoption folder. All the information specified must be grouped together into a **Binder 10 - Project Closure and Handover (PCH) Binder**.

Binder 10 PCH must be titled as CRAM project number, B10 v1 (where version control needs to be identified).

All documents uploaded into Binder 10 PCH must be titled with the CRAM project number, then the document type and categorised as handover document e.g. '12345 1:500 PCH Project Completion and Handover Certificate'.



SPEN will assess the information provided in Binder 10 PCH. If this is insufficient SPEN will reject Binder 10 PCH and indicate the reasons why. If the information is sufficient the binder will remain categorised as 'pending'.

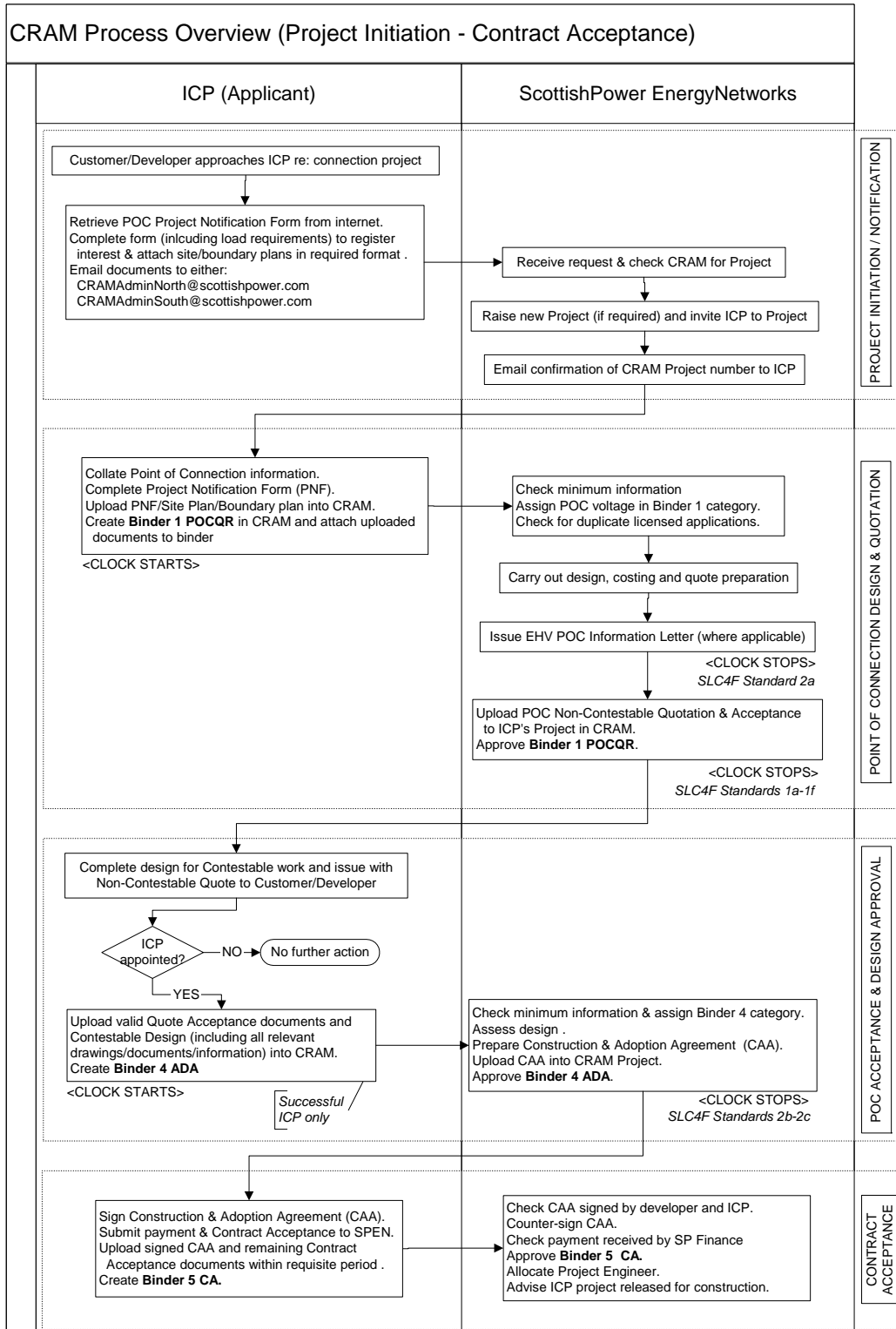
Once the information has been assessed as satisfactory, SPEN will approve Binder 10 PCH and the ICP informed. If the project and or closure information has been assessed as not meeting SPEN's requirements Binder 10 will be rejected and the ICP informed of the deficiencies.

