

Serving the Midlands, South West and Wales

Company Directive

STANDARD TECHNIQUE: NC2N

Relating to: The ICP Operating Manual

Policy Summary

This document provides detailed guidance to the ICP for Design Approval of Associated Contestable Works/Assets and Point of Connection Design Approval of Contestable Connection Works/Assets including the auditing process and the on-site inspection regimes.

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Approved by:

Policy Manager

Total 2015

NOTE: The current version of this document is stored in the WPD Corporate Information Database. Any other copy in electronic or printed format may be out of date.

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IMPLEMENTATION PLAN

Introduction

This document has been created to provide an ICP with access to relevant detailed information that is applicable to the Framework Network Access and Adoption Agreement and the associated Extension to Contestability Agreements.

Main Changes

This is a new document.

Impact of Changes

This Standard Technique is for the use of Independent Connection Providers and is intended to provide access to specific guidance that is not otherwise accessible to them.

Implementation Actions

This document shall be made available to Independent Connection Providers within the Tech info site.

Implementation Timetable

This policy shall be implemented on the 28th September 2015.

Document Revision	n & Review Table	
Date	Comments	Author
28/09/2015	This document is a new document.	Paul B Smith

1.0 INTRODUCTION

- 1.1 This document provides detailed guidance to the ICP for the Design Approval of Associated Contestable Works/Assets and Point of Connection Design Approval of Contestable Connection Works/Assets including the auditing process and the on-site inspection regimes.
- 1.2 This document provides access to information for Independent Connection Providers who are signatories to the Framework Network Access and Adoption Agreement and the appropriate Extensions to Contestability that have been made available to facilitate the Code of Practice.
- 1.3 The guidance shall be read in conjunction with WPD Policy and Standard Techniques relating to the New Connections procedures contained within the Technical formation site.
- 1.4 The Operating Manual can be found in Appendix A of this Standard Technique.

Design Approval and The Inspection and Monitoring Regime

Operating Manual

This document provides detailed guidance to staff for the inspection of assets that are to be adopted by WPD that have been constructed by an Independent Connection Provider (ICP) including WPD new connections .

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Section 1 - The Inspection and Monitoring Regime

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The Golden Rules for Working with ICPs in WPD

The ICP shall be provided with the same level of services that would be afforded to any other WPD customer. The Assets provided by the ICP shall meet the same standards as our own work, as per G81 and WPD standards and Policies.

Where an ICP presents work for Adoption, WPD staff shall ensure that the work is facilitated in a timely manner.

The Inspection and Monitoring Regime

WPD's Inspection and Monitoring Regime is the method by which WPD will assess the inspected performance of Connections Business (CB) against an agreed set of criteria that will determine the inspection level that will apply to ICP and WPD.

Where an ICP is at Inspection Level 3 and they meet specific eligibility criteria, they can apply for Self Inspection Level (SIL). To ensure that WPD are adopting serviceable assets that are fit for purpose WPD need oversight of the ICP site inspections, this can be achieved by using a small sampling inspection regime that is undertaken by WPD staff in parallel with the ICP Inspection Regime.

To achieve this we've developed a hybrid regime that incorporates a methodology to allow a CB to move up and down the inspection levels depending on quality of work and volume of inspections.

An ICP may not choose to use the Self Inspection regime, by adopting this approach we will have in place a regime that's consistent for all whether we or they undertake inspections.

Levels of Inspection

There are three levels of inspection where Inspection level 1 gives the highest level of on-site inspections and 3 the lowest.

All ICPs will initially be allocated to inspection level 1 but may move to lower levels of inspection depending on both performance and volume of works undertaken.

The Self Inspection Regime will allow a CB to undertake site inspections of their own this will reduce the number of inspections that WPD undertake.

For the purpose of sampling the assets that are to be adopted under the Self Inspection regime, there will be two levels of Self Inspection within the Inspection Regime. They are Self Inspection Level 1 (SIL 1) and Self Inspection Level 2 (SIL 2).

Movement to Lower Inspection Levels

An ICP may move to lower levels of inspection depending on the numbers of inspections and successful performance at the current level of inspection. Successful performance is that level of performance that would either not result in movement of the CB to a lower level (if it is at Inspection Level 3 or SIL 2).

Eligibility to undertake Self Inspection

To become eligible under the Self Inspection Regime, the ICP shall have been working to the FNA & AA for a minimum of 12 Months **and** have attained Inspection Level 3 during that time.

All ICP's who are eligible to undertake Self Inspection and wish to be included shall be moved from Inspection Level 3 to SIL 2. This will be a Connection Policy Activity.

Some ICP's will only wish to undertake work in specific areas. It shall not be mandatory for an ICP to be considered for Self Inspection across all Activities. Where an ICP wish to undertake new Activities they shall follow the process above for each additional Activity. This is to ensure that the work is to an acceptable standard before they are moved to Self-Inspection. The nominated DM shall have discretion over this process.

Where a CB is removed from Self Inspection due to poor performance, they shall not be considered for Self Inspection for a 12 month. During the 12 month they shall attain Inspection Level 3, and shall remain at that level for a full six months in all relevant Activities before being given the opportunity to move back to SIL 2.

Self-Inspection Membership

Provided the ICP meets the requirements of the eligibility process, they can make a request to WPD to become a Self-Inspection ICP.

WPD Connections Policy will send an Extension of Contestability Agreement to the ICP. This document will detail the Categories and Activities that are to be included in the Self-inspection process.

When the ICP returns a signed copy of the EOC they shall be allocated to SIL 2 for each of the Categories and Activities that have been agreed.

Any additional Activities that the ICP wish to introduce at a later date shall meet the eligibility requirement before they are added to the existing Self-inspection regime.

An ICP can elect to leave the Self-inspection regime by providing WPD with 'three months' notice in writing. WPD shall have the same opportunity to withdraw from the Self-inspection process by giving ICP(s) the same notice.

Inclusion of Inspection costs at Quotation Stage

If the ICP is known at the quotation stage, a check shall be made to see if the ICP has Self Inspection Level in the FNA&AA credential spreadsheet. If the ICP has the EOC for SIL, then inspections costs for the activities outlined in their EOC will not be charged for. All other activities outside of the EOC for SIL shall be treated as Level 3 if the ICP is known during the quotation stage and Level 1 if they are unknown.

It is unlikely that the ICP will be in a position to provide a scheme that will allow the Planner to provide an accurate estimate of the number of inspections and visits required. In this circumstance an estimate shall be made based on historical information of the scheme type and included with the enquiry information. The estimated number of inspections may also be calculated by taking the contestable elements of the WPD design (Option 1) and basing the estimated inspections on this information.

Billing

The connection charge payee shall be billed in advance for the estimated number of Inspections and Visits to be carried out; the inspection costs shall be added to the quote as an extra with on costs removed.

If the ICP is known at the quotation stage and they have the EOC for Self Inspection, no inspection charge shall be included in the quotation.

On completion of the scheme the actual number of visits shall be compared with the estimated number of visits that have been paid for.

- Where a refund is due, this shall be calculated and issued to the original connection charge payee.
- Additional inspections carried out due to revisits for failed inspections shall be invoiced to the ICP for payment.

 Where WPD have miss-calculated and not charged sufficiently for inspection costs, this will be identified at the end of the scheme and the connection charge payee shall be invoiced accordingly for any additional visits omitted (other than re-visits for failed inspections).

Connection to the WPD existing network shall continue to be billed retrospectively as detailed in ST: NC2L.

CROWN Inspection Generation

ICP works

On completion (approval) of the Design Approval CROWN activity, the Planner shall itemise the ICP's design and enter the values into CROWN (lengths of cable, number of joints etc.). CROWN will automatically determine the number of inspections and visits required for the scheme that has been provided by the CB.

See **Design Approval**

WPD works

For LV and HV works

CROWN will calculate the number of inspections from the WPD quote SWE's automatically upon completion of the 'Accept Quote' activity. The activity 'ICP Inspection' shall be automatically added to the activity list. Generated inspections (if applicable) will be displayed in the CROWN Draw Down Tool as 'outstanding'.

See <u>CROWN determination for the Inspections for WPD work</u>

For EHV works

CROWN is unable to calculate the required inspections automatically. The planner will need to add the required inspections manually.

Fixing the Inspection Level

When the CROWN system process is complete the Scheme will be fixed at the CB Inspection level, this information is held within the CROWN system. The inspection level for the scheme is fixed and will not change for the duration of the Scheme.

The connection to WPD existing network will be continuously updated based on volume of inspections.

Inspection Draw Down

The CB shall provide a program of work that they intend to carry out. This shall be a daily whereabouts notification delivered to the local NS team on the Monday 5 working days prior to works commencing (for all Voltage levels). They shall provide updates as the scheme progresses to allow WPD to carry out on-site Inspections.

The CROWN facility provides a draw down tool where the system will calculate the number of inspections required for the scheme based on the amount of work that the CB has indicated that they intend to carry out for that stage of the work.

This is intended as an indication of the number of inspections and visits that are required. In some circumstances all the inspections could have been carried out for that specific Activity and therefore no further inspections are required for that Activity. The system also provides an indication of the number of completed visits and provides a total of outstanding or not required visits for the scheme.

ICP connection to WPD existing network shall be notified automatically via CROWN following the process contained within ST: NC2L.

On Site Inspection

ICP Works

When an ICP has provided a program of work, the WPD inspector shall enter the quantities in to the Inspection Draw Down in the CROWN system. The Inspection Draw Down will provide the number of inspections and visits required for the given quantities. The number of outstanding visits will be displayed on the page to assist the Inspector. With an indication of the number of inspections required, the WPD Inspector shall visit site and inspect the work. This inspection shall be recorded on the appropriate Inspection and Monitoring Site Report. Where there is an opportunity to combine a number of inspections during one visit it shall be done.

See Inspection Draw Down.

WPD Works

If CROWN has generated inspections for WPD works, the planner shall use the Draw Down tool to work out the required inspections and provide the technician with a list of required inspections on a 'Required inspections form'. As the work presents, the technician shall carry out the required inspections and fill out the correct site report forms for the nature of the work.

See CROWN determination for the Inspections for WPD work

Abortive Site Visit for ICP works only

The following process shall apply where an ICP has provided a program of work to WPD and the WPD inspector attends site following the information provided within the program to find the work is not ready for inspection.

The inspector shall record the failed visit as follows:

- Complete the appropriate site report and state the reason for not undertaking the inspection.
- Pass to Team Support.
- Team Support to record the failed inspection as 'Outstanding' and <u>save as a visit</u> (see Team Support user guidance notes).
- Team Support to email the report to the ICP with appropriate cover letter (in NEWCON drive).
- Keep a copy of the site report.

When the activity is ready for inspection

- Carry out inspection, reporting using the appropriate inspection form.
- Pass report and evidence (if applicable) to Team Support.
- Team Support to record inspected activity by changing result from 'Outstanding' to either 'Pass' or 'Fail' (dependent on inspection outcome) and saving the visit (see Team Support user guidance notes).

Recording Site Visits within CROWN

Pass

Where the work has been completed to an acceptable standard this shall be recorded as a 'Pass' in the CROWN system. The Inspection and Monitoring Site Report shall be emailed to the ICP with the appropriate cover letter and a record stored locally.

Fail

Where failures occur, the defects identified shall be recorded on the appropriate form. Failed activities are pre-allocated a severity Category 1, 2 or 3. Failures shall be entered into CROWN with the result 'Fail' and the appropriate defect category identified.

