



# Nuclear Power in the Post-Fukushima Era

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## Technical & Commercial Impacts

The world has just experienced the second-worst calamity in the history of nuclear power. Following the 9.0 magnitude Tohoku-Pacific Ocean Earthquake and its ensuing tsunami, Tokyo Electric Power Company's (TEPCO) Fukushima Daiichi Nuclear Power Plant suffered a complete station blackout and subsequent partial core meltdowns among other major malfunctions. The result of this disaster is that four of the six reactors at the site are irreparably damaged, and the whole station is expected to be completely decommissioned. This entire event has already had indelible effects on Japan, the nuclear power industry, and the global energy markets. While some of the ramifications are yet to be fully grasped, it is critical to begin the process of analyzing the likely impacts.

The Ux Consulting Company (UxC) announces its Post-Fukushima special report, which will review the impacts of this accident on a technical as well as commercial level in order to allow for in-depth analysis and forecasting of how Japan and the world will respond to this event. UxC's team of nuclear

engineering, market, and Japan experts are working overtime to provide both factual, independent analysis as well as critical problem-solving ideas.

### Comprehensive Analysis

UxC's report on Fukushima will address a wide range of relevant topics:

#### Fukushima Daiichi Accident Recap

Full analysis of the accident sequence, resulting technical and operational issues and emergency response.

#### Prospects for Japan

Review of the near- and long-term impacts of the accident on Japan's environment, nuclear power and overall energy program, as well as the economic and governmental implications.

#### Impacts on Global Nuclear Power

Overview of the world response to the Fukushima accident, including details for each country. Additionally, presentation of the "before and after" picture of global nuclear power using UxC's proprietary *Nuclear Power Outlook* reactor forecasts as well as the likely impact from reduced nuclear power usage on other energy fuels.

#### Overall Lessons from Fukushima

Key lessons will be discussed, including issues related to plant design basis (i.e. accident scenarios), reactor design and engineering, operations and regulations, as well as government response and public notification.

#### Implications for Operating Reactors

Based on analysis of potential new regulatory requirements for existing nuclear power plants, technical discussions will focus on generic challenges and possible solutions as well as design-specific issues (e.g. special focus on BWR Mark 1 containments).



#### Implications for New Reactors

Considering potential new regulatory requirements, technical discussions will focus on generic challenges and possible solutions as well as design-specific issues for new reactors (e.g. comparisons of leading PWR, BWR, PHWR, and SMR technologies).

#### Implications for Spent Fuel

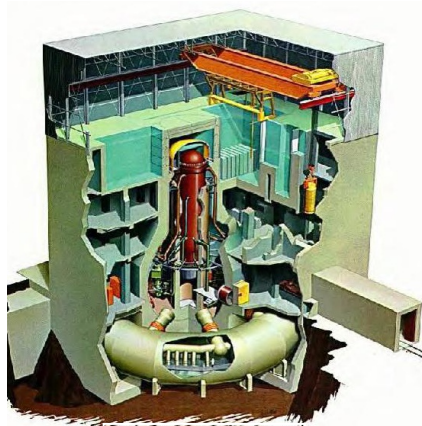
With the likelihood of new regulatory requirements on spent fuel management, technical discussions will examine engineering challenges and possible solutions for spent fuel pools and dry cask storage systems.

#### Nuclear Industry Ramifications

Given the range of technical issues arising from Fukushima, a broad analysis of the potential market impacts must be made. This includes impacts on NSSS vendors, EPCs, component and materials suppliers, as well as spent fuel management and D&D firms.

#### Sign Up to Purchase Today!

UxC's Post-Fukushima special report was issued in June 2011 (updated in September 2011). Order today for just \$5,000. Please contact Jonathan Hinze at [jonathan.hinze@uxc.com](mailto:jonathan.hinze@uxc.com) or +1-603-425-1185.



GE BWR Mark 1

#### Ux Consulting

1501 Macy Drive, Roswell, GA 30076  
770.642.7745 FX: 770.643.2954

[www.uxc.com](http://www.uxc.com)