# **Submission to the: Economic Regulation Authority**

# **Re Incentive Mechanisms**



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## 1. Introduction

This submission sets out the response of Alinta Gas Networks (AGN) to the Discussion Paper published by the Economic Regulation Authority (ERA), titled *Incentive mechanisms* for Code regulated gas pipeline systems.

The ERA's Discussion Paper proposes that:

- regulated companies should be permitted to retain efficiency gains and losses associated with operating expenditure for a period of 5 years, regardless of the timing of the next regulatory review;
- capital expenditure efficiency gains / losses should accrue to the Service Provider within
  the current Access Arrangement period only. (That is, there should be no carry-over
  from one regulatory period to the next of efficiency gains and losses associated with
  capital expenditure); and
- where strong incentives exist for cost reduction, matters such as the safeguarding of service levels may need to be addressed through other means.

In response, AGN considers that:

- Incentive arrangements should permit regulated companies to retain efficiency gains and losses associated with operating expenditure for a period of 10 years, regardless of the timing of the next regulatory review.
- Incentive arrangements should also be applied to capital expenditure, to permit regulated companies to retain capital-related efficiency gains and losses for a period of 10 years, regardless of the timing of the next regulatory review.
- For the purpose of determining the amount of capital expenditure efficiency gains to be carried over from one regulatory period to the next, there should be adjustments made to account for scope changes, so that gains and losses attributable under the incentive mechanism relate principally to factors within the control of the company.
- At the end of an Access Arrangement period, any net negative amount attributable to accrued efficiency losses should be carried forward to be offset against any positive amounts that may accrue in the future.
- Guaranteed Service Level (GSL) schemes coupled with competitive disciplines and safety standards provide effective arrangements to ensure the maintenance by Service



Providers of high levels of customer service in the presence of incentives for cost reduction.

- In its design of incentive mechanisms, the ERA should carefully consider the relationship between the performance achieved by a company in response to incentives, and the price path that may reasonably be considered to be applicable to the company at future regulatory decisions. Given the risks and costs of regulatory error that have been identified by the Productivity Commission, regulators' decisions should not assume and impose prospective efficiency gains on regulated companies. Instead, regulatory decision-making should be based on information about the level of efficiency actually achieved by each company in response to cost-reduction incentives.
- An effective incentive-based regulatory regime will enable all stakeholders to reasonably infer that a company's actual level of costs is consistent with efficient operation and investment. The drawing of such an inference enables the regulator to adopt a light-handed approach to assessing the prudence and efficiency of capital and operating expenditure that does not involve costly and detailed regulatory examination.

The Discussion Paper contains an analysis of a number of issues relating to the design of incentive arrangements in the regulation of gas networks. Some of the analysis and conclusions set out in the Discussion Paper are, in AGN's view, inconsistent with sound principles of incentive regulation, particularly in light of:

- the conclusions and recommendations of the Productivity Commission's review of the national access regime, and the draft report of its review of the gas access regime; and
- the decision of the Western Australian Supreme Court in the recent Epic Energy case.

AGN submits that it will be important for the ERA to ensure that the incentive mechanism is designed and administered in a manner that reflects an appropriate practical application of the principles set out in the Western Australian Supreme Court's decision, and the Productivity Commission's reviews of the national access regime and the gas access regime.

This submission sets out detailed responses to each of the conclusions made in the Discussion Paper.

The remainder of this submission is structured as follows:

 Section 2 sets out AGN's responses to the Discussion Paper's conclusions on the rationale for incentive mechanisms;



- Section 3 sets out AGN's responses to the Discussion Paper's conclusions on design criteria;
- Section 4 sets out AGN's responses to the Discussion Paper's conclusions on price path incentive mechanisms; and
- Section 5 sets out AGN's responses on the Discussion Paper's conclusions on benefit sharing under a price path incentive mechanism.



# 2. Rationale for Incentive Mechanisms

The Discussion Paper's conclusions regarding the rationale for incentive mechanisms are as follows:

#### Conclusion 2.1

Incentive mechanisms are sought to foster outcomes on efficiency and growth of the gas market that emulate outcomes that could be expected if a competitive environment existed for the delivery of Services, including Reference Services.

#### Conclusion 2.2

Incentive Mechanisms are also sought to over time help reveal efficient costs of delivering the Reference Services and so avoid intrusive and costly regulatory activity that would otherwise be necessary in assessing proposed Access Arrangements.

