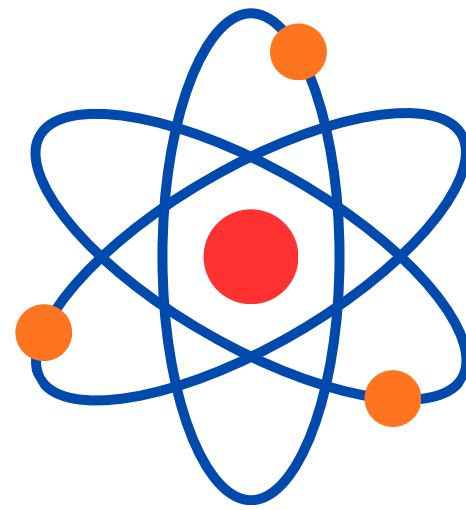




POWERING TOMORROW

A Carbon County Community Series on Nuclear Energy

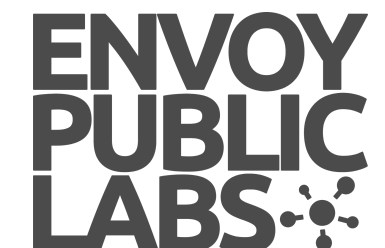


From Rock to Reactor: The Modern Nuclear Fuel

A clear, start-to-finish look at the modern nuclear fuel cycle and how it drives jobs, technology, and economic growth in Utah. Join industry experts and power generations companies discuss this new technology. Presentations with question / answer format.

June 18, 2026 7:00 pm
Carbon County Events Center

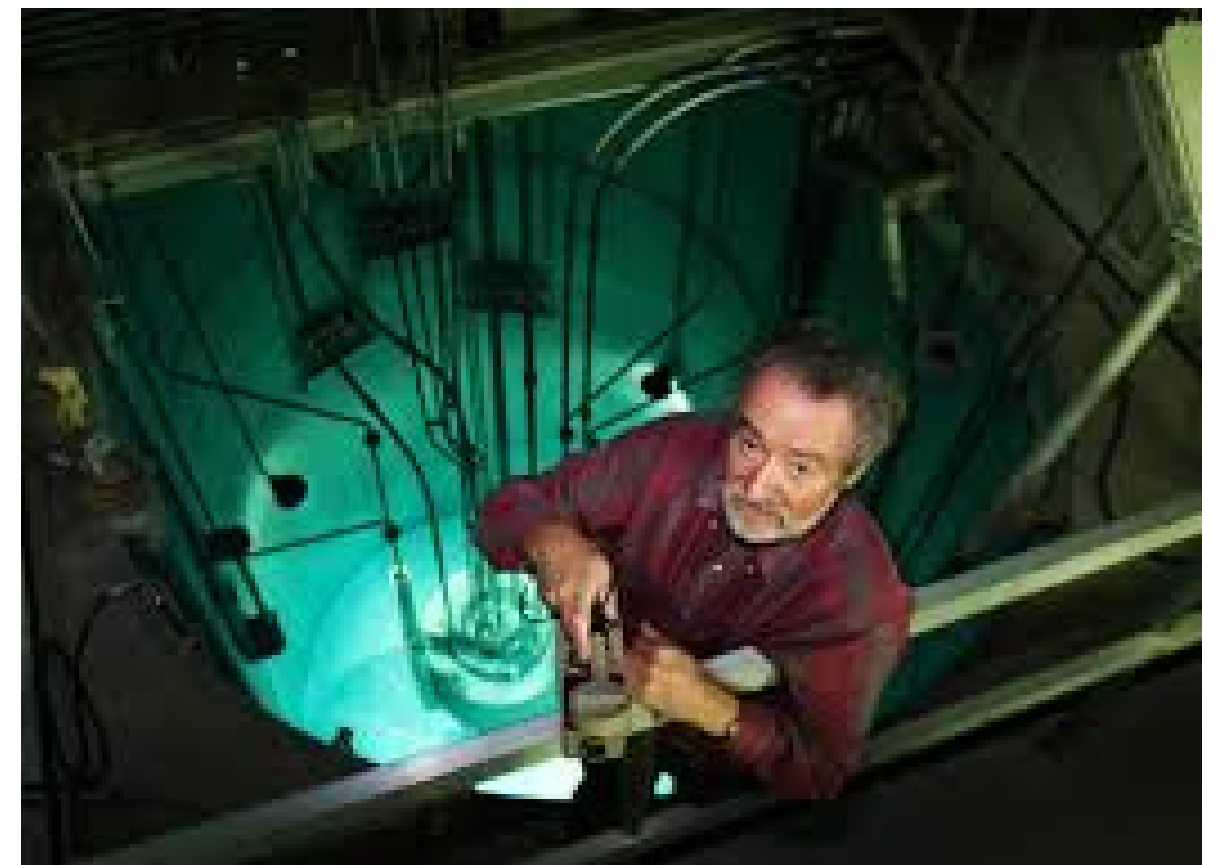
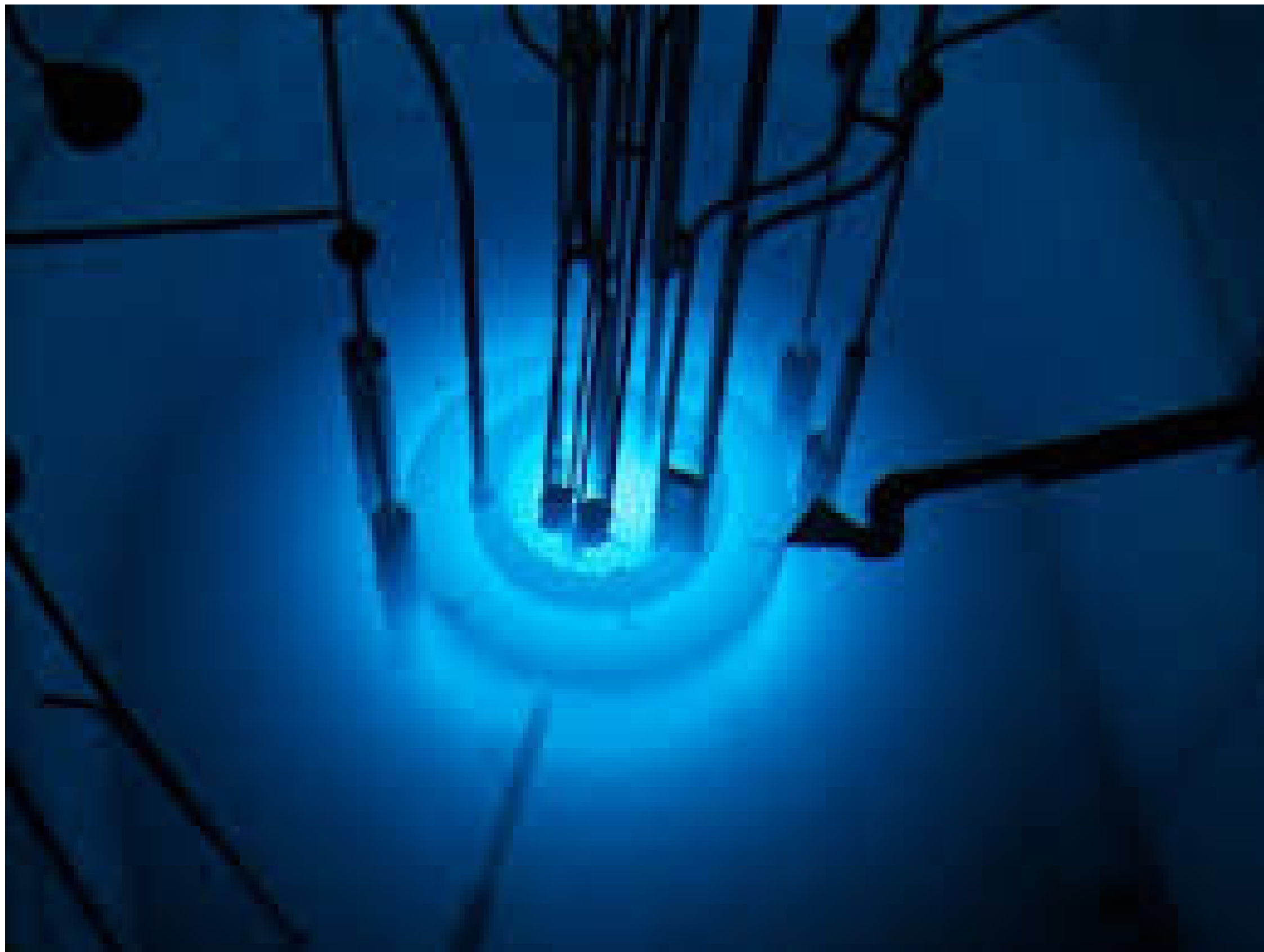
**SPONSORED
BY:**



