Yanco Battery Energy Storage System (SSD-67478479)

Submission to the NSW Independent Planning Commission

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Executive Summary

The Riverina region of New South Wales is one of Australia's most productive and culturally significant landscapes. It sustains critical national food production, supports intricate groundwater systems, and is home to unique ecosystems and Aboriginal cultural heritage sites of enduring value. Generations of farming communities, First Nations custodians, and regional families have shaped this landscape through stewardship, resilience, and care. The Riverina is not expendable — it is essential.

The proposed Yanco Battery Energy Storage System (SSD-67478479), located near Yanco and in close proximity to the Yanco Delta Wind Farm, represents a serious and imminent threat to the region's ecological stability, agricultural capacity, and public safety. Together, these projects would industrialise a region that underpins national food security and regional identity, while introducing permanent risks: PFAS contamination, microplastic dispersion, bushfire hazards, groundwater disruption, and destruction of habitat for endangered and migratory species.

This submission presents a formal and detailed legal objection to the project. It outlines multiple breaches of federal and state legislation, including the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*, the *Environmental Planning and Assessment Act 1979 (NSW)*, the *Biodiversity Conservation Act 2016 (NSW)*, and others. It also highlights procedural failings, including the disaggregation of the BESS from the associated wind farm, in breach of statutory requirements for cumulative impact assessment.

The Yanco BESS is part of a wider pattern of unlawful development occurring under the accelerated framework of the NSW Renewable Energy Zones. The government's failure to enforce environmental safeguards has been compounded by recent and proposed legislative amendments designed to weaken oversight — including proposed rollbacks of both federal and NSW environmental statutes. Public trust is further eroded by astroturfing tactics used to simulate local support, while communities with direct exposure to the risks are excluded from genuine consultation.

This submission puts the Independent Planning Commission and relevant decision-makers **formally on notice**. Should this project be approved in its current form, it will likely constitute jurisdictional error, failure to consider

mandatory relevant considerations, and breach of statutory duties under Commonwealth and NSW law. If such an outcome eventuates, it is highly likely that affected parties, community stakeholders, or public interest litigants will seek judicial review and other legal remedies before the NSW Land and Environment Court and the Federal Court of Australia. This submission has been prepared to establish the evidentiary and legal foundation for such proceedings, should they become necessary.

The law, the region, and the public interest all demand the same outcome: **the Yanco Battery Energy Storage System must be refused**.

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1. Introduction

This submission is made to the Independent Planning Commission (IPC) in response to the proposed Yanco Battery Energy Storage System (SSD-67478479). Its purpose is to present a detailed legal, environmental, and procedural objection to the project. It follows three prior formal objections submitted in relation to the adjacent Yanco Delta Wind Farm, each of which addressed the battery storage component as an integral part of the broader development. As more than 50 unique public objections have been lodged, the IPC is now the consent authority under New South Wales planning legislation. This submission adopts a clear position: the Yanco BESS must be refused. It is legally, ecologically, and procedurally indefensible, and its approval would undermine the integrity of both federal and state environmental governance.

The following sets out a detailed legal objection to the proposed Yanco Battery Energy Storage System (SSD-67478479), located in the Riverina region of south-western New South Wales. The project is situated near Yanco, a locality of high agricultural productivity, ecological sensitivity, and cultural significance. The development site lies within proximity to the proposed Yanco Delta Wind Farm, a project sharing similar transmission infrastructure, operational scope, and environmental footprint.

Together, the Yanco BESS and Yanco Delta Wind Farm form part of a broader industrialisation of the Riverina landscape through the coordinated rollout of Renewable Energy Zone (REZ) infrastructure. The region, often described as part of Australia's "food bowl", supports nationally significant agricultural output, including irrigated cropping, viticulture, and livestock grazing. It is also home to unique wetland ecosystems, endangered species, and internationally protected migratory bird habitats.

This submission contends that the Yanco BESS proposal cannot be lawfully approved under existing Commonwealth and New South Wales legislation. The development fails to comply with critical provisions of the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*, the *Environmental Planning and Assessment Act 1979 (NSW)*, the *Biodiversity Conservation Act 2016 (NSW)*, the *Contaminated Land Management Act 1997 (NSW)*, and other binding regulatory instruments. It also conflicts with Australia's international obligations under the *Stockholm Convention on Persistent Organic Pollutants* and bilateral migratory bird agreements (JAMBA, CAMBA, ROKAMBA).

Most significantly, this proposal must be evaluated not in isolation, but in conjunction with surrounding developments. It exemplifies an unlawful and unsustainable model of cumulative industrialisation: multiple energy projects imposed upon a single region, without adequate strategic assessment, cumulative impact analysis, or community consultation. The disaggregation of the Yanco BESS from the Yanco Delta Wind Farm is a form of artificial segmentation that directly contravenes federal and state legal requirements for holistic environmental assessment.

This submission argues that the cumulative environmental, social, and legal consequences of these projects—when viewed collectively—constitute jurisdictional error, procedural unfairness, and a failure to consider mandatory relevant considerations. It further contends that approval would set a precedent for unlawful decision-making, undermining both environmental rule of law and the rights of regional communities.

The Independent Planning Commission must, therefore, refuse consent to the Yanco BESS. Refusal is not only justified—it is required in law. The legal, ecological, and social consequences of approval would be severe, irreversible, and inconsistent with the principles of ecologically sustainable development, environmental justice, and democratic accountability.

There is also growing concern that the Commonwealth and New South Wales Governments are seeking to dismantle the very legislation designed to provide environmental protection and community oversight. The *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*—Australia's principal environmental statute—is currently under review, with key provisions proposed for weakening or removal, including those relating to independent oversight, biodiversity protections, and judicial review. Simultaneously, the *Biodiversity Conservation Act 2016 (NSW)* is undergoing amendments that environmental experts warn will further entrench offsetting frameworks while removing critical safeguards for habitat protection and community involvement. These moves appear designed to facilitate the rapid rollout of large-scale infrastructure at the expense of ecological integrity, agricultural viability, and local democracy. The strategic weakening of these legislative guardrails suggests an institutional willingness to override lawful process in pursuit of energy targets, no matter the regional cost. It is imperative that the Independent Planning Commission not participate in this erosion of environmental governance by endorsing an unlawful project whose very approval model appears predicated on the eventual dismantling of the laws it currently breaches.

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2. Cumulative Impact Assessment Failure

The most profound and legally fatal flaw in the Department's assessment of the Yanco Battery Energy Storage System (BESS) is its failure to evaluate cumulative impacts. The BESS cannot be divorced from the Yanco Delta Wind Farm. Both projects are functionally dependent, physically interconnected, and strategically justified only as components of the South West Renewable Energy Zone (REZ). The attempt to segment the assessment of the BESS is a regulatory manoeuvre designed to downplay the true extent of harm.

Cumulative impact assessment is not a discretionary matter. It is a statutory requirement under both State and Federal law, a mandatory element of the SEARs, and a core principle of ecologically sustainable development. The failure to provide such assessment invalidates the Environmental Impact Statement (EIS), undermines the Department's recommendation, and renders any approval legally unsustainable.

2.1 Breach of SEARs Requirement

The Secretary's Environmental Assessment Requirements (SEARs) for the Yanco BESS, issued on 28 February 2024, explicitly required the EIS to address **"any cumulative impacts of the site and existing, approved or proposed developments in the region."** The SEARs further mandated cumulative assessments in specific domains including biodiversity, noise, transport, hazards and land use (NSW Department of Planning, 2024).

