



**AUSTRALIAN
CONSERVATION
FOUNDATION**

**Australian Conservation Foundation submission to the Joint Standing
Committee on Treaties on the Agreement between the Government of
Australia and the Government of Ukraine on Co-operation in the
Peaceful Uses of Nuclear Energy**

October 2016

Key findings and recommendations

- There are serious and unresolved nuclear safety and security issues with Ukraine's nuclear sector that would be exacerbated by the proposed treaty action.
- There is a lack of detailed information to support the safety and safeguards assumptions underpinning the proposed treaty action.
- The National Interest Analysis (ATNIA 12) is deeply deficient, especially in relation to key safeguards and security concerns and the implications of the Russian conflict.
- The proposed treaty action should not be advanced in the absence of a meaningful Australian government and agency response to the Fukushima nuclear accident – a continuing nuclear crisis directly fueled by Australian uranium.
- Australia is well placed to help enhance energy security in Ukraine through the provision of smart and sustainable renewable energy systems and resources.
- ACF welcomes JSCOT's attention to this important issue and urges the Committee to not support this treaty action in its current form at this time. ACF welcomes the opportunity to explore the issues raised in this paper in person before the Committee.

Introduction: The Australian Conservation Foundation (ACF) has been committed to inspiring people to achieve a healthy environment for all Australians for over fifty years. We work with the community, business and government to protect, restore and sustain our environment.

ACF welcomes this opportunity to comment on the Agreement between the Government of Australia and the Government of Ukraine for Co-operation in the Peaceful Uses of Nuclear Energy. ACF has a long interest and active engagement with the Australian uranium sector and maintains that the proposed treaty action does not advance Australia's national interest.

ACF would welcome the opportunity to further explore the issues raised in this submission in person before the Committee.

Nuclear safeguards

Successive Australian governments have attempted to maintain a distinction between civil and military end uses of Australian uranium exports, however this distinction is more psychological than real. No amount of safeguards can absolutely guarantee Australian uranium is used solely for peaceful purposes. According the former US Vice-President Al Gore, "in the eight years I served in the White House, every weapons proliferation issue we faced was linked with a civilian reactor program."¹

Despite successive federal government assurances that bilateral safeguard agreements ensure peaceful uses of Australian uranium in nuclear power reactors the primary difference between a civilian and military nuclear program remains one of intent.

In 1993 the International Atomic Energy Agency stated: *It is clear that no international safeguards system can physically prevent diversion or the setting up of an undeclared or clandestine nuclear programme.*

ACF notes that the existing cost estimate related to this proposed treaty action makes no provision for an enhanced national contribution to the International Atomic Energy Agency's (IAEA) monitoring and compliance division. It is no secret that the IAEA faces both significant capacity constraints and increasing demands. It is unreasonable for Australia to add to these demands whilst failing to contribute to addressing IAEA resourcing. ACF urges JSCOT to examine ways to enhance this capacity, particularly through consideration of a dedicated monitoring and compliance levy on Australian uranium producers.

Domestic impacts of uranium mining

ACF notes the unresolved concerns raised about the performance of the Australian uranium industry over a decade ago in a 2003 Senate Inquiry which found the sector characterised by a pattern of underperformance and non-compliance and an absence of reliable data to measure the extent of contamination or its impact on the environment. The Inquiry further identified an operational culture that gives greater weight to short term considerations than

¹ Al Gore, *Guardian Weekly*, 167 (25), 9-15 June 2006.

long term environmental protection and concluded that changes were necessary in order to protect the environment and its inhabitants from 'serious or irreversible damage.'²

In the years since there has been little improvement in the fundamentals of the uranium sector and ACF urges JSCOT to seek a formal briefing on the status of the recommendations made in the 2003 report before further advancing this proposed treaty action.

Economic benefits of uranium mining

ACF maintains that the value of the employment and economic contribution made by the Australian uranium sector is consistently exaggerated.

The Australian uranium industry remains a contested and controversial sector that lacks a secure social license. The industry's economic and employment contribution is small in relation to its significant domestic and international risks and legacies and there is an urgent need for an independent cost-benefit analysis and a comprehensive and transparent assessment of Australia's uranium trade. Uranium is a small contributor to Australian export revenue and employment. From 2002 to 2011, uranium sales averaged \$627 million annually and accounted for only 0.29% of all national export revenue.

The industry's contribution to employment is also underwhelming. The World Nuclear Association estimates 1,760 jobs in Australia's entire uranium industry. That is the highest of all estimates yet it represents just 0.015% of the jobs in Australia.

Small industrial sectors can play an important economic role but the unique properties and risks of uranium mining relative to any benefits means its role requires particular scrutiny. Claims made in the National Interest Analysis (ATNIA 12) that the treaty action would open *an important additional market for Australian uranium producers* need to be tested in this context.

Advancing a bilateral agreement with Ukraine would not significantly affect Australia's exports. Ukraine's intention to increase external uranium purchases offers Australian producers the chance of a portion of a potential market valued between \$A20 -50 million. This is simply an equation where scant return directly entails – and fuels - considerable risk.

ACF maintains that the commercial interest of a small, high risk-low return industrial sector should not be confused with Australia's long term national interest and that the ATNIA has been deeply deficient in this regard.

Ukraine's nuclear sector:

The plan to sell Australian uranium to Ukraine is an ill-advised and dangerous retreat from responsibility with security and safety implications that the current National Interest Analysis (ATNIA 12) fundamentally fails to address. The NIA's under-stated noting 'that political tensions currently exist between Ukraine and Russia' completely fails to recognize or reflect the gravity of the situation.

²Senate ECITA Committee: Regulating the Ranger, Jabiluka, Beverley and Honeymoon uranium mines, October 2003, p. iv.

Australia, the country that directly fuelled Fukushima now plans to sell uranium to Ukraine, the country that gave the world Chernobyl – hardly a match made in heaven. Thirty years ago this year the Chernobyl nuclear disaster spread fallout over large swathes of eastern and western Europe and five million people still live in contaminated areas in Belarus, Ukraine and Russia.

Serious containment and waste management issues remain at Chernobyl with a massive concrete shield now under construction in an attempt to enclose the stricken reactor complex and reduce the chances of further radioactive releases.

Against this backdrop there are deep concerns over those parts of the Ukrainian nuclear sector that are not yet infamous names, including very real security concerns about nuclear facilities being targeted in the current conflict with Russia.

The Zaporizhia nuclear facility is Europe's largest and is only 200 kilometres from the conflict zone in eastern Ukraine. Some commentators have described nuclear plants in the region as pre-deployed nuclear targets and there have already been armed incursions during the recent conflict period.

This threat is more than a theoretical possibility and the lack of attention to this in the NIA is disturbing and deeply deficient. In mid-September 2016 a *Times* report documented concerns over high level Russian plans to destabilise the Zaporizhia administrative region ('*Vladimir Putin ordered plot to seize half of Ukraine*', *Australian*, 15 September). Earlier acts of apparent sabotage have already seen the dangerous practise of emergency power unloading at nuclear power plants in Ukraine– including the Zaporozhskaya and South Ukrainian reactors.

Australia has already suspended uranium sales to Russia and it makes scant political or security sense to start selling uranium to Ukraine now. Along with security concerns there are serious and unresolved safety and governance issues with the proposed sales plan.

Ukraine has 15 nuclear reactors - four are currently running beyond their design lifetime while a further six will reach this in 2020. That means two thirds of Ukraine's nuclear reactors will be past their use-by date within five years. The current deeply contested series of license renewals and the related European Bank for Reconstruction and Development (EBRD) financing of a program to upgrade safety features at Ukrainian nuclear facilities has highlighted serious deficiencies in governance, operations and compliance with contemporary international standards.

On top of that, there is growing regional concern over the risks associated with the Poroshenko administration focus on keeping the reactors running. In rushing to extend operating licences Ukraine is cutting process and safety corners and not complying with its obligations under the Espoo Convention – an international framework agreement around transboundary environmental impact assessment. In April 2013 the UN Espoo monitoring group found that license renewals at the Rivne nuclear facility were not compliant with Espoo procedures.

In 2013 the Eastern Partnership, a leading East European civil society forum, declared that the absence of environmental impact assessment for nuclear projects posed "a severe threat to people both in Ukraine and in neighbouring states, including EU member states". Nearby nations including the governments of Slovakia, Romania and Hungary have formally and unsuccessfully called for Ukraine to provide further detail on its nuclear projects and to facilitate increased regional dialogue on this unresolved issue of concern.

These concerns have been amplified after a series of recent shutdowns, fires and safety concerns at Ukrainian nuclear facilities. In this context ACF seeks further detail on the process and criteria for the development of the Nuclear Fuel Cycle list referred to in Article VIII of the proposed Agreement.

The Ukrainian government's response to continuing domestic and international disquiet over the operations of its nuclear sector was a 2015 government decree preventing the national nuclear energy regulator from carrying out facility inspections on its own initiative. This coupled with increased pressure on industry whistle-blowers and critics has done nothing to address the real risks facing the nations aging nuclear fleet.

None of these issues have been meaningfully identified, let alone addressed, in the treaty action or analysis to date. Any plan to supply Australian uranium to such a fraught region deserves the highest level of scrutiny. This has not occurred to date and instead we have template based paperwork and cut and paste assurances.

Ukraine and energy security:

The current conflict with Russia has highlighted Ukraine's energy dependence. Australia is well placed to assist in facilitating Ukraine's desire for enhanced energy security through renewable energy, rather than fossil or uranium fuel based systems.

Renewable energy sources are now a more significant contributor to the global energy mix than ever before, while nuclear energy's share in the world's power generation mix has declined steadily over the past two decades, following its peak of 17 per cent in 1993. Since then it dropped to around 10 per cent in 2012, while its share of global commercial primary energy production dropped dramatically to 4.5 per cent, a level last seen in 1984 (*World Nuclear Industry Status Report 2013*).

Nuclear electricity has extremely high capital costs and is centralised and risky, while renewable energy is faster to deploy, more flexible and fit for purpose, as well as safer and cheaper. Australia's renewable energy expertise and resources mean we are well placed to help Ukraine diversify its energy options. Instead of high-cost, high-risk options like nuclear we should be facilitating and embracing flexible and easily deployable renewable energy options. There are also clear gains that could be made in the area of energy efficiency as Ukraine has an energy intensity three times higher than the European average.

Nuclear policy post Fukushima

The Fukushima nuclear emergency – a continuing crisis directly fuelled by Australian uranium – has led to a significant global reappraisal and review of the role and safety of nuclear energy that is not adequately reflected in the ‘business as usual’ approach that underpins much of this treaty and the accompanying National Interest Analysis.

In October 2011 there was formal confirmation from the Australian Safeguards and Non-Proliferation Office (ASNO) that *Australian obligated nuclear material was at the Fukushima Daiichi site and in each of the reactors.*

The UN Secretary General initiated a comprehensive review of international nuclear safety, security and safeguards following the Fukushima nuclear crisis. Much of this review – the *United Nations system-wide study on the implications of the accident at the Fukushima Daiichi nuclear power plant – September 2011* – has relevance for the Australian uranium sector and, regrettably many of its concerns and recommendations still require active attention and action.

In relation to uranium mining the review recommended that:

To help countries to evaluate the potential contribution of nuclear energy to sustainable development, an in-depth assessment of the net cost impact of the following is needed....

Local Impacts of mining: There are concerns regarding the impacts of mining fissionable material on local communities and ecosystems (section 70)

ACF seeks clarification on what information has been provided to the Committee on the action taken by the Australian government/agencies or by Australian uranium producers to give effect to this clear recommendation.

IPPNW Basel Congress resolution

The resolution of the International Physicians for the Prevention of Nuclear War’s (IPPNW) 2010 Basel Congress concluded that:

Uranium ore mining and the production of uranium oxide (yellowcake) are irresponsible and represent a grave threat to health and to the environment. Both processes involve an elementary violation of human rights and their use lead to an incalculable risk for world peace and an obstacle to nuclear disarmament.

The International Council of IPPNW therefore resolves that: IPPNW call for appropriate measures to ban uranium mining worldwide.

This unequivocal position from a highly regarded, Nobel Prize winning, medical body illustrates growing international expert concerns over the human health and wider adverse impacts of uranium mining and requires, at minimum, a measured assessment and public response from uranium producing and exporting nations. This is particularly the case given

successive Australian governments' claims of *strict conditions* and *best practice* in relation to uranium mining and export – claims repeatedly made throughout the NIA.

ACF seeks detail on what steps Australian producers, agencies or regulators have taken to assess the health impacts of uranium mining and export subsequent to the Basel resolution and the Fukushima nuclear accident.

Role of the Australian Safeguards and Non-Proliferation Office (ASNO)

ASNO has a key role in the proposed treaty action as the Australian 'competent authority'.

Stakeholder confidence in the performance of ASNO and the wider nuclear safeguards regime could be improved by ASNO committing to increased transparency by publishing country based information on the separation and stockpiling of Australian obligated plutonium, details on the bilateral Administrative Arrangements, information relating to nuclear material accounting discrepancies and a clear articulation of how Australia is acting to advance nuclear safeguard, security and non-proliferation outcomes.

Economic costs

ACF notes that the ATNIA states that the proposed Agreement would not have any general impact on businesses or Commonwealth Government agencies in Australia and that the costs arising would be the 'same as for all other nuclear cooperation agreements'. This approach and allocation is inadequate to advance a comprehensive inter agency response to the issues raised in this submission. A credible whole-of-government approach to new nuclear agreements in the post Fukushima landscape would require input from the Office of the Supervising Scientist, ASNO, DRET, ARPANSA, ONA and others. This is especially the case given the serious and specific security concerns involved with this planned treaty action. The approach taken in the current process provides no basis for confidence in the pro-forma assurances made in relation to Australia's uranium sector and exports.

