

Industry Information Session: Compliance

24 March 2010, St Catherine's Lodge, Wokingham



nationalgrid

The power of action.™

Practicalities

- ◆ No fire alarm tests are planned
- ◆ Timings for today
- ◆ Questions along the way
- ◆ Facilities

Key messages

- ◆ Major change to Grid Code
 - ◆ ~400 pages of legal drafting
 - ◆ Significant NGET and industry effort to get here
- ◆ No fundamental change to the processes that are followed
 - ◆ Main intent is to transfer current arrangements into Grid Code
- ◆ Working Group has developed some changes to processes along the way
 - ◆ Much of this is already in the Guidance Notes

NGET organisational changes

- ◆ Operational Notifications Team
 - ◆ Single point of co-ordination enabling a consistent approach to issuing Operational Notifications
 - ◆ Set up in response to the increasing number of generation connections
 - ◆ Provision to customer of greater clarity on the obligations required
 - ◆ Greater transparency and efficiency

- ◆ Richard Lavender, Steve Hoar, Ali Ahmed (graduate)

Agenda

- ◆ Welcome and Introductions
- ◆ Background
- ◆ Processes
 - ◆ New Connections
 - ◆ Modifications
 - ◆ Lifetime compliance
 - ◆ LEEMPS
- ◆ Cross Code Issues
- ◆ Next Steps

Current Compliance Process

- ◆ Process by which a generator demonstrates compliance with the Grid Code and specific requirements in bilateral agreements
- ◆ Currently covered by 'Guidance Notes' available on National Grid's website
 - ◆ No formal governance
 - ◆ No formal industry change process
- ◆ Process has been successful over the last 20 years in ensuring ongoing safe and secure operation of the transmission system
- ◆ ~30 GW plant has been through these processes

Drivers for Change

- ◆ Paper 07/35 presented to GCRP in September 2007
 - ◆ ‘....concerns expressed by members of the GCRP....’
 - ◆ The introduction of additional technical performance requirements in the Guidance Notes beyond the requirements of the Grid Code
 - ◆ While Grid Code changes are scrutinised by the industry as a whole, performance changes in the Guidance Notes are not
 - ◆ GCRP agreed to establish a Working Group, and a Terms of Reference was agreed
- ◆ Split out the ‘what’ (technical performance requirements) and ‘how’ (process)
- ◆ Working Group Report to be prepared for May 2008 GCRP for technical performance requirements and February 2009 GCRP for compliance process

Technical Performance Requirements

- ◆ Working Group Report presented to May 2008 GCRP
- ◆ GCRP agreed to proceed to industry consultation
- ◆ D/08 issued on 2 July 2008
 - ◆ Droop Definition
 - ◆ Control System Models
 - ◆ Power System Stabiliser
 - ◆ Operation above 50.5Hz
- ◆ Grid Code changes approved by Authority on 19 November 2008
- ◆ Implementation date of 8 December 2008

Compliance Working Group

- ◆ Working Group met six times during 2008
- ◆ Working Group report presented to GCRP in February 2009
- ◆ GCRP view:
 - ◆ ..a few matters which still required further consideration...
 - ◆ Two weeks for further comment on WGR by industry
 - ◆ WG to then agree way forward (possibly via another meeting)
 - ◆ WG to proceed with industry consultation once agreement has been obtained regarding the outstanding issues
- ◆ Working Group met again in July 2009

Working Group Membership

- ◆ Representatives from:
 - ◆ NGET
 - ◆ Scottish Power Networks
 - ◆ E.ON
 - ◆ RWE Trading
 - ◆ Scottish Power Renewables
 - ◆ Electricity North West
 - ◆ British Energy
 - ◆ Ofgem (Authority Observer)

Industry consultation

- ◆ Further to Working Group discussion, NGET produced:
 - ◆ Legal drafting
 - ◆ Working Group report
- ◆ Working Group members invited to comment to ensure that their views were reflected appropriately
- ◆ Industry consultation issued on 1 February 2010
 - ◆ Responses required by 1 April 2010 (original closing date)

Discussion at February 2010 GCRP

- ◆ Comments about length of consultation document
- ◆ Desire to have longer consultation period
- ◆ Questions over requirement to change other codes
- ◆ Can anything be done to improve engagement during the consultation period?

Objectives for today

- ◆ To highlight process followed to get to where we are
- ◆ To highlight the processes involved with compliance
- ◆ To raise awareness of proposals for those not closely involved in working group deliberations
- ◆ To explain the requirement for changes to other codes
- ◆ To help you provide your consultation responses
- ◆ To explain the way forward

Industry Information Session: Compliance

24 March 2010, St Catherine's Lodge, Wokingham



nationalgrid

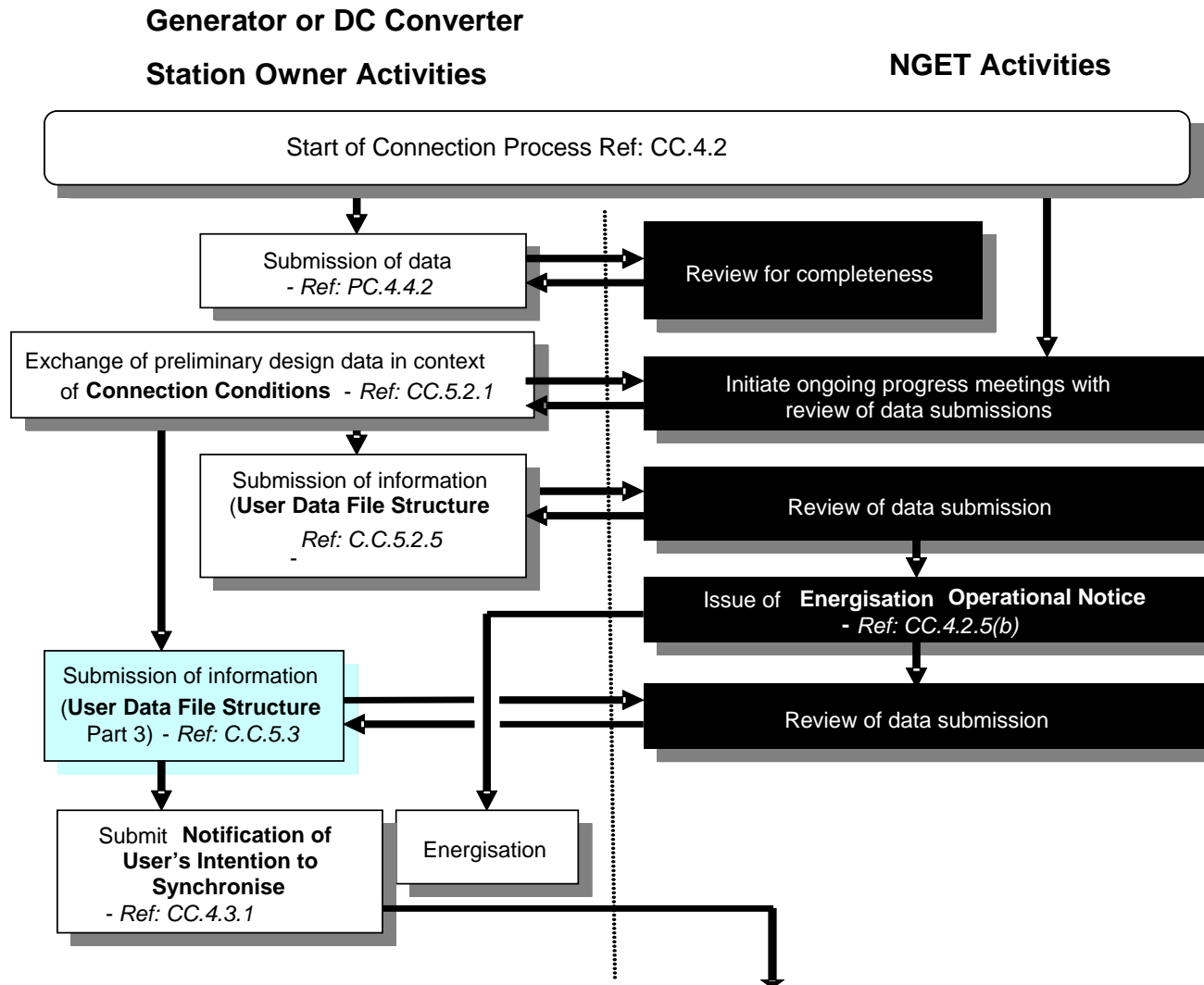
The power of action.™

4. New Connections

- ◆ Illustrative Compliance Process (Process 1) for New Power Stations/DC Converter Stations - Appendix CC.A.9

Steve Hoar

Illustrative Compliance Process (Process 1) for New Power Stations/DC Converter Stations



Appendix 12
CC.A.12

USER SELF CERTIFICATION OF COMPLIANCE (Interim/Final)

Power Station/ DC Converter Station	[Name of Connection Site/site of connection]	User:	[Full User name]	Registered Capacity (MW) of Plant:
--	--	--------------	------------------	---

This **User Self Certification of Compliance** records the compliance by the **User** in respect of [NAME] **Power Station/DC Converter Station** with the **Grid Code** [or in the case of LEEMPS/LEEMDCCS those provisions of the **Grid Code** with which the **Distribution Code** requires the LEEMPS/LEEMDCCS to comply] and the requirements of the **Bilateral Agreement and Construction Agreement** dated [] with reference number []. It is completed by the **Power Station/DC Converter Station** owner in the case of **Plant** and/or **Apparatus** connected to the **National Electricity Transmission System** and for **Embedded Plant**. For LEEMPS/LEEMDCCS a **User Self Certification of Compliance** shall also be completed and submitted by the **Network Operator** where CC.3.3.4(a) applies.