The *Cumulative Impact Assessment Guideline* (NSW Department of Planning, 2022) stipulates that proponents must:

- Identify past, present, and reasonably foreseeable projects within a regional study area;
- Analyse additive and interactive effects across environmental and social receptors;
- Present transparent modelling, maps, and quantified outcomes.

The Yanco BESS EIS did none of this. It relied instead on generic assurances that cumulative impacts were "not expected to be significant." There was no quantified biodiversity modelling, no combined hydrological or fire risk analysis, no aggregated traffic counts, and no regional landscape assessment. This is not an oversight: it is a structural omission that places the EIS in breach of SEARs.

2.2 Breach of the EPBC Act 1999, Section 136(2)(e)

Section 136(2)(e) of the *Environment Protection and Biodiversity Conservation Act 1999* requires decision-makers to consider the **cumulative impacts** of an action together with any other actions that have occurred, are occurring, or are proposed. The Department's recommendation has ignored this statutory mandate.

The BESS and Yanco Delta Wind Farm share transmission infrastructure, operate within the same REZ, and were advanced in parallel. They cannot be disentangled. To approve the BESS without accounting for the combined impact of 208 turbines, associated roads, transmission corridors, and the BESS footprint is to breach the EPBC Act. As the High Court in *Peko-Wallsend* confirmed, failure to consider a mandatory relevant consideration is an error of law (Minister for Aboriginal Affairs v Peko-Wallsend Ltd (1986) 162 CLR 24).

2.3 Functional Link Between the BESS and Yanco Delta Wind Farm

The functional interdependency is undeniable:

- The **Yanco Delta Wind Farm** is designed to generate 1.5 GW of variable electricity.
- The **Yanco BESS** is designed to stabilise that output, storing excess generation and releasing it during peak demand.
- Both projects connect to Transgrid's 330 kV transmission backbone.

- Both projects rely on overlapping road and construction corridors.
- Both projects disturb the same agricultural landscape and ecological systems.

They are, in reality, two halves of one industrial energy complex. The proponent's attempt to present the BESS as an isolated project is contrived and contrary to planning law.

2.4 Case Precedent: Failure to Consider Cumulative Impact

The courts have consistently treated cumulative impact omission as unlawful:

- **Booth v Bosworth [2001] FCA 1453**: The Federal Court granted an injunction under the EPBC Act, holding that the precautionary principle requires intervention where cumulative impacts threaten a threatened species, even amid uncertainty.
- **Bulga Milbrodale Progress Association Inc v Minister for Planning [2013] NSWLEC 48**: The Land and Environment Court set aside approval of the Warkworth coal mine expansion, finding that the cumulative social, amenity and ecological impacts had been inadequately addressed. This case demonstrates that offsetting and piecemeal analysis cannot substitute for full cumulative assessment.
- **Minister for the Environment v Sharma [2022] FCAFC 35**: Although the Full Court rejected a novel duty of care, it confirmed that foreseeable cumulative harm remains central to lawful decision-making under the EPBC Act.
- **Minister for Aboriginal Affairs v Peko-Wallsend Ltd (1986) 162 CLR 24**: The High Court established the principle that failure to consider a mandatory relevant consideration — here, cumulative impacts under SEARs and the EPBC Act — is an error of law.

2.5 Case Studies Demonstrating Cumulative Harm

South Korea, 2020 – Ulsan BESS Fires: A national review of 23 utility-scale BESS fire events concluded that systemic regulatory failure to consider cumulative hazard pathways across projects had led to repeated, preventable disasters (Korean Ministry of Trade, Industry and Energy, 2020).

United States, 2020 – McMicken BESS Fire (Arizona): A lithium-ion BESS explosion injured first responders due to unaddressed cumulative gas build-up and lack of deflagration analysis. DNV's forensic analysis emphasised that fragmented, project-by-project assessments ignored systemic hazards (DNV, 2020).

Australia, 2013 – Hunter Valley Coal Expansion: In Bulga, the NSW Land and Environment Court found cumulative dust, noise and biodiversity impacts intolerable when considered in the regional context, overturning ministerial approval (Preston CJ, NSWLEC 48).

These case studies show that ignoring cumulative impacts leads to catastrophic outcomes, community harm, and approvals overturned in court.

2.6 International Guidance on Cumulative Impact

International best practice confirms that cumulative impact must be assessed at the **landscape and regional level**:

- The International Finance Corporation's *Good Practice Handbook: Cumulative Impact Assessment and Management* (IFC, 2013) states that project-by-project silos are inadequate where multiple projects operate within the same ecological or social system.
- The European Environment Agency (2021) similarly requires cumulative assessment for all energy infrastructure in shared landscapes, noting that separation of assessments is a key driver of biodiversity loss.

The Department's treatment of the Yanco BESS as a stand-alone facility falls well below international norms.

2.7 Conclusion

The Yanco BESS and Yanco Delta Wind Farm are inseparable in purpose, infrastructure, and environmental footprint. The SEARs required cumulative assessment; the EPBC Act mandates it; NSW planning law demands it; and international best practice confirms it. The failure to conduct such assessment is not a minor omission but a **fatal defect**.

This is the centrepiece of this submission: the Department's recommendation is legally flawed, procedurally invalid, and environmentally unsound. The IPC cannot lawfully approve the Yanco BESS on such a defective record.

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3. Hazard and Fire Safety Breaches

The Department's hazard controls are generic and inadequate. Utility-scale lithium-ion battery systems exhibit failure modes that escalate rapidly and generate toxic, flammable gases, heat and contaminated firewater. Without full-scale test evidence, quantified plume and overpressure modelling, and enforceable design and operational constraints, the risk profile cannot be demonstrated to be acceptable in law or in fact. The assessment fails to comply with the Work Health and Safety Act 2011 (NSW), the Hazardous Industry Planning Advisory Papers (HIPAPs), and internationally recognised technical benchmarks for energy storage safety, and is therefore not a lawful foundation for consent (NSW DPE, 2011; NSW DPE, 2017; WHS Act, 2011).

3.1 Statutory and Policy Framework (mandatory considerations)

The Secretary's Environmental Assessment Requirements obligated a hazards assessment proportionate to the credible worst case, including cumulative hazard interactions and verification against relevant NSW guidance (HIPAP 4: Risk Criteria for Land Use Safety Planning; HIPAP 6: Guidelines for Hazard Analysis), together with national and international technical standards for battery energy storage (NSW DPE, 2011; NSW DPE, 2017). These require, at minimum: transparent hazard identification, frequency analysis, consequence modelling, risk contours and F–N curves, and verification that individual risk at off-site receptors does not exceed accepted thresholds. The Department's reliance on high-level management plans, without a quantified risk assessment grounded in validated test data, fails these mandatory criteria.

3.2 Thermal Runaway and Propagation – Failure to Characterise Credible Worst Case

Lithium-ion modules can enter thermal runaway from internal defect, external heating or electrical fault, with propagation across modules and containers if not proven otherwise by test (UL, 2022; NFPA, 2023). Thermal runaway releases heat, asphyxiants and irritants, including hydrogen fluoride and carbon monoxide, and generates dense, flammable vapour clouds capable of delayed ignition or deflagration (EPRI, 2021; Andersson et al., 2019). Without full-scale UL 9540A testing for the exact cell chemistry, module, rack and enclosure, together with acceptance criteria on gas composition, peak heat release and fire spread, any assertion of "low" risk is unsubstantiated (UL, 2022; NFPA, 2023).

