Attachment 12.2

Proposed Opex Incentive Scheme Additional Information -E Factor

January 2020

Dampier Bunbury Pipeline

1. Introduction

We support effective, outcome-based incentive arrangements as a way of more actively promoting the long-term interests of our customers.

In AA5 we are proposing to introduce the E Factor. The E Factor is an opex incentive scheme that offers rewards to DBP for achieving efficiency gains (opex savings), and penalties for efficiency losses (opex overspends). Importantly, the E Factor allows us to share with our customers the significant majority (70%) of any benefits achieved, leading to a lower opex cost base and driving lower pipeline tariffs over the long term.

1.1. How it works

Similar to the Gain Sharing Mechanism (GSM), applied by the ERA to Western Power, and the EBSS applied by the AER, the E Factor provides a continuous incentive for DBP to achieve efficiency gains.

The E Factor establishes an annual opex benchmark, which is the sum of all forecast opex that is reasonably within our control and has been calculated using the top-down, roll-forward method. Any forecast opex that is uncontrollable or that has been forecasted by another method (bottom-up build, for example) is not included in the annual benchmark. This is because opex forecast using a bottom-up build (or similar):

- is typically not predictable enough to prevent windfall gains or losses under an incentive scheme; or
- is built up using forecast demand, including both SUG and turbine use, and therefore its inclusion in the scheme would counteract the incentive for demand effects.

Each year, if we are able to outperform the benchmark (spend less than the target), we will then be allowed to retain approximately 30% of the saving (referred to as an efficiency gain), with the other 70% returned to customers via a tariff revenue adjustment in AA6.[i]

To ensure the incentive to outperform the opex benchmark is even in each year of an access arrangement period (and spans between periods), the incremental efficiency gains or losses are carried forward for five years.

This is best explained by the simplified example in Figure 1.

In the worked example below our E Factor benchmark for the year is $100 million. In year one we spend $100 million, so there is no gain/loss. In year two we spend $95 million, which is a $5 million efficiency gain. This incremental gain is carried over for the next five years.

In year three, we spend $96 million. While this is a $4 million saving compared to the benchmark, it is a $1 million efficiency loss compared to the previous year. This incremental loss is then carried over for the next five years.

In years four and five, we maintain expenditure at $96 million, which is a saving compared to benchmark, but results in no additional incremental gain or loss from that already provided.

The incremental carryover amounts that roll over into the following period are summed and then used to calculate an revenue adjustment in the following period. The revenue adjustment is applied as a separate revenue building block.

The regulator will typically use actual operating expenditure in year four of the current access arrangement period as the basis for determining forecast opex in the next access arrangement period. This means in our worked example, the E Factor benchmark for the following access arrangement period is set at $96 million.

In terms of the actual benefit to the business and customers of the efficiency gain, the E Factor revenue adjustment is calculated based on the present value of the efficiency gain (or loss), with benefits shared over 30 years.

Under this simple example, and with a 6% real discount rate, the estimated benefit to DBP and customers would be around $70 million in present value dollars, with customers retaining around $50 million of that benefit, equivalent to 70%.

Figure 1: Simple worked example of E Factor incremental carryovers

Simple worked example of E Factor incremental carryovers

$million real 2020	Current AA period					Next AA period				
Year	1	2	3	4	5	6	7	8	9	10
Opex benchmark (A)	100	100	100	100	100	96	96	96	96	96
Opex actual (B)	100	95	96	96	96					
Cumulative saving (A-B)	0	5	4	4	4					
Incremental saving	0	5	-1	0	0					
Carryover of incremental gain/loss made in year:										
1		0	0	0	0	0				
2			5	5	5	5	5			
3				-1	-1	-1	-1	-1		
4					0	0	0	0	0	
5						0	0	0	0	0
Total Carryover (C)						4	4	-1	0	0
Benefits to business (Cumulative saving + carryover)		5	4	4	4	4	4	-1		
Benefits to customers (Cumulative saving + carryover 6 yrs deferred)								5	4	4

Simple worked example of E Factor benefits – 30-year NPV calculation

$million real 2020	Current AA period					Next AA period					Future AA periods	Total NPV **	% of benefits
Year	1	2	3	4	5	6	7	8	9	10	Years 11+		
Benefits to business													
- Nominal $ (from prior table)		5.0	4.0	4.0	4.0	4.0	4.0	-1.0					
- Present value $		5.0	3.7	3.5	3.3	3.2	2.9	-0.7			0.0	20.8	
Total cashflow to business (today's $)												**20.8**	**30%**
Benefits to customers													
- Nominal $ (from prior table)								5.0	4.0	4.0	4.0 pa		
- Present value $								3.5	2.6	2.4	41.2	49.8	
Total cashflow to customers (today's $)												**49.8**	**70%**
Total benefits												**70.7**	**100%**

* Based on 6% discount rate

** Total NPV over lifetime

It is also worth noting that the current regulatory and contractual arrangements at DBP mean that opex underspends cannot be achieved at the expense of service performance.

