

## Questionnaire: Long Term Fixed Priced Products

Name of Respondent:	Shona Watt
Company:	RWE npower
Responding on behalf of:	RWETrading, RWE npower, npower ltd, npower commercial gas, Npower Direct, npower northern ltd, npower northern supply ltd, npower yorkshire ltd, npower yorkshire supply ltd, npower cogen ltd, npower cogen trading ltd

Q.1	<p>Do you believe that users wishing to hedge against future tariff changes should seek suitable products from independent parties and not National Grid e.g. financial institutions?</p>
	<p>Yes. National Grid is responsible for construction a major part of the GB transmission system which directly influences the level charges for use of the GB transmission system. It would create perverse incentives if the same institution which can directly affect the charges offers a hedge against this charge.</p>
Q.2	<p>Would you support proposals from National Grid to develop a Long Term Fixed Priced Product:</p> <p style="padding-left: 40px;">With National Grid taking the financial risk (of the difference between the fixed tariff and the standard tariff)?</p> <p style="padding-left: 40px;">With other users sharing the financial risk?</p>
	<p>NGC can derive a set of tariffs which plots the course of TNUoS tariffs for D and G over time, but many uncertainties in future revenue requirements, coupled with the current and expected large scale investments in the transmission system planned in the near term can mean that these tariffs are grossly inaccurate. Since TOs can induce changes in the network which affects these charges it is highly inappropriate for NGC to take the risks in changes to the charges.</p> <p>Individual users who would like LTT should bear the financial risk of their future charges or seek a financial hedge with a suitable provider. It would be inappropriate for the risks associated with LTTs to be borne by users not entering into LTTs.</p>
Q.3	<p>The following risks to tariff stability have been identified:</p> <ol style="list-style-type: none"> <li>1. Changing Transmission system network, generation and demand background</li> <li>2. Changing regulated background (total allowed revenue)</li> <li>3. Zonal Boundary changes</li> <li>4. Tariff parameters (e.g. security/expansion factors) changing</li> <li>5. Use of System methodology modifications</li> <li>6. Major industry change</li> </ol> <p>Which of the above risks would you wish to be managed in a Long Term Fixed Priced Product?</p> <p>Are there any additional risks you believe should be considered?</p>
	<p>The method used to calculate TNUoS Tariffs is one which involves many simplifying assumptions and some judgement applied by NGC. While the raw</p>

	<p>nodal demand and generation numbers are mostly not subjective, the process of manipulation these numbers to produce a set of tariffs for Generation and Demand is subjected to all the above risks in varying degrees.</p> <p>Use of System methodology change is the greatest risk in predicting future charges. A LTT is not an effective tool for managing this risk.</p> <p>Changes in the zonal boundaries for generation can have a major impact on a specific site's charges. As a pre-requisite to LTTs, a set of zones which more closely align to some agreed features of the transmission network (e.g. zones defined as subsets of the zones implied by the System boundaries), and a more deterministic method of calculating them, would have to be agreed.</p> <p>Users who do not opt for LTT should not be exposed to the risks identified in Q3 especially where under recovery in previous years would probably mean that users who are not bounded by fixed tariffs face unexpectedly high charges.</p>
Q.4	<p>Would you prefer a Long Term Fixed Priced Product to be based on an approved and published methodology or on a bespoke bilateral basis?</p>
	<p>If users are allowed to enter into long term arrangements on tariff with NGC then it has to be on a basis which is calculable and transparent and is equitable to all users. An approved methodology would have to be separately consulted on and involve all the costs imposed on the system by incremental generation.</p>
Q.5	<p>In a Long Term Fixed Priced Product what would be your choice for a minimum and maximum fixed period?</p>
	<p>The charging methodology is based on an annual TEC product, so any LTT would by definition be for a minimum of two years, and thereafter for a whole number of years. The length of any fixed priced LTT would be a major factor in the risk premium associated with the LTT. The major risk factors identified would lead to even greater risk premia for users requiring LTTs for a period extending beyond the end of the current Price Control time frame.</p>
Q.6	<p>What are the implications of National Grid's responsibility for charge calculation and methodology development on the structure and governance of a Long Term Fixed Priced Product?</p>
	<p>National Grid has an obligation under Licence Condition C5 to keep the charging methodology under review at all times in order to make it more accurately reflect costs and promote full effective competition. This obligation would be hindered if the current arrangements are extended to fixed pricing periods longer than the current one year time horizon.</p>
Q.7	<p>Should there be additional credit requirements for the introduction of tariffs fixed for more than a year ahead?</p>
	<p>Yes this necessarily has to be the case with any long term contract.</p>
Q.8	<p>What alternatives to a Long Term Fixed Priced Product are available to manage the identified risks and do you think these alternatives are better options?</p>
	<p>Currently users can enter into financial arrangement with any third party to hedge their TNUoS charge in much the same way, for example, that a generator may hedge their input fuel costs. This does not require any special intervention by NGC, or indeed any facilitation, since involvement of TOs and NGC would be</p>

	perverse as TOs and SO can influence these charges.
Q.9	Do you believe there is any merit in requiring new users to commit to a Long Term Fixed Priced Product to support new transmission investment? If so, please state for how long?
	<p>Under the current arrangements, new users are to some extent shielded by the true costs of new investments, since their liability is limited to a small fraction of the true costs of the incremental investments only if they fail to comply with the future TNUoS tariffs. Since most of the costs are socialised in the tariffs, existing users bear the major part of the additional costs. If new users are required to underwrite new transmission investments (e.g. paying TNUoS for a period of time), then the length of their commitment would have to be comparable with the asset life invested on their behalf.</p> <p>These issues will have to be reconsidered in the light the recent publication of the NGC's conclusion document on managing access to the GB transmission system.</p>
Q.10	Are there any other issues regarding long term charging arrangements that you wish to be considered?
	<p>Currently, the small generators subsidy is embodied in the annual TNUoS charges. If LTT are developed and introduced to users, then the effects of changes this and any future subsidies and their knock-on effects to users who do not subscribe to LTT would have to be managed to minimise their financial penalty.</p> <p>In addition to restricting the review and possible enhancement of the TNUoS charging methodology if LTTs are introduced, the possibilities of gaining further efficiencies through harmonisation of TNUoS and DUoS charging may be fettered if some form of methodology freeze is imposed. This could also hinder developments in the wider European arena, where for example, aspects of the ITC are due to be implemented in GB in January 2006.</p>

