

## **Connection Charging Methodology**

**Review of the Charging Methodology for Assets  
Operating Beyond the End of Their Replacement Period**

**Conclusions Report for a Longer Term Solution**

**April 2002**

## Background

1. Under Licence Condition C7B of The National Grid Company plc's (National Grid) transmission licence, which came into effect on the implementation of the designated Connection and Use of System Code (CUSC), National Grid is required to determine and conform to a Connection Charging Methodology, approved by Ofgem.
2. National Grid must also prepare a statement of the Connection Charging Methodology to be approved by Ofgem. Ofgem consulted on the charging methodologies and approved the Connection Charging Methodology subject to a condition that National Grid:

*“should review its Connection Charging Methodology regarding assets operating beyond their replacement period and provide a report to Ofgem of the results of its review, with reasons in reasonable detail for its conclusions. National Grid is then required, if appropriate, to initiate the procedure set out in the transmission licence for changing its methodology so that any such change could take effect from 1 April 2002.”*

3. In order to meet this condition, National Grid discussed the issue at the industry-wide Transmission Charging Methodologies Forum (TCMF) and published a review paper on the issue, further seeking Users' views. The Connection Charging Methodology Review Paper (CCM-R-01), published on 8 August 2001, discussed the charging methodology for assets which are operating beyond their Replacement Period.
4. Following this review National Grid recognised the need to adopt a short term solution to address the issue identified which would be implemented by 1 April 2002 and then to undertake to develop a longer term solution for assets operating beyond their replacement period.
5. National Grid issued a Modification Proposal document (CCM-M-03) on 20 November 2001 detailing the short-term proposals. This detailed minor changes to the Charging Methodology whereby Users who agreed to an extension to the Replacement Period term within their bilateral connection agreement would not need to be charged the 2.5% default charge. Agreements to vary sought to extend the Replacement Period to age plus one year for those sites with assets operating beyond their original replacement period. This process was concluded on 21 December 2001 and a report issued to Ofgem. On 17 January 2002 Ofgem decided not to veto the modification and the change was implemented with effect from 1 April 2002. This change effectively removed the need for the 2.5% default charge for those Users who had agreed to vary and is effective for one year to 31 March 2003.
6. National Grid has then set out to identify in consultation with Users a longer term solution for assets operating beyond their replacement period and this report details the conclusions of this review process and sets out a framework for a more enduring process.

## Longer Term Solution

7. National Grid initiated discussions on the appropriate longer term process for the Connection Charging Methodology regarding assets operating beyond their replacement period through publications on the web-site, presentations at TCMF meetings and dedicated workshops with Users. This built on previous discussions and issues raised during the development of the short term process. The aim was to develop a framework for a longer term solution. This framework should cover a process for obtaining agreement where works are required at a site, establishing ongoing arrangements when no works are required, determining the charging rules in each case and to outline any necessary changes to the Connection Charging Methodology and contractual arrangements.

### Proposals Reviewed – Description of Scenarios

8. National Grid developed with Users a process for obtaining agreement to asset replacement at a Connection site and also considered what charging options may be available to Users when assets operate beyond their replacement period.
9. Three scenarios were put forward by National Grid which tried to set out the high level situation where assets might operate beyond their Replacement Period. Flowcharts were developed to illustrate the different scenarios and to act as an easy means by which they could be developed. The scenarios and flowcharts were developed with input from Users through the TCMF and the dedicated workshops in order to capture a longer term framework. The three scenarios and some issues raised from shared sites are detailed in Annex 1 of this report. The Annex represents the outcome of the discussion and development of the scenarios.
10. The basis for all three scenarios was the need for more discussion and interaction with Users on an on-going basis in order to better facilitate and pre-empt discussion of assets operating beyond their replacement period. This approach and the need for a framework transparent to all Users so that they are aware of the procedures involved and the options available to them were supported by Users.

### Scenario 1 - Works Required Process

11. Scenario 1 dealt with the situation where asset condition has suggested that works are required on Connection Assets and involves informing the User, or Users at a shared site, and discussing and developing solutions and proposals in a timely fashion. Following evaluation of options an Offer would be made to the User(s) with an agreement to vary their existing Bilateral Connection Agreement and if applicable provide a construction agreement. If the offer was acceptable to all parties then the agreements would be varied and the asset replacement started. Charges would be calculated in the normal way for any new assets from an agreed charging date. If this charging date was beyond the end of the original Replacement Period, then the charges for assets operating for the period from the end of the Replacement Period to the new charging date would consist of maintenance and transmission running costs only. If the User(s) and National Grid cannot reach agreement then it was envisaged that there would be provision for the Offer to be referred to Ofgem for determination.

