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## **12 Years Fuel Evolution Experience at Leibstadt NPP**

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The Leibstadt Nuclear Power Plant is a GE-designed BWR-6. Since the commercial start-up of the plant in 1984, the plant has managed a comprehensive program to enhance production efficiency. Cornerstones in this program are a power uprate from 3138 MWth to 3600 MWth (approximately 15 percent) and a steady fuel burnup increase of 1-2 MWd/kgU per year. The burnup achievable with the current 5 percent enrichment limit is in the range of 60-65 MWd/kgU batch average.

Both the power uprate and the burnup increase are essential for cost effective electricity production, but in many respects they are also a challenge for the fuel and core design. In particular the plant availability and the fuel reliability have to be maintained at a very high level, requiring a cautious introduction of new features and materials.

Mr. Korhonen will provide details from the development program including future improvements.