There are strict conditions in our shipper contracts and operating licence that require us to maintain public safety, ensure a reliable supply, and to deliver a high quality of service. Deterioration in any of these conditions would result in financial penalties, which would likely offset any potential benefits to DBP under the E Factor.

We also note that, unlike electricity, gas is a discretionary commodity, typically regulated under a price cap form of regulation in Western Australia. It is therefore in our interests to maintain a high level of service, safety and credibility to ensure shippers and end customers continue to choose to use natural gas (and our pipelines).

With regard to the potential for reducing opex spend simply by incurring more capex, this is unlikely to be a significant risk at DBP. Our typical capex forecast is relatively low, with the majority of business activities relating to operating and maintaining our long-established pipeline assets. Our actual capex is also tested internally (and externally by the ERA) for prudence and efficiency before it can be rolled into the capital base.

We also propose that if during the access arrangement period we identify a more efficient opex-based solution that can be adopted in place of capex, this opex is excluded from the E Factor benchmark. This means we will have an ongoing incentive to deliver the most efficient solution – whether opex or capex – and have the flexibility in-period to substitute capex for opex (or vice versa) where efficient to do so.

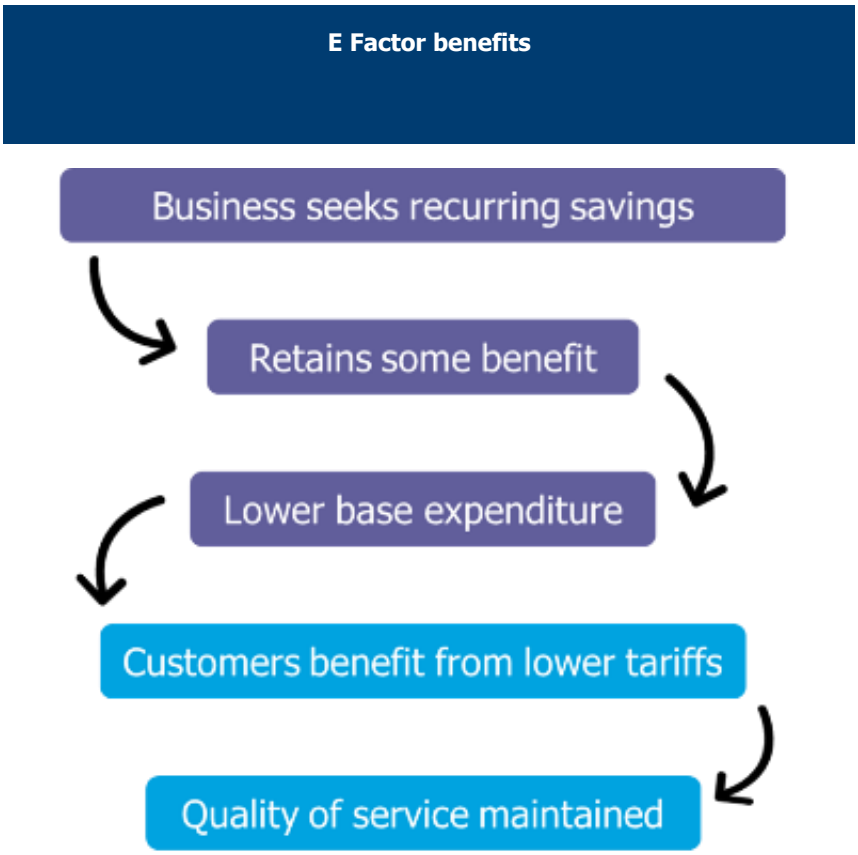
1.2. Why the E Factor is necessary

The E Factor is necessary to strengthen the incentive to incur efficient levels of opex, as well as encouraging continuous improvement in operating practices. While the price cap form of regulation provides incentive to outperform opex benchmarks, as discussed, the price cap incentive alone is uneven over a regulatory period.

As a business matures, the ability and impetus to find efficiencies can slow. Introducing a new opex incentive mechanism can place pressure on the business to operate within opex allowances and generate greater focus on efficiency improvements.

We are introducing the E Factor for AA5 to help sharpen our focus on improving operating practices and maximising the efficiency of our pipeline services. By operating under an efficiency scheme, DBP will also be more closely aligned with AGIG's other infrastructure businesses, as well as the continuous improvement and knowledge sharing culture across the Group.

In terms of the benefits the E Factor will bring, at the most basic level it will ensure we continually seek recurring savings. This, in turn should help maximise the efficiency of opex, resulting in lower prices for customers and no deterioration in safety, reliability or service levels.



1.3. E Factor design

Key features of the E Factor:

- symmetrical – provides for rewards and penalties;
- benefits shared with customers (70:30 in the favour of customers);
- only applies to expenditure forecasted using top-down roll-forward approach;
- only includes opex costs that are within DBP's control to avoid windfall gains/losses;
- benefit/penalty carried over for five years resulting in time-neutrality;
- applies from AA5 onwards and the effect in revenues will be from AA6;
- mitigates capex/opex bias; and
- considers other similar schemes that apply elsewhere.