The results for <u>all</u> inspections shall be entered into CROWN as soon as possible after the inspection has been completed.

Notifying the ICP of Inspection Results

The Inspectors report shall be sent to the ICP, with photographs where appropriate within two working days following the issue of an automated email by CROWN.

Inspection reports containing failures shall always be forwarded to the Connections Policy Team in an electronic format to the appropriate address:

wpdconnectionspolicy@westernpower.co.uk
 (South Wales and South West)

wpdconnectionpolmids@westernpower.co.uk
 (Midlands)

The Connections Policy Team shall file the Information for Future Reference within Fortis.

The Inspector shall keep a local record.

Defect Categories

There are three types of Category failures:

- Category 1: is a severe or dangerous defect where there is a serious non-compliance with WPD's policies and procedures or the Framework Network Access and Adoption Agreement. Such defect will result in immediate suspension of that specific Activity of work by that CB ICP on that site.
- Category 2: is a serious defect where there is a serious non-compliance with WPD's policies and procedures or the Framework Network Access and Adoption Agreement (FNA&AA). Such defect may not be recoverable at the time of inspection, may result in failure to adopt the asset until rectified. Further inspections will normally be required and gives a failure score of 4. In this instance WPD may determine the action required to rectify the defect.
- Category 3: is a minor defect resulting from a minor non-compliance with WPD's policies and procedures or the FNA&AA. Such defect will normally be recoverable at the time of inspection, will not require further inspections and gives a failure score of 1.

Defects shall be reported within the CROWN system using the Site Inspection form.

Failure Processes

Category 1 Failure Process

Where a WPD inspector has identified a Category 1 failure this shall be communicated to the Team manager. If the Team Manager agrees with the inspector, the results shall be recorded in the CROWN system registering a Category 1 Failure.

The Inspection and Monitoring Site Report shall be annotated clearly indicating the location(s) and the severity of the defect.

The CROWN system shall be updated as detailed above with the relevant information, any additional chargeable inspection shall be raised within the CROWN system. Copies of the Site Report and any photographs, as appropriate, shall be emailed to the ICP and a copy sent to Connection Policy.

The TM shall contact the ICP to arrange an urgent meeting to discuss the failure(s). The TM will check in the Fortis File to ensure that the ICP has not had any Category 1 Failures or Inspection Level 1 Performance Failure Notices within the last 12 Months.

If any of the above has occurred the TM shall refer the issue to the Responsible DM who has been appointed to manage the poor performance.

The TM will as soon as is reasonably practicable suspend Adoption of the failed activity by the ICP on that site.

The TM shall meet with the ICP and carry out an investigation and agree a program of work to resolve the issues identified. The ICP shall provide in writing, details of how they intend to prevent a reoccurrence.

Provided that the TM is satisfied that the issues have been resolved he shall send the details to the Connections Policy Team for filing.

The TM can then allow the ICP to continue work on site.

CROWN will move the ICP to Inspection Level 1 automatically, following the registration of a Category 1 Failure notice.

Inspection Level 1 and SIL 1 Failure Notice

Where an ICP is at Inspection Level 1 or SIL 1 and due to poor performance, the CROWN system issues an Inspection Level 1 or SIL1 Failure Notice, The Responsible DM Shall:

Contact the ICP to arrange a Meeting to discuss the Poor Performance

Access the historical failure reports held in the Fortis File

Using the historic information where appropriate, discuss the failure(s) and issue(s), as appropriate with the ICP.

Following the meeting, the ICP shall provide in writing to WPD details of how they intend to prevent poor performance in the future.

Where the historic information indicates a Category 1 Failure notice has been issued within the last 12 Months, refer the ICP to Lloyd's for non-compliance.

The DM shall suspend the ICP from undertaking any activity in the four WPD license areas until such time as Lloyd's can report that the ICP has been investigated and they are confident that the ICP has resolved all the issues and are capable of undertaking work to an acceptable standard.

Where Lloyd's have withdrawn the ICPs accreditation WPD will be unable to adopt any further Assets constructed under this accreditation until Lloyd's has reinstated the ICPs accreditation.

If at any time within the next 12 months the ICP has further Category 1 Failure Notices, in any Activity recorded within the CROWN system, or CROWN issues Inspection Level 1 Failure Notice, the DM shall invoke the FNA & AA or NA & AA and refer the ICP to the WPD legal team where the ICP shall be suspended from working in all of the WPD four licensed areas.

All records of meetings and correspondence shall be sent to Connection Policy and filed for future reference. Where a CB is at SIL 1 and the poor performance continues CROWN will call for the CB to be moved back to Inspection Level 3. An email will be sent to the DM who has been appointed to manage the poor performance process.

A meeting will be called to resolve the issues by the DM with the CB. Provided that the DM is happy with the written plan of action, the CB will remain at SIL 1. When sufficient work has been successfully completed CROWN will move the CB back to SIL 2.

A detailed poor performance flow chart is available. See **Poor Performance Flow Chart**.

Movement from Self Inspection Level 1 to WPD Chargeable Inspections

Where a CB has been moved from self-inspect to Inspection Level 3, due to poor performance, they shall have all of their remaining Activities moved back to Inspection Level 3. They shall not be considered for self-inspect for a minimum of a 12 month following removal from the Self-Inspect regime.

Having been moved back to the higher inspection regime they shall provide satisfactory performance (remain at Inspection Level 3) for a minimum of a 12 month. Provided the work is satisfactory, it shall be at the discretion of the nominated DM to agree if the CB can be moved back to SIL 2.

Category 2 Failure Process

Where a WPD inspector has identified a Category 2 failure, the Inspection and Monitoring Site Report shall be annotated clearly indicating the location(s) and the severity of the defect.

CROWN shall be updated with the relevant details; an additional chargeable inspection shall be raised within the CROWN system. The CROWN system will send an automated email to the ICP. Copies of the Site Report shall be emailed by the Inspector to the ICP and Connection Policy.

The ICP shall notify the Inspector when the remedial works have been completed where a re-inspection shall be carried out.

Category 3 Failure Process

Where a WPD inspector has identified a Category 3 failure, the Inspection and Monitoring Site Report shall be annotated to clearly indicating the location(s) and the severity of the defect.

The CROWN system shall be updated with the relevant details. The system will send a notice to the ICP informing them of the failure.

A copy of the Site Report shall be attached to an email and sent to the ICP and Connection Policy.

ICP Self Inspection Requirements

ICP Audit Pack

Where an ICP is undertaking Self-inspections they shall submit an Audit pack consisting of:

- A record of the site inspections undertaken as appropriate for the inspection level,
- Details of any poor workmanship,
- Commissioning Certificate,
- Test results,
- Schematic drawings,
- Cable records.

Where appropriate to the WPD Inspector, the Inspections shall be stored locally.

Warranty

All work that is adopted by WPD is covered by a 2 year ICP warranty. However installations within excavations 1.5m or greater in depth are covered for 3 years.

Any assets that are constructed and adopted under the Self-inspection regime shall have a 10 year warranty

When an ICP is working to Self-inspect and any Activity is at Inspection Level 3 or higher, the work will have a 10 year warranty.

Where an ICP moves back to inspection Level 3, all the work shall continue to be subject to a 10 Years warranty.

Inspection Level Monthly Report

All CB who are registered to undertake work in the Connection Policy database shall be sent a web focus report automatically. This report will provide the Inspection Level that the CB has been allocated following the previous months performance.

Rejection Following Submission of a Completion Certificate

WPD may refuse to connect assets offered by the ICP, examples of which are provided below;

- A program of work has not been provided
- There are omissions or late delivery of the Completion Certificate
- The as-constructed records are inaccurate or incomplete
- The network offered for connection has not been inspected by WPD in accordance with the Inspection Regime;
- The working area or site is deemed unsafe by WPD staff/contractors
- A Principal Contractor, site agent, site security or any other authorized person refuses access to site
- WPD staff are unable to gain sufficient access to a work location with tools or testing equipment
- Any other requirements of appropriate UK legislation affecting the installed assets are deemed by the WPD Inspector not to have been met
- Where appropriate a WPD Rejection Notice shall be emailed to the ICP's nominated contact.

Where WPD is unable to connect and energise because of operational restrictions or force majeure the ICP's nominated contact should be informed in writing as soon as possible and an alternative date agreed for connection to WPD's distribution system.

Inspecting WPD Connections work

All Connections work shall be inspected and recorded in the same way as the ICP work. The appropriate Managed Unit shall be used to record the connections work within the CROWN system.

Section 2 - CROWN Calculation and Performance Monitoring

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Inspection Regime Tables

Inspection Level 1 to 3								Self-Inspection Level 1 and 2			
Activity	Inspect Level 1	Qualifying count to level 2	Inspect Level 2	Qualifying count to level 3	Inspect Level 3	Calculation	Inspect SIL 1	Qualifying count to SIL 2	Inspect SIL 2		
Mains											
LV Mains	50%	20 Inspections	10%	20 Inspections	5%	1 visit for each 100m of cable installed (minimum 1 visit)	5%	20 Inspections	2%		
HV Mains	50%	20 Inspections	10%	20 Inspections	5%	1 visit for each 100m of cable installed (minimum 1 visit)	5%	20 Inspections	2%		
Trenchless	100%	20 Inspections	100%	20 Inspections	100%	1 visit for each 50m of cable installed (minimum 1 visit)	5%	20 Inspections	2%		
LV Mains Joints	50%	20 Inspections	10%	20 Inspections	2%	5 joints = 1 visit (minimum 1 visit)	5%	20 Inspections	2%		
LV Terminations	50%	20 Inspections	10%	20 Inspections	10%	2 Terminations = 1 visit (minimum 1 visit)	5%	20 Inspections	2%		
HV Joints	50%	20 Inspections	20%	20 Inspections	10%	5 joints = 1 visit (minimum 1 visit)	5%	20 Inspections	2%		
HV Terminations	50%	20 Inspections	20%	20 Inspections	10%	2 Terminations= 1 visit (minimum 1 visit)	5%	20 Inspections	2%		
Pole erection	50%	20 Inspections	20%	20 Inspections	5%	3 Poles = 1 visit (minimum 1 visit)	5%	20 Inspections	2%		
Spans of conductor installation	50%	20 Inspections	20%	20 Inspections	5%	1 visit for each 100m of cable installed (minimum 1 visit)	5%	20 Inspections	2%		
Final climbing inspection	50%	20 Inspections	20%	20 Inspections	5%	5 Spans = 1 visit (minimum 1 visit)	5%	20 Inspections	2%		