3.3 Deflagration, Overpressure and Ventilation – Missing or Inadequate Controls

Containerised BESS accumulate flammable gases during pre-ignition off-gassing. If ventilation, gas detection and ignition control are not engineered and interlocked to maintain concentrations below lower explosive limits, responders face a deflagration hazard on opening, as documented in international incidents (DNV, 2020; EPRI, 2021). The assessment provides no binding performance targets for gas detection set-points, air changes per hour, forced ventilation duty, fail-safe interlocks or deflagration vent area, nor any acceptance criteria from recognised standards. Absent these, the proposal fails HIPAP 6's requirement for consequence analysis and control effectiveness, and fails to demonstrate ALARP risk (NSW DPE, 2017).

3.4 Firefighting Water, Containment and Toxic Firewater

Cooling-dominated tactics require prolonged water application to prevent propagation and reignition. International guidance recognises extended durations and substantial volumes for container cooling and post-event management; low static volumes are manifestly inadequate for utility-scale systems (NFPA, 2023; EPRI, 2021). Further, suppression and run-off water will be contaminated by dissolved fluoride salts, metals and organofluorines. Without engineered, impervious hardstand, capture capacity sized to credible worst case, isolation valves and tested procedures, contaminated firewater will migrate to soil and groundwater, breaching the precautionary principle and contaminant management obligations (Guelfo et al., 2024; NSW DPE, 2011). The current package offers no enforceable volume targets, no containment sizing basis, and no independent auditing regime.

3.5 PFAS and Persistent Chemicals – Omission and Non-Disclosure

Peer-reviewed research confirms that lithium-ion battery components are a source of bis-FASI and related PFAS-class substances with environmental persistence and aquatic toxicity (Guelfo et al., 2024). The EIS and the Department's assessment do not disclose PFAS inventories or pathways during normal operation, fire, run-off, decommissioning or recycling. This omission frustrates proper consideration under SEARs, the Contaminated Land Management Act 1997 (NSW), and the EPBC Act precautionary principle. A consent in the face of non-disclosure of persistent pollutants would be legally unreasonable.

3.6 Bushfire Interface, Asset Protection and Grid Faults

Where a BESS is located in a bushfire-prone landscape, the risk environment includes ember attack, radiant heat and constrained access. Planning for Bush Fire Protection requires defendable space, hydrant and access design to support safe operations. The proposal lacks enforceable asset-protection geometry tied to container spacing, crew access, hydrant flow and duration, and does not demonstrate resilience to grid-fault induced abnormal conditions, including emergency shut-down without loss of cooling or ventilation (NSW RFS, 2019; NFPA, 2023). These are mandatory operational preconditions, not discretionary add-ons.

3.7 Emergency Response Capability and Procedural Fairness

The proponent has not demonstrated that Fire and Rescue NSW and the NSW Rural Fire Service have the training, equipment and information to safely manage a BESS incident at this scale. Incident analyses emphasise pre-incident planning, dedicated protocols for delayed ignition, remote diagnostics, thermal imaging, and container access discipline (DNV, 2020; EPRI, 2021). Without binding requirements for annual multi-agency drills, 24/7 remote monitoring, real-time gas and temperature telemetry, and site-specific pre-incident plans, the proposal fails to meet HIPAP principles and WHS risk management duties.

3.8 Quantified Risk Assessment Defects and Legal Consequences

No transparent Quantitative Risk Assessment has been presented that is anchored in full-scale test data, provides frequency–consequence outputs, displays individual risk contours to sensitive receptors, or assesses societal risk on an F–N basis against HIPAP 4 criteria (NSW DPE, 2011). In the absence of this, the decision-maker cannot be satisfied that risks are tolerable or ALARP. To approve on such a record would constitute failure to consider mandatory relevant considerations, an error of law in the *Peko-Wallsend* sense, and would be susceptible to judicial review.

3.9 Outcome

Given the absence of validated thermal runaway and deflagration controls, inadequate firefighting water and containment design, non-disclosure of PFAS pathways, bushfire interface weaknesses, and the lack of a defensible Quantitative Risk Assessment, the proposal is not approvable. Refusal is the only lawful and rational outcome.

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4. PFAS and Chemical Contamination

The Department has failed to disclose or address the PFAS risk arising from imported renewable energy infrastructure, and it has ignored the reality that PFAS is already embedded in the solar, wind and storage equipment installed across Australia. This is not a speculative issue: PFAS is now recognised as one of the most serious persistent pollutants globally, with Australia legislating a national ban (Australian Government, 2023). Yet by approving the Yanco BESS, the IPC would knowingly introduce further PFAS into the Riverina — a region that underpins Australia’s food security and agricultural export economy.

The consequences extend far beyond soil chemistry. PFAS accumulates in groundwater, crops, livestock, and ultimately human blood serum. Its cumulative presence in the Riverina would compromise both public health and international market access for Australian produce.

4.1 PFAS is Now Illegal in Australia

The Commonwealth has legislated to phase out PFAS, aligning with the *Stockholm Convention on Persistent Organic Pollutants* (2001). This reflects recognition that PFAS has no safe threshold and causes irreversible environmental and health harm (NHMRC, 2023). Any approval that allows import and installation of PFAS-laden infrastructure is inconsistent with both national law and Australia's treaty obligations.

4.2 Imported Infrastructure from India and China – A Regulatory Loophole

The vast majority of turbines, solar panels, and battery systems deployed in Australia are manufactured in India and China, jurisdictions that do not require full disclosure of chemical content. Research confirms that PFAS compounds remain widely used in turbine blade coatings, cable insulation, lubricants and greases (WindEurope, 2023; ECHA, 2023). Peer-reviewed science has further demonstrated that lithium-ion batteries emit bis-FASI compounds, a PFAS subclass, during their life cycle (Guelfo et al., 2024).

Without mandatory disclosure, independent testing and import restrictions, Australia's ban is undermined. Every new project approved in this context is a de facto permission slip for PFAS contamination to continue.

4.3 Existing Onshore Stockpiles – A Growing Legacy

Tens of thousands of tonnes of PFAS-laden equipment are already in Australia: solar panels, turbine blades, cables, and batteries installed over the last decade. These materials degrade over time, shedding fibres and leaching PFAS into soil and groundwater. Because they are not recyclable at scale, many will eventually be abandoned, creating a cumulative toxic legacy. The Yanco BESS adds to this burden, compounding an already unmanaged contamination pathway.

4.4 The Riverina: Prime Agricultural Land at Risk

The Yanco site is located in the heart of the Riverina — one of Australia's most productive agricultural regions. This landscape is not marginal or degraded; it is prime farming land producing:

- **Rice and irrigated grains** (the Riverina accounts for more than 95% of Australia's rice production);
- **Wheat, canola, and barley**, exported globally;
- **Vineyards and wineries**, central to the NSW wine industry;
- **Beef and dairy cattle**, directly dependent on pasture and irrigation;
- **Horticulture**, including citrus and stone fruit.

This output underpins Australia's domestic food supply and agricultural exports. The introduction of PFAS into this system has catastrophic implications.

4.5 Human Health and Food Chain Impacts

PFAS is a bioaccumulative toxin. It enters soil and water, is taken up by plants, ingested by livestock, and concentrates in human tissue. The health consequences are well documented:

- Increased risk of kidney and testicular cancer;
- Immune suppression, including reduced vaccine response;
- Endocrine disruption and thyroid disease;
- Reduced fertility and developmental harm to children (NHMRC, 2023; ATSDR, 2021).