### Scenario 2 - Status Quo

12. Scenario 2 in essence described the status quo where asset condition does not suggest any replacement works are necessary at any particular point in time and the User is willing to continue with the current arrangements. In this scenario, it was suggested that the ongoing charges beyond the end of the Replacement Period would consist solely of maintenance and Transmission Running Costs. Hence there would be no default 2.5% charges beyond the replacement period and the Users requirements would be assumed to be enduring. This scenario would link back to scenario 1 so that at any time before or after the Replacement Period, National Grid would be able to initiate the works required process described in Scenario 1 to meet its licence and statutory obligations should asset condition deteriorate.

### Scenario 3 - Finite Life Extension

13. Scenario 3 considered a finite period life extension of a site beyond the end of the original Replacement Period. This process would be instigated by the User in the case where the User knows that they will be exiting a site after a number of years and would prefer to hedge against the risk of assets requiring replacement during this finite period. In this scenario, it was suggested that Users would pay an application fee and for any detailed condition assessment costs. National Grid would then, subject to asset condition, make a finite period life extension offer and charges would be set to reflect the risk of assets having to be replaced during the finite period.

### Comments on Scenarios Raised by Users

14. During the review process, Users raised the following points on the scenarios.

#### Scenario 1

15. Users queried what would happen, for instance, if agreement was reached for Asset Replacement in Scenario 1 at a date which was 3 years beyond the Replacement Period and then the asset needed replacing at Replacement Period plus 2 years. I.e. the assets did not reach the proposed date of replacement. National Grid noted that the main issue was to obtain agreement to asset replace and suggested that Users would be sheltered from events once agreement had been reached and charges would not be varied until the proposed replacement date.
16. Users also raised the question of how charges would be levied if refurbishment of the assets was agreed as the appropriate option. National Grid noted this would need to be incorporated into the framework and suggested that the most obvious route would be to charge for these works either through the site specific maintenance charge or through a one-off payment.

#### Scenario 2

17. Users noted that in Scenario 2, Users would still want the opportunity to discuss the 'options' before planning any asset replacement if an asset failed in service. National Grid noted therefore that the Scenario 1 process needed to encapsulate

an urgent procedure to cope with this situation. Some Users felt it may be possible to agree certain agreed actions in the event of a failure in advance.

### Scenario 3

18. Several issues were raised by Users regarding scenario 3. Users queried how the liabilities from existing agreements at the site would be transferred to a finite period agreement, i.e. how the existing bilateral connection agreement for the site would sit with the new agreement. Users noted that although the process should address individual assets, the principle of the proposal was based around reaching agreement on a site basis. Such an approach would need to detail how assets of different lives would be treated at the same site and would be complicated by other issues such as the asset condition being good but the overall site condition poor. Users queried how or whether partial terminations could be treated if the concept was on a site basis.
19. Users wished to understand how the end of the finite period would be managed and work because ultimately if the User was required to disconnect at the end of the agreed period then effectively the agreement would be an early disconnection notice. Users were concerned that this raised the issue of commercial confidentiality. Users wanted to clarify if there were any options for re-negotiation at the end of the finite period or if any offer would take into account the situations where Users might be able to offer 'free' spares in return for reduced charges.
20. A level of application fee and a charging calculation for scenario 3 which is transparent and reflective would need to be agreed. Overall Users noted that the expected timeframe for the finite period (5 to 10 years) was unlikely to be compatible for most parties. In most cases Users worked on much shorter time horizons which would make this option effectively impractical.
21. National Grid noted that the concept of Scenario 3 was driven from an assumption that some Users might wish to agree a short life extension beyond the end of the Replacement Period if they knew with certainty when they are going to leave the system. The essence of this scenario is that fixed plans can be made and charges calculated and assessed to end at a finite point in the future. If this finite point is not fixed and in effect can be rolling then the scenario would not make sense.