Services	2001	1 00	100/	100	201	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- 24	20	201
Service cable installation	20%	20 inspections	10%	20 Inspections	2%	1 visit for each 100m of cable installed	5%	20	2%
		Inspections		Inspections		(minimum 1 visit)		Inspections	
Service Terminations	20%	20	5%	20	2%	5 Plots = 1 visit	5%	20	2%
Service reminations	2070	Inspections	370	Inspections	270	(minimum 1 visit)	370	Inspections	270
Service Flight conductor installation	50%	20	20%	20	5%	1 visit for each 100m of	5%	20	2%
-		Inspections		Inspections		cable installed		Inspections	
						(minimum 1 visit)			
Polarity and Loop Impedance Check	50%	20	20%	20	10%	5 plots = 1 visit	5%	20	2%
		Inspections		Inspections		(Minimum 1 Site Visit)		Inspections	
Service Joint	20%	20	5%	20	2%	5 Plots = 1 visit	5%	20	2%
		Inspections		Inspections		(minimum 1 site visit)		Inspections	
Substations		l	<u> </u>	"	1	1	<u>I</u>	I	
Foundations/Building	100%	20	20%	20	5%	1 foundation = 1 visit	5%	20	2%
Touridations, building	10070	Inspections	2070	Inspections	370	(minimum 1 visit)	370	Inspections	270
Electrical Plant	100%	20	20%	20	5%	1 Installation = 1 visit	5%	20	2%
		Inspections		Inspections		(minimum 1 visit)		Inspections	
HV Substation Pre- Commissioning	100%	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	100%		100%	1 test = 1 visit	5%	20	2%
3						(minimum 1 visit		Inspections	
HV Operations Pre-commissioning	100%	20	20%	20	5%	1 test = 1 visit	5%	20	2%
		Inspections		Inspections		(minimum 1 visit)		Inspections	
F: 10 .:									
Final Connections	1.000/	20	50%	20	10%	5 connections = 1 visit	5%	20	2%
Final Connections LV Connection Activity-connection	100%		30,0	1			2,5		
LV Connection Activity-connection	100%	_		Inspections		l (minimum 1 visit)		Inspections	
	100%	Inspections 20	50%	Inspections 20	10%	(minimum 1 visit) 3 connections = 1 visit	5%	Inspections 20	2%

33kV Underground cables	50%	20 Inspections	10%	20 Inspections	5%	1 visit for each 100m of cable installed (minimum 1 visit)	5%	20 Inspections	2%
66kV Underground cables	50%	20 Inspections	10%	20 Inspections	5%	1 visit for each 100m of cable installed (minimum 1 visit)	5%	20 Inspections	2%
132kV Underground cables	50%	20 Inspections	10%	20 Inspections	5%	1 visit for each 100m of cable installed (minimum 1 visit)	5%	20 Inspections	2%
All directional drilling (HDD) whether 33kV, 66kV or 132kV.	100%	20 Inspections	100%	20 Inspections	100%	1 installation = 1 visit	5%	20 Inspections	2%
33kV Jointing	50%	20 Inspections	10%	20 Inspections	2%	2 joints = 1 visit (minimum 1 visit)	5%	20 Inspections	2%
33kV Terminations including separable connectors.	50%	20 Inspections	10%	20 Inspections	10%	2 Terminations = 1 visit (minimum 1 visit)	5%	20 Inspections	2%
66kV Jointing	50%	20 Inspections	20%	20 Inspections	10%	2 joints = 1 visit (minimum 1 visit)	5%	20 Inspections	2%
66kV Terminations including separable connectors.	50%	20 Inspections	10%	20 Inspections	10%	2 Terminations = 1 visit (minimum 1 visit)	5%	20 Inspections	2%
132kV Jointing	50%	20 Inspections	10%	20 Inspections	2%	2 joints = 1 visit (minimum 1 visit)	5%	20 Inspections	2%
132kV Terminations including separable connectors.	50%	20 Inspections	10%	20 Inspections	10%	2 Terminations = 1 visit (minimum 1 visit)	5%	20 Inspections	2%
Sheath testing of 33kV, 66kV and 132kV cables as per ST: OS10C/2	100%	20 Inspections	20%	20 Inspections	10%	5 tests = 1 visit (minimum 1 visit)	5%	20 Inspections	2%
Commissioning testing of 33kV, 66kV and 132kV cables as per ST: OS10C/2.	100%	1				5 tests = 1 visit (minimum 1 visit)			
Pilot Cable [Inspect with power cable]	50%	20 Inspections	10%	20 Inspections	5%	1 visit for each 100m of cable installed (minimum 1 visit)	5%	20 Inspections	2%
Pilot Cable Jointing	50%	20 Inspections	10%	20 Inspections	2%	5 joints = 1 visit (minimum 1 visit)	5%	20 Inspections	2%
Pilot Cable Terminations	50%	20 Inspections	10%	20 Inspections	10%	2 Terminations = 1 visit (minimum 1 visit)	5%	20 Inspections	2%

EHV Mains O/H	1		<u> </u>		1		T		
Have statutory Clearances been maintained?	100%	20 inspections	20%	20 Inspections	2%	1 visit per project full compliance required = 1 inspection	5%	20 Inspections	2%
Has correct signage been affixed?	100%	20 Inspections	20%	20 Inspections	2%	1 visit per project full compliance required = 1 inspection	5%	20 Inspections	2%
Has Correct Anti-Climbing Device's been affixed?	50%	20 Inspections	20%	20 Inspections	5%	1 visit per project full compliance required = 1 inspection	5%	20 Inspections	2%
Has plant and equipment been installed correctly?	50%	20 Inspections	20%	20 Inspections	2%	1 visit per project full compliance required = 1 inspection	5%	20 Inspections	2%
Correct size pole installed and reinstated, in line, in plumb and on twist?	50%	20 Inspections	20%	20 Inspections	2%	1 visit per project full compliance required = 1 inspection	5%	20 Inspections	2%
Correct size conductor installed in line with project plans / instructions?	100%	20 Inspections	20%	20 Inspections	2%	1 visit per project full compliance required = 1 inspection	5%	20 Inspections	2%
Correct stay types been used, at correct stay angle / spread and on line to bisect the angle?	50%	20 Inspections	20%	20 Inspections	2%	1 visit per project full compliance required = 1 inspection	5%	20 Inspections	2%
Has earthing been installed correctly, conductor size and type and readings?	100%	20 Inspections	20%	20 Inspections	2%	1 visit per project full compliance required = 1 inspection	5%	20 Inspections	2%
Have approved materials and suppliers been used?	50%	20 Inspections	20%	20 Inspections	10%	1 visit per project full compliance required = 1 inspection	5%	20 Inspections	2%
Is Phase rotation correct?	100%	20 Inspections	20%	20 Inspections	2%	1 visit per project full compliance required = 1 inspection	5%	20 Inspections	2%
EHV Substations - Civil									
Switch Room / Control Room Substructure	100%	20 Inspections	20%	20 Inspections	5%	1 building= 1 visit (minimum 1 visit)	5%	20 Inspections	2%

Switch Room / Control Room	100%	20	20%	20	5%	1 building = 1 visit	5%	20	2%
Superstructure		Inspections		Inspections		(minimum 1 visit)		Inspections	
LV AC (incl heating / lighting / de-	100%	20	20%	20	5%	1 LVAC Installation = 1	5%	20	2%
humidification)		Inspections		Inspections		visit (minimum 1 visit)		Inspections	
Access Road / Hard-standing /	100%	20	20%	20	5%	1 feature = 1 visit	5%	20	2%
Footway		Inspections		Inspections		(minimum 1 visit)		Inspections	
Substation Compound surfacing and	100%	20	20%	20	5%	1 compound = 1 visit	5%	20	2%
pre-formed cable trenches/ troughs		Inspections		Inspections		(minimum 1 visit)		Inspections	
Substation Compound Security	100%	20	20%	20	5%	1 compound perimeter	5%	20	2%
Fencing and Gates		Inspections		Inspections		= 1 visit (minimum 1		Inspections	
						visit)			
Outdoor Terminal Support	100%	20	20%	20	5%	1 bay = 1 visit	5%	20	2%
Structures (inc Foundations)		Inspections		Inspections		(minimum 1 visit)		Inspections	
									<u> </u>
EHV Substations - Plant	T	_	1		•				
33kV Switchgear (Indoor) –	50%	10	25%	5	10%	1 switch board = 1	10%	10	5%
Installation						inspection			
33kV Switchgear (Outdoor) –	50%	20	25%	10	10%	1 circuit breaker /	10%	10	5%
Installation						switch = 1 inspection			
33kV Switchgear – Cold Commission	100%	10	50%	10	10%	1 site = 1 inspection	10%	10	5%
Testing									
33kV Switchgear – Local Inter-trip	100%	10	50%	5	10%	1 site = 1 inspection	10%	10	5%
Testing									
33kV Switchgear – Protection	100%	10	50%	10	10%	1 site = 1 inspection	10%	10	5%
Testing									
33kV Switchgear - Remote inter-	100%	10	100%	5	100%	1 site = 1 inspection	10%	10	5%
tripping (inc test/commission Pilot									
Cable)									
33/11kV Transformer - Installation	50%	10	25%	10	10%	1 transformer = 1	5%	5	2%
						inspection			
33/11kV Transformer – Tap Change	50%	10	25%	10	10%	1 tap change = 1	5%	5	2%
& Controls						inspection			
33/11kV Transformer – Testing	100%	20	50%	20	10%	1 transformer = 1	5%	5	2%
Alarms & Trips						inspection			
33/11kV Transformer – Pre-	100%	20	50%	20	10%	1 transformer = 1	5%	5	2%
energisation Oil Sampling				1	1	inspection			

66kV Switchgear – Installation	100%	20	75%	5 10 50% 1 circuit breaker or 1 disconnector = 1 inspection [min 2 inspections, 1 of each]		10%	10	5%	
66kV Switchgear - Cold Commission Testing	100%	10	75%	5	50%	1 site = 1 inspection	10%	10	5%
66kV Switchgear - Protection Testing	100%	10	75%	10	50%	1 site = 1 inspection	10%	10	5%
66kV Switchgear - Local Inter-trip Testing	100%	10	75%	10	50%	1 site = 1 inspection	10%	10	5%
66kV Switchgear – Remote inter- tripping (inc test/commission Pilot Cable)	100%	20	100%	10	100%	1 site = 1 inspection	10%	10	5%
66/33kV or 66/11kV Transformer - Installation	50%	10	25%	10	10%	1 transformer = 1 inspection	5%	5	2%
66/33kV or 66/11kV Transformer - Tap Change & Controls	50%	10	25%	10	10%	1 transformer = 1 inspection	5%	5	2%
66/33kV or 66/11kV Transformer - Testing Alarms & Trips	100%	20	50%	20	10%	1 transformer = 1 inspection	5%	5	2%
66/33kV or 66/11kV Transformer - Pre-energisation Oil Sampling	100%	20	50%	20	10%	1 transformer = 1 inspection	5%	5	2%
132kV Switchgear — Installation	100%	20	75%	10	50%	1 circuit breaker or 1 disconnector = 1 inspection [min 2 inspections, 1 of each]	10%	10	5%
132kV Switchgear - Cold Commission Testing	100%	10	75%	5	50%	1 site = 1 inspection	10%	10	5%
132kV Switchgear - Protection Testing	100%	10	75%	10	50%	1 site = 1 inspection	10%	10	5%
132kV Switchgear - Local Inter-trip Testing	100%	10	75%	10	50%	1 site = 1 inspection	10%	10	5%
132kV Switchgear - Remote inter- tripping (inc test/commission Pilot Cable)	100%	20	100%	10	100%	1 site = 1 inspection	10%	10	5%