Uranium Fuel and the Front End of the Nuclear Fuel Cycle



**Energy
Development**



Nuclear Chemistry, Nuclear Engineering, and Nuclear Power

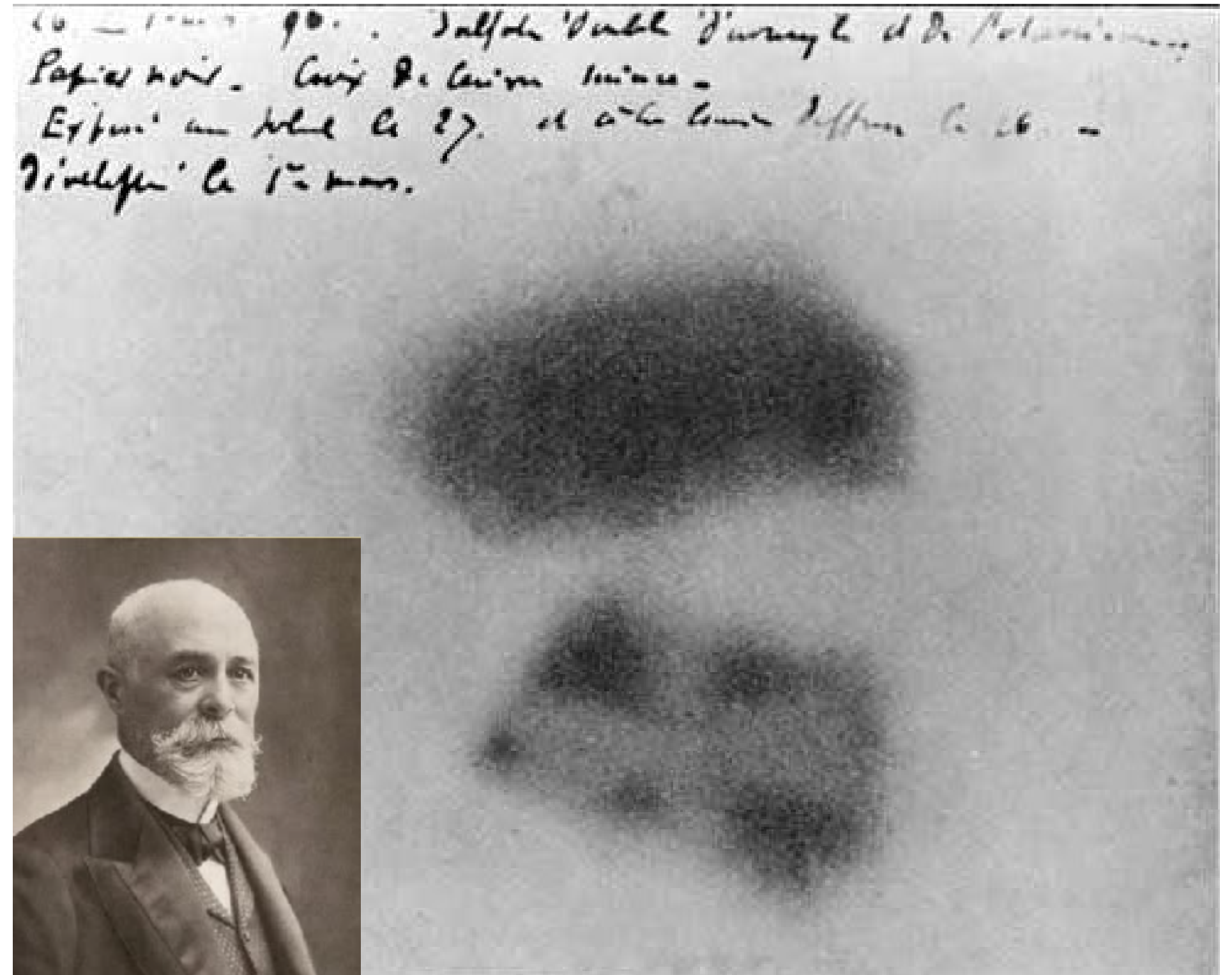
Ancient Uses of Metals



Ore



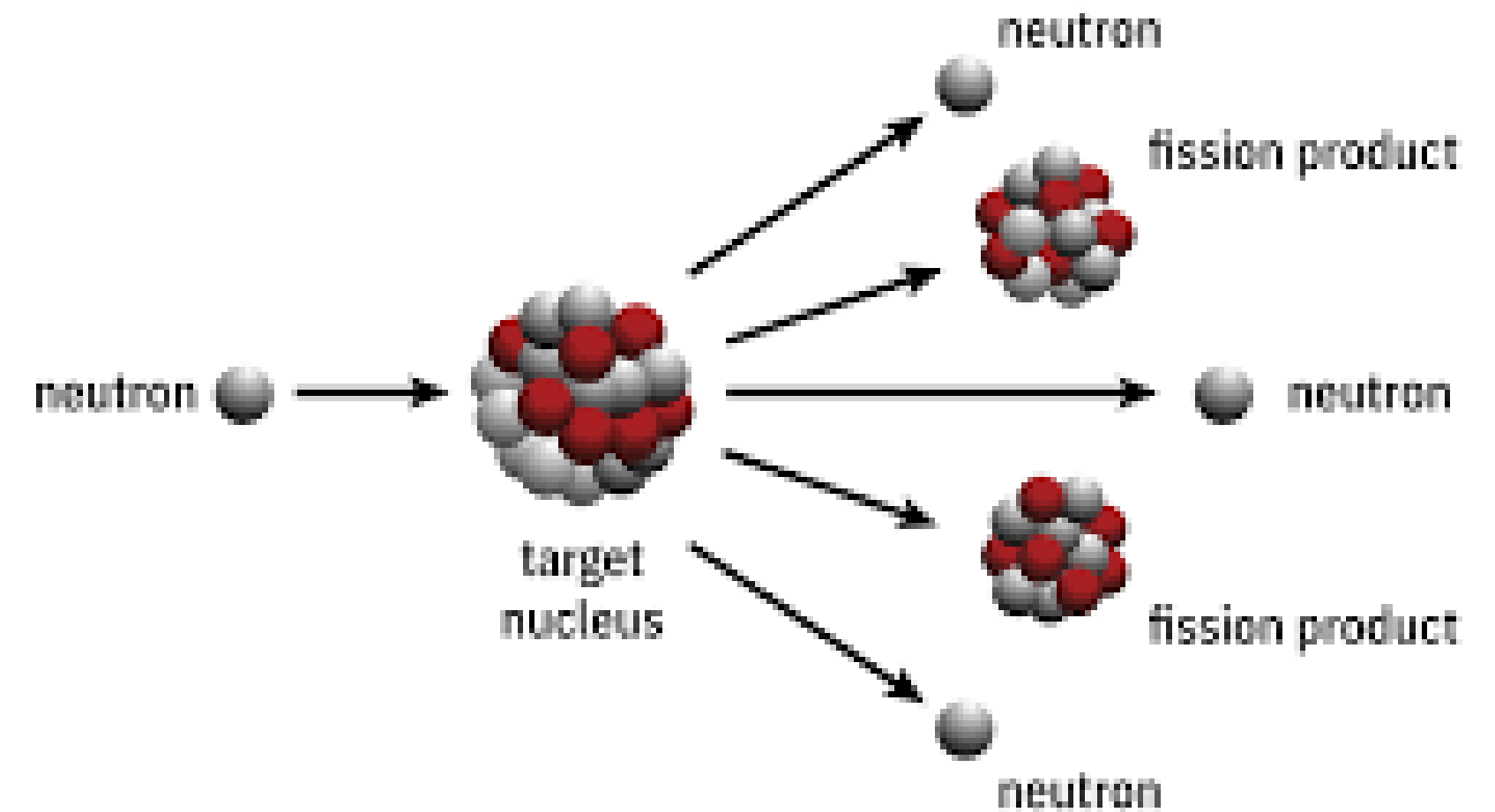
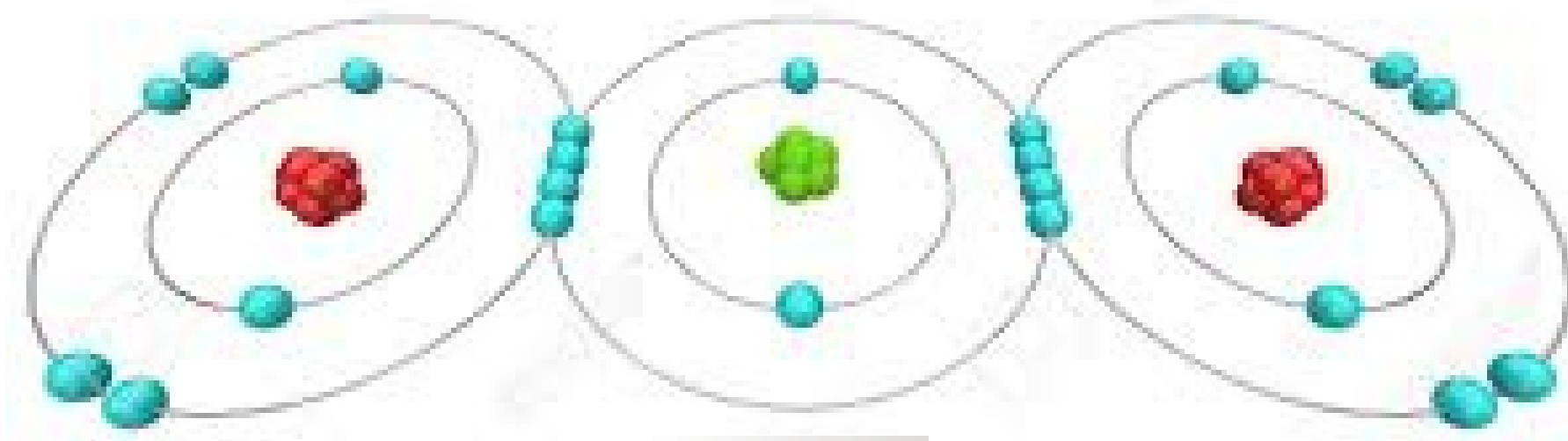
Uranium Ore and the Discovery of Radioactivity

