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Economic Regulation Authority

Draft decision on proposed revisions to the access arrangement for the Western Power Network 2022/23 – 2026/27

Attachment 10: Expenditure incentives and other adjustment mechanisms

9 September 2022

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Note

This attachment forms part of the ERA's draft decision on proposed revisions to the access arrangement for the Western Power Network for the fifth access arrangement period (AA5). It should be read with all other parts of the draft decision.

The draft decision comprises all of the following attachments:

Draft decision on proposed revisions to the access arrangement for the Western Power network 2022/23 – 2026/27 – Decision Overview

Attachment 1 – Price control and target revenue

Attachment 2 – Regulated asset base

Attachment 3A – AA4 capital expenditure

Attachment 3B – AA5 capital expenditure

Attachment 4 – Depreciation

Attachment 5 – Return on regulated asset base

Attachment 6 – Operating expenditure

Attachment 7 – Other components of target revenue

Attachment 8 – Services

Attachment 9 – Service standard benchmarks and adjustment mechanism

Attachment 10 – Expenditure incentives and other adjustment mechanisms (this document)

Attachment 11 – Network tariffs

Attachment 12 – Policies and contracts

1. Summary

This attachment deals with the following expenditure incentives and adjustment mechanisms that are proposed in respect of the AA5 period:

- force majeure adjustment mechanism
- adjustment mechanism for changes to the Technical Rules
- investment adjustment mechanism
- gain sharing mechanism
- D-Factor
- deferred revenue
- demand management innovation allowance mechanism.

The service standard adjustment mechanism is considered in Attachment 9.

Summary of draft decision on expenditure incentives and adjustment mechanisms

- The proposed force majeure adjustment mechanism (unchanged from AA4) is approved.
- The proposed adjustment mechanism for changes to the Technical Rules (unchanged from AA4) is approved.
- The proposed Investment adjustment mechanism must be amended to include investment relating to the Network Renewal Undergrounding Program and Standalone Power Systems.
- The proposed gain sharing mechanism must be amended to correct drafting errors.
- The proposed D-Factor scheme must be amended to remove the costs of non-co-optimised essential system services as any such costs related to the provision of covered network services are captured in the current D-Factor scheme.
- The proposed recovery of deferred revenue for AA6 (based on the life of the relevant assets consistent with the approach since AA2) is approved.
- The proposed demand management innovation allowance mechanism is consistent with the ERA guideline and is approved.

The reasons for the ERA's draft decision in respect of matters relevant to expenditure incentives and other adjustment mechanisms considered in this attachment and details of required amendments are set out in this attachment.

2. Force majeure adjustment mechanism

The Access Code allows the target revenue to be adjusted to recover unrecovered costs incurred as a result of an unforeseen force majeure event (force majeure adjustment mechanism).

An extract of the relevant provisions in the Access Code is included in Appendix 1.

The current access arrangement includes a force majeure adjustment mechanism in clause 7.1.

If a force majeure event occurs during an access arrangement period Western Power must, as part of its proposed revisions for the next access arrangement review, provide a report to the ERA setting out:

- A description of the nature of the force majeure event.
- A description of insurance cover that Western Power had in place at the time of the force majeure event.
- The unrecovered costs borne, or an estimate of the unrecovered costs likely to be borne, by Western Power during the access arrangement period as a result of the occurrence of the force majeure event.
- A demonstration that the amount added to the target revenue for the next access arrangement period in respect of those uncovered costs does not exceed the costs which would have been (or, in the case of estimated costs, would be) borne by the service provider efficiently minimising costs.

Under the current access arrangement, any adjustment to target revenue must leave Western Power financially neutral based on the time the unrecovered cost is incurred and is required to take into account the effects of inflation and the time value of money based on the weighted average costs of capital for the Western Power network.

2.1 Western Power's proposal

Western Power has not proposed any amendments to the force majeure adjustment mechanism as contained in the current access arrangement.

2.2 Submissions

No submissions were received on the force majeure adjustment mechanism.

2.3 Considerations of the ERA

The ERA has reviewed the force majeure adjustment mechanism. The force majeure adjustment mechanism is consistent with sections 6.6 to 6.8 of the Access Code. Accordingly, the ERA considers that the force majeure adjustment mechanism meets the requirements of the Access Code and the remains consistent with the Access Code objective.