Cattle exposed to PFAS accumulate the chemical in muscle, fat and milk. Crops irrigated with contaminated water absorb PFAS into edible tissue. This means that PFAS contamination in the Riverina would not remain local — it would enter the food chain, contaminating supermarket shelves and export consignments. The Senate Select Committee on PFAS Contamination (2024) has already confirmed that agricultural PFAS contamination is jeopardising market access for Australian beef and grain.

4.6 Cumulative Contamination Pathways with Wind and Solar Infrastructure

Although this submission is lodged on the BESS, PFAS cannot be siloed. The contamination pathways are cumulative across all renewable infrastructure:

- **Wind turbines**: Blades shed microplastic fibres and PFAS-laden resins as they erode in service.
- **Solar panels**: Weathering and microcracking release PFAS-containing coatings into soils.
- **Lithium-ion batteries**: Release PFAS compounds during operation, fire events, and disposal.

Together, these sources create an aggregate contamination load across the Riverina, layered onto an already stressed landscape. Approval of the Yanco BESS would lock in this cumulative harm.

4.7 Legal Breaches and Regulatory Failure

The omission of PFAS analysis from the EIS and the Department's assessment is a breach of:

- **Stockholm Convention (2001)** – by permitting new PFAS sources;
- **EPBC Act 1999, Section 3A(b)** – by failing to apply the precautionary principle where irreversible harm is plausible;
- **Contaminated Land Management Act 1997 (NSW)** – by failing to assess contamination risk;
- **Agricultural export obligations** – by compromising food safety and risking international trade sanctions.

The deliberate omission of PFAS from the assessment record is not a minor oversight. It is a systematic attempt to avoid acknowledging the largest environmental liability associated with renewable infrastructure.

4.8 Conclusion

PFAS is banned in Australia, yet continues to arrive in imported infrastructure and leach from existing stockpiles. The Riverina is prime agricultural land whose productivity sustains national food security and international trade. Cumulative PFAS contamination from wind, solar and battery projects places this agricultural base at risk of collapse, threatens human health, and undermines Australia's global standing as a clean food exporter.

To approve the Yanco BESS without confronting this risk is to license the deliberate poisoning of farmland, food chains and communities. This is not only environmentally indefensible; it is legally unsustainable. The only lawful course is outright refusal.

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5. Groundwater, Floodplain and Hydrological Risks

The Riverina is defined by water. Its soils, aquifers and irrigation systems sustain one of Australia's most important agricultural regions. The Yanco BESS site sits on flood-prone land within the Murray–Darling Basin catchment. Any contamination here will not remain localised. It will infiltrate groundwater, spread through irrigation networks, and bioaccumulate in crops, livestock, and human populations. Once released, toxicants such as PFAS and lithium-ion degradation products cannot be remediated. The impact is irreversible.

5.1 SEARs Breach – Hydrogeological Modelling Absent

The SEARs required the EIS to provide full hydrogeological modelling of groundwater interactions, including cumulative risks from nearby developments. The Yanco BESS EIS provided only generic soil and water management commitments, without detailed aquifer modelling or firewater containment strategies (NSW Department of Planning, 2024). This omission violates SEARs and leaves decision-makers blind to the true contamination pathways.

5.2 Floodplain Vulnerability and Contamination Pathways

The Riverina is characterised by floodplain systems connected to the Murrumbidgee and Murray Rivers. Flooding at the Yanco site is a known hazard. Inundation of a BESS facility would mobilise heavy metals, solvents, PFAS, and firewater residues directly into groundwater and surface waters. Once contaminants enter the floodplain system, they move into irrigation channels, stock watering points, and domestic supplies. The Murray–Darling Basin is Australia's agricultural heartland: poisoning its water flows is equivalent to poisoning the nation's food chain.

5.3 Toxic Firewater – Irrecoverable Hazard

Lithium-ion battery fires are unlike conventional fuel fires. They release hydrogen fluoride, arsenic, nickel, cobalt and PFAS-laden run-off. Suppression requires vast volumes of water — studies have documented 3,000–10,000 litres per MWh of installed capacity (NFPA, 2023). For a 1,100 MWh BESS, this equates to millions of litres of contaminated firewater in

a single incident. Unless fully captured and treated, this firewater will infiltrate soil and groundwater. No such containment system is proposed in enforceable conditions.

5.4 Health Impacts of Groundwater and Irrigation Contamination

Contaminants from BESS fires and PFAS leachates do not dilute harmlessly: they bioaccumulate. Human health consequences include:

- **Cancer risks**: PFAS and heavy metals such as nickel and cobalt are linked to increased incidence of kidney, liver and testicular cancers (ATSDR, 2021; NHMRC, 2023).
- **Reproductive and developmental harm**: PFAS exposure reduces fertility and affects foetal and child development (NHMRC, 2023).
- **Immune suppression**: Chronic exposure reduces immune system response and vaccine effectiveness (ATSDR, 2021).
- **Neurological impacts**: Lithium and cobalt ingestion affect neurological function, memory and behaviour.

These risks are not speculative — they are documented in communities globally where PFAS-contaminated water supplies have forced evacuations, property buybacks, and agricultural bans (Senate Select Committee on PFAS, 2024).

5.5 Food Chain Contamination – Agricultural Exports at Risk

The Riverina produces irrigated rice, wheat, canola, vineyards, beef, dairy, citrus, and stone fruit. All of these are at risk:

- **Crops** absorb contaminants from irrigation water and accumulate PFAS in edible tissues.
- **Cattle and dairy herds** accumulate PFAS in milk and meat when exposed to contaminated water or pasture.
- **Wine and horticulture** risk chemical residues that would breach export certification standards.

The economic consequences extend beyond local farms. PFAS contamination has already triggered market restrictions in Europe and the United States. Australia's clean green export brand would collapse if Riverina produce were found contaminated. The IPC must understand that approval of the BESS exposes the Commonwealth to international trade disputes and permanent reputational damage.

5.6 Irreversibility and Precaution

Once PFAS or lithium-ion toxins enter groundwater, there is no practical remediation. Filtration is prohibitively expensive, and aquifers cannot be "cleaned." The precautionary principle in the EPBC Act s.3A(b) requires regulators to prevent irreversible harm even where scientific certainty is incomplete. Here, certainty is not lacking: the pathways are clear, the risks are documented, and the harm is permanent.

5.7 Case Studies – Water Contamination from Energy Projects

- **Oakey, Queensland (2019):** PFAS contamination from fire-fighting foams forced agricultural restrictions and compensation claims, showing the destruction of farming communities when water is compromised (Queensland Audit Office, 2020).
- **Williamtown, NSW (2016):** PFAS contamination of groundwater near RAAF Base Williamtown forced bans on fishing, livestock sales and property transfers, costing billions in remediation and compensation (Senate PFAS Inquiry, 2018).
- **McMicken BESS, Arizona (2020):** Firewater contamination post-explosion was documented as an unmitigated pathway to soil and groundwater, with authorities recommending redesign of all firewater containment systems (DNV, 2020).

These cases prove that once contamination occurs, communities are destroyed economically, socially, and ecologically.

5.8 Conclusion

The Yanco BESS sits on flood-prone land within Australia's most important agricultural basin. Its failure to model groundwater impacts, its lack of credible firewater containment, and its cumulative PFAS legacy represent an existential threat to farming communities and food exports. The health risks to humans are severe and irreversible; the contamination of soil and irrigation networks cannot be undone.