Once this process has been completed satisfactorily the ICP can raise an invoice to SPEN for any adoption or handover payment if applicable.

Appendix 9 shows the project closure and handover process diagram.

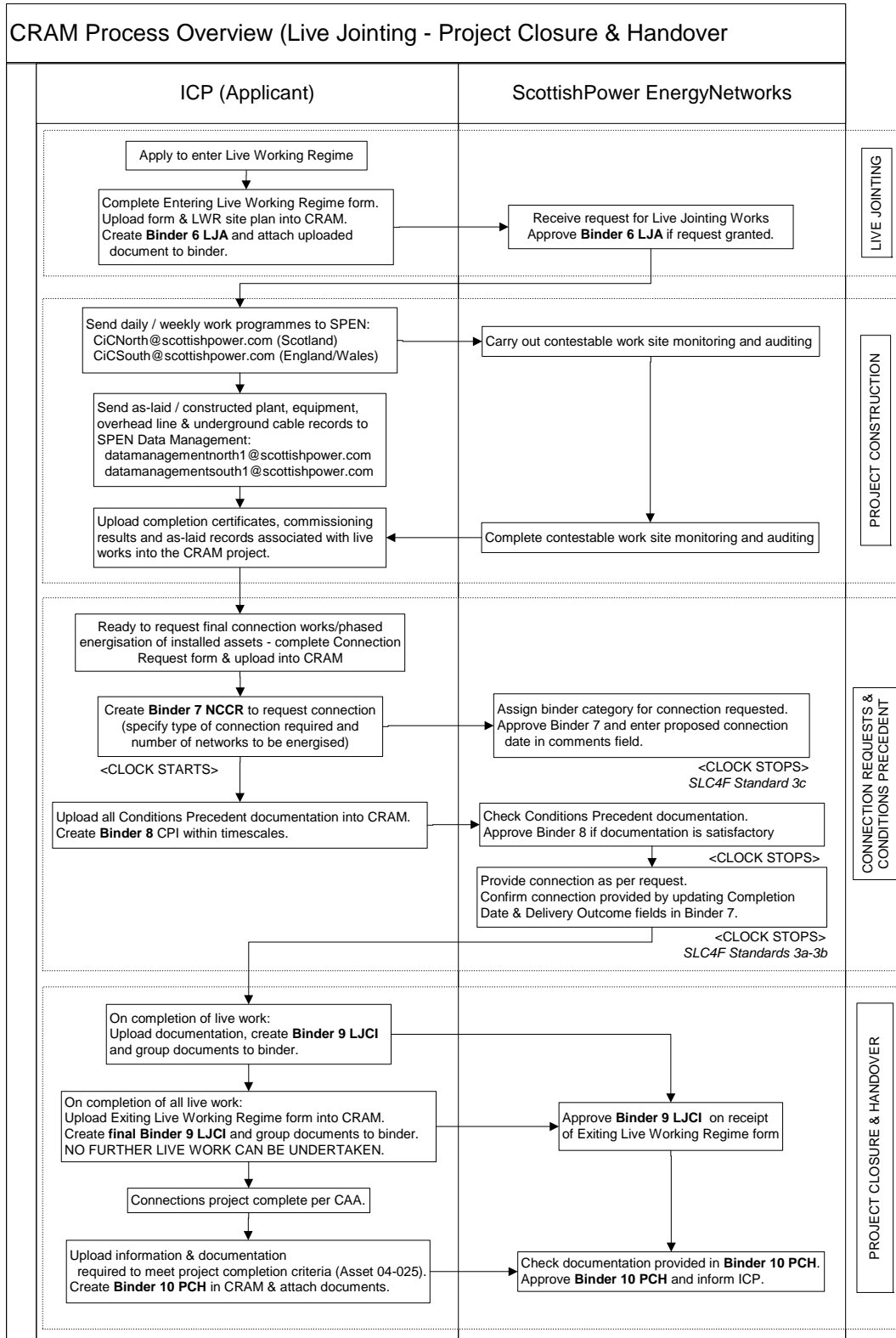


18. APPENDIX 1 – HIGH LEVEL CRAM PROCESS





APPENDIX 1 – HIGH LEVEL CRAM PROCESS CONTINUED ...