3. Adjustment mechanism for changes to the Technical Rules

The Access Code provides that target revenue in the access arrangement period can be adjusted for any unforeseen costs or any unforeseen cost savings relating to amendments to the Technical Rules (Technical Rules adjustment mechanism).

An extract of the Access Code provisions relevant to the adjustment mechanism for changes to the Technical Rules is included in Appendix 2.

The current access arrangement includes a Technical Rules adjustment mechanism in clause 7.2.

If the Technical Rules are amended during an access arrangement period, under the current access arrangement Western Power must, as part of its proposed revisions for the next access arrangement review, provide a report to the ERA setting out:

- A description of the nature and timing of the impact of the technical rule change on Western Power's non-capital costs and new facilities investment for this access arrangement period.
- The costs (or cost savings) incurred, or an estimate of the costs (or cost savings) likely to be incurred, by Western Power as a result of that technical rule change.

Under the current access arrangement, any adjustment to target revenue must leave Western Power financially neutral based on the time the unrecovered cost is incurred and is required to take into account the effects of inflation and the time value of money based on the weighted average costs of capital for the Western Power network.

3.1 Western Power's proposal

Western Power has not proposed any amendments to the Technical Rules adjustment mechanism as contained in the current access arrangement.

3.2 Submissions

No submissions to the ERA addressed the Technical Rules adjustment mechanism.

3.3 Considerations of the ERA

The ERA has reviewed the Technical Rules adjustment mechanism. The Technical Rules adjustment mechanism is consistent with sections 6.9 to 6.12 of the Access Code. Accordingly, the ERA considers that the Technical Rules adjustment mechanism remains consistent with the requirements of the Access Code and the Access Code objective.

4. Investment adjustment mechanism

The investment adjustment mechanism allows for the carryover of costs or benefits arising from differences in forecast and actual capital costs from one access arrangement period to the next period.

An extract of the Access Code provisions relevant to the investment adjustment mechanism are included in Appendix 3.

The investment adjustment mechanism included in Western Power's AA4 access arrangement provided for an adjustment to target revenue in the next access arrangement period that corrects for any economic loss or gain due to differences between forecast and actual capital expenditure, taking into account inflation and the time value of money, for the following classes of capital expenditure:

- connecting new generation capacity
- connecting new loads
- augmentation of the network to provide covered services
- the State Underground Power Program.

The ERA's decision on the investment adjustment mechanism, as set out in its framework and approach document published on 9 August 2021, was:

> The following categories must be removed from the investment adjustment mechanism set out in clause 7.3.7 of the current access arrangement:
>
> - Connection of new generation capacity
> - Connection of new load
> - Augmentations to provide additional capacity.

As set out in the framework and approach, the amendment was made to be consistent with the price control. The current price control effectively already includes an adjustment mechanism. As Western Power receives more revenue if demand is greater than forecast and less revenue if demand is less than forecast, there is less need for the investment adjustment mechanism to include expenditure for growth and customer demand. Removing growth and customer driven expenditure from the investment adjustment mechanism improves incentives for Western Power to seek efficiencies in capital expenditure.

4.1 Western Power's proposal

Western Power's proposal adopts the ERA's decision on the investment adjustment mechanism set out in the framework and approach document.

Western Power also proposes to amend the one remaining investment category subject to the investment adjustment mechanism as follows:

> The category that is used in calculating the investment difference is new facilities investment undertaken for augmentation of the transmission system and distribution system under the current or succeeding state underground power program.

Western Power submits:

> The Investment adjustment mechanism will continue to apply to the State underground power programs. The State underground power programs is an initiative that replaces overhead lines in established areas with underground power infrastructure. It is retained in the Investment adjustment mechanism as the State underground power programs is co-funded between the program partners – the State Government, Western Power and local government authorities. During the AA5 period, other state government programs could apply including a succeeding state underground power program. Investment and volumes of the current and succeeding State underground power programs during the AA5 period are highly dependent on community and local government support and funding. The Investment adjustment mechanism ensures that customers pay only for actual investment in state government programs, including the current or succeeding State underground power programs, during the AA5 period.