We have recorded our compliance against each requirement of the **Grid Code** which applies to the **Power Station/DC Converter Station**, together with references to supporting evidence and a commentary where this is appropriate, and have provided this to **NGET**. A copy of the **Compliance Statement** is attached.

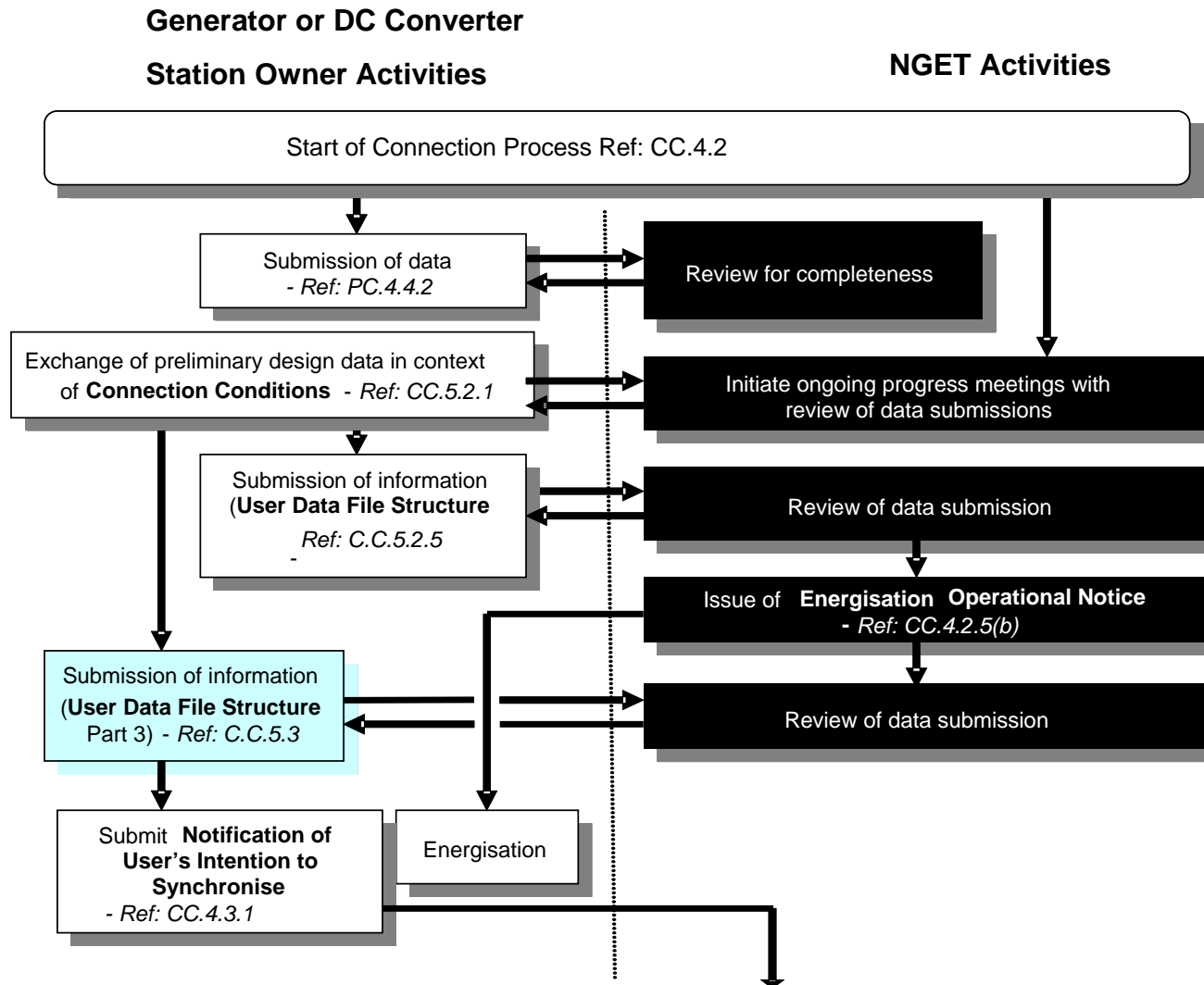
Supporting evidence, in the form of simulation results, test results, manufacturer's data and other documentation, is attached in the **User Data File Structure**.

The **User** hereby certifies that, to the best of its knowledge and acting in accordance with **Good Industry Practice**, the **Power Station** is compliant with the **Grid Code** and the **Bilateral Agreement** in all aspects [with the following **Unresolved Issues***] [with the following derogation(s)**]:

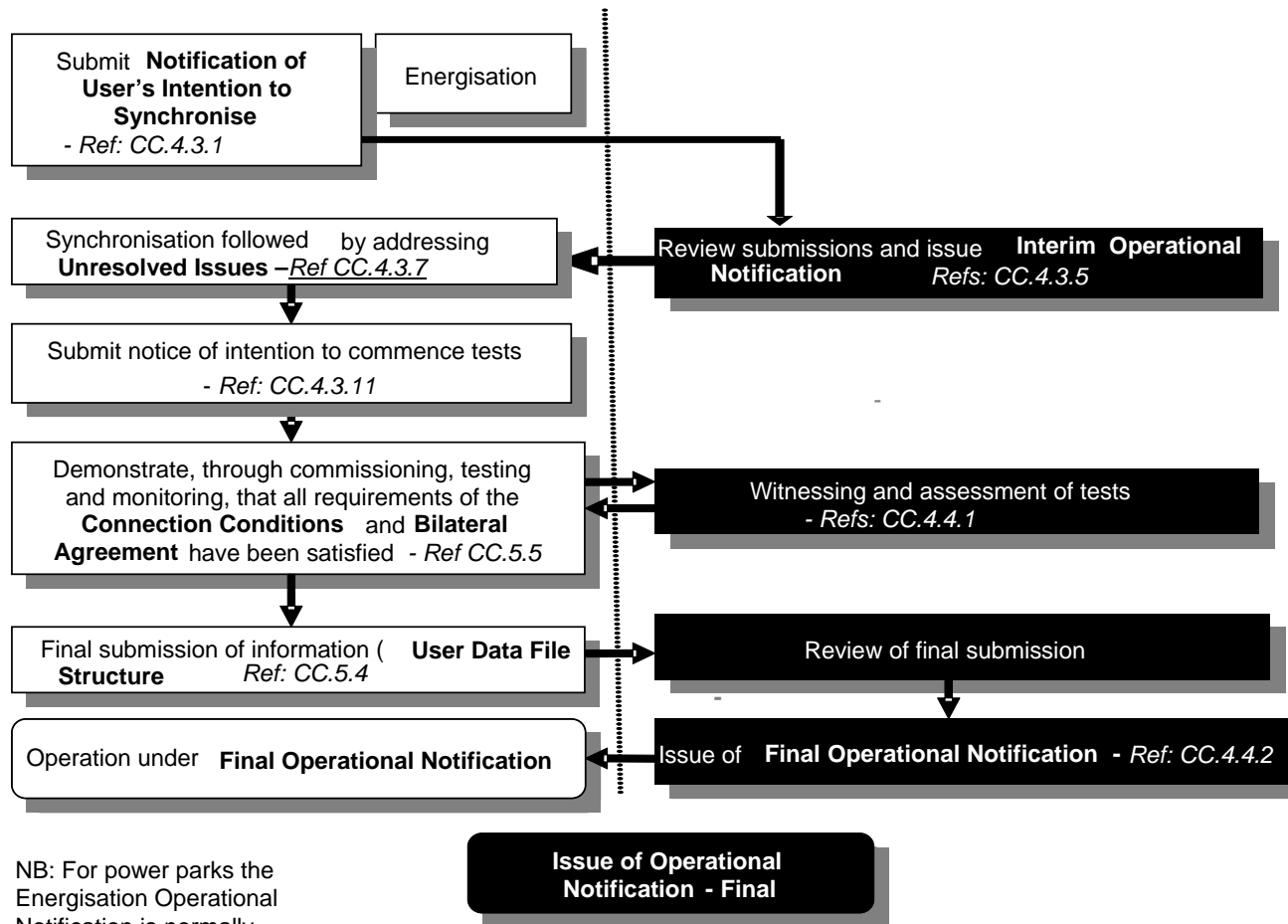
Connection Condition	Requirement	Ref:	Issue

Compliance certified by:	Name: [PERSON] Signature: [PERSON] Date:	Title: [PERSON DESIGNATION] Of [User details]
---------------------------------	--	--

Illustrative Compliance Process (Process 1) for New Power Stations/DC Converter Stations



Process 1 Continued.....