132/33kV or 132/11kV Transformer - Installation	50%	10	25%	10	10%	1 transformer = 1 inspection	5%	5	2%
132/33kV or 132/11kV Transformer - Tap Change & Controls	50%	10	25%	10	10%	1 transformer = 1 inspection	5%	5	2%
132/33kV or 132/11kV Transformer - Testing Alarms & Trips	100%	20	50%	20	10%	1 transformer = 1 inspection	5%	5	2%
132/33kV or 132/11kV Transformer - Pre-energisation Oil Sampling	100%	20	50%	20	10%	1 transformer = 1 inspection	5%	5	2%
110V Battery System	50%	20	25%	20	5%	1 battery system = 1 inspection	5%	5	2%
33kV Fault Thrower	50%	20	25%	10	10%	1 fault thrower = 1 inspection	10%	10	5%
Earthing System – Installation	100%	10	50%	20	10%	1 earth system = 1 inspection	5%	5	2%
Earthing System - Testing	100%	10	50%	20	20%	1 earth system test = 1 inspection	10%	10	5%
Associated 11kV Primary Switchgear									
11kV Primary Switchgear – Installation	50%	10	25%	5	10%	1 switch board = 1 inspection	10%	10	5%
11kV Primary Switchgear – Cold Commission Testing	50%	20	25%	10	10%	1 circuit breaker / switch = 1 inspection	10%	10	5%
11kV Primary Switchgear – Local Inter-trip Testing	100%	10	50%	10	10%	1 site = 1 inspection	10%	10	5%
11kV Primary Switchgear – Protection Testing	100%	10	50%	5	10%	1 site = 1 inspection	10%	10	5%
11kV Primary Switchgear - Remote inter-tripping (inc test/commission Pilot Cable)	100%	10	50%	10	10%	1 site = 1 inspection	10%	10	5%

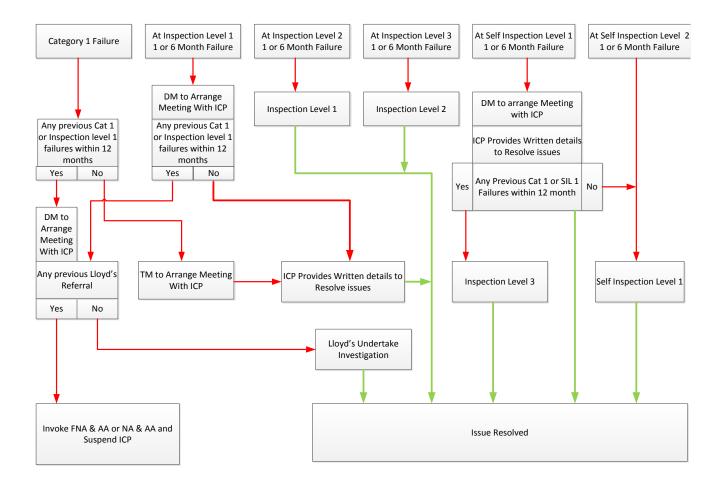
Approved Designer Audit Table

Audit Level 1	to 3	Self Au	Self Audit Level 1 and 2					
Activity	Audit Level 1	Qualifying count to level 2	Audit Level 2	Qualifying count to level 3	Audit Level 3	Self Audit Level 1	Qualifying count to SAL 2	Self Audit Level 2
Metered Demand LV	100%	Audits 20	50%	Audits 20	25%	5%	Audits 20	2%
Metered Demand HV	100%	Audits 20	50%	Audits 20	25%	5%	Audits 20	2%
Metered Generation LV	100%	Audits 20	50%	Audits 20	25%	5%	Audits 20	2%
Metered Generation HV	100%	Audits 20	50%	Audits 20	25%	5%	Audits 20	2%
Metered Demand EHV	100%	Audits 20	50%	Audits 20	25%	5%	Audits 20	2%
Metered Generation EHV	100%	Audits 20	50%	Audits 20	25%	5%	Audits 20	2%

Point of Connection Audit Table

Audit Level 1	to 3	Self Au	Self Audit Level 1 and 2					
Activity	Audit Level 1	Qualifying count to level 2	Audit Level 2	Qualifying count to level 3	Audit Level 3	Self Audit Level	Qualifying count to SAL 2	Self Audit Level 2
Metered Demand LV	100%	Audits 20	50%	Audits 20	25%	5%	Audits 20	2%
Metered Demand HV	100%	Audits 20	50%	Audits 20	25%	5%	Audits 20	2%
Metered Generation LV	100%	Audits 20	50%	Audits 20	25%	5%	Audits 20	2%
Metered Generation HV	100%	Audits 20	50%	Audits 20	25%	5%	Audits 20	2%

Poor Performance Flow Chart

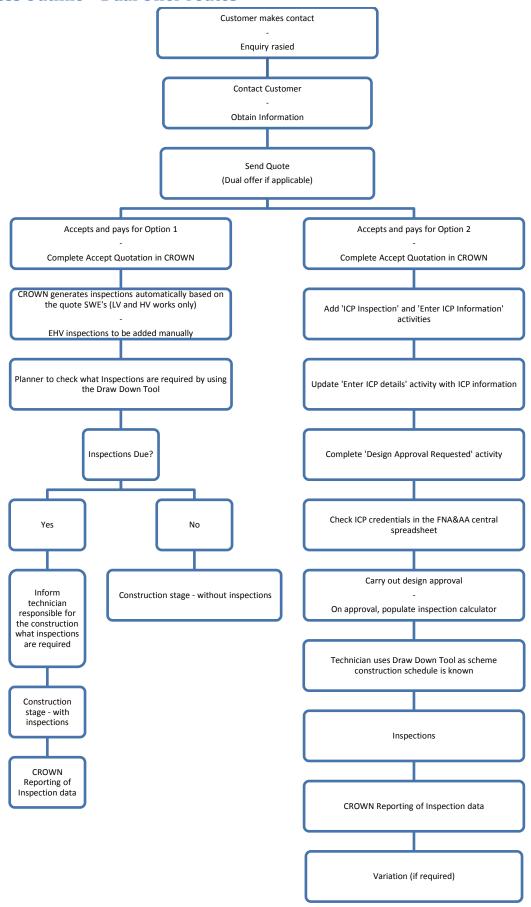


Section 3 - Inspection and Monitoring CROWN User Guide

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CROWN Process Outline - Dual Offer routes

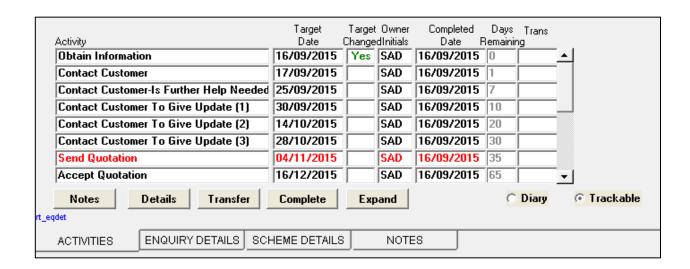


CROWN Routing and processes for Inspecting WPD works

The following steps are required for when a customer accepts and pays for WPD to carry out both the contestable and non-contestable work to provide the connection – Option 1 within the Dual Offer quote.

The following CROWN activities should already be complete:

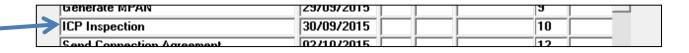
- ✓ Contact Customer
- ✓ Obtain Information
- ✓ Send Quote
- ✓ Accept Quote Option 1



CROWN determination for the Inspections for WPD work

Upon completing the 'Accept Quote' activity, CROWN will calculate the required inspections automatically for LV and HV works.

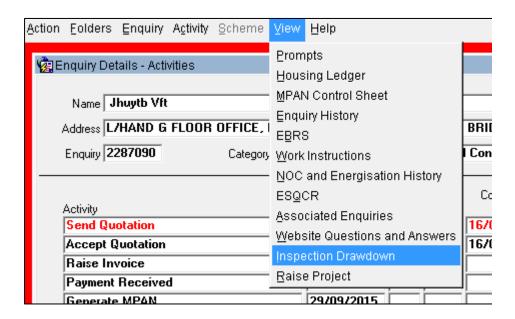
The activity 'ICP Inspection' will be added to the activity list automatically by CROWN.



To see if inspections are required and have been generated by CROWN, the Draw Down Tool needs to be accessed.

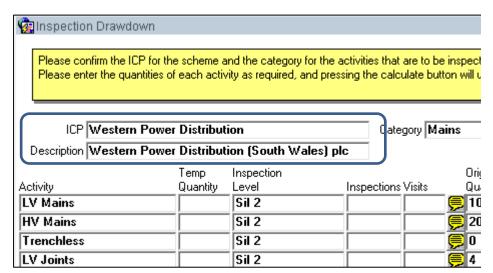
Click 'View'

Open 'Inspection Drawdown'

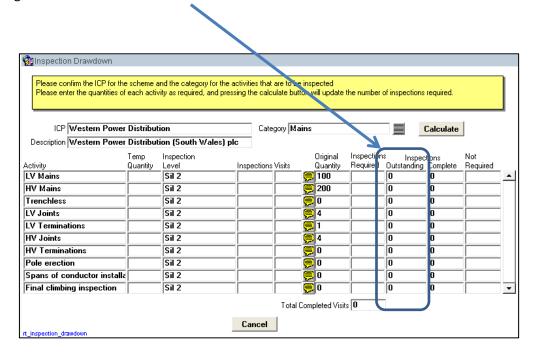


The Inspection Draw Down window will display showing WPD as the ICP and the appropriate license area.

This information is pulled through from the scheme building process.



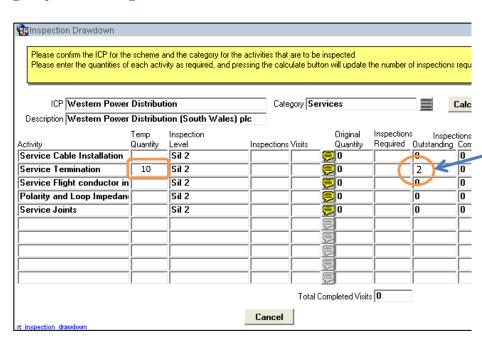
If any inspections have been generated and are required, they will be displayed with a count in the 'Outstanding' column.

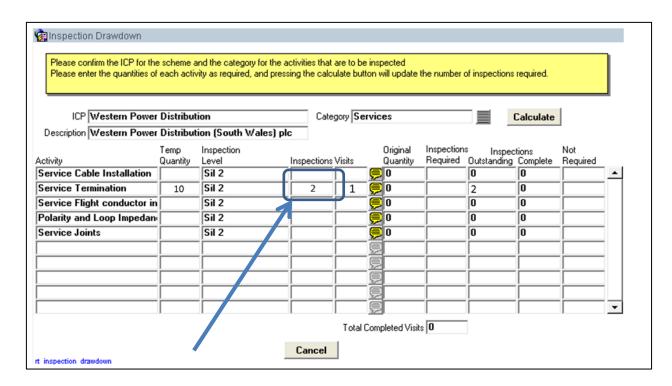


All categories should be checked for generated inspections, navigating between categories using the category selection louver.

Process to follow if Outstanding Inspections are generated

- If CROWN indcates inspections are 'Outstanding'
- Populate the 'Temp Quantity' cell applicable to each activity, which has outstanding inspections, with the amount of work being carried out of that activity type.
- 3. Click 'Calculate'





The results from the calculation displayed in the 'Inspections' cell(s) shall be transposed onto the 'Required Inspections' proforma template.

The Required Inspections template can be found by clicking on or navigating to the following link: F:\Policy LAN page\Policy Dissemination\Links (do not move or delete)\IMR2015\Required inspections.xltm

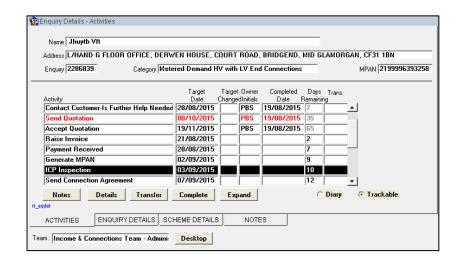
Process to follow where <u>no outstanding</u> inspections are generated

If upon using the Draw down tool, it indicates no inspections are outstanding across any of the categories, then this means that no inspections are due for any part of the scheme.