4.2 Submissions

The Australian Energy Council raised concern that the inclusion of speculative investment in revenue targets, could result in Western Power benefitting from unrealised investment through the investment adjustment mechanism:

> In particular, the Australian Energy Council suggests that revenue targets should not include speculative investment unless Western Power takes the risk of asset write downs. This will avoid a situation where Western Power proposes a complex capital expenditure program for an access arrangement period, a large revenue target is set over the access arrangement period, and Western Power subsequently doesn’t implement the program but gets to keep much of the associated revenue under the investment adjustment mechanism.

4.3 Considerations of the ERA

The ERA is satisfied that the proposed removal of investment categories except for the State Underground Power Programs is consistent with the framework and approach.

In respect of the concerns raised by the Australian Energy Council, the ERA is required to approve an efficient level of expenditure that does not include speculative investment. In general, the ERA considers that it is desirable that a service provider keeps the benefit of any out-performance of cost forecasts and incurs the cost of any under-performance. This is the basis of incentive regulation, whereby the service provider is faced with an incentive to minimise costs.

The investment adjustment mechanism provides for an adjustment to target revenue in the next access arrangement period that corrects for any economic loss or gain due to differences between forecast and actual capital expenditure, taking into account inflation and the time value of money. As set out in the framework and approach, this could partially or fully undo the incentive for a service provider to out-perform the capital expenditure forecasts. To the extent that this occurs, an investment adjustment mechanism may be inconsistent with the Access Code objective (in respect of efficiency of investment).

Opportunities for an investment adjustment mechanism to operate consistently with the Access Code objective are therefore limited to situations where the incentive structure under the Access Code would fail to operate as normally expected.

As discussed in Attachment 3B, the ERA has reduced Western Power's proposed capital expenditure for the Network Renewal Undergrounding Program and standalone power systems due to concerns about the efficiency and deliverability of those programs. To ensure that Western Power can increase the speed of those programs if these issues are overcome, or to reflect a lower level of expenditure if Western Power is not able to deliver at the rate assumed by the ERA, the ERA proposes to include investment for the Network Renewal Undergrounding Program and Standalone Power Systems in the investment adjustment mechanism.

The Investment Adjustment Mechanism ensures that, if Western Power can scale up efficiently during AA5, the target revenue for AA6 will be adjusted to reflect the additional investment. It also ensures that if Western Power does not deliver its program target revenue for AA6 will be adjusted to reflect the underspend. This provides Western Power with the flexibility to focus activity and expenditure during AA5 to meet the challenges of the sector's transformation whilst protecting customers from incurring costs if the programs are reduced during AA5.

The ERA considers this departure from the framework and approach is necessary to take account of the advice the ERA's technical consultant has provided on the Network Renewal Undergrounding Program and standalone power systems.

Required Amendment 1

Amend the investment adjustment mechanism to include investment on the Network Renewal Undergrounding Program and standalone power systems.

5. Gain sharing mechanism

Actual operating expenditure during an access arrangement will differ from the forecast made when the access arrangement was approved. The service provider is incentivised to minimise costs as it keeps the benefits of any out-performance of operating cost forecasts and incurs the costs of any under-performance during the access arrangement period.

The gain sharing mechanism increases the incentive for the service provider to achieve operating cost efficiencies during an access arrangement period as it ensures that service provider retains the efficiency saving for the same period of time, regardless of which year during the access arrangement period the efficiency was made.

Without this mechanism, efficiency savings made in year one would be retained for five years but savings in year five would be retained for only one year. Consequently, there would be less incentive to make efficiency savings in the latter years of an access arrangement period.

An extract of the Access Code provisions relevant to the gain sharing mechanism is included in Appendix 4.

Requirements for the gain sharing mechanism are set out in section 6.19 to 6.28 of the Access Code.

The ERA's decision on the gain sharing mechanism, as set out in the framework and approach document published on 9 August 2021, was:

> The current gain sharing mechanism with the following amendments will apply for the fifth access arrangement:
>
> - References to service standard performance must be removed by deleting section 7.4.4 to 7.4.6 of the access arrangement.
> - All references to "above-benchmark surplus" in the access arrangement must be replaced with "above-benchmark surplus or below-benchmark deficit" and the formula in section 7.4.3 must be amended so that the adjustment can be less than zero.
> - Network growth and customer growth escalators will be considered when reviewing Western Power's forecast operating costs at the access arrangement review. Any network growth and customer growth escalators approved in the ERA's determination of forecast operating costs will need to be reflected in the gain sharing mechanism.
> - The exclusion of uncontrollable costs must be deleted.[1]

5.1 Western Power's proposal

Western Power proposes to amend the gain sharing mechanism as contained in the current access arrangement to reflect the ERA's decision in the framework and approach document.