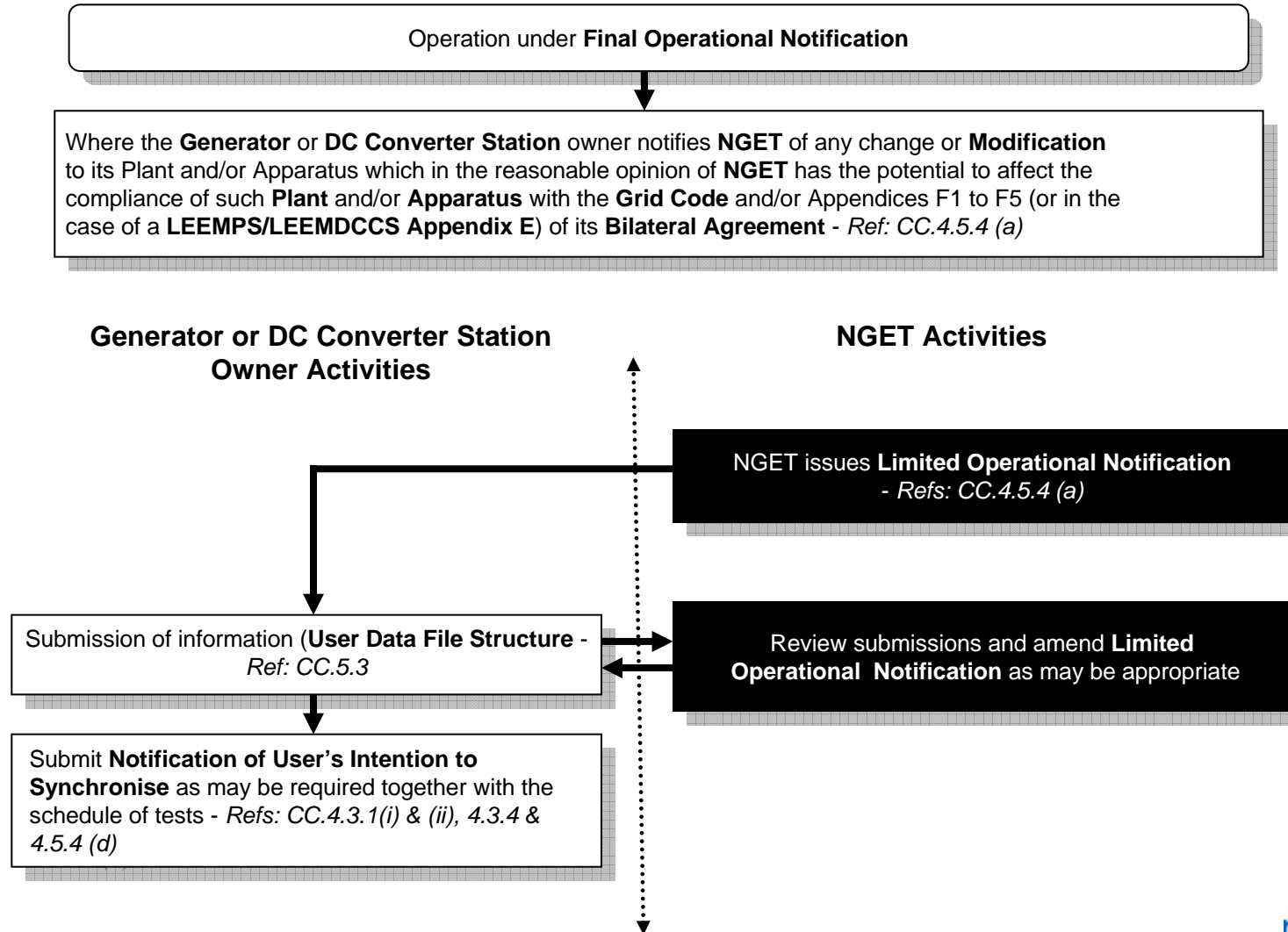
NB: For power parks the Energisation Operational Notification is normally Issued at the same time as the Interim Operational Notification

5. Modifications

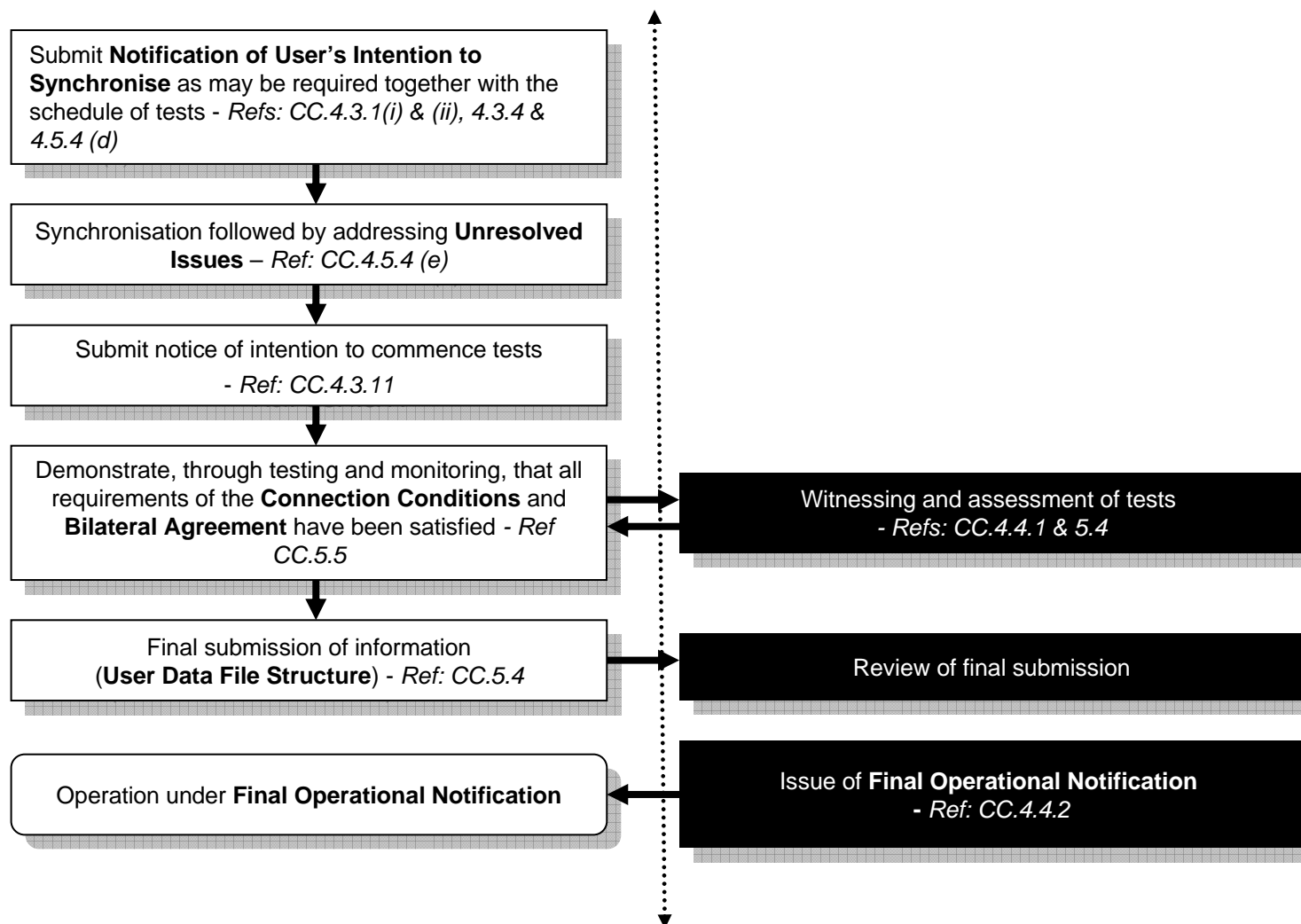
- ◆ Illustrative Compliance Process for Change or Modification (Process 2) – Appendix CC.A.15

Steve Hoar

Illustrative Compliance Process for Change or Modification (Process 2)



Process 2 Continued.....



Main body of compliance text

- ◆ Processes as already described.
- ◆ Requirements for simulation studies – see Appendix 8
- ◆ Practicalities of how to carry out testing of:
 - ◆ Synchronous plant, see App CC.A13
 - ◆ PPMs including offshore PPMs, see App CC.A14
 - ◆ Includes advice on preparation of test procedures
 - ◆ Signals needed
 - ◆ Effective & efficient alternatives acceptable
- ◆ For PPMs optional method to help reduce risk
 - ◆ Manufacturers Data & Performance Report