To approve the Yanco BESS would be to authorise the permanent poisoning of the Murray–Darling Basin. This is not a risk — it is a certainty if the project proceeds. Refusal is the only lawful course.

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6. Decommissioning and Financial Assurance Failures

The Department's Assessment Report presents decommissioning as a routine, manageable process. This is a dangerous illusion. In reality, there is no statutory framework in NSW to compel full decommissioning of battery or renewable energy projects, no requirement for secured bonds, and no functioning recycling industry capable of managing the hazardous waste volumes. The assurances given are based on **astroturfing narratives promoted by industry groups** to placate regulators and communities. They are not enforceable legal obligations, and they collapse under scrutiny.

The risks are not theoretical. Once PFAS, toxic firewater, and microplastic residues enter soil and groundwater, they **cannot be removed**. Rehabilitation promises are meaningless in this context: the contamination is permanent. This section sets out why the IPC cannot lawfully approve the Yanco BESS on the basis of decommissioning assurances.

6.1 Absence of Enforceable Decommissioning Law

Unlike the mining sector, where the Mining Act 1992 (NSW) requires security deposits to ensure rehabilitation, there is no equivalent legal requirement for renewable energy projects or large-scale BESS installations. The recommended conditions for Yanco BESS (B33–B35)

merely state that infrastructure must be removed within 18 months of ceasing operations. This is **unenforceable**:

- If the proponent becomes insolvent, there is no secured fund to cover decommissioning.
- If the asset is sold, obligations may be diluted or avoided entirely.
- If decommissioning costs exceed expectations, proponents can walk away.

This is not regulation. It is a voluntary commitment dressed up as a condition.

6.2 No Bonds or Financial Security

The Department has not required bonds or financial assurance. This is a glaring omission. The dismantling of a 250 MW / 1,100 MWh BESS, with its hazardous lithium-ion waste, PFAS coatings, and contaminated concrete pads, will cost hundreds of millions of dollars. Without bonds, these costs will fall to host landholders, councils, or taxpayers.

Evidence from the United States shows the scale of this risk. The Government Accountability Office (2021) found that dozens of renewable projects left behind abandoned infrastructure due to absent or inadequate financial assurance. In Australia, abandoned wind turbines at Crookwell (NSW) and Windy Hill (Queensland) show the same pattern: promises of removal that were never fulfilled.

6.3 Astroturfing by Industry – Recycling as Myth

Industry lobby groups such as the Clean Energy Council and WindEurope promote glossy documents on "recycling pathways" and "decommissioning best practice." These are **not legally binding standards**. They are **astroturfing tools**, designed to reassure decision-makers that industry has solutions. The truth is:

- Globally, fewer than 15% of turbine blades and solar panels are recycled; the majority are landfilled or stockpiled (IRENA, 2022).
- No industrial-scale recycling facilities for lithium-ion BESS exist in Australia.
- Pilot projects overseas recover only a fraction of materials, leaving toxic residues behind.

In short, the promise of recycling is a convenient fiction. The reality is stockpiles of hazardous waste, shifted from one community to another, with no circular economy in place.

6.4 PFAS, Microplastics and Permanent Contamination

Even if some infrastructure were dismantled, the contaminants it leaves behind cannot be removed:

- **PFAS** in coatings, lubricants, cables, and batteries leaches into soil and groundwater. These "forever chemicals" are chemically stable, resisting breakdown for centuries (NHMRC, 2023). Once in soil, they bind to sediments and infiltrate aquifers. There is no technology capable of fully remediating PFAS in situ.
- **Microplastics from turbine blades**: Blade erosion releases tonnes of PFAS-laden microplastics annually, carried by wind and water into soils, rivers, and farmland.

These particles fragment but never degrade, infiltrating irrigation systems, crops, and livestock.
- **Heavy metals and solvents from batteries**: Lithium, cobalt, nickel, and manganese accumulate in soil and water. They are toxic to plants, animals, and humans. They do not dilute or dissipate; they remain in ecosystems permanently.

Rehabilitation in this context is impossible. No condition requiring removal of "infrastructure" can address contamination at the molecular and particulate level. Once released, the toxins are a permanent part of the Riverina landscape.

6.5 Burden on Agricultural Landholders

Host landholders are contractually exposed. Many lease agreements shift decommissioning responsibility to the landholder once operations cease. If the proponent defaults, it is the farmer who is left with abandoned concrete pads, contaminated soils, and stockpiled hazardous waste. For prime agricultural land in the Riverina, this means permanent loss of productivity, reduction in land value, and exposure to liability if contaminated produce enters the market.

Neighbouring non-host landholders bear the externalised impacts: PFAS-laden water, drifting microplastics, and toxic dust. They have no contractual recourse, yet will suffer the same contamination. This is inequitable and unlawful under principles of environmental justice.

6.6 Precedents of Abandoned Infrastructure

- **Windy Hill, Queensland**: Turbines left derelict with no removal, scarring the landscape.
- **Crookwell, NSW**: Infrastructure abandoned, with no enforcement of removal conditions.
- **Williamtown, NSW (RAAF Base)**: PFAS contamination has forced bans on farming, fishing and property transactions, leaving communities destroyed. This is the lived reality of inadequate contamination planning.
- **United States (renewables)**: GAO (2021) documented orphaned wind and solar projects with no financial assurance, leaving local governments responsible.

These precedents demonstrate the inevitability of abandonment without enforceable decommissioning laws and bonds.

6.7 Legal and Policy Breaches

By failing to require enforceable decommissioning obligations, the Department breaches:

- **EPBC Act s.3A(b) Precautionary Principle** — approving irreversible contamination without certainty of remediation.
- **Environmental Planning and Assessment Act 1979 (NSW)** — failing to impose conditions that genuinely prevent adverse impacts.
- **Principle of intergenerational equity** — shifting costs and contamination to future generations.
- **Stockholm Convention (2001)** — enabling ongoing PFAS contamination through failure to control imports and end-of-life disposal.

6.8 Conclusion

Decommissioning promises are not worth the paper they are written on. They are industry talking points, unsupported by law, bonds, or infrastructure. The reality is that PFAS contamination, microplastic deposition, and toxic leachates from BESS and turbine waste are permanent. Once in soil and groundwater, they cannot be removed. Rehabilitation is impossible.

Approval of the Yanco BESS without secured decommissioning bonds and enforceable obligations would be reckless and unlawful. It would condemn the Riverina's prime farmland to an irreversible toxic legacy and leave future generations with abandoned industrial carcasses and poisoned soils.

The IPC must not fall for industry astroturfing. Without decommissioning law, without bonds, and with no capacity to remediate permanent contamination, the only lawful and

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7. Community, Procedural Fairness and Social Division

The Department's assessment treats the Riverina community as a homogenous bloc and dismisses the scale of objection as insignificant. This is a profound distortion. In reality, the project has divided farming families, created inequity between host and non-host landholders, and undermined community trust in planning institutions. Procedural fairness has been compromised at every stage.

This is not a matter of perception; it is structural. The proponent has selectively consulted with host landholders, offered financial inducements to a handful of families, and excluded the majority of affected neighbours. The Department, by accepting these engagement processes, has ratified a fundamentally unfair model. This is inconsistent with the principles of natural justice, contrary to statutory obligations for public participation, and corrosive to the social fabric of rural communities.

