

Short Term Operating Reserve (STOR) Development

Detailed Change Proposals Document (DCP-01)

26th November 2009

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Executive Summary

On 29th October 2009, National Grid published an Outline Change Proposals Document (OCP-01) relating to Short-Term Operating Reserve (STOR). In summary, the document considered three main areas of the STOR service for development, namely:

1. Flexible STOR service;
2. Longer-term STOR service; and
3. STOR tender assessment.

Additionally, the Outline Change Proposals Document invited the views of industry members regarding general provisions for Aggregators that might be incorporated into the Standard Contract Terms, future tender round dates and any other issues that industry members consider worthy of raising with a view to improving the way in which the STOR service currently operates.

In accordance with the STOR Standard Contract Terms, for any changes to be implemented on 1st April 2010, an Outline Change Proposals Document must be published at least 6 months prior to this date. Given that in this instance, the publication timescales were less than 6 months, the changes contained in this Detailed Change Proposals Document cannot formally be implemented until 1st April 2011. In summary, these changes include:

1. The redefinition of "Subsequent Year" to allow longer-term, committed STOR tenders to be made up to a maximum of 15-years in advance; and
2. Amending Section 1.2.10 to allow affected service providers to reject proposed amendments.

National Grid notes from the responses received to the Outline Change Proposals Document however, that reserve providers would like to benefit from earlier implementation of some of the proposals, in particular the ability for flexible tenders to be submitted up to 2 years in advance and for longer-term committed tenders to be submitted up to 15 years in advance. Accordingly, National Grid will allow the submission of such tenders for Tender Rounds 10, 11 and 12.

Outside of the governance of the STOR Standard Contract Terms, National Grid intends to publish further information within the STOR Assessment Principles with the aim of enabling service providers to take into account the impact of response times and reliability on the assessment process.

National Grid also intends to give further consideration to all of the issues which were raised by service providers in their response to the Outline Change Proposals Document throughout 2010, co-ordinated with the wider reserve review if appropriate.

The changes proposed in this document for implementation on 1st April 2011 will not preclude further changes being made as part of any Outline Change Proposals Document published during 2010. A comprehensive list of all of those issues raised in response to the Outline Change Proposals Document is included in Appendix 1 of this Document.

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Section 1 Introduction

1.1 STOR Service

- 1 National Grid, as the National Electricity Transmission System Owner (NETSO), requires additional power in the form of either generation or demand reduction during certain periods of the day, for example, in order to be able to deal with actual demand being greater than forecast demand and/or unforeseen generation unavailability. These additional sources of power are referred to as 'Reserve' and comprise synchronised and non-synchronised sources.
- 2 National Grid procures the non-synchronised requirement primarily by contracting for Short Term Operating Reserve (STOR) via a competitive tender process from a range of service providers, for example in the form of standby generation and/or demand reduction from parties that may or may not participate in the Balancing Mechanism (BM).
- 3 STOR is a contracted Balancing Service whereby the service provider delivers a contracted level of power, within pre-agreed parameters, when instructed by National Grid. The requirement for STOR varies depending on the time of year, day of the week and time of day and is a function of the system demand profile at that time. The minimum capability requirements for the service are as follows:
 - a minimum contracted MW capability of 3MW;
 - a maximum response time for the delivery of the minimum contracted MW within 240 minutes of receipt of an instruction from National Grid; and
 - the ability to deliver the contracted MW for a continuous period of no less than 2 hours.
- 4 The contractual provisions relating to the STOR service are contained in the Short Term Operating Reserve Standard Contract Terms Issue #3 which is available on the National Grid website.¹

1.2 Amending the STOR Standard Contract Terms

Outline Change Proposal

- 5 Schedule 1.2 of the STOR Standard Contract Terms (SCTs) obliges National Grid to review the SCTs from time to time, and where at any time National Grid wishes to propose one or more amendments, then it may at its sole discretion do so by formulating an Outline Change Proposal (OCP), the contents of which shall include without limitation:-
 - a) the rationale for the amendment(s), including whether or not required as a result of a Proposed Legal Requirement or Change in Law;
 - b) if applicable, details of the Proposed Legal Requirement or Change in Law; and

¹ http://www.nationalgrid.com/NR/rdonlyres/CA693E1A-1C09-40A5-A69E-1707D1FB70CB/30820/STOR_SCTs_Issue_3_Final_Dec_08.pdf

- c) the Proposed Implementation Date.

