

“Sellout” : a Book about a history of Bad Decisions

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Would you recommend this audiobook to a friend? If so, why?

This is a book about two individuals: Jim Kennedy and John Kutsch, who dared to question the decisions of just about every agency of government that deals with energy and strategic materials. Anyone who wonders who is in charge of national policies of vital national interest, and what a citizen can do to influence government should read this book. Since the 1960's the U.S. Department of Energy has basically given up on the idea that the U.S. should be a leader in development of advanced nuclear technology, and has converted our nuclear programs to a series of rules and regulations rather than innovation and development. One area where this has had major impacts is in the development (or failure of development) of the element Thorium as a fuel in nuclear reactors. This technology was invented in the U.S., but all serious work on it was pretty much halted by the end of the Clinton administration. At the same time the Chinese government clearly saw the importance of Thorium as a fuel in advanced reactors, and set up an aggressive program to develop Thorium Breeder reactors. They used U.S. technology to do this. Meanwhile the U.S. government has taken a hands off position on Thorium and molten salt reactors which use them. In fact the U.S. has classified Thorium as a precursor for nuclear weapons and a hazardous material.

The other side of this coin is the matter of Rare Earth Minerals. These are of immense industrial and strategic value, but because of the Thorium Problem, it is virtually impossible to mine rare earths in the U.S. Our two protagonists have spent the better part of their careers trying to overturn this situation, and get the U.S. back on its feet with respect to both rare earth development and the Thorium fuel cycle for civilian power generation. This is a story of incredible frustration and dogged determination.

What did you like best about this story?

This story shows how private individuals with little in the way of prestigious credentials and economic backing can get into a position to affect national policy because of the correctness of their position and their unwillingness to take no for an answer. The two issues of rare earth development and Thorium energy seem unrelated, but due to geology they are inextricably linked. As long as Thorium is considered a hazard rather than an energy resource it will be impossible to ever develop either Thorium for energy or rare earths for the range of high tech devices that require them. Leaving us with no option but to buy the rare earth products we need from the Chinese (as long as they are willing to sell them) and an energy system based on windmills and natural gas combustion.

Which scene was your favorite?

There is a great scene where Jim and John are meeting with a room full of staffers from the Senate Armed Services Committee and Jim lays out the fact that Congress is violating the law

and its responsibility to the Country by failing to set up the National Rare Earth Co-operative, which would provide a structure for both domestic rare earth mining and production (the so-called “rare earth value chain”), and a system for transporting and storing Thorium and for its development as a fuel source for the next generation of civilian power stations.

Was there a moment in the book that particularly moved you?

One of the most interesting and disturbing parts of the story was when Xu Hongjie spoke at the Oak Ridge National Labs about how China wanted to commercialize Thorium breeder reactors and own all of the intellectual property, and they were happy to have been provided with the information generate by ORNL, which had been abandoned by the U.S. This showed how China, a country run by scientists and engineers could run circles around the U.S., a country run by bankers, stock speculators and lawyers.

Any additional comments?

At the end of the book, our heroes had exhausted all of the congressional and departmental sources of funding and support for the National Rare Earth Co-op, but they saw one last ray of hope, which is that the President sign an executive order to set up the program. This would be great, but one wonders how much spare capacity there is in the White House to deal with a trivial matter of the technological and energy future of the country when there are pressing matters like the Russian hacking to attend to. Maybe, however, the Great Disrupter may tip the balance and allow for progress to be made.