# Fluence Monitoring Program

As a part of any fluence analysis, assumptions about future operating strategies are necessary to project fluence to the end of plant life; however, plants seldom operate according to assumption.

Changes in operating strategies such as 1) new fuel designs, 2) power reductions or uprates, 3) flow rates, 4) changes in cycle lengths, and 5) fuel types loaded on the periphery can all affect fluence projections.

To have an understanding of changes in fluence as they happen and the impact that the changes may have on a plant's RPV and internals, it is essential to evaluate the core designs and operational strategies for new operating cycles in a timely manner.

TransWare's Fluence Monitoring Program assists our clients in this endeavor. This customizable program can:

- ***Provide fluence based on updated history / projections at any desired time***
- ***Mitigate the impact of peak fluence in critical components***
- ***Extend the life of reactor components***
- ***Defer inspection frequencies and delay maintenance and repair of components***
- ***Support outage inspections with accurate values***

As our clients know, one of the greatest expenses of fluence evaluations is the collection and processing of reactor operating data. The Fluence Monitoring Program can break this cost-*ineffective* pattern by maintaining current models to calculate best-estimate fluence in existing and newly-flawed components. Today, fluence models can be updated cost effectively - even on a per-cycle basis, if desired.

Depending on your needs and operating objectives, TransWare can routinely:

- ***Collect new operating history data to keep base fluence models up to date.***
- ***Update fluence models with new operating history data to determine changes in fluence in critical reactor components.***
- ***Evaluate new fuel designs and operating strategies at the design stage to assess the impact of fluence on the RPV and internals before finalizing core design.***

We will work with you to customize a program based on the specific needs of your plant and even provide on-call assistance to generate updated fluence during plant inspections.

As an organization following sound quality assurance practices, it is our goal to work collaboratively with our clients to deliver a complete and usable product. Our QA program satisfies the requirements of 10CFR50 Appendix B.

transware
ENTERPRISES
**1565 Mediterranean Drive** · **Sycamore, Illinois 60178**
phone **815.895.4700** fax **815.895.4704** www.**transware**.net