7.1 Inequity Between Host and Non-Host Landholders

The planning process allows developers to sign confidential agreements with "host" landholders who permit infrastructure on their properties. These hosts may receive annual lease payments, while their neighbours bear the externalised burdens of noise, microplastics, PFAS contamination, fire risk, and visual industrialisation. Non-hosts receive nothing.

This inequity drives deep social division. Families that once cooperated in irrigation, cropping, and livestock management are now in open conflict. Non-hosts are stripped of agency over their own environment and livelihoods, yet face the same contamination risks. This violates the principle of equity embedded in ecologically sustainable development and undermines social cohesion.

7.2 Exclusion from Consultation – Breach of Procedural Fairness

The SEARs and the Environmental Planning and Assessment Act 1979 (NSW) require genuine consultation with all affected stakeholders. In practice, consultation has been limited to:

- Host landholders with a direct financial stake;
- Local government and agency stakeholders;
- Select information sessions framed as “drop-in centres.”

Neighbouring non-host farmers, Indigenous custodians, and regional community groups have been excluded from meaningful engagement. Their objections, when submitted, have been summarised and dismissed without serious evaluation. This breaches procedural fairness and undermines the legitimacy of the assessment process.

7.3 Astroturfing of Community Support

The proponent and industry lobby groups promote narratives of community “support” for renewable energy. These are manufactured through astroturfing:

- Public relations campaigns emphasising jobs, regional investment, and climate credentials.
- Sponsorship of local sporting clubs or schools to create an impression of benevolence.
- Use of consultants to draft form submissions supportive of the project.

This does not reflect genuine community endorsement. It is manipulation. In Yanco, more than 60 unique objections were submitted — a significant number given the population density. This is evidence of strong opposition, not support. The Department’s dismissal of this opposition is disingenuous and dangerous.

7.4 Social Division and Mental Health Impacts

The cumulative pressure of multiple industrial projects in the Riverina is fracturing communities. Families face uncertainty about land values, health risks, and the future viability of farming. Evidence from other regions shows elevated stress, conflict, and mental health deterioration when large energy projects divide host and non-host landholders (McMurtry et al., 2011; Krogh, 2014).

Farmers are forced into impossible choices:

- Accept hosting infrastructure and compromise agricultural land integrity; or
- Reject hosting and face contamination and industrialisation without compensation.

This dynamic creates lasting resentment, undermines intergenerational trust, and corrodes rural resilience.

7.5 Impacts on Indigenous Custodians and Cultural Values

Procedural fairness requires proper consultation with Indigenous custodians. Instead, cultural heritage assessments are often perfunctory, with engagement reduced to desktop studies or token meetings. The Riverina holds sites of cultural and spiritual significance to the Wiradjuri

people, yet their voices are marginalised. Ignoring this undermines reconciliation and breaches obligations under the *Aboriginal Cultural Heritage Act 2022 (NSW)*.

7.6 Economic and Land Value Inequities

Non-host landholders face:

- Reduced land values due to proximity to industrial infrastructure;
- Inability to sell properties because of contamination stigma;
- Loss of productive capacity through PFAS contamination, microplastics, and noise.

Meanwhile, host landholders receive lease payments. This economic inequity entrenches division and undermines the principle of distributive justice. International evidence shows property values adjacent to wind and solar projects fall, with neighbouring landowners unable to recover losses (Heintzelman & Tuttle, 2012).

7.7 Procedural Breaches in Public Participation

The Independent Planning Commission is required to consider all submissions impartially. Yet the process itself disadvantages rural communities:

- Short exhibition periods during peak harvest times;
- Technical documents spanning thousands of pages, inaccessible to lay farmers;
- Public meetings conducted in formats that limit participation.

This effectively silences the very people most affected. Such procedural barriers contravene the intent of participatory planning and amount to denial of natural justice.

7.8 Case Studies of Community Breakdown

- **Bulga, NSW (2013):** The Land and Environment Court overturned the Warkworth coal expansion due to intolerable cumulative social and amenity impacts, recognising that community harm was as significant as ecological harm.
- **Williamtown, NSW (2016):** PFAS contamination from Defence bases destroyed community trust, forced property buybacks, and devastated livelihoods.
- **Ontario, Canada (2010s):** Wind turbine rollouts fractured rural communities, leading to lasting social division and documented mental health decline (Krogh, 2014).

These case studies show that ignoring community opposition and dismissing fairness concerns leads not only to litigation, but also to irreparable social harm.

7.9 Legal Breaches

The process breaches multiple legal obligations:

- **Environmental Planning and Assessment Act 1979 (NSW)** – requirement for genuine consultation and consideration of submissions.
- **Local Government Act 1993 (NSW)** – obligations to ensure fairness and transparency in decisions affecting communities.

- **Aboriginal Cultural Heritage Act 2022 (NSW)** – obligations to protect cultural values and engage with Indigenous custodians.
- **EPBC Act 1999, s.3A(a)** – principle of intergenerational equity, breached by exposing future generations to contamination and division.

7.10 Conclusion

The Yanco BESS has not been subject to fair or equitable consultation. The process has privileged host landholders, excluded non-host neighbours, and ignored Indigenous voices. It has relied on industry astroturfing to create an illusion of support while dismissing genuine objections. The result is a fractured community, enduring inequity, and procedural unfairness that undermines the legitimacy of the entire process.

To approve the project in these circumstances would not only be socially destructive, but legally indefensible. The IPC must reject the Yanco BESS on the grounds of inequity, procedural unfairness, and social harm.

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8. Legal and Regulatory Breaches of the Yanco Battery Energy Storage System

The Yanco Battery Energy Storage System (BESS) proposal breaches numerous statutory obligations under both Commonwealth and New South Wales environmental law. These breaches are systemic and material, not administrative or technical. They render the project incapable of lawful approval. The proposal violates duties imposed under the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*, the *Environmental Planning and Assessment Act 1979 (NSW)*, and other statutes relating to contaminated land, water management, work health and safety, Aboriginal cultural heritage, and local governance. The proposal also conflicts with international treaties to which Australia is a party, including the *Stockholm Convention on Persistent Organic Pollutants* and the Japan–Australia, China–Australia, and Republic of Korea–Australia migratory bird agreements.

If approved in its current form, the project would expose the consent authority to judicial review for jurisdictional error, including failure to consider mandatory relevant considerations, failure to apply the precautionary principle, and reliance on legally inadequate environmental assessments. The IPC cannot lawfully grant consent without remedying these defects.

8.1 Breaches under the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*

The *EPBC Act* provides for the protection of Matters of National Environmental Significance (MNES), including listed threatened species and ecological communities, migratory species, and water resources of the Murray-Darling Basin. It also imposes mandatory duties to assess cumulative impacts and apply the precautionary principle.

8.1.1 Cumulative Impact (s 136(2)(e))

Section 136(2)(e) of the EPBC Act requires the decision-maker to consider "the impacts of the action in combination with the impacts of other actions." This includes past, present, and reasonably foreseeable developments (EPBC Act 1999, s 136(2)(e)). The Department's failure to evaluate the cumulative environmental impact of the Yanco BESS in conjunction with the Yanco Delta Wind Farm—a directly connected and co-located project—is a breach of this provision. The projects share transmission infrastructure, operational timelines, and justification under the South West Renewable Energy Zone (REZ). Treating the BESS as a separate and isolated proposal is artificial and inconsistent with federal statutory requirements.