Western Power has proposed two further amendments in respect of the gain sharing mechanism to:

- Remove the adjustment to the efficiency benchmarks for actual network growth.

[1] These costs were specified as; superannuation costs for defined benefit schemes, licence fees, energy safety levy and ERA fees.

- Exclude costs that relate to the demand management innovation allowance mechanism.

In relation to the first bullet point, Western Power submits:

> …this is aligned with the overall philosophy applied by the Australian Economic Regulator under the base-step-trend approach which is to avoid adjustment to opex for uncontrollable costs, on the basis that under the right incentive framework, differences between actual and forecast costs will balance out over time. Under the Australian Economic Regulator's equivalent Gain share mechanism, the Efficiency benefit sharing mechanism, there is no ex-post adjustment to the forecast opex to account for actual network growth.

Western Power's proposed efficiency and innovation benchmarks for AA5 are set out in Table 42 of the proposed revised access arrangement.

5.2 Submissions

There were no submissions on the gain sharing mechanism.

5.3 Considerations of the ERA

The ERA has considered the proposed gain sharing mechanism against the requirements of the Access Code, the Access Code objective and the ERA's decision in the framework and approach document.

The ERA considers that there are some minor drafting errors in the proposed gain sharing mechanism that require amendment in order for it to accurately reflect the ERA's decision in the framework and approach document.

Required Amendment 2

Amend the drafting errors in the gain sharing mechanism formula.

In relation to the additional revisions to the gain sharing mechanism proposed by Western Power:

- The framework and approach document noted that growth and customer growth escalators would be considered when reviewing Western Power's forecast operating costs and any network growth and customer growth escalators approved in the ERA's decision in respect of forecast operating costs will need to be reflected in the gain sharing mechanism. Western Power's proposal to remove the adjustment to the efficiency benchmarks for actual network growth is a departure from the framework and approach document. However, the ERA considers the reason given by Western Power is valid and accepts the proposed change.
- The ERA considers that it would be inconsistent with the objectives of the gain sharing mechanism for costs claimed under the demand management innovation allowance mechanism to be included in operating expenditure. Therefore, the ERA considers these costs should be excluded and does not have an issue with Western Power's proposal to exclude costs that relate to the demand management innovation allowance mechanism.

The ERA considers that the further amendments proposed by Western Power to the gain sharing mechanism from those set out in the framework and approach document are consistent with the requirements of the Access Code and are consistent with the Access Code objective.

Accordingly, Western Power's proposal to amend the gain sharing mechanism to reflect the ERA’s decision in the framework and approach document is consistent with the requirements of the Access Code and are consistent with the Access Code objective. To the extent the amendments proposed by Western Power have departed from the ERA's decision in the framework and approach document, for the reasons set out above, the ERA is satisfied that the proposed amendments are consistent with the requirements of the Access Code.

6. D-factor

The D-factor provides for the recovery, in the next access arrangement period, of operating expenditure incurred as a result of deferring a capital expenditure proposal or for network control services or demand-management initiatives.

The Access Code does not include a mechanism for the retrospective recovery of non-capital costs, which could result in Western Power not choosing the overall least cost option. The D-factor scheme was approved by the ERA to remove this apparent disincentive.

The D-factor is set out in clause 7.6 of Western Power's current access arrangement. It provides for an amount to be added to Western Power’s target revenue at the next access arrangement review for:

- Any additional non-capital costs incurred by Western Power as a result of deferring a new facilities investment project during the access arrangement period, net of any amounts previously included in target revenue in relation to the deferred new facilities investment (other than such amounts included in the calculation of the capital related costs due to any investment difference under the investment adjustment mechanism). The new facilities investment project that has been deferred must have been included in the forecast new facilities investment for AA4.
- Any additional non-capital costs incurred by Western Power in relation to demand management initiatives or network control services.

Under the current D-factor, an amount will only be added to Western Power's target revenue if there is an approved business case for the relevant expenditure and this business case is made available to the ERA. The business case must demonstrate to the ERA’s satisfaction that the proposed non-capital costs satisfy the requirements of section 6.40 and 6.41 of the Access Code as relevant.[2]

Any adjustment to target revenue must leave Western Power financially neutral and is required to take into account the effects of inflation and the time value of money based on the weighted average costs of capital for the Western Power network.