## Questionnaire: Long Term Fixed Priced Products

Name of Respondent:	Elaine Greig
Company:	AMEC Wind Energy
Responding on behalf of:	AMEC Wind Energy

Q.1	Do you believe that users wishing to hedge against future tariff changes should seek suitable products from independent parties and not National Grid e.g. financial institutions?
	<i>NGC should make the required information available to independent third parties (confidentially if necessary), such that these parties may be able to compete with NGC in an open long term fixed price product market.</i>
Q.2	Would you support proposals from National Grid to develop a Long Term Fixed Priced Product: With National Grid taking the financial risk (of the difference between the fixed tariff and the standard tariff)? With other users sharing the financial risk?
	<i>NGC, or such other financial institution as develops a product, should take the risk, in return for the premium paid for the product.</i>
Q.3	The following risks to tariff stability have been identified: 1. Changing Transmission system network, generation and demand background 2. Changing regulated background (total allowed revenue) 3. Zonal Boundary changes 4. Tariff parameters (e.g. security/expansion factors) changing 5. Use of System methodology modifications 6. Major industry change  Which of the above risks would you wish to be managed in a Long Term Fixed Priced Product?  Are there any additional risks you believe should be considered?
	<i>1 to 5 could be managed by such a product, users being able to select from these. 6 could make such a product redundant and agreements would then need to be run-off.</i>
Q.4	Would you prefer a Long Term Fixed Priced Product to be based on an approved and published methodology or on a bespoke bilateral basis?
	<i>Published methodology.</i>
Q.5	In a Long Term Fixed Priced Product what would be your choice for a minimum and maximum fixed period?
	<i>2 years to 20 years.</i>
Q.6	What are the implications of National Grid's responsibility for charge calculation and methodology development on the structure and governance of a Long Term Fixed Priced Product?

	<i>The product will have to be designed to be robust against known developments structures.</i>
Q.7	Should there be additional credit requirements for the introduction of tariffs fixed for more than a year ahead?
	<i>Only in so far as to cover termination arrangements to ensure that users cannot take advantage of a product in good years, and terminate should the product become more expensive.</i>
Q.8	What alternatives to a Long Term Fixed Priced Product are available to manage the identified risks and do you think these alternatives are better options?
	<i>Lower cap on annual changes, and limit step changes due to zonal boundary changes for example.</i>
Q.9	Do you believe there is any merit in requiring new users to commit to a Long Term Fixed Priced Product to support new transmission investment? If so, please state for how long?
	<i>Investment is already guaranteed by the connection termination arrangements in the agreement, further support is not required.</i>
Q.10	Are there any other issues regarding long term charging arrangements that you wish to be considered?
	<i>Governance of data availability &amp; any other requirements of independent third parties in order to create a competitive market.</i>

## Questionnaire: Long Term Fixed Priced Products

Name of Respondent:	<i>Paul Jones</i>
Company:	<i>E.ON UK plc</i>
Responding on behalf of:	<i>E.ON UK plc</i>

Q.1	<p>Do you believe that users wishing to hedge against future tariff changes should seek suitable products from independent parties and not National Grid e.g. financial institutions?</p>
	<p><i>This is the preferable solution.</i></p>
Q.2	<p>Would you support proposals from National Grid to develop a Long Term Fixed Priced Product:</p> <p style="padding-left: 40px;">With National Grid taking the financial risk (of the difference between the fixed tariff and the standard tariff)?</p> <p style="padding-left: 40px;">With other users sharing the financial risk?</p>
	<p><i>The first point to note is that it would be unacceptable for such a product to be developed so that other users shared the financial risk. Users would have had no choice in whether or not to take on this risk and there is no rationale for expecting them to do so. It would also be inconsistent with other hedging products which contain the risk between the relevant counterparties.</i></p> <p><i>If the risk is contained between NGC and the relevant counterparty, then another issue arises. That is that users may be reluctant to enter into such an arrangement given the nature of NGC's involvement in setting the underlying charging methodology. This is why a third party provider may be preferable.</i></p>
Q.3	<p>The following risks to tariff stability have been identified:</p> <ol style="list-style-type: none"> <li>1. Changing Transmission system network, generation and demand background</li> <li>2. Changing regulated background (total allowed revenue)</li> <li>3. Zonal Boundary changes</li> <li>4. Tariff parameters (e.g. security/expansion factors) changing</li> <li>5. Use of System methodology modifications</li> <li>6. Major industry change</li> </ol> <p>Which of the above risks would you wish to be managed in a Long Term Fixed Priced Product?</p> <p>Are there any additional risks you believe should be considered?</p>
	<p><i>Any number of these could be accommodated within a hedging contract which would affect the value and thus associated price of the contract.</i></p>
Q.4	<p>Would you prefer a Long Term Fixed Priced Product to be based on an approved and published methodology or on a bespoke bilateral basis?</p>