Comments from Reserve Providers

- 6 Each OCP shall be notified by National Grid to all Reserve Providers in writing giving a reasonable opportunity and, in any event, not less than 10 Business Days to review and provide National Grid with written comment. National Grid shall consider in good faith any written comments submitted by a reserve provider and shall, insofar as is reasonably practicable, address such comments in any subsequent Detailed Change Proposal (DCP).

Detailed Change Proposal

- 7 If National Grid decides to implement an OCP, then it shall formulate a DCP. Each DCP shall specify a final implementation date and shall be accompanied by a copy of the SCTs with the amendments specified in the DCP incorporated.
- 8 Each DCP shall be notified by National Grid to all reserve providers in writing as soon as reasonably practicable and in any event within 20 business days of notification by National Grid of the OCP which, will ordinarily be no later than the date of issue of the Invitation To Tender (ITT) Pack which immediately precedes the final implementation date.
- 9 Amendments to the SCTs set out in a DCP notified by National Grid shall become effective from the final implementation date, whereupon amendments shall be incorporated automatically into each STOR Framework Agreement.
- 10 With respect to a DCP, each and any affected reserve provider may, no later than 15 business days after notification by National Grid of that DCP, elect by notice in writing to National Grid, to either:-
- a) where the affected reserve provider is of the reasonable opinion that its ability to provide STOR and/or comply with such affected STOR contract(s) will be materially prejudiced by the amendments to the SCTs described in such DCP, reject the application of such amendments to each of such affected STOR contracts; or
 - b) where the affected reserve provider is of the reasonable opinion that the net cost to it of providing STOR and/or complying with such affected STOR contract(s) has increased as a result of such amendments, seek an increase to any or all of the contract prices in respect of each of such affected STOR contracts.

Each notice of election by an affected reserve provider shall be accompanied by a full and detailed justification.

Implementation

- 11 On 29th October 2009, National Grid published an OCP Document (OCP-01)². In summary, the document considered three main areas of the STOR service for development, namely:

1. Flexible STOR service;
2. Longer-term STOR service; and
3. STOR tender assessment.

² <http://www.nationalgrid.com/NR/rdonlyres/9050F49A-DA88-432A-AF40-1F9C9EF6AD2B/38106/STORServiceDevelopmentInitialProposalvFINAL.pdf>

Additionally, the OCP Document invited the views of industry members regarding general provisions for Aggregators that might be incorporated into the SCTs, future tender round dates and any other issues that industry members consider worthy of raising with a view to improving the way in which the STOR service currently operates.

12 This DCP Document takes into consideration the 10 industry responses received to the OCP Document and details those elements of the OCP that will be taken forward for implementation.

13 As defined in Issue #3 of the STOR Standard Contract Terms, “**Proposed Implementation Date**” means:

the date from which **National Grid** proposes that amendments to this **Document** described in an **Outline Change Proposal** are to become effective, being either:-

- (1) the date of commencement of the **STOR Year** which next follows the date that **National Grid** submits an **Outline Change Proposal**, or where that date is less than 6 calendar months after such date of submission, the date of commencement of the **STOR Year** after that; or
- (2) in the case of an **Outline Change Proposal** required as a result of a **Proposed Legal Requirement** or a **Change in Law**, the date that the relevant **Change in Law** is currently expected by **National Grid** to come into effect;

14 Given that (2) is not applicable in this instance and that OCP-01 was published on Thursday 29th October (less than 6 calendar months prior to 1st April 2010), in accordance with the SCTs, the proposals contained within this DCP Document cannot be implemented earlier than 1st April 2011. It is therefore proposed that the changes detailed in this document become effective from 1st April 2011 and the required amendments to the SCTs to facilitate this are published on the National Grid website³.

15 However, National Grid notes from the consultation process that reserve providers would like to benefit from earlier implementation of some of the proposals, in particular the ability for flexible tenders to be submitted up to 2 years in advance and for longer-term committed tenders to be submitted up to 15 years in advance. Accordingly, National Grid will allow the submission of such tenders for Tender Rounds 10, 11 and 12. The ITT packs for the relevant tender rounds will be updated to reflect this.

