Submission in Response to the Draft National Electricity Amendment (Improving the Cost Recovery Arrangements for Transmission Non-Network Options) Rule 2025

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1. Executive Summary

The Draft National Electricity Amendment (Improving the Cost Recovery Arrangements for Transmission Non-Network Options) Rule 2025 seeks to refine cost recovery mechanisms within the National Electricity Market (NEM). However, significant concerns arise regarding its implementation, particularly its potential to impose higher energy costs on Australian consumers.

1.1 Key Concerns:

1.1.1 **Increased Consumer Costs:** The draft rule's approach to cost recovery could result in substantial electricity price increases for end-users. Recent analyses, including findings from a Senate inquiry, highlight the escalating energy prices impacting households, with costs rising at unprecedented rates. The inquiry also noted the lack of measures to curb this trend effectively.

1.1.2 **Transparency Deficiencies:** The proposed amendments lack robust mechanisms to ensure transparency in cost allocation and recovery processes. Without clear guidelines, inefficiencies and cost overruns may be passed on to consumers, undermining public trust and market stability.

1.1.3 **Omission of Comprehensive Cost-Benefit Analysis:** The rule fails to mandate thorough evaluations of socio-economic and environmental impacts, potentially leading to decisions that prioritize economic efficiency for operators over public and community interests.

1.1.4 **Environmental Risks:** By not addressing environmental impacts, the draft rule may inadvertently enable projects that contravene national environmental laws and international commitments, such as the Stockholm Convention on Persistent Organic Pollutants.

1.1.5 **Community Engagement Gaps:** The draft rule inadequately addresses the need for meaningful community consultation, neglecting the importance of involving stakeholders in decision-making processes.

1.2 Recommendations:

1.2.1 **Comprehensive Cost-Benefit Analyses:** Require all non-network options to undergo evaluations that integrate economic, environmental, and social factors to ensure balanced decision-making. 1.2.2 **Enhanced Transparency:** Introduce detailed guidelines and reporting requirements to ensure clarity in cost recovery mechanisms and foster public accountability. 1.2.3 **Strengthened Compliance:** Align the rule with existing environmental

laws, such as the EPBC Act, and international agreements, including the United Nations Sustainable Development Goals (SDGs). 1.2.4 **Mandatory Stakeholder Engagement:** Implement formal processes to involve consumers, community groups, and other stakeholders, ensuring their concerns are addressed. 1.2.5 **Promoting Innovation:** Support the development and adoption of sustainable technologies and practices to reduce long-term costs and environmental impacts.

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2. Detailed Submission

2.1 Environmental Impacts of Non-Network Options

2.1.1 **Habitat Destruction:** Similar to large-scale infrastructure projects, non-network options may involve vegetation clearing, threatening biodiversity and disrupting ecosystems. Examples include disruptions to keystone species, which can cascade through ecosystems, destabilizing flora and fauna populations. 2.1.2 **Lifecycle Carbon Emissions:** Embedded carbon from the manufacturing, transport, and decommissioning of non-network assets must be quantified to align with net-zero targets. A lack of comprehensive carbon accounting risks undermining Australia's climate commitments. For example, the energy-intensive manufacturing of energy storage systems generates significant embedded emissions. 2.1.3 **Contamination Risks:** Advanced materials, including PFAS in energy storage systems, pose long-term contamination threats to soil and water systems. These contaminants, often referred to as "forever chemicals," accumulate in the environment, causing widespread ecological harm and potential health risks.

2.2 Economic and Socio-Environmental Costs

2.2.1 **Community Livelihoods:** Changes in land use for non-network infrastructure can disrupt agricultural activities and local economies. For example, the loss of arable farmland can reduce agricultural outputs, creating downstream economic losses. 2.2.2 **Tourism and Ecosystem Services:** Disruptions to biodiversity hotspots threaten ecosystem services critical for climate resilience and tourism. Areas with rich biodiversity often serve as destinations for eco-tourism, which supports local economies.