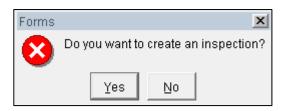
The inspections part of CROWN must be closed using the following steps:

Highlight 'ICP Inspection' activity

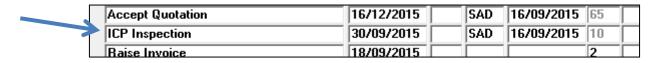
Click 'Complete'



You shall be asked if you want to create an inspection. Select 'No'.



This will complete the 'ICP Inspection' activity.



No further inspection activity will take place and the construction can be carried out without the inspection and monitoring requirement.

Construction file handover procedure for WPD works with required inspections

Upon handover, the technician shall be made aware of all inspections required for the construction stage via the 'Required Inspections' form which has been populated by the planner (see <u>Process to follow</u>).

The required inspections shall be presented clearly on the template form showing how many inspections are required for each activity type.

See <u>F:\Policy LAN page\Policy Dissemination\Links (do not move or delete)\IMR2015\Required inspections.xltm</u> for form.

The technician shall be made aware of the reporting process and the required blank inspection reporting forms shall be included in the construction file for use when the work presents ready for inspection.

See \\AVODCS01\NEWCON\CIC\I and MR\Forms for I&MR for forms.

CROWN Routing and processes for Dual offer Option 2 route

The following steps are required for when WPD generates a quote for WPD to carry out the non-contestable work only and the customer to appoint an ICP for the contestable elements – Option 2 within the Dual Offer quote.

The following CROWN activities should already be complete:

- ✓ Contact Customer
- ✓ Obtain Information

Calculating and including the inspection costs required for the quote

As part of the offer WPD must include inspection costs for the contestable works that the ICP could undertake. At the quotation stage, we may not know who the ICP is nor their design.

Procedure to follow if the ICP is known at the quotation stage.

Firstly a check should be made to see if the ICP has the Extension of Contestability (EOC) for Self Inspection (SIL).

The information is held in the FNA&AA credentials spreadsheet.

See FNA&AA spreadsheet

Where an ICP has the EOC for SIL, then no inspection costs shall be added to the quote as the ICP will be carrying out self-inspections.

Where the ICP does not have the EOC for SIL, then inspection costs shall be added to the quote.

Determination of the required inspections is done via a Visit Estimation calculator.

See <u>Inspection calculator</u> (instructions for use are displayed within the calculator itself.)

The required inspections shall be added to the quote as an extra against the category <u>CiC Inspections</u> at the current inspection rate, on-costs removed.

Procedure to follow if the ICP is NOT known at the quotation stage.

The inspection calculator shall be used to calculate the inspection visits required. See Inspection calculator

The planner will take the contestable elements for the design of Option 1, populate the inspection calculator with the scheme details and then use the Inspection Level 1 to determine the inspections required.

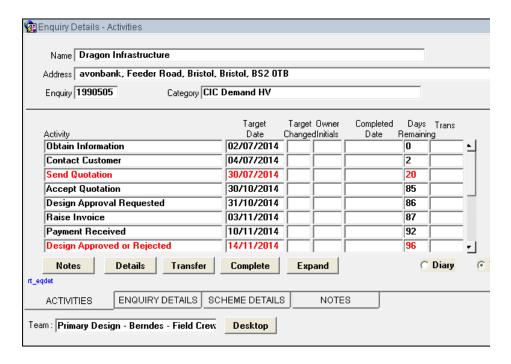
Inspections shall be added as an extra to Option 2 under the CiC category; all on-costs shall be removed.

- ✓ Send Quote
- ✓ Accept Quote Option 2

Create an Inspection Regime

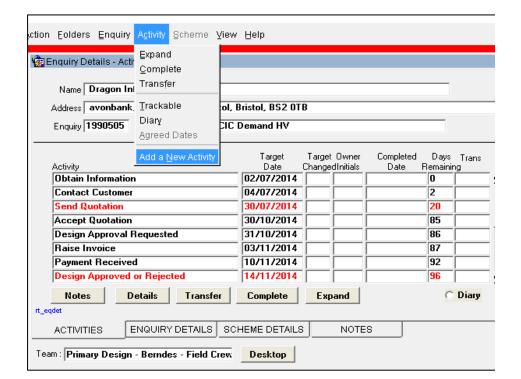
Adding the required activities

Open the prepared Enquiry Details Screen.



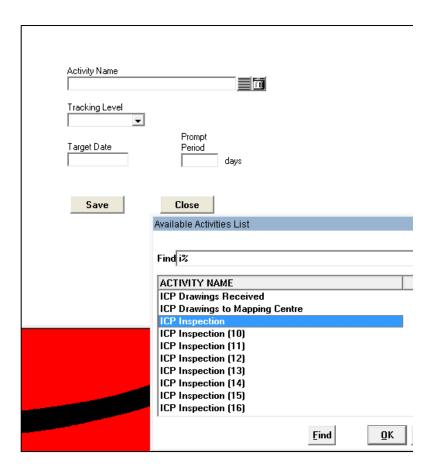
Select activity

Add a New Activity.



Open the Activity List via the LOV

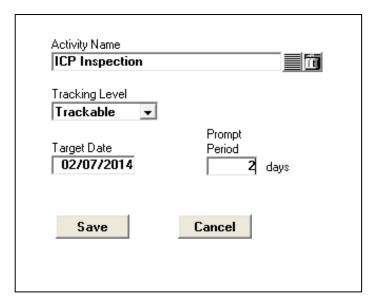
Select 'ICP Inspection'



Select Trackable

Enter a target date (6 months ahead).

Click Save and Close



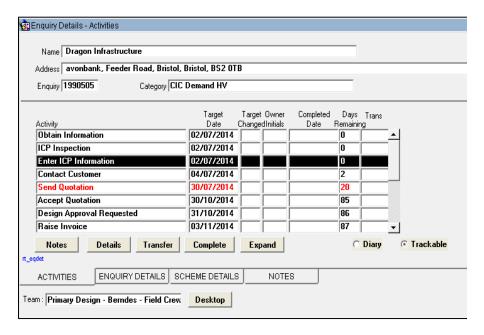
Using the same method, open the Activity List via the LOV and select 'Enter ICP Information', select Trackable and enter a target date (3 months ahead)

Updating CROWN with the ICP details

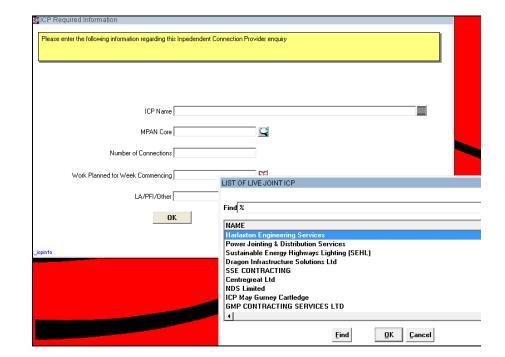
Once you know the chosen ICP's details, the CROWN system must be updated via the following steps.

Select the 'Enter ICP Information' activity

Click Complete



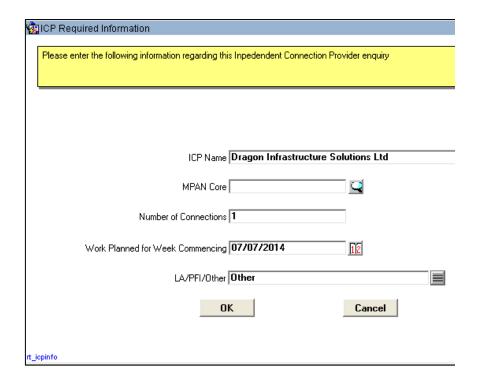
Click ICP Name LOV and select ICP



Enter the number of connections (energising connections)

Add a date for work commencing (CROWN only allows a Monday)

Select 'Other' from the options.



Design Approval Requested

When the ICP design is received, CROWN must be updated to confirm this.

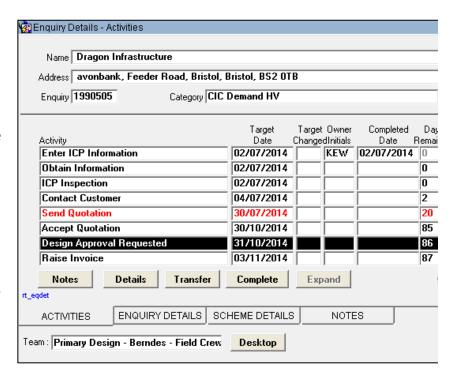
If the ICP is requesting to Self-approve their own design, then must have the EOC for self-approval <u>and</u> they must submit their enquiry via the CIRT route.

See <u>CROWN Process and enquiry</u> route for CIRT enabled enquiries

Else...

Highlight 'Design Approval Requested'

Click 'Complete'



Enter the date you received the design from the ICP in the 'Date Approval Request Received' cell.

A single click in this cell will populate it with the current date.

Save & Close

🗽 Design Approval		
If requesting Design Approval then ent If further information is required then c		
Date Approval Req Request		
	pproval Requestor	Comments
1 02/07/2014		
	Reg Info Requested Info	Received
	No. Date Dat	
Request Additional Info		
from Customer or Update		
Existing Request		
Request		
	Save	Close
rt_design_approval_request		

Completing 'Design Approval Requested' starts the Guaranteed Standard activity 'Design Approved or Rejected'

Design Approved or Rejected

Design Approval (where the ICP is not self-approving their design)

On receiving the ICP design, WPD shall review it in accordance with ST:SD1F, using the criteria set out in Appendix B. Upon failing to meet the full criteria and / or if design information is missing, then the design shall be rejected with a descriptive comment and the actions required to resolve the issue.

The scheme shall be checked to determine what type of work they are proposing to carry out for the customer. The ICP credentials will need to be checked to make sure they have the appropriate agreements and accreditations in place to carry out such works.

A central spreadsheet showing current agreements is maintained by New Connections Policy which can be located in the NEWCON drive.

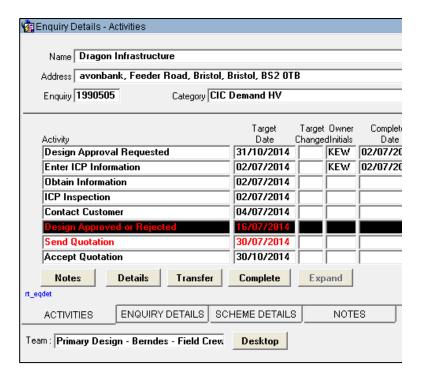
\\AVODCS01\NEWCON\CIC\WPD FNA & AA\2014 NA AA and 2015 FNA AA including extensions V2.xls

If the ICP does not have the correct agreements for the proposed design, then New Connections Policy shall be contacted for advice – it may be necessary to set up a Triparty agreement for the scheme.

All required adoption agreements must be in place prior to any work being undertaken by the ICP.

When you have decided the outcome of the ICP design, this decision must be reflected in CROWN.

Highlight 'Design Approved or Rejected' Click 'Complete'



Approve or Reject Designs or view detail. Click on the Close button to Exit the Form.