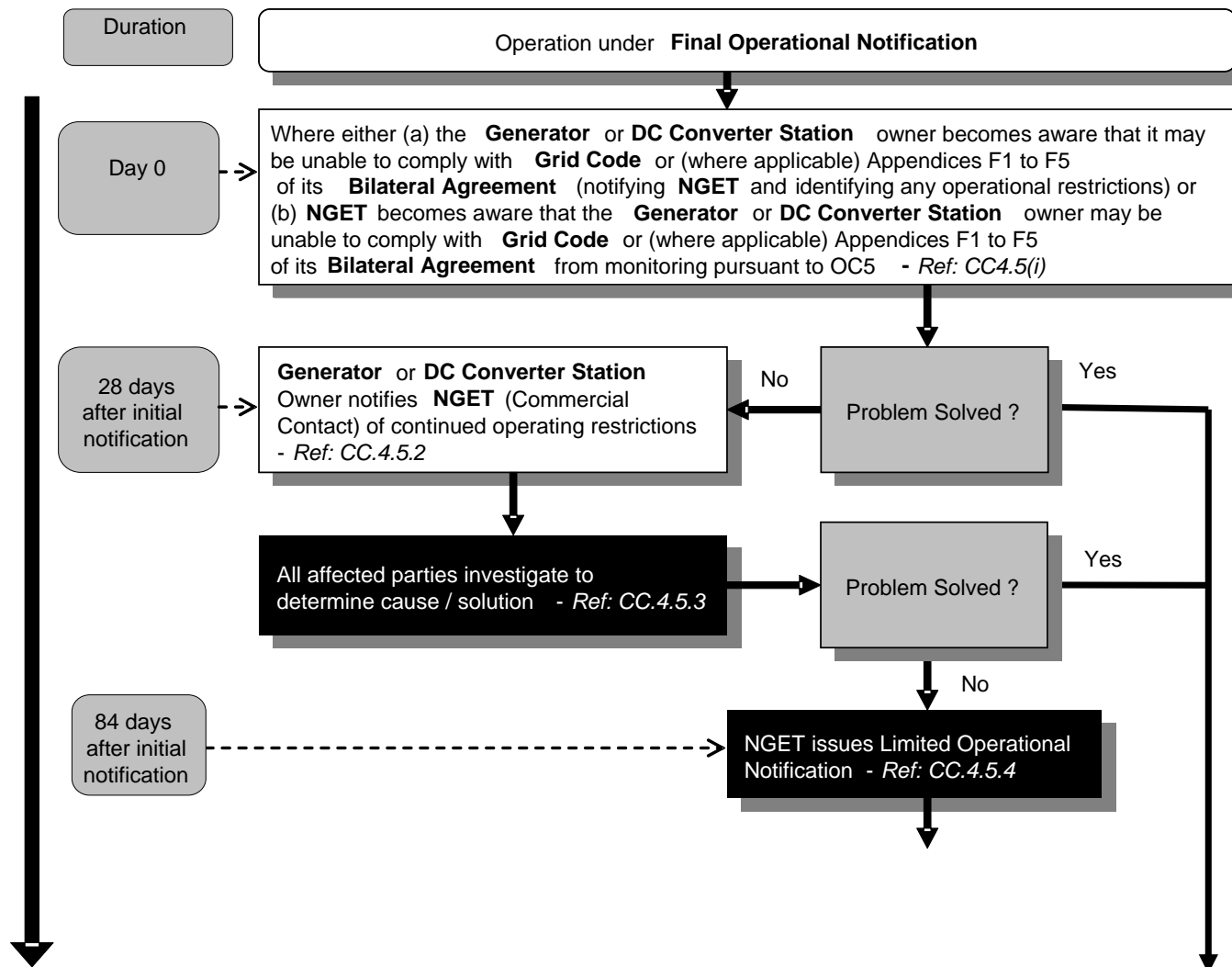
Helge Urdal

6. Lifetime Compliance

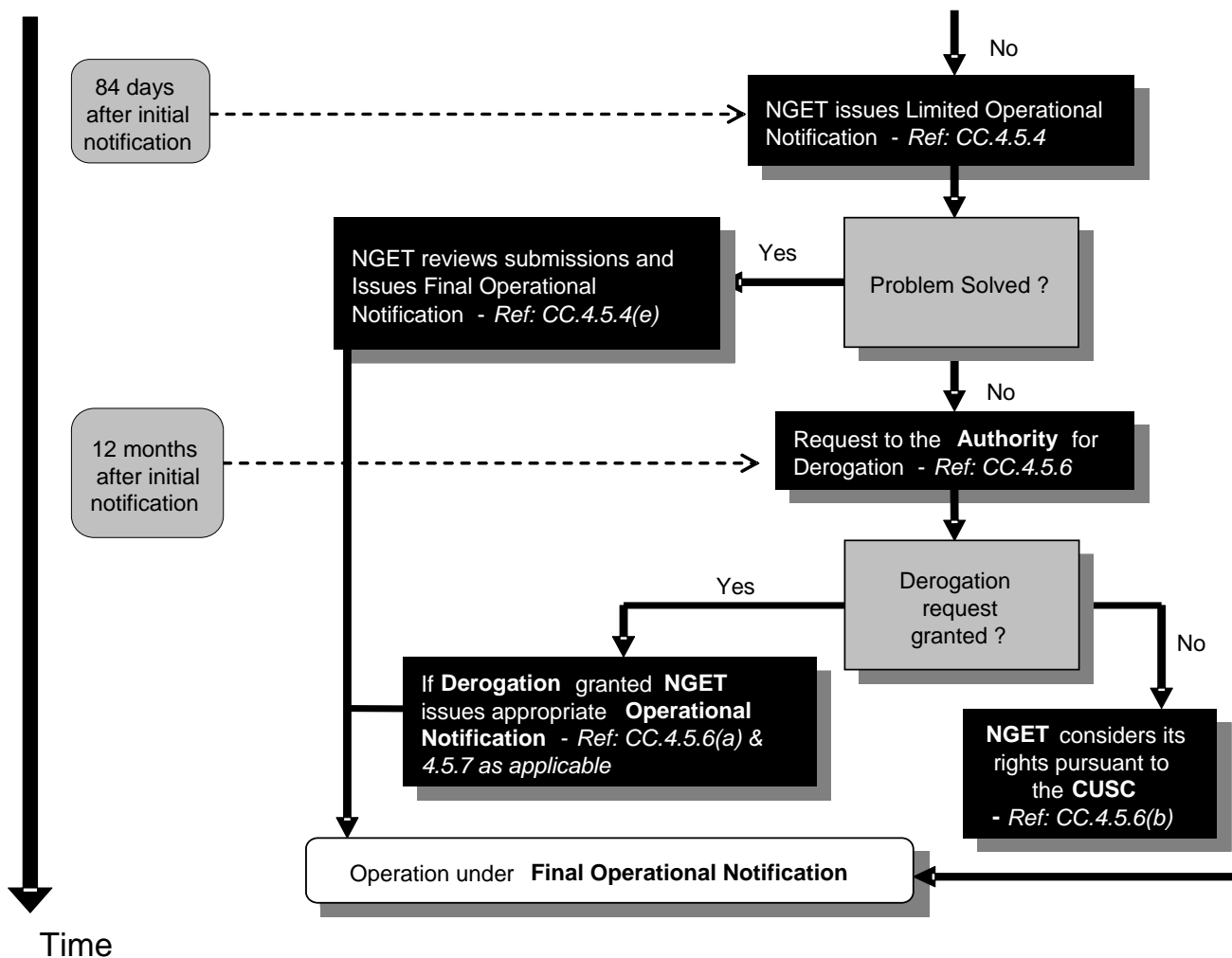
- ◆ Illustrative Compliance Process (Process 3) for Ongoing Compliance - Appendix CC.A.11

Richard Lavender

Illustrative Compliance Process (Process 3) for Ongoing Compliance



Process 3 Continued.....