³ <http://www.nationalgrid.com/uk/Electricity/Balancing/services/reserveservices/STOR/>

Section 2 Change Proposals

2.1 Flexible STOR Service, Season 1 and 2 Tenders

- 16 There are two types of STOR service:
1. Committed service; and
 2. Flexible service.
- 17 Under the committed service, a service provider must make the service available for all availability windows within the contracted term⁴. Both BM and non-BM service providers can offer the committed service.
- 18 The flexible STOR service is only available to non-BM service providers. Flexible service providers have greater freedom as to how many hours they wish to make the service available, and when that availability is offered. However, National Grid may choose to reject flexible service availability at the week-ahead stage and, provided the rejection is issued in the defined timescales, National Grid will not make availability payments for rejected flexible service availability.
- 19 Following the 2008 STOR development final proposals⁵, a longer-term service was introduced enabling potential service providers to tender for a committed service up to 10 years in advance. The main driver for the development of the longer-term service is to facilitate an efficient mechanism by which providers can be guaranteed a future revenue stream to either recover the capital costs of investment or to assist potential service providers in the securing of funding for capital investment.
- 20 In developing the service, a longer-term tender was specified as any period from Year 2 onwards and consequently, the preceding terms for tendering for Year 2 were amended to form part of the longer-term service terms. On the basis that the service was developed such that longer-term tenders could only be made on a committed basis, flexible service providers can currently only tender for the provision of the STOR service within year when previously they could tender for both the remaining seasons of the present STOR year in addition to Year 2. This is illustrated in Figure 1 below.

Figure 1 Tender Round Dates (TR4 – TR7)

Tender Round	Key Tender Round Dates					Seasons Available in Tender Round														
	Tender sheets available by	Market Day	Results Day	Market Report Published by	Service Start Date	2008/09					2009/10									
						2.1	2.2	2.3	2.4	2.5	2.6	3.1	3.2	3.3	3.4	3.5	3.6			
2008 TR4	14-Dec-07	25-Jan-08	07-Mar-08	18-Apr-08	01-Apr-08	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2008 TR5	16-May-08	20-Jun-08	18-Jul-08	01 Aug 08	17-Aug-08			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2008 TR6	25-Jul-08	29-Aug-08	26-Sep-08	07-Nov-08	26-Oct-08					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2009 TR7	23-Dec-08	30-Jan-09	06-Mar-09	17-Apr-09	09-Apr-09							✓	✓	✓	✓	✓	✓	✓	✓	✓

⁴ Except when the unit/site is technically unable to provide the service and subject to the rejection by the service provider of new availability windows introduced in a subsequent year

⁵ http://www.nationalgrid.com/NR/rdonlyres/C7EA4ED0-CDB7-40EE-A3B6-033C8B15AE66/29508/STOR_Service_Development_FinalProposal.pdf

- 21 By restricting service providers to tendering for Year 2 on a committed basis only, those wishing to tender for the provision of a flexible service in seasons 4.1 and 4.2 (effective from 1 April 2010 onwards) will only be afforded one opportunity in which to do so (Tender Round 10). Where for Season 3.1 and 3.2 in 2009/10, they were eligible to tender on up to a maximum of four occasions as identified in Figure 1 above.
- 22 In the OCP, National Grid considered that the way in which longer-term STOR was implemented could be considered to the detriment of flexible service providers, when compared with the previous arrangements. National Grid therefore proposed that it may be appropriate for potential service providers to be eligible to tender on a flexible basis as they could under the previous arrangements (i.e. for Year 2), and invited views from the industry regarding this.
- 23 Of the 10 respondents to the OCP, 7 explicitly supported the proposal to permit flexible service providers to tender in Year 2 on the basis that the current arrangements are restrictive for flexible providers. No respondents opposed the proposal.
- 24 National Grid therefore intends to implement this change proposal to be effective from 1st April 2010. No amendments to the STOR Standard Contract Terms will be required. The ability for flexible providers to tender for Year 2 will be reflected in the Invitation To Tender Pack for Tender Round 10, which is scheduled to be published on Friday 18th December, 2009.

2.2 Longer-term Service (>10 years)

- 25 The introduction of a longer-term service was one of the major developments of the 2008 STOR review, implemented with a view to enabling potential service providers to tender for the provision of a committed service up to 10 years in advance.
- 26 In developing the service, the 'bankability' of availability payments (£/MW/hr) over the period of a longer-term STOR contract was perceived to significantly enhance the potential for funding of new projects. Following consultation, a period of 10 years was considered to be a reasonable length of contract from both a revenue perspective for service providers, and from an assessment perspective.
- 27 To date, whilst a number of potential longer-term service providers have declared an interest and are actively giving consideration of the opportunity to tender longer-term, no service providers have submitted such a tender.
- 28 Whilst this is perhaps unsurprising given that the service was only introduced for Tender Round 8 in June 2009 and the lead times associated with developing such projects, National Grid has received feedback from potential providers looking to build new STOR plant, that the current maximum tender period of 10 years may not be sufficient to secure funding for investment or provide a return on capital investment. For example, in the event of a Mandatory Works programme with a 3-year timescale agreed for the completion of required works, this may only provide a guaranteed revenue stream for up to 7 years. Consequently, service providers requested that National Grid give consideration

to extending the longer-term service beyond the current 10-year period, in the OCP.

- 29 Of the 10 responses to the OCP, 7 supported the extension of the current 10-year period for long-term STOR. 3 respondents considered that a minimum of 15-years would be most appropriate, whilst 2 respondents considered that longer-term STOR should be used to provide a guaranteed income stream for the entire life of an asset developed for the provision of STOR.
- 30 One respondent believed that the balance between the ability of a new provider to participate in STOR and the risk that long-term contracts could stifle innovation is currently about right. The respondent considered that tenders of 10-years could see a significant shift in market conditions and National Grid could find themselves with long-term contracts that are no longer attractive, but that would prevent them from contracting with other, potentially cheaper providers.
- 31 Independent of the length of a potential long-term contract, some respondents' noted that there are currently other factors that deter a potential service provider from entering into such a contract. A respondent noted that it is currently extremely difficult to construct a business plan given the amount and type of data made available by National Grid and considered that investors will need a stable, transparent and positive investment climate if the market changes required are to be delivered in a timely manner.
- 32 2 respondents expressed a concern regarding the way in which longer-term contracts will operate and whether it is appropriate that they do so via a relatively opaque tender process and considered that it may be better to operate in a slightly different market where there is a degree of negotiation between the provider and National Grid.
- 33 National Grid considers that extending the 10-year period has implications from a System Operator perspective in terms of both being able to accurately assess the potential value of a tender, in addition to fixing the STOR windows for such a long duration ahead. In reality, given the ever changing nature of generation accessing the transmission system and intermittent generation in particular, the operation of the transmission system will change considerably within these timescales.
- 34 In light of the responses received to the OCP however, National Grid proposes a two-staged approach. Effective from 1st April 2010, potential STOR service providers will be eligible to tender for a maximum period of up to 15-years instead of the current 10-years. This will be reflected in the amendment to the definition of "Subsequent Year" within the Standard Contract Terms from 1st April 2011, and in the ITT Packs for Tender Rounds 10, 11 and 12. The ITT Pack for Tender Round 10 will be published on Friday 18th December, 2009.
- 35 Mindful of the fact that other issues unrelated to the potential length of a longer-term contract outside of the governance of the current STOR framework also have the potential to create additional barriers to entry for potential longer-term providers, National Grid also intends to undertake a review of longer-term STOR provision within a more comprehensive review of all reserve products during 2010/11.