### Shared Site Issues

22. Users noted that shared sites added a layer of complexity into the process underlying all the scenarios. The main problem identified was where Users had different requirements for their connection at a site. Users noted that it was essential that the process incorporated a process for determining agreement and resolving dispute. In particular, it was noted that the existence of Scenario 3 type arrangements would make it very difficult to define transparent charging rules to cope with changes at shared sites.
23. National Grid noted that the sharing principle does add complexity which is highlighted when agreement is trying to be reached on future plans for a site. It noted that Scenario 1 should encapsulate a means of gaining agreement where Users have different needs, namely offers of an agreement to vary which could be accepted or referred. National Grid noted the comments with regard to Scenario 3 and the additional complexity this would add.

### Wider Issues

24. Several issues were raised during the review process which encompass a wider remit than the review of assets operating beyond their replacement period. Shared sites in particular raise issues over allocation rules and agreement over the optimum asset replacement strategy for all parties. Likewise one of the key issues for non-enduring Users when asset replacing is the liability for termination amounts. Users also felt that the issue of transmission development including change of voltage at connection sites as part of wider transmission development should be reviewed.
25. Several Users noted that the issues associated with the asset replacement process were driven by the charging boundaries. A review of the charging boundaries would provide an opportunity to address a lot of the issues in a different way along with the nature of charges and liabilities.
26. National Grid noted these comments and was supportive of a more widespread review of the approach to connection charging. It was noted further that such a review did not fall within the review of assets operating beyond their replacement period. National Grid believed that this should be addressed as part of a wider review of charging and indeed has already instigated such a review process.

### General Comments

27. Users generally agreed that Scenarios 1 and 2 provided a framework for a longer term solution. Users expressed some concerns over the practicalities of developing Scenario 3. Although agreeing that there were benefits from entering into a finite period life extension and that this provided alternative arrangements for them, the Users felt that the complexity and issues associated with this scenario undermined its value. A particular issue is how such a process would be achieved effectively at shared sites where Users have conflicting requirements regarding replacement versus life extension and duration of extension. A common view emerged that Scenario 3 might be too onerous to implement.

### **Impact on Other Industry Documentation**

28. It is recognised that this review has identified a framework for a longer term solution which will involve both changes to the Charging Statements but also amendments to the Connection and Use of System Code (CUSC). The amendments required to the CUSC will be to section 2.17 which details the contractual requirements and process when replacing connection assets.
29. It is recognised that a CUSC Amendment Proposal CAP012 was submitted in January to the CUSC Panel and this is currently being reviewed by a CUSC Working Group. CAP012 proposes to amend section 2.17 and proposes to develop a process to be followed when replacing connection assets. CAP012 interacts with the current proposals for an enduring solution and it is anticipated that this will overlap with Scenarios 1 and 2 of the longer term framework.
30. No impact on any other Industry Documents has been identified through the process.

## **Conclusions**

### **Framework for longer term arrangements**

31. A longer term framework for assets which are operating beyond their Replacement Period has been discussed and developed with Users over the review period.
32. On the basis of these discussions, National Grid proposes to put in place a longer term framework encapsulating Scenarios 1 and 2 for assets operating beyond their replacement period but proposes that it is not appropriate at this stage to develop charging principles for Scenario 3.
33. Scenario 1 provides a framework for discussing options and coming to agreement on works required at a site. It also involves a means of resolving dispute if agreement cannot be reached. The charging rules can be defined in line with this scenario.
34. Scenario 2 provides an underlying framework for ongoing charges when no works are required at a site and through linking with Scenario 1 ensures that charges for assets operating beyond their Replacement Period can consist solely of maintenance and Transmission Running Costs. Therefore Scenarios 1 and 2 achieve a longer term solution which delivers everything the short term process involved without the need for Agreements to Vary to be issued and signed every year.
35. Scenario 3, whilst conceptually sensible, has a large number of practical problems and indeed Users believe these will negate the usefulness of the scenario. Scenario 1 provides some of the flexibility with regard to discussing different options to asset replacement that Scenario 3 tries to provide. Discussion surrounding Scenario 3 and on issues raised by shared sites identified that there are a number of more fundamental issues that require review regarding connection charging in general. National Grid believes its own and Users' time would be better invested reviewing and developing these issues, rather than creating more complexity through introducing Scenario 3 type options within the current connection charging regime. Indeed National Grid has also initiated the development of terms of reference for a wider review of connection charging.