Rejection Date Target Date Approval Date Approver/Rejecter 16/07/2014 Close

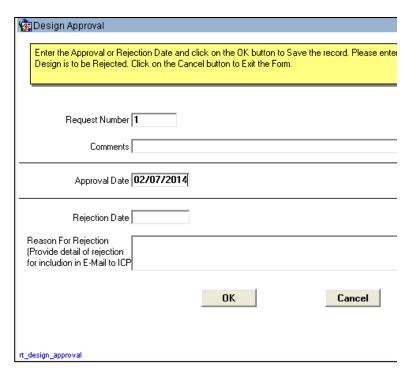
Click the magnifying glass

If you approve the design, enter the date in the Approval Date cell.

If the design does not meet the criteria set out in ST:SD1F Appendix B or more information is required, the design should be rejected. A date shall be inserted into the Rejection Date cell. A reason shall also be provided which will notify CIRT enquiry ICP's the reason why the design is rejected.

A rejection will reactivate 'Design Approval Requested' and stop the GS standard clock.

A follow up call / email is also required to make sure the ICP is aware of what is required.



Upon acceptance of the ICP design you will be presented with the Inspection Calculator.

The calculator allows the ICP design to be itemised and entered into CROWN so that the inspections required can be generated.

CROWN Inspection Calculator

Check the ICP name is correct – if not 'Enter ICP Information' activity will need to be reactivated and completed with the correct information.

Select the appropriate category by clicking the louver

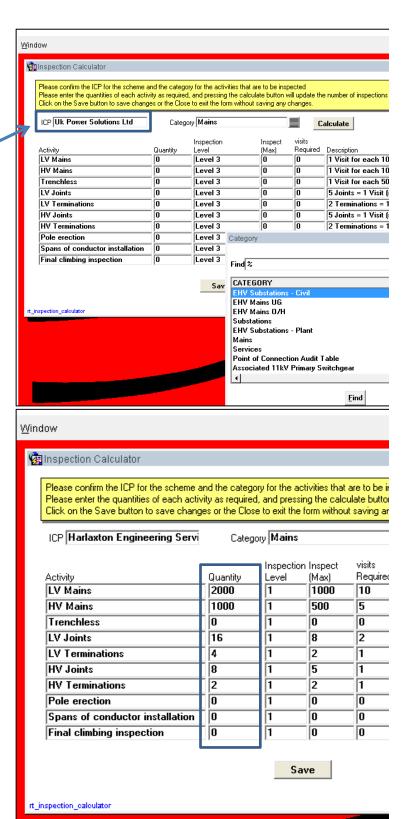
Enter the ICP work per activity into the 'Quantity' cells.

Once quantities have been entered in the first category click Calculate and Save. This will generate inspections and then save them.

Failure to do this in order will mean inspections are not correctly assigned to the enquiry.

Change category by clicking on LOV. When quantities are completed always click calculate and save before changing category.

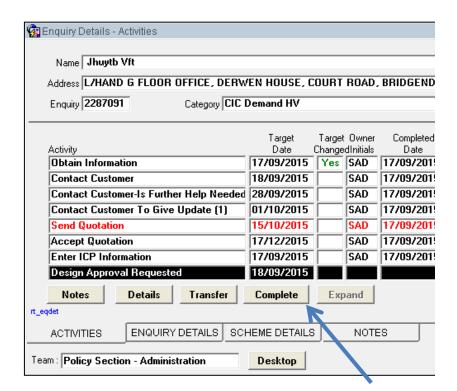
Repeat the process for any other categories that are required, click Close.



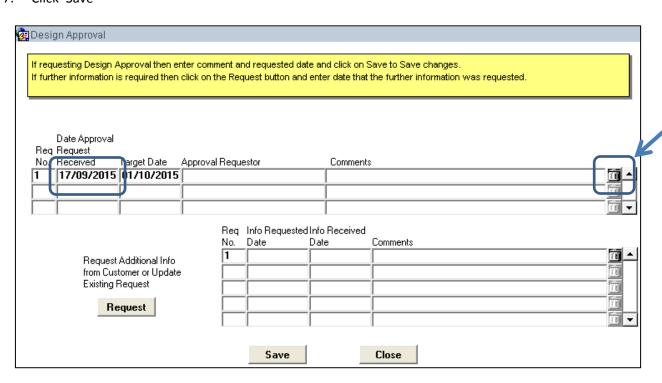
How to re-run the Inspection Calculator after it has been closed

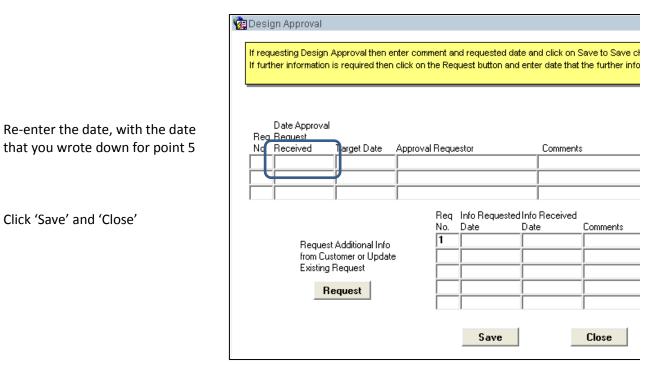
If you accidently close down the Inspection calculator window without fully populating it, follow these steps:

- Reactivate 'Design Approval Requested'
- Reactivate 'Design Approve or Rejected'
- 3. Highlight 'Design Approval Requested'
- 4. Click 'Complete'

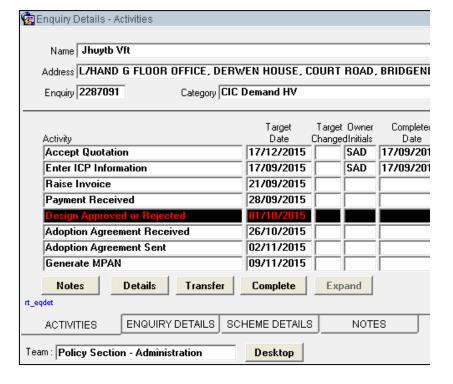


- 5. Write down the existing date
- 6. Click the delete button
- 7. Click 'Save'

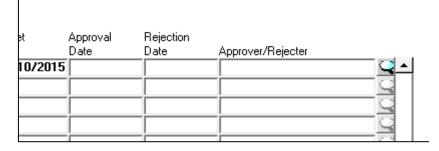




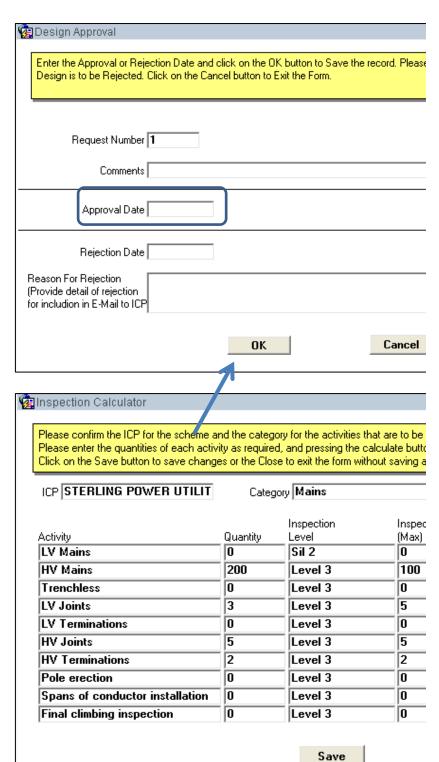
- Highlight 'Design Approved or Rejected'
- 11. Click 'Complete'



12. Click Magnifying Glass



13. Approve the design – click 'OK'



14. The Inspection Calculator will now be displayed, it should still have your data in the fields to which you can add to or delete in the normal way.

CROWN Process and enquiry route for CIRT enabled enquiries

This section shall be read in conjunction with ST:SD1F

Where an ICP wants to self-approve their own designs (both for Parent and POC schemes) they <u>must use</u> the online CROWN interface system, CIRT.

If upon providing a customer with a dual offer quote, they accept and pay for option 2 and appoint an ICP who has the EOC for self-approval, the dual offer enquiry must be closed, the ICP must use the CIRT process and raise a new CIRT enquiry.

For help on the CIRT process, see CIRT user guide.

When the ICP raises an enquiry through the CIRT process the category issued will be one of the following:

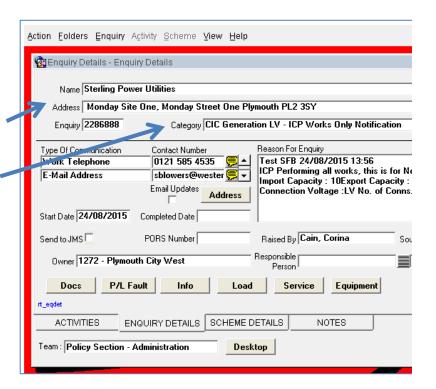
- CIC Demand LV ICP Works Only Notification
- CIC Generation LV ICP Works Only Notification
- CIC Demand HV ICP Works Only Notification
- CIC Generation HV ICP Works Only Notification

The CIRT process interfaces with CROWN, and allows the ICP to complete certain activities which in turn informs us of their current position with the enquiry process.

When a CIRT generated enquiry is opened in CROWN the name of the ICP /customer will present with the address of the works.

The enquiry category will be set with the required CIC – ICP works only notification.

By ICP raising this enquiry they are notifying us that they intend on carrying out work to provide a connection to a customer(s).



On receiving the notification (enquiry), the WPD planner shall check to make sure the ICP holds the EOC to carry out the self-determination of the POC and scheme design checking via the FNA&AA spreadsheet.

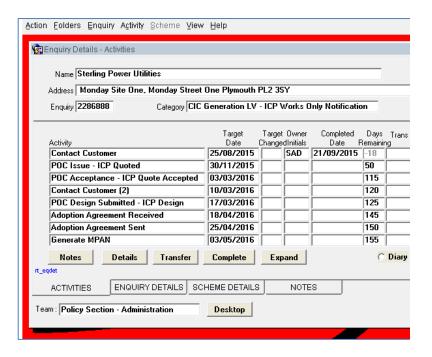
See FNA&AA Spreadsheet

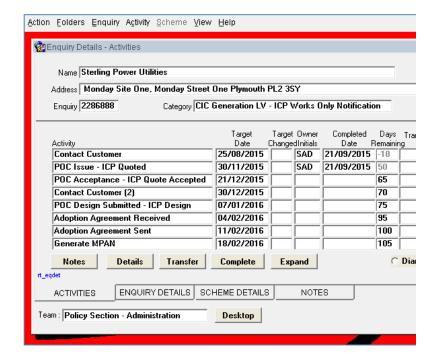
The outcome of this check shall be relayed back to the ICP, and the 'Contact customer' activity shall be completed.

The planner shall provide all necessary information to the ICP to allow them to quote as per ST:SD1F.

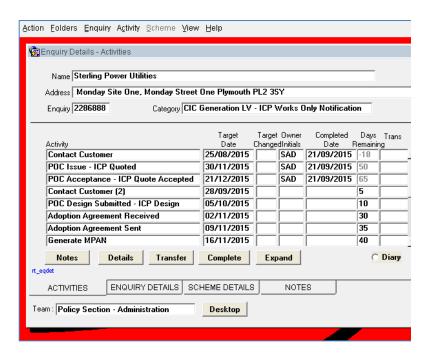
If the ICP has the correct EOC's in place they can determine the POC and design the scheme under self-approval and issue the customer with a quote for the connection works.

When they have done this the ICP will complete the activity 'POC Issue – ICP Quoted' via CIRT.





The ICP shall notify us that the customer has accepted their quote by completion of the 'POC Acceptance – ICP Quote Accepted' activity via CIRT.