2.3 Legislative and Policy Compliance

2.3.1 **EPBC Act Compliance:** Non-network projects must include mitigation strategies for impacts on threatened species and ecological communities. Failure to comply with the EPBC Act can lead to legal challenges and project delays. 2.3.2 **International Standards:** Reflect commitments under agreements such as the Stockholm Convention and the SDGs, including Goals 13 (Climate Action) and 15 (Life on Land). Non-compliance with these standards could tarnish Australia's global standing and environmental credibility.

2.4 Community Engagement and Transparency

2.4.1 **Mandate Stakeholder Consultation:** Engage local communities, Indigenous groups, and environmental organizations during planning and implementation. Effective consultation builds trust and ensures projects reflect community needs and values. 2.4.2 **Ensure Transparent Processes:** Provide public access to assessments and methodologies used in

evaluating non-network options. Transparency promotes accountability and allows for informed public discourse.

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3. Recommendations for Enhancing the Rule

3.1 **Environmental Safeguards:**

- Require cumulative impact assessments and lifecycle carbon accounting for all projects. Studies, such as those by Watson et al. (2011), demonstrate that preserving intact ecosystems significantly contributes to carbon sequestration, outperforming reforestation efforts following land clearing.
- Mandate the assessment of material toxicity and potential contamination risks, drawing lessons from global studies, including Dietz et al. (2020), which highlight the persistence and bioaccumulation of PFAS compounds.

3.2 **Cost-Benefit Analysis:**

- Develop methodologies that incorporate socio-environmental factors, supported by independent oversight. These methodologies should align with frameworks outlined by the United Nations Environment Programme (UNEP) for assessing ecosystem service values.
- Incorporate lifecycle analyses, as suggested by the International Renewable Energy Agency (IRENA, 2021), to account for emissions and environmental impacts across all phases of non-network option implementation.

3.3 **Compliance Mechanisms:**

- Ensure alignment with the EPBC Act and international agreements. Strengthening compliance reduces the risk of costly legal challenges and environmental degradation. Case studies, such as those involving the Great Barrier Reef Marine Park, underscore the necessity of strict enforcement to protect critical ecosystems.
- Introduce penalties for non-compliance to enhance accountability and deter irresponsible project implementations. Penalties should reflect the environmental and socio-economic damages caused by breaches.

3.4 **Community Engagement:**

- Implement structured stakeholder consultation frameworks. For example, the Gondwana Link initiative in Western Australia highlights the benefits of involving local communities in ecosystem preservation and project planning.
- Establish benefit-sharing models to distribute economic gains equitably. This could include revenue-sharing agreements with local communities or investments in community infrastructure, similar to models successfully implemented in Scandinavian renewable energy projects.

3.5 **Promoting Innovation and Sustainability:**

- Support the development of PFAS-free technologies and recycling-friendly energy storage systems. Research by Rahman et al. (2021) highlights the feasibility of adopting sustainable alternatives in energy infrastructure.
- Incentivize advancements in materials science to reduce dependency on harmful substances and improve the recyclability of renewable energy components, aligning with circular economy principles promoted by the European Union's REACH regulations.

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4. Conclusion

While the Draft National Electricity Amendment (Improving the Cost Recovery Arrangements for Transmission Non-Network Options) Rule 2025 addresses critical gaps, it requires significant enhancements to ensure fairness, transparency, and sustainability.

To truly serve the public interest, the rule must embed mechanisms for independent oversight, ensuring that cost recovery processes are not only transparent but also equitable. Independent oversight bodies should be tasked with verifying compliance, evaluating socio-environmental impacts, and holding operators accountable for any breaches. Without such measures, the risk of unchecked cost inflation and environmental degradation remains unacceptably high.

Additionally, the government must adopt a more rigorous approach to community engagement. Stakeholder voices, particularly those from vulnerable or marginalized groups, should play a central role in shaping project outcomes. Trust in the system hinges on genuine participation, equitable benefit-sharing, and demonstrable efforts to address public concerns.

Ultimately, this submission underscores the need for a paradigm shift. Instead of merely refining existing mechanisms, the government must demonstrate a commitment to systemic reform that prioritizes environmental integrity, public accountability, and long-term resilience. Only through these measures can the rule fulfill its intended purpose of balancing economic, environmental, and social objectives within the National Electricity Market.

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5. References

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