



**DRAFT DECISION**  
**Australian Gas Networks (SA)**  
**Access Arrangement**

**2021 to 2026**

**Attachment 13**  
**Capital expenditure sharing**  
**scheme**

November 2020

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## Note

This attachment forms part of the AER's draft decision on the access arrangement that will apply to Australian Gas Networks (SA) ('AGN') for the 2021–26 access arrangement period. It should be read with all other parts of the draft decision.

The draft decision includes the following documents:

Overview

Attachment 1 – Services covered by the access arrangement

Attachment 2 – Capital base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency carryover mechanism

Attachment 9 – Reference tariff setting

Attachment 10 – Reference tariff variation mechanism

Attachment 11 – Non-tariff components

Attachment 12 – Demand

Attachment 13 – Capital expenditure sharing scheme

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## 13 Capital expenditure sharing scheme

This attachment outlines our assessment of AGN's proposal for a capital expenditure sharing scheme (CESS) for the 2021–26 access arrangement period. The design of AGN's proposed CESS is based on the CESS approved for AGN's Victorian gas network. This deviates somewhat from the more recently approved CESS for JGN NSW, which excluded connections capex. As the CESS is new for AGN, it will not impact revenues in the upcoming access arrangement period, but rather, future access arrangement periods. Consequently, our draft decision relates to the design of the scheme.

### 13.1 Draft decision

Our draft decision approves the application of a CESS in the 2021–26 access arrangement period.

### 13.2 Assessment approach

A full access arrangement may include (or we may require it to include) one or more incentive mechanisms to encourage efficiency in the provision of services by the service provider.<sup>1</sup> Incentive mechanisms may provide for carrying over increments for efficiency gains, or decrements for efficiency losses, from one access arrangement period into the next.<sup>2</sup> An incentive mechanism must be consistent with the revenue and pricing principles.<sup>3</sup>

We consider the following revenue and pricing principle is most relevant for assessing AGN's proposed incentives:

A service provider should be provided with effective incentives in order to promote economic efficiency with respect to reference services the service provider provides.

The economic efficiency that should be promoted includes—

- (a) efficient investment in, or in connection with, a pipeline with which the service provider provides reference services; and
- (b) the efficient provision of pipeline services; and
- (c) the efficient use of the pipeline.<sup>4</sup>

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<sup>1</sup> NGR, r. 98(1).

<sup>2</sup> NGR, r. 98(2).

<sup>3</sup> NGR, r. 98(3).

<sup>4</sup> NGL, s. 24(3).

### 13.3 AGN's proposal

If implemented in our final decision, this will be the first time that we apply a CESS to AGN in an access arrangement. The scheme that AGN proposes we apply is similar to the CESS applied to AGN's Victorian gas network.

AGN believes that the CESS would provide a continuous incentive to pursue capex related efficiency improvements and to share efficiency gains (or losses) with its customers.<sup>5</sup>

The CESS mechanism is described in detail in Clause 5.2 of AGN's access arrangement. In a simple form, the CESS rewards AGN for spending less than forecast capex, and penalises it for spending more. The CESS is designed so that AGN retains 30 per cent of the benefit or cost, and shares the remaining 70 per cent with its customers.

As the CESS provides an incentive to reduce levels of capex, safeguards have to be provided so that a service provider is not merely rewarded for underinvesting in its network at the expense of performance. A contingent payment mechanism is included in the CESS, which acts to reduce the reward AGN can retain if its performance falls.

AGN has developed measures to monitor service performance. Five target measures have been proposed, which are used to calculate AGN's Asset Performance Index (API). These are:

- unplanned System Average Interruption Frequency Index (SAIFI) (weighting 25 per cent)
- unplanned System Average Interruption Duration Index (SAIDI) (weighting 25 per cent)
- mains leaks (weighting 42.3 per cent)
- service leaks (weighting 4.9 per cent)
- meter leaks (weighting 2.7 per cent).

Performance targets for each measure have been set using the last five years of historical data. The performance targets are weighted to produce the API. AGN's actual performance will be measured against the API. Its reward for reducing capex will be scaled down if it does not meet this performance standard in a linear scale from 100 per cent (where it will receive a full benefit) to 80 per cent (where it will receive no benefit). So, for example, if it achieves 90 per cent on the API, this will scale down its CESS payment by 50 per cent. This is consistent with the thresholds set in the Victorian and NSW CESS.

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<sup>5</sup> AGN, *Final Plan: Five year plan for our South Australian network July 2021-June 2026*, July 2020, p. 121.

