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Attachment 1: Conversion

1.1 Introduction

Basslink Pty Ltd applies for a determination from the AER under cl 11.6.20(c) of the Rules that, from 1 July 2025, if the Basslink network service ceases to be classified as a market network service, it will instead be classified as a prescribed transmission service.

Basslink Pty Ltd considers that classifying the Basslink network service as a prescribed service, and having this service regulated by the AER, would promote the national electricity objective (NEO).

This attachment considers the costs and benefits of classifying the Basslink network service as a prescribed service such that it can be regulated by the AER under a transmission determination. Such conversion would be justified because its benefits outweigh its costs.

1.2 Legal Framework for Conversion

The governing law regarding conversion to a TNSP providing prescribed Transmission Services is set out in the Law and the Rules.

The Rules allow a network service provider to classify a service as a market network service, provided that certain criteria are satisfied.[11] Notably, these criteria include that the relevant service has never been the subject of a transmission determination – meaning that the ability to classify services as market network services is not open to regulated TNSPs. In practice, the option to classify a network service as a market network service is only open to existing MNSPs. However an MNSP may elect to cease classifying a network service as a market network service, and seek a determination from the AER that it will instead be classified as a prescribed service.

Where an existing network service ceases to be classified as a market network service, the AER may at its discretion determine the service to be a prescribed transmission service. This is the determination that Basslink Pty Ltd is seeking from the AER – that the Basslink network service will be classified as a prescribed service if it ceases to be classified as a market network service.

The Rules do not prescribe any criteria for the AER's decision on whether to classify the Basslink service as a prescribed service. However we understand that the AER will seek to give effect to the NEO and may also have regard to the revenue and pricing principles.[12]

[11] NER, cl 2.5.2(a).
[12] NEL, s 16.

National Electricity Objective

To the extent that the test for conversion has a nexus with the NEO, there are a number of key elements expressed in the NEO that should be considered in this context.

The NEO is to:[13]

> *"promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:*
>
> - *price, quality, safety and reliability and security of supply of electricity*
> - *the reliability, safety and security of the national electricity system."*

In order to promote efficiency in the provision of electricity services, the AER must make a decision that provides the most benefits relative to costs of the two possible decisions:

(i) Basslink not being classified as a prescribed service, and therefore not subject to revenue regulation (the counterfactual); and
(ii) Basslink being classified as a prescribed service, and therefore subject to revenue regulation.

In conducting this comparison, the AER must take into careful consideration the incentives created in each scenario. As further articulated below, the classification of Basslink services as prescribed services will ensure that it operates in the most efficient and reliable manner, thereby exerting downward pressure on prices for consumers in both Victoria and Tasmania and providing a higher level of transmission of renewable energy from Tasmania to Victoria.

1.3 The Counterfactual

The counterfactual is the forecast of the likely future state of the world if Basslink services are not classified as prescribed services. It does not represent the continuation of the previous set of circumstances. This is a particularly important distinction when considering the future operation of Basslink if it is not converted into a TNSP, because the way Basslink has been operated in the past is not a reliable indicator of how it would be operated in the future.

Operation of MNSPs in the NEM

In the NEM, interconnector MNSPs are dispatched in a similar way as generators: they participate in central dispatch under the market rules by submitting network dispatch offers (similar to the generation dispatch offers submitted by a scheduled generator).[14] These network dispatch offers can contain up to a maximum of ten price bands for each direction of power flow for the scheduled network service.[15] Just like any generator, a MNSP has the freedom to decide how much capacity it bids into the market and can offer blocks of capacity at different prices.

Where the MNSP's scheduled network services are dispatched by AEMO (depending on the MNSP's dispatch offers and the supply / demand balance), this permits power flow between the two regions

[13] National Electricity (South Australia) Act 1996,
[14] NER, cl 3.8.2.
[15] NER, cl 3.8.6A.

up to the dispatched capacity. In the region from which the power flows, the interconnector acts as load. In the importing region, it effectively acts as a source of generation. As a result, the interconnector effectively pays the Regional Reference Price in the region from which it transports energy and receives the Regional Reference Price in the region into which it transports.

A MNSP derives its revenue from the existence of price differentials between regions of the NEM. Under the Rules, the net revenue that an MNSP expects to receive is based on the amount of energy transferred by the scheduled network services and the price differential between the relevant connection points (based on the applicable regional reference node price and loss factors).[16]

The ACCC has previously noted that the revenue model for MNSPs under the Rules, as described above, may lead to some curtailment of the benefits that would otherwise accrue from interconnection of NEM regions.

