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# bp Australia submission to the Western Australia Design Paper for the Capacity Investment Scheme

bp Australia (bp) welcomes the opportunity to provide our views in response to the design paper for the Capacity Investment Scheme in Western Australia. bp welcomes the Australian Government's investments to underwrite the expansion of renewable electricity generation within Australia's electricity grids, including in Western Australia.

## About bp

bp's purpose is to reimagine energy for people and our planet. Our ambition is to become a net zero company by 2050 or sooner. bp aims to be net zero across our operations (scope 1 & 2), in our oil and gas production (scope 3) and in the energy products we sell (life-cycle emissions intensity). For each of these we have also set short-term (2025) and medium-term targets (2030). You can read more about our net zero plans and progress in our 2024 Net Zero Ambition report.

Globally, our strategy is to transition from an international oil company to an integrated energy company. That transition is underway – between 2019 and 2022 the share of our annual capital investment going into what we call our transition growth engines (bioenergy, convenience, EV charging, renewables and power, and hydrogen) grew from 3% to 30%. We also continue to invest in oil and gas – investing in meeting the needs of today's energy system alongside investing to help scale lower carbon alternatives. We believe that the global energy transition needs to be not just rapid enough to meet the Paris climate goals, but also orderly. We aim to:

- Reduce our oil and gas production (from 2019 levels) by 2030 and lower emissions while keeping up cash flow by high grading our hydrocarbon portfolio and growing bioenergy.
- Invest in low-carbon energy to rapidly scale up in solar and offshore wind and develop new opportunities in carbon capture and clean hydrogen.

- Install 100,000 EV charging points and opening more than 1,000 new strategic convenience sites worldwide.
- Progress five transition growth businesses: bioenergy, convenience, EV charging, renewables, and hydrogen by 2025.

In addition, bp owns 50% of Lightsource bp, an independently operated global business. In November 2023, bp agreed to take full ownership by acquiring the remaining 50.03% interest. Subject to regulatory approvals, the transaction is anticipated to be completed by mid-2024.

## About bp Australia

All elements of bp's global strategy are present in Australia.

- We've substantial gas interests in Western Australia as a foundation partner of the Woodside-operated Northwest Shelf Joint Venture (JV) and are developing the Browse project with our JV partners. We're working on ways to decarbonise these operations to ensure longer term supply of gas for both domestic and export markets.
- We're working with partners exploring the possibility of a Carbon Capture and Storage (CCS) hub, Angel, off the coast of Western Australia. This proposed offshore large-scale, multi-user CCS facility near Karratha in Western Australia offers the potential capture around 5 million tonnes per annum (mtpa) of emissions from existing hard-to-abate domestic and international sources, with the opportunity to expand.
- We are operator of the Australian Renewable Energy Hub (AREH) in the Pilbara, planned to provide green electrons and green hydrogen in the hard to abate sectors of the Pilbara and, in time, the Asia Pacific.
- We're transitioning our Kwinana refinery site into an integrated clean energy hub:
    - The Kwinana Energy Hub has entered front-end engineering design (FEED) for the manufacture of up to 10,000 barrels per day of sustainable aviation fuel (SAF) or renewable diesel (RD); and
    - We're also advancing plans for producing over 14,000 tonnes of green hydrogen per annum as part of our H2Kwinana project. H2Kwinana is a recipient of a federal government Hydrogen Hub funding grant and has been shortlisted for the Hydrogen Headstart program.
- We are working on a further hydrogen project – GERI at Oakajee in the Mid-west and secured access to around 105,000 hectares for future renewables generation.
- Over 1GW developed and financed, and 7.5GW under development of renewable generation in Australia through Lightsource bp.

- And alongside an established retail-convenience and B2B fuels business, we're rolling out electric vehicle charge points through our bp pulse brand, and exploring options with partners to decarbonise heavy transport, including hydrogen refueling.

## The Capacity Investment Scheme is a welcome investment in the WEM

bp expects to be a major electricity user and generator into the SWIS from 2030. As we and other industrial energy users invest in the energy transition, our electricity needs will change. We agree this will necessarily require significant investment in new capacity over the coming decade to meet growing electricity demand, replace retiring coal-fired generators and to meet commitments from industry and government to reduce greenhouse gas emissions. The Commonwealth's investment via the Capacity Investment Scheme in underwriting some of this new capacity is very welcome.

We understand the intention is to target 6.5TWH of VRE and 1.1GW of four-hour equivalent dispatchable capacity in the WEM over the period to 2030. We welcome this clarity and, should it become clear more capacity is needed over the period to 2030, encourage this target capacity scope to increase.

While we welcome the CIS in the WEM, we note that it alone is insufficient. We encourage the Western Australia government to continue reforming the WEM to ensure the incentives and operation are best aligned with the rapid transformation that is needed.

## The capacity Investment Scheme in WA should incorporate demand response

We note the design paper indicates that demand response is not intended to be eligible for the first round, but is under consideration for future tenders. bp strongly encourages the immediate inclusion of a demand response, given its equivalent value to the WEM to other eligible capacity. Investment in flexible loads, like electrolysers for hydrogen production, can support the rapid uptake of renewable electricity and the efficient operation of the grid.

In times of high demand, electrolysers can be rapidly turned down to reduce peak demand. As well as helping firm the grid, this mitigates the need for more expensive gas or diesel and the incremental renewable energy that the electrolyser would have used is available to other users. In periods of low demand during the middle of the day, the electrolyser can ramp-up to reduce solar curtailment and remove the need for more expensive options to maintain grid balance. It's important for power markets to be equipped to recognise this value because it will help underpin investment decisions. Some of this value can be recognised in existing market structures, but others require additional reform.

Should demand response be considered for future tenders, there may need to be some adjustments made to the proposed design. For example, the lead and build time for these investments may be longer than for renewable generation or battery capacity so tenders may need to be held more than 3 years ahead. These demand response options may also need a different pricing structure to better reflect how they engage in the market and the other revenue streams that capture outside of power markets.

### Equivalent underwriting needed for renewable capacity in outside of the WEM

A significant proportion of Western Australia's current and future electricity demand is not, nor ever likely to be connected to the WEM. This energy demand will also need to undertake a rapid transformation if Australia is to meet its emissions reduction goals. Investments in new capacity to supply this demand outside of the WEM will face similar barriers to those intending to connect to the WEM. As with capacity needed for the WEM, there is a role for government to support the orderly transition and rapid development of new capacity.

While bp understands the design of the CIS is intended to work in conjunction with wholesale electricity markets and so may not be an appropriate instrument to provide this support, we encourage the Commonwealth and Western Australian governments to explore options to provide similar support to new capacity requirements outside of the WEM.

### Conclusion

Thank you again for the opportunity to submit our views on the proposed design of the CIS in the WEM. We have a long history of successfully operating in Western Australia and are pursuing substantial investments in support of the State's and Australia's energy transition. We look forward to working with both Governments as they develop the necessary policy settings to support the transition.