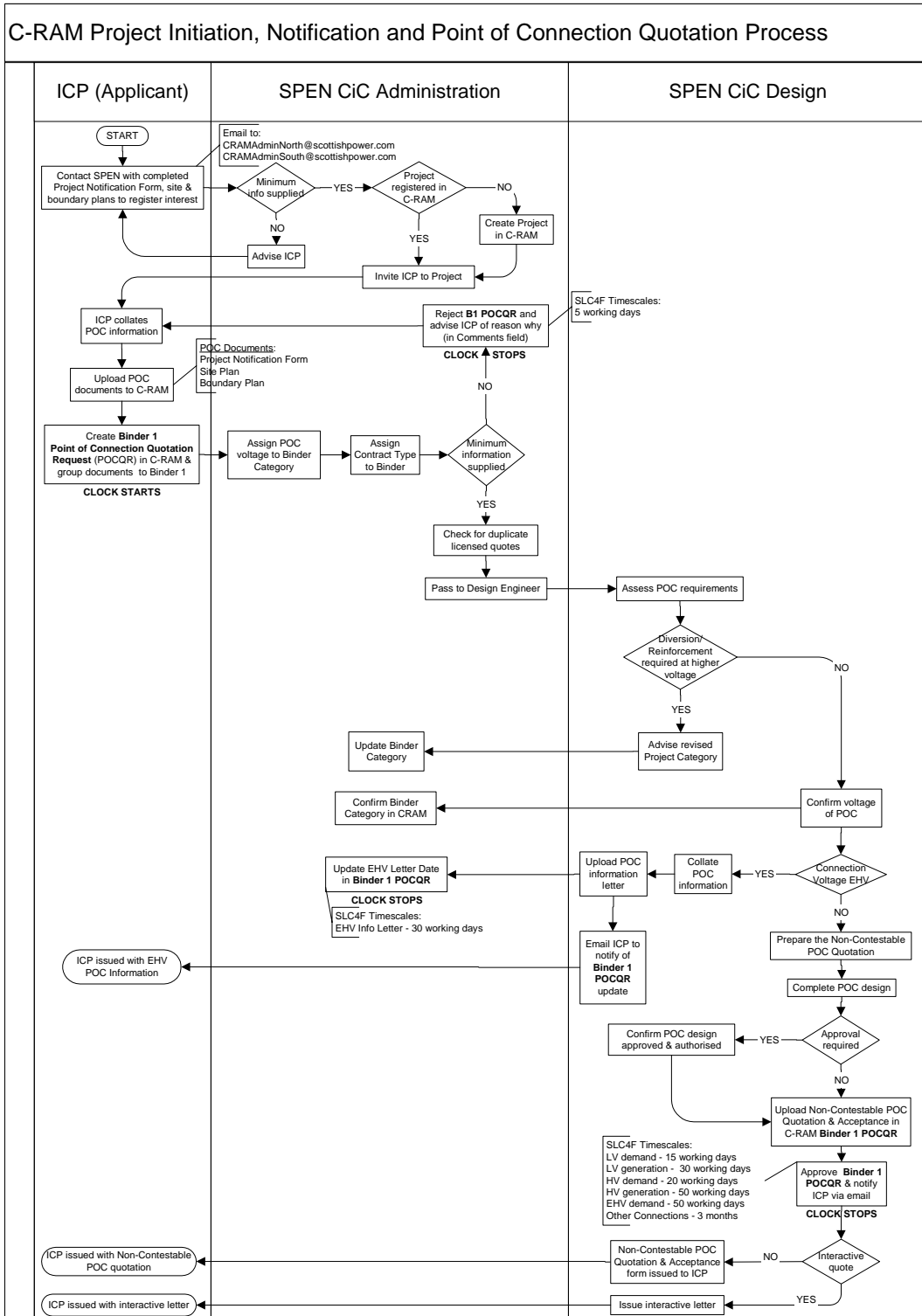


19. APPENDIX 2 – PROJECT NOTIFICATION FORM

Please refer to Project Notification Form document.



