The Decline of Nuclear Power Worldwide

November 14, 2012

Hi Debbie:

Congratulations for all the great work you do.

It is very good of you to let people know that nuclear power is on the decline. But the situation for nuclear is in fact far worse than your recent e-mail suggests (see Debbie's e-mail at the end of this text).

Contrary to what is stated there, it is important to realize that nuclear power has NEVER produced 12% of the world's energy. In fact it has never produced even as much as 3% of the world's energy.

The confusion is caused by the fact that nuclear provides mainly ONE KIND of energy, namely electricity -- but most of the world's energy consumption is NON-electrical (e.g. gasoline for cars, ships and airplanes, coal and coke for smelting furnaces, etc.)

So it is true that nuclear has produced (in 2005) 16% of the world's ELECTRICITY. But that 16% of electricity turns out to represent only about 2.3% of the world's 2005 total energy use.

And by April 2012, the contribution of nuclear power had already dropped to only 13.5% of the world's electricity according to one of the biggest promoters of nuclear -- representing an even smaller fraction of the world's energy use (less than 2%). [see http://www.world-nuclear.org/info/inf01.html]

I am confident that by 2035 the contribution of nuclear power will be WAY below 12% of the world's electricity. I am sending you some studies that show that the role of nuclear power will be declining for the next 20 years or more -- and this was foreseen long before the Fukushima disaster of 2011.

Even the IAEA (International Atomic Energy Agency) that PROMOTES nuclear energy worldwide, has admitted (in 2011) that the nuclear share of world electricity is dropping sharply (see article below). And by the way, the article clearly indicates that in 2010 the nuclear share was already only 12.4% of global electricity use . . . .

Nuclear share in world energy could be halved by 2050: IAEA

http://www.platts.com/RSSFeedDetailedNews/RSSFeed/ElectricPower/6500772
Paris (Platts) -- 20 Sep 2011

The share of nuclear power in world electricity supply could shrink over the next 40 years to 6.2%, half what it was in 2010, according to a recent analysis by the International Atomic Energy Agency's Department of Nuclear Energy.

Although overall installed capacity will grow, nuclear power will lose ground to other energy sources like renewables and fossil fuels, Hans Holger Rogner, head of the Vienna agency's Planning and Economic Studies Section, told journalists in Vienna today. That would mean increased carbon emissions and higher fossil fuel prices, he said.

The agency's 2011 projections show a decline of about 7-8% compared to those published a year ago, reflecting the combined impact of Germany's decision to phase out nuclear power by 2022 and the consequences of Japan's Fukushima nuclear power plant accident.

I hope this helps to shed some light on the subject....

Gordon Edwards.

P.S. Here are five pre-Fukushima studies on the decline of nuclear:

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1) No Major Nuclear Revival by 2030, says CIGI Report

Marketwire, Thu Feb 4 2010 http://au.sys-con.com/node/1273879

WATERLOO, CANADA--(Marketwire - Feb. 4, 2010) - A significant expansion of nuclear energy worldwide is unlikely to occur before 2030….

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2) Prognos: Nuclear power losing in importance world-wide

The latest "Prognos" survey predicts a global decline of nuclear

WIEN INTERNATIONAL , January 10, 2010
http://www.wieninternational.at/en/node/16702

The world-wide renaissance of nuclear power that has so often been predicted will not take place in the next few decades. Nuclear energy will be on the decline till the year 2030, and will continue to decline in importance globally.

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3) Nuclear Power Cannot Solve Climate Change

A new report finds that nuclear power plants cannot be built quickly enough and in a safe and secure manner to be a major global solution for climate change, according to a report released yesterday from the Carnegie Endowment for International Peace.

By Katherine Ling, Scientific American, January 10, 2010
http://www.sciam.com/article.cfm?id=nuclear-cannot-solve-climate-change

The report says the nuclear industry, under current policies and financing, won't be able to build enough new reactors to make a difference in climate in the next 20 years.

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4) A nuclear power renaissance? Maybe not.

By David Whitford, editor-at-large, CNN "Money", April 22, 2009
http://money.cnn.com/2009/04/22/technology/nuclear.fortune/index.htm

Don't expect more than three new [nuclear] plants to be built in the next 10 years, experts at a session on nukes at Fortune's *Brainstorm: Green* conference agree.

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5) New Nuclear – The Economics Say No

New Nuclear Development – Corporate Risks

Citigroup Global Markets, 9 November 2009
https://www.citigroupgeo.com/pdf/SEU27102.pdf ***The Five Risks***

There are five substantial areas of risk faced by developers of new nuclear power stations. Three of those risk areas are so big and significant that if they go wrong, the developer (even the biggest utilities) could be financially damaged beyond repair. These risks can be classed as Corporate Killers.

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Here is Debbie's original e-mail:

On Nov 12, 2012, at 1:56 PM, Committee for Future Generations wrote:

David Shields just announced on CBC Blue Sky: an International Energy Association study has determined that by 2035, only 12% of the world's energy will be nuclear as opposed to 18% which was predicted last year.

He says this drop is due to what happened in Japan . He went on to comment that this will "obviously affect uranium mining here in Saskatchewan - growth of nuclear power certainly looks like it's been curtailed".

We're already living with 300 million tons of toxic tailings exposed to our environment in northern Saskatchewan, and 37,000 tons of highly radioactive nuclear waste in Canada alone that has to be isolated from the environment virtually forever, but at least this is good news that the world is waking up to the fact that

NUCLEAR ENERGY = POISONING THE PLANET

and it's production, according to the IEA study, will be slowing. Keep up the great work educating the people, people!!! :) :) :) :)

Debbie Mihalicz -- Committee for Future Generations

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Let's Be Active Participants in the Lives of Our Children's Children