

280 Slater Street, Ottawa, ON. K1P 5S9

Dear Commission Members,

Thank you for publishing your discussion paper **DIS-16-03: "Radioactive Waste Management and Decommissioning"**, and inviting feedback on the contents of this paper.

I am moved in the first instance to commend you for the open-minded and transparent process that CNSC has created with regard to soliciting public feedback and consulting with Stake Holders involved with the Waste Management issue. I would also express my admiration for the code of Values and Ethics that I read as being the expected behaviour that guides the work of your Commission. In return, I want to say that I seek to develop my submission to you with all the clarity and care and honestly I can bring to what I believe is a profoundly important, but strangely incomplete, subject.

I feel the need to preface my feedback in this way, because my interest in the whole nuclear subject, in the veritable wholeness of the nuclear subject, means that my feedback spills over into a range of insights and concerns not normally considered as being germane to the Waste Management issue.

In this email, I intend to summarise these insights, and indicate the potential I believe there is for a programme of new work that addresses the phenomena of radiation. In support of this, I will attach two pdf. documents. The one is a letter to the chief officers of Hydro-Québec, in which I indicate my reservations about our complete faith in 'the physics of the atom', and advocate an equal interest in "the metaphysics of the atom". On this basis, I propose that the recently-retired reactor at Gentilly could serve as a laboratory for new work, to determine if we can create a collective spiritual process that can ameliorate or heal the phenomena of radiation.

The other pdf. file contains a more substantial discourse on this same subject. To wit: the spiritual nature of nuclear energy, the spiritual content of nuclear fission, the holographic nature of our Universe. All of which provide a context which I believe allows us to see and anticipate the potential for us humans, us Humanity, to develop some kind of remedial process and approach to the particle world, and the issue of radiation. I have sent this pdf. file to the Canadian Conference of Catholic Bishops, because the metaphysical nature of nuclear energy puts the whole nuclear subject in their territory, more than we - or they - normally consider.

In this mood, I would reiterate a significant point in the remit of CNSC: about your requirement to "disseminate objective scientific, technical and regulatory information to the public."

With respect, I find this sentence highlights "the blind spot", the "Achilles Heel" of your remit, and indeed, our whole world-wide work with nuclear energy. My thesis, which is hardly new, hardly mine alone, is that we dearly need to come to our nuclear work with an awareness that combines both our objective knowledge and our subjective experience of the energy in the newly-discovered realm of the particles.

I know it goes against the grain of conventional opinion. But I advocate this dualistic, holographic approach because I have come to see how it provides us with a metaphoric language that is essential if we are to discuss and figure how else we might address the phenomena of radiation. I entertain the idea that we will one day develop a collective spiritual approach to the waste materials that will obviate the need to excavate underground repositories.

Feeling the need to "jump start" my argument and indicate the value of subjective perceptions, I will outline for you an outstanding example of our failure to value and invest in this kind of perception and language.

This series of photographs were made by the French military when they were testing a nuclear device in the South Pacific, in the early 1970's.



The images that make up this series are often shown individually by concerned citizens and groups who are haunted by the invention and use (on two occasions) of nuclear weapons. It makes good sense to be alarmed. But I want to comment on the subjective story going on inside of the fission process, because it points to the universal nature of nuclear energy and the universal nature of the nuclear processes.

The feature that commands our attention at the beginning of this whole process is the fiery column of archetypal masculine energy we see rising upwards to meet and penetrate the circular horizontal cloud of archetypal feminine power in the upper reaches of this photograph.

This straight-forward, subjective-rich, symbolic explanation provides the basis for us to see the whole social and spiritual nature of the energetic processes that are at the heart of nuclear fission. We are in effect watching the familiar behaviour of two ghostly "energetic entities". The one masculine, the other feminine. They formed themselves out of the field of energy released a moment before from a parcel of uranium. Now they move to be in relationship with each other: a relationship that sustains itself and them, for the next forty five seconds, which is (I believe) about the average life span of the particle population.

When the first atomic bombs were detonated, the physicists were totally unprepared for the 'mushroom cloud' effect. They had no way to account for it. This ignorance, or mystery, remains in place to this day. Civil society has followed tamely in the footsteps of the military and made no attempt to broaden and deepen our knowledge of the Atomic World ... what I think of as the metaphysics of nuclear. To my mind, we are caught in an ancient intellectual trap that is an unwitting outcome of The Reformation, which means our scientific mind can not help but shy away from investigating the living nature of the Atomic World.

There is excellent evidence elsewhere (in the objective and subjective nature of the "four interactive forces") that the same forms of energy are between and amongst the particles as are here, between and amongst us humans. On this basis, along with the visual story, nuclear fission can be seen as a marriage, a collaborative union of these two archetypal universal qualities, masculine strength and feminine power. As present in our lives as they are in the particle population. I would suggest that this kind of insight and understanding needs to be transferred to our nuclear reactors. That we can posit the social and spiritual processes going on inside these devices, that we can then be better informed and prepared to respond to the phenomena of radiation at the end.

I am impressed and moved, I sought to tell you at the start of this letter, by the determination of CNSC to be transparent and accessible with the responsibilities of your office. Likewise, I am seeking to indicate the need for an approach to our nuclear work that treats scientific knowledge and spiritual experience as being of equal value, as being equally informative as to the reality of this smaller world we are now working within.

I am writing also to Hydro-Québec, outlining this same 'dualistic' argument, and suggesting that the Gentilly reactor could well serve as a laboratory, a test bed, whereby an inquiry as to the potential for a group of people to work together, and explore and develop a collective process with which we might connect down into the Atomic World and seek to affect events down in there ... might be developed. It is an approach that needs, in my estimation, to include the Church(es). I think they in turn are remiss in not valuing the wealth of insight about the spiritual nature of the Universe that comes from the sciences. But if we can organise an inquiry, that combines and synthesises the different kinds of data in our keeping, I think we could determine, say within a matter of months, if this is a positive way to approach the issue of radiation/radioactivity.

We have opened the door to the Atomic World and there is no going back. We can not forget or forego what we now know. The only forward is to go in deeper. I like this phrase. We are committed to learning an whole lot more about the Atomic World. We have the physics pretty well sorted. It is now the metaphysics that needs our attention. This kind of knowledge requires a focus more on our experiences of the particle world and the energy within it. This is where we will need new social technologies in order to proceed, with interest and guidance from CNSC, that we stay sensible to what we are doing.

I trust this submission will alert you to ideas waiting as-it-were to be discovered. I know this "whole view" is not required of you. Yet I think it is on the horizon and can not be ignored. I am pleased to write to you, and have my contribution be somewhere in your system. Like an old prospector, I'm trying to develop a mine on the basis of some scattered surface showings, and enjoying the challenge.

With good wishes for your duties and endeavours. Yours sincerely, Ian Turnbull

146 Findhorn, Moray, Scotland IV36 3YL. iacturnbull@gmail.com www.nucleargodeeper.com