The Discussion Paper's conclusions with regard to the rationale for incentive mechanisms appear reasonable.

However, in reaching these conclusions, the Discussion Paper states (on page 10):

"For a covered Pipeline that lacks competitive pressure on its market share and pricing, a regulatory scheme that through a Reference Tariff addresses fair and reasonable returns to the Service Provider for no more than its routine and prudent performance will lead to concerns that further benefits for all that are apparent in the competitive situation will not be delivered and that the Service Provider will not necessarily strive to achieve world's best practice."

This statement raises potential concerns because it seems to suggest that a fair and reasonable return may over-compensate "routine and prudent performance." AGN rejects any such suggestion. In addition, the statement may be read as suggesting that "the competitive situation" can be clearly defined in practice, and the "further benefits" that may be generated in such a situation can in practice be clearly identified and delivered through regulation.

Such inferences would be at odds with the recent decision of the Western Australian Supreme Court in the Epic case, which made it clear that under the Code, regulators must aim to replicate a "workably competitive" outcome. This means that the efficiency standards imposed should not be those of a theoretical construct of perfect competition but rather one that might be found in a real market and this may well allow higher costs than the theoretical ideal.

In addition, these inferences are inconsistent with the principles established by the Productivity Commission's review of the national access arrangements. That review noted



- the scope for regulatory error is high if regulators become overly ambitious in their decision making;
- there is a significant risk that aggressive regulatory decision-making may severely diminish incentives for on-going investment in infrastructure; and
- the cost to society as a whole of insufficient infrastructure investment is far greater than the potential cost associated with regulatory decisions that are expressly aimed at providing incentives for on-going investment.

It will be important for the ERA to ensure that the incentive mechanism is designed and administered in a manner that reflects an appropriate practical application of the principles set out in the Western Australian Supreme Court's decision in the Epic case, and the Productivity Commission's reviews.



# 3. Criteria Governing the Design of Incentive Mechanisms

The Discussion Paper provides a summary of the objectives set out in sections 8.44 and 8.46 of the Code. These objectives provide a basis for guiding the design of incentive arrangements, and for assessing the merits of alternative incentive mechanisms. The Discussion Paper also proposes a number of supplementary criteria that are described as "desirable". The Discussion Paper's three conclusions regarding the design criteria for incentive mechanisms are set out below. AGN's responses to each of the conclusions are also set out below.

#### Conclusion 3.1

Criteria for the design of Incentive Mechanisms are given in section 8.44 and section 8.46 of the Code as series of objectives against which it is necessary to assess compliance although no absolute level of achievement of those objectives is prescribed.

AGN makes no comment on this conclusion

#### Conclusion 3.2

A number of desirable design criteria can be proposed to augment the list of necessary criteria prescribed in the Code.

AGN broadly agrees that it is possible to augment the list of criteria prescribed in the Code, however page 13 of the Discussion Paper suggests that "robustness" will be enhanced if the design of the incentive mechanism is:

"reviewable by the Regulator (if necessary due to material change in circumstances)".

In response to this suggestion, AGN notes that the effective functioning of any incentive mechanism is dependent on the extent to which the Service Provider can be confident that the rules for rewarding efficiency gains will be preserved over the relevant regulatory periods. If the Regulator is able to review the rules governing the operation of the incentive mechanism, then there is a risk that the rules may change, resulting in the confiscation of efficiency gains. The prospect of any such changes would, in turn, severely diminish the incentives on Service Providers to achieve efficiency gains in the first place.

This discussion highlights that *certainty* in the operation of an incentive mechanism is a fundamentally important attribute. Service Providers may reasonably seek such certainty through the application of fixed principles, particularly where the period of operation of the mechanism spans more than one regulatory period. Notwithstanding this, any criteria applied during the ERA's assessment of incentive mechanisms should encompass a consideration of the need for the mechanism to provide certainty over the entirety of the period of operation of the mechanism.



#### Conclusion 3.3

Considerable flexibility is given to the Service Provider as to how it will conduct its business in response to the Incentive Mechanism and thus matters such as the safeguarding of service levels may need to be addressed through other means.

