#### **NUCLEAR FUEL CYCLE ROYAL COMMISSION – SOUTH AUSTRALIA**

#### Are you in favour of nuclear?

Or not seeing the absolute need for total and immediate transformation of human polity & economy: zero impact favouring planet, (all!) people and (all!) nature.

# What if you are completely wrong? Only YOU can answer!

#### How?

"I" am a member of the ONLY species to have caused a major mass extinction of life on the planet! Somewhere "I" have been very very wrong.

"My" brain is largely conditioned, formed by 'other-peopleknowledge', by the past – by 'those' mistakes.

It's very difficult to challenge the fundamental tenets on which our professional and personal life is based – but in some cases our collective and even personal survival can be at stake.

Challenge your own knowledge and your own certitudes – with your own deep realisations.

Read this short paper, not to agree or disagree, but to stimulate your own "insight", a direct awareness of reality that may be very different to what we think, believe and even work to achieve.

Here is the problem – and a way "you" can find an 'answer-with-a-future'.

Web copy available on: www.earthsight.org

Read the following text, research the links, finally (#10) see HOW you can discover for yourself what "you" really know – and what you CAN do.

Do not 'agree' or 'disagree', but be attentive to your own "flash of insight".

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The nuclear fuel cycle has already led to major disasters in fully functioning industrial societies. The risk of global warming resulting in a breakdown in the nuclear energy process cannot be ignored.

A number of evident false beliefs, or charades, concerning nuclear safety and global warming need to be examined.

#### **NUCLEAR CHARADES**

## Charade #1: "decisions are neutral, I am not responsible, I do a good job, I cannot be held liable for future events"

Reality: In responsible risk management, a medium or even low probability of very high and possibly catastrophic damage is totally unacceptable. Promoting such a path, when fully informed (see following), involves direct personal responsibility and possible liability of the persons or organisations concerned for destructive consequences.

Each individual is responsible, even when acting as part of or subordinate to the directives of an organisation. The 'self-interests' of the organisation are not a defence.

The 'facts' on which convictions and decisions are formed are (almost) always 'selective', aimed at obtaining a pre-determined result. To be fully open to a complete range of facts requires the conscious adoption of <u>non-judgemental creativity</u>, critically examining all pre-established and 'organisational' points of view.

# Charade #2: "uranium export, nuclear energy and waste storage are good for business and good for South Australia"

Reality: Nuclear power is in decline around the world, for reasons of safety and even profitability. Nuclear energy cannot solve our problems, it only multiplies the risk.

The nuclear industry: share of world electricity has been in decline since 1996 (p. 13)

is seriously out-dated: "Twenty-eight years after the Chernobyl disaster, none of the post-Chernobyl designs has entered service" (idem p. 47 and 7)

on the way out (p. 10): "A number of key players are busy transitioning from one paradigm to the next".

and already being replaced by renewables: "From an <u>innovation standpoint</u> (idem p. 11), the answer is absolutely clear: it's already happened". (See also "<u>Key Insights</u>" idem p. 12).

As for the self-destructive choice of adopting a dying industry, nuclear waste storage would make South Australia the most toxic rubbish tip of the entire planet, for a million years (see <u>St Louis</u> and <u>Mayak</u>).

The title of "Nuclear Waste SA" would close the door to investment and tourism, discourage overseas students and lead the local population to move elsewhere, resulting in "the wasted state".

#### Charade #3: "nuclear energy is safe"

#### a) "Chernobyl caused only a few deaths":

Reality: Chernobyl was responsible for nearly one million deaths while "the genetic consequences .. will impact hundreds of millions of people"

<u>Chernobyl Death Toll: 985,000</u>, and pdf <u>download of book</u>, New York Academy of Sciences (p.77).

One nuclear power plant can pollute half the globe. Chernobyl fallout covered the entire Northern Hemisphere. idem (p.1)

#### b) "Fukushima was quickly under control and caused even fewer deaths":

Reality: The extensive research published on <a href="http://enenews.com">http://enenews.com</a> (absolutely essential reading – from <a href="Japan">Japan</a> and <a href="US">US</a> and <a href="World">World"</a>) show the problems today are continuing and getting worse:

"a million cancers could result from Fukushima" the North Pacific is virtually a marine disaster North America and even Europe have been affected.

This occurred in an advanced technological civilisation - in the present decade.

\*\*\* Energy News (enenews.com) is a news aggregator that continually updates news on the effects of nuclear energy. A glance at the headlines for each of the three Regions will profoundly change our view of what it means to "go nuclear".

