Decision Paper on Cancellation of Generating Unit Agreements in Northern Ireland

10 June 2010

1 CONTENTS

2 EXECUTIVE SUMMARY

Following the publication of an initial consultation paper on 26 November 2009 and the publication of a second consultation paper on 29 March 2010, and having considered the responses to each of these consultations, the Northern Ireland Authority for Utility Regulation ("**the Authority**") publishes this decision paper in order to confirm its decisions:

1. **To instruct the cancellation of the GUAs for the coal/oil fired Kilroot Generating Units No. 1 and No. 2 at the Earliest Cancellation Date of 1 November 2010.**

2. **Not to instruct the cancellation of the remaining units at the Earliest Cancellation Date of 1 November 2010, but to keep these contracts under review.**

This decision paper also states that on 30 April 2010 the Authority gave notice of its intention to issue a direction to **NIE Energy Limited** and **AES Kilroot Power Limited** to terminate early (from 1 November 2010) the GUAs for the coal/oil fired Kilroot Units 1 & 2. Such direction will be issued on or immediately after 28 October 2010.

3 INTRODUCTION

The Northern Ireland Authority for Utility Regulation ("**the Authority**") has the power - as set out in a licence condition contained within various electricity licences ("the **Cancellation Condition**") - to direct the early cancellation of a Generating Unit Agreement ("**GUA**").

The Authority's power to cancel a GUA early ("the **cancellation power**") only applies once it has determined that requisite trading arrangements, which satisfy certain requirements, have been developed. The Authority determined, on 23 October 2007, that the Single Electricity Market (**"**the **SEM**") constituted the requisite trading arrangements[1].

There are currently ten GUAs in force between NIE Energy Limited (effectively its Power Procurement Business ("**PPB**")) and electricity generators in Northern Ireland. The Cancellation Condition provides that the Authority may give a direction for a GUA to be cancelled at any time on, or after, its Earliest Cancellation Date ("**ECD**"). Eight of the GUAs have an ECD of **1 November 2010**. The other two GUAs have an ECD of **31 March 2012**.

On 26 November 2009 the Authority published a Consultation Paper entitled "Consultation on Relevant Considerations in relation to the possible Cancellation of Generating Unit Agreements in Northern Ireland" [2]. The Consultation contained a proposed framework via which the Authority would assess whether or not to instruct the cancellation of GUAs in Northern Ireland.

Following receipt of responses to this first consultation, and having taken account of these responses, the Authority issued a second consultation paper on 29 March 2010 entitled "Second Consultation on Cancellation on Generating Unit Agreements in Northern Ireland[3]" in order to:

- Outline its minded-to decisions in relation to cancellation;
- Explain its analyses and rationale for these decisions; and
- Obtain the further views of market participants and interested parties prior to making its final decisions.

[1] Rationale for Determination that SEM Constitutes Requisite Arrangements
[2] GUA Consultation on Relevant Considerations
[3] Second Consultation on Cancellation of GUAS in Northern Ireland

The responses to the first consultation were published alongside the second consultation.

Following receipt of responses to the second consultation, and having considered these responses (which are published along with this decision paper), the Authority is publishing this decision paper to outline its decision in relation to the termination of the GUAs, and to highlight the notice that was given to the market on 30 April 2010 regarding the intention to cancel the two Kilroot coal/oil fired units, taking effect from 1 November 2010.

In terms of structure:

- **Section 4** provides a background to the history and structure of the GUAs;
- **Section 5** describes the content of the second consultation and summarises the responses;
- **Section 6** describes the updated economic analysis carried out by the Authority in relation to the GUAs
- **Section 7** provides a summary of the results of this economic analysis;
- **Section 8** describes the policy considerations to which the Authority had regard;
- **Section 9** sets out the decisions of the Authority in relation to cancellation of the GUAs at the Earliest Cancellation Date;
- **Section 10** describes the next steps in relation to the GUAs being cancelled from November 2010 and the GUAs which are not being cancelled at present.

4 BACKGROUND

When the electricity industry in Northern Ireland was privatised in 1992, the generating stations were sold to private companies and Power Purchase Agreements (“**PPAs**”) were entered into between these companies and Northern Ireland Electricity plc.

The PPAs with each power station comprise two forms of agreement: a Power Station Agreement (“**PSA**”) relating to the station’s operation and a number of individual Generating Unit Agreements (“**GUAs**”) relating to each generating unit within the power station. These contracts are managed by PPB – a business unit within NIE Energy Limited. There are ten GUAs still in force: five for units at Ballylumford Power Station, one for a unit at Coolkeeragh Power Station and four for units at Kilroot Power Station.

The GUAs contain provisions relating to the purchase and payment by PPB for a number of services including the availability of capacity, the generation of electricity and the provision of ancillary services from each individual generating unit. The GUAs make provision for two categories of payment, namely (i) energy payments, and (ii) availability payments.

Energy payments represent reimbursement of fuel costs, while **availability payments** represent reimbursement for acquisition costs and operating costs. Availability payments are paid irrespective of whether electricity is actually generated, subject to the unit being available to generate.

Each PSA also contains Change in Law provisions which allow for amendments to payments in the event that a generator’s costs (or revenues) vary as a result of changes in legislation, including environmental legislation. Examples of this are costs incurred by AES Kilroot in the past to install a flue gas de-sulphurisation (“**FGD**”) plant to comply with more stringent requirements on SO_2 emissions under the Large Combustion Plant Directive (2001/80/EC). Further costs may be incurred by AES Kilroot under this Directive from 2016 to comply with more stringent controls on NO_x emissions. The European Union Greenhouse Gas Emission Trading System (EU ETS), based on EU Directive 2003/87/EC resulted in the granting of free carbon allowances from 2005-2012 to all generators in Northern Ireland. For nine of the GUAs, the parties have accepted that the value of the free carbon allowances reverts to PPB. However, in the case of Coolkeeragh ESB this is, at present, a matter of dispute between the Coolkeeragh ESB and PPB. It is expected that beyond 2012 no further free allowances will be granted to electricity generators.

PPB sells the energy and capacity purchased from the generating stations through the PPAs in the SEM. PPB also sells ancillary services to the System Operator for Northern Ireland (“**SONI**”).

In any year, PPB will either make a profit or loss on each GUA, i.e. revenues earned in the SEM and from selling ancillary services will either be greater than or less than the costs of the GUAs. In accordance with its licence provisions, PPB passes this profit or loss on to electricity consumers in Northern Ireland as one component of a levy known as the Public Service Obligation (“**PSO**”).