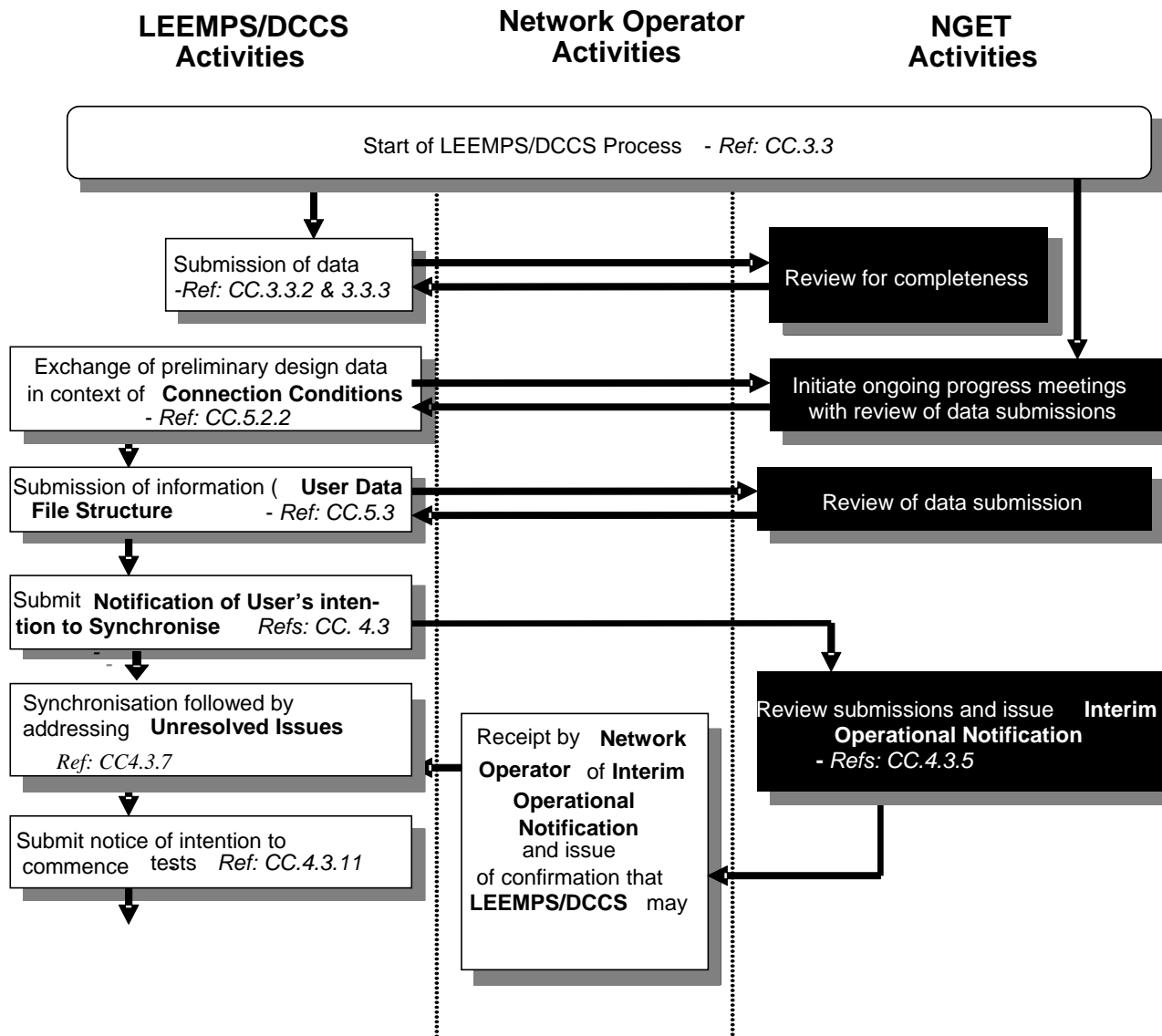


7. LEEMPS

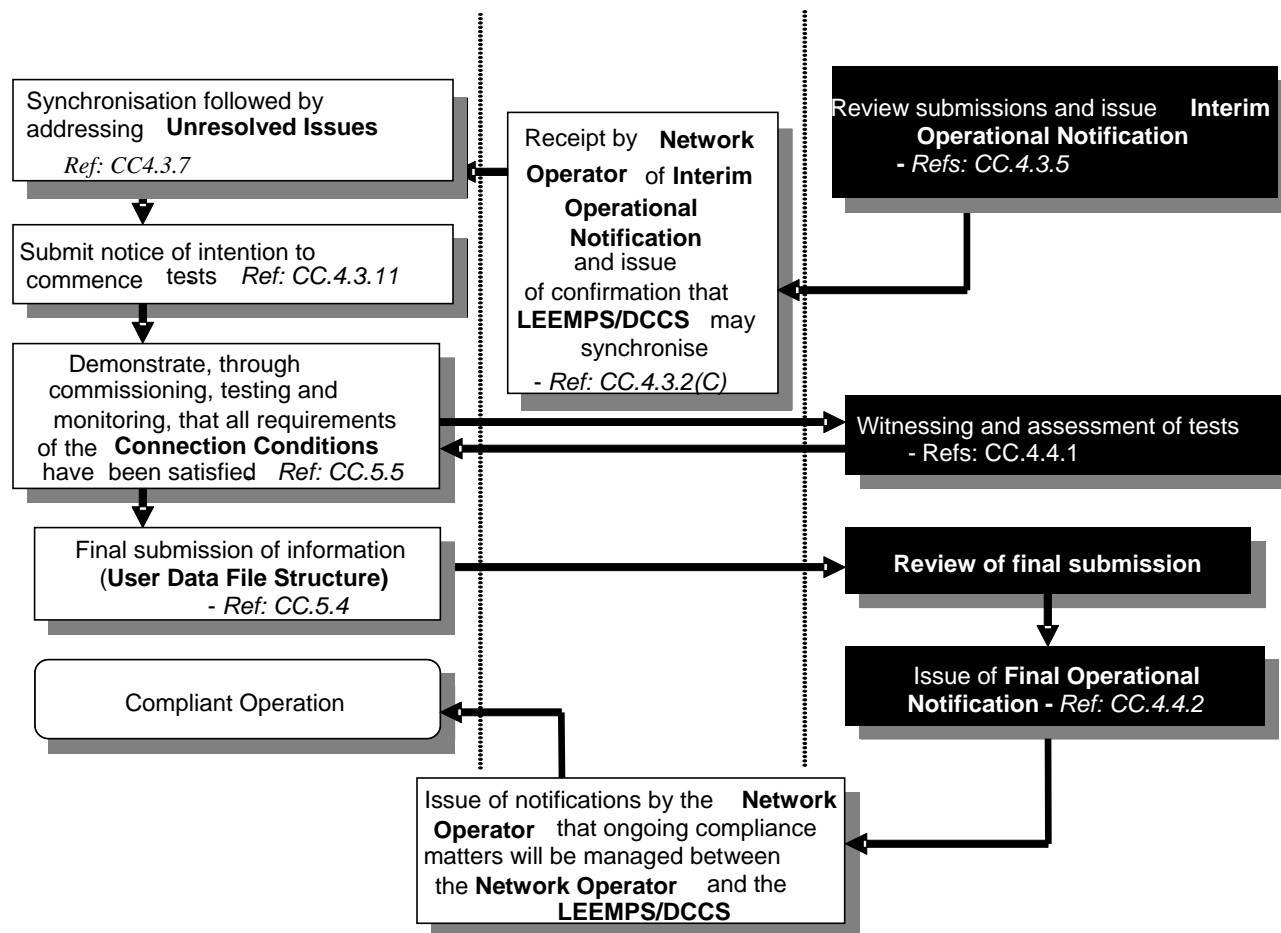
- ◆ Illustrative Compliance Process for LEEMPS/LEEMDCCS (Process 4) - Appendix CC.A.10

Helge Urdal

Illustrative Compliance Process for LEEMPS/LEEMDCCS (Process 4)



Process 4 Continued.....



Grid Code Generator Compliance

Industry Info Session March 2010



nationalgrid

The power of action.™

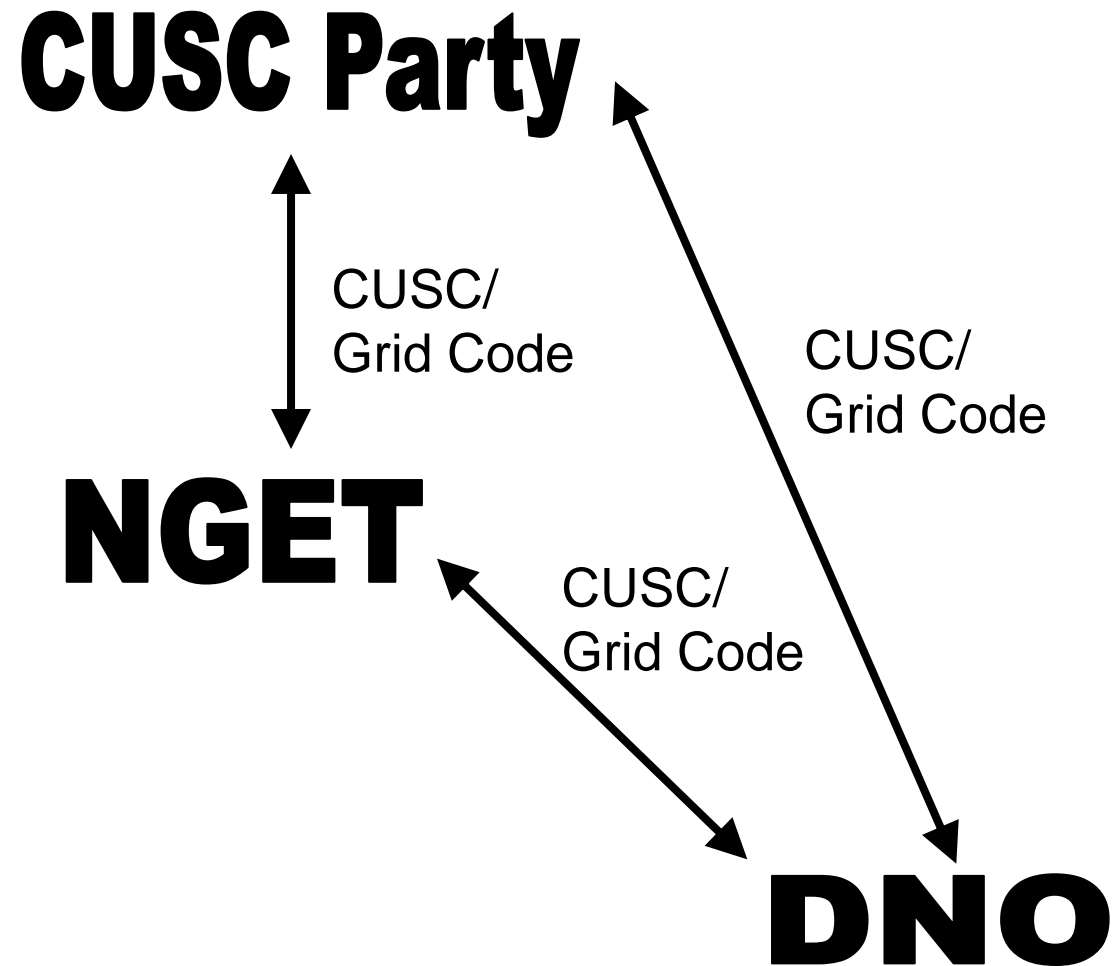
A/10 Consequential Code Changes - Overview

- ◆ Changes required to:
 - ◆ Distribution Code
 - ◆ DCUSA
 - ◆ CUSC
- ◆ Required by a proposed change to the compliance process for Licence Exemptible Embedded Medium Power Stations (LEEMPS)
- ◆ The corresponding code change processes have been initiated