6.1 Western Power’s proposal

Western Power is proposing to amend the D-factor as contained in the current access arrangement to include any costs incurred to procure a non-co-optimised essential system service (NCESS) as directed by the Coordinator of Energy under the WEM Rules. It considers:

> Inclusion of NCESS in the D Factor enables the appropriate recovery of the actual costs of procurement of NCESS where the Coordinator of Energy triggers this under the WEM Rules and deems that Western Power, as the Network Operator, shall pay for the service. Customers will only pay for the actual additional operating expenditure through a true-up of revenue in the next access arrangement period.

[2] Section 6.40 and 6.41 set out the criteria for non-capital costs.

6.2 Public submissions

Synergy expressed concern around the impact of the proposed D-factor scheme on AA6 target revenue.

> Synergy is also concerned that an assumption of zero opex for alternative options in AA5 is likely to inflate target revenue during the sixth access arrangement (AA6) period because proposed new facilities investment in AA5 will be inefficient due to the lack of assumed substitution of opex for capex to resolve network issues or constraints and, under WP's proposed D-factor scheme, WP will have an incentive to defer the proposed inefficient capex during AA5 to increase target revenue during AA6.

6.3 Considerations of the ERA

In relation to Synergy's concerns, the ERA considers the D-factor has adequate safeguards to ensure that only efficient expenditure is approved.

In relation to Western Power's proposal to include any costs incurred to procure a non-co-optimised essential system service, the ERA considers the existing provisions of the D-factor already allows any such costs related to the provision of covered network services as it includes:

- Any additional non-capital costs incurred by Western Power as a result of deferring a new facilities investment project during the access arrangement period.
- Network control services which are defined as demand-side management or generation solutions that can be a substitute for network augmentation.

On that basis, the ERA considers Western Power's proposed amendment should be removed.

Required Amendment 3

Amend the D-factor to remove the proposed inclusion of non-co-optimised essential system service costs.

7. Deferred revenue

The current access arrangement includes provision for a deferral of revenue from the AA2 period with the deferred amount (escalated for inflation and by the rate of return) to be included in target revenue in subsequent access arrangement periods.

7.1 Western Power's proposal

Western Power has updated the values in the access arrangement (sections 7.7.1 to 7.7.3) to reflect the opening balance for the sixth access arrangement period (AA6) at June 2022 prices and the remaining time frame for recovering the deferred revenue.

7.2 Submissions

No submissions to the ERA addressed this matter.

7.3 Considerations of the ERA

The ERA has tested the calculation of the updated values. The ERA is satisfied that the remaining time frames have been calculated correctly. The values for the opening balance will be updated in the final decision to reflect actual CPI for June 2022 and the WACC determined by the ERA in the AA5 final decision.

8. Demand management innovation allowance mechanism

The requirement for a demand management innovation mechanism to be included in an access arrangement was introduced as part of the amendments to the Access Code to support the delivery of the State Government's Energy Transformation Strategy.

The objective of the demand management innovation mechanism is to provide service providers with funding for research and development in demand management projects that have the potential to reduce long term network costs.

An extract of the Access Code provisions relevant to the demand management innovation allowance mechanism are included in Appendix 5.

As required under the Access Code, the ERA published a guideline on 14 September 2021.

The guideline provides:

> The demand management innovation allowance mechanism is an annual, ex-ante allowance in the form of a fixed amount of additional revenue at the commencement of each pricing year for an access arrangement period.
>
> The ERA will determine the level of the demand management innovation allowance in the framework and approach that applies to the access arrangement period.
>
> The demand management innovation allowance determined in the framework and approach will be included in the target revenue approved for the relevant access arrangement period.
>
> During the access arrangement period to which the demand management innovation allowance applies, the service provider may spend the allowance on demand management innovation projects that meet the eligibility criteria set out in this guideline. The allowance may be used to fund projects which occur over a period longer than the access arrangement period.
>
> At the next access arrangement review, the ERA will review the expenditure claimed by the service provider against the demand management innovation allowance to determine whether the claimed expenditure meets the eligibility criteria.
>
> The ERA will make an adjustment to target revenue for the next access arrangement period to recover the amount of any allowance that was not spent, or any expenditure claimed that did not meet the eligibility criteria. This will include an adjustment for the time value of money.