	<i>A published methodology would assure users that such products were being provided on a non-discriminatory manner.</i>
Q.5	In a Long Term Fixed Priced Product what would be your choice for a minimum and maximum fixed period?
	<i>A number of different products could be offered. Probably an appropriate range would be between 2 and 15 years duration.</i>
Q.6	What are the implications of National Grid's responsibility for charge calculation and methodology development on the structure and governance of a Long Term Fixed Priced Product?
	<i>As mentioned under Q2 above, users may be concerned about acquiring a hedging product from someone who has such control over the prices that are to be hedged against.</i>
Q.7	Should there be additional credit requirements for the introduction of tariffs fixed for more than a year ahead?
	<i>As NGC and the User are entering into this as a bilateral arrangement and are fully exposed themselves to the hedging risk, then they should arrange their own credit arrangements. This may simply entail NGC ensuring that it does not enter into too many of such agreements with one particular counterparty.</i>
Q.8	What alternatives to a Long Term Fixed Priced Product are available to manage the identified risks and do you think these alternatives are better options?
	<i>No additional view on this other than mentioned above.</i>
Q.9	Do you believe there is any merit in requiring new users to commit to a Long Term Fixed Priced Product to support new transmission investment? If so, please state for how long?
	<i>No. Would discriminate against these users compared with existing uses who are able to reduce TEC with no penalty at any time.</i>
Q.10	Are there any other issues regarding long term charging arrangements that you wish to be considered?
	<i>No.</i>

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Name of Respondent:	Mike Harrison
Company:	ScottishPower Energy Management Ltd
Responding on behalf of:	ScottishPower Generation Ltd, ScottishPower Energy Retail Ltd, CRE Energy Ltd

Q.1	<p>Do you believe that users wishing to hedge against future tariff changes should seek suitable products from independent parties and not National Grid e.g. financial institutions?</p>
	<p><i>We do not believe that the use of financial products is the best means of allowing users to reduce the volatility of their TNUoS charges. However, should this be the only route available to users we believe that it would be inappropriate for NGC to be the counterparty.</i></p>
Q.2	<p>Would you support proposals from National Grid to develop a Long Term Fixed Priced Product:</p> <p style="padding-left: 40px;">With National Grid taking the financial risk (of the difference between the fixed tariff and the standard tariff)?</p> <p style="padding-left: 40px;">With other users sharing the financial risk?</p>
	<p><i>We do not see this as simply a risk allocation issue. We believe that the charging methodology should allow users to fix the locational element of the tariff should they wish to do so with the residual recalculated each year as noted in the response to Q3. Under NGC's approach of fixing the whole tariff the under or over recovery should be smeared across all users.</i></p>
Q.3	<p>The following risks to tariff stability have been identified:</p> <ol style="list-style-type: none"> <li>1. Changing Transmission system network, generation and demand background</li> <li>2. Changing regulated background (total allowed revenue)</li> <li>3. Zonal Boundary changes</li> <li>4. Tariff parameters (e.g. security/expansion factors) changing</li> <li>5. Use of System methodology modifications</li> <li>6. Major industry change</li> </ol> <p>Which of the above risks would you wish to be managed in a Long Term Fixed Priced Product?</p> <p>Are there any additional risks you believe should be considered?</p>
	<p><i>We believe that the essence of long term fixed prices is to fix the locational element of the tariff to preserve the relative position of the user at the time his contracting decision was made. Subsequent changes to the total revenue requirement would be reflected in the residual element of the tariff paid by all users. This would be recalculated annually after the revenue recovery from users, both fixed price and floating, had been assessed.</i></p>

Q.4	Would you prefer a Long Term Fixed Priced Product to be based on an approved and published methodology or on a bespoke bilateral basis?
	<i>As noted above, we believe that this should be a feature of the approved and published methodology.</i>
Q.5	In a Long Term Fixed Priced Product what would be your choice for a minimum and maximum fixed period?
	<i>Minimum 5 years, maximum 25 years</i>
Q.6	What are the implications of National Grid's responsibility for charge calculation and methodology development on the structure and governance of a Long Term Fixed Priced Product?
	<p><i>We see no implications if the philosophy outlined above is followed and the LTFPP was a feature of the approved and published methodology.</i></p> <p><i>On the other hand, we do not believe that it is tenable that NGC should provide a LTFPP through a bilateral contract whilst the underlying tariffs are recalculated annually using a methodology controlled by NGC.</i></p> <p><i>It is also not clear from the current consultation what exactly the access product is which is the subject of the LTFPP. Consideration of the charging aspects of LTFPP is difficult in the absence of discussion as to the characteristics of the product, e.g., whether the corresponding product is a form of long term TEC which can be traded between users (subject to an exchange rate) and what termination provisions might be applicable. It would be particularly important that the LTFPP could be re-opened in the event of a major change of circumstances outwith the control of the parties, e.g., as a result of the actions of a competent authority.</i></p>
Q.7	Should there be additional credit requirements for the introduction of tariffs fixed for more than a year ahead?
	<i>We do not believe that additional credit requirements would be appropriate. It is not clear what additional credit risk NGC would face under an LTFPP regime as described above. Additional security requirements would also be a barrier to entry for smaller users for whom the ability to reduce the volatility of charges by the use of an LTFPP would be particularly attractive.</i>
Q.8	What alternatives to a Long Term Fixed Priced Product are available to manage the identified risks and do you think these alternatives are better options?
	<i>As noted above, the essence of the LTFPP is to minimise the risk of changes in the locational differentials between users. Should it not be possible to fix the differentials then a cap on the rate of change of the locational tariffs may provide some protection against changes in the relative competitive position of users.</i>

	<i>However, we believe that the current methodology which can, through the effect on steel and aluminium prices of a boom in the Chinese economy, cause a transfer of wealth from northern generators to southern generators, and from southern suppliers to northern suppliers, is fundamentally flawed.</i>
Q.9	Do you believe there is any merit in requiring new users to commit to a Long Term Fixed Priced Product to support new transmission investment? If so, please state for how long?
	<i>No. Long term products should be made available to all users but be compulsory for none.</i>
Q.10	Are there any other issues regarding long term charging arrangements that you wish to be considered?
	<i>Long term contracting should be within the context of users being able to fix the locational element of the price at any time and for any proportion of their TEC.</i>

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<b>Name of Respondent:</b>	<b>Rekha Patel</b>
<b>Company:</b>	<b>ConocoPhillips</b>
<b>Responding on behalf of:</b>	<b>Immingham CHP</b>