### **Modifications necessary to the Connection Charging Methodology**

36. The necessary changes include modifications to Chapter 7 of the Charging Statements. The high level changes to deliver the proposed framework are detailed in Annex 2. The precise details of changes to the methodologies would be the subject of future charging methodology modification consultations. It is anticipated that these modifications would be proposed in July 2002, once the outcome of CAP012 is known.

### **Modifications necessary to other Industry documents**

37. Changes will also be required to the CUSC to implement the contractual requirements of the Asset Replacement process as detailed in Scenario 1 and Scenario 2. This in particular will require changes to section 2.17 of the CUSC which covers the Asset Replacement process. It is recognised that the process being developed under the CAP012 CUSC Working Group will need to be

reviewed to identify if it delivers the proposed changes required under Scenarios 1 and 2. The CAP012 process is likely to conclude towards the end of June 2002.

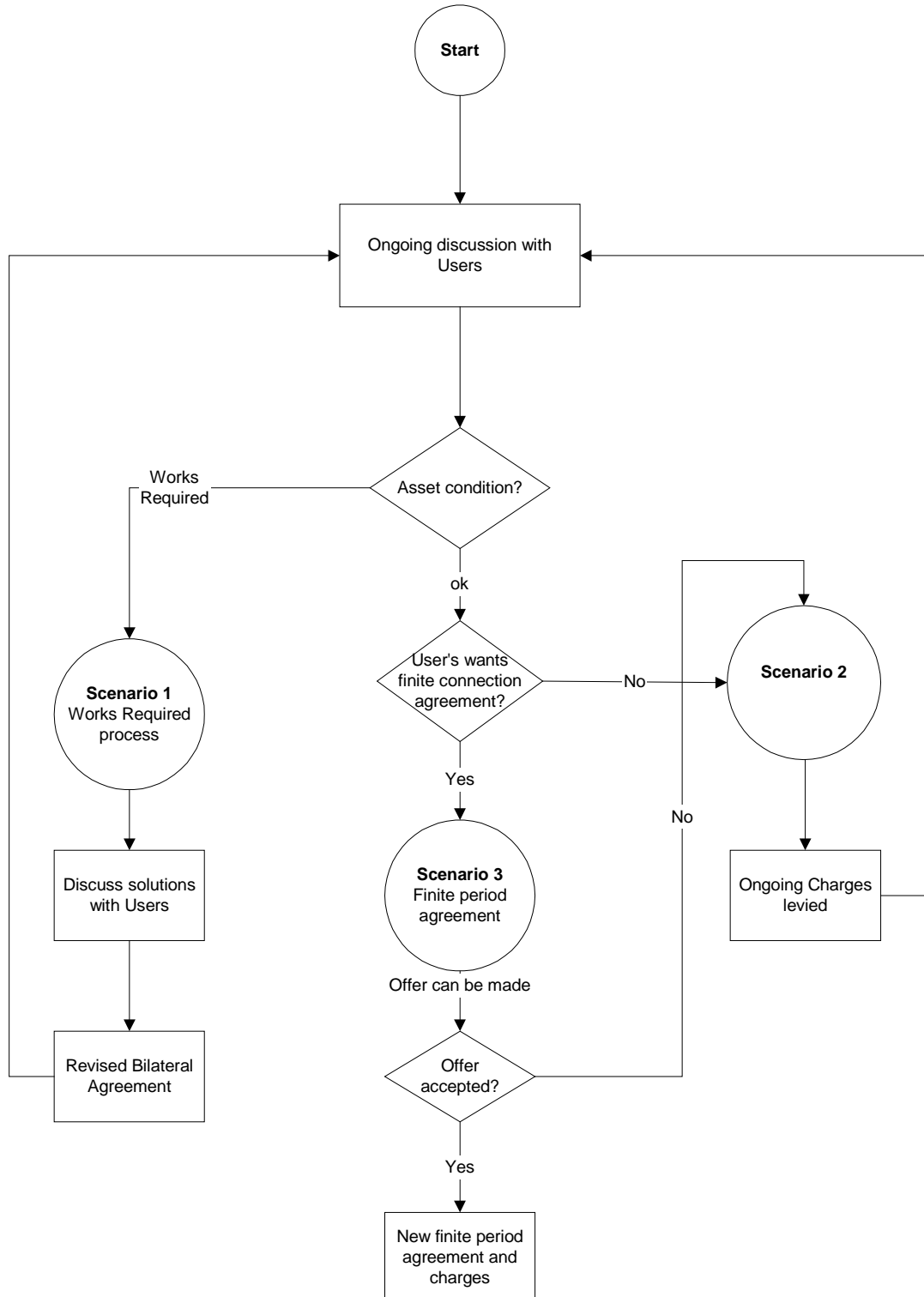
38. National Grid therefore proposes to review the process developed through CAP012 to identify if it is sufficient to deliver the framework of Scenario 1 and 2. If it does not then National Grid may have to bring forward further CUSC amendments. The elements that we have identified as important for an underlying contractual framework for scenarios 1 and 2 are set out in Annex 2. Separate discussions will have to be held with those Users who are not parties to CUSC to develop consistent arrangements.