#### Charade #4: "nuclear is the answer to global warming"

Reality: The failure of nuclear power generation systems due to technical problems or cyclical natural events is already capable of causing extensive human death and destruction of natural species, affecting continents and oceans.

Furthermore, possible runaway global warming *in the next few decades* (see #5 and #6) would result directly in the breakdown of industrial capacity and power systems, resulting in the meltdown of nuclear reactors, thus impacting life on the entire planet.

Maintaining a nuclear waste storage facility requires continuing industrial capacity for  $\underline{1}$  million years, and re-packaging of waste every 100 years (i.e. 10,000 times).

See submission to Climate Change SA review, "Not just our grandchildren", on <a href="https://www.earthsight.org">www.earthsight.org</a>: - see the linked web pages and study the indicated source material.

A pro-nuclear decision today brings with it a high risk of 'nuclear winter'.

#### Charade #5: "global warming is not all that urgent"

Reality: The <u>2014 IPCC report</u> (p. 8) said that under 'business as usual' there was a significant risk of a 4.8 °C temperature increase by 2100 and "7.8 °C when including climate uncertainty .. (high confidence)".

The IPCC observation of a "high confidence scenario" of c. 5 °C to 8 °C temperature increase, due in particular to economic growth, in effect means <u>industrial breakdown then</u> <u>civilisation collapse</u> (and chain nuclear-meltdown: see #4).

### Charade #6: "there is no need to worry about Arctic methane and positive feedback"

Reality: Even with this dire forecast, the IPCC report still ignored the very rapid increase in Arctic methane since 2010, causing a methane veil to spread down over much of the northern hemisphere ("Arctic methane Earthsight" p.2 and "Arctic Atmospheric Methane Global Warming Veil").

With runaway methane release, and no significant action by states, extinction temperatures could become possible even within the next few decades.

# Charade #7: "where an event has never occurred, risk management can be ignored"

Reality: The possibility of a low-impact high-risk event can be ignored.

A high impact event, with medium risk, calls for careful avoidance planning.

A cataclysmic event, even at low risk, calls for an urgent collective response at all levels.

The scientifically attested possibility of human extinction *in our lifetime* calls for an immediate fundamental re-evaluation of all aspects of our economic, financial and industrial activities.

#### Charade #8: "this royal commission is just another royal commission"

Reality: This royal commission is perhaps the most important in the history of Australia. A victory by pro-nuclear interests can have catastrophic consequences.

The choice of renewable energy can help the economy and employment and carry Australia to a position of leadership.

A pro-nuclear decision could radically impact Australia - and the world - by leading to nuclear disaster, already possible from predictable causes, and more so with the risk of near-term runaway global warming.

Facilitating nuclear power in other countries through the export of uranium or by providing nuclear waste facilities in Australia can be devastating, for other countries and for Australia, and result in widespread destruction of life on land and in the sea.

South Australia can gain enormous advantage by proclaiming a nuclear-free state and promoting renewable energy.

## Charade #9: "let's not exaggerate – we're OK mate – above all don't hurt the economy"

Reality: There have been 5 major mass extinction events in the history of life on this planet. 'Our' "Anthropocene extinction" is already considered the 6<sup>th</sup>, and augmented by global warming and runaway feedback loops it may well become the greatest.

The Permian with 90% extinction involved a 5 °C warming due to volcanic CO2 (compare to IPCC warning in #5 above), in turn causing Arctic methane release and a further 5 °C warming. With only 1 °C warming so far we are already close to a (summer) ice-free Arctic Ocean and release of the "Methane Monster" [pleeease, read the references!].

#### Charade #10: "it's too late to do anything - and there's nothing "I" can do"

Reality: It seems clear, there is a problem with our species.

As a member of the human species, "I" am responsible.

As a member of a society, a corporation, a government, a nation, "I" am responsible.

But, a sense of responsibility without a means of responding is profoundly debilitating.

The present author points to an understanding of the human problem and a means of responding, by the individual and by the individual within the organisation, that may be a key to the fundamental change urgently required. See "The Awakeness Paradigm".

A <u>climate plan</u> that deserves careful attention includes a combination of 'fees' and 'rebates' ('<u>feebates'</u>) at national, state and (importantly) local levels, aiming at emission cuts of:

80% by 2020!!!

The world needs to change, totally, but, with imagination and creativity, this planet can (easily) be a much, much better place to live in (see Peace and Planet).

For a detailed examination of what "I" can do, see and experiment with 'Creative Discussion'.

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www.creativediscussion.org & www.earthsight.org

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