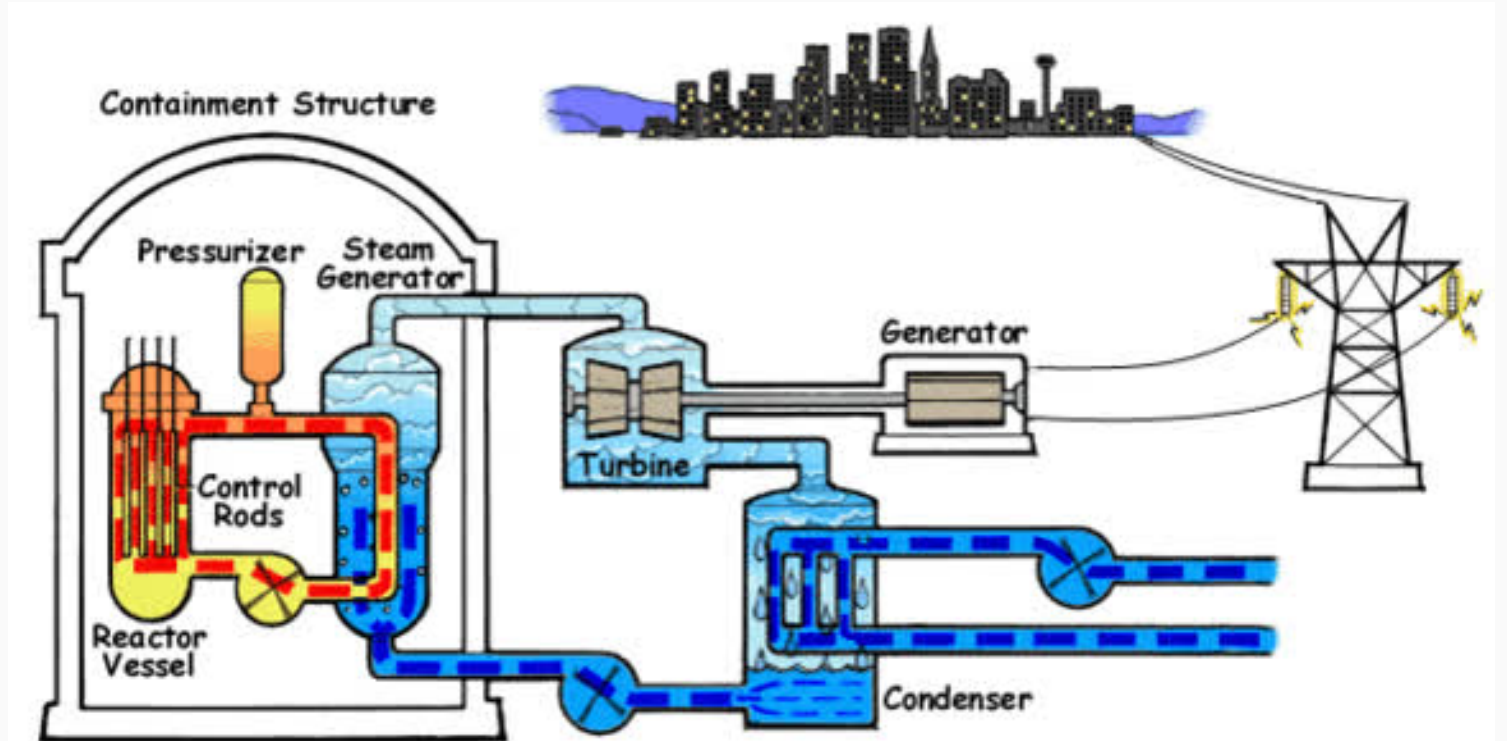
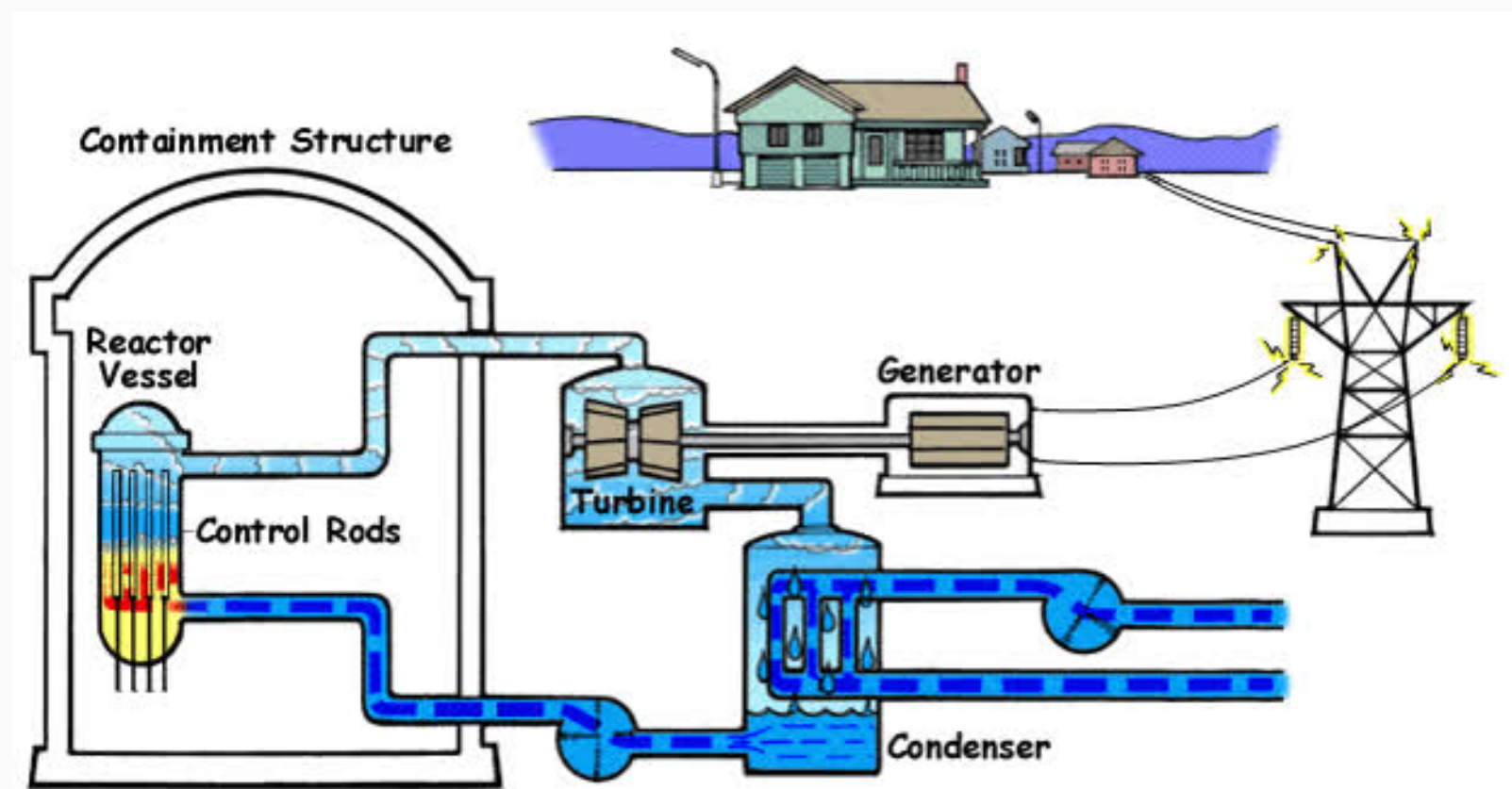