8.1 Western Power's proposal

Western Power proposes to include the following provisions in its access arrangement for AA5 in relation to the demand management innovation allowance mechanism:

> 9.1.1 Pursuant to section 6.32A of the Code a demand management innovation allowance mechanism applies to the fifth access arrangement period and subsequent access arrangement periods.
>
> 9.1.2 For the purposes of section 6.32B of the Code the demand management innovation allowance is an annual, ex-ante allowance provided in the form of a fixed amount of additional non-capital target revenue at the commencement of each pricing year of an access arrangement period. For the fifth access arrangement period, the allowance is $5.89M ($ real as at 30 June 2022).

9.1.3 Pursuant to section 6.32F of the Code, if any amount of the demand management innovation allowance is not used or not approved by the Authority over the access arrangement period, this amount must not be carried over into the subsequent access arrangement or reduce the amount of the demand management innovation allowance from the target revenue for the next access arrangement period.

9.1.4 The demand management innovation allowance mechanism will operate as per the demand management innovation allowance guideline published by the Authority in accordance with section 6.32D, 6.32J and 6.32K of the Code.

8.2 Submissions

There were no submissions on the demand management innovation allowance mechanism.

8.3 Considerations of the ERA

Consideration of the amount of the allowance for AA5 is included in Attachment 7.

In respect of proposed clause 9.1.1, the ERA is satisfied that the demand management innovation allowance may apply for subsequent access arrangement periods. The requirement in clause 9.1.4 that the demand management innovation allowance mechanism operate as per the Authority's guideline will provide sufficient certainty and safeguards as to how the mechanism may apply in future access arrangement periods.

In respect of proposed clause 9.1.4, the ERA considers that the demand management innovation allowance mechanism is required to operate both in accordance with the requirements of the Access Code and the demand management innovation allowance guideline published by the Authority. The ERA does not consider that the absence of a specific reference to the Access Code means that any other provisions of the Access Code are excluded from applying.

The ERA is satisfied that the proposed amendment to the access arrangement is consistent with the requirements of the Access Code and the ERA’s guideline on the demand management innovation allowance mechanism.

Appendix 1 Code Extract – Force majeure

Sections 6.6 to 6.8 of the Access Code allows the target revenue to be adjusted to recover unrecovered costs incurred as a result of an unforeseen force majeure event (force majeure adjustment mechanism).

6.6 If:

(a) during the previous *access arrangement period*, a *service provider* incurred *capital-related costs* or *non-capital costs* as a result of a *force majeure event*; and

(b) the *service provider* was unable to, or is unlikely to be able to, recover some or all of the costs ("**unrecovered costs**") under its insurance policies; and

(c) at the time of the *force majeure* event the *service provider* had insurance to the standard of a *reasonable* and *prudent person* (as to the insurers and the type and level of insurance),

then subject to section 6.8 an amount may be added to the *target revenue* for the *covered network* for the next *access arrangement period* in respect of the unrecovered costs.

6.7 Nothing in section 6.6 requires the amount added under section 6.6 in respect of unrecovered costs to be equal to the amount of unrecovered costs.

6.8 An amount must not be added under section 6.6 in respect of *capital-related costs* or *non-capital costs*, to the extent that they exceed the costs which would have been incurred by a *service provider efficiently minimising costs*.

Appendix 2 Code Extract – Adjustment mechanism for changes to the technical rules

Sections 6.9 to 6.12 of the Access Code provides that target revenue in the access arrangement period can be adjusted for any unforeseen costs or any unforeseen cost savings relating to amendments to the Technical Rules (Technical Rules adjustment mechanism).

6.9 If, during the previous *access arrangement period,* the *technical rules* for the *covered network* were amended under section 12.53 with the result that the *service provider*, in complying with the amended *technical rules*:

(a) incurred *capital-related costs* or *non-capital costs*:

(i) for which no allowance was made in the *access arrangement*; and

(ii) which the *service provider* could not have reasonably foreseen at the time of the *approval* of the previous *access arrangement*;

and

(b) did not incur *capital-related costs* or *non-capital costs* for which allowance was made in the *access arrangement*,

then subject to sections 6.10 to 6.12 an amount may be added to the *target revenue* for the *covered network* for the next *access arrangement period* in respect of the costs.