20. APPENDIX 3 – CRAM POINT OF CONNECTION DESIGN AND QUOTATION PROCESS



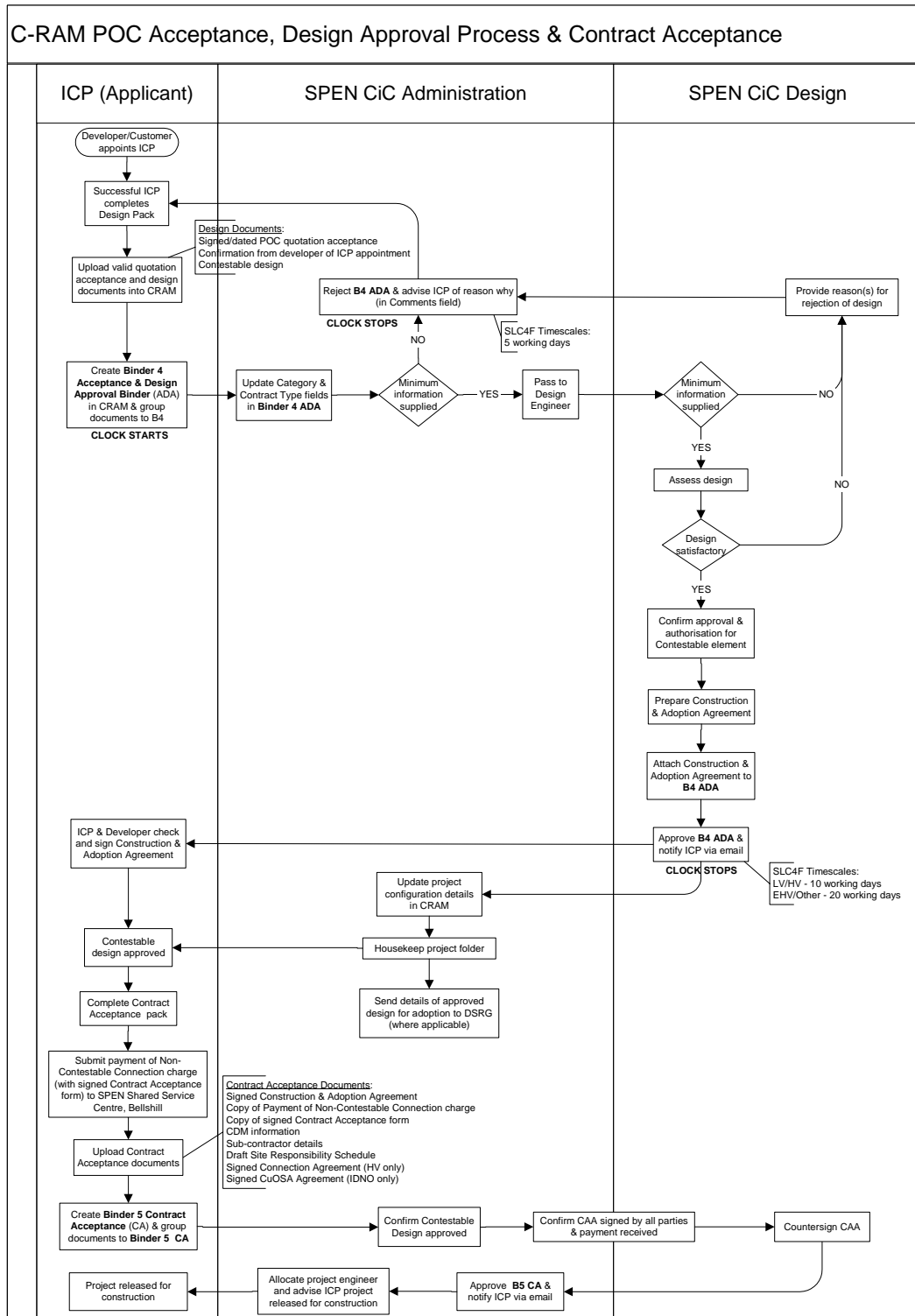


21. APPENDIX 4 – CRAM DESIGN APPROVAL DOCUMENTATION FORM

Please refer to Design Approval Documentation Form document.