Q.1	<p>Do you believe that users wishing to hedge against future tariff changes should seek suitable products from independent parties and not National Grid e.g. financial institutions?</p>
	<p>This option – and insurance options more generally - should be explored to assess viability and practicability from the point of view of third party providers. However, on the basis of current information, we have doubts because of the general level of risk and uncertainty, and of NGC's privileged informational position, as to whether third party providers could offer this service at affordable prices.</p>
Q.2	<p>Would you support proposals from National Grid to develop a Long Term Fixed Priced Product:</p> <p style="padding-left: 40px;">With National Grid taking the financial risk (of the difference between the fixed tariff and the standard tariff)?</p> <p style="padding-left: 40px;">With other users sharing the financial risk?</p>
	<p>Yes, we would like to see such proposals developed, especially if the current methodology continues to be applied with risks of significant price changes for individual users year on year. It is wholly reasonable for users to wish to hedge their transmission costs, which are primarily long-lived asset-based charges. Most of the current variability arises from application of an inherently unstable charging methodology.</p> <p>We are open-minded as to whether NGC pursues this as the transmission licensee or as some form of insurance agent.</p> <p>Risk should be dealt with by NGC through variation to its periodic revenue award, not by users.</p>
Q.3	<p>The following risks to tariff stability have been identified:</p> <ol style="list-style-type: none"> <li>1. Changing Transmission system network, generation and demand background</li> <li>2. Changing regulated background (total allowed revenue)</li> <li>3. Zonal Boundary changes</li> <li>4. Tariff parameters (e.g. security/expansion factors) changing</li> <li>5. Use of System methodology modifications</li> <li>6. Major industry change</li> </ol> <p>Which of the above risks would you wish to be managed in a Long Term Fixed Priced Product?</p>

	Are there any additional risks you believe should be considered?
	All these risks could be mitigated significantly by restricting the ability of NGC to change charging parameters between years once the periodic price review has been settled. There is, in our view, an irresistible case for imposing limitations for items 3 to 6 in this way. Item 2 could be dealt with by some form of carry forward mechanism (overs and unders account) over the life of the price control.
Q.4	Would you prefer a Long Term Fixed Priced Product to be based on an approved and published methodology or on a bespoke bilateral basis?
	It should form part of the charging methodology and be applied consistently and predictably across users, and fall under formal governance processes.
Q.5	In a Long Term Fixed Priced Product what would be your choice for a minimum and maximum fixed period?
	As a minimum, five years. Using first principles, any such arrangement might be available over the life of the connection. However, we believe that if the change restrictions as outlined in our response to Q3 were implemented it may not be necessary to introduce a formal fixed price product.
Q.6	What are the implications of National Grid's responsibility for charge calculation and methodology development on the structure and governance of a Long Term Fixed Priced Product?
	We cannot see any.
Q.7	Should there be additional credit requirements for the introduction of tariffs fixed for more than a year ahead?
	No. Current policies are more than adequate.
Q.8	What alternatives to a Long Term Fixed Priced Product are available to manage the identified risks and do you think these alternatives are better options?
	<p>Three alternative options are identified above, and should also be evaluated by NGC:</p> <ul style="list-style-type: none"> <li>▪ third party hedge provider</li> <li>▪ unlicensed NGC provider</li> <li>▪ limiting change within the life of the periodic revenue control.</li> </ul> <p>We sense that the first two approaches may not prove practicable, but the third has obvious merit.</p>
Q.9	Do you believe there is any merit in requiring new users to commit to a Long Term Fixed Priced Product to support new transmission investment? If so, please state for how long?
	No; connection terms and construction agreements should provide NGC with the necessary certainty.

Q.10	Are there any other issues regarding long term charging arrangements that you wish to be considered?
	Consideration should also be given to capping the level of price changes year on year.

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Name of Respondent:	Simon Lord
Company:	First Hydro Company
Responding on behalf of:	

Q.1	Do you believe that users wishing to hedge against future tariff changes should seek suitable products from independent parties and not National Grid e.g. financial institutions?
	<i>They should (and are) able to seek hedges from other companies but as there have been significant changes to tariffs over the last few years the premium attached would be significant.</i>
Q.2	Would you support proposals from National Grid to develop a Long Term Fixed Priced Product: With National Grid taking the financial risk (of the difference between the fixed tariff and the standard tariff)? With other users sharing the financial risk?
	<i>We would support a proposal for long term tariffs as long as other users on short term tariffs are not burdened with additional risk (i.e. become liable for any annual shortfall.) NGC would be best placed to be the counterparty to these transactions.</i>
Q.3	The following risks to tariff stability have been identified: 1. Changing Transmission system network, generation and demand background 2. Changing regulated background (total allowed revenue) 3. Zonal Boundary changes 4. Tariff parameters (e.g. security/expansion factors) changing 5. Use of System methodology modifications 6. Major industry change  Which of the above risks would you wish to be managed in a Long Term Fixed Priced Product?  Are there any additional risks you believe should be considered?
	<i>We believe that a suitable long term product would be based on the locational element in the tariff. Including factors that significantly affect the residual tariff e.g. G/D split, total revenue collection etc may present a barrier to product development.</i>
Q.4	Would you prefer a Long Term Fixed Priced Product to be based on an approved and published methodology or on a bespoke bilateral basis?
	<i>A published tariff would be preferred.</i>
Q.5	In a Long Term Fixed Priced Product what would be your choice for a minimum and maximum fixed period?
	<i>Three to fifteen years would be suitable</i>

Q.6	What are the implications of National Grid's responsibility for charge calculation and methodology development on the structure and governance of a Long Term Fixed Priced Product?
	<i>Controls would need to be in place such that the contracting subsidiary of NGC that developed the long term tariffs would need to be a ring fenced business with no involvement in the tariff setting for short term tariffs.</i>
Q.7	Should there be additional credit requirements for the introduction of tariffs fixed for more than a year ahead?
	<i>No</i>
Q.8	What alternatives to a Long Term Fixed Priced Product are available to manage the identified risks and do you think these alternatives are better options?
	<i>Currently the only way of mitigating these risks is to own a portfolio of power stations with geographic diversity. This alternative is not available to independent generators.</i>
Q.9	Do you believe there is any merit in requiring new users to commit to a Long Term Fixed Priced Product to support new transmission investment? If so, please state for how long?
	<i>We believe that users should have an obligation to commit to paying TNUoS at the TEC level for a minimum of five years after connection.</i>
Q.10	Are there any other issues regarding long term charging arrangements that you wish to be considered?
	<i>No</i>