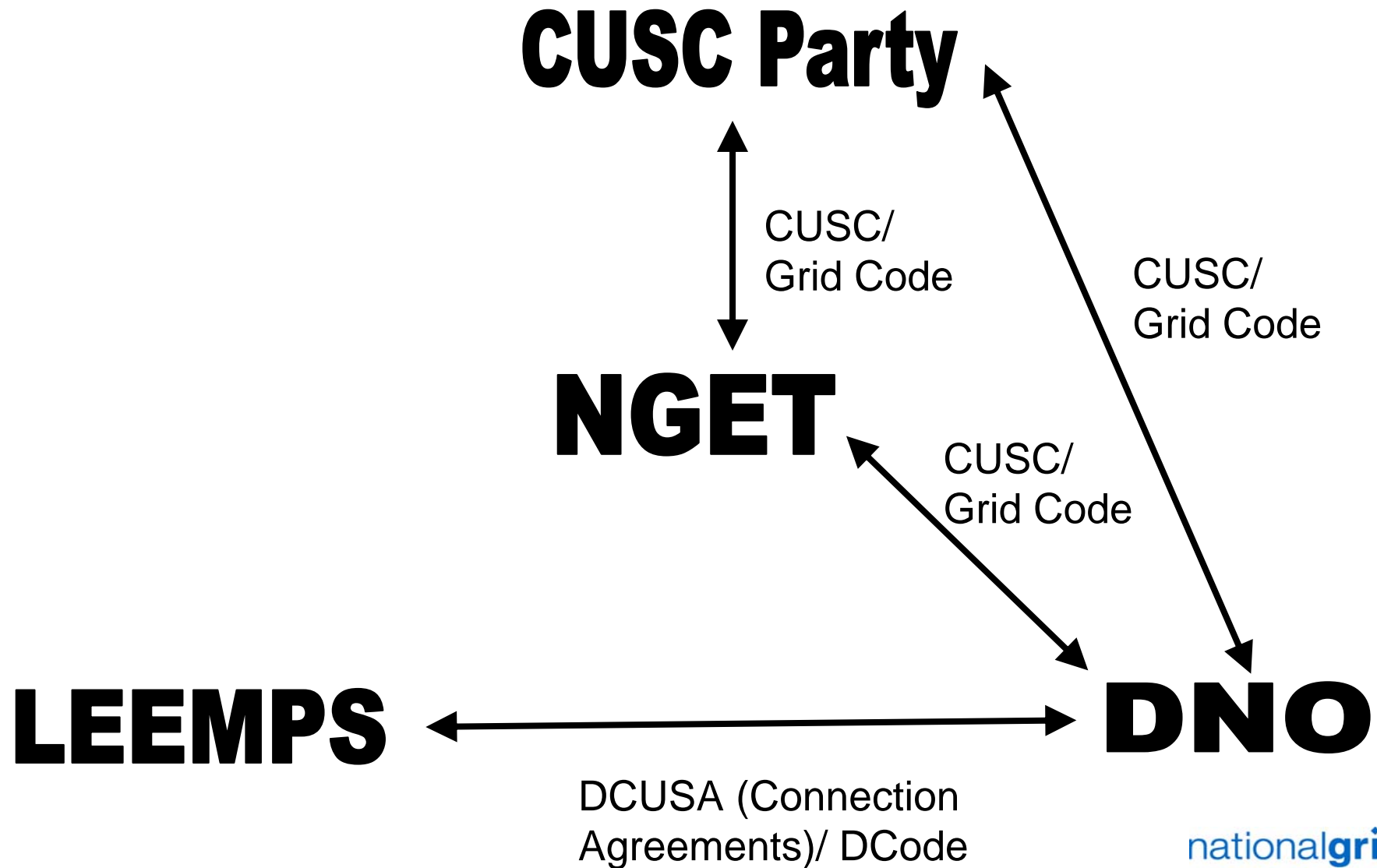
LEEMPS - Background

- ◆ After class exemption, no direct contractual/ codified relationship between CUSC parties (inc NGET) and LEEMPS generator
- ◆ 50 - 100MW generators
- ◆ Distribution connected
- ◆ Under A/10 proposals, DNO can nominate for National Grid to perform LEEMPS compliance process, in its place
- ◆ Cross Code paper published across the industry