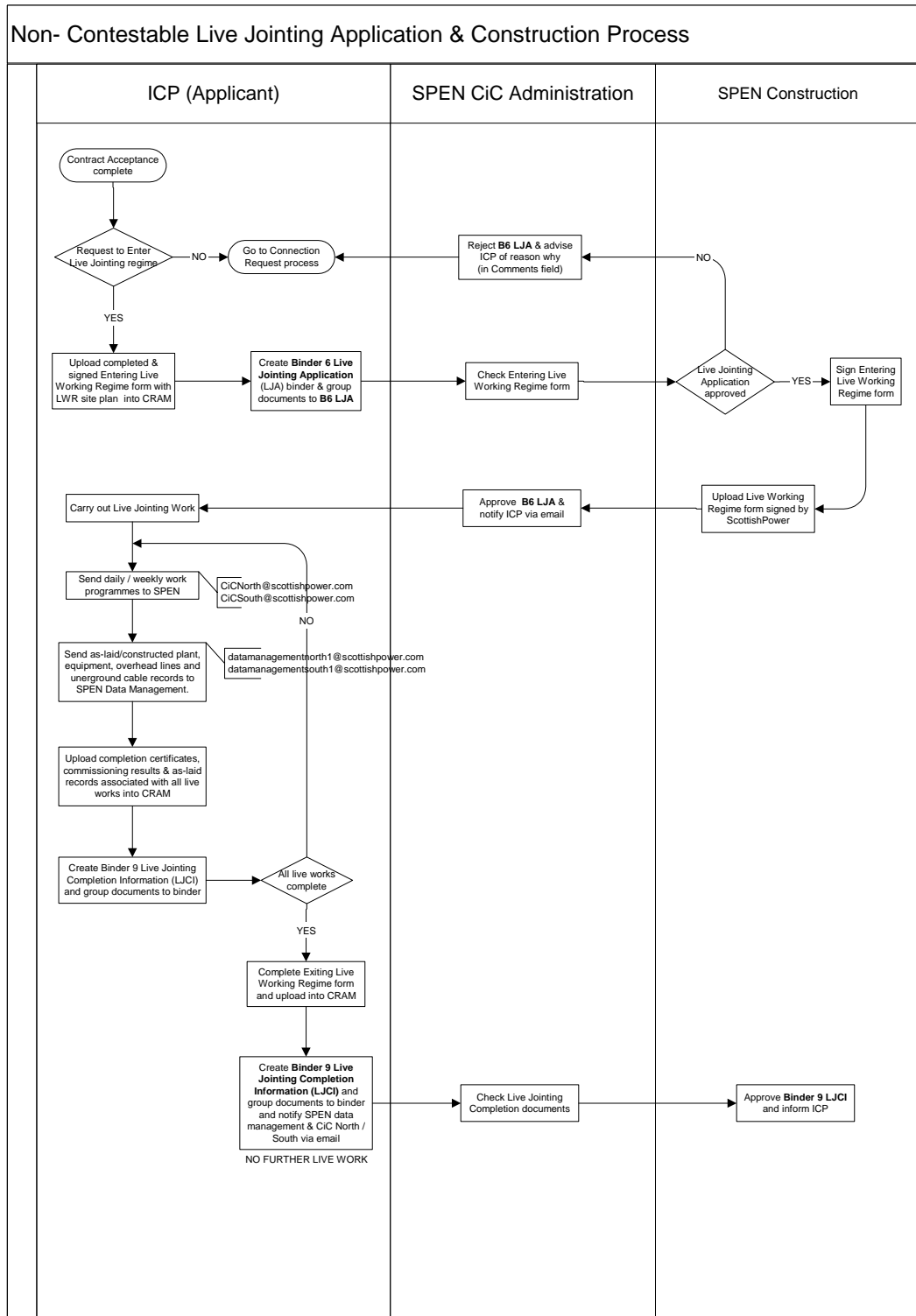


22. APPENDIX 5 – CRAM POC ACCEPTANCE, DESIGN APPROVAL AND CONTRACT ACCEPTANCE PROCESS





23. APPENDIX 6 – CRAM LIVE JOINTING AND PROJECT CONSTRUCTION PROCESS



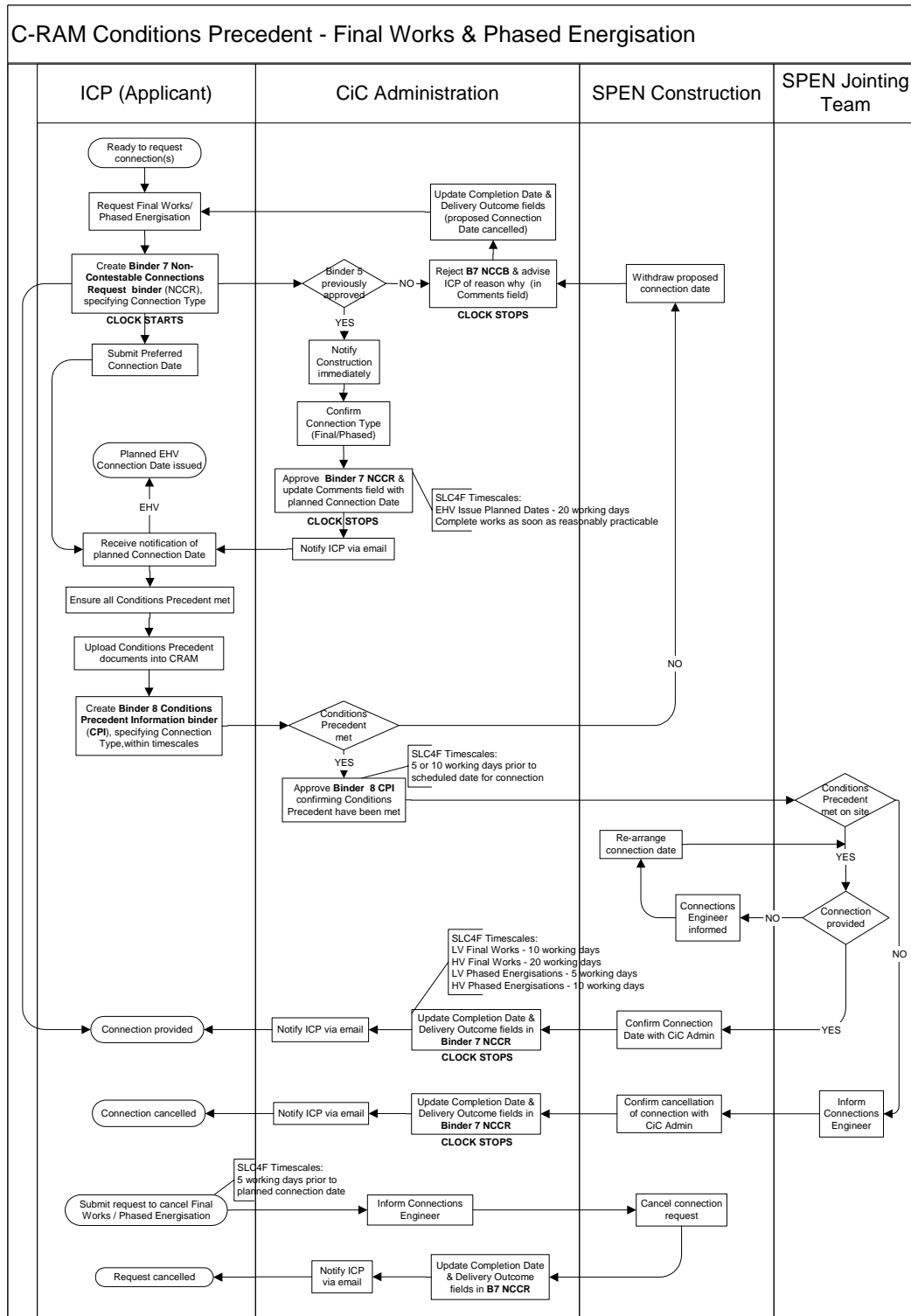


24. APPENDIX 7 – CONNECTION REQUEST FORM

Please Refer To Connection Request Form Document

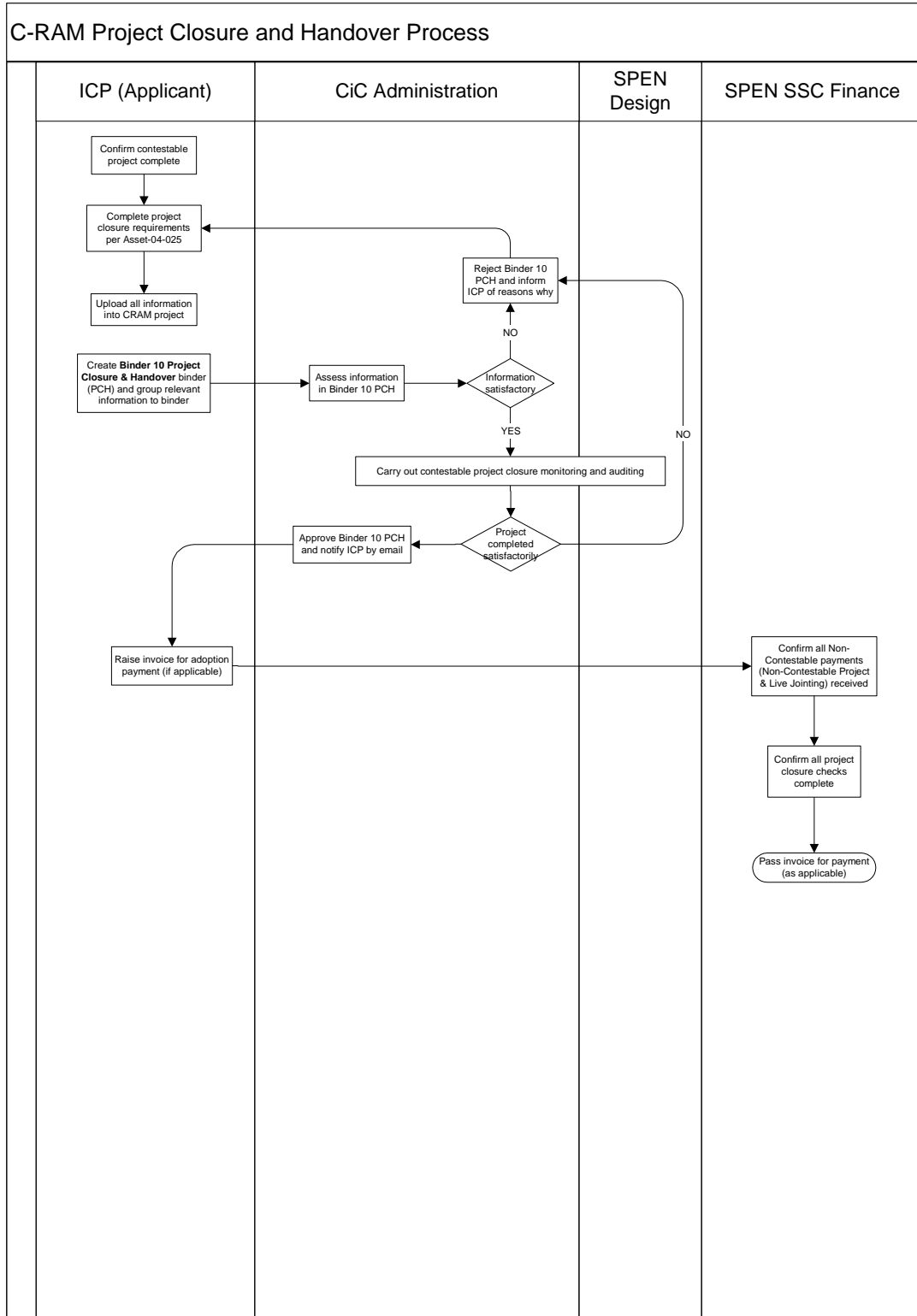


25. APPENDIX 8 – CRAM CONNECTION REQUESTS AND CONDITIONS PRECEDENT PROCESS





26. APPENDIX 9 – CRAM PROJECT CLOSURE AND HANDOVER PROCESS



Point of Connection Application (Project Notification Form)

Company Name							
Applicant Reference Number:		CRAM Project No:					
Admin Contact Name		Telephone No:					
Design Contact Name		Tel. No: Direct Dial					