In response to Conclusion 3.3 of the Discussion Paper, AGN agrees that in principle, where strong incentives to reduce costs exist, there should be arrangements in place to ensure that service standards are safeguarded. In this context it in noted that in the gas distribution sector, these safeguards are provided primarily by safety standards which, given the nature of the standards and the physical characteristics of gas distribution networks, result in a high level of network reliability. These standards can be supplemented by the inclusion of a customer rebate scheme or "guaranteed service level" (GSL) scheme in the Reference Tariff Policy.

GSL schemes are structured to provide an appropriate incentive to the Service Provider to ensure that the level of service delivered to individual small end use consumers is not materially less than the high level of service reliability delivered, on average, by the network as a whole. Where the Service Provider fails to deliver prescribed services within the specified service levels, payments are made by the Service Provider to consumers.

It should be noted to this end that AGN has proposed such a scheme in its proposed Access Arrangement.

All of these arrangements, coupled with the competitive pressures faced by Service Providers provide effective mechanisms to ensure the maintenance by the Service Provider of high levels of customer service in the presence of incentives for cost reduction.



## 4. Price Path Incentive Mechanisms

The Discussion Paper contains seven conclusions regarding price path incentive mechanisms. These conclusions, and AGN's responses to each one are set out below.

#### Conclusion 5.1

A price path of Reference Tariffs forecast for each year of an Access Arrangement Period, and often expressed in terms of a CPI-X formula, has become the most commonly used Incentive Mechanism for gas pipeline access regulation within Australia.

AGN makes no comment on this conclusion.

#### Conclusion 5.2

A price path set for a period with the assumption of certain efficiencies and/or sales increases being made for each year of that period provides a strong incentive for the Service Provider to achieve at least those or some equivalent efficiencies and/or those sales increases in each year.

AGN strongly disagrees that the "assumption of certain efficiencies" will, of itself provide incentives. Regardless of the assumptions underlying the price path, it is the existence of the price path – or price cap – itself that provides incentives. This is because for the duration of the Access Arrangement period, the total revenue that the regulated company is permitted to recover is independent of its actual costs. To the extent that the company is able to produce the services required by customers at a reduced cost, the company's profits in the regulatory period will be increased. It is therefore the de-coupling of the company's actual costs from its allowed revenue within an Access Arrangement period, and not "the assumption of certain efficiencies and/or sales increases", which provides incentives.

The Discussion Paper may also read as suggesting that "the assumption of certain efficiencies" by the Regulator is a straightforward matter, and is therefore a desirable course of action. Such an inference is, however, ill-founded. The assumption of efficiencies by the Regulator may deliver short term price reductions to consumers, however, as noted by the Productivity Commission in its recent review of the national access regime:

- the scope for regulatory error is high if regulators become overly "surgical" and ambitious in seeking to reduce access prices to the lowest possible level;
- there is a significant risk that aggressive regulatory decision-making may unduly constrain the returns available from infrastructure investment, thereby severely diminishing incentives for on-going investment in infrastructure; and



• the cost to society as a whole of insufficient infrastructure investment is far greater than the potential cost associated with regulatory decisions that are expressly aimed at providing incentives for on-going investment.

Finally, AGN considers that a regime under which the Regulator makes assumptions of future efficiency gains in setting CPI-X price paths is inconsistent with one of the two key purposes of incentive regulation (as described on page 1 of the Discussion Paper), which is to: "over time, help reveal efficient costs of delivering Reference Services and so avoid intrusive and costly regulatory activity that would otherwise be necessary in assessing proposed Access Arrangements".

Under the regulatory approach proposed in the Discussion Paper:

- The response of the regulated company to the incentives will result in the company achieving and *revealing* (though regulatory accounts and other performance reporting arrangements) efficient operating and capital costs.
- The information revealed by the company would then be used by the Regulator as a basis for setting future price paths.
- Under such an approach, the need for the Regulator to "assume" or forecast future efficiency gains and to embed these in price path decisions is obviated; the company's own recent actual performance can be taken as a benchmark for the next price path, and if, during the course of a regulatory period, the company is able to deliver services at a cost below that benchmark, then the Regulator would have new information about the company's level of efficiency that could be used to set the next price path.

AGN considers that the regulatory approach described in the three dot points above, which appears to be advocated by the Discussion Paper, would indeed avoid the "intrusive and costly regulatory activity" that would be associated with a regime under which the Regulator attempted to anticipate and impose assumed prospective efficiency gains on companies through price path decisions.