1.4. Inclusions and exclusions

To ensure the E Factor promotes economic efficiency, and is consistent with the NGR and the Revenue and Pricing Principles of the NGL, it is important the operating costs included and excluded from the opex benchmark are appropriate.

As a general principle, the costs that make up the opex benchmark in the E Factor are those:

- calculated using a top-down, roll-forward method; and
- reasonably within our control.

This accounts for around 80% of our opex.

Table 1.1 lists the opex items that are excluded from the E Factor benchmark.

Table 1.1: E Factor inclusions and exclusions

Opex category	Opex sub-category	Forecasting method
Government charges	Permits, licence fees, rates and taxes	Roll-forward, externally driven
System use gas	Fuel gas	Bottom-up build, externally driven
Field expenses	Turbine / GEA overhauls	Bottom-up build, non-cyclical

Only three of 21 opex sub-categories are excluded from the E Factor benchmark.

This means the E Factor is a powerful incentive, designed to promote the use of all reasonable endeavours to find opex efficiencies in controllable costs.

In most cases, costs are excluded because they are forecast using a bottom-up build methodology.

Cost categories estimated via bottom-up build are typically non-recurrent or simply too volatile and exogenous to forecast with sufficient certainty. As a result, any efficiency gains or losses in respect of these costs tend to be based on changes in recurrent expenditure.

It is not appropriate to carryover non-recurrent efficiency gains, as there is the risk DBP could retain more than 100% of the benefit, resulting in windfall gain. These categories are GEA and turbine overhauls, insurance and SUG.[ii]

We do, however, still have an incentive under our price cap to outperform forecast costs that are not included in the E Factor. As previously discussed, the current regulatory framework provides some (albeit less powerful) incentive to reduce operating costs within an access arrangement period.

The only E Factor opex exclusions forecast using the top-down, roll-forward method are permits, licence fees, rates and taxes.

We propose these costs be excluded because they are driven by external factors and are not reasonably within our control. Excluding these costs is consistent with the operation of Western Power's GSM, where these uncontrollable items (such as the Energy Safety levy, ERA costs and licence fees) are adjusted for in the efficiency and innovation benchmarks.

1.5. Consistency with the NGR

The E Factor is consistent with the NGR, specifically rule 98, in that it provides a mechanism for carrying over increments for efficiency gains and decrements for losses from one access arrangement period to the next.

The E Factor is also consistent with the Revenue and Pricing Principles detailed in section 24(2) to (7) of the NGL. Consistent with NGL 24(3), the E Factor provides DBP with an effective incentive in order to promote economic efficiency with respect to pipeline services.

The incentive to reduce operating costs promotes economic efficiency, the provision of pipeline services, and efficient use of the pipeline, and therefore satisfies the requirements of NGL section 24(3) parts (a), (b) and (c).

Consistent with NGL 24(6), the E Factor also gives regard to the economic costs and risks of the potential for under and overinvestment in the DBP, by providing an incentive to operate more efficiently and within expenditure benchmarks and consider efficient opex/capex trade-offs.

The proposed opex inclusions and exclusions also ensure the E Factor provides DBP with a reasonable opportunity to recover at least the efficient costs that the service provide incurs in providing reference services. This is consistent with NGL 24(2)(a).

Given the above, we therefore consider the proposed E Factor also meets the requirements of the National Gas Objective, which is to:

…promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.

1.6. Where does an opex incentive scheme currently apply?

All AER-regulated gas distribution and transmission businesses now operate under an EBSS or equivalent. This includes:

- AGN SA (distribution);
- AGN Victoria and Albury (distribution);
- Multinet Gas Networks (distribution);
- Jemena Gas Networks (distribution);
- APA Victorian Transmission System;
- Ausnet Services (distribution);
- Amadeus (transmission);
- ActewAG (distribution); and
- Roma to Brisbane Pipeline (transmission).

DBP had an opex incentive scheme under the former legislative framework – the Western Australian *National Third Party Access Code for Natural Gas Pipeline Systems*, but the scheme was not retained following the transfer of the framework to the National Gas Law and Rules in 2009.

1.7. Impact on revenues

The E Factor will have no impact on the prices customers pay during the AA5 period, as any Revenue adjustments for efficiency gains or losses will not be applied until the following access arrangement period (AA6).

However, the E Factor will provide an immediate incentive to DBP to pursue operating efficiencies, which may include investing in innovative systems and solutions that can reduce operating costs. Customers will therefore benefit from lower opex costs in the future.

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[i] The 30:70 split is based on a real discount rate of 6% over a 30-year NPV analysis.

[ii] Any opex incurred to reduce capex or capex reclassified to opex is identified during the access arrangement period and therefore is not forecast.