6.10 The amount (if any) to be added under section 6.9(a) must be positive, and the amount (if any) to be added under section 6.9(b) must be negative.

6.11 A positive amount must not be added under section 6.9(a) in respect of capital-related costs or *non-capital costs*, to the extent that they exceed the costs which would have been incurred by a *service provider efficiently minimising costs*.

6.12 A negative amount added under section 6.9(b) must have regard to the savings that would have been made by a *service provider efficiently minimising costs* even if the *service provider* did not actually achieve that level of savings.

Appendix 3 Code Extract -Investment Adjustment Mechanism

Sections 6.13 to 6.17 of the Access Code provides the definition and requirements for an investment adjustment mechanism.

"Investment adjustment mechanism" defined

6.13 An "**investment adjustment mechanism**" is a mechanism in an access arrangement detailing how any investment difference for the *access arrangement period* is to be treated by the *Authority* at the next *access arrangement review*.

6.14 In sections 6.13 and 6.16, "**investment difference**" for an *access arrangement period* is to be determined at the end of the *access arrangement period* by comparing:

(a) the nature (including amount and timing) of actual *new facilities investment* which occurred during the *access arrangement period*;

with

(b) the nature (including amount and timing) of *forecast new facilities investment* which at the start of the *access arrangement period* was forecast to occur during the *access arrangement period*.

Requirement for an investment adjustment mechanism

6.15 If an *access arrangement* uses the form of *price control* described in section 6.2(a), then the *access arrangement* must contain an *investment adjustment mechanism*.

6.16 Without limiting the types of *investment adjustment mechanism* which may be contained in an *access arrangement*, *an investment adjustment mechanism* may provide that:

(a) adjustments are to be made to the *target revenue* for the next *access arrangement* in respect of the full extent of any investment difference; or

(b) no adjustment is to be made to the *target revenue* for the next *access arrangement* in respect of any investment difference.

6.17 An *investment adjustment mechanism* must be:

(a) sufficiently detailed and complete to enable the *Authority* to apply the *investment adjustment mechanism* at the next *access arrangement review*; and

(b) without limiting this Code, consistent with the *gain sharing mechanism* (if any) in the *access arrangement*;

(c) consistent with the *Code objective*.

Appendix 4 Code Extract – Gain sharing mechanism

An access arrangement must include a gain sharing mechanism[3] unless the ERA determines it is not necessary to achieve the objective in section 6.4(a)(ii) of the Access Code. The objective in section 6.4(a)(ii) of the Access Code is to reward the service provider for efficiency gains and innovation beyond the efficiency and innovation benchmarks in a previous access arrangement or to penalise the service provider for efficiency losses derived from a failure to meet the efficiency and innovation benchmarks in a previous access arrangement.

The specific requirements for a gain sharing mechanism are set out in sections 6.19 to 6.28. of the Access Code.

'Gain sharing mechanism' defined

6.19 A "gain sharing mechanism" is a mechanism:

(a) in an *access arrangement* which the *Authority* must apply at the next *access arrangement review* to determine an amount to be included in the *target revenue* for one or more of the following *access arrangement periods*; and

(b) which operates as set out in sections 6.20 to 6.28.

Requirement for a gain sharing mechanism

6.20 An *access arrangement* must contain a *gain sharing mechanism* unless the *Authority* determines that a *gain sharing mechanism* is not necessary to achieve the objective in section 6.4(a)(ii).

Objectives for gain sharing mechanism

6.21 A *gain sharing mechanism* must have the objective of:

(a) achieving an equitable allocation over time between *users* and the *service provider* of innovation and efficiency gains or losses relative to *efficiency and innovation benchmarks*; and

(b) being objective, transparent, easy to administer and replicable from one *access arrangement* to the next; and

(c) giving the *service provider* an incentive to reduce costs or otherwise improve productivity in a way that is neutral in its effect on the timing of such initiatives; and

{For example, a *service provider* should not have an artificial incentive to defer an innovation until after an *access arrangement review*.}

(d) minimising the effects of the mechanism on incentives for the implementation of *alternative options*.

6.22 A *gain sharing mechanism* must be sufficiently detailed and complete to enable the *Authority* to apply the *gain sharing mechanism* at the next *access arrangement review*, including by prescribing the basis on which returns are to be determined for the purposes of section 6.23 and the basis on which losses are to be determined for the purposes of section 6.23A.