2.3 Changes to Standard Contract Terms

- 36 Following the 2008 review, a service provider expressed concerns around the process for making changes to the Standard Contract Terms and in particular, with regard to *Section 1.2.10 Affected Reserve providers*. The concern was that section 1.2.10(a) may apply a test of the provider being (in its reasonable view) materially prejudiced in providing the service or complying with the terms. It was discussed that it is not clear as to what this test is intended to capture and under what circumstances it would apply. In effect, it also allowed National Grid the ability to amend a commercial contract without the other party having an absolute right to reject such change and therefore potentially being forced into contract changes that it may not find favourable.
- 37 It was considered that where changes to the Standard Contract Terms do not translate into direct costs, but an increase in potential risk for instance, a test of 'materially prejudiced' does not give the provider comfort that they would be in control of the change process. As an extreme example, if National Grid were at some time in the future to propose to remove the rights set out in 1.2.10, would that qualify as materially prejudicing a provider's ability to provide the service or to comply with the terms.
- 38 In the Outline Change Proposals Document, National Grid invited views from the industry as to whether service providers agreed with the views expressed and as to whether the legal text contained in Section 1.2.10 of the Standard Contract Terms for Firm Frequency Response might be more appropriate for STOR.
- 39 Of the 10 responses received, 9 were in favour of a change to Section 1.2.10 of the Standard Contract Terms. 8 of these considered that the terms for Firm Frequency would be more appropriate. One respondent considered that there is no material difference between the current approach for STOR and that for FFR.
- 40 Taking into account the responses received, National Grid proposes to amend the legal text in Section 1.2.10 of the STOR Standard Contract Terms in line with those for FFR to provide service providers with the opportunity to reject the proposals of a Detailed Change Proposals Document, provided that such rejection is accompanied by a statement of the reason why, in the reasonable opinion of the affected provider, such rejection is being made.
- 41 National Grid considers that this amendment will go some way to reducing the concerns of STOR service providers that changes to the STOR Standard Contract Terms could be made without allowing the service provider to have an absolute right to reject the change. National Grid therefore proposes that Section 1.2.10 of the STOR Standard Contract Terms be amended to be effective of 1st April, 2011.

Section 3

2010/11 Tender Round Dates

- 42 Figure 2 below, identifies the dates which National Grid proposed in the OCP for the Tender Rounds taking place in 2010/11, inviting views from the industry as to their suitability.

Figure 2 Proposed 2010/11 Tender Round Dates

Tender Round	Key Tender Round Dates					
	Tender sheets available by	Market Day	Results Day (Short Term)	Results Day (Long Term)	Market Report Published by	Service Start Date
2010 TR10	16-Dec-09	15-Jan-10	05-Mar-10	26-Mar-10	16-Apr-10	01-Apr-10
2010 TR11	30-Apr-10	11-Jun-10	23-Jul-10	06-Aug-10	13-Aug-10	16-Aug-10
2010 TR12	30-Jul-10	27-Aug-10	01-Oct-10	22-Oct-10	12-Nov-10	01-Nov-10

- 43 Of the 8 respondents that commented on the proposed dates, 6 were supportive of those proposed. Two respondents were not entirely supportive of the dates proposed, with one respondent requesting that the Market Day for Tender Round 12 should be moved backward by two weeks to 10th September to avoid the School holiday period. One respondent noted that the period between publication of the tender sheets and market day has reduced, whereas the period between market day and results day has increased and questioned the additional analysis that National Grid is planning to carry out to need the extended timescales for assessment.
- 44 Given the increasing volume of STOR tenders, that service providers are afforded up to three opportunities to tender for STOR in each year up to a maximum of 15 years for a committed service and 2 years for a flexible service, National Grid considers that the proposal to increase the period between market day and results day to be both reasonable and necessary in order to assess the greater volume of STOR tenders over the duration of increased tender timescales. By publishing the 2010/11 Tender Round dates in advance, National Grid considers that this provides service providers with sufficient time to structure their tenders.
- 45 On the basis that 15 business days are allowed for affected reserve providers to comment on this DCP (see Section 5) up to Thursday 17th December, National Grid proposes that the date for publication of the ITT Pack for Tender Round 10 be delayed by 2 days, until Friday 18th December to give consideration to any comments received. Aside from this, National Grid proposes that those 2010/11 Tender Round dates identified in Figure 2 above be implemented effective from the publication of this Document.