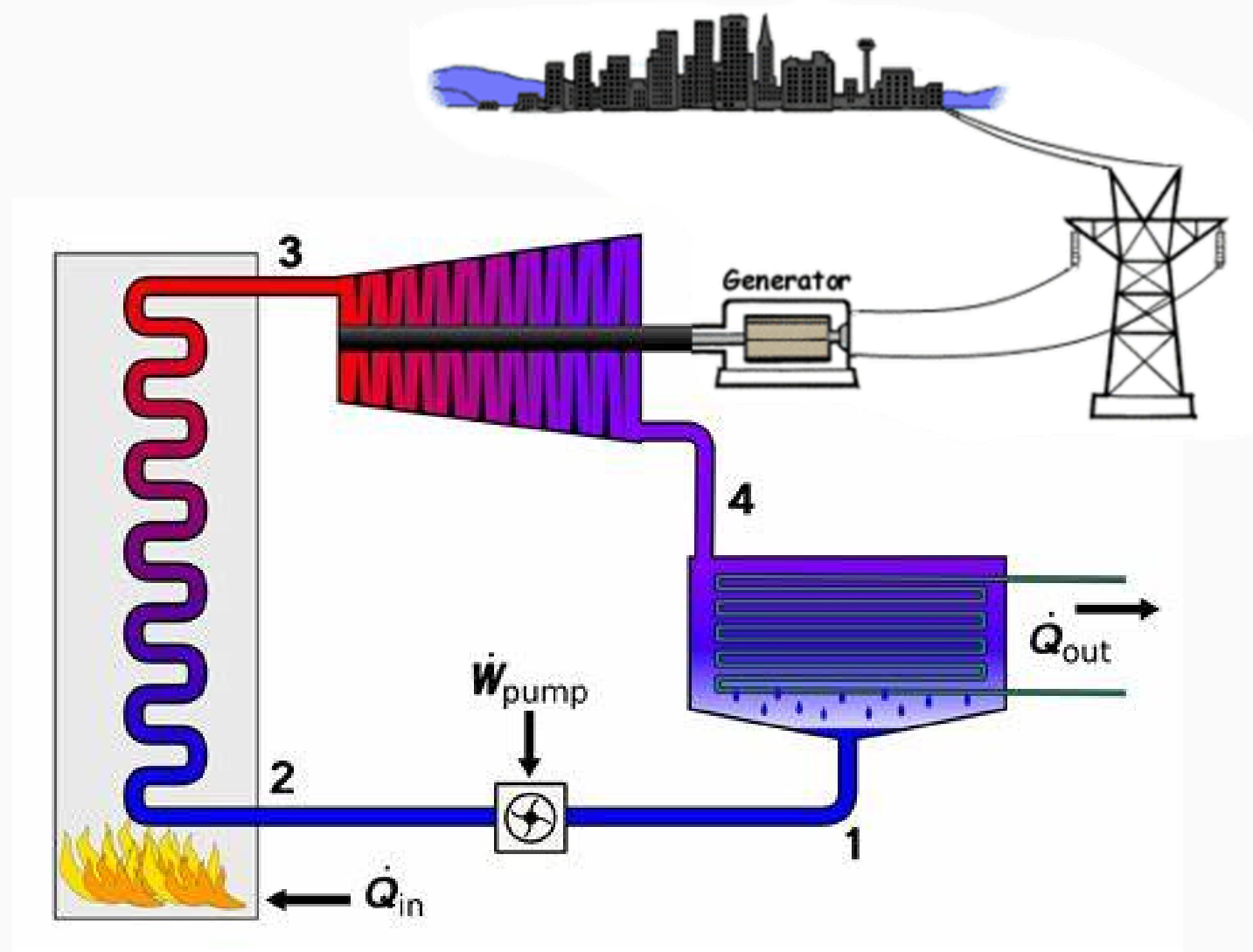