In 2001, the ACCC made a determination in respect of an application for authorisation for amendments to the National Electricity Code (as it then was) which included proposed arrangements to permit MNSPs to participate in the NEM. In describing the operation of an MNSP, the ACCC noted that[17]:

[The] arrangements provide for investments in market network services to be supported by the revenue stream generated by trading electricity between the two interconnected regions. The parties to the investment will bear the risks associated with arbitraging electricity prices between the two regions. The MNSP can manage the risks by earning revenue in the following ways:

- *acting as an electricity merchant - buying electricity in the low price region and selling it in the high price region. The price differential multiplied by the volume of electricity traded provides the MNSP with the revenue needed to support the investment; or*
- *underwriting the investment by selling the rights to the revenue generated by trading electricity across the interconnector. Purchasers of such rights include electricity retailers, traders and generators; or*
- *selling a physical trading product, that is the right to bid the capacity into the market; or*
- *entering into contracts with NEMMCO for provision of ancillary services or reserve trader services.*

[16] NER, cl 3.8.6A(g).
[17] https://www.accc.gov.au/system/files/public-registers/documents/D01%2B43022.pdf

In making its decision to permit the proposed amendments to support participation of MNSP's, the ACCC stated that (at page 131):

> *In this context the Commission does not consider that the introduction of MNSPs to the NEM will result in a public detriment due to a lessening of competition. However, in some situations the Commission is aware that the operation of a market network service may detract from the public benefits that could otherwise be expected. The Commission recognises that the incentive placed on the proponents of a market network service may be to preserve price differentials between regions. Interested parties claim that MNSPs will have an incentive to either construct a link of smaller than socially optimal capacity and/or restrict flows between the regions. As such the expected public benefits that could arise from the introduction of market network services may not be fully realised. An MNSP may bid its capacity into the NEM at high prices, though such strategies will be constrained by the bid prices of competing generators and interconnectors. As such the MNSP will possess a degree of market power or may enhance the existing market power of other NEM participants and may be able to influence spot prices, especially by withdrawing capacity from the spot market. The Commission believes that when an MNSP has an incentive to limit the capacity of a link to preserve inter-regional price differentials, this is similar to that of a new generator who would not want to over invest in capacity leading to a collapse in its regional spot price. In this context, the Commission notes that new generators avoid this risk by writing long term supply contracts to get a secure income stream and hedge against the risk of a decline in prices. Similar contracting arrangements are also open to MNSPs, who could sell the rights to inter-regional revenues to generators that want to export electricity to another region.*

These incentive properties of the MNSP revenue model, as noted by the ACCC, are simply a function of the market rules.

Previous operation of Basslink

For most of its life to date,[18] Basslink Pty Ltd has been under a service agreement with Hydro Tasmania which requires it to dispatch the full capacity of the interconnector, in almost all cases, at a price of zero[19]. In the NEM, bidding at zero means that a generator or a MNSP is willing to accept any (non-negative) price, and effectively will provide its full capacity regardless of the market outcome.

As a result of the above factors, Basslink has (with the exception of a short period in 2022 when Basslink was under administration) operated in a manner designed to make its full capacity available to the market whenever such physical capacity is technically possible and is needed. This operation as an 'open link' interconnector reflects the manner in which a TNSP would have operated over the same period.

[18] Except for a short period of time between February 2022 and October 2022 when Basslink Pty Ltd was subject to external administration and was operating as a 'pure' merchant interconnector.
[19] There are some limited circumstances in which Basslink may be required to bid at a price other than zero

Credible counterfactual

As outlined by the ACCC (cited above), if Basslink is to remain a MNSP, it has a number of options available, and would need to consider the potential revenues and risks of each option. While Basslink Pty Ltd has not sought to quantify in any detail these potential revenues and risks as this time, it notes the following in respect of these options:

- A MNSP of Basslink's capacity operating without any hedging contracts is likely to have incentives under the Rules to legitimately bid the asset in a manner designed to optimise the level and incidence of price differential between Victoria and Tasmania. This will almost certainly result in a reduction of transmission capacity being bid, lower levels of renewable energy being transferred from Tasmania to Victoria, and higher wholesale prices in both Victoria and Tasmania – compared to a world in which the Basslink services are regulated as prescribed services.