This breach was judicially recognised in *Minister for Aboriginal Affairs v Peko-Wallsend Ltd* (1986) 162 CLR 24, where the High Court held that failure to consider a mandatory relevant consideration constitutes a jurisdictional error. The obligation to evaluate cumulative environmental effects is also supported by *Bulga Milbrodale Progress Association Inc v Minister for Planning* [2013] NSWLEC 48, in which the NSW Land and Environment Court invalidated a project approval due to insufficient cumulative impact assessment.

8.1.2 Precautionary Principle (s 3A(b))

Section 3A(b) of the EPBC Act embeds the precautionary principle, requiring that "a lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation where there are threats of serious or irreversible damage." The BESS proposal triggers this principle on multiple fronts, including PFAS contamination, firewater toxicity, and battery explosion risk. Yet the Department's assessment contains no site-specific plume modelling, no validated firewater containment system design, and no PFAS pathway analysis.

In *Booth v Bosworth* [2001] FCA 1453, the Federal Court upheld the precautionary principle in halting activities that threatened the spectacled flying fox, despite incomplete scientific certainty. That principle applies a fortiori here, where credible scientific evidence demonstrates plausible risks of irreversible damage to groundwater, agricultural soils, threatened species habitat, and human health.

8.1.3 Matters of National Environmental Significance (ss 18, 20)

The Yanco BESS is situated within the Riverina region, a critical inland corridor for migratory birds and an area containing habitat for threatened species such as the superb parrot (*Polytelis swainsonii*) and southern bell frog (*Litoria raniformis*), both listed under the EPBC Act. The project area lies within the Murray-Darling Basin, a water resource of national significance. There has been no adequate species-specific field survey or cumulative impact assessment for these MNES. The failure to apply the protections of ss 18 and 20 of the EPBC Act renders any Commonwealth approval vulnerable to challenge.

Further, the Riverina is a recognised segment of international flyways protected under JAMBA, CAMBA, and ROKAMBA. Under these agreements, Australia has a treaty obligation to avoid projects that harm migratory bird populations or interfere with their habitat and migratory routes. The absence of avoidance strategies and the lack of robust bird strike modelling breaches these obligations.

8.2 Breaches under the *Environmental Planning and Assessment Act 1979 (NSW)*

The *EP&A Act* requires that development approvals are based on proper consideration of environmental impact, ecologically sustainable development principles, and the public interest.

8.2.1 Mandatory Relevant Considerations (s 4.15)

The IPC must consider all environmental impacts of a proposal (EP&A Act 1979, s 4.15(1)(b)), the suitability of the site (s 4.15(1)(c)), submissions made (s 4.15(1)(d)), and the public interest (s 4.15(1)(e)). The Yanco BESS approval package fails to assess cumulative environmental and social impacts, omits PFAS risk analysis, and provides only high-level generic hazard plans without quantified risk assessments. These omissions amount to failure to consider mandatory relevant considerations.

In *Minister for Planning v Walker* [2008] NSWCA 224, the Court of Appeal affirmed that failure to consider climate change impacts and flood risks was an error of law. The same reasoning applies to the IPC's omission of cumulative and chemical risks.

8.2.2 Procedural Fairness and Community Exclusion

Community consultation has been structurally biased. Non-host landholders, Traditional Owners, and food producers have been sidelined. The use of astroturfing — artificial simulation of support — compounds procedural unfairness. This offends both the principle of participatory planning and the common law requirement of natural justice.

8.3 Other Legislative Breaches

- **Contaminated Land Management Act 1997 (NSW):** The BESS includes no enforceable measures to monitor, capture, or contain PFAS-class substances, now recognised as Class A contaminants under Australian regulatory frameworks (Australian Government, 2023). This breach exposes downstream landholders to contamination risk and long-term liability.
- **Water Management Act 2000 (NSW):** The proposal fails to account for the risk of contaminated firewater entering the floodplain and irrigation systems of the Riverina. The absence of containment basins, isolation valves, or full-scale testing of cooling water requirements breaches water management obligations for high-risk facilities.
- **Work Health and Safety Act 2011 (NSW):** Under sections 19 and 27, persons conducting a business or undertaking (PCBUs) must ensure risks to health and safety are minimised so far as is reasonably practicable. The omission of validated UL 9540A battery testing, lack of responder training, and inadequate design of deflagration control systems violate WHS risk management duties.
- **Aboriginal Cultural Heritage Act 2022 (NSW):** There is no indication that appropriate consultation with Traditional Custodians occurred, nor any cultural heritage impact assessment. This constitutes a breach of statutory consultation duties and cultural heritage protection mandates.

8.4 Breach of International Obligations

- **Stockholm Convention on Persistent Organic Pollutants:** Australia has committed to phasing out PFAS-class chemicals. The BESS includes imported infrastructure from China and India where PFAS remains in widespread use in battery components, cabling, and coatings. Approving this proposal contravenes Australia's treaty obligations and undermines international chemical safety governance.
- **WTO Sanitary and Phytosanitary Agreement:** If PFAS contamination of agricultural produce occurs, Australia may face export restrictions under WTO rules. The IPC has a duty to assess and prevent contamination risks that jeopardise market access and violate international trade law.

8.5 Conclusion: Legal Consequences and Remedies

The IPC's approval of the Yanco BESS would be susceptible to challenge in both the NSW Land and Environment Court and the Federal Court of Australia. The decision-making process has failed to:

- Consider mandatory relevant considerations;
- Apply the precautionary principle;
- Conduct a valid cumulative impact assessment;
- Address chemical contamination risks;
- Uphold statutory duties under multiple laws;
- Comply with Australia's international treaty obligations.

Accordingly, **the only legally and ethically defensible outcome is outright refusal** of the Yanco BESS proposal. Any consent issued on the current record would constitute a jurisdictional error and expose the decision-maker to judicial review.

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9. Systemic Legislative Failure, Cumulative Harm and the Erosion of Environmental Law

The Yanco Battery Energy Storage System (BESS) must be assessed not as an isolated project, but as part of a broader pattern of regulatory failure and unlawful facilitation of industrial-scale energy developments across rural New South Wales. This pattern is defined by four converging phenomena:

1. Widespread breaches of statutory obligations across multiple projects;
2. The unchecked accumulation of environmental and social harm;
3. Systemic exclusion of affected communities from fair participation;
4. A coordinated attempt to dismantle environmental and planning legislation under the guise of achieving "net zero" targets by 2030.

Together, these factors create a legal, environmental and democratic crisis of national significance. The IPC has a statutory and ethical obligation to uphold the rule of law, not merely to facilitate policy targets. The Yanco BESS—along with the associated Yanco Delta

Wind Farm—represents a case study in what happens when the rule of law is subverted by political expediency.

9.1 Breach of the *Biodiversity Conservation Act 2016 (NSW)*

The *Biodiversity Conservation Act 2016* was enacted to promote the conservation of biodiversity, support ecosystem resilience, and ensure development does not compromise ecological integrity. In practice, however, it has been manipulated to facilitate habitat destruction rather than prevent it.

A recent statutory review by the NSW Government acknowledged that the Act is failing to protect biodiversity or prevent cumulative ecological loss (NSW Department of Planning and Environment, 2023). Independent reviewers found that offset mechanisms are misused, monitoring is weak, and threatened species assessments are inadequate (Independent Biodiversity Legislation Review Panel, 2023).

The Yanco BESS proposal contains no credible biodiversity modelling and omits cumulative assessment despite being embedded in a landscape of simultaneous wind, solar, and transmission developments. This omission is inconsistent with the objectives and regulatory intent of the BC Act. It undermines regional ecological connectivity, violates the precautionary principle, and ignores obligations to protect endangered ecological communities listed under both state and federal law.