## Questionnaire: Long Term Fixed Priced Products

Name of Respondent:	Simon Lord
Company:	Rugeley Power Ltd and Deeside Power Development Company Ltd
Responding on behalf of:	

Q.1	Do you believe that users wishing to hedge against future tariff changes should seek suitable products from independent parties and not National Grid e.g. financial institutions?
	<i>They should (and are) able to seek hedges from other companies but as there have been significant changes to tariffs over the last few years the premium attached would be significant.</i>
Q.2	Would you support proposals from National Grid to develop a Long Term Fixed Priced Product: With National Grid taking the financial risk (of the difference between the fixed tariff and the standard tariff)? With other users sharing the financial risk?
	<i>We would support a proposal for long term tariffs as long as other users on short term tariffs are not burdened with additional risk (i.e. become liable for any annual shortfall.) NGC would be best placed to be the counterparty to these transactions.</i>
Q.3	The following risks to tariff stability have been identified: 1. Changing Transmission system network, generation and demand background 2. Changing regulated background (total allowed revenue) 3. Zonal Boundary changes 4. Tariff parameters (e.g. security/expansion factors) changing 5. Use of System methodology modifications 6. Major industry change  Which of the above risks would you wish to be managed in a Long Term Fixed Priced Product?  Are there any additional risks you believe should be considered?
	<i>We believe that a suitable long term product would be based on the locational element in the tariff. Including factors that significantly affect the residual tariff e.g. G/D split, total revenue collection etc may present a barrier to product development.</i>
Q.4	Would you prefer a Long Term Fixed Priced Product to be based on an approved and published methodology or on a bespoke bilateral basis?
	<i>A published tariff would be preferred.</i>
Q.5	In a Long Term Fixed Priced Product what would be your choice for a minimum and maximum fixed period?

	<i>Three to fifteen years would be suitable</i>
Q.6	What are the implications of National Grid's responsibility for charge calculation and methodology development on the structure and governance of a Long Term Fixed Priced Product?
	<i>Controls would need to be in place such that the contracting subsidiary of NGC that developed the long term tariffs would need to be a ring fenced business with no involvement in the tariff setting for short term tariffs.</i>
Q.7	Should there be additional credit requirements for the introduction of tariffs fixed for more than a year ahead?
	<i>No</i>
Q.8	What alternatives to a Long Term Fixed Priced Product are available to manage the identified risks and do you think these alternatives are better options?
	<i>Currently the only way of mitigating these risks is to own a portfolio of power stations with geographic diversity. This alternative is not available to independent generators.</i>
Q.9	Do you believe there is any merit in requiring new users to commit to a Long Term Fixed Priced Product to support new transmission investment? If so, please state for how long?
	<i>We believe that users should have an obligation to commit to paying TNUoS at the TEC level for a minimum of five years after connection.</i>
Q.10	Are there any other issues regarding long term charging arrangements that you wish to be considered?
	<i>No</i>

## Questionnaire: Long Term Fixed Priced Products

Name of Respondent:	Maf Smith
Company:	Scottish Renewables Forum
Responding on behalf of:	Scottish Renewables Forum

Q.1	<p>Do you believe that users wishing to hedge against future tariff changes should seek suitable products from independent parties and not National Grid e.g. financial institutions?</p> <p><i>We believe that it is most appropriate for NGC to offer longer term charging products. However there may be a role for independent parties to offer products in the market that may assist in operation of the market.</i></p>
Q.2	<p>Would you support proposals from National Grid to develop a Long Term Fixed Priced Product:</p> <p style="padding-left: 40px;">With National Grid taking the financial risk (of the difference between the fixed tariff and the standard tariff)?</p> <p style="padding-left: 40px;">With other users sharing the financial risk?</p> <p><i>Yes. National Grid should develop a Long Term Fixed Priced Product. This will give greater market certainty for market participants. National Grid should take on the risk for this, as they have the market position to be able to offer price products, and be able to properly analyse the long term operation of the market.</i></p> <p><i>Longer term pricing should be offered on a 5 year period, and could be brought into line with distribution charging timescales.</i></p> <p><i>It would not be appropriate for other users to bear the financial risk. In particular independent smaller generators will find it more difficult to ascertain the full workings of the market and less able to respond effectively.</i></p> <p><i>However, it may be appropriate for NGC to share the risk by offering price products. For example, generators could have the option of choosing a one year or five year priced tariff. The values may be different to reflect the risk to NGC of offering a longer term price, and generators would therefore pay a premium for greater charging certainty. This would offset any risk to NGC and to generators (though obviously different types of risk).</i></p>
Q.3	<p>The following risks to tariff stability have been identified:</p> <ol style="list-style-type: none"> <li>1. Changing Transmission system network, generation and demand background</li> <li>2. Changing regulated background (total allowed revenue)</li> <li>3. Zonal Boundary changes</li> <li>4. Tariff parameters (e.g. security/expansion factors) changing</li> <li>5. Use of System methodology modifications</li> <li>6. Major industry change</li> </ol> <p>Which of the above risks would you wish to be managed in a Long Term Fixed Priced Product?</p>