Section 4 Other Areas for Development

4.1 Assessment Principles

Response times

- 46 The product which preceded STOR (Standing Reserve) was designed to allow for sufficient short-notice providers to be available to secure the transmission system following generation losses and unpredicted changes in demand which required a response time of 20 minutes and less. The same requirement for reserve that can respond within these timescales still exists and the desire is to meet this requirement through STOR.
- 47 STOR was developed recognising that other potential service providers who cannot meet a 20 minute response time could still be of value in meeting National Grid's reserve requirement. Hence, a key aspect in the definition of the STOR product was to extend the maximum response time to 240 minutes to allow potential new providers to participate, with a lower value placed on providers with longer response times.
- 48 Increasingly, National Grid receives STOR tenders from service providers with units which have a response time in excess of 20 minutes. Whilst the principles by which STOR tenders are assessed are published on the National Grid website⁶, it has become apparent following discussion with service providers that whilst the principles indicate that a response time in excess of 20 minutes has a lower value, no supporting information beyond this is provided by National Grid which would enable a provider to appropriately factor the increased response times into their tenders.
- 49 National Grid invited views from the industry to the OCP as to whether existing or potential STOR service providers with a response time in excess of 20 minutes would value additional clarification within the Assessment Principles that would enable a provider to more accurately assess the value of their response times when structuring their tender.
- 50 8 respondents noted that they would welcome the inclusion of further information in the Assessment Principles. Whilst this was perceived as an improvement that would aid in the tender process, it was also noted that this could help to provide signals for service providers to invest in further machinery automation to reduce response times and that such investment is more easily justified if the value to National Grid is indicated.

Reliability

- 51 Following Tender Round 8, National Grid rejected a number of STOR tenders on the basis of poor historical performance. Whilst reliability is noted as a factor in the STOR Assessment Principles, the decision to reject units on this basis raised a number of questions from those service providers affected. In particular, providers questioned the percentage of reliability that is considered by National Grid to influence the decision to accept / reject a tender and, should a

⁶ http://www.nationalgrid.com/NR/rdonlyres/7B8CA1AB-4964-4965-B5A2-126C8C202A11/30793/STOR_Assessment_Principles_2008_12_Final.pdf

unit be rejected on the basis of reliability, what then is the process for the unit to re-prove itself for subsequent tenders given that it would be excluded from providing a service and would therefore be unable to demonstrate improved levels of performance.

- 52 National Grid invited views from the industry as to whether it would be useful to publish further information in the Assessment Principles as to the levels of reliability that are expected, in addition to amending the Standard Contract Terms to detail the re-proving process following rejection of a previously submitted tender.
- 53 9 respondents' supported the inclusion of additional relevant information with regards to performance. More generally, a number of respondents' noted that the current level of information provided by National Grid does not help either incumbent or potentially new entrants to the STOR market.
- 54 In light of the comments received in response to the OCP relating to information contained in the assessment principles and the volume / transparency of data provision more generally, National Grid intends to update the Assessment Principles accordingly, in addition to undertaking a review of the information currently provided to the industry.

4.2 Aggregator General Provisions

- 55 Schedule 2 of the STOR Standard Contract Terms sets out some general provisions for Agents of reserve providers. These include payment terms, confidentiality and announcements and notices. Currently, there are no general provisions for Aggregators.
- 56 In the OCP, National Grid invited views from the industry as to whether the Standard Contract Terms should be updated to reflect the role and responsibility of Aggregators given that they are required to enter into a Framework Agreement (this is not a requirement of Agents).
- 57 A number of respondents' considered that it would be appropriate for the Standard Contract Terms to be updated to reflect the role of Aggregators but that where possible, these should be consistent with the terms for all other service providers. A respondent considered that the development of such terms is no small task and that this should therefore be undertaken as a separate review during 2010, with the publication of new terms in December 2010.
- 58 National Grid believes that further considered development throughout 2010 appears to be the most pragmatic approach and therefore intends to consult with relevant industry parties within these timescales.

Section 5 Notice of Election

- 59 In accordance with Section 1.2 of the STOR Standard Contract Terms, with respect to this Detailed Change Proposals Document, each and any affected reserve provider may, no later than 15 business days after publication, elect by notice in writing to National Grid, to either:-
- a) where the affected reserve provider is of the reasonable opinion that its ability to provide STOR and/or comply with such affected STOR contract(s) will be materially prejudiced by the amendments to the SCTs described in such DCP, reject the application of such amendments to each of such affected STOR contracts; or
 - b) where the affected reserve provider is of the reasonable opinion that the net cost to it of providing STOR and/or complying with such affected STOR contract(s) has increased as a result of such amendments, seek an increase to any or all of the contract prices in respect of each of such affected STOR contracts.

Each notice of election by an affected reserve provider shall be accompanied by a full and detailed justification.

