



Fabrication: The Unique Factor in the Fuel Cycle

Includes Post-Fukushima Analysis

A Global Review and Analysis of the Fuel Fabrication Markets

The Ux Consulting Company (UxC) is pleased to present the 2011 *Fabrication Market Outlook* (FMO), which is the fifth annual edition in this series. This year's report focuses on the Fukushima impacts on fabrication while building upon the significant enhancements made in past FMO editions as part of our continuing efforts to enhance understanding in the global nuclear fuel fabrication marketplace.

UxC's in-house team along with consultant, Joel Gingold, with over forty years experience in the fuel fabrication industry, have prepared this comprehensive and up-to-date report addressing the commercial, economic, institutional, and technical aspects of this sector. Fabrication's high technical content, need for regulatory approval, and the restriction of fuel assemblies to specific reactors require a unique approach to its analysis.



To those with little knowledge of fuel fabrication and its markets, this report can serve as a primer providing a solid background and understanding of how its markets function. To those knowledgeable in the fundamentals, it offers analyses of a variety of its aspects based on several decades of participation. To those who are actively involved in the industry, it supplies additional insights to assist in the improvement of existing nuclear fuel programs and in the development of new ones.

What's New in the 2011 FMO?

Given the dramatic shifts in the industry after the Fukushima accident, this year's Essay provides an analytical discussion of the likely impacts of the accident on all aspects of the fuel fabrication market as well as addressing other recent trends in the industry. Obviously, the Fukushima ramifications are quite broad, and therefore additional discussion of its impacts is found throughout the report.

We have once again conducted a survey of international utility attitudes toward the fabrication market, but have expanded last year's version to cover additional topics.

This year's fuel fabrication demand projection is, once again, based on UxC's internal requirements forecasting model (URM), which, beginning with UxC's own proprietary forecasts for nuclear power growth, calculates demand on a reactor-by-reactor, cycle-by-cycle basis. The model has been refined and improved and produces even more accurate forecasts.

As in the past, the focus of the report is fuel for Light Water Reactors

(LWRs), i.e., Boiling Water Reactors (BWRs) and Pressurized Water Reactors (PWRs), including VVER designs; but we also include updated discussion of fabrication for pressurized heavy water reactors (PHWRs), gas cooled reactors in the UK (Magnox, AGR), and light water cooled, graphite moderated reactors (LGR) in Russia (e.g. RBMKs).

In addition to updating our supply and demand data to 2030, our 2011 report includes specific year-by-year fabrication price forecasts to 2030, including discussion of the many factors influencing fabrication prices.

Chapters in the 2011 FMO include:

- 1. Nuclear Fuel Fabrication Market Primer**
- 2. Essay: Fukushima, Fabrication and the Future**
- 3. Reactor Developments and Fabrication Demand Outlook**
- 4. Utility Procurement Approaches and Contracting Issues**
- 5. The World's Nuclear Fuel Fabricators**
- 6. Supply and Demand Analysis**
- 7. Global and Regional Market Analysis**
- 8. Nuclear Fuel Fabrication Prices**
- 9. Non-LWR Fabrication Markets**

To purchase or for more information, contact Jonathan Hinze at +1-603-425-1185 or jonathan.hinze@uxc.com.

Ux Consulting

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

www.uxc.com