In this context, it is noteworthy that page 21 of the Discussion Paper states:

"A detailed analysis of the determination of Reference Tariffs under the Code is beyond the scope of this discussion paper. It should, however, be recognised that the determination does have a fundamental impact on the resulting Incentive Mechanism."

AGN strongly agrees that the incentive mechanism and the determination of future price paths are strongly inter-related. It is suggested that in its design of incentive mechanisms, the ERA should carefully consider the relationship between the performance achieved by a company in response to incentives, and the price path that may reasonably be considered to be applicable to the company at future regulatory decisions. Given the risks and costs of regulatory error that have been identified by the Productivity Commission, regulators'



decisions should not assume and impose prospective efficiency gains on regulated companies. Instead, regulatory decision-making should be based on information about the level of efficiency actually achieved by each company in response to cost-reduction incentives.

Finally, it is noteworthy that the Essential Services Commission in Victoria has carefully considered the question of the incentive properties of price path forms of regulation, and has concluded that:

"Under the CPI-X approach, the X factors that apply each year throughout the access arrangement period are not adjusted within that period. The source of the incentives to pursue gains extends from the fixed nature of these price caps, not the particular assumptions used to set them in the first place. The caps remain in place for the duration of the period irrespective of whether the assumptions used to establish them turn out to be favourable or unfavourable to the distributor. As such, the Commission considers the incentive properties of the regime are sufficient to infer that operating (and capital) expenditure approximates levels that would be incurred by a prudent service provider operating efficiently." (ESC, Review of Gas Access Arrangements - Final Decision, October 2002, page 81.)

AGN considers that the inference (that actual operating and capital costs incurred by the Service Provider are efficient and prudent) is soundly based, provided that an effective incentive-based regulatory regime is in place. The drawing of such an inference enables the regulator to adopt a light-handed approach to assessing the prudence and efficiency of capital and operating expenditure that does not involve costly and detailed forensic examination by the regulator.

#### Conclusion 5.3

An additional incentive is available under a price path through section 8.44 of the Code. That section offers security for the Service Provider that, with agreement of the Relevant Regulator, there can be some limit placed on absorbing into Reference Tariffs the benefits of efficiency improvements and of sales growth. Those benefits are then expressed as the cost savings and/or sales revenue increase that overall would cause returns to the Service Provider from the sale of the Reference Service to exceed the level of returns expected for that Access Arrangement Period or during a period (commencing at the start of an Access Arrangement and including two or more Access Arrangement Periods).

AGN makes no comment on this conclusion.

# Conclusion 5.4

The Code does not exclude consideration within a price path Incentive Mechanism of additional returns attributable to such things as fortuitous events or general economy – wide movements input costs, or to economies effected in capital spending (reflected in lower interest payments and other charges).

AGN makes no comment on this conclusion.



#### Conclusion 5.5

A price path Incentive Mechanism complying with section 8.44 of the Code may be viewed by a Service Provider as inherently asymmetric in terms of the risk to its return should Reference Tariffs reflect an overly-optimistic view of the efficiency initiatives and market growth prospects likely to be available to Service Provider over the Access Arrangement Period. As a practical consideration, there exists an offsetting asymmetry of information available to the Service Provider as compared to that available to the Regulator at the time the Reference Tariffs are approved. This makes it unlikely that the processes under the Code for proposing and assessing compliance of Reference Tariffs will necessarily embrace an overly-optimistic view of efficiency initiatives and market growth prospects.

AGN strongly disagrees with Conclusion 5.5. This conclusion implies that it might be seen as legitimate for a regulator to assume very substantial prospective efficiency gains in its price path decisions, in order to compensate for any advantage that is believed to be available to the regulated company because of information asymmetry.

This line of reasoning suggests that it would be acceptable for a regulator to adopt a view of the potential for short term price reductions that is biased against the legitimate commercial interests of Service Providers, in order to compensate for supposed information asymmetry advantages. Apart from being inconsistent with the objectives set out in section 8.1 of the Code, such a policy, if applied, would stifle incentives for on-going investment in infrastructure and would therefore not be in the long term interest of consumers.