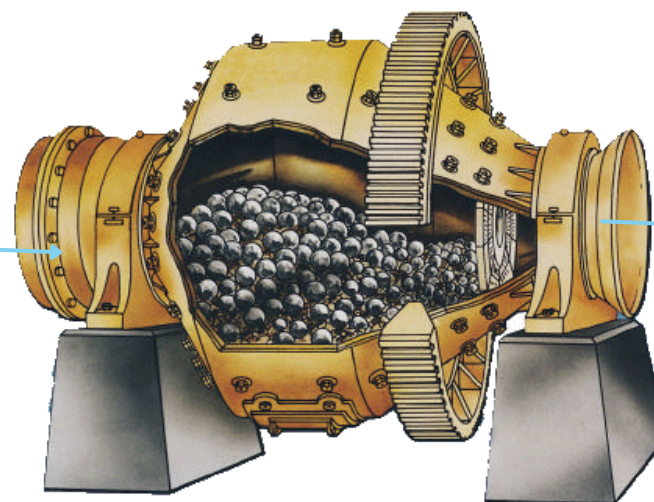
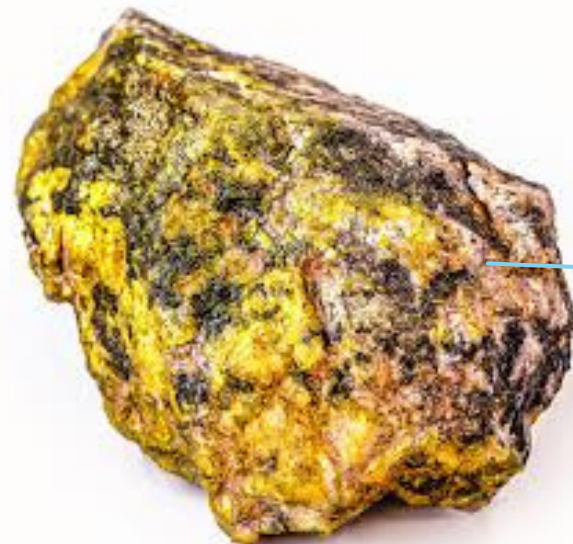
Combustion

vs.