## **Recommendations**

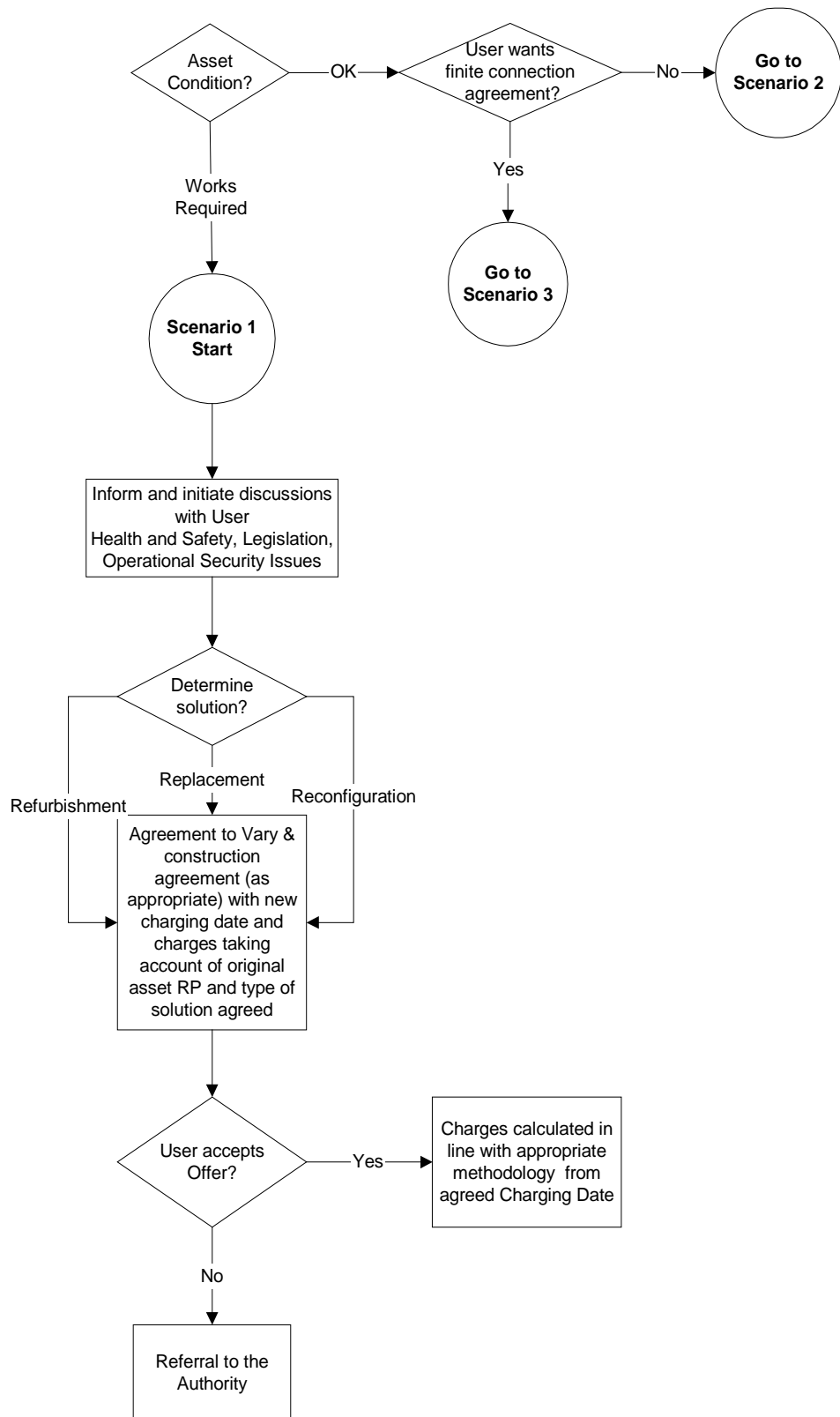
39. We invite Ofgem to:
- Note the review process and endorse the proposed way forward.
  - Note that National Grid may have to follow up CAP012, following its conclusions, with an amendment to the CUSC to implement the enduring framework identified above.
  - Note that National Grid will propose amendments to the Connection Charging Methodology, expected in July 2002.
  - Note that National Grid will ensure consistent arrangements are put in place for those Users who are not parties to the CUSC