Moreover, for the reasons set out in AGN's response to Conclusion 5.2 above, it is neither legitimate nor necessary for the regulator to attempt to anticipate prospective efficiency gains in price path decisions, because the company's own performance under an effective incentive based regulatory regime will provide information that can form a basis for regulatory decision-making.

The ERA should note that AGN's Access Arrangement Information submitted on 31 March 2004 revealed substantial savings in operating expenditure during the period 2000 – 2004. These savings were achieved as part of the privatisation process. In should not be assumed that further efficiencies of this magnitude can automatically be achieved. AGN has forecast more modest (realistic) expectations of efficiencies in the 2005 – 2009 period.

#### Conclusion 5.6

A price path Incentive Mechanism that also allows for sharing of negative return variances or cost overruns, possibly by carry forward to offset future positive variances, may be assessed as reasonable in taking the mechanism towards a position of greater symmetry of risk between the Users and the Service Provider.

AGN concurs with Conclusion 5.6 of the Discussion Paper. In particular, AGN agrees that any accrued negative variances would not be subtracted from the Regulator's estimate of the Service Provider's Total Revenue; instead, any accrued negative variances at the end of one Access Arrangement period would be carried forward to be offset against any positive variances in future periods.



# **Conclusion 5.7**

The individual circumstances of a Covered Pipeline may need to be considered when assessing a price path Incentive Mechanism that requires the Service Provider to also share additional returns from "blue" sky' events and so potentially produces a significant "asymmetric truncation" of returns.

Subject to the Productivity Commission's further consideration of this issue (in the context of its present review of the National Gas Code) AGN considers Conclusion 5.7 of the Discussion Paper to be reasonable.



# 5. Benefit sharing under a Price Path Incentive Mechanism

The Discussion Paper contains 18 conclusions regarding benefit sharing under a path incentive mechanism. These conclusions, and AGN's responses to each one are set out below.

#### Conclusion 6.1

Unearned variances in return that result from exogenous events should be included along with earned variances in return that result from endogenous management actions since:

- exogenous events need to be effectively harnessed by the Service Provider;
- the financial impact of an exogenous event may be influenced by prior commercial positioning of the Service Provider;
- some exogenous and endogenous impacts will be assumed in framing the price path;
- in a competitive environment a pipeline owner would sustain for at least a period the impacts of both endogenous and exogenous events; and
- making a distinction would invite an intrusive and likely costly case-by-case assessment approach by the Relevant Regulator.

AGN concurs with Conclusion 6.1 of the Discussion Paper.

#### Conclusion 6.2

An exogenous event having an impact on return that is not able to be influenced by the Service Provider, for example changes to licence fees or taxes, might be more appropriately treated as a specified pass-through into Reference Tariffs.

AGN concurs with Conclusion 6.2 of the Discussion Paper.

#### Conclusion 6.3

Allowing a carry-forward of negative variances to return for offset against future positive variances will tend to emulate a competitive market situation and provide greater symmetry of risk for the Service Provider and Users than a mechanism in which negative variances are not carried forward, without necessarily contributing to short-term volatility in Reference Tariffs.

AGN generally concurs with Conclusion 6.3 of the Discussion Paper.



#### Conclusion 6.4

The simple price path Incentive Mechanism that requires the Service Provider to bear any variance to return that occurs during the current Access Arrangement Period, makes no distinction between non-capital costs and capital costs as a source of such a variance.

AGN concurs with Conclusion 6.4 of the Discussion Paper.

#### Conclusion 6.5

The simple price path Incentive Mechanism that does not provide for any carry-forward by the Service Provider of variances to return into the next or subsequent Access Arrangement Period(s), produces significantly different influences on the timing of expenditure saving initiatives related to non capital costs than for expenditure related to capital costs.

AGN generally concurs with Conclusion 6.5 of the Discussion Paper. However, AGN does not consider that the substance of Conclusion 6.5 provides justification for applying an incentive mechanism to operating expenditure but not capital expenditure. Further details of AGN's position on the treatment of capital-related efficiency gains are set out below.

#### **Conclusions 6.6**

There is a sound basis for considering carry-forward of variances to return arising from non capital expenditure, for a fixed term at least as long as the term of the Access Arrangement Period, to mitigate adverse influences that otherwise would impact on the timing of initiatives to implement efficiency savings in non capital expenditure.

