



## **PALADIN ENERGY LTD**

ACN 061 681 098

**“Agreement between the Government of Australia and the Government of the Russian Federation on Cooperation in the use of Nuclear Energy for Peaceful Purposes” -**

### **SUBMISSION TO THE JOINT STANDING COMMITTEE ON TREATIES**

1. Paladin Energy Limited (Paladin) is an Australian company, based in Perth WA, whose business is the development of uranium resources worldwide for the production and sale of uranium concentrates as fuel for use in nuclear power reactors for the production of electricity.
2. Paladin owns and operates a uranium mine and processing facility in Namibia (Langer Heinrich Uranium) which is now producing and exporting uranium concentrates, and is more than half way through the construction of a new uranium mine and processing facility, the Kayelekera Uranium Project, in Malawi which will be progressively commissioned from the end of 2008. Combined output from both operations in 2009 will exceed 7 million pounds of U<sub>3</sub>O<sub>8</sub>.
3. Paladin has extensive uranium interests in Australia. Through its subsidiary, Summit Resources, Paladin is investing significantly in exploration and environmental baselines studies covering resources in the Mt Isa region of Queensland with a view to beginning a pre-feasibility study at the end of 2008. Paladin is also a 50% joint venture participant with Cameco in the Angela and Pamela deposits near Alice Springs in the Northern Territory where an extensive exploration program and environmental impact statement studies will be undertaken over the next two years. Paladin also owns two uranium deposits in Western Australia.
4. Paladin senior personnel have been intimately involved in the global uranium business, and in the Australian uranium production and export industry, for thirty years, and believe that Paladin has sufficient experience in the global nuclear electricity industry to justify making this submission.
5. Paladin is a member of the *Australian Uranium Association* and through that organisation has adopted and fully supports the Uranium Stewardship Principles which are consistent with those being developed by the *World Nuclear Association* and which assert *inter alia* a fundamental commitment to “the safe and peaceful use of nuclear technology” (Draft Principle 1).
6. **The Importance of Nuclear Energy**

Nuclear electricity comprises about 16% of global electricity production. There are currently 439 nuclear power reactors operating in 31 countries, and 36 new plants are under construction. After a construction hiatus at the end of the last century there is now a global re-affirmation of the value of nuclear power stimulated in part by climate change policies and also by the growing recognition of the excellent economic and safety performance of most power reactors. According to the *World Nuclear Association* there are now 93 nuclear power plants in the “on order or planned” category, and a further 218 nuclear power plants “proposed”. It is reasonable to predict that many more countries will adopt nuclear power as a cornerstone of base load electricity production because it is an existing proven technology which produces large amounts of electricity with minimal carbon emissions over the complete fuel cycle while creating small volumes of wastes (in contrast to several other electricity fuels).

The Report to the Prime Minister entitled *Uranium Mining, Processing and Nuclear Energy – Options for Australia?* (Commonwealth of Australia, 2006) is a wide-ranging review of the contemporary nuclear power industry and is commended to the Committee as an authoritative document on nuclear issues.



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### 7. Australia's Important Role in Global Nuclear Power

Despite a history of ambivalent, and often restrictive policies towards uranium mining, and a refusal to countenance nuclear energy domestically, Australia has earned a significant position in the world nuclear industry by virtue of (a) our emergence as the second largest producer of natural uranium; and (b) our exemplary system of nuclear non-proliferation procedures and controls. These two factors combined place Australia in a position of influence over the growth of the nuclear power industry worldwide, provided Australia maintains the integrity of the international non-proliferation systems without introducing impractical and unnecessary impediments to legitimate trade in civilian nuclear materials.

The system of Bilateral Safeguards Agreements, and the regulatory arrangements which flow from these, have been an important characteristic of the Australian uranium industry over the past thirty years. It is axiomatic that the more Australian uranium used in the international fuel cycle, the greater will be the amount of nuclear material subject to Australia's safeguards system.

### 8. The Significance of the Proposed Agreement with the Russian Federation

The Nuclear Non-Proliferation Treaty (NPT) draws a distinction between the Nuclear Weapons States (NWS) – the United States of America, the United Kingdom, France, the Russian Federation (as successor to the USSR), and the Peoples' Republic of China – and the rest of the (NPT-signatory) world (the Non-Nuclear Weapons States – NNWS). For the purposes of the civil nuclear fuel cycle, the distinction is important because by definition the NWS have military nuclear facilities whereas the NNWS do not. Therefore the theoretical risk of misuse of civil nuclear material is in a practical sense a possibility in an NWS and so a clear separation of civil and military flows is essential to enable non-proliferation compliance and product tracking (*although there is no suggestion that an NWS has in fact misused any civil nuclear material*).

The Russian Federation is a Nuclear Weapons State under the NPT and has, over many years demonstrated by word and deed a staunch commitment to the non-proliferation aspects of the NPT.

Russia has a substantial civil nuclear industry, encompassing the whole range of nuclear activities from uranium mining and processing through to power reactor design and construction and spent fuel management. Public statements by the Russian Government over many years have stated their nuclear policy to involve a significant dependence on domestic nuclear power and an expansion of their international nuclear trade by building power reactors for other countries and in many cases offering fuel cycle services (including conversion, enrichment, fuel fabrication and waste management). It is likely that Russia will become an internationally significant participant in the growth of nuclear power programs over the next twenty years.

Consistent with the internationalization of the nuclear fuel cycle, Russia and the United States of America on May 6 signed a bilateral Agreement for Peaceful Nuclear Cooperation (123 Agreement) which establishes the legal foundation for cooperation between the two countries in the peaceful uses of nuclear energy. Significantly, that agreement will enhance Russia's cooperative support of the United States' *Global Nuclear Energy Partnership* (GNEP) initiative, particularly in the area of new fast breeder reactor development, and the concepts of international fuel centres and international spent fuel storage.

It is therefore important that Australia, as a major uranium producer, and Russia as a major nuclear technology provider, reach an agreement on nuclear cooperation, including the application of Australian safeguards to Australian origin nuclear materials, to enable both countries to cooperate and benefit from expanded peaceful applications of nuclear technology.

The Proposed Agreement with the Government of the Russian Federation is consistent with Australia's long standing commitment to ensuring peaceful use of Australian origin nuclear materials (the most recent being the bilateral agreement made with the Peoples' Republic of China).



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The Proposed Agreement recognizes Russia's status at a NWS and, similar to agreements in force with the other NWS provides for a separation of civil and military facilities and product flows.

It is Paladin's view that the Proposed Agreement is in Australia's national interest because it fosters and extends Australia's non-proliferation standards through formal agreement with the Russian Federation, a significant nuclear state, and as a result will strengthen the international nuclear non-proliferation regime and support the continued expansion of the peaceful use of nuclear technology.

Submitted by  
**PALADIN ENERGY LTD**

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