By cancelling a GUA contract, the Authority is instructing PPB to terminate its commercial arrangement with the generator.

At present, PPB acts as an intermediary between the generating units and the electricity market by bidding into the SEM on their behalf. Under the terms of the GUAs, the generating units receive energy payments and availability payments from PPB, while PPB receive the revenue the generating unit would have received if it had been participating directly in the SEM. Any difference, whether positive or negative, between the amount PPB receives in respect of the generating units and the amount it pays to the generators for energy and availability is levied to all Northern Ireland consumers through the PSO.

If a unit’s GUA were to be cancelled, that unit would no longer impact upon the PSO and its costs would be bid into the SEM by the unit’s owners. Each of the units’ owners already has other generating units which they presently bid directly into the SEM, so the conversion to bidding of the presently contracted units directly into the SEM by the owners should not be problematic. If the unit is economically efficient it would be expected to continue to operate in the SEM. If the unit is not economically efficient, it may exit the SEM.

The units under GUA with PPB are listed in the table below:

Table 1: Expiry and Earliest Cancellation Dates of the GUAs

Company	Generating Unit	GUA Contracted Capacity (MWs)	Fuel Type	Earliest Cancellation Date (ECD)	Contract Expiry Date (CED)
AES Kilroot	K1	260 (oil), 195 (coal)	Coal/Heavy Fuel Oil	1 November 2010	31 March 2024
AES Kilroot	K2	260 (oil), 195 (coal)	Coal/Heavy Fuel Oil	1 November 2010	31 March 2024
AES Kilroot	KGT1	29	Distillate	1 November 2010	31 March 2024
AES Kilroot	KGT2	29	Distillate	1 November 2010	31 March 2024
Premier Power	B CCGT 10	106	Gas	31 March 2012	31 March 2012 (with two five-year extension options exercisable by PPB with two years notice in each case)
Premier Power	B CCGT 20	510	Gas	31 March 2012	31 March 2012 (with two five-year extension options exercisable by PPB with two years notice in each case)
Premier Power	B4	180	Gas	1 November 2010	31 March 2012
Premier Power	BGT1	58	Distillate	1 November 2010	31 March 2020
Premier Power	BGT2	58	Distillate	1 November 2010	31 March 2020
Coolkeeragh ESB	CGT8	58	Distillate	1 November 2010	31 March 2020
Total		**1548**			

5 PREVIOUS CONSULTATIONS

On 26 November 2009, the Authority published a consultation paper setting out its initial thoughts and seeking the views and opinions of interested parties on the relevant considerations it should take in to account in relation to the possible cancellation of GUAs in Northern Ireland.

The purpose of this consultation was to:

- Set out the Authority's initial thoughts on the types of issues and factors the Authority believes will or should inform its decision making process (i.e. whether or not it should exercise its early cancellation power at the earliest opportunity); and
- Obtain views of market participants and interested parties.

Nine non-confidential responses to this consultation were received. These were summarised within the second consultation and published in full alongside it.

This second consultation was published on 29 March 2010 and was entitled "Second Consultation on Cancellation on Generating Unit Agreements in Northern Ireland". The purpose of this consultation was to:

- Outline the Authority's minded-to decisions in relation to cancellation;
- Explain the Authority's analyses and rationale for these decisions; and
- Obtain the further views of market participants and interested parties prior to the Authority making its final decisions.

Nine non-confidential responses to the consultation paper were received (AES, BGE, Consumer Council, ESB International, NIE, NIE Energy Supply, Premier Power, SONI, SSE). One confidential response was also received. Comments received are separated into two areas: economic analysis and policy considerations. The non-confidential responses have been published on the Authority's website (www.uregni.gov.uk).

5.1 ECONOMIC ANALYSIS

AES *stated the following:*

The Authority had assumed that Commercial Offer Data (COD) and Energy Payments under the GUA are notionally equal and generally cancel each other out. This is incorrect in relation to heat rate; for example, even when Kilroot Unit 1 and/or Kilroot Unit 2 are the marginal price setting units, the energy payments that PPB receives from the market are higher than the energy payments under the GUA, thereby benefiting the customer.

The infra-marginal rent example provided is misleading as, in addition to the infra-marginal rent that PPB secures, additional margin is secured due to the difference in contracted heat rates versus the actual heat rates PPB bid into the market.

AES are concerned that the Authority's analysis in relation to ancillary service payments does not adequately reflect the likelihood of constrained-on running.

AES were also concerned with the overly aggressive build assumptions. With the exception of a few OCGT units, there was no evidence that any other capacity will be built in the medium term. Wind growth figures are overly optimistic. The main effect of the Authority's unrealistic build assumptions is to dilute and undervalue the forecasted capacity revenues that PPB is likely to secure in the near and medium term.

AES agrees with the assertion that the contribution of infra-marginal rent by the Kilroot 1 and 2 units is very sensitive to the relative prices of gas and coal. Given the binary nature of the scheduling switch and the very significant impact on infra-marginal rent, AES believe that it is vital that the Authority consider an appropriate level of volatility as a sensitivity to the base case.

The high gas price scenario as modelled by the Authority does not represent the industry standard option spread approach when commodity volatility would be an integral part of the valuation. A high carbon scenario is linked to the high gas price scenario and should not be treated as a separate scenario in isolation.

The modelling approach and results substantially undervalue the AES GUAs in relation to Kilroot Units 1 and 2, particularly in relation to the market revenue PPB will secure in the near to medium term. AES continue to believe their offer to PPB reflects a fair allocation of risk and value to AES and customers.

Consumer Council *stated the following:*

Any decision on the future of these contracts must be based on the latest and most accurate market forecasts to ensure that the consumer gets the best deal available. Each contract must be considered individually. The Authority should consider how the planned North/South and East/West interconnectors may impact on the economic analysis.

ESB International *stated the following:*

It is incorrect to assume that PPB's will be successful in its legal dispute with ESBI in regard to carbon allowances.

The assumption of steady growth in demand of 2.6% p.a. from 2011 does not match with other studies.

The Authority has chosen an availability factor of 98% which is excessive given the age of the generating unit.

More conservative capacity payment assumptions should be chosen.

The Coolkeeragh GT8 is subject to LCPD and the relatively low running hours of this unit has meant that so far no SO_2 or NO_X abatement equipment has been required. However, if the GUA running hours of the unit were to increase to the point that capital investment in abatement or monitoring equipment was required, CESB would seek to be reimbursed in accordance with the contract provisions.

SONI *stated that:*

This modelling is an important consideration in the determination of whether to cancel the contracts. However, it is difficult to incorporate the dynamic nature of the market and how the units would respond to being out of contract.

No other comments were received on the Economic Analysis within the Non-Confidential Responses.

5.2 POLICY CONSIDERATIONS

AES *stated that:*

If the Kilroot 1 and 2 units are to be cancelled, then it would be prudent and consistent with policy to cancel the GUAs for KGT1 and KGT2. **SSE** supported this view.

Cancelling the Kilroot 1 and 2 GUAs in the absence of a robust Fuel Security Code will increase the risk to security of supply from November 2010 onwards.

CfD liquidity in the SEM will significantly diminish if the Kilroot 1 and 2 GUAs are cancelled.

Northern Ireland, and indeed the whole island, is already heavily dependent on gas and vulnerable to upstream supply constraints and market conditions in the UK and wider EU. If the GUAs are cancelled, customers lose access to that valuable price hedge.

BG Energy *stated that:*

It is disappointed that the Utility Regulator has only taken the decision to terminate two of the ten GUAs at this time; the remaining GUAs should be terminated at the earliest date possible. Greater competition amongst generation units in the SEM will contribute to providing greater liquidity and competition in the wholesale market.

ESBI *stated the following:*

ESBI agree with the Authority's consideration that cancellation of GUAs would help to promote effective competition.

ESBI believe that security of supply will be better protected if ESBI owns and operates the GT8 unit in the SEM. The reasons for this are:

- SONI do not see any issue about security of supply from early GUA cancellation;
- GUA contracts can be cancelled at any time on, or after, its ECD, introducing uncertainty for the generating unit owner;
- The Coolkeeragh GT8 OCGT is almost 40 years old, more than twice the recommended life of a BNE peaker;
- If the GUA is cancelled, the generator assumes full market risk for the availability and reliability of the generating unit. ESBI would have the freedom to analyse the possibility of an upgrade or new investment on the site.

ESBI believes that the under the GUAs consumers have a large risk exposure and consumers' interests will be better protected if the GUA is cancelled; PPB does not have any financial incentive to maximise the operation of these assets.

ESBI believes that the cancellation of the Coolkeeragh GUA could help to achieve the objective of improving the diversity of supply and environmental sustainability. If the GUA is cancelled, ESBI could have the freedom to optimise the use of the grid connection. Alternative generating technologies would be considered, whereas nothing new would be considered if the GUAs are extended indefinitely.

Premier Power *stated the following:*

Premier Power strongly agrees that cancellation of GUAs would help to promote competition. The cancellation of GUAs would remove obstacles for market participants which currently inhibit and potentially create disincentives to efficient operating practices.

A rolling 180-day cancellation clause is very unsettling for GUA Generators and hinders forward planning for both the generator and the System Operator as cancellation could result in closure of the unit. If the Authority does not cancel the contracts at the earliest opportunity generators should be advised how and when it intends to review the contracts going forward and if the consultation process is to be followed on each occasion.

Premier Power wishes the Regulator to take on board the following key points. It is essential that:

1. Uncertainty is removed;
2. Unnecessary obstacles and bureaucratic structures which are restricting competition are removed;
3. GUAs are dealt with under a consistent policy framework to ensure non-discriminatory outcomes

SSE *stated that:*

SSE agree with the Authority's proposed decision that the AES Kilroot GUA contracts should be cancelled at the earliest possible date. They regret the decision not to provide the additional liquidity in the wholesale market that would accrue from cancellation of the other GUAs, but accept that the scale of expected PSO benefit from their retention is a material counterbalance to the cancellation argument.

The consultation acknowledges that cancellation of the GUAs would help to promote effective competition, but fails to explain why this benefit is outweighed by other considerations in arriving at the intended decisions. While noting the potential for the market to continue to recognise the portfolio value of having diverse generating units whereby cancellation could trigger subsequent merger or acquisition activity such that this portfolio value may be restored, the consultation paper does not proceed to examine this thesis.

Market exit appears to have been the sole criteria against which to have assessed security of supply, although ESBI suggested that GUA termination would offer generators opportunities to reconfigure their sites to provide a more flexible, sustainable and therefore secure generation facility.

Environmental sustainability – in setting out an argument of principle in relation to public subsidy and carbon footprint, this criterion provides a more balanced perspective on the relative merits of the different GUAs and we agree with the Authority's conclusion.

SSE accepts that the sensitivity analysis undertaken as part of the modelling exercise provides a reasonable basis for cancelling the AES Kilroot GUA.

SONI *stated that:*

Cancellation of these GUAs will promote more effective competition.

No other comments were received on the Policy Considerations within the Non-Confidential Responses.

5.3 OTHER COMMENTS

NIE *stated that:*

Requests that the Authority addresses in its final decision paper that the continuing provision of the guarantee is inconsistent with the current requirements for full and effective separation of network activities from supply and generation activities.

NIE Energy Supply *stated that:*

NIEES is very concerned about the outlook regarding contract market liquidity. Early cancellation of the Kilroot contracts, combined with additional ambiguity around the potential integration of ESB's retail and generation entities creates a potentially difficult context to manage the 2010 CfD contracting process.

While they note that the Authority considers that the market may continue to recognise this portfolio value and cancellation could trigger subsequent merger or acquisition activity, such that this portfolio value may be restored. NIEES believes that any such activity is more likely in the medium to long term and therefore such an immediate cancellation timescale will lead to acute scarcity in the 2010 contracting window.

Given the reduction in the PPB portfolio the Authority should be mindful that GUA cancellation further exposes NIEES to increased costs due to the nature of the credit provisions contained within the market rules.

SONI *stated that:*

There are a number of agreements such as Connection Agreements, TUoS Agreements, HAS Agreements and changes to the PSIA that will need to be in place before the cancellation of the Kilroot GUAs can be executed. There will also be a number of changes required to Information Systems to facilitate the new arrangements.

While SONI note the view of the SEM Committee that this is not a SEM matter, they believe that the impact on the SEM remains an important consideration.

The remaining contracts whose ECD is November 2010 should be subject to further analysis.

No other comments were received within the non-confidential responses.

6 ECONOMIC ANALYSIS

Taking account of the responses to the second consultation, the Authority decided it was prudent to repeat its economic and sensitivity analysis using up-to-date and revised data, as well as implementing many of the suggestions made by respondents.

Regarding changes to the assumptions, it should be noted that in several cases, the Authority has decided to implement respondents' proposals in order to 'stress-test' the model, and to test the impact of the arguments made, particularly by AES Kilroot. The Authority does not necessarily agree with the basis of all of the assumption changes proposed and implemented in the updated model; but believes that by testing these changes, the decision to cancel the contracts as outlined in the previous consultation can be more robustly justified.

The changes made are described below. All other modelling assumptions are consistent with those described in the second consultation paper.

6.1 FUEL PRICES

The forecast fuel and carbon prices for the previous analysis were 'frozen' on 17 February 2010. These were updated and a new snapshot was taken on 21 April 2010.

Exchange Rates were taken from www.oanda.com and updated to €1.35/$ and €0.88/£.

Overall, since the previous consultation, the combined effect of fuel and carbon price movements has resulted in the modelling forecasts showing the revenue earned by PPB from the Kilroot coal units is lower than in the results suggested by the previous modelling. This is largely driven by higher carbon prices, which impact coal fuelled generation to a greater extent than gas fuelled generation.

6.2 GENERATION AND DEMAND

For the previous set of modelling, assumptions around demand growth and new generation build were taken from a recent model built by *Redpoint* for the Authority for simulation of various policies relating to wind and dispatch.

Generation

Respondents to the consultation argued that assumptions around plant entry were too optimistic and not consistent with the Generation Adequacy Report (GAR) for Ireland and the Seven Year Statement (SYS) for Northern Ireland. The GAR and SYS are produced by the system operator of the relevant jurisdiction and provide a forecast of entry / exit of plant from 2010 to 2016. The Authority considered this feedback and decided to accordingly update its modelling assumptions on plant entry and exit up to 2016 as described in the GAR and SYS. Beyond 2016, no changes to plant entry / exit were made relative to the previous entry / exit assumptions.

The main changes to plant entry and exit from 2010 to 2016 are described in the following table:

Table 2: Updated Assumptions around Plant Entry and Exit

Original Assumption	Updated Assumption
CCGT 1 (440MW) entry in 2013	CCGT 1 400MW, entry deferred until 2015
CCGT 2 (430MW) entry in 2013	Does not enter
CCGT 3 (400MW) entry in 2016	Does not enter
OCGT (2x100MW) entry in 2016	Does not enter
Tarbert Station (588MW) exit in 2015	Exit in 2012
Great Island Station (212MW) exit in 2015	Exit in 2012
Ballylumford 5&6 (340MW) exit in 2013	Ballylumford 4,5 & 6 (510MW) exit in 2015
	Additional 89MW Waste-to-Heat in 2011 (72MW in Dublin, 17MW in Meath)
	Nore OCGT 98MW, entry 2011
	Cuilleen OCGT 98MW, entry 2012
	Cahir OCGT 98MW, entry 2013

Demand

Demand growth was also updated to match the high demand forecast published by the system operators in the latest GAR and SYS. The following table gives a summary of updated demand growth assumptions.

Table 3: Demand Growth Assumptions

	Original Assumption	Updated Assumption
2011-2018	2.6% p.a.	2.5% p.a.
2019-2025	1.9% p.a.	2.5% p.a.

Wind

Wind growth assumptions in the updated model remains similar to that of the original model, with an average forecast growth of 13.5% p.a. until 2020. Until 2016 growth is taken from the GAR and SYS, beyond this a 5% p.a. growth is assumed. By 2020 it is assumed there will be almost 6,000MW of wind installed on the island.

6.3 OTHER ADJUSTMENTS

Variable Operation & Maintenance and Heat Rate

Previously a Variable Operation & Maintenance (VOM) 'adder' provision of £400k was included for the two AES Kilroot coal-fired units. This was originally intended to not only capture the cost of VOM, but also capture the effects highlighted by AES in their response to the second consultation, namely, that the unit heat rates defined under the contract are superior to the more recently measured rates presently being used by PPB to calculate the Commercial Offer Data submitted to the SEM. This distinction leads to a small effective adder to PPB's net revenue for each MWh that the coal units are dispatched.

This assumption was updated to £2.5m to reflect the response from AES. It should be noted however, that this decision was taken in the context of stress-testing the modelling, which as per the previous work, had suggested that the coal unit GUAs are not good value for consumers. The decision to update the adder estimate above should be taken in that context, and should not be taken as approval by the Authority of PPB's commercial bidding behaviour in the SEM.

SEMO and other PPB fixed costs

These were previously allocated pro-rata to the Kilroot units, but have now been removed completely.

6.4 SENSITIVITIES

Previously, the Authority ran several scenarios on a number of key variables in order to test the sensitivity of the results to changes in these variables.

A high gas price scenario was run, where the price of gas was increased by 15% relative to the price of coal and carbon. This sensitivity was retained (updated as per the Base Case) for this second-round of analysis and additional sensitivities were added where the cost was increased to 25%, 50% and 75% relative to the price of coal and all other variables. The rationale for this scenario is to investigate the impact on infra-marginal rent of increased running of the coal units at Kilroot when the price of gas increases.

In the original analysis, two other scenarios were run. One of these scenarios inflated the price of carbon by 20% (the High Carbon Scenario), while the other scenario (the Slow Investment Scenario) tested the effect if reducing new build and therefore tightening the supply margin.

Based on the responses to the consultation, it was not deemed necessary to update / re-run these scenarios.

7 MODELLING RESULTS

7.1 OVERVIEW

As with the second consultation, the modelling was carried out by extracting the SEM Revenues and running schedules from the *Plexos* model, and then applying the algebra in the GUAs to calculate the GUA related costs. This was carried out over six whole, separate years for each scenario. The first three years examine the short-term and cover November 2010 to October 2013. The final three years look further out, covering calendar years 2016, 2020, and 2024.

It should be noted that all results are shown on a whole-year basis, even if the year is only partially captured by the contracts. This is to enable a like-for-like comparison across the years.

All monetary values shown in the tables that follow are in thousand of pounds and in 2010 real terms. They represent the net contract value or impact on the PSO i.e. positive figures mean the contract is to the benefit of consumers, while negative figures mean the contract is a cost to consumers.

7.2 BASE CASE (PRIOR TO AES KILROOT OFFER)

Table 4: Base Case (Prior to AES Kilroot Offer) – Pre-Consultation

	Impact on PSO (£'000s)							
Period	**B4**	**K1**	**K2**	**BGT1**	**BGT2**	**CGT8**	**KGT1**	**KGT2**
Nov 2010 – Oct 2011	£1,966	-£9,796	-£11,962	£353	£299	£820	£682	£662
Nov 2011 – Oct 2012	£2,322	-£9,889	-£11,179	£411	£406	£874	£826	£791
Nov 2012 – Oct 2013	-£639	-£19,019	-£19,993	-£856	-£849	-£34	-£158	-£169
Calendar 2016	£1,033	-£18,598	-£18,880	-£243	-£312	£348	£83	£1
Calendar 2020	£742	-£18,906	-£20,236	-£379	-£417	£223	£4	-£64
Calendar 2024	£1,012	-£18,325	-£18,446	N/A	N/A	N/A	£103	£36

After repeating the economic and sensitivity analysis using up-to-date and revised data, the following results were obtained:

Table 5: Base Case (Prior to AES Kilroot Offer) – Post-Consultation

	Impact on PSO (£'000s)							
Period	**B4**	**K1**	**K2**	**BGT1**	**BGT2**	**CGT8**	**KGT1**	**KGT2**
Nov 2010 – Oct 2011	£2,225	-£8,520	-£11,860	£440	£387	£1,143	£767	£747
Nov 2011 – Oct 2012	£2,346	-£7,628	-£10,869	£407	£403	£1,109	£863	£831
Nov 2012 – Oct 2013	£30	-£15,386	-£18,308	-£614	-£608	£465	-£24	-£38
Calendar 2016	£1,183	-£15,488	-£17,420	£35	-£35	£943	£229	£143
Calendar 2020	£892	-£15,029	-£18,055	£50	£10	£967	£229	£155
Calendar 2024	£1,163	-£13,848	-£15,741	£332	£231	£1,205	£389	£313

7.3 POST AES KILROOT OFFER

As mentioned in the previous consultation, AES Kilroot has made an offer to PPB in relation to its four units. This comprised a reduction in the Base Availability Credit for all four units and a 'risk sharing' aspect whereby the net contract value (i.e. the difference between PPB's costs and revenues in relation to that unit) at the end of each year would be shared with consumers, subject to caps and floors, in return for an alteration of the earliest cancellation date of those GUAs to the end of 2015.

In its previous analysis, the Authority evaluated the offer by re-calibrating its base case model to reflect the proposed arrangements. The Authority has therefore re-calibrated the post-consultation base case, the results of which are presented below. Please note that because the risk sharing aspect covers all four units, the results have been presented in aggregate form.

Table 6: Impact of AES Kilroot Offer (Post-Consultation)

	Impact on PSO (£'000s)	
Period	**Pre AES Kilroot Offer**	**Post AES Kilroot Offer**
Nov 2010 – Oct 2011	-£18,867	-£8,962
Nov 2011 – Oct 2012	-£16,802	-£6,964
Nov 2012 – Oct 2013	-£33,756	-£11,600
Calendar 2016	-£32,536	-£7,692
Calendar 2020	-£32,699	-£7,557
Calendar 2024	-£28,886	-£5,242

7.4 SENSITIVITY ANALYSIS

Having considered the responses to the consultation, the Utility Regulator has undertaken much wider analysis into the sensitivity of gas prices compared to coal prices. It has analysed the effect on the contracts if the forward prices of gas were to rise 15%, 25%, 50% and 75% continually over the entire period whilst all other forward price remained unchanged. It was not deemed necessary to repeat the sensitivity analysis for the other scenarios presented in the consultation paper. These results are aggregated for the four Kilroot units. Given that the remainder of the units are peakers and do not earn infra-marginal rent under the Base Case, their contract values were not materially impacted by the sensitivity in gas.

Table 7: Impact of Gas Sensitivity Analysis

	Impact on PSO (£'000s)				
	Base	Forward Gas+15%	Forward Gas+25%	Forward Gas+50%	Forward Gas+75%
Nov 2010 – Oct 2011	-£8,962	-£2,876	£391	£11,663	£23,193
Nov 2011 – Oct 2012	-£6,964	-£581	£4,236	£16,546	£28,077
Nov 2012 – Oct 2013	-£11,600	-£3,461	£794	£12,507	£32,600
Calendar 2016	-£7,692	-£5,309	-£645	£9,695	£29,227
Calendar 2020	-£7,557	-£7,469	-£5,622	£1,790	£20,431
Calendar 2024	-£5,242	-£5,003	-£1,522	£7,158	£31,895

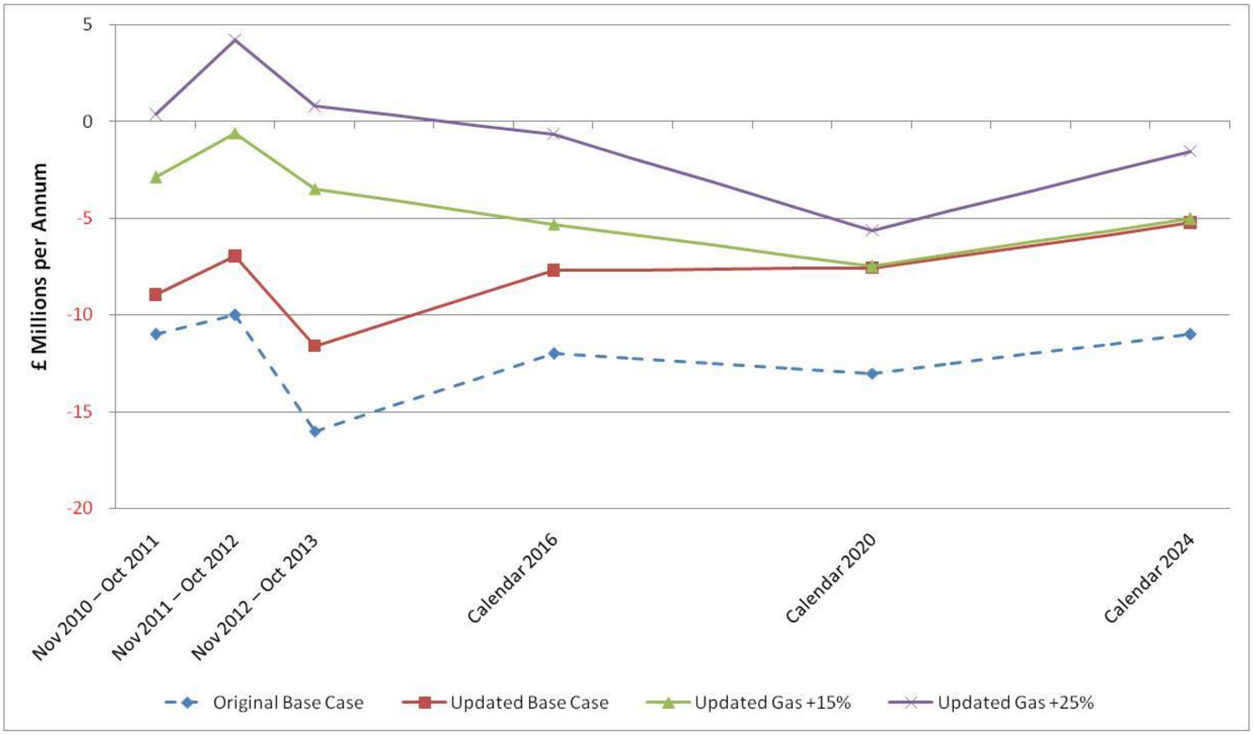
7.5 SUMMARY OF UPDATED MODELLING

The repeated economic analyses tend to continue to support the conclusions of the modelling conducted for the previous consultation. There remains a strong argument in favour of cancellation at the Earliest Cancellation Date for the Kilroot Coal Units K1 and K2.

An overview of the results for the AES Kilroot Units under each scenario is provided in Figure 1 below. Please note that this chart displays the contract values in millions of pounds.

It should be noted that costs related to the compliance with the LCPD Directive from 2016 onwards have been ignored. If these were included, retaining the Kilroot GUAs would be even more detrimental to customers.

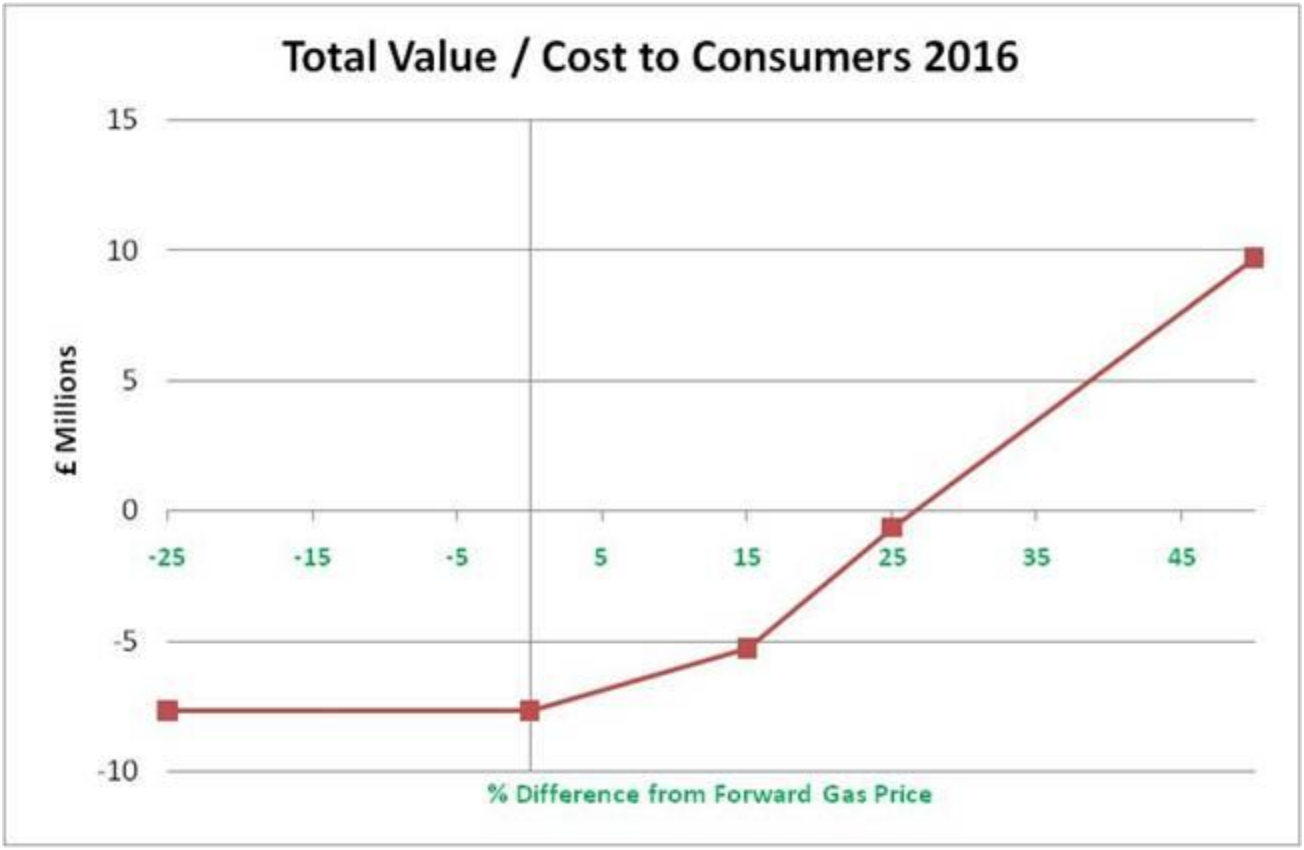
Figure 1 – Summary of Results for AES Units



The progressive gas sensitivities were used to generate graphs which show the changing value of the contracts depending on how high the gas price emerges relative to the Base Case assumption. The graphs are shown below (Figure 2 and Figure 3). Note that the first graph is the summed value over the first three years of the contracts.

Figure 2 – Value/Cost to Consumers depending on Gas Price

Figure 3 – Value/Cost to Consumers depending on Gas Price



These graphs demonstrate that there is essentially an 'Option Value' for consumers in the retention of the contracts, as suggested by some respondents and particularly highlighted by AES in their response. The effect is present because, on the 'downside', the contract value has a 'floor' of around -£8m per year which cannot effectively sink any lower, even were the gas price to crash to historically low levels (ignoring further costs imposed by the LCPD from 2016). On the upside however, there would be value to consumers in the contracts should the relative gas price rise to levels of 50% or more over the entire period than what is assumed in the Base Case, and the benefit continues to increase the higher the relative gas price.

The Authority considered this effect at length, and has concluded that this Option does not warrant retention of the contracts when considered against the value of the contracts under the Base Case, which the Authority considers to be most likely to emerge in reality. This is in the context that an inflation of the relative gas price of 20% would be required before the contracts 'break even' in the first three years, rising to 25% in 2016.

The Authority's decision was not just based on economic analysis. Policy implications were also considered and these are discussed in the next section.

8 POLICY CONSIDERATIONS

The Authority outlined in the second consultation paper the policy considerations which it would take into account in determining whether any or all of the GUAs should be cancelled.

In the exercise of it functions, the Authority is guided by its statutory principal objective and duties.

The principal objective of the Authority is to:

> "protect the interests of consumers of electricity of supplied by authorised suppliers wherever appropriate by promoting effective competition between persons engaged in or in commercial activities connected with the generation, transmission or supply of electricity"

In furthering this principal objective, the Authority must have regard to:

> "The need to secure that all reasonable demands for electricity are met", and "The need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under Part 11 of the Electricity (Northern Ireland) Order 1992 or the Energy Order (Northern Ireland) Order 2003".

The Authority may or must also have regard to a number of additional matters including securing a diverse, viable and environmentally sustainable long-term energy industry.

Finally, the Authority shall not discriminate between electricity companies in the exercise of its functions.

Further account of the policy considerations was taken following receipt of the responses to the second consultation, and is summarised below.

8.1 SECURITY OF SUPPLY

The general theme of the responses to the second consultation was that the cancellation of GUAs would not adversely affect security of supply.

Although the constraint on imports across the North-South Interconnector means that the Kilroot coal/oil-fired units are currently necessary to serve supply in Northern Ireland, the Authority has considered the likely revenues which these units would earn in the SEM (if the GUAs were cancelled) and concluded that market exit is unlikely prior to 2016.

The economic viability of the AES Kilroot units may however become more problematic from 2016 onwards due to the NO_X abatement requirements of the Large Combustion Plant Directive ("**LCPD**"). This is likely to require a significant capital investment in abatement technology or a cap on operating hours. However the implications of the LCPD from 2016 across Europe is common knowledge in the industry and there is adequate time for the construction of significant replacement plant in the market, in the event that these Kilroot units exited the market at that time.

8.2 DIVERSITY OF SUPPLY

AES stated in their response to the second consultation that Northern Ireland is heavily dependent on gas and vulnerable to upstream supply constraints and market conditions in the UK and wider EU. They argued that if the GUAs are cancelled, customers would lose access to a price hedge which the Kilroot coal-fired units provide.

However, ESBI believes that the cancellation of its GUA could help to achieve the objective of improving the diversity of supply and environmental sustainability. If a GUA is cancelled, the owner of that unit would have the freedom to optimise the use of the grid connection. Alternative generating technologies would be considered, whereas nothing new at those sites could be considered while the GUAs continue.

The coal/oil-fired units at Kilroot, with the exception of wind and interconnection, are the only non-gas units presently generating electricity in Northern Ireland. If cancellation of the GUAs for these units was to lead to market exit, Northern Ireland would be become very dependent on gas-fired generation.

However, as explained above, the Authority does not believe that these units will exit the market prior to 2016. Furthermore, diversity is expected to improve in the medium term with further interconnection, wind generation, and possibly generation from biomass.

8.3 COMPETITION & LIQUIDITY

The majority of responses to the second consultation stated that the cancellation of GUAs would help to promote competition amongst generation units, which in turn will provide greater liquidity in the wholesale market.

SSE regret the decision not to provide the additional liquidity in the wholesale market that would accrue from cancellation of the other GUAs, but accept that the scale of expected PSO benefit from their retention is a material counterbalance to the cancellation argument.

ESBI believes that under the GUAs, consumers have a large risk exposure and consumers' interests will be better protected if the GUA is cancelled as PPB does not have any financial incentive to maximise the operation of these assets.

PPB presently offers contracts for difference (CfDs) on a voluntary basis to suppliers. PPB's ability to offer these products is enhanced by the portfolio effect resulting from having access to both coal units from AES Kilroot and a CCGT from Premier Power. While this ability will be reduced if some of the GUAs are cancelled, the Authority has considered that the market may continue to recognise this portfolio value and cancellation could trigger subsequent merger or acquisition activity, such that this portfolio value may be restored.

Both the Authority and the SEM Committee have a statutory duty to promote competition wherever appropriate. To date in the SEM, market power mitigation measures have been necessary, including ring-fencing of the PPB business within the Viridian Group. The Authority considers that reduction of PPB's market share is a step in the right direction in promoting competition.

8.4 ENVIRONMENTAL SUSTAINABILITY

In regard to environmental sustainability, the Authority considers that it may not be appropriate to retain any financial support mechanisms (in the form of "out of market" GUAs) for generating units which have an adverse effect on climate change, relative to other technologies which are less carbon intensive. This is particularly the case for the AES Kilroot coal/oil fired units.

8.5 OTHER CONSIDERATIONS

Fuel Security

The Authority notes that the Fuel Security arrangements in Northern Ireland remain an evolving work area, and that these may need to be reviewed in the light of contract cancellation. However, the Authority does not consider this to be a material consideration in the cancellation decisions.

The Remaining Units

The Authority accepts that the units that will remain under GUA present a degree of uncertainty for the parties involved because the Authority's power to instruct cancellation can be enacted at any time going forward, subject to the notice period.

The Authority acknowledges that some operators would prefer cancellation of the other GUAs. However, the Authority is of the view that, in the absence of any proposals to realise the value of those contracts for consumers, it is in consumers' interest that these contracts remain in place.

The Authority intends to keep the value of the remaining GUAs under review.

The NIE Guarantee

The Authority notes the issue raised by NIE concerning the Guarantee and will consider what action, if any, to take regarding this matter in due course.

NIE Energy Supply Credit Provision

The Authority notes the potential increase in credit cover costs that could emerge for NIE Energy Supply in the face of cancellation. The Authority does not believe this to materially impact or fetter the validity of the economic results in this paper or the justification to cancel.