The ICP shall send the WPD planner the scheme design and design approval compliance form (ST:SD1F Appendix B) to allow us to audit and record the results in CROWN.

When the ICP sends the design and supporting documentation, they shall also complete the 'POC Design Submitted – ICP Design' activity via CIRT.

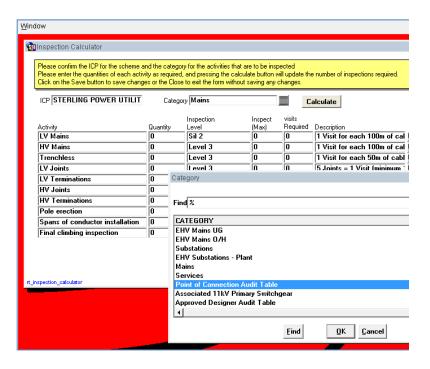
WPD planner to contact the ICP to confirm receipt of the ICP design.

'Contact customer (2)' activity to be completed.

Where the ICP has self-approved their POC and scheme design (parent) this needs to be recorded. The inspection calculator window will display, allowing the recording of the ICP self-determination and self-approval. During this stage we must also input of the ICP scheme design which will then generate any required inspections to be performed by WPD.

To record that the ICP has determined the POC select 'Point of Connection Audit Table' from the category LOV.

Click 'OK'



Identify what type of scheme the ICP has carried out self-determination of the POC by writing a value of '1' against the appropriate activity name.

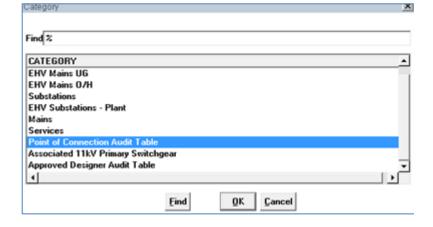
Click 'Calculate'

Click 'Save'.

nspection Calculator Please confirm the ICP for the scheme and the category for the activities that are to be inspected Please enter the quantities of each activity as required, and pressing the calculate button will update the number of inspections r Click on the Save button to save changes or the Close to exit the form without saving any changes. ICP STERLING POWER UTILIT Category Point of Connection Audit Calculate Inspection Level Level 1 Required Activity Qu CIC Demand LV - ICP Works Only 1 (Max) TBA CIC Generation LV - ICP Works 0 TRA Level 1 n n CIC Demand HV - ICP Works Only 0 Level 1 n TRA CIC Generation HV - ICP Works C 0 Level 1 TRA Save Close

If the ICP has self – approved their own scheme design then using the category LOV select 'Approved Designer Audit Table'.

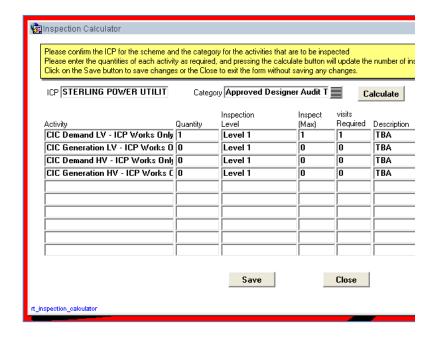
Click 'Ok'.



Identify what type of scheme the ICP has carried out self-approval of the parent/ site scheme by writing a value of '1' against the appropriate activity name.

Click 'Calculate'

Click 'Save'.

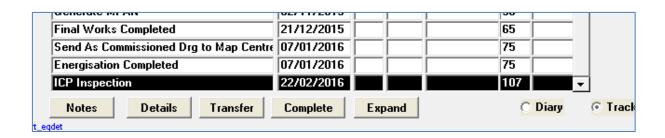


All appropriate categories should now be run through, populating with the ICP scheme details to generate the onsite inspections.

See CROWN Inspection Calculator for further help.

Next it must be checked to see if the ICP design and/ or POC determination should be audited. To do this, the 'ICP Inspections' activity must be accessed.

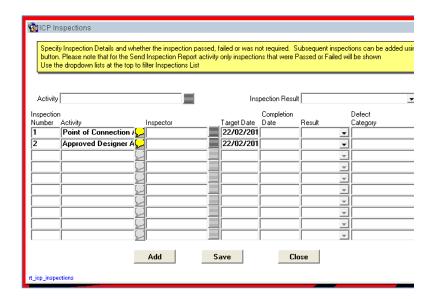
Highlight then click 'Details'



If we are required to carry out an audit on the POC or site design, then they shall be shown in the list of activities.

In this example, CROWN is informing us that an audit is required on both the POC design and the site design.

The designs should be audited as per ST:SD1F using the criteria set out in Appendix B.



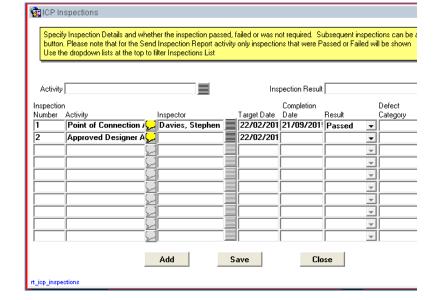
When the audit is complete, the result shall be recorded in CROWN. The field shall be populated as follows:

Inspector

• Enter your name as the inspector

Completion date

The date the audit took place

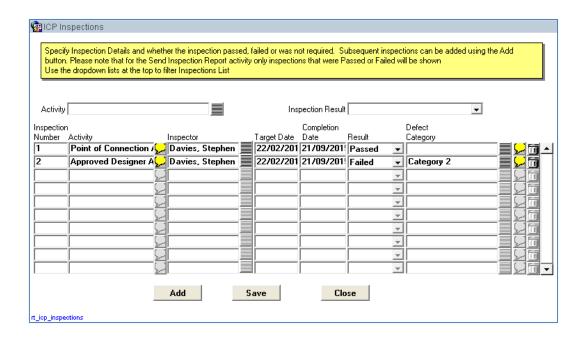


Result

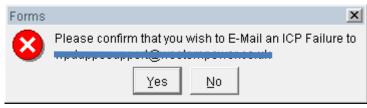
The overall outcome of the audit.

- Pass, if all appropriate criteria of ST:SD1F Appendix B are met.
- Fail, if any appropriate criteria of ST:SD1F Appendix B are not met.
 - Where a failure occurs, the defect category shall be identified in the defect category cell.





Upon entering all of the required information, the entries shall be saved. Click 'Save'.



For any failed activities, CROWN will ask if you want to send the failure information to the ICP. Click 'Yes'.

You will be asked if you would like to create a re-inspection.

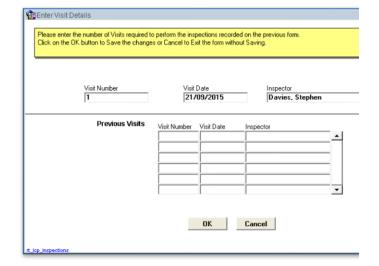
If the ICP is to change their design due to any failures identified, and resubmit it back to you, then 'Yes' should be clicked.



RICP Inspections Specify Inspection Details and whether the inspection passed, failed or was not required. Subsequent inspections can be added usin button. Please note that for the Send Inspection Report activity only inspections that were Passed or Failed will be shown Use the dropdown lists at the top to filter Inspections List This will add an extra line in the activity list Activity Inspection Result ready for the result from the additional Inspection Number Activity audit to be recorded. Target Date Inspector Result Category Point of Connection / Davies, Stephen
Approved Designer A Davies, Stephen 22/02/201 21/09/201 Passed 22/02/201 21/09/201 Failed Category 2 Approved Designer A 21/09/201 Close Add Save

The audit results shall be saved as a visit in the normal way by entering the visit number, visit date (date of audit) and the Inspector (your name).

Click 'OK'



The audit is now complete and recorded.

Informing the ICP of the technician responsible for the inspections

Upon populating CROWN with the ICP scheme detail, it is important that the ICP is aware of whom to inform when they know the schedule of work for the construction stage.

The team manager should be consulted with, and it will be their decision as to who is allocated to the site for inspections and any other non-contestable elements for the provision of the connection.

Preferably two technicians should be allocated to a site so that inspections can be covered in the event of a technician being on leave.

The ICP should be made aware of the names and contact numbers and email addresses of the technicians responsible for the site. The manager may want their details included for monitoring.

Inspection Draw Down

When an ICP provides a work schedule, then the technician will need to check whether any inspections are required for the work being done by the ICP at that time; this is done using the CROWN Draw Down Tool.

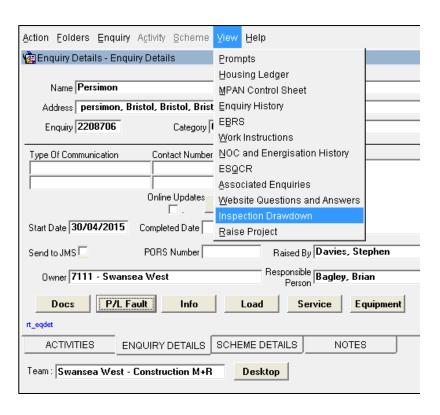
To Access the Inspection Draw Down Tool

Action Folders Enquiry Activity Scheme View Help 🙀 Enquiry Details - Enquiry Details Name Persimon Address persimon, Bristol, Bristol, Bristol Enquiry 2208706 Category CIC Demand HV Type Of Communication Reason For Enquiry Contact Number Online Updates Address Start Date 30/04/2015 Completed Date Send to JMS 🗔 PORS Number Raised By Davies, Stephen Responsible Bagley, Brian Owner 7111 - Swansea West P/L Fault Load Service Docs Info Equipment ACTIVITIES ENQUIRY DETAILS SCHEME DETAILS NOTES Team: Swansea West - Construction M+R Desktop

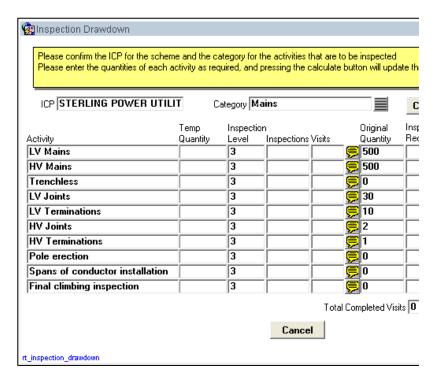
Select the Enquiry Details page

From the menu select 'View'

Click 'Inspection Drawdown'

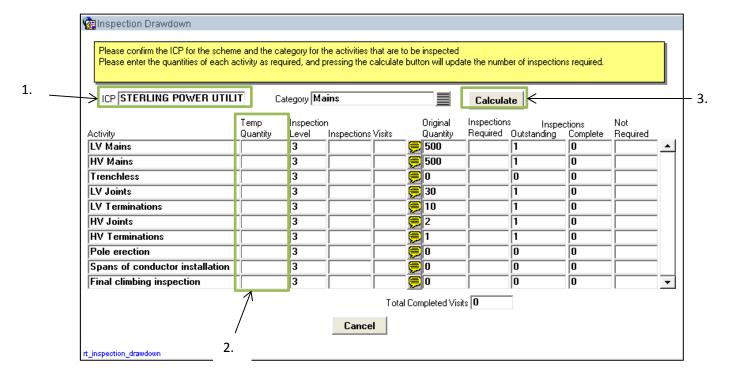


You will be presented with the following screen, ready for data entry.