Fission





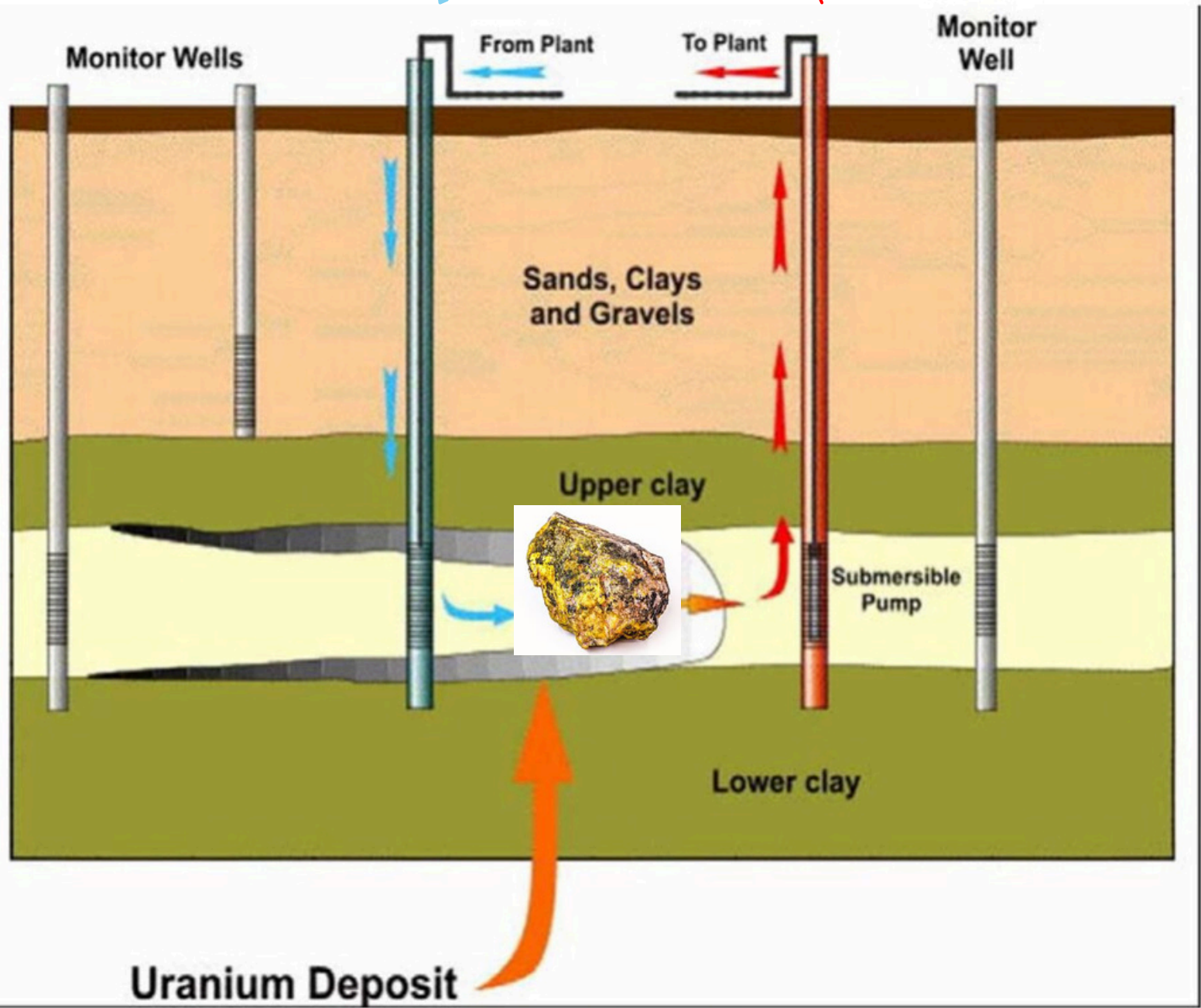


Mining and Milling



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Development**

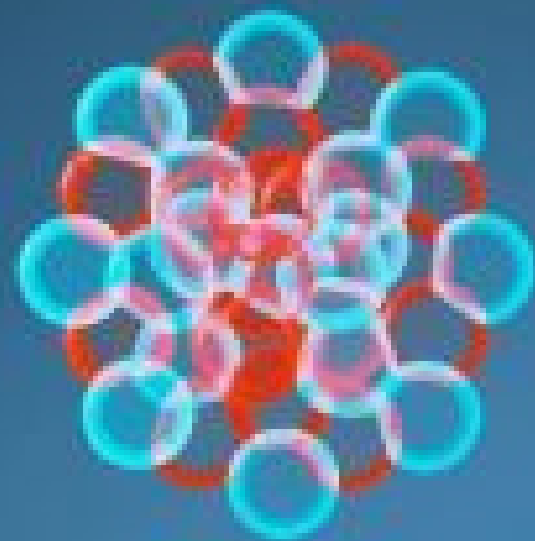
In Situ Leaching



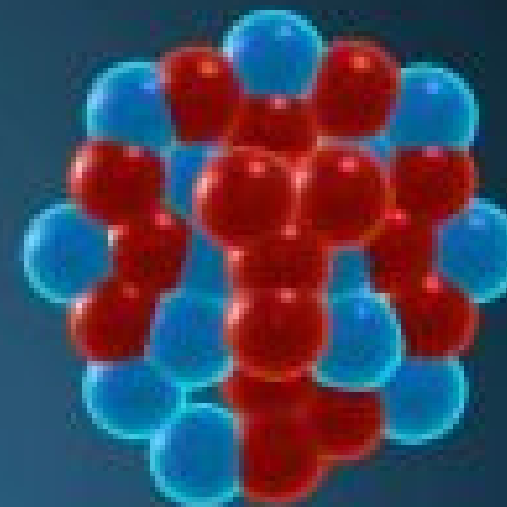
UEC
Uranium Energy Corp

Enrichment: Conversion

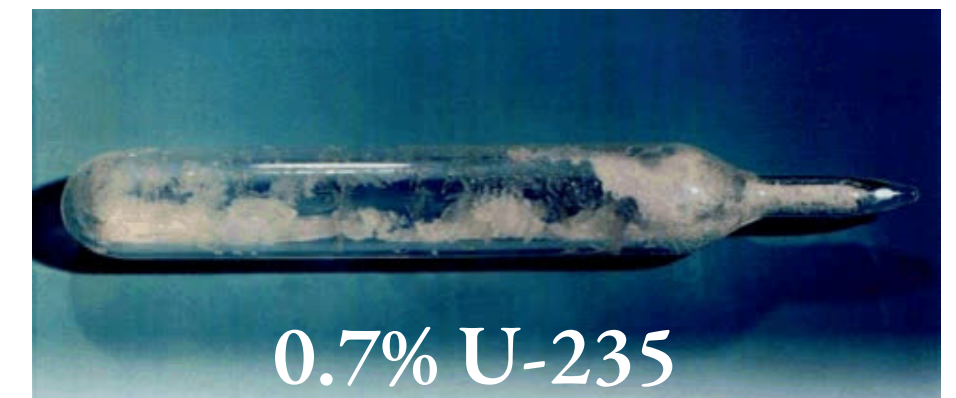
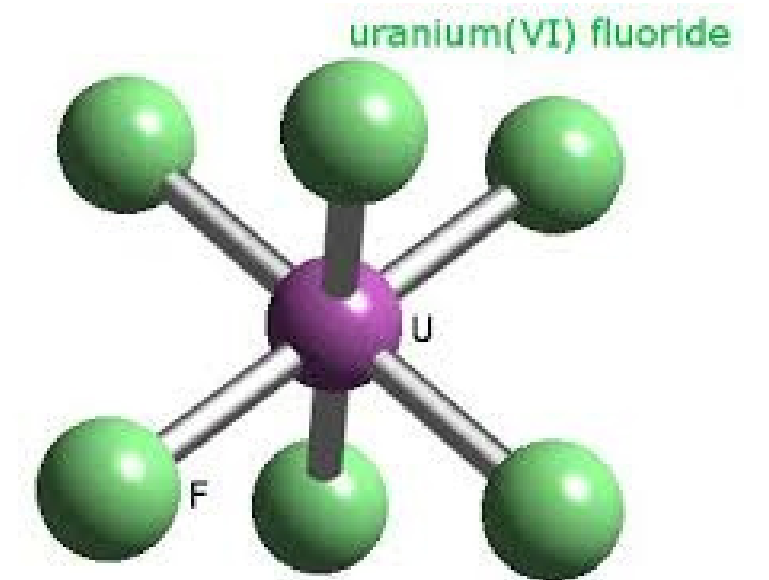
URANIUM ISOTOPES