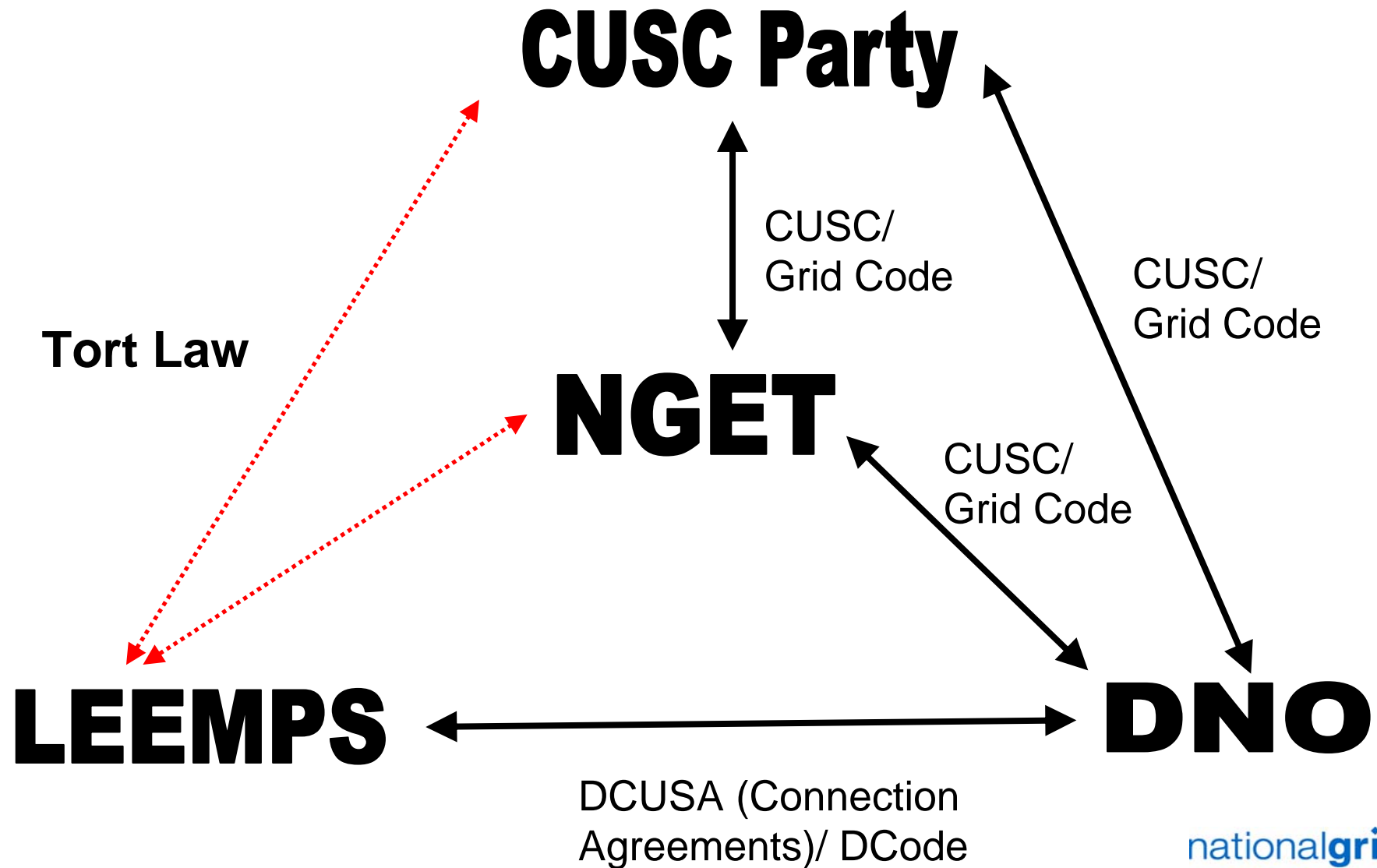
Contractual Relationships I



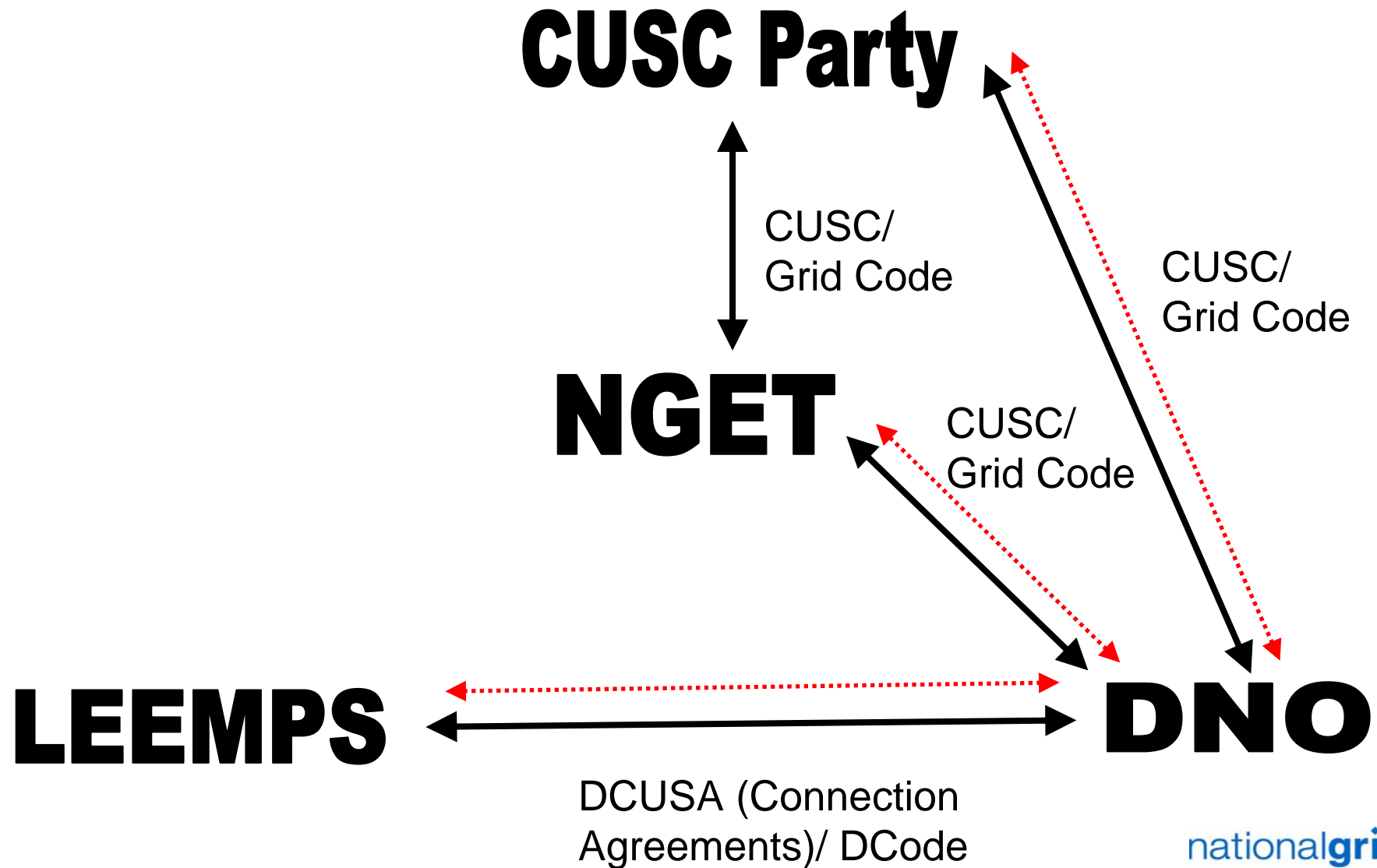
Contractual Relationships II

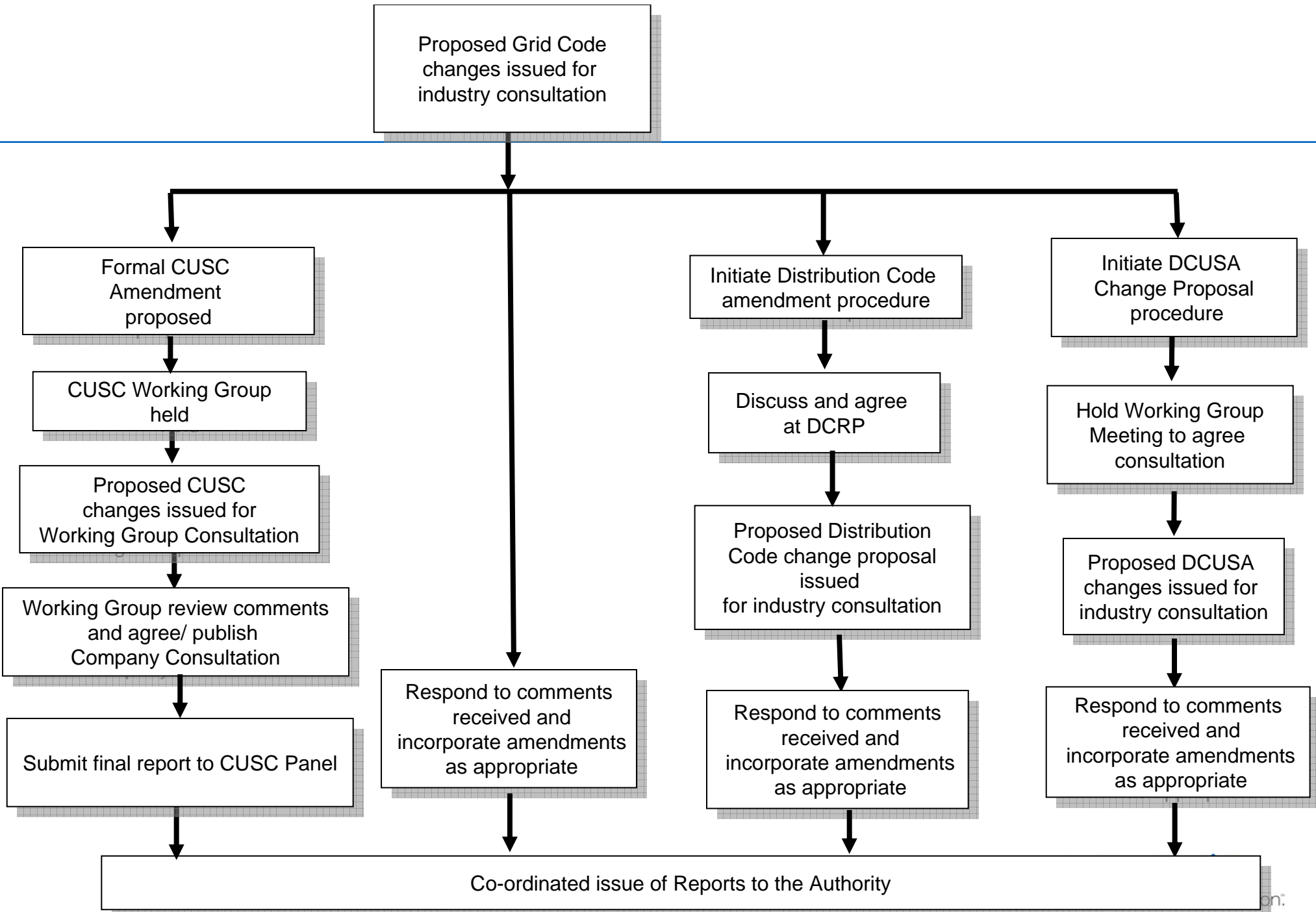


Contractual Relationships III

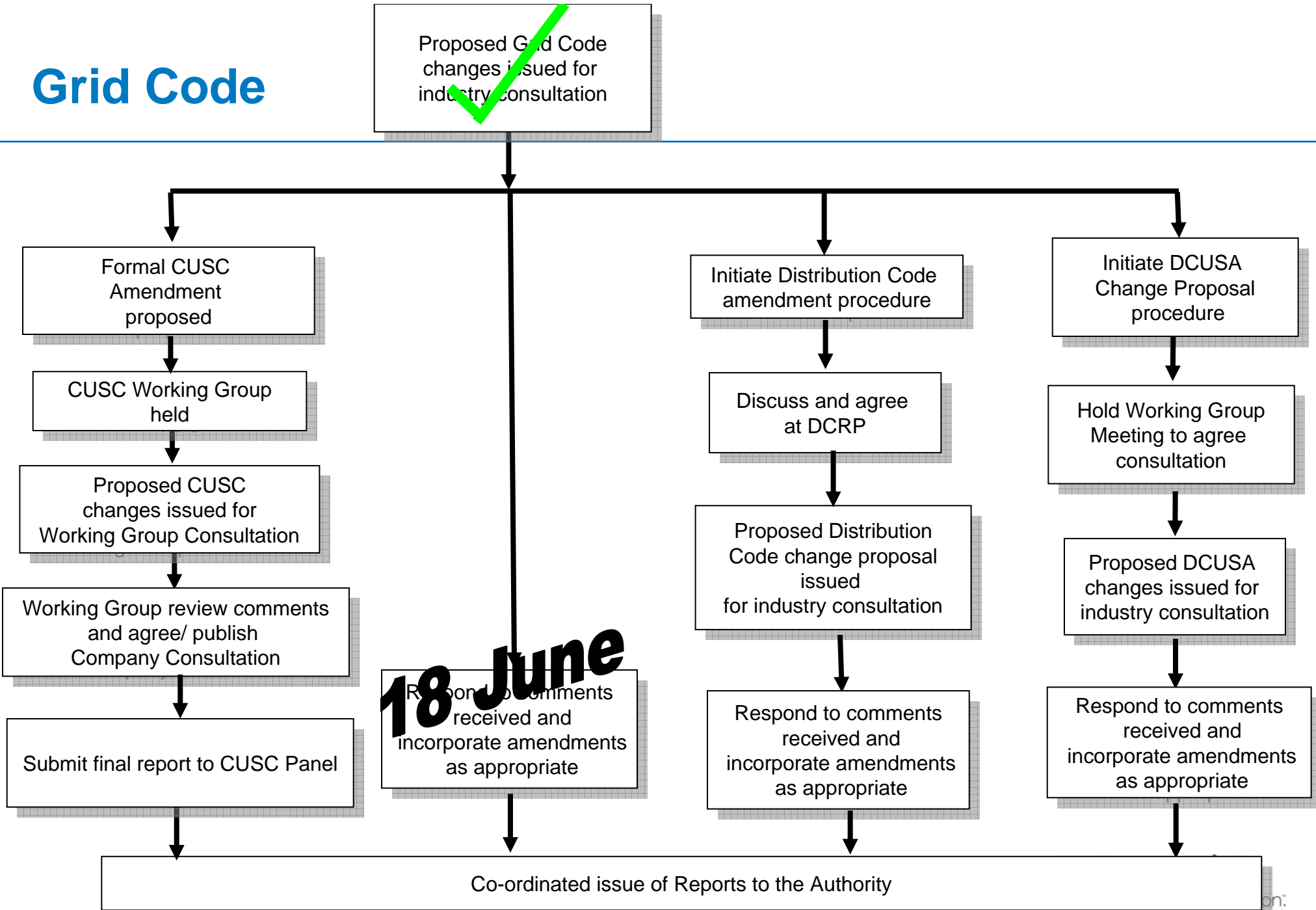


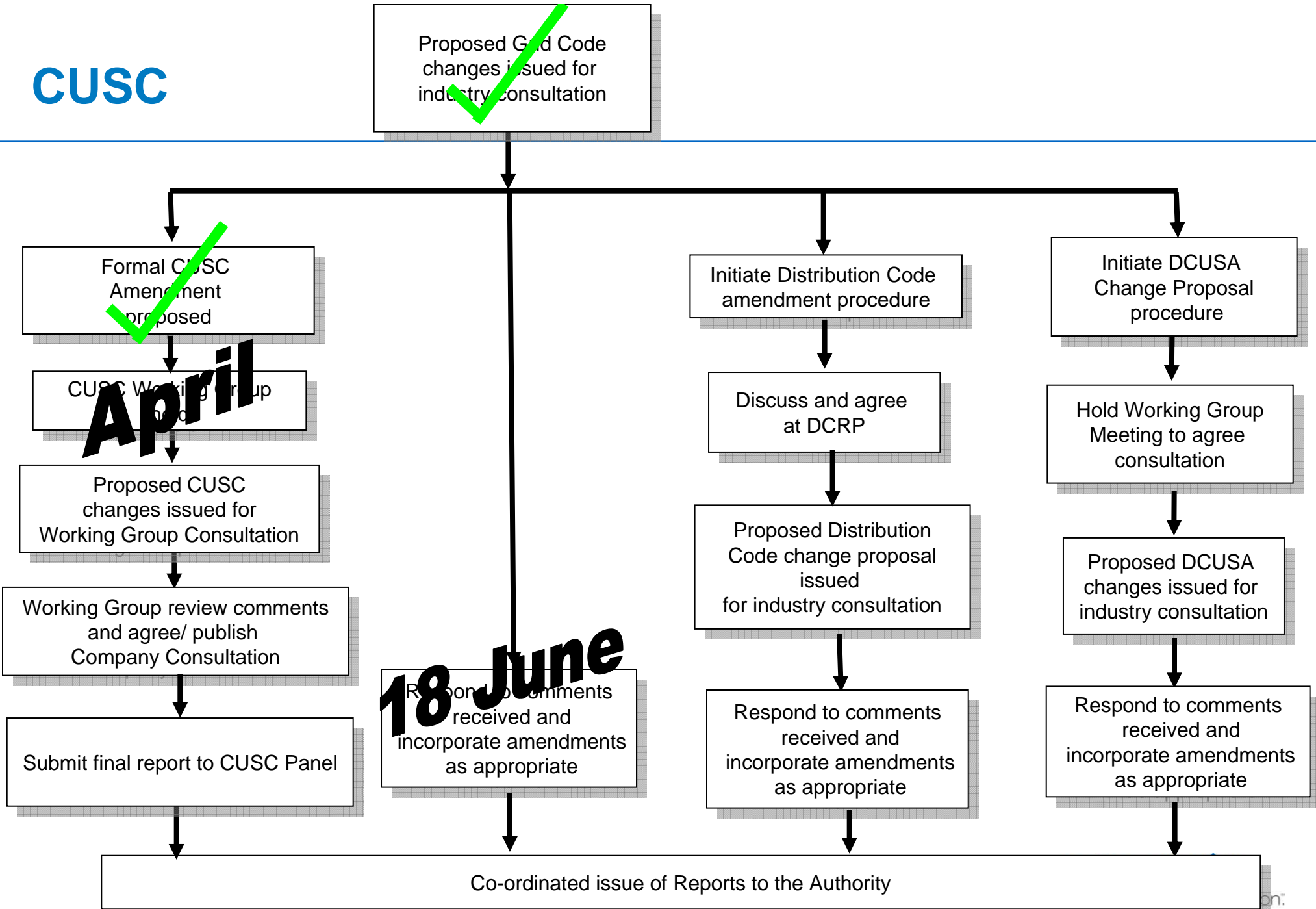
Contractual Relationships IV



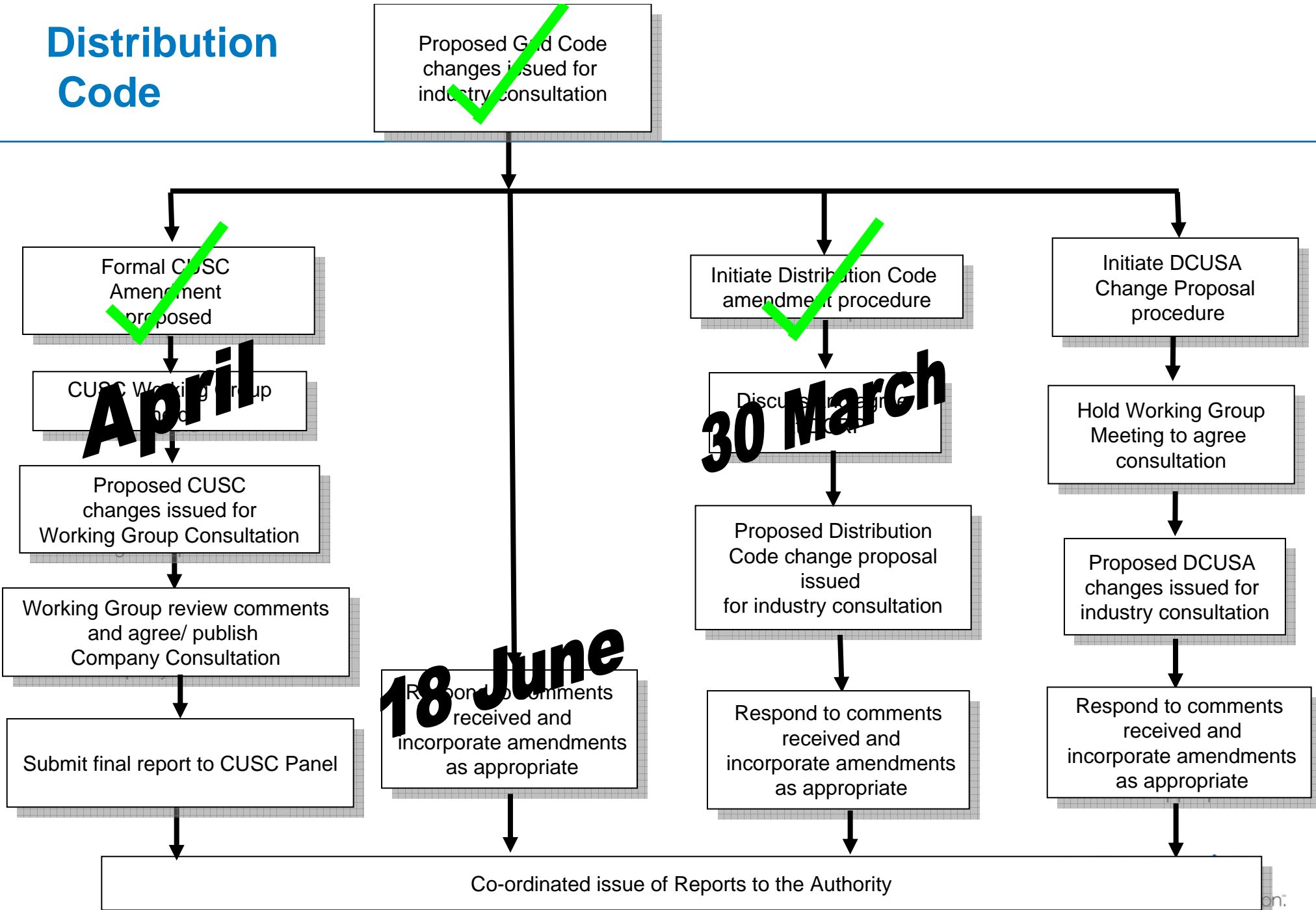


Grid Code

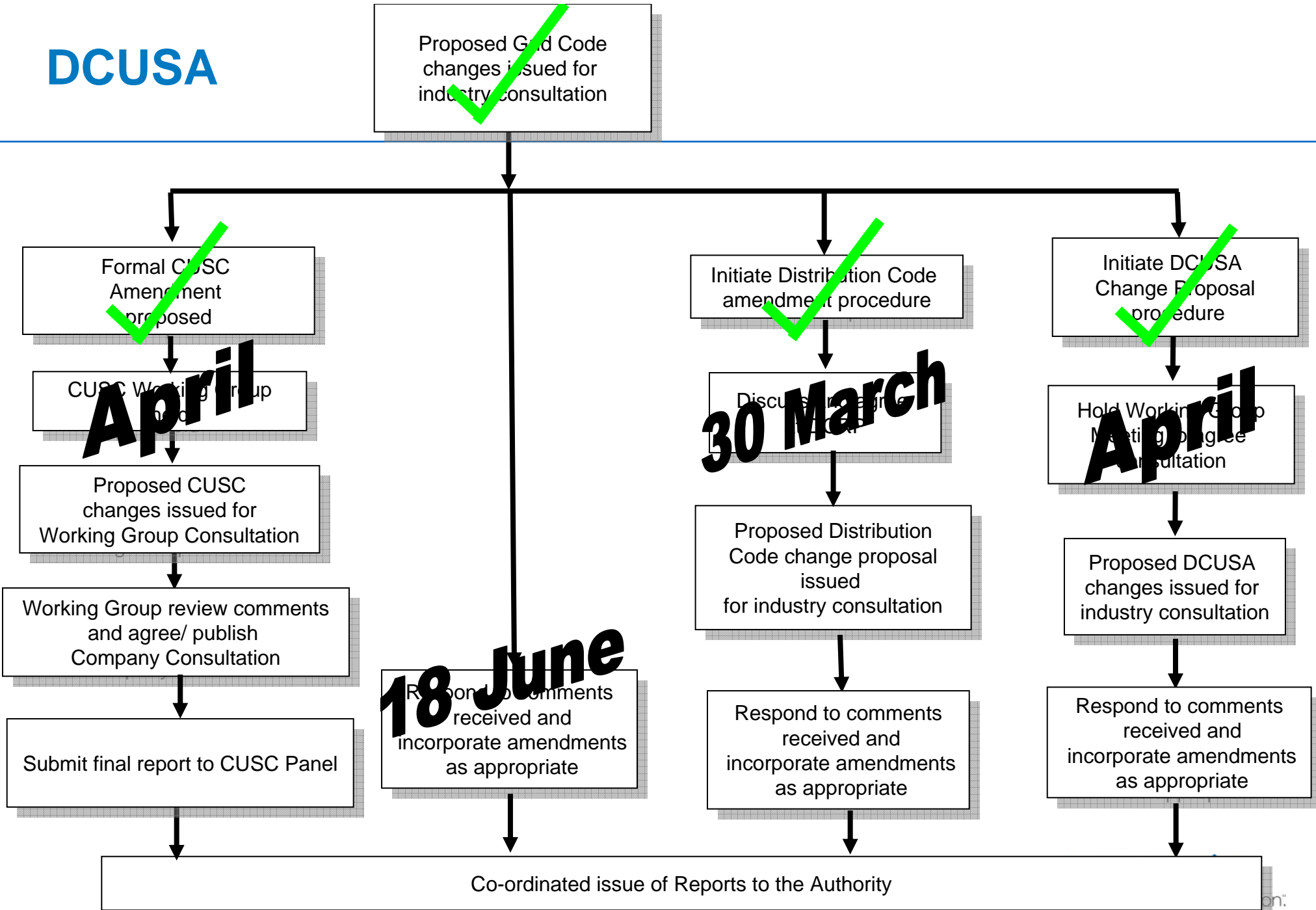




Distribution Code



DCUSA



Addition to Grid Code Consultation drafting

- ◆ Initial discussions held with DCUSA parties
- ◆ LEEMPS not direct signatories to DCUSA but use Connection Agreements with DNO
- ◆ Propose using an equivalent bilateral waiver between NGET and LEEMPS
- ◆ Additional clauses required in Grid Code Consultation (A/10)
 - ◆ Requirement for waiver to be in place for NGET to perform LEEMPS compliance
- ◆ Consultation to be extended to 18th June 2010

Close

Industry Info Session March 2010



nationalgrid

The power of action.™

Next Steps

- ◆ Opportunity for final questions
- ◆ Any views on whether objectives have been met?
- ◆ Clarity on key dates going forward

- ◆ Have a safe journey home