ACF maintains there is both a need and opportunity here to strengthen international policy architecture by JSCOT examining ways to enhance the IAEA's capacity, particularly through consideration of a dedicated monitoring and compliance levy on Australian uranium producers.

Treaty duration

It is proposed this treaty action '*shall remain in force for an initial period of thirty years*'. ACF believes that this period is too long and lacks flexibility – especially given the extremely fluid security situation in this region. Any nuclear co-operation agreement should have a shorter duration than three decades and include regular, formal and transparent review points. Further to this ACF seeks detail on the proposed periodic review process referred to in Article VI (3) of the proposed Agreement.

Nuclear Non-Proliferation Treaty (NPT)

ACF notes that the proposed treaty with Ukraine reaffirms Australia's support for the objectives and provisions of the Nuclear Non-Proliferation Treaty and Australia's desire 'to promote universal adherence to the Treaty'. ACF would welcome clarity on the clear tension between this position and the sale of uranium to India, a non-NPT signatory – against the advice of a previous Committee recommendation.

Consultation:

The approach to consultation taken with the treaty action has been restricted and inadequate – as can be clearly seen in the documentation (ATNIF 30). "Industry stakeholders welcomed the signature of the proposed Agreement" which was discussed "at various events throughout 2016". Of course Australian uranium producers – and hopefuls - facing massive losses following Fukushima - would welcome any chance to talk up their sector. This is predictable commercial practise, not meaningful consultation on a contested public policy issue with significant and complex security and safety implications. The approach to date in relation to consultation is deeply deficient. ACF would welcome the Committee providing some insight into what 'stakeholders' were engaged in these 'face to face meetings' and what range of advice was sought in the consultation process.

JSCOT's pivotal role re the proposed treaty action:

ACF welcomes the Committee's attention to this important treaty action. We maintain there are serious and unaddressed concerns that have not been given credible or measured attention to date and there is a clear need for less promotion and more scrutiny of the proposed treaty action.

ACF also sees this review as an important test of the robustness of Parliamentary procedures and mechanisms. This is especially the case as prudent recommendations from previous JSCOT Inquiries into nuclear matters have been inadequately recognised and respected by other political actors.

ACF welcomes the Committee's attention to this proposed treaty action as an important forum to explore a related range of important, and currently under-examined, issues.

Conclusion

As a significant uranium supplier with a stated commitment to best international standards and processes Australia must ensure that policy decisions relating to the contested uranium sector are based on best practice and review, rather than on pro-forma assurances. ACF maintains that this treaty process has, to date, lacked the rigor and analysis required to make the *best practice* and *stringent safeguards* claims that are repeatedly made in the ATNIA.

The serious and unresolved security concerns in Ukraine and the surrounding region have not been adequately addressed in either the proposed treaty action or the ATNIA. Further, international studies, analysis and recommendations following the Fukushima nuclear emergency – a continuing crisis directly fuelled by Australian uranium - have not been

acknowledged or addressed. The rationale for Australian uranium exports should be based on a detailed assessment of the best evidence, not untested assurances. The proposed treaty action and the supporting documentation fail to make a robust, evidence based case or to best advance nuclear safety and non-proliferation outcomes.

ACF urges the Committee to not approve this treaty action.

ACF further requests that the Committee moves to strengthen Australia's stated commitment to advancing nuclear safety and non-proliferation outcomes by (inter alia)

- **seeking a briefing on the implementation status of the 2003 Senate Inquiry recommendations into the adequacy of domestic uranium regulation**
- **supporting a dedicated cost-benefit analysis and public inquiry into the domestic and international implications of Australia's uranium sector**
- **requiring the National Interest Analysis of the proposed treaty action to meaningfully address safety and security issues, especially in the context of the conflict with Russia**
- **formally addressing all the recommendations of the 2011 United Nations system-wide study on the implications of the accident at the Fukushima Daiichi nuclear power plant**
- **exploring mechanisms to enhance the capacity of the monitoring and compliance division of the International Atomic Energy Agency – including a levy on Australian uranium producers**
- **supporting increased transparency in the reporting and operations of the Australian Safeguards and Non-Proliferation Office (ASNO)**
- **gathering further advice on the range of actions available to the Australian government to best advance nuclear safety and non-proliferation outcomes**
- **promoting and strengthening enhanced international non-proliferation and compliance efforts including the growing move for a Nuclear Weapons Convention or formal legal ban on nuclear weapons, the Comprehensive Nuclear Test Ban Treaty, the Nuclear Non-Proliferation Treaty (NPT) and a Fissile Materials Cut-Off Treaty.**

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