	Are there any additional risks you believe should be considered?
	<p><i>We feel that points 1 to 3 should be included in a longer term charging product.</i></p> <p><i>Points 1 to 3 will cover changes that are due to the workings of the methodology, and therefore outwith the control of users. This is therefore the risk that users wish to be protected against.</i></p> <p><i>The other issues raised (no.s 4 to 6) are issues that will change over time, and which can be more easily foreseen. Therefore it will be acceptable for these changes to be outwith the proposed longer term pricing product.</i></p>
Q.4	Would you prefer a Long Term Fixed Priced Product to be based on an approved and published methodology or on a bespoke bilateral basis?
	<p><i>A long term fixed priced product should be based on the main charging methodology.</i></p> <p><i>The methodology should be used to calculate the appropriate charge, which should then be levied for a set period.</i></p> <p><i>Bilateral charging arrangements would not be beneficial to the wider market, as they would not encourage transparency in charging arrangements.</i></p>
Q.5	In a Long Term Fixed Priced Product what would be your choice for a minimum and maximum fixed period?
	<p><i>We feel that a five year timescale is appropriate. This is because it matches the distribution charging cycle, so would allow generators to plan finances over the same period.</i></p> <p><i>This is particularly appropriate for Scotland, where there is a substantial level of embedded generation sites that will pay transmission charges, because these sites are over 5MW or 20MW,(depending on the Scottish DNO they connect into). It would be inappropriate for such embedded generation to have to pay charges in two different ways.</i></p>
Q.6	What are the implications of National Grid's responsibility for charge calculation and methodology development on the structure and governance of a Long Term Fixed Priced Product?
	<p>Provided that the system is transparent there are no implications. The long term price should be arrived at through a methodology calculation, and then offered to the market. The market can then choose to use this product or not.</p>
Q.7	Should there be additional credit requirements for the introduction of tariffs fixed for more than a year ahead?
	<i>No</i>
Q.8	What alternatives to a Long Term Fixed Priced Product are available to manage the identified risks and do you think these alternatives are better options?
	<i>We know of no other products that would deliver minimised risk to generators</i>

	<i>through lowering the likelihood of changes to the charging system.</i>
Q.9	Do you believe there is any merit in requiring new users to commit to a Long Term Fixed Priced Product to support new transmission investment? If so, please state for how long?
	<i>If users commit to a long term price, then this should be binding on both parties for the period of the long term price.</i>
Q.10	Are there any other issues regarding long term charging arrangements that you wish to be considered?
	<i>Not at this time.</i>

## Questionnaire: Long Term Fixed Priced Products

Name of Respondent:	Stephen Moore
Company:	EDF Energy
Responding on behalf of:	EDF Energy (Cottam Power) Ltd, EDF Energy (Services) Ltd, EDF Energy (Sutton Bridge Power) Ltd, Jade Power Generation Ltd, London Energy plc, SEEBOARD Energy Ltd, West Burton Ltd

Q.1	<p>Do you believe that users wishing to hedge against future tariff changes should seek suitable products from independent parties and not National Grid e.g. financial institutions?</p> <p><i>Both options are perfectly feasible and we see no reason why one should take precedence over the other.</i></p>
Q.2	<p>Would you support proposals from National Grid to develop a Long Term Fixed Priced Product:</p> <p>With National Grid taking the financial risk (of the difference between the fixed tariff and the standard tariff)? <b>Yes.</b></p> <p>With other users sharing the financial risk? <b>No.</b></p> <p><i>It is imperative that long-term prices do not result in greater volatility risk for other market participants. If large numbers of power stations were to choose fixed access products with the risk borne by the rest of the market then the level of stability for stations on an annual tariff would decrease.</i></p> <p><i>We believe that cost reflectivity should continue to form the basis of the charging model and believe that if the risk from long-term prices for some is shared amongst other users, this would not be the case.</i></p>
Q.3	<p>The following risks to tariff stability have been identified:</p> <ol style="list-style-type: none"> <li>1. Changing Transmission system network, generation and demand background</li> <li>2. Changing regulated background (total allowed revenue)</li> <li>3. Zonal Boundary changes</li> <li>4. Tariff parameters (e.g. security/expansion factors) changing</li> <li>5. Use of System methodology modifications</li> <li>6. Major industry change</li> </ol> <p>Which of the above risks would you wish to be managed in a Long Term Fixed Priced Product?</p> <p>Are there any additional risks you believe should be considered?</p> <p><b>Risks which could be managed by Long Term Fixed Price Product.</b>  <i>Alterations to the Transmission network or the generation and demand background (1) and changes to zonal boundaries (3) are the prime reasons why generators would want long-term fixed charges, they could be included as long as the risk did not fall on other generators.</i></p> <p><b>Risks which could not be managed by Long Term Fixed Price Product.</b>  <i>Any variation of the regulated background (2) or major industry change (6) represent fundamental changes to the market and should be outside the scope of any long-term charges – unless specific provision is made for either party to reopen negotiations.</i></p> <p><b>Unsure.</b>  <i>Currently NGC is cost neutral to changes to the use of system methodology (5) as the amount to be recovered does not change just the revenue recovery. Were longer-term charges implemented and NGC taking the financial risk, they would be in a position where they could gain or lose money on modifications.</i></p>

