COMMENT: Australia's Nuclear Future? Information Conflicts or Relevant and Reliable Science¹ A Conflict Resolution Perspective

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The recent announcement by the leader of the Federal Liberal National Party for a climate action plan for Australia's transition to net zero emissions, based on seven nuclear plants with a mix of renewables and gas, has ignited concern and controversy.

This is not surprising given the latest independent polling (18 June 2024) on this issue by the *Essential Report* which indicated that: -

People think the best way to achieve our net zero by 2050 target is by developing renewables rather than developing nuclear (63% to 37%)".

The poll highlights the reason why public interest environmental controversies continue to ignite conflict when **environment/anti-nuclear positions** and **development/pro-nuclear positions** collide.

The unfortunate outcome of this situation is to create a *red corner* $\sim v \sim$ *blue corner* scenario! A scenario that does not resolve the needs and concerns ("*interests*") of each side created by an *information conflict*.

When the environment is in issue, conflicts over information, limitations in the available information, as well as values, will invariably be the primary sources of conflict. Misinformation can also be a feature in complex environmental problems. Resolving the scientific information conflict over the future for nuclear that exists today in Australia requires a conflict resolution approach.

In this regard, the Scientific Round-Table, a structured process for evaluating and resolving divergent viewpoints on relevant and reliable science in environmental conflicts, warrants consideration for managing and resolving the existing conflict over nuclear in Australia.

Moving forward, the challenge for political parties then becomes one of deciding on the appropriate National Plan for a power system for Australia to transition to net zero consistent with binding Paris Agreement obligations in reducing emissions e.g., *equity and sustainable development*.

A power system must not only be predictable and dispatchable – but also affordable, reliable, sustainable and secure. The Plan should lead to a commitment that can be implemented and to not become an *illusory promise - a promise made which is uncertain, indefinite, vague or impossible to fulfil.*

The framework for the National Plan should evaluate a mix of options to find the optimum balance between **renewables** and other **feasible and viable climate action options** e.g., *natural gas, nuclear, hydro, tidal, carbon capture and storage technology, clean energy technology, carbon offsets or credits, carbon sinks (which include forests, grasslands)* ...

The problem for a National Plan today is that there has yet to be an effective evaluation for the mix of Net Zero options proposed for Australia, in terms of complying with the binding Paris Agreement obligation to promote sustainable development.

This issue continues to be the elephant in the room. But the <u>accepted</u> <u>methodology</u>, <u>Multi-Objective Analysis</u>, for undertaking a systematic and objective evaluation in this regard, exists from the environmental sciences and planning. For the transition to net zero to result in benefits for the community, the community needs to be effectively engaged in the resolution of the nuclear information conflict over relevant and reliable science.

At the very least, Australians should demand our politicians adhere to the legal concept of "due diligence" and provide the community with a Risk Analysis (Risk Assessment/Risk Management/Communication) of their Plan for Australia's energy security.

The communication of risk is crucial to provide information to the community that leads to an understanding of risk to the public posed by potential climate action options for reducing emissions.

KEY WORDS: Climate change; net zero; energy security; renewables; nuclear; relevant reliable science; information conflict; scientific round-table; due diligence; risk analysis; Paris Agreement; illusory promise

- "[1] whether the theory or technique in question can be (and has been) tested;
- [2] whether it has been subjected to peer review and publication;
- [3] its known or potential error rate; and
- [4] the existence and maintenance of standards controlling its operation, and whether it has attracted widespread acceptance within a relevant scientific community. The inquiry is a flexible one, and its focus must be solely on principles and methodology, not on the conclusions that they generate" (Author's emphasis).

Source at pages 23-4.

¹ In *Daubert v Merrell Dow Pharmaceuticals Inc.* 509 U.S. 579 (1993), the United States Supreme Court established a strict test for the judicial assessment of expert opinion evidence *when Rule 702 of the Federal Rules of Evidence applied, to ensure that scientific evidence was "both relevant and reliable".*

The Supreme Court concluded that in relation to "whether the testimony's underlying reasoning or methodology is scientifically valid and properly can be applied to the facts at issue [that] many considerations will bear on the inquiry". These considerations include: