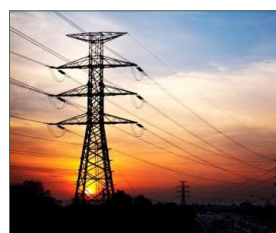


Review of Generating Unit Agreements in Northern Ireland

Decision Paper
10 October 2014



About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive leads a management team of directors representing each of the key functional areas in the organisation: Corporate Affairs; Markets; and Networks. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.

Our Mission

Value and sustainability in energy and water.

Our Vision

We will make a difference for consumers by listening, innovating and leading.

Our Values

Be a best practice regulator: transparent, consistent, proportional, accountable, and targeted.

Be a united team.

Be collaborative and co-operative.

Be professional.

Listen and explain.

Make a difference.

Act with integrity.

Abstract

When the electricity industry in Northern Ireland was privatised in 1992 a number of Generating Unit Agreements were entered into between NIE's Power Procurement Business (now part of Power NI) and generator owners. The principal objective of the Utility Regulator is to protect the interests of consumers. To assist in achieving this objective, we have the power to direct the early cancellation of a Generating Unit Agreement.

This decision paper sets out our economic and policy considerations on the matter, along with our latest decision, which is to not instruct cancellation of the remaining GUAs at this time, but to keep them under review from an economic and policy perspective.

Audience

Energy industry stakeholders; electricity licence holders; electricity consumers; electricity consumer representatives and policy makers.

Consumer impact

This paper sets out both economic and policy considerations in relation to the cancellation of remaining GUA contracts. Our economic assessment estimates that not instructing cancellation of these contracts at this time will benefit electricity consumers approximately £0.3 million on average per annum. However, the benefit is forecast to be greater over the next four years, where the average value is estimated to be £1.3 million on average per annum. We have also considered policy considerations in relation to promoting effective competition, security of supply, diversity of supply and environmental sustainability.

Contents

1. Executive Summary.....	1
2. Introduction.....	3
3. Background.....	5
<i>Background to GUAs</i>	
<i>Operation of the GUAs</i>	
<i>Early Cancellation of the GUAs</i>	
4. Consultation and Responses.....	7
<i>Summary of Consultation Paper</i>	
<i>Consultation Responses</i>	
<i>Key Points from Responses to Consultation</i>	
5. Market Update and Subsequent Correspondence.....	11
<i>Market Update</i>	
<i>PPB Submission</i>	
<i>AES Submission</i>	
<i>Manufacturing NI</i>	
6. Economic Analysis – Methodology.....	13
<i>Methodology</i>	
<i>PPB Price Control</i>	
7. Updated Economic Analysis – Results	14
<i>Changes from analysis presented in consultation paper</i>	
<i>Sensitivity Analysis</i>	
<i>PSO Tariffs</i>	
<i>Summary</i>	
8. Policy Considerations.....	19
<i>Promotion of Effective Competition</i>	
<i>Security of Supply</i>	
<i>Diversity of Supply</i>	
<i>Environmental Sustainability</i>	
9. Jurisdiction for Decision.....	22
10. Decision.....	23
11. Glossary of Terms.....	24

1.Executive Summary

- 1.1. On 19 March 2014 we issued a consultation into the potential cancellation of the two remaining Generator Unit Agreements (“GUAs”) contracts between AES and Power NI’s Power Procurement Business (“PPB”).
- 1.2. Eight responses to the consultation were received. These were from parties both in favour of cancellation and against cancellation.
- 1.3. Since the consultation closed we have considered each response and where necessary we have requested further information and clarification. We have updated our economic and policy assessment, taking on board relevant points raised in consultation responses and subsequent correspondence.
- 1.4. Following consideration of this issue by our Board a market update setting out our latest assessment of the GUAs together with responses to the consultation was published on 31 July 2014.
- 1.5. This market update stated that while the GUAs in their own right are expected to be of value, the additional overhead cost of PPB means the impact of retaining the GUAs is forecast to be a net consumer cost.
- 1.6. The update concluded that given the results of the economic analysis (at that point in time) and taking account of key policy considerations, on balance we were of a view that unless PPB were able to substantially reduce their annual operating costs, the most likely outcome would be a net cost of retaining the contracts beyond Q1 2015.
- 1.7. Since issuing this update we have met with PPB and received an additional proposal from them. This proposal offers to reduce PPB’s current costs by £2.4 million per annum alongside a ‘gain share’ mechanism.
- 1.8. The PPB proposal has had a significant impact on our latest economic assessment. The results of the most likely ‘base-case’ scenario now indicate that retention of the GUAs would be beneficial to consumers. This is presented in Table 1.1 below.

Table 1.1: Base Case – Benefit/Cost to Consumers (through the PSO) of retaining the GUAs (£k)¹

£'000	2015*	2016	2017	2018	2019	2020	2021	2022	2023	Average
Bford CCGT 10	373	278	422	221	-1,384	-1,220	-1,057	-714	-583	-407
Bford CCGT 20	185	878	1,354	1,466	-595	62	720	1,102	1,628	755
Total Benefit/(Cost)	557	1,156	1,777	1,686	-1,980	-1,158	-337	388	1,045	348

1.9. The impact of PPB's price control proposal changes our forecast economic assessment from being a marginal cost of retaining the contracts to being a forecast benefit.

1.10. It should be noted that our latest economic assessment has also changed from that presented in the consultation paper for a number of reasons, for example, we have used more recent fuel, carbon, demand and exchange rate assumptions, and we have taken on board a number of points raised by consultation responses.

1.11. In addition to a revised base case assessment we have also updated our sensitivity analysis, which includes results for different scenarios surrounding forecast commodity prices and demand.

1.12. The decision to cancel or retain the GUAs is not based solely on economic analysis. A number of policy considerations have also been taken into account, including the impact of GUA cancellation on: the promotion of effective competition; security of supply; diversity of supply and environmental sustainability.

1.13. Our policy assessment has not materially changed from that set out in our consultation paper. We believe that this assessment has been supported by responses to the consultation. In particular in relation to promoting competition and contract liquidity as well as facilitating the efficient functioning of the new I-SEM market.

1.14. As a result of our updated economic assessment and consideration of policy matters we make the following decision:

Not to instruct cancellation of the two remaining GUAs at this time but to keep them under review from both a policy and economic perspective.

¹ Note: Because six months' notice is required before cancellation can take effect, the results for 2015 only provide the forecast valuation from 1 April onwards.

2.Introduction

- 2.1. On 19 March 2014 we issued a consultation into the potential cancellation of the two remaining Generator Unit Agreements (“**GUAs**”) contracts between the AES Corporation (“**AES**”) and Power NI’s Power Procurement Business (“**PPB**”)².
- 2.2. The consultation paper set out our initial assessment of both policy and economic considerations. This assessment indicated that, from both these perspectives, it would be beneficial to instruct cancellation of the remaining GUAs. Hence, the paper contained a draft decision, which was to instruct the cancellation of the two remaining GUAs to take effect in December 2014.
- 2.3. Eight responses to the consultation were received. These were received from parties both in favour of cancellation and against cancellation. Further detail of these responses is set out in Chapter 4.
- 2.4. Since the consultation closed we have considered each response and, where necessary, we have requested further information and clarification. We have updated our economic and policy assessment, taking on board relevant points raised in consultation responses and subsequent correspondence, and where available, more up to date assumptions (e.g. in relation to fuel prices, exchange rates and regulated tariffs). Further detail of our updated assessment is available in Chapter 7 and Chapter 8.
- 2.5. This issue was presented to our Board on 27 June 2014. After considering the issue, we published a market update on the matter and indicated that we would make a final decision following our Board meeting in September. The market update, consultation responses and a brief summary of responses was published on 31 July 2014³.
- 2.6. Since publication of this update we have engaged in further discussions with PPB and AES and received additional submissions from both parties.
- 2.7. On 12 September 2014 our Board considered a revised policy and economic assessment of the issue and made the decision set out in Chapter 10 of this paper.

Structure of this paper:

² http://www.uregni.gov.uk/uploads/publications/2014-03-19_GUA_Consultation_Paper_v1_0.pdf

³ http://www.uregni.gov.uk/uploads/publications/2014-07-31_GUA_Market_Update.pdf

2.8. In terms of structure:

- **Chapter 3** describes the background to the GUAs;
- **Chapter 4** provides a summary of the March 2014 consultation and the responses received to it;
- **Chapter 5** describes the market update published on 31 July and subsequent correspondence received;
- **Chapter 6** describes the methodology of our economic analysis;
- **Chapter 7** describes the results of our updated economic analysis;
- **Chapter 8** describes the policy considerations to which we have had regard;
- **Chapter 9** describes the jurisdiction for making any decision
- **Chapter 10** describes our decision on this matter
- **Chapter 11** sets out a glossary of terms used within this paper.

3. Background

Background to GUAs

- 3.1. When the electricity industry in Northern Ireland was privatised in 1992, the generating stations were sold to private companies. Power Purchase Agreements (“**PPAs**”) were entered into between these companies and Northern Ireland Electricity plc as at that time a competitive wholesale market did not exist.
- 3.2. The PPAs with each power station included a number of individual Generating Unit Agreements (“**GUAs**”) relating to each generating unit within the power station. These contracts are currently managed by Power NI’s Power Procurement Business (“**PPB**”) – a business unit within the Viridian Group (former owners of NIE plc).
- 3.3. Over recent years the number of GUAs that PPB manage has reduced to two. These are for two Combined Cycle Gas Turbines (“**CCGTs**”) at Ballylumford Power Station, which have a combined contracted capacity of 616MW. This represents around 25% of total Northern Ireland generation capacity. Further details are set out in the table below.

Table 3.1: Contract Expiry Dates of the remaining GUAs

Generating Unit	Contracted Capacity (MW)	Fuel Type	Contract Expiry Date
CCGT 10	106	Gas	23 September 2018 (with a five-year extension option)
CCGT 20	510	Gas	23 September 2018 (with a five-year extension option)
Total	616		

Operation of GUAs

- 3.4. 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.
- 3.5. PPB sells the energy and capacity purchased from the generating stations through the PPAs in the Single Electricity Market (“**SEM**”). PPB also sells ancillary

services to the System Operator for Northern Ireland (“**SONI**”). The revenue PPB receives from doing so goes towards offsetting the costs of the GUAs along with PPB’s own operational costs.

3.6. If this revenue is not sufficient to cover the associated costs then the difference is made up by a charge to the Northern Ireland Public Service Obligation (“**PSO**”) tariff (as set out in PPB’s licence provisions). If PPB has surplus revenue then this is returned to consumers through a rebate to the PSO tariff.

Early Cancellation of the GUAs

3.7. As can be seen from Table 3.1, each GUA is scheduled to come to an end at its Contract Expiry Date.

3.8. We have the power, as set out in licence conditions (“**the Cancellation Condition**”) contained within electricity generation licences (Condition 15) and the electricity supply licence of Power NI Energy Limited (Condition 60) to direct the early cancellation of a GUA⁴.

3.9. To date, following a comprehensive consultation process (detailed below), we have instructed cancellation of the following GUAs:

- Kilroot 1 and 2 (each 260MW) with effect from 1 November 2010.
- Kilroot GT1 and 2 (each 29MW), and Ballylumford GT1 and 2 (each 58MW) with effect from 1 November 2012.
- Coolkeeragh GT8 (58MW) with effect from 1 February 2013.

3.10. Three other GUAs (relating to other Ballylumford units) have also expired over recent years.

3.11. The GUAs can only be cancelled early where certain specified requirements, which are set out in the Cancellation Condition. Further information on the background, history and cancellation of the GUAs can be found in the consultation paper published in March 2014⁵.

⁴ The Earliest Cancellation Date for the remaining two GUAs was 1 April 2012.

⁵ http://www.uregni.gov.uk/uploads/publications/2014-03-19_GUA_Consultation_Paper_v1_0.pdf

4. Consultation and Responses

Summary of Consultation Paper

- 4.1. On 19 March 2014 we published a consultation paper on the possible cancellation of the remaining GUAs. The paper detailed our initial policy and economic considerations on the matter, along with our draft decision.
- 4.2. The policy assessment included consideration of the impact cancellation would have on:
- the promotion of effective competition
 - market design and the new target model
 - security of supply
 - diversity of supply
 - environmental sustainability
- 4.3. The economic assessment set out analysis of the forecast benefit/cost to consumers (through the PSO) of retaining the GUAs. Based on information available at the time, our base case economic assessment estimated that instructing cancellation of the remaining GUAs would be beneficial for consumers.
- 4.4. As a result of this economic assessment and consideration of policy matters, our draft decision was to instruct the cancellation of the two remaining GUAs to take effect in December 2014.

Consultation Responses

- 4.5. Eight responses were received to this consultation. These were from:

AES	Power NI
CBI	Power NI Energy Limited (PPB)
Consumer Council	SONI
Manufacturing NI	SSE (Ireland)

- 4.6. From our review of the responses, AES, SONI, SSE and the Consumer Council were generally supportive of cancellation. CBI and Manufacturing NI⁶ did not indicate any clear preference but highlighted a number of points for clarification. PPB and Power NI were against cancellation.

⁶ Following publication of the market update, Manufacturing NI provided a further submission in which they stated that their position is against cancellation.

4.7. We have considered each response and where necessary we have requested further information and clarification. Where appropriate, we have updated our economic and policy assessment to reflect relevant points from the consultation responses and subsequent correspondence. Details of our updated assessment are set out in Chapter 7 and Chapter 8.

4.8. Both the summary and the full responses were published along with our market update on 31 July 2014.

Key Points from Responses to the Consultation

4.9. This section summarises our response to two of the key points raised in consultation responses.

Difference between 2014 and 2012 economic analysis

4.10. Four of the responses questioned the difference between the economic assessment of the GUAs presented in the consultation paper and the assessment presented in a decision paper we published in April 2012.

4.11. In April 2012, we published our assessment of the value of these contracts as part of the process that led to the cancellation of five peaking generating units at Ballylumford, Coolkeeragh and Kilroot. Our assessment at that time indicated that there would be economic value in retaining the GUAs for the two Ballylumford CCGT units until at least 2021.

4.12. The economic assessment of the GUAs involves a complex modelling process that involves making assumptions based on information available at any point in time. Overall there are several factors that influence the difference between these assessments, with key factors including:

- Our 2014 assessment uses up to date assumptions in relation to demand and fuel prices. For example, the spread between coal and gas prices has increased since 2012 and demand forecasts provided by SONI are now lower than was forecast back in 2012. Both these impacted on the amount of profit the contracted units are forecasted to earn from the SEM;
- The 2014 modelling assumes lower revenue from capacity payments than forecast in April 2012. This difference is driven by the impact of exchange rates and a falling share of the Annual Capacity Payment Sum due to the entry of new capacity;
- The 2014 model also assumes lower ancillary services revenue than forecast

in 2012. The 2014 analysis was based on more recent actual revenue which reflects a lower than previously expected growth in this revenue stream;

- Gas capacity costs in 2014 were also assumed to be higher than what was forecast in 2012. This reflected the use of more up to date actual data provided by PPB

Difference between our economic analysis and PPB's

4.13. Two of the responses raised questions in relation to the difference between our economic analysis presented in the consultation and that carried out by PPB.

4.14. We have assessed PPB's response, met with and requested further clarification from PPB on a number of points. PPB's consultation response highlights a number of areas where our assessment differs from their assessment. These include gas transportation tariffs and bookings, GTUoS charges, ancillary services revenue, PPB price control costs, CFD risk premiums and a number of other items.

4.15. In the analysis carried out since the consultation we have taken on board a number of the points made by PPB, for example, in relation to ancillary service revenue. We have also used the latest available rates and tariffs for GTUoS and gas transportation capacity.

4.16. We have not however included in our analysis what we would see as some of the more speculative elements contained within PPB's assessment. These include PPB's assumptions in relation to gas capacity bookings and CfD risk premium revenue. In relation to these items our assessment is broadly consistent with analysis presented in other regulatory decisions, including previous GUA cancellation decisions.

4.17. To ensure robustness of our assessment we have also sense checked our analysis against historic outturn data and forecast data provided to us by PPB as part of the annual tariff process.

Examples of other points raised

4.18. Contrary to PPB's assessment, AES's response suggested that there should be adjustments made to our modelling that would increase the cost of the GUAs to consumers. These suggested adjustments include potentially increased interconnector net import to the SEM and adjusting for the inherent volatility in

inframarginal rent and variable operation and maintenance costs.

- 4.19. Several responses also supported our assessment of the policy considerations. For example, SONI stated that cancellation would increase transparency, liquidity and competitiveness of the SEM as a result of generators operating directly in the market.

5. Market Update and Subsequent Correspondence

Market Update

- 5.1. We published a market update on 31 July 2014 along with the responses to the consultation.
- 5.2. This update stated that while the GUAs in their own right are expected to be of value, the additional overhead cost of PPB means the impact of retaining the GUAs is forecast to be a net consumer cost. This update also outlined that our assessment of the policy considerations remained broadly unchanged to that presented in the consultation paper, which largely supported a decision to cancel the remaining GUAs.
- 5.3. The update concluded that given the results of the economic analysis (at that point in time) and taking account of key policy considerations, on balance we are of a view that unless PPB are able to substantially reduce their annual operating costs, the most likely outcome is that there will be a net cost of retaining the contracts beyond Q1 2015.

PPB Submission

- 5.4. Since issuing the market update we have met with PPB and received an additional price control proposal from them (received 27 August).
- 5.5. This submission follows an earlier and less substantial offer from PPB to reduce their overhead costs (received 26 June).
- 5.6. In summary, PPB's proposal offers to reduce their current costs by £2.4 million per annum alongside a 'gain share' mechanism where any surplus made through the GUAs would be shared between customers and PPB on an 80:20 basis (PPB keeping 20%). The split would change to 90:10 for any surplus above £10 million.
- 5.7. This latest offer represents a significant reduction on current overhead costs, the impact of which is assessed in the economic analysis section of this paper.
- 5.8. It should be noted that PPB also provided an additional submission in relation to their ability to offer proposed services being developed under the DS3 programme within the terms of the current GUA contracts.

AES Submission

5.9. Since issuing the market update we met with AES, who provided a further submission in response to the publication of our market update and consultation responses.

5.10. This submission provided an update to AES's economic analysis, and representation in relation to the flexibility of how AES would operate the units, credit cost savings, gas capacity bidding, change in law costs, contract liquidity, market power, market efficiency and security of supply.

Manufacturing NI (MNI)

5.11. On 14 August we received a further submission from MNI. This submission raises a number of concerns that MNI have and also clarifies its position is against cancellation (not broadly neutral as we had interpreted from their written consultation response).

6. Economic Analysis - Methodology

Methodology

- 6.1. Since the publication of the market update, we have updated our economic modelling in relation to the forecast valuation of the GUAs.
- 6.2. As in previous cancellation decisions and the March 2014 consultation, the key economic consideration is the forecast effect on PSO charges to Northern Ireland consumers resulting from cancellation, or otherwise, for each GUA between now and the contract expiry date.
- 6.3. In order to determine the likely effects on the PSO, it is necessary to compare:
- forecast payments due to the generators under the GUAs; with
 - forecast revenues due to PPB in the form of SEM revenues and ancillary service payments from SONI over the remaining lifetime of the GUAs; and
 - the associated cost of operating the PPB business
- 6.4. If forecast revenues due to PPB are greater than forecast GUA payments (and associated PPB costs) for any particular generating unit, it would be rational, on an economic basis, to retain that GUA. If forecast revenues due to PPB are less than forecast GUA payments (and associated PPB costs) for any particular generating unit, it would be rational, on an economic basis, to cancel that GUA. However, retention or cancellation is not exclusively an economic concern. There are also a number of non-economic policy considerations (discussed in Chapter 8) which must also be taken into account.
- 6.5. In forecasting future GUA revenues and costs, the same general methodology that was used in previous cancellation decisions has been used for the purpose of this analysis. Further information on the methodology can be found in the March 2014 consultation paper.

PPB Operating Costs

- 6.6. As described in Chapter 5, following the publication of the market update on 31 July, PPB has offered to reduce their operating costs within their next price control. We have taken the reduction offered into account when assessing the future value of the GUAs.

7. Updated Economic Analysis - Results

7.1. This section provides details of the expected impact on customers from retaining each GUA. All monetary values shown in the tables that follow are in thousands of pounds and in real terms. They represent the net impact on the PSO during that period:

- positive (black) figures mean the contract is to the benefit of consumers;
- negative (red) figures mean the contract is a cost to consumers.

7.2. If a contract with forecasted positive value was cancelled, consumers would not receive the benefit of this value. Conversely, if a contract had negative value, cancellation would mean that consumers did not face this cost.

7.3. Plexos forecast models were run for calendar years 2015, 2016, 2019 and 2022. Results presented for other years were extrapolated from these model runs.

Changes from analysis presented in consultation paper

7.4. Our latest assessment has changed from that presented in the consultation paper for a number of reasons, including:

- More recent fuel, carbon, demand and exchange rate assumptions;
- We have updated our Plexos modelling to better reflect the actual bidding structures of certain generators;
- We have taken on board a number of points raised by PPB and AES in their consultation responses;
- We have accounted for PPB's latest operating cost proposal.

7.5. The impact of these changes is reflected by adjustments to the following forecast revenue and cost line items⁷:

- A fall in forecast infra-marginal rent;
- A fall in forecast capacity revenues due to movement in exchange rate;
- An increase in "VOM" costs due to more up-to-date information;
- Updated assumptions for gas transportation capacity bookings and GTUoS;
- A reduction in the overhead cost of the PPB business.

⁷ Further explanation on what each of these costs represents is described in the consultation paper

7.6. The following table summarises our latest base case assessment, and takes account of the net impact of the underlying contract value and the avoidable costs of the PPB business (resulting from their latest price control offer).

Table 7.1: Base Case – Benefit/Cost to Consumers (through the PSO) of retaining the GUAs (£k)⁸

£'000	2015*	2016	2017	2018	2019	2020	2021	2022	2023	Average
Bford CCGT 10	373	278	422	221	-1,384	-1,220	-1,057	-714	-583	-407
Bford CCGT 20	185	878	1,354	1,466	-595	62	720	1,102	1,628	755
Total Benefit/(Cost)	557	1,156	1,777	1,686	-1,980	-1,158	-337	388	1,045	348

7.7. In summary, the results of the most likely ‘base-case’ scenario indicate that retention of the GUAs would be beneficial to consumers. Based on this base case scenario, it would make sense, on an economic basis, not to cancel these contracts at this time.

Sensitivity Analysis

7.8. An updated sensitivity analysis was conducted on a number of different scenarios. These scenarios were focused on increasing and decreasing forward gas prices, and increasing and decreasing forecast demand.

Fuel Prices

7.9. Given that wholesale electricity prices, and hence generator revenue are largely influenced by wholesale gas prices, sensitivities were carried out by inflating and deflating gas price by 10%.

High Gas Price

Table 7.2: High Gas Price – Benefit/Cost to Consumers (through the PSO) of retaining the GUAs (£k)

£'000	2015*	2016	2017	2018	2019	2020	2021	2022	2023	Average
Total Benefit/(Cost)	-15	1,229	1,784	1,627	-2,136	-1,526	-917	-307	242	-2

7.10. In this scenario, the increase in gas prices leads to these gas fired units

⁸ Note: Because six months’ notice is required before cancellation can take effect, the results for 2015 only provide the forecast valuation from 1 April onwards. It should also be noted that shared costs have been allocated across the two units based on their relative capacities.

becoming less competitive compared to other units. These units are forecast to be scheduled less often and therefore earn less infra-marginal rent from the market. They therefore represent a burden on consumers.

Low Gas Price

Table 7.3: Low Gas Price – Benefit/Cost to Consumers (through the PSO) of retaining the GUAs (£k)

£'000	2015*	2016	2017	2018	2019	2020	2021	2022	2023	Average
Total Benefit/(Cost)	948	2,571	2,946	2,610	-1,133	154	1,213	2,273	3,332	1,657

7.11. In this scenario, with low gas prices, the units are more competitive in the wholesale market and are therefore scheduled more and earn more infra-marginal rent. Based on this scenario, retention of the remaining GUAs would represent an economic benefit to consumers.

Demand

7.12. The All-Island Generation Capacity Statement provides low, median and high demand forecasts. The base case results were based on the median demand forecast. The following tables show the results of basing the analysis on the high and low demand forecasts.

High Demand

Table 4.5: High Demand – Benefit/Cost to Consumers (through the PSO) of retaining the GUAs (£k)

£'000	2015*	2016	2017	2018	2019	2020	2021	2022	2023	Average
Total Benefit/(Cost)	6	923	1,715	1,795	-1,631	-1,247	-863	-479	-94	14

7.13. The above table shows the impact of using the high demand forecast instead of the median demand forecast. Given the position of these units in the generation merit order, small changes to the input variables can have a reasonably significant impact on generator revenues.

Low Demand

Table 4.6: Low Demand – Benefit/Cost to Consumers (through the PSO) of retaining the GUAs (£k)

£'000	2015*	2016	2017	2018	2019	2020	2021	2022	2023	Average
Total Benefit/(Cost)	244	-850	188	344	-3,349	-2,384	-1,420	-455	408	-808

7.14. Reducing demand leads to the units running at a lower capacity factor and

hence the forecast results based on this scenario suggest it would be in consumers' economic interest to cancel the remaining GUAs for effect in December 2014.

Other Sensitivities

7.15. We have also considered the impact on the value of the GUAs of other scenarios. These include a further outage on the Moyle Interconnector and a further delay in the development of a second North-South Interconnector. Both of these increase the forecast value of the GUAs.

7.16. We also looked at the sensitivity of the assessment in relation to movements in exchange rates. Any decrease in the value of sterling against the euro will increase the value of the GUAs. This is largely driven by the changes in capacity revenue due to the Annual Capacity Payment Sum being calculated in euro.

7.17. It should be noted that there are many other factors which could impact the results, including carbon prices, entry and exit of other plant in the market, generation outages and potential for additional revenues under DS3.

Public Service Obligation (PSO) Tariffs

7.18. As described earlier, the net economic effect of the GUA contracts and PPB's operating costs is on consumers through an increase or reduction to the PSO tariff element. This element of the PSO tariff for the twelve month period commencing 1 October 2014 will be negative i.e. a benefit for consumers.

7.19. A significant part of this benefit is due to PPB earning more revenue than expected in the 2013/14 tariff year and this additional revenue being returned to consumers through a 'k-factor' adjustment. However, much of this higher revenue was due to unexpected outages of other key generation plant that led to higher than expected levels of running for the GUA contracted units. This is not forecast to occur on an ongoing basis.

7.20. In addition, PPB's tariff submissions consider the benefit PPB receives from holding and using their allocation of free carbon allowances (under the European Union's Emission Trading Scheme). This is a benefit that is captured for consumers whether cancellation takes place or not. It is therefore not considered a factor for the economic assessment in relation to cancellation.

7.21. It is also worth noting that as part of our assessment of PPB's tariffs for 2014-

15, PPB provided a detailed forecast of their expected revenues and costs. Our assessment of this submission has given us further confidence that our analysis is realistic and robust.

Summary

7.22. The results of the modelling carried out for the base case indicates that the contracts will be an economic benefit to consumers from 1 April 2015 onwards. This assessment is largely influenced by PPB's proposed reduction in their overhead costs. This benefit is forecast to be greatest over the next four years, totalling approximately £5 million.

7.23. The sensitivity analysis carried out shows the effects of changes in certain variables can have on consumer costs. Consideration will need to be taken on the likelihood of such sensitivities before a decision to cancel is made.

8. Policy Considerations

8.1. The previous section considered the likely economic effect, in terms of price impact on customers, of retaining the existing contracts. However, the decision to cancel or retain the GUAs cannot be based solely on economic analysis. There are also a number of policy considerations which must be taken into account.

8.2. In the exercise of our functions we are guided by our statutory principal objective and duties.

8.3. The principal objective of the Utility Regulator (in relation to electricity) is to:

“protect the interests of consumers of electricity 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”

8.4. In furthering this principal objective, we 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”.

8.5. We shall also have regard to a number of additional matters including securing a diverse, viable and environmentally sustainable long-term energy industry. We shall also not discriminate between electricity companies in the exercise of its functions.

8.6. In our consultation we set out our assessment of the likely effects of GUA cancellation on:

- the promotion of effective competition;
- security of supply;
- diversity of supply;
- environmental sustainability

8.7. Overall our policy assessment has not materially changed from that set out in our consultation paper.

8.8. We consider that the policy assessment set out in our consultation paper has been supported by responses to the consultation. In particular in relation to promoting competition and contract liquidity as well as facilitating the efficient functioning of the new I-SEM.

Promotion of effective competition

I-SEM Implementation

8.9. The effect of cancelling or retaining the GUAs could impact competition in the SEM. In this respect, the impact in relation to the new SEM design (the I-SEM⁹), contract liquidity and market power are of particular concern.

8.10. The introduction of the I-SEM will bring about substantial changes to the current SEM arrangements. While we expect that any market changes will facilitate intermediary arrangements such as those currently used by PPB, the absence of the GUAs may simplify the implementation of certain aspects of the new arrangements.

8.11. In addition to this, the removal of existing legacy arrangements should help improve the overall efficiency of market signals and hence greater promote competition and transparency within the wholesale market. However, the existence and continuation of the GUA contracts may act to mitigate any such uncertainty or potential adverse effect of introducing a new market.

Contract Liquidity

8.12. As set out in the consultation paper, there are both risks and benefits associated with cancellation in relation to contract liquidity. On balance, we consider that any cancellation decision should not have any significant negative impact on contract liquidity but that cancellation may improve liquidity in the market. The new market design may also help facilitate greater liquidity.

Market Power

8.13. Our consultation paper set out an assessment of the impact of cancellation on market power, including potential changes to results of the Herfindahl-Hirschman

⁹ [SEM-14-085: I-SEM High Level Design](#):

Index calculation¹⁰. This assessment indicated that there is a high degree of market concentration in the market and that would increase should cancellation take place. However, as also highlighted, there are a number of market power mitigation measures in place within the SEM and local market power should be reduced if and when a second north-south interconnector is completed. It is expected that market power mitigation will continue to be a key feature in the new I-SEM market.

Security of supply

8.14. While security of supply is a key concern at present it is not something that consultation responses gave a strong response on. Our assessment is that a decision to cancel would not have a material impact on security of supply as it is expected that these generators will continue to operate whether cancellation takes place or not. A key difference would be that AES's revenues will be driven by SEM revenues rather than the terms of the GUAs.

Diversity of supply

8.15. We do not see any impact on diversity of supply from the cancellation or otherwise of these units.

Environmental sustainability

8.16. There should be no negative impact on environmental sustainability from the cancellation or otherwise of the remaining GUAs.

8.17. However, we will continue to monitor the impact the existence of the GUAs has on the units' ability to provide flexibility services, for example under the DS3 programme¹¹, which is designed to help accommodate renewables on the all-island grid.

¹⁰ HHI measures the market concentration of an industry. It is calculated by summing the squares of market share for each firm. In a perfectly competitive market, HHI approaches zero. In an uncompetitive market, HHI approaches 10,000.

¹¹ <http://www.soni.ltd.uk/Operations/DS3/>

9. Jurisdiction for Decision

- 9.1. Article 6(2) of the Electricity (Single Wholesale Market) (Northern Ireland) Order 2007 (“the SEM Order”) provides that any decision as to the exercise of a relevant function of the Utility Regulator in relation to a SEM matter must be taken on behalf of the Utility Regulator by the SEM Committee.
- 9.2. Article 6(3) confirms that a matter is a SEM matter if the SEM Committee determines that the exercise of a relevant function of the Utility Regulator in relation to that matter materially affects, or is likely materially to affect, the SEM.
- 9.3. At their meeting on 29 May 2014, the SEM Committee discussed this issue and previous GUA cancellation proposals and agreed that the decision to cancel these contracts was not a SEM matter.
- 9.4. Therefore the decision on whether or not to instruct early cancellation of the remaining GUAs should be taken by the Utility Regulator Board.

10. Decision

10.1. Having undertaken detailed economic analysis and sensitivity analysis into the financial position of the two remaining GUAs, and after considering all relevant policy considerations, we make the following decision:

Not to instruct cancellation of the two remaining GUAs at this time but to keep them under review.

10.2. The overall benefit of the GUAs will be kept under review from both a policy and economic perspective, including a satisfactory conclusion in relation to PPB's price control from 1 April 2015 onwards.

10.3. We will continue to engage with PPB in relation to their price control so as to ensure consumer value is maximised.

11. Glossary of Terms

CCGT	Combined Cycle Gas Turbine
CfD	Contract for Difference
COD	Commercial Offer Data
GUA	Generating Unit Agreement
HHI	Herfindahl-Hirschman Index
ICE	Intercontinental Exchange
I-SEM	Integrated Single Electricity Market
MMU	Market Monitoring Unit
MSQ	Market Schedule Quantity
MW	Megawatt
MWh	Megawatt-hour
NDC	Non-Directed Contract
NIAUR	Northern Ireland Authority for Utility Regulation
PPA	Power Purchase Agreement
PPB	Power Procurement Business
PSA	Power Station Agreement
PSO	Public Service Obligation
SEM	Single Electricity Market
SMP	System Marginal Price
SONI	System Operator for Northern Ireland
TUoS	Transmission Use of System
VOM	Variable Operation and Maintenance