## Annex 1 – Replacement Scenarios Flowcharts

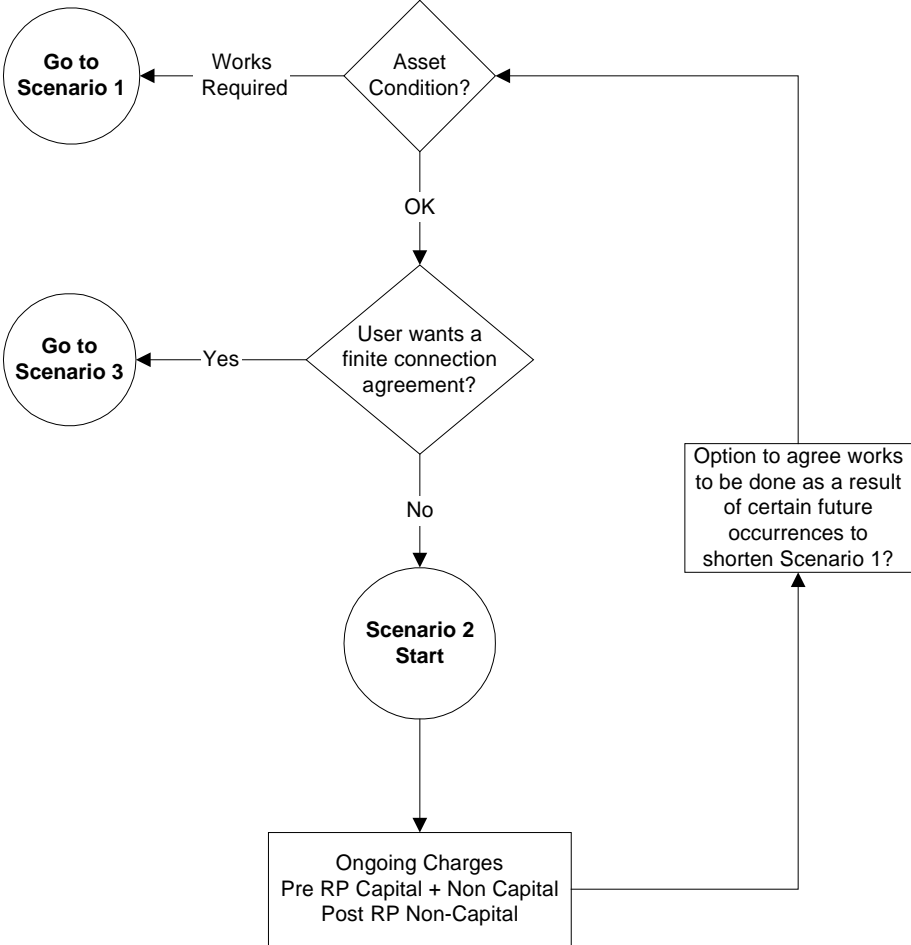
# Enduring Process Overview for Assets Operating Beyond Their Replacement Period