Fax Number:		Date of Request					
Date of Initial Request		Requested By					
Return Email Address							
SITE DETAILS							
Job Title/Site Name <i>Please use title from development drawing to ensure standardisation of project name</i>							
Development Address <i>Indicating the street name and number, area, town and postcode</i>							
Type of enquiry	Fully Adopted / Section 16 to IDNO / Adopted to IDNO						
Proposed Asset Owner – if not SPD or SPM		Grid Refs: <i>Mandatory</i>		X:			
				Y:			
Developer		Architect - if known					
Consultant - if known		Solicitor details – if known					
Future Phase Details <i>Inc CRAM No(s)</i>							
Associated Projects <i>Inc CRAM No(s)</i>							
CONNECTION / LOAD SUMMARY (A)							
Domestic		Un-metered		I & C		Total	
Number of Connections		Number of Connections		Number of Connections		Number of Connections	
Total Domestic load		Total Un-Metered Load		Total I & C Load		Total Project Load	
FUTURE DEVELOPMENT CONNECTION / LOAD SUMMARY (B)							
Domestic		Un-metered		I & C		Total	
Number of Connections		Number of Connections		Number of Connections		Number of Connections	
Total Domestic load		Total Un-Metered Load		Total I & C Load		Total Project Load	
TOTAL DEVELOPMENT CONNECTION / LOAD SUMMARY (A+B)							
Domestic		Un-metered		I & C		Total	
Number of Connections		Number of Connections		Number of Connections		Number of Connections	
Total Domestic load		Total Un-Metered Load		Total I & C Load		Total Project Load	