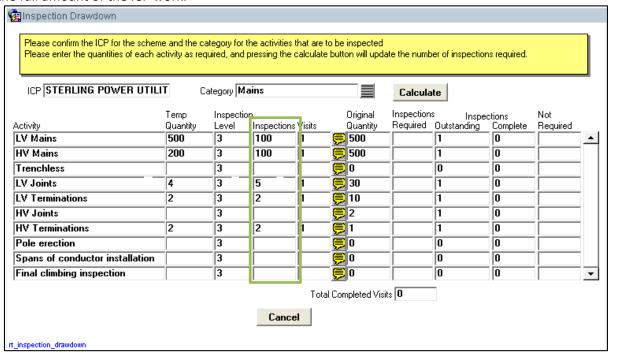


On accessing the Draw down tool you will need to:

- Check the ICP displayed is correct.
- 2. Enter the ICP scheme of work into the 'Temp Quantity' column.
- Click 'Calculate'



On clicking 'Calculate' the Inspections required will be displayed showing how much needs to be checked out of the full amount of the ICP work.



When presented with the results, it is important to write them down before changing the category, as CROWN will not save the information, and you will lose it.

CROWN Recording of Site Inspection Results (WPD & ICP works)

When the inspection forms are returned, the information must be entered into CROWN. This task will normally be carried out by a Team support; a separate user guide outlining this process in detail is available.

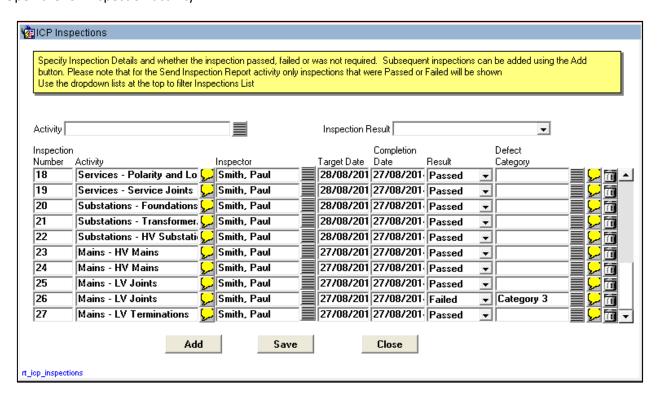
To view the guidance for the CROWN Inspection recording processes click on or navigate to \\AVODCS01\NEWCON\CIC\I and MR\CROWN inspection recording.pdf.lnk

Important

Where an inspection is undertaken at SIL 1 or SIL2 DO NOT record a visit, only record a visit where a reinspection is being undertaken at SIL1 or SIL2.

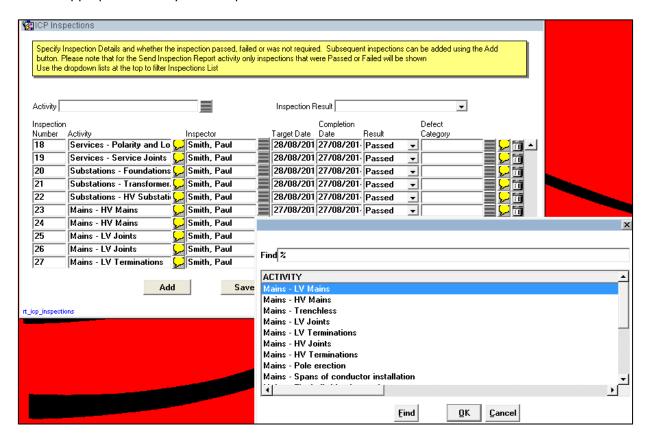
Adding additional Inspections

Open the ICP Inspection activity

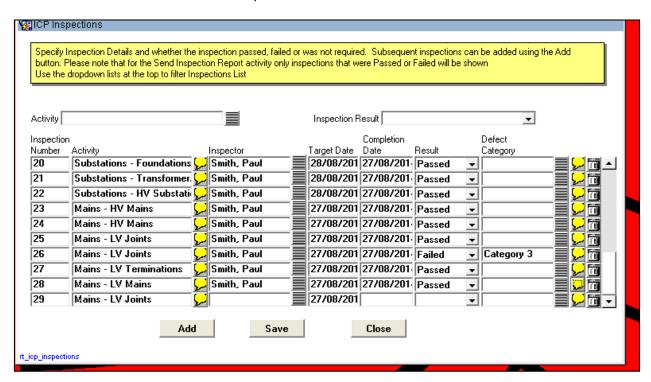


Where an additional Inspection needs to be added, click the add button.

Select the appropriate activity to be inspected



CROWN has now created an additional inspection



Section 4 - FAQ's

FAQ	Answer	Relevant links / guides
Where are the blank report forms	NEWCON > CIC > I&MR > Forms for I&MR	click here
How do I work out the estimated number of inspection visits required for my option 2 quote?	Using the estimation calculator located in the NEWCON drive. Follow the on screen instructions, and refer to the operation manual.	click here
How do I include the charge for the estimated number of inspection in option 2 of my dual offer?	Include the estimated inspection costs against the CiC category.	click here
Do I include 'on costs' for the inspection costs?	No – on costs must be zeroed	List of items on-costs to be zeroed click here page 3
I have used Diary instead of Trackable for an activity, how do i change this?	Select the activity to be changed – click Expand – change the selection to trackable – save and close.	click here
When do I complete 'Design Approval Requested'?	Only when the ICP has sent you their design for approval. This activity does not represent you requesting their design.	
On completing Design approval I do not see the inspection calculator window appear?	You have not completed the 'Enter ICP information' activity prior to attempting to approval the design. CROWN needs you to complete 'Enter ICP Information' first so that it can base the calculation on the ICP's inspection level. Reactivate design approval – complete 'Enter ICP information' – carry out design approval again. You should now be presented with the inspection calculator.	
A list of all user guides and manuals associated with I&MR 2015	 ST:NC2M click here Team support I&MR user-guide click Technician / inspectors I&MR user-guide 	

Section 5 - Documentation

Contents

WPD Inspection and Monitoring Regime Notice of Inspection	. 62
Defect Notices	. 62
Inspection Report Forms	. 62
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WPD Inspection and Monitoring Regime Notice of Inspection

This is a formal notice of Inspection

Following the program of works submitted, WPD have made a site visit to carry out an Inspection in accordance with the Inspection Regime.

Please find attached to these document details of the inspections that have been undertaken. If you are at Inspection Level 1 or 2 for any Activity inspected the inspections will count to a movement to the next lower inspection level.

If you are at inspection Level 3 the successfully inspected assets will ensure that you remain at the lowest level of inspection.

Defect Notices

The following defect notices are available in the NEWCON shared area N:\CIC\I and MR\Forms for I&MR\Inspection notices

🔁 WPD Defect Notice of an Energised Netw	08/09/2014 15:13	Adobe Acrobat D	116 KB
🔁 WPD Defect Report	08/09/2014 15:22	Adobe Acrobat D	115 KB
🔁 WPD Inspection and Monitoring Regime	08/09/2014 15:26	Adobe Acrobat D	111 KB
🔁 WPD Rejection Notice	08/09/2014 15:29	Adobe Acrobat D	41 KB

Inspection Report Forms

The following Inspection and Monitoring forms are available in the NEWCON shared area N:\CIC\I and MR\Forms for I&MR

🔁 ASSOCIATED 11KV PRIMARY SWITCHGE	10/08/2015 08:31	Adobe Acrobat D	210 KB
🔁 EHV MAINS OVERHEAD REPORT	10/08/2015 08:31	Adobe Acrobat D	224 KB
🔁 EHV MAINS UNDERGROUND REPORT	10/08/2015 08:30	Adobe Acrobat D	232 KB
🔁 EHV SUBSTATIONS - CIVIL REPORT	10/08/2015 08:30	Adobe Acrobat D	213 KB
🔁 EHV SUBSTATIONS - PLANT REPORT	10/08/2015 08:29	Adobe Acrobat D	265 KB
🔁 FINAL CONNECTIONS REPORT	10/08/2015 08:29	Adobe Acrobat D	207 KB
🔁 MAINS SITE REPORT FORM V3	19/05/2015 15:35	Adobe Acrobat D	233 KB
🔁 SERVICE SITE REPORT FORM V3	19/05/2015 15:36	Adobe Acrobat D	239 KB
🔁 SUBSTATION SITE REPORT FORM V3	19/05/2015 15:37	Adobe Acrobat D	237 KB

Defect Category Guidance

The following Defect Category guidance documents are available in the NEWCON shared area N:\CIC\I and MR\Forms for I&MR\Defect category guidance

11kV Sub extesible circuit breaker Inspec	08/09/2014 14:57	Adobe Acrobat D	165 KB
11kV Distrabution Sub extesible type in G	08/09/2014 14:57	Adobe Acrobat D	219 KB
🔁 11kV Distrabution Sub unit type with non	08/09/2014 14:58	Adobe Acrobat D	224 KB
🔁 11kV Distrabution Sub unit type with RM	08/09/2014 14:58	Adobe Acrobat D	230 KB
33kV Sub extesible circuit breaker Inspec	10/08/2015 08:21	Adobe Acrobat D	286 KB
5 66kV Sub circuit breaker inspection	10/08/2015 08:22	Adobe Acrobat D	249 KB
132kV Sub circuit breaker inspection	10/08/2015 08:23	Adobe Acrobat D	249 KB
🔁 CiC Inspection LV	08/09/2014 14:59	Adobe Acrobat D	277 KB
🔁 CiC Inspection OH 11-33KV	10/08/2015 08:23	Adobe Acrobat D	333 KB
🔁 CiC Inspection OH LV	08/09/2014 14:59	Adobe Acrobat D	361 KB
🔁 CiC Inspection OH MV	08/09/2014 14:59	Adobe Acrobat D	331 KB
🔁 Overhead Inspection Report	20/02/2015 09:18	Adobe Acrobat D	257 KB
🔁 Quality Index 11kV Jointing Inspection De	08/09/2014 15:02	Adobe Acrobat D	131 KB
🔁 Quality Index Cable Laying Inspection De	10/08/2015 08:24	Adobe Acrobat D	211 KB
🔁 Quality Index Cable Laying Inspection De	08/09/2014 15:02	Adobe Acrobat D	207 KB
Substation Acceptance Process	10/08/2015 08:25	Adobe Acrobat D	300 KB

APPENDIX B

SUPERSEDED DOCUMENTS

None.

APPENDIX C

ASSOCIATED DOCUMENTATION

The Electricity Act 1989 as amended by the Utilities Act 2000

The Electricity (Connection Charges) Regulations 2002

The Electricity Safety Quality and Continuity Regulations 2003

Western Power Distribution (South West) plc's Distribution Licence

Western Power Distribution (South Wales) plc's Distribution Licence

Western Power Distribution (East Midlands) plc's Distribution Licence

Western Power Distribution (West Midlands) plc's Distribution Licence

Statement of Methodology and Charges for Connection to Western Power Distribution (South West) plc's Electricity Distribution System;

Statement of Methodology and Charges for Connection to Western Power Distribution (South Wales) plc's Electricity Distribution System;

Statement of Methodology and Charges for Connection to Western Power Distribution (East Midlands) plc's Electricity Distribution System;

Statement of Methodology and Charges for Connection to Western Power Distribution (West Midlands) plc's Electricity Distribution System

POL HS9 and associated STs - CDM Regulations

POL: NC2 New Connections

APPENDIX D

REVIEW DATE

This document shall be reviewed in September 2018

APPENDIX E

KEY WORDS

Network Access and Adoption Agreement, Connection Offer, ICP, Inspection, Specification, Defect.