AGN concurs with Conclusion 6.6 of the Discussion Paper, however the company also believes that there is a sound basis for carrying forward variances to return arising from capital and operating expenditure for ten years, to:

- mitigate adverse influences that otherwise would impact on the timing of initiatives to implement efficiency savings in non capital expenditure;
- provide incentives for regulated companies to achieve efficiencies in operation, maintenance and capital investment; and
- provide consumers with a reasonable share of the benefits of all efficiency gains over time.

Further details of the basis of AGN's views are set out in its responses to Conclusions 6.7 and 6.10 below.



#### Conclusion 6.7

There is a potential for significant counter-productive outcomes and on balance a limited benefit that might come from any carry-forward beyond the end of the Access Arrangement Period of variances to return arising from capital expenditure. These counter-productive outcomes relate to potential over-estimation of capital works budgets and avoidance or deferral of investments that have a low, but otherwise acceptable, impact on reducing net present costs for Users. These effects may apply in particular to capital projects dealing with system integrity and service reliability. The offsetting benefits of a carry-forward of variances to return arising from capital expenditure rely largely upon encouraging activities that would normally be ascribed to a diligent and prudent operator. Those activities include efficiency in implementation of capital works, appropriate timing of the project, and innovation in design to minimise expenditure.

AGN disagrees that the there is potential for significant counter-productive outcomes to arise as a result of the carrying forward of capital expenditure efficiency gains from one period to the next.

As noted in the company's response to Conclusion 3.3 above, there are arrangements in place that help safeguard customer service standards when incentives to reduce costs are present. These arrangements help ensure that a Service Provider's investment plans take full account of the need to maintain the operating capability of the asset base over the long term, so that services are provided in accordance with customers' needs at minimum total life cycle cost. AGN does not accept the Discussion Paper's suggestion that applying an efficiency carry over mechanism to capital expenditure would have a negative effect on investment in projects that deal with system integrity and service reliability.

AGN accepts that there may be incentives for a Service Provider to over-forecast capital expenditure when arrangements allow for the carrying-over of benefits of capital expenditure savings from one Access Arrangement period to the next. However, AGN believes that arrangements can be put in place to mitigate any incentives to over-forecast. These arrangements would involve adjusting the efficiency gain to be carried over from one period to the next for scope changes. In this regard, it is noted that in considering the merits of applying efficiency carry over arrangements to capital expenditure, page 43 of the Discussion Paper acknowledges that the Victorian Essential Services Commission adopted such arrangements in its 2003 Victorian Gas Access Arrangements review decision. The Discussion Paper goes on to state:

"...[The] approval by the ESC in Victoria at the end of 2002 of revisions to Access Arrangements for the three major gas distribution systems in that state adopted a more complex scheme [than the one proposed in the Discussion Paper]. In that case, a 5-year carry-forward of variances to return that arise from capital expenditure has been included with adjustments for scope changes against benchmarks for gas connection activity as a core business activity of the Service Provider.

For a major gas distribution system, connection activity is customer-driven and an essentially continuous and routine activity. As far as the Incentive Mechanism in those cases is concerned, the timing of that particular type of capital expenditure



should not become an issue, reasonably reliable benchmarks for the unit cost of connections should be feasible even for as much as five years into the future, and gas market growth might be inhibited should the Service Provider feel exposed to increased capital expenditure being required due to the number of connections rising above forecast levels. Accordingly, in such cases the additional complexity associated with carry-forward of variances to return from this type of expenditure might be assessed as reasonable in relation to the additional incentive created to contain costs to Users in the longer term."

It is also noteworthy that the ESC's 2002 decision addressed the question of whether and how reduced levels of renewals capital expenditure should be rewarded under an incentive mechanism. The ESC's Final Decision stated:

"In the event that less capital expenditure is undertaken over the 2003-07 access arrangement period than the forecast assumed by the Commission in setting these reference tariffs, the Commission will need to be satisfied that this has not occurred as a result of an imprudent and uneconomic deferral of necessary works. In the event that it is not satisfied that this is the case, it will not consider the reduction in expenditure (calculated at benchmark rates) arising from the imprudent deferral to reflect an efficiency gain. Deferring expenditure in this way contrasts with the situation whereby an approximate number of kilometres of mains are replaced at a total cost that turns out to be less than anticipated. This is broadly consistent with the proposed adjustment to the carryover for growth, whereby an adjustment has been foreshadowed to the measurement of efficiency to account for the benchmark costs of meeting growth that turns out to be different to that which was forecast in calculating reference tariffs".