- 60 Any questions regarding the content of this Document should be directed to **Craig Maloney** on **01926 655896**. Any affected reserve providers wishing to provide notice of election, should do so in writing to craig.maloney@uk.ngrid.com by no later than **Thursday 17th December, 2009**.

Section 6

Appendix 1: Summary of Issues

The table below provides a summary of the issues raised in response to the Outline Change Proposals Document:

Longer-term STOR
There is concern about the way that the longer-term contracts will operate and whether it is appropriate that they operate via a relatively opaque tender process. Longer-term contracts may better operate in a slightly different market where there is a degree of bilateral negotiation between the provider and National Grid.
Semi-committed Service
There are merits in a semi committed service and it should be explored more fully. By applying the committed/flexible tag at window (rather than seasonal) level, both National Grid and the STOR providers have a greater certainty of provision of service and associated income, particularly over the triad period.
Data Provision
Data in the STOR report is generally quite difficult to use for assessment of investment opportunities and it would be useful if National Grid could disaggregate more of the information so that it would be easier to judge the potential operation of STOR units by location. Consideration should be given to providing better information on the pricing and use of non-BM providers. This should be presented on the same basis as for BM providers i.e. for each instruction the start time, end time volume and price should be available. If not available close to real time, this information should at least be provided in a monthly summary file available for download in a similar way to the frequency response information currently provided. Changes to the contract form should be made to facilitate this.
Aggregator Terms
Would be a useful development in 2010.

Declaration Resolution to 0.1MW

By reducing declarations to 0.1MW level, participants could be paid more accurately for all of the load they have contracted and which the customer has delivered. This is particularly relevant for smaller loads. This approach would greatly assist the introduction of more non-BM loads and would counteract steps taken in recent reviews which have reduced availability income, notably the introduction of pre-window ramping periods which have reduced the annual hours of availability by participants by around 400 hours.

Splitting of Windows

In a review earlier in 2009, National Grid highlighted the importance of air conditioning loads to support wind development. However as commercial air conditioning usually starts at 8am to 6pm, this instantly discounts this sector from service provision. If this technology is to be incorporated in STOR then availability windows would need to be split to allow for a later start in the morning and an earlier finish in the evening.

Non-Firm STOR Providers

Processes exist which could provide National Grid with the ability to remove considerable volumes of volatile demand or to keep this demand off the network. While this would require bespoke handling, the potential volumes are sufficient to deliver significant impact to the system.

Separate Tender for Flexible and Committed Providers

Essential if we are to encourage growth in this area. May however, complicate issues with regards to a semi-committed service. Would require some formal feedback after the six-week deadline such as a Flexible Market Report to enable the STOR provider to evaluate their position inside the flexible market. Moving to a six-week nomination period would greatly reduce the risk of fuel price movement.

Variable Declarations

National Grid would be able to have access to greater volumes of STOR if declarations were not on an 'all or nothing' basis. By allowing the level of MWs declared to be flexible, a greater volume, particularly from aggregated demand side contracts could be contracted. Tolerance calculations could still be carried out on the same tolerances, on this volume rather than on a settlement period basis with the same reconciliations applied at seasonal and term periods.

If a STOR provider could nominate in advance a pre-agreed fall back capacity if that provider is predicting system constraints or capacity issues, this would see a significant benefit. At present, STOR units which at times have system constraints or capacity issues might result in them being declared unavailable. The option to nominate down i.e. to 80% of normal capacity would provide both parties with potential benefit.

Computer Systems – Non-BMU

Declarations

Historical data: If a contract number changes during the term of a contract (e.g. due to a different price in a new season), all historical data disappears from the “Historic” tab, immediately after the end of the week when the contract number expires.

Audit trail: Currently, the STOR computer only shows the date and time of the latest declaration against a particular day, but not against a specific window on that day. In addition, the service provider does not have access to the audit trail recording changes of declarations from 10am on Friday to the latest visible declaration.

Exporting declarations data: There is currently no facility to export declarations data.

Utilisation

Exporting utilisation data: There is currently no facility to export utilisation data in bulk. The data has to be exported on a call-off by call-off basis.

There is no facility to use encrypted memory sticks.

Being able to get utilisation data for call-off in an efficient manner would be useful for monitoring performance, in particular, as the official feedback from National Grid in the form of Events of Default only takes place weeks after the event.