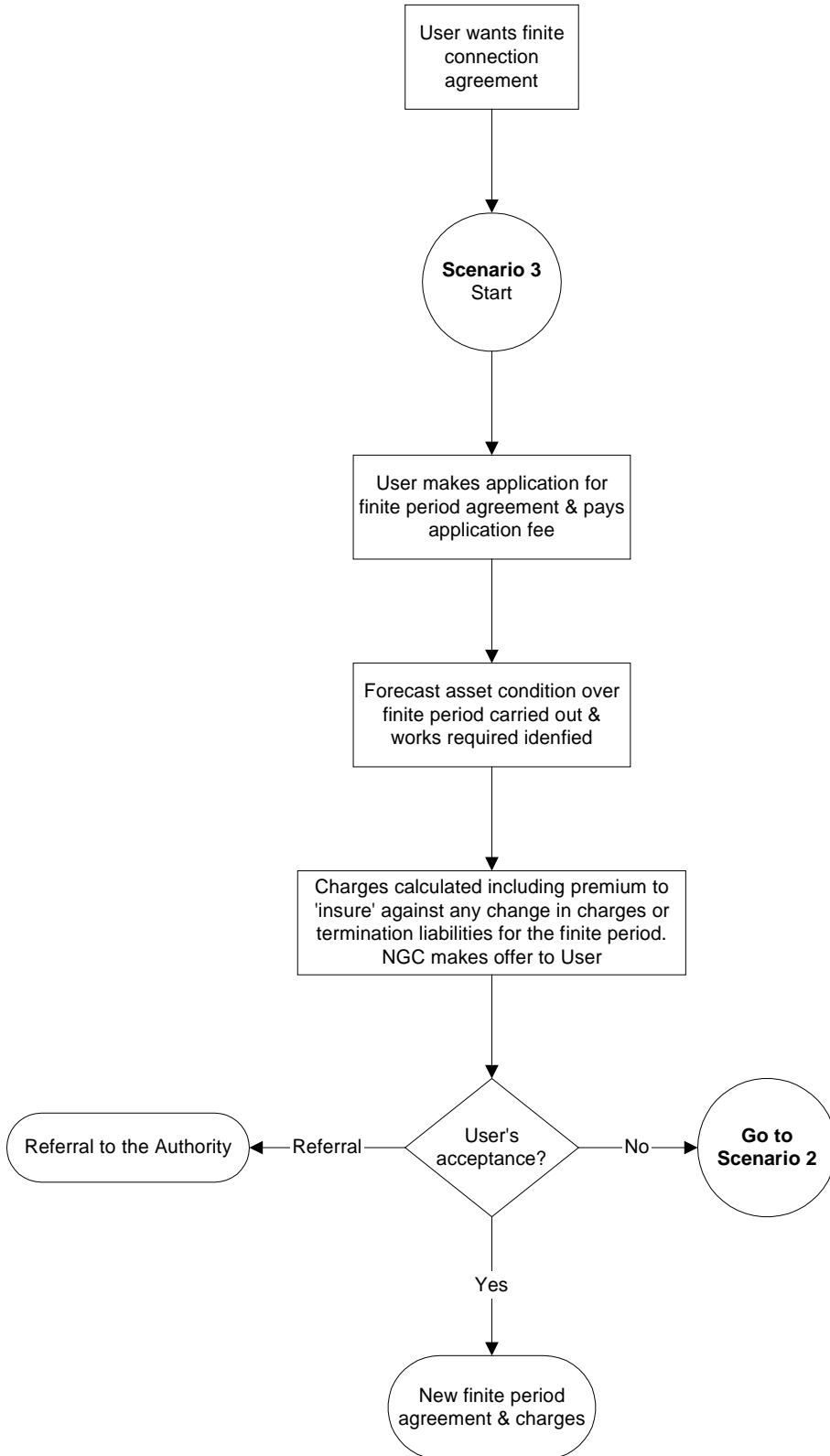
## Scenario 1 Works required on Asset / Site