URANIUM-238
NO OF NEUTRONS-146
NO OF PROTONS-92

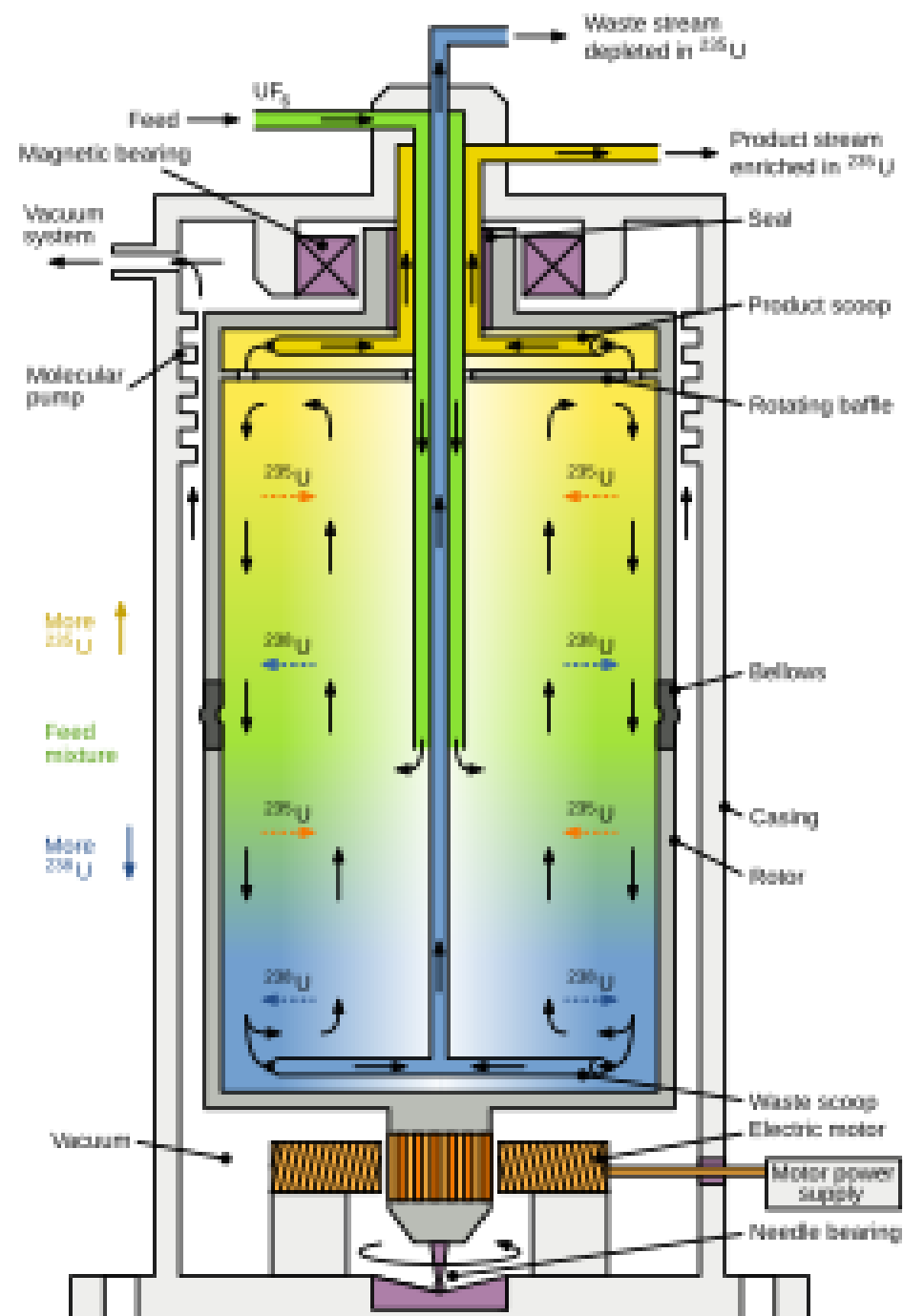


URANIUM-235
NO OF NEUTRONS-143
NO OF PROTONS-92



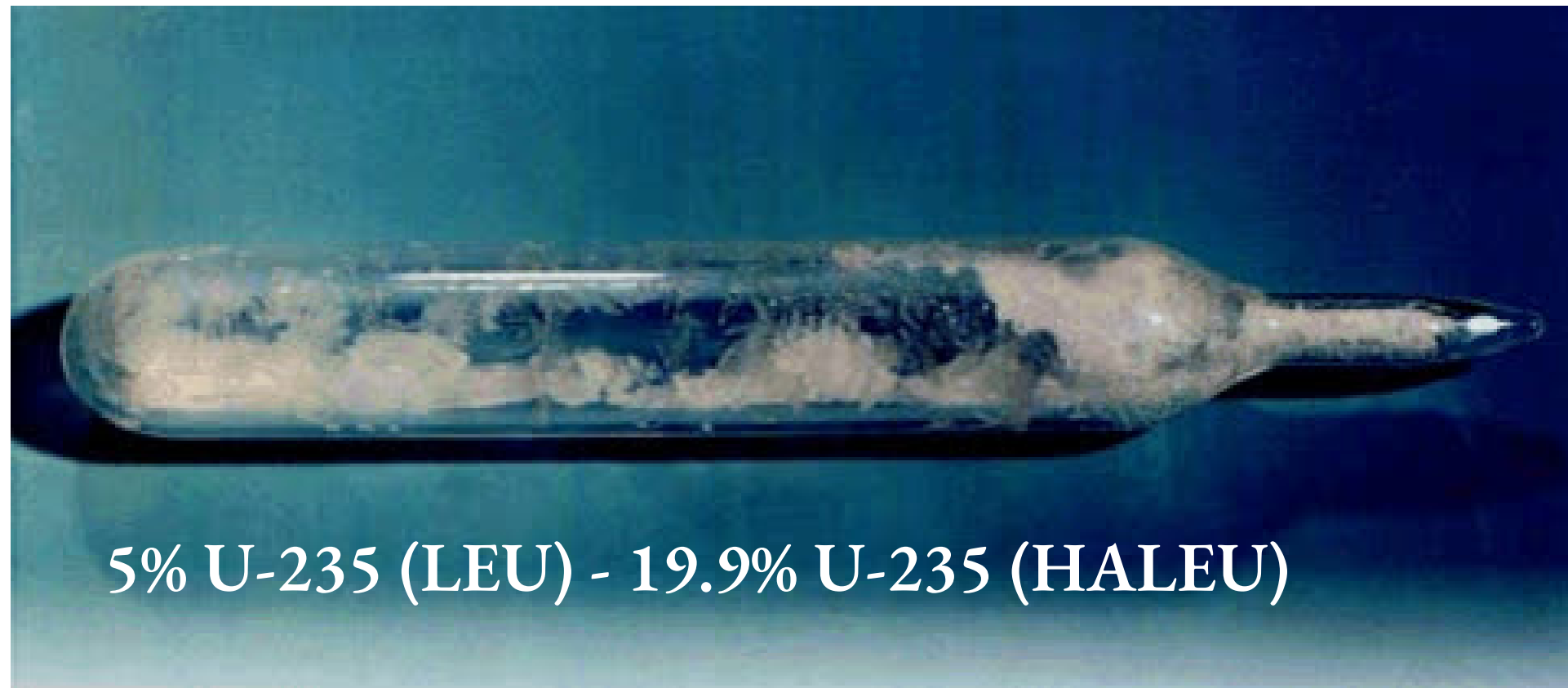
**Energy
Development**

Enrichment: Centrifuging

