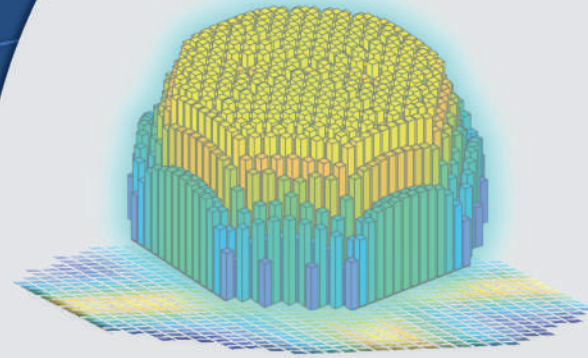


CoreDesigner.ai

Eliminate Operational Waste from
Your Fuel Cycles



AI Powered Core Design for BWRs & PWRs

CoreDesigner.ai seamlessly integrates into existing licensed methodologies to transform your core design over multiple cycles optimizing:

- fuel loading and shuffling
- control rod patterns
- core flow schedules

\$ Fuel Costs

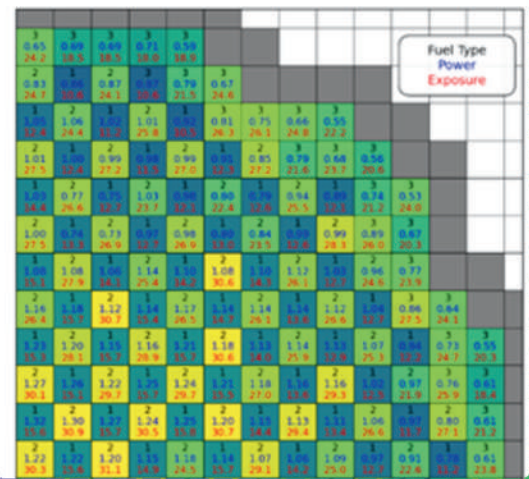
\$ Discharge Burnup

\$ Rod Movements

\$ Engineering Hours

SAVE

Current Best Power and Exposure Pattern



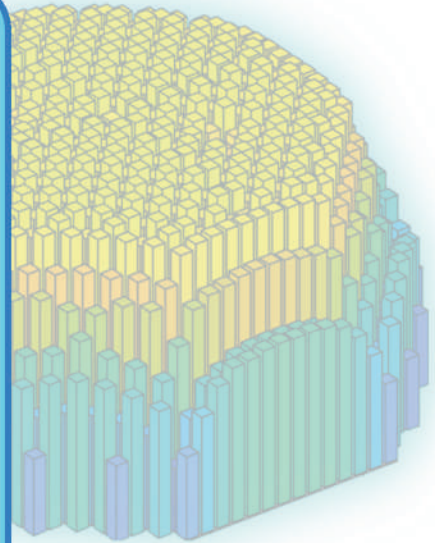
Improving Core Design Methods

Using advanced machine learning techniques CoreDesigner.ai models achieve superior reload designs compared to traditional methods.



Tool Features

- **Design Acceleration:** The CoreDesigner.ai model can evaluate core designs more than 1,000 times faster than traditional core simulation, making it possible to evaluate up to 1.7 million cycles in a day.
- **Graphical Interface:** An intuitive, web-based interface coupled with advanced AI modeling ensures seamless design and evaluation.
- **Automation and Optimization:** The tool's highly configurable autoloader automatically generates patterns meeting your core design requirements, significantly enhancing the design process.
- **High Accuracy:** Using advanced AI modeling, CoreDesigner.ai provides robust core design evaluations with your approved 3D core model methodologies used today.



Results

- **Core Design:** Core loading pattern with either pre-defined fresh fuel bundle types or optimized fresh bundle designs.
- **Optional Designs:** The tool finds optimal bundle designs for a user-defined number of fresh fuel bundles.

Integration Compatibility

CoreDesigner.ai is compatible with all standard computing platforms, including Linux, Windows, and UNIX. Its intuitive graphical interface provides powerful data visualization tools, enhancing the user experience. The tool can integrate with any approved in-house core simulators, providing flexibility and adaptability to existing processes.