Moreover, PFAS contamination of ecological habitats—now a scientifically confirmed outcome of both wind and battery infrastructure (Guelfo et al., 2024)—has not been considered in biodiversity impact calculations, rendering the EIS structurally deficient.

9.2 Breach of the *Local Government Act 1993 (NSW)*

The *Local Government Act 1993* enshrines principles of equity, transparency, and the right of local communities to meaningfully participate in planning processes. In the context of the Yanco BESS and broader REZ projects, these rights have been systematically denied.

Non-host landholders, Traditional Custodians, food producers, and regional communities have been excluded from material stages of consultation. Councils in the Riverina and Central West have repeatedly raised concerns that planning is being driven by external consultants and developers, not communities (Morton, 2024; McKenzie, 2024). The government's removal of "phantom dwelling" objections (Chambers, 2024) is emblematic of the erosion of local input.

This top-down, extractive model of development breaches the spirit and the operational requirements of the Local Government Act. It has fuelled public distrust and legal exposure.

9.3 The Cumulative Impacts of Clustering Industrial Energy Projects

The Yanco BESS is one of dozens of industrial-scale energy projects now operating within the NSW Renewable Energy Zones (REZs). In the absence of strategic, landscape-level

planning, these projects are converging to create regional-scale environmental degradation. Their cumulative impact is not theoretical—it is visible, measurable, and legally actionable.

Scientific literature and community evidence confirm that clustered infrastructure produces:

- Widespread habitat loss and fragmentation (Environmental Defenders Office, 2023);
- Cumulative noise and infrasound pollution affecting both humans and livestock (Smith, 2025);
- Microplastic and PFAS contamination of agricultural soils and water systems (Guelfo et al., 2024);
- Social dislocation, mental health stress, and economic inequity (NSW Legislative Council, 2024).

Yet cumulative impact modelling is persistently absent from REZ project EISs. This failure is not compliant with the *EPBC Act 1999 (Cth)* s 136(2)(e), nor with NSW's biodiversity, planning or public health obligations. As Justice Preston made clear in *Bulga Milbrodale Progress Association Inc v Minister for Planning* [2013] NSWLEC 48, the piecemeal analysis of isolated projects cannot substitute for lawful cumulative impact assessment. The IPC would risk jurisdictional error by approving Yanco BESS in the absence of this analysis.

9.4 Legislative Dismantling and the Attack on Environmental Safeguards

There is growing concern that, having failed to comply with existing laws, state and federal governments now seek to **dismantle the laws themselves**. Two examples illustrate this:

- The **EPBC Act 1999 (Cth)** is currently under review, with government signalling its intent to weaken mandatory federal oversight of renewable projects (Senate Select Committee, 2024). The Samuel Review's strong recommendations for strengthened enforcement and independent environmental regulation have been selectively ignored.
- The **NSW Biodiversity Conservation Act 2016** is under active revision to align with a "nature positive" economic framework, but environmental groups warn that reforms may entrench offset trading while removing core habitat protections (Environmental Defenders Office, 2023; Nature Conservation Council of NSW, 2024).

The government's motivation is transparent: to accelerate project approvals in order to meet 2030 emissions targets. However, such targets—while important—do not override statutory obligations. There is no clause in the EPBC Act or any NSW statute that exempts governments from compliance on the basis of climate urgency.

To permit BESS projects to proceed under a regime of deliberate legal erosion would set a dangerous and unlawful precedent. As Australia transitions to renewable energy, that transition must be conducted lawfully. If the price of net zero is the destruction of biodiversity, cultural heritage, groundwater, food production, and community rights, then the transition has lost its legitimacy.

9.5 Conclusion: Refusal is the Only Lawful Outcome

The Yanco BESS proposal is not merely flawed—it is emblematic of a systemic failure in Australia's energy planning regime. It breaches federal and state law, violates international

obligations, disregards community rights, and forms part of a wider pattern of cumulative environmental harm and legislative deregulation.

The Independent Planning Commission must recognise that it is no longer assessing a single project, but a wider legal and environmental emergency. Approving this proposal would:

- Contravene the *EPBC Act*, the *Biodiversity Conservation Act*, and the *Local Government Act*;
- Endorse the cumulative destruction of ecological, agricultural and cultural values in the Riverina;
- Signal complicity in the dismantling of environmental protection law in Australia.

Refusal is not only justified—it is **legally required**. The IPC must reject this project and recommend the establishment of an independent federal or judicial inquiry into the cumulative impacts and regulatory failures of the NSW Renewable Energy Zones.

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10. Conclusion

The Riverina is not just a region — it is a lifeline. It is one of Australia's most productive and resilient agricultural zones, supporting food security, rural livelihoods, biodiversity corridors, and cultural heritage values of national importance. It is a landscape where generations have stewarded the land through drought, flood, fire, and economic upheaval. To fragment, contaminate, and industrialise this landscape under the guise of progress is not only ecologically reckless — it is morally indefensible.

The proposed Yanco Battery Energy Storage System would introduce irreversible risks: PFAS contamination, groundwater degradation, industrial fire hazards, microplastic pollution, and the loss of critical habitat for endangered and migratory species. It would compound the harm already set in motion by the adjacent Yanco Delta Wind Farm, creating a cumulative impact across the region that has never been lawfully assessed. If this project is approved, there will be no return to pre-existing land use, no true remediation, and no community consent. The damage will be lasting — to the soil, the water, the laws that are meant to protect them, and the public trust in environmental governance.

At its core, this submission is a call to uphold the rule of law. Federal and state legislation — the *EPBC Act 1999*, the *Biodiversity Conservation Act 2016 (NSW)*, and others — are not optional guidelines. They are binding legal frameworks that exist to protect the very landscapes now being targeted for industrialisation. Yet the government appears increasingly willing to dismantle these laws to expedite energy infrastructure — reforms to the EPBC Act and the NSW biodiversity regime are advancing under the pretext of efficiency, but their true effect is to remove the final barriers to permanent environmental degradation.

Meanwhile, public narratives are being manipulated through deliberate astroturfing — the fabrication of artificial community support designed to drown out real opposition and distort consultation outcomes. These tactics threaten the legitimacy of the entire planning process. They obscure the truth: that these projects are deeply damaging, poorly regulated, and fundamentally incompatible with the long-term health of regional Australia.

In light of the overwhelming legal deficiencies, cumulative harm, and systemic disregard for regional communities and ecosystems, the Independent Planning Commission must reject the Yanco Battery Energy Storage System. Refusal is not only justified — it is legally unavoidable. To approve this project would be to endorse unlawful process, irreversible environmental harm, and the deliberate sacrifice of regional communities. The future of the Riverina, the credibility of environmental law, and the legitimacy of Australia's energy transition rest on rejection of this project.

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- Contaminated Land Management Act 1997 (NSW)
- Environment Protection and Biodiversity Conservation Act 1999 (Cth)
- Environmental Planning and Assessment Act 1979 (NSW)
- JAMBA – Agreement between the Government of Australia and the Government of Japan for the Protection of Migratory Birds in Danger of Extinction and their Environment, [1981] ATS 6

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- ROKAMBA – Agreement between the Government of Australia and the Government of the Republic of Korea on the Protection of Migratory Birds and their Environment, [2007] ATS 24
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- Water Management Act 2000 (NSW)
- Work Health and Safety Act 2011 (NSW)

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