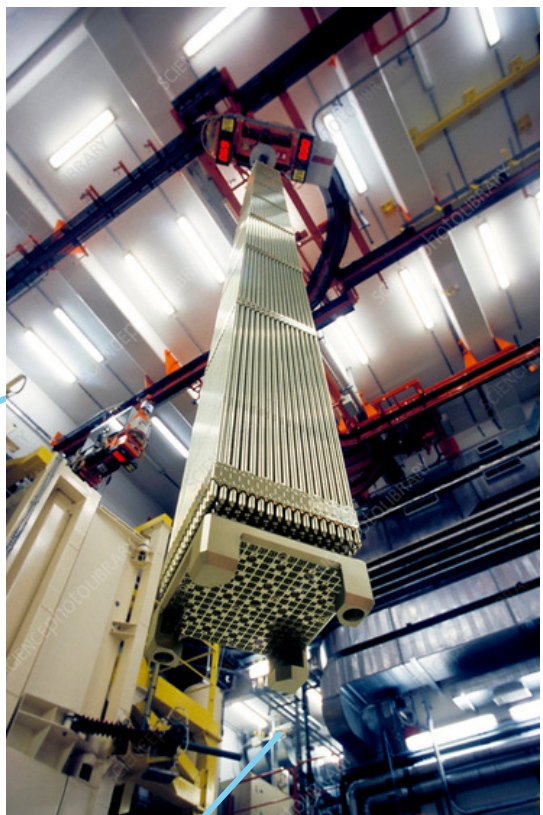


**Energy
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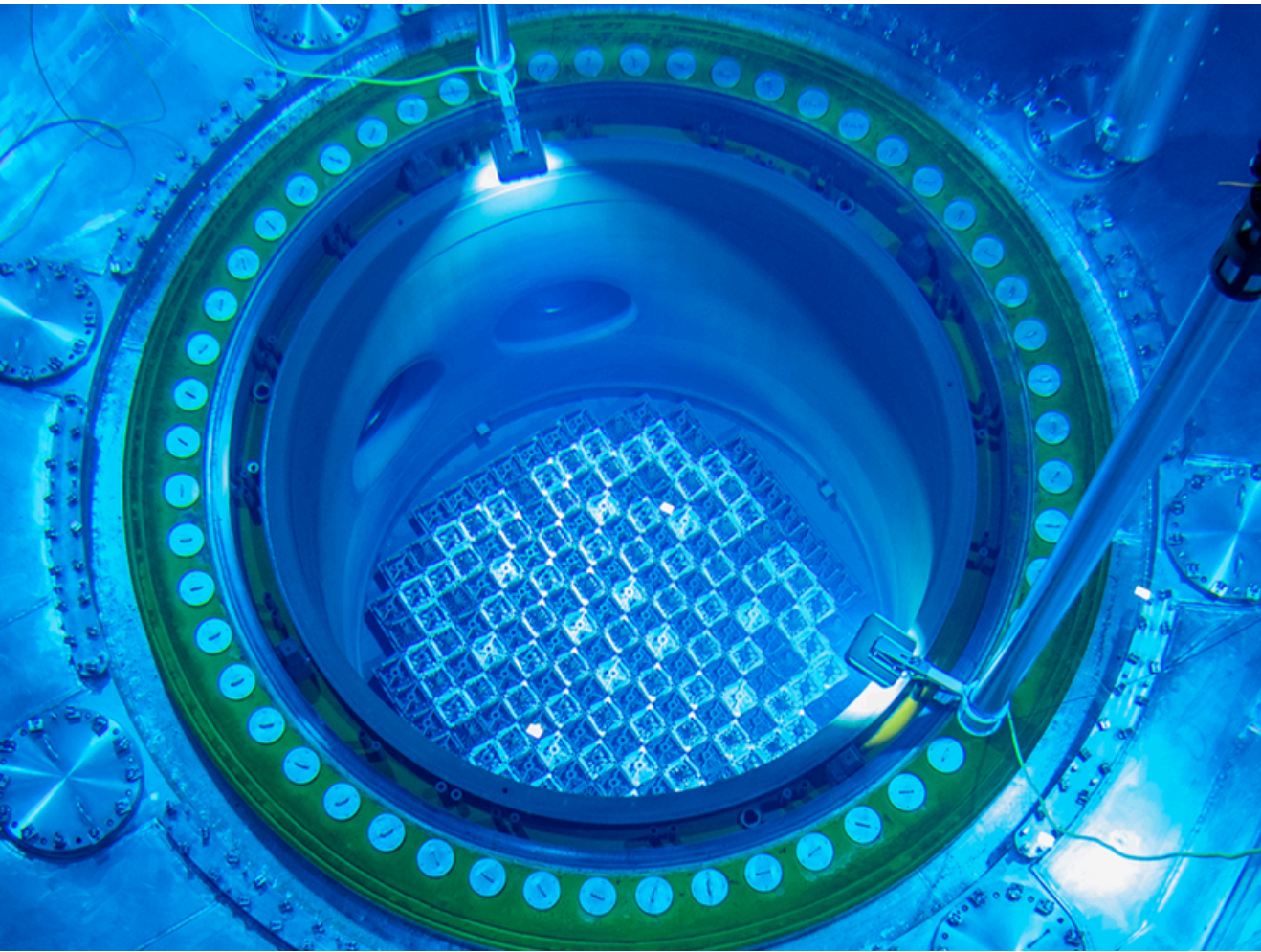
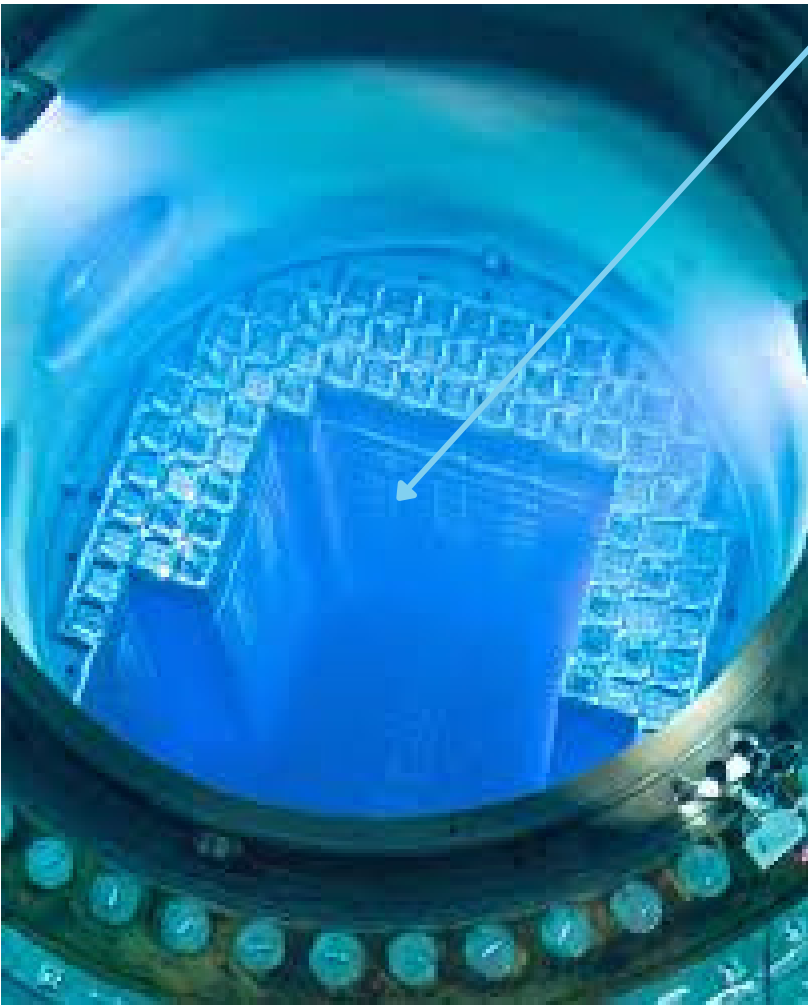
Enrichment: Deconversion & Fuel Fabrication



**Energy
Development**