### 13.3.1 Interrelationships

The incentive scheme AGN proposes relates to various areas of the business covered by the 2021–26 access arrangement.<sup>6</sup> For example, the introduction of a CESS will affect the size of the capital base and may alter the balance of investment signals between operating expenditure (opex) and capex. We aim to incentivise service providers, such as AGN, to make efficient decisions on when and what type of expenditure to incur, and to balance expenditure efficiencies with service standards.

### 13.3.2 Stakeholders

The South Australian Minister for Energy and Mining noted the AER is best placed to consider the merits of a CESS, while Origin supported the CESS.

## 13.4 Reasons for draft decision

### 13.4.1 Exclusion of new connections capex from CESS targets

Consistent with our recent JGN NSW decision, and our draft decision for AGN, we consider connections capex should be excluded from the CESS. AGN has not proposed to exclude these costs. However, AGN has noted in further correspondence that it has no objection to removing connections capex.<sup>7</sup>

Generally, we consider excluding new connections capex from the CESS is likely to better achieve the revenue and pricing principles in the NGR. The amount of capex spent on new connections is largely outside of AGN's control. As a result, providing an incentive under the CESS is unlikely to have an impact on the ultimate to reduce expenditure is unlikely to change the number or cost of new connections undertaken by AGN. Applying the CESS may result in AGN receiving a reward or penalty for factors beyond its control.

The volume of new connections capex is largely driven by the number of new dwellings constructed, which is outside of AGN's control. Also, given the new connections are installed using a tender process, AGN has limited scope to obtain lower unit rates once it has selected its preferred provider. AGN's performance against its targets is also largely unrelated to the amount of new connections capex it undertakes.

### 13.4.2 Asset Performance Index range

The CESS proposed by AGN contains a mechanism to vary CESS payments based on how AGN performs against certain service targets. This is known as the asset performance index (API). The API is in place to balance the incentive for AGN to make efficiency savings on capex and maintain its quality of service.

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<sup>6</sup> The efficiency carryover mechanism for opex is a related scheme.

<sup>7</sup> AGN, *Response to IR#018 - CESS - 20200910*, 18 September 2020.

The API allows CESS payments to be made to AGN on a sliding scale. AGN has proposed the range for the API be set from 80 to 100 per cent. Under this arrangement, if AGN achieves 100 per cent of its performance targets, it will receive a full payment. The payment will then reduce if AGN does not achieve 100 per cent on a sliding scale, and AGN will not receive a CESS payment if its performance is less than 80 per cent.

We have accepted AGN’s proposal to apply the API range from 80-100 for the 2021–26 period. We consider the performance targets proposed and calculations used are broadly similar to those approved in NSW and Victoria.

### 13.4.3 Performance targets for the asset performance index

AGN’s API includes a series of targets that its actual performance is compared to.

We have reviewed the historical data AGN used to develop these targets. In all but one case, we consider these were relatively stable, and not impacted by the presence of significant outliers. However, we noted that the calculation for unplanned SAIDI included one observation that was more than six times higher than the next highest observation. We sought further information from AGN regarding this. In response, AGN provided updated information, noting that the observation in question was based on an incorrect calculation. The new information provided a more stable path across years, and our draft decision adopts this figure in place of AGN’s original proposal. This is reflected in the proposed revisions below.

We consider other aspects of the performance targets, and the updated unplanned SAIDI target, provide a sound basis to assess the actual performance of AGN over the access arrangement period. The new targets are presented in Table 13.1 below.

**Table 13.1 Corrected historical unplanned SAIDI performance and updated target**

	2014–15	2015–16	2016–17	2017-18	2018–19	Target
Unplanned SAIDI	266	130	219	316	604	307

Source: AGN, *Revised attachment 11.1*, 18 September 2020.

## 13.5 Proposed revisions

We require the following revisions to make the access arrangement proposal acceptable:

Revision	Amendment
<b>Revision 13.1</b>	Amend the unplanned SAIDI target at clause 6 of Annexure I of the access arrangement to 307.04
<b>Revision 13.1</b>	Make all necessary amendments to the access arrangement to remove forecast capex for new connections from the CESS calculation.



## Shortened forms

Shortened form	Extended form
AER	Australian Energy Regulator
capex	Capital expenditure
CESS	Capital expenditure sharing scheme
CPF	Contingency payment factor
EBSS	Efficiency benefit sharing scheme
NGL	National Gas Law
NGR	National Gas Rules
NSW	New South Wales
opex	Operating expenditure
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
WACC	Weighted average cost of capital