The experience in Victoria suggests that arrangements can be put in place to provide incentives to encourage efficient levels of renewals and growth-related capital expenditure. These arrangements mitigate the incentive that a Service Provider might otherwise have to over-forecast its capital expenditure.

# Conclusion 6.8

One approach to carry-forward to variances to return arising from capital expenditure is based on section 8.22 of the Code. Section 8.22 requires that an adjustment be made in calculating the Capital Base at the commencement of a subsequent Access Arrangement Period. That adjustment is to be in accord with an approved Reference Tariff Policy or as determined by the Relevant Regulator. That adjustment is also to be designed to best meet the objectives set out in section 8.1 that include emulating a competitive market and providing an incentive to reduce costs and develop the market, i.e. an adjustment that implements an Incentive Mechanism



#### Conclusion 6.9

An alternative approach to arranging for carry-forward of variances to return arising from capital expenditure may exist through direct adjustment of the Total Revenue calculation for a subsequent Access Arrangement period. That adjustment would need to be in accord with an Incentive Mechanism statement set out in an approved Reference Tariff Policy. Adoption of this alternative approach has implications for the decision required under section 8.22 on adjustment of the Capital Base.

As noted in its Access Arrangement Revisions (submitted in March 2004) AGN favours an approach to carrying forward capital-related efficiency gains that is consistent with the approach outlined in Conclusion 6.9 of the Discussion Paper.

#### Conclusion 6.10

A price path Incentive Mechanism that provides in the calculation of Total Revenue for carry-forward of variances to return for the Service Provider arising from non capital expenditure is likely to be an enhancement beneficial to all stakeholders, compared to a simple price path Incentive Mechanism with no carry-forward. It is less clear that introducing a carry-forward arising from capital expenditure will ultimately be beneficial to all stakeholders. A relevant consideration is section 8.16(a) of the Code, which specifically addresses efficiency, prudence and the achievement of the lowest sustainable cost of providing Services for acceptance of a New Facilities Investment into the Capital Base. Providing a carry-forward arrangement for variances arising from capital expenditure creates the opportunity for an increased financial return to the Service Provider for what is already a requirement on it.

AGN considers that the last sentence of Conclusion 6.10 of the Discussion Paper mischaracterises the incentive mechanism as an undue reward to the Service Provider for doing what it is required to do under the Code in any event. Such an interpretation fails to address the fundamental points that:

- an effective incentive mechanism must provide an efficient Service Provider with an opportunity to increase shareholder value;
- it is the prospect of higher returns that provides the incentive to the Service Provider to seek out and achieve efficiency gains; and
- the response of Service Providers to incentives leads to lower overall costs and consumer prices in the long run, and hence results in the delivery of benefits to consumers as well as Service Providers.



It is noted that this same logic (of incentivising Service Providers to achieve efficiency gains) underpins the efficiency carry-over arrangement that would be applied to operating expenditure, which the Discussion Paper assesses as being beneficial.

On the basis of this logic, AGN considers that there are benefits in applying an incentive mechanism to both capital and operating expenditure. In addition, AGN considers that the application of similar incentive mechanisms to capital and operating expenditure would ensure that potential efficiency gains arising from savings in capital and recurrent costs are treated consistently, thus ensuring that the Service Provider faces no distorted incentives to favour operating expenditure over capital expenditure, or vice versa.

#### Conclusion 6.11

The code affords considerable discretion as to the proportion of both benefits and detriment's in returns from the price path forecast that is to be shared by the Service Provider with Users.

AGN concurs with Conclusion 6.11 of the Discussion Paper.

#### Conclusion 6.12

Simplistically, the optimum sharing proportion is a balance that emulates the dynamics and disciplines of a workably competitive market.

Conceptually, AGN concurs with Conclusion 6.12 of the Discussion Paper. As noted elsewhere in this submission however, it will be important for the ERA to design and administer the incentive arrangements in a way that is consistent with the principles established by the WA Supreme Court's decision in the Epic case, and the Productivity Commission's reviews of the national access arrangements and the gas access arrangements.