8.6 CONCLUSION

Having carried out a rigorous economic analysis and considered the policy implications, the Authority has concluded that it is in the interests of electricity consumers to cancel the GUAs for the two coal-fired units at Kilroot.

Cancellation of GUAs associated with the Premier Power CCGT is not possible until 31 March 2012. However on the basis of current economic analysis, cancellation at or after this time would not be in the interest of consumers.

Economics analysis suggests that the GUAs associated with the five peaking units in Northern Ireland still represent value for consumers. The Authority intends to keep the value of these GUAs under continual review.

9 DECISIONS

Having repeated the detailed economic analysis and sensitivity analysis into the financial position of the GUAs, and after considering all relevant policy considerations, the Authority publishes the following decisions:

1. **The GUAs for the coal/oil fired Kilroot Generating Units No. 1 and No. 2 should be cancelled at the Earliest Cancellation Date of 1 November 2010.**

2. **The GUAs for the remaining units should not be cancelled at the Earliest Cancellation Date of 1 November 2010, but kept these under review.**

As stated in the cancellation condition, the Authority must give not less than 180 days' notice to:

- The Department for Enterprise, Trade and Investment;
- The Power Procurement Business of NIE Energy Limited;
- All Electricity Licensees; and
- The Consumer Council for Northern Ireland

of its intention to do so.

Accordingly, the Authority issued notice on 30 April 2010 to the parties listed above of its intention to issue a direction to NIE Energy Limited and AES Kilroot Limited to terminate early (from 1 November 2010) each of:

a. The cancellable GUA dated 1 April 1992 in respect of generation set No. 1 at the AES Kilroot Power Station located at Larne Road, Carrickfergus, County Antrim, Northern Ireland, BT38 7LX; and

b. The cancellable GUA dated 1 April 1992 in respect of generation set No. 2 at the AES Kilroot Power Station located at Larne Road, Carrickfergus, County Antrim, Northern Ireland, BT38 7LX.

The Authority intends to issue the direction to NIE Energy Limited and AES Kilroot Power Limited on or immediately after 28 October 2010.

The full text of this notice of intent can be found at Appendix 1.

10 NEXT STEPS

10.1 GENERATING UNIT AGREEMENTS BEING CANCELLED

The Authority has issued a notice of its intention to terminate early the two Kilroot coal/oil-fired units from their earliest cancellation date of 1 November 2010.

The Authority will issue a final direction once the 180 days' notice from the publication of this notice of intention has elapsed. Because the notice of intention was given to the parties concerned on 30 April 2010, the direction to terminate shall be issued to NIE Energy Limited and AES Kilroot Power Limited on, or immediately after, 28 October 2010.

10.2 GENERATING UNIT AGREEMENTS NOT BEING CANCELLED

As stated above, only the GUAs for Kilroot Units 1 & 2 are being cancelled from their Earliest Cancellation Date. The Authority determined that it is in the economic interests of consumers for the remainder of the contracts to be retained. These contracts will however be kept under review.

APPENDIX 1 – TEXT OF THE NOTICE OF INTENT ISSUED ON 30 APRIL 2010 IN RESPECT OF THE GENERATING UNIT AGREEMENTS FOR AES KILROOT UNITS 1 & 2

Notice given under paragraph 6(e) of:

1 Condition 60 of the electricity supply licence held by NIE Energy Limited,

2 Condition 5 of other electricity supply licences, and

3 Condition 15 of electricity generation licences.

Issued To:

(1) Department for Enterprise, Trade and Investment

(2) The Power Procurement Business of NIE Energy Limited

(3) All Electricity Licensees

(4) Consumer Council for Northern Ireland

30 April 2010

WHEREAS:

1 The Northern Ireland Authority for Utility Regulation (the **Authority**) is empowered by virtue of Condition 60 of the electricity supply licence held by NIE Energy Limited, Condition 5 of other electricity supply licences[4], and Condition 15 of electricity generation licences[5] (the **Cancellation Condition**), to direct parties to a cancellable Generating Unit Agreement (**GUA**) to terminate that GUA from a date or event specified in the direction (referred to in this notice as **early termination**).

2 The Authority may only exercise its power to issue a direction directing the early termination of a cancellable GUA (the **cancellation power**) if the Authority has determined that requisite arrangements which satisfy the requirements of paragraph 3 of the Cancellation Condition have been developed.

3 Before exercising the cancellation power in respect of any cancellable GUA the Authority must give not less than 180 days' notice to the above named parties of its intention to do so.

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[4] Refers only to electricity supply licences which include Condition 5: Modification of Single Electricity Market Trading and Settlement Code and Cancellation of Contracts.

[5] Refers only to electricity generation licences which include Condition 15: Modification of Single Electricity Market Trading and Settlement Code and Cancellation of Contracts.

4 The Authority determined on 23 October 2007 that requisite arrangements had been developed and that they satisfied the requirements of paragraph 3 of the Cancellation Condition.

5 The Authority has –

(a) considered all relevant facts and circumstances related to the GUAs,

(b) carried out two formal consultations dated 26 November 2009 and 29 March 2010 on the relevant matters for consideration in respect of the potential early termination of one or more of the cancellable GUAs presently in force (with the 29 March consultation also setting out the responses received to the first consultation),

(c) met with relevant stakeholders and interested parties to receive and understand their views on the relevant matters, and

(d) had due regard to the views of respondents to the two consultations and of other interested parties.

NOW:

In accordance with its principal objective and general duties as set out in Article 12 of the Electricity (Northern Ireland) Order 1992, and with paragraph 6(e) of the Cancellation Condition, the Authority hereby gives notice of its intention to issue a direction to NIE Energy Limited and AES Kilroot Power Limited to terminate early (from 1 November 2010) each of -

(a) a cancellable GUA dated 1 April 1992 in respect of generation set no. 1 at the AES Kilroot Power Station located at Larne Road, Carrickfergus, County Antrim, Northern Ireland, BT38 7LX, and

(b) a cancellable GUA dated 1 April 1992 in respect of generation set no. 2 at the AES Kilroot Power Station located at Larne Road, Carrickfergus, County Antrim, Northern Ireland, BT38 7LX.

The Authority intends to issue the direction to NIE Energy Limited and AES Kilroot Power Limited on or immediately after 28 October 2010.

Signed Shane Lynch

Shane Lynch

Date: 30 April 2010

Authorised by and on behalf of the Northern Ireland Authority for Utility Regulation