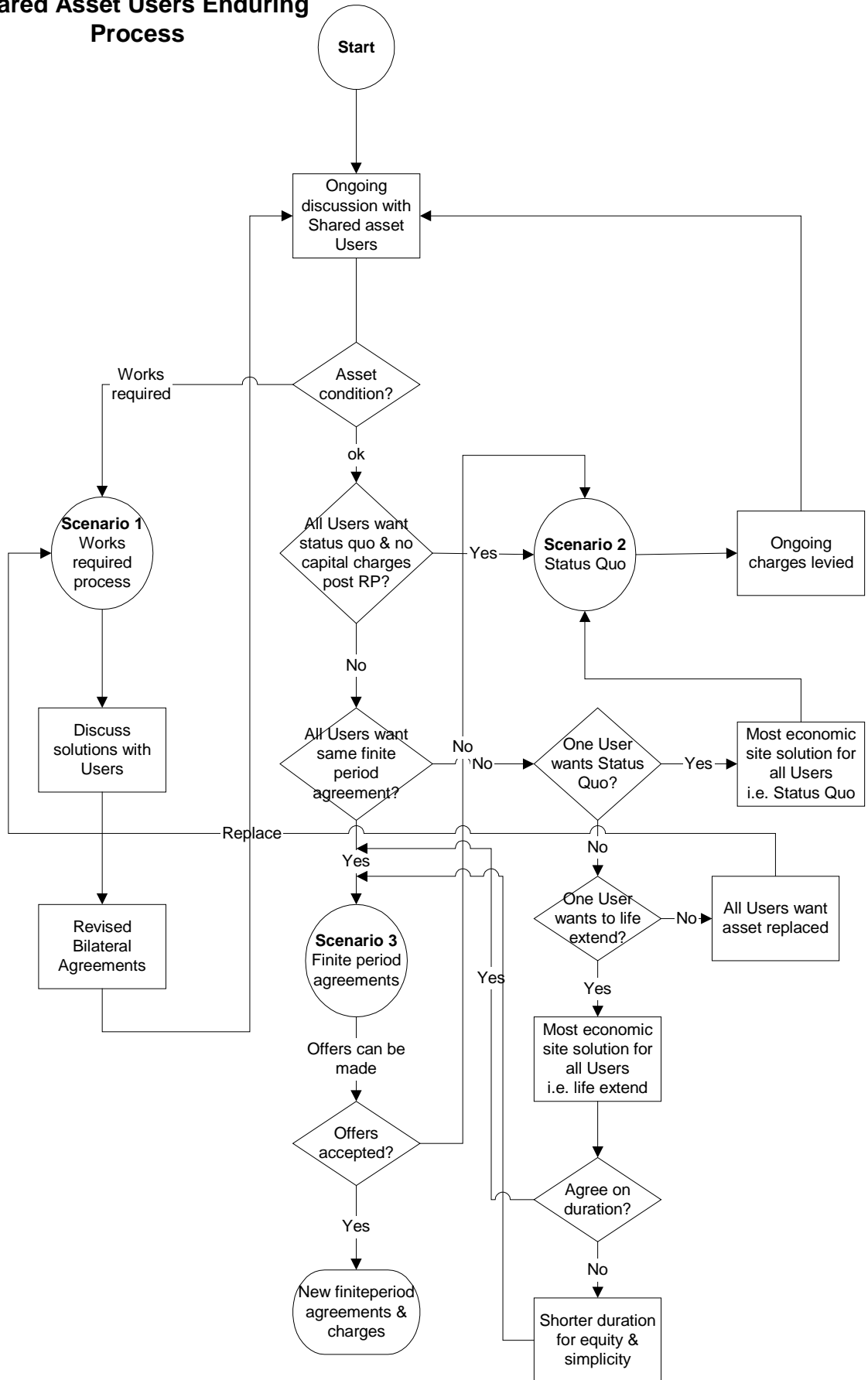
**Scenario 2 No works required (status quo rules)**



### Scenario 3 Finite period life extension



# Shared Asset Users Enduring Process



## Annex 2: Proposed Changes

### Connection Charging Methodology

Chapter 7 will need to include

- Definition of Replacement Period for charging purposes
- Rules for assets replaced before the end of their Replacement Period
- Rules for assets operating beyond their Replacement Period
- Rules for assets replaced after the end of their Replacement Period
- Rules if an offer has been referred to Ofgem
- Charging Rules for other works than like for like replacement
  - Refurbishment
  - Re-configuration
  - Upgrade
  - Non-like for like replacement
  - Transitory asset replacements

### CUSC – contractual obligations and rights:

Section 2 will need to specifically cover

Works Required Process

- Rights and Obligations on parties to discuss works required on NGC Assets in a timely and co-ordinated manner.
- A process that can be initiated at any stage of an existing asset's/site's life for notifying and agreeing works that are required on that asset/site
- An Urgent process to notify Users and discuss options in the event of a short term need to undertake works on an asset, ensuring that Users can be consulted and that NGC has the necessary rights to meet its licence and statutory obligations.

Upon agreement

- Obligations on Users to pay in accordance with charging statements
- Rights and obligations of NGC to revise charges
- Obligation on Users to pay any revised charges

Where no agreement

- Process to refer the matter to Ofgem for decision
- Rights/obligations with regard to revision of charges / obligations to pay whilst dispute is being settled