#### Conclusion 6.13

Amendment in mid-2001 to section 8.44(b) of the Code provided for retention by the Service Provider of variances to return beyond the Access Arrangement Period in which those variances originated, thus reducing the potential for the price path Incentive Mechanism to produce counter-productive impacts towards the end of an Access Arrangement period.

AGN concurs with Conclusion 6.13 of the Discussion Paper.

#### Conclusion 6.14

Fixing the duration of a retention period to be the same as the duration of the Access Arrangement Period will assist in creating a glide path for tariffs that will have the generally beneficial impact of smoothing prices across Access Arrangement Periods.



AGN concurs with Conclusion 6.14 of the Discussion Paper. However, as noted in its response to Conclusion 6.16 below, AGN favours the application of incentive arrangements that would enable a Service Provider to retain the benefits of efficiency gains for 10 years from the time that the gains are made. It is noted that a 10 year benefit retention (or "glide path") period results is a 50/50 sharing of efficiency gains in present value terms between consumers and Service Providers.

# **Conclusion 6.15**

A limited number of Access Arrangements approved prior to mid-2001 anticipated that under the price path Incentive Mechanism a carry-forward of benefits might become acceptable under the Code, facilitating in those cases the carry-forward of variances from the initial Access Arrangement Period.

AGN makes no comment on this conclusion.

#### Conclusion 6.16

Theoretical considerations of risk and return to the Service Provider point towards a 50 percent share in present value terms being a maximum to be retained by the Service Provider consistent with generating an optimal batch of efficiency measures.

AGN concurs with Conclusion 6.16 of the Discussion Paper. However, in reaching this conclusion, pages 41 and 42 of the Discussion Paper state:

"Simplistically, the optimum sharing proportion is a balance that emulates the dynamics and disciplines of a workably competitive market...

What is being sought is an outcome that reflects the dispassionate forces of competition. In this context it would be difficult to argue that the Service Provider should retain any benefit above the regulatory rate of return for a substantial time, even if that benefit was due to some effort by the Service Provider that could be considered to have gone beyond that of a diligent and prudent operator."

The notion of competitive forces constraining a Service Provider's rate of return to a level at or below the regulatory rate of return seems to reflect an assumption of perfect competition, rather than a workably competitive market.

The ERA's consideration of the question of benefit-sharing arrangements should have proper regard to the principles established by the Western Australian Supreme Court's decision in the Epic case. In this regard it is noted that the Court affirmed that the National Gas Code is not aimed at replicating the outcomes of a theoretically 'perfect' market, which is an abstraction; it is designed to promote outcomes similar to those that might occur in a 'workably' competitive market, which may sometimes include elements of persistent market power.



On the basis of these considerations and the analysis presented in the Discussion Paper, a 10 year gain sharing period would be consistent with generating an optimal batch of efficiency measures. On this basis, AGN considers it would be reasonable to argue for a 10 year sharing period.

#### Conclusion 6.17

Approaches to determining an optimal sharing proportion based on a case-by-case risk/return analysis appear prohibitively complex, intrusive and uncertain.

AGN concurs with Conclusion 6.17 of the Discussion Paper. Adopting a 10 year gain sharing period would represent a pragmatic and workable approach.

#### Conclusion 6.18

Subjective judgement is currently called upon to determine an appropriate sharing proportion. As a rule-of-thumb, it is suggested that for a 5-year Access Arrangement Period the norm should be a 5-year rolling retention term for both positive and negative variances to return arising from non capital costs, and an end of Access Arrangement retention term for both positive and negative variances to return arising from capital expenditure. A price path Incentive Mechanism scheme based on these proposed parameters appears to satisfy, or at least not be inconsistent with, all of the essential criteria set out in the Code. It also should be able to be implemented so as to substantially satisfy the suggested open-ended list of desirable criteria.

For the reasons set out in its responses to Conclusions 6.6, 6.7 and 6.10 above, AGN considers that an incentive mechanism should be applied to both operating and capital expenditure, with a gain sharing period of 10 years. As noted on page 43 of the Discussion Paper, incentive mechanisms that provide rewards for efficiency gains in capital and operating expenditure have been implemented in Victoria. On the basis of this experience, and the responses set out in this submission, AGN considers there are strong grounds for the ERA to implement an incentive mechanism that will provide rewards over a ten year period for efficiency gains achieved in relation to both capital and operating expenditure.