- Basslink Pty Ltd acknowledges that the opportunities to earn significant revenue for price differentials reduces as additional generation in both Tasmania and Victoria increases, and as transmission capacity connecting Tasmania and Victoria is developed and becomes operational. However, Basslink Pty Ltd anticipates that in the period prior to the operation of additional generation and/or transmission capacity there will be significant periods in which the Rules framework will create incentives for legitimate bidding of MNSP capacity in a way that would produce significant price differentials.

- APA has not traditionally operated in a manner that requires exposure to market risk, and if it chose to 'contract out' of the market risk associated with Basslink as an MNSP, it would have the option of either entering into a 'hedge' contract, or to sell the dispatch rights to the capacity of Basslink.

- There are likely to be generators and/or other market participants operating in Victoria and other mainland NEM jurisdictions that would have significant commercial incentives to contract the dispatch rights of Basslink.

- A contract with Hydro Tasmania would conceptually be an option available to Basslink Pty Ltd. We note in this respect that:

    - The current agreement between Basslink Pty Ltd and Hydro Tasmania is a transitional arrangement only, intended to cover the period until the regulatory conversion process is completed. It cannot be assumed that in the event that the AER decides against regulatory conversion that commercial arrangements similar to those currently on foot will continue.

    - The value of the dispatch rights of Basslink may be valued more highly by other market participants than Hydro Tasmania.

- A more traditional hedging contract is also an option, but again we note that the value of dispatch rights of Basslink or the operation of Basslink as a stand-along MNSP may be assessed to be higher than those achieved by way of a hedging agreement.

At this stage Basslink Pty Ltd has not fully explored all of the potential options that may be available in the event that Basslink services are not classified as prescribed services. However, our preliminary view is that the most credible counterfactual is that Basslink Pty Ltd will operate either as a MNSP on a merchant basis, or will contract for the dispatch of its capacity with another mainland NEM participant. Basslink Pty Ltd, or the contracting 'owner' of the capacity, will then operate the MNSP in

accordance with the market rules and the market design – i.e. bidding in a manner designed to derive revenue from the price differential between regions. This will almost certainly result in lower levels of transmission capacity being provided, higher incidents of price disparity, and less hydro generation being exported from Tasmania to Victoria for a significant period of time.

We also note in this context that as a regulated TNSP, AEMO will be able to sell SRAs to the market. The availability of these products as a risk management tool should be considered an additional benefit of the conversion – for the reasons noted above, it cannot be assumed that these or similar risk management products would be available if Basslink were to operate as a MNSP.

Investment incentives as an MNSP

Basslink Pty Ltd has commissioned an asset condition report by Amplitude Consultants, a consultancy with specialist knowledge of HVDC transmission. This report confirms that at present Basslink is in good condition and is capable of delivering its rates transfer capacity. However, as with any long-lived transmission asset, Basslink will require on-going renewal investment to minimise risk of outages. In short, the decisions that would need to be made to ensure or extend the life of the asset will be more difficult to make for a MNSP than a TNSP.

Basslink Pty Ltd is of the view that classifying the services as prescribed services would provide a more robust environment for renewal investment than would likely occur if Basslink were to operate as an MNSP. A regulated environment would provide the certainty required for confident, long term investment for reasons that include:

- A business will only proceed with future investment and re-investment if it can reasonably expect to earn appropriate return on that investment.
- The market risk facing an MNSP will likely operate as a disincentive to long-term investment in the asset. As noted by the ACCC, an ‘uncontracted’ MNSP would be conscious of the impact additional transmission capacity would have on its ability to derive revenue from the price differential between regions, and would need to be careful not to ‘over invest’ if the asset were to face a reduction in profitability in the future. The timing and capacity of additional generation and transmission, and therefore its impact on the revenue available to an MNSP, will be difficult to assess over the long term.
- The incentive to invest in a revenue producing asset is clear and will generally act as a countervailing force to the disincentive outlined above. However, the following circumstances need to be considered in assessing the balance of those incentives for a MNSP:
    - The nexus between a reduction in transmission capacity available and revenue available for a MNSP is not necessarily linear - a stand-alone MNSP does not necessarily benefit financially from having all capacity available at all times. A MNSP may be incentivised to balance maintenance costs commensurate with the capacity it optimally offers into the market.
    - This non-linear relationship between capacity and revenue becomes more pronounced over time, as the opportunities to earn revenue from price disparity become fewer.
- Where an investment would create net benefits to market participants that are not captured in the revenue of a MNSP, it is unlikely that those investments would be made.