Q.4	Would you prefer a Long Term Fixed Priced Product to be based on an approved and published methodology or on a bespoke bilateral basis?
	<i>Both options are viable; a published price would provide transparency to the market as to NGC's view of future changes to tariffs but there is no reason why that should exclude bilateral deals between NGC and individual generators.</i>
Q.5	In a Long Term Fixed Priced Product what would be your choice for a minimum and maximum fixed period?
	<i>The minimum period should be two years and fixed prices could easily be offered for an entire Price Control Period. Beyond that the risk becomes more difficult to quantify as baseline assumptions are likely to change. It is obvious why 10 or 15 year fixed prices would appeal to the developers of new generation projects as they would provide greater certainty to financial institutions but whether the risk, and hence the risk premium, would be too great is another matter. Where longer term access crossed into another Price Control Period it is likely that there would be a need for either party to be able to reopen negotiations.</i>
Q.6	What are the implications of National Grid's responsibility for charge calculation and methodology development on the structure and governance of a Long Term Fixed Priced Product?
	<i>Pure cost-reflectivity would lead to extreme volatility with nodal prices fluctuating on an annual basis so there must always be a balance between cost-reflectivity and stability in any charging methodology. With Long Term Fixed Pricing, if a generator wants stability then they pay a premium for it, either to NGC or a third-party. This represents a rational decision on the part of the generator to discount cost-reflectivity in favour of stability. However, were the financial risk to be carried by other users then those users lose cost-reflectivity through no choice of their own.</i>
Q.7	Should there be additional credit requirements for the introduction of tariffs fixed for more than a year ahead?
	<i>There is no reason to require additional credit for generators choosing a longer-term deal as the risk is no greater than at present on a recurring annual tariff. Generators pay TNUoS monthly and any default would be subject to NGC's existing provisions for payment default – the length of the deal makes no difference.</i>
Q.8	What alternatives to a Long Term Fixed Priced Product are available to manage the identified risks and do you think these alternatives are better options?
	<i>The potential already exists for a generator to enter into what is essentially a TNUoS Contract for Differences, always assuming that they can find a counterparty willing to take the risk.</i>
Q.9	Do you believe there is any merit in requiring new users to commit to a Long Term Fixed Priced Product to support new transmission investment? If so, please state for how long?
	<i>Requiring new users to commit to a long term product risks being discriminatory, serious developers will want TEC and firm access in the longer term anyway but do not need to be forced into paying the premium that will be attached to a long-term product. It is unlikely that such a requirement would do much to remove the current high levels of 'froth' from the GB queue.</i>
Q.10	Are there any other issues regarding long term charging arrangements that you wish to be considered?

## Transmission Network Use of System Charges

### Questionnaire: Long Term Fixed Priced Products

Name of Respondent:	Steve Drummond
Company:	EDF Trading Ltd
Responding on behalf of:	EDF Trading Ltd and EDF (Generation)

Q.1	Do you believe that users wishing to hedge against future tariff changes should seek suitable products from independent parties and not National Grid e.g. financial institutions?
	<i>We believe that both should be available or at least possible.</i>
Q.2	Would you support proposals from National Grid to develop a Long Term Fixed Priced Product: With National Grid taking the financial risk (of the difference between the fixed tariff and the standard tariff)? With other users sharing the financial risk?
	<i>The financial risks should certainly not be taken by the other parties who have signed up to the annual product and the risks associated with it. In the long term product it would be NG that takes the financial risk in return for the income negotiated in the bilateral agreement.</i>
Q.3	The following risks to tariff stability have been identified: 1. Changing Transmission system network, generation and demand background 2. Changing regulated background (total allowed revenue) 3. Zonal Boundary changes 4. Tariff parameters (e.g. security/expansion factors) changing 5. Use of System methodology modifications 6. Major industry change  Which of the above risks would you wish to be managed in a Long Term Fixed Priced Product?  Are there any additional risks you believe should be considered?
	<i>All of the above could be included, it would be subject to negotiation between the parties. The length of the contract would also have to be negotiated. Regulatory risk is perhaps the biggest risk and it is not clear whether the above list includes it. Such a risk though would be difficult to quantify and hence to take it on.</i>
Q.4	Would you prefer a Long Term Fixed Priced Product to be based on an approved and published methodology or on a bespoke bilateral basis?
	<i>There should be an approved methodology to show what might be available but the specific terms would be subject to negotiation and so would become a 'bespoke bilateral' contract.</i>
Q.5	In a Long Term Fixed Priced Product what would be your choice for a minimum and maximum fixed period?
	<i>There wouldn't – it would be subject to negotiation.</i>
Q.6	What are the implications of National Grid's responsibility for charge calculation and methodology development on the structure and governance of a Long Term Fixed Priced Product?
	Such a product would enable NG to charge according to the perceived risks it was

	having to bear. This would be a value added service and, as such, the income would be outside the price control, especially if NG was taking the full risks. However it is vital that the party concerned has its generation included for charge calculation purposes to avoid distortion to the other parties' charges.
Q.7	Should there be additional credit requirements for the introduction of tariffs fixed for more than a year ahead?
	<i>Possibly, it depends who bears the risk of the system reinforcements if the party is in default.</i>
Q.8	What alternatives to a Long Term Fixed Priced Product are available to manage the identified risks and do you think these alternatives are better options?
	<i>A similar product could exist in one of the financial institutions but we are not aware of any. The annual product would be the alternative. Whether it or the LTFPP is better would be up to parties to decide.</i>
Q.9	Do you believe there is any merit in requiring new users to commit to a Long Term Fixed Priced Product to support new transmission investment? If so, please state for how long?
	<i>No. There should be no commitment other than to sign up for one or the other. The length of time would then be their choice 1yr or more.</i>
Q.10	Are there any other issues regarding long term charging arrangements that you wish to be considered?
	<i>No.</i>

## Questionnaire: Long Term Fixed Priced Products

Name of Respondent:	Elaine Hanton
Company:	Highlands & Islands Enterprise
Responding on behalf of:	N/A