'Surplus' defined

6.23 A "surplus" has arisen to the extent that:

(a) returns actually achieved by the *service provider* from the sale of *covered services* during the previous *access arrangement period*;

[3] As required under section 6.20 of the Access Code.

exceeded:

(b) the level of returns from the sale of *covered services* which at the start of the *access arrangement period* was forecast to occur during the *access arrangement period*.

'Deficit' defined

6.23A A "**deficit**" has arisen to the extent that:

(a) returns actually achieved by the *service provider* from the sale of *covered services* during the previous *access arrangement period*;

are less than:

(b) the level of returns from the sale of *covered services* which at the start of the *access arrangement period* was forecast to occur during the *access arrangement period*.

Prior surpluses may be retained

6.24 Subject to the provisions of any *investment adjustment mechanism*, the *service provider* may retain all of the *surplus* achieved in the previous *access arrangement period*, and accordingly, the *Authority* must not make an adjustment in order to recover the *surplus* achieved in the previous *access arrangement period* when approving the *price control* in a subsequent *access arrangement*.

Determining the above-benchmark surplus or below-benchmark deficit

6.25 The *Authority* must determine how much (if any) of the *surplus* results from efficiency gains or innovation by the *service provider* in excess of the *efficiency and innovation benchmarks* in the previous *access arrangement* ("**above-benchmark surplus**") or how much of the *deficit* results from a failure of the *service provider* to meet the *efficiency and innovation benchmarks* in the previous *access arrangement* ("**below benchmark deficit**").

6.26 [Not used]

Determining the increase or decrease to the target revenue

6.27 The *Authority* must apply the *gain sharing mechanism* to determine how much (if anything) is to be added to or removed from the *target revenue* for one or more coming *access arrangement periods* under section 6.4(a)(ii) in order to enable the *service provider* to continue to share in the benefits of the efficiency gains or innovations which gave rise to the *above-benchmark surplus* or to penalise the *service provider* for the failure to meet the *efficiency and innovation benchmarks* which gave rise to the *below-benchmark deficit*.

6.28 If the Authority makes a determination under section 6.27 to add or remove an amount to the target revenue in more than one access arrangement period, that determination binds the Authority when undertaking the access arrangement review at the beginning of each such access arrangement period.

Appendix 5 Code Extract – Demand management innovation allowance mechanism

The specific requirements for a demand management innovation allowance mechanism are set out in sections 6.32A to 6.32H of the Access Code:

6.32A An *access arrangement* must contain a *demand management innovation allowance mechanism*.

6.32B The demand management innovation allowance is an annual, ex-ante allowance provided to *service providers* in the form of a fixed amount of additional revenue at the commencement of each *pricing* year of an *access arrangement period*.

6.32C The objective of the *demand management innovation allowance mechanism* is to provide *service providers* with funding for research and development in demand management projects that have the potential to reduce long term network costs ("**demand management innovation allowance objective**").

6.32D The *Authority* must make and publish guidelines which must include a *demand management innovation allowance mechanism* consistent with the *demand management innovation allowance objective* and the information specified in section 6.32J.

6.32E The Authority must determine the maximum amount of the allowance under the *demand management innovation allowance mechanism* for an *access arrangement period*, which must be calculated for each *pricing* year in the *access arrangement period*.

6.32F Any amount of allowance not used by the *service provider* or not approved by the *Authority* over the *access arrangement period* must not be carried over into the subsequent *access arrangement period* or reduce the amount of the allowance for the subsequent *access arrangement period*.

6.32G In developing and applying any demand management *innovation allowance mechanism*, the *Authority* must take into account the following:

(a) the mechanism should be applied in a manner that contributes to the achievement of the *demand management innovation allowance objective*;

(b) projects the subject of the allowance should:

(i) have the potential to reduce long term network costs; and

(ii) be innovative and not otherwise efficient and prudent *alternative options* that a *service provider* should have provided for in its *proposed access arrangement*; and

(iii) comply with the *demand management innovation allowance guidelines*

(c) the level of the allowance:

(i) should be reasonable, considering the long term benefit to *consumers*; and

(ii) should only provide funding that is not available from any other source; and

(iii) may vary over time; and

(d) the allowance may fund projects which occur over a period longer than an *access arrangement period*.