

Allowance for end of life costs

Directlink in its Transmission Determination Proposal included an allowance for end of life costs (Land rectification and restoration costs) in its forecast capital expenditure. Stakeholders responded indicating that while they supported the concept they would need more detail before deciding whether they could fully accept the concept.

This is a new concept for economic regulation in electricity is gas and electricity but is more common economic regulation of Ports etc.

What are end of life costs?

End of life costs are those costs after Directlink has ceased operation that are legally required to comply with laws, planning standards and agreements. They are costs associated with the removal of any equipment and work to be undertaken on the land to make it consistent with any legal obligations.

Why should customers pay for efficient end of life costs?

End of life costs are incurred by all infrastructure assets. . It is a cost of providing the service.

All transmission equipment is on easements or land owned by the transmission network service provider.

If equipment is contained on land then there is a legal obligation to remove the equipment and make the site safe for the community and the environment. The obligations for end of life treatment are also addressed in easement agreements. The strictness of the end of life treatment would be expected to have an inverse relationship with the cost of acquiring the easement.

End of life costs can be significant. If forced to pay for the end of life costs the network would not recover the cost of their investment and would have trouble attracting finance.

In short, end of life costs are a standard part of electricity transmission business and is impossible to legally avoid. It is consistent with the National Electricity Objective that where efficiently incurred these costs should be recovered from customers.

When should customers pay for efficient end of life costs?

Having the customers who benefit from the operation of Directlink pay the end of life costs, rather than future customers, is consistent with the National Electricity Objective and feedback from our stakeholders.

In their response to PIAC noted

Annualising the cost of this would be a prudent way of preventing bill shock to customers at end-of-life and is consistent with the beneficiary pays principle where the costs are recovered from those customers who are currently deriving benefit from Directlink.

Directlink shares the view that the cost should go to the customers who benefit rather than customers who are no longer receiving the service.

Linking the benefit and cost leads to greater efficiency overtime in both operation and investment consistent with NEO.

How much are end of life costs?

While the requirements set out in the easement agreements will not change between now and the end of life the broader health, safety and environmental obligations imposed by local, state and federal governments could.

Directlink has taken the view that the best proxy for those future costs is an estimate of the current costs to be incurred to restore Directlink sites.

In respect of this we engaged GHD to estimate end of life costs for Directlink consistent with current obligations. [This work is still ongoing so no cost estimate is currently available.]

How do you convert future costs into an annual allowance?

In finance there are formulas for determining the future value of a series of annual payments (an annuity).

This formula can be used to back solve for a given future value (the end of life costs). When used in this manner the formula recognises the time value of money. At its most simple, this concept is that money can earn interest over time so that a dollar today is worth more than a dollar in a year's time by the value of interest it can earn.

$$C = \frac{FV - PV(1 + i)^n}{\left[\frac{(1 + i)^n - 1}{i} \right]}$$

Where:

C = annual payment

FV = End of Life Cost

PV is the assumed value of money received

I = discount rate

N = number of years remaining

The Queensland Competition Authority used an annuity method in its final determination of end of life costs for the Dalrymple Bay Coal Terminal.

The formula requires a discount rate and a duration.

Directlink has used the cost of debt as determined consistent with the binding rate of return instrument.

Discount rate

Directlink has used the risk free rate as calculated using the AER's binding rate of return instrument.

As this is an amount recovered in advance the interest rate should be the interest rate that is earned on the "holding fund" where the cash is saved.

Directlink has used the risk free rate as a proxy for this amount. It is worth noting that this overestimates the interest rate on an ultra-low risk investment because it ignores the tax treatment of interest earnings. But in the current low interest rate environment the difference is unlikely to be material.

This is different from the discount rate used in the QCA Dalrymple Bay Coal Terminal decision. The reason for this is the expected treatment of the amount collected under the allowance.

The QCA does not require that the amount be specifically set aside to cover the end of life costs. Rather treats it as an amount that covers the unavoidable obligation and whether Dalrymple Bay Coal Terminal sets aside the amount or covers that out of future shareholder capital is a matter for management so the QCA uses a WACC discount rate.

There were concerns raised by the AER and stakeholders that the value should be there when the costs are incurred. Therefore, Directlink is treating this allowance as an amount that will need to be set aside to cover the costs when they do occur and therefore only capable of earning an interest rate consistent with a low risk investment such as a bank account or government bond.

Duration

Directlink is currently expected to have an economic life out to 2041 (FY2042). It is at this point that it will have to undertake restoring the land.

Directlink has assumed a duration for the calculation of the annuity the same as the expected economic life.

A number of questions were posed by stakeholders and the AER, these are addressed below.

Transmission Determination Reviews

One other aspect of significance in understanding the annual allowance is like all aspects of a transmission determination it is decided by the Australian Energy Regulator every five years.

While Directlink can't bind future considerations of the AER, in other economically regulated industries the Regulator reviews the annuity calculation at each determination. In doing so they recalculate the annuity, taking into account the amount assumed to have been collected (ie the amount allowed) in previous determinations with updated end of life cost estimates, revised discount rates and durations to calculate the annuity that will result in the collection of the end of life costs at the end of life.

What happens if the life of Directlink is extended?

The current economic life is expected to be approximately 22 years from the start of the next transmission determination period. This is one of the inputs to the calculation of the annuity methodology adopted by Directlink.

Assuming the AER uses the annuity method to determining the annual allowance. Then if the life (duration) of Directlink increases or decreases the revised value will be the input to the annuity calculation and will automatically adjust the outcome for the change in life expectancy such that only the expected end of life costs are recovered.

What happens if the forecast end of life costs change?

Similar to the life expectancy of Directlink, the expected cost is an input to the calculation of the annual cost under the annuity method. If the expected end of life cost changes using the annuity method then the annual amount changes to ensure that the assumed recovered amount plus the annual amount will recover the revised expected cost.

Has the cost of decommissioning and land restoration already been included in the RAB value of Directlink?

There has been no allowance for end of life costs in the RAB for Directlink. It was not one of the factors taken into account when determining the initial capital base. There have been no allowances for it since then.

What happens with any over- or under-spend once the actual costs of land rectification and restoration are revealed?

There is no real adjustment factor that can be used to true the actual cost with the forecast cost. But there are two mitigation factors than mean this is unlikely to be a major issue for customers.

The first factor is that the final review of the annual payment will be two years from the end of Directlink's cost. So the final cost estimate will be close in time and accuracy to the actual cost likely to be incurred by Directlink.

The second factor is the annual allowance will be determined by the AER including the allowance for the last two years. This means that Directlink is not in a position to be able to upwardly bias the estimate.