- These issues are not necessarily addressed under the counterfactual where Basslink dispatch capacity is contracted to a NEM participant. It cannot be assumed that there would be a single contract that would extend for the life of the asset but rather that there would be a series of contracts, with the contracting of the asset becoming harder to procure as the opportunity to derive revenue from the price differentials reduce in line with the increase in generation and/or transmission capacity. That is to say, the certainty of the revenue available to Basslink to underpin long term investment decisions will not be significantly ameliorated by contracting the capacity, as long term ability to contract will be subject to the same uncertainty as the long term ability to derive revenue from spot price differentials.

The public benefit is best served by Basslink operating as an 'open link', offering a reliable and efficient service to transport energy between Tasmania and Victoria for the 40 year life of the asset – with the regulatory framework ensuring a reasonable opportunity to recover efficient renewal investment.

Relationship with Market Benefit analysis

In **Attachment 2** and **Attachment 2.1** we present an estimate of the market benefits of Basslink. This is designed to demonstrate the market benefits attributable to Basslink as an existing transmission asset, and is not designed to demonstrate the benefit of Basslink being a regulated asset as opposed to an unregulated asset. However, it should be noted that:

- this estimate is derived on the assumption of Basslink being available to its full capacity and of efficient investment to ensure that it meets the reliability standards expected of a regulated transmission service.

- there is a relationship with the size of the market benefit modelled and the proportion of Basslink's capacity which is reliably available (although not necessarily linear). However, the market benefit analysis does not inform the impact of reduced capacity from Basslink on wholesale prices in Tasmania or Victoria.

This indicates that it is likely that Basslink as a regulated asset will deliver greater benefits than as an unregulated asset.

1.4 Cost of Regulatory Conversion

The most significant counterpoint to an argument in favour of regulatory conversion is that in relation to the transfer of the investment risk from the investor to the users. For regulated transmission infrastructure, once investment has been deemed efficient by the AER and has occurred, users are obligated to pay enough to ensure return on and of the investment. Both the return on investment and the depreciation profile are set by the AER. For MNSPs, there are no regulated constraints on the rate of return or how quickly the capital is paid back. However, there is also no guarantee of repayment. If the asset is not needed by the market and is not able to earn sufficient revenue, the risk is entirely with the investor.

In principle, a MNSP will keep operating as long as its revenue at least covers its variable costs. In other words, even with substantial reduction in revenue, a MNSP may continue providing services, such that customers continue receiving the benefit in circumstances where a MNSP is not recovering a contribution to its fixed costs. This would not occur where the asset is a TNSP – customers will always pay both the variable and fixed costs of the asset. Further, the cost of future investment is born by consumers, and this includes the costs associate with unexpected failure. In these

circumstances, the difference being paid by consumers could be considered the cost of regulatory conversion.

It cannot be assumed that Basslink as an MNSP would not be able to recover the same level of revenue over a shorter period of time, namely in the period before additional generation and transmission capacity reduces the incidences of significant price disparity between Victoria and Tasmania. However, it should be assumed that the MNSP would seek to recover those costs over a significantly shorter period than if the asset were a TNSP. As noted above, this will impact the incentives for a MNSP to make long term investments.

Basslink Pty Ltd further notes that while there will always be some risk of unexpected failures, Basslink Pty Ltd has received a report from Amplitude which notes that the asset is in good condition and is capable of delivering its transfer capacity.

1.5 Comparison of Factual and Counterfactual

Basslink will continue to deliver some degree of market benefit for so long as it continues to provide interconnection between Victoria and Tasmania. However these benefits will be greater if Basslink services are classified as prescribed services. The reasons for this are outlined above, and include:

- If Basslink continues to operate as an MNSP, the benefits of interconnection will naturally be constrained due to the incentives created under the market rules. The ACCC has previously noted that the revenue model for MNSPs under the Rules may lead to some curtailment of the benefits that would otherwise accrue from interconnection of NEM regions. As a regulated TNSP, Basslink Pty Ltd would have the incentive and the financial certainty to make its full capacity available to the market
- Basslink Pty Ltd as a TNSP will have the incentive to undertake the necessary efficient reinvestment to maintain and enhance the capabilities of the interconnector cable. A MNSP in a changing market will have an incentive to reduce future investment, both because of the risk to the economic life of the asset, and the non-linear relationship between capacity and profitability.
- Basslink Pty Ltd as a TNSP will be a source of Interregional Settlement Residue Auctions, and market participants on both sides of the link will gain access to these risk management products.

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Attachment 2: Net Market Benefits