Q.1	<p>Do you believe that users wishing to hedge against future tariff changes should seek suitable products from independent parties and not National Grid e.g. financial institutions?</p>
	<p>This is a moot point if they are not available from independent parties.</p> <p>NGC justifies its methodology partly on the basis that it believes the charges to be stable. NGC stating that it is not willing to offer a long-term product which at least hedges its own methodology is at odds with its defence of its methodology.</p>
Q.2	<p>Would you support proposals from National Grid to develop a Long Term Fixed Priced Product:</p> <p style="padding-left: 40px;">With National Grid taking the financial risk (of the difference between the fixed tariff and the standard tariff)?</p> <p style="padding-left: 40px;">With other users sharing the financial risk?</p>
	<p>Stability and variation in UoS tariffs can be a financial burden on projects. In HIE's area UoS tariffs for new generators are already very significant to the extent that project viability is very sensitive to any changes upwards.</p> <p>Most intermittent generation projects (e.g. wind, wave and tidal) are funded through finance deals. Current levels of UoS charges are a significant factor in project economics and the current regime where charges are adjusted year on year means there is a risk to the economic viability of projects should charges rise. Project financiers are therefore very keen to have a longer term view of UoS charge variability, and under the current charging regime must allow (conservatively) for upward UoS variation. The introduction of a fixed term UoS charge would assist by removing this risk and allowing financiers to quantify the UoS charges to a project. HIE is therefore supportive of moves to introduce Long Term Fixed Price products and other UoS products as outlined in HIE's response to the Condition 3 consultation.</p>
Q.3	<p>The following risks to tariff stability have been identified:</p> <ol style="list-style-type: none"> <li>1. Changing Transmission system network, generation and demand background</li> <li>2. Changing regulated background (total allowed revenue)</li> <li>3. Zonal Boundary changes</li> <li>4. Tariff parameters (e.g. security/expansion factors) changing</li> <li>5. Use of System methodology modifications</li> <li>6. Major industry change</li> </ol> <p>Which of the above risks would you wish to be managed in a Long Term Fixed Priced Product?</p> <p>Are there any additional risks you believe should be considered?</p>
	<p>The list seems comprehensive but new risks may arise and so this should be kept under review.</p>

Q.4	Would you prefer a Long Term Fixed Priced Product to be based on an approved and published methodology or on a bespoke bilateral basis?
	The former would be more appropriate for NGC offering the product, but should not preclude a range of options being offered.
Q.5	In a Long Term Fixed Priced Product what would be your choice for a minimum and maximum fixed period?
	Electricity purchase contracts for wind farms are in the range of say 3-15 years. It would be preferable to have a range of durations on offer to the market.
Q.6	What are the implications of National Grid's responsibility for charge calculation and methodology development on the structure and governance of a Long Term Fixed Priced Product?
Q.7	Should there be additional credit requirements for the introduction of tariffs fixed for more than a year ahead?
Q.8	What alternatives to a Long Term Fixed Priced Product are available to manage the identified risks and do you think these alternatives are better options?
Q.9	Do you believe there is any merit in requiring new users to commit to a Long Term Fixed Priced Product to support new transmission investment? If so, please state for how long?
Q.10	Are there any other issues regarding long term charging arrangements that you wish to be considered?
	<p>HIE recommends that some of the detailed points should be taken forward with the financial community, and that it would be helpful for NGC to put forward its own views, as well as initial proposals for a long-term product which it considers it can offer.</p> <p>HIE has outlined its views on the development of other, apart from Long Term Fixed, UoS products as part of the Condition 3 Questionnaire.</p>

## Questionnaire: Long Term Fixed Priced Products

Name of Respondent:	Gayle Cairns
Company:	BE Power and Energy Trading
Responding on behalf of:	British Energy Group

Q.1	Do you believe that users wishing to hedge against future tariff changes should seek suitable products from independent parties and not National Grid e.g. financial institutions?
	British Energy believes this to be a desirable objective. However, hedging against future tariff changes is only possible if there is some means of assessing the risk. This is likely to require a more stable regulatory charging framework for this service to emerge.
Q.2	Would you support proposals from National Grid to develop a Long Term Fixed Priced Product: With National Grid taking the financial risk (of the difference between the fixed tariff and the standard tariff)? With other users sharing the financial risk?
	We do not support any proposal that puts risk with parties other than NGC and the contracting user.
Q.3	The following risks to tariff stability have been identified: 1. Changing Transmission system network, generation and demand background 2. Changing regulated background (total allowed revenue) 3. Zonal Boundary changes 4. Tariff parameters (e.g. security/expansion factors) changing 5. Use of System methodology modifications 6. Major industry change  Which of the above risks would you wish to be managed in a Long Term Fixed Priced Product?  Are there any additional risks you believe should be considered?
	British Energy would expect that a true long term fixed price product would manage all of these risks and any others with the exception of force majeure. In addition, the risk of an imposed change to regulatory approach to tariff setting must also be explicitly covered.
Q.4	Would you prefer a Long Term Fixed Priced Product to be based on an approved and published methodology or on a bespoke bilateral basis?
	An approved long-term fixed price access product from NGC would need to be laid out in a published methodology. Transparency in this area would be vital.
Q.5	In a Long Term Fixed Priced Product what would be your choice for a minimum and maximum fixed period?
	For agreements with NGC a minimum of 2 years should apply. There should be no set upper limit to allow the scope for lifetime of plant agreements. Clearly there is no limit on a private hedge agreement with a financial institution.

Q.6	What are the implications of National Grid's responsibility for charge calculation and methodology development on the structure and governance of a Long Term Fixed Priced Product?
	If NGC are in the position of being responsible for both the long-term product structures and the normal access products the business is incentivised to change the methodology to maximise the profitability of the long-term agreements. These implications therefore need to be considered carefully in the context of NGC incentive schemes.
Q.7	Should there be additional credit requirements for the introduction of tariffs fixed for more than a year ahead?
	No. The additional risks on NGC do not justify any additional credit requirements for generators. Generation TNUoS requires no credit and neither should this.
Q.8	What alternatives to a Long Term Fixed Priced Product are available to manage the identified risks and do you think these alternatives are better options?
	Financial instruments could be used to manage some of the risks but given the current uncertainty in the regulatory framework and the basis of charges, such instruments are currently almost impossible to price. However, in principle these are the most suitable routes for long term fixed price access as the risk is left between the two contracting parties. Also this does not create incentives for NGC to alter the methodology to gain commercial advantage.
Q.9	Do you believe there is any merit in requiring new users to commit to a Long Term Fixed Priced Product to support new transmission investment? If so, please state for how long?
	There is no merit in committing users to long term fixed price products if you wish to operate in a manner in which assets are infrastructure. If long term commitment from users is required to support specific transmission infrastructure development then NGC would need to introduce a methodology based on deep connection charging which would offer this in the most economically efficient way.
Q.10	Are there any other issues regarding long term charging arrangements that you wish to be considered?