Point of Connection Application (Project Notification Form) continued

<u>LOAD BREAKDOWN</u>			
	ADMD	N	TOTAL (kVA)
Houses (ADMD* x N) + 18			
Flats (ADMD* x N) + 18			
Commercial/Industrial	N/A		
Number of Landlord Supplies included in the above total			
Heating Type			
Space Heating Load			
Preferred POC Location			
Interim Supply			
Street Lighting			
<u>ADDITIONAL INFORMATION</u>			
Please state all checks done to ensure SPEN has knowledge of any future developments in the area			
Has a location/boundary plan been included in the application?			
Has a site plan been included in the application?			

NB: Please ensure the following fields are completed.

Failure to provide the minimum information will result in the application being rejected.

- Company Name
- Administrator Contact Name
- Design Name
- Site Name
- Development Address (including postcode)
- Grid References
- Number of Connections
- Total Load Details
- Load Breakdown Information
- Location/Boundary Plan (Adobe Acrobat PDF format)
- Site Plan (AutoCad DWG format up to 2005, scale clearly marked preferably 1:500)

A good quality location/boundary plan and a site plan are to be uploaded in the binder on CRAM. The surrounding areas to the site must be visible on at least one of the plans.

*** The ADMD must be rounded to the nearest 0.5 kW and be subject to a minimum of 2 kW for domestic connections.**

Please see the Greenfield Housing document (ESDD-02-012) on the company website or in the documents on the CRAM front page for further help and information.

<u>DESIGN APPROVAL DOCUMENTATION FORM</u>				Revision Number		
Construction and Adoption Agreement Required	Yes / No	Bi - partite	Tri - partite	Contract Type	ICP only	ICP / IDNO
Connection and Use of System Agreement required (IDNO site)	Yes / No	Name of IDNO				
		<i>If applicable</i>				
If POC application details have changed since initial application update POC Form, re-upload and attach to Binder 4.			Uploaded to CRAM - Yes/No	File Title/Number		
Point of Connection (POC) Form uploaded						
Volt Drop Calculations & Earth Loop Impedance						
Bill of Quantities of Assets to be Adopted						
Electrical Design Drawings						
Substation Acquisition Drawing						
Engineering Report* (see below)						
Wayleave Request Form <i>If applicable</i>						
Wayleave & Land Ownership Drawing						
Live Working Area Plan <i>If applicable</i>						
Internal Mains Plan <i>If applicable</i>						
Substation Layout Drawing <i>If applicable</i>						
<u>DESIGN APPROVAL DOCUMENTATION – Information Requirements</u>						
*An Engineering Report should include the following information, where applicable:						
	Component Details					
Applicant Information	Company name, address and contact details			Contractors details, including NERS accreditation		
	Landowner details			Solicitor of landowner details		
	Architect/Consultant details					
Design Information	Maximum/Actual design PSCC at service/main connection			No. of customers and connections on each phase		
	Design PSCC at LV B/Bs of HV/LV Transf (kA)			Maximum clearance time for phase/earth fault at cutout		
	Voltage Drop Calculations			Maximum feeder load in Amps		
	Loop Impedance			Fuse selected		
	Site ADMD			Maximum voltage regulation at cutout (+ & -)		
	Maximum earth loop resistance			Maximum voltage unbalance		
Other Information	A full itinerary of equipment, plant and materials, including types, sizes and ratings employed			Health and safety issues		
	Name of supplier if known			Abnormal working conditions		
	Land contamination issues			Contact names and numbers		

Additional Requirements for Design Approval:

- Signed and dated POC Quote Acceptance form (included in the quotation)
- Confirmation from developer of appointment as their preferred accredited connection installer

N.B. Please ensure all information requested is provided.

Failure to provide the minimum information will result in the Design Approval being rejected.

Third Party Connection Request Form

ICP/IDNO		Date of Request	
CRAM Project Number		Project Manager/ Engineer	
Date Connection(s) Required		Contact Number	
Email		Fax Number	
Site Name		Developer	
Address	Grid Co-ordinates	X:	Y:
Details of Connections Requested	<i>(please include number and size of joints required)</i>	HV	
		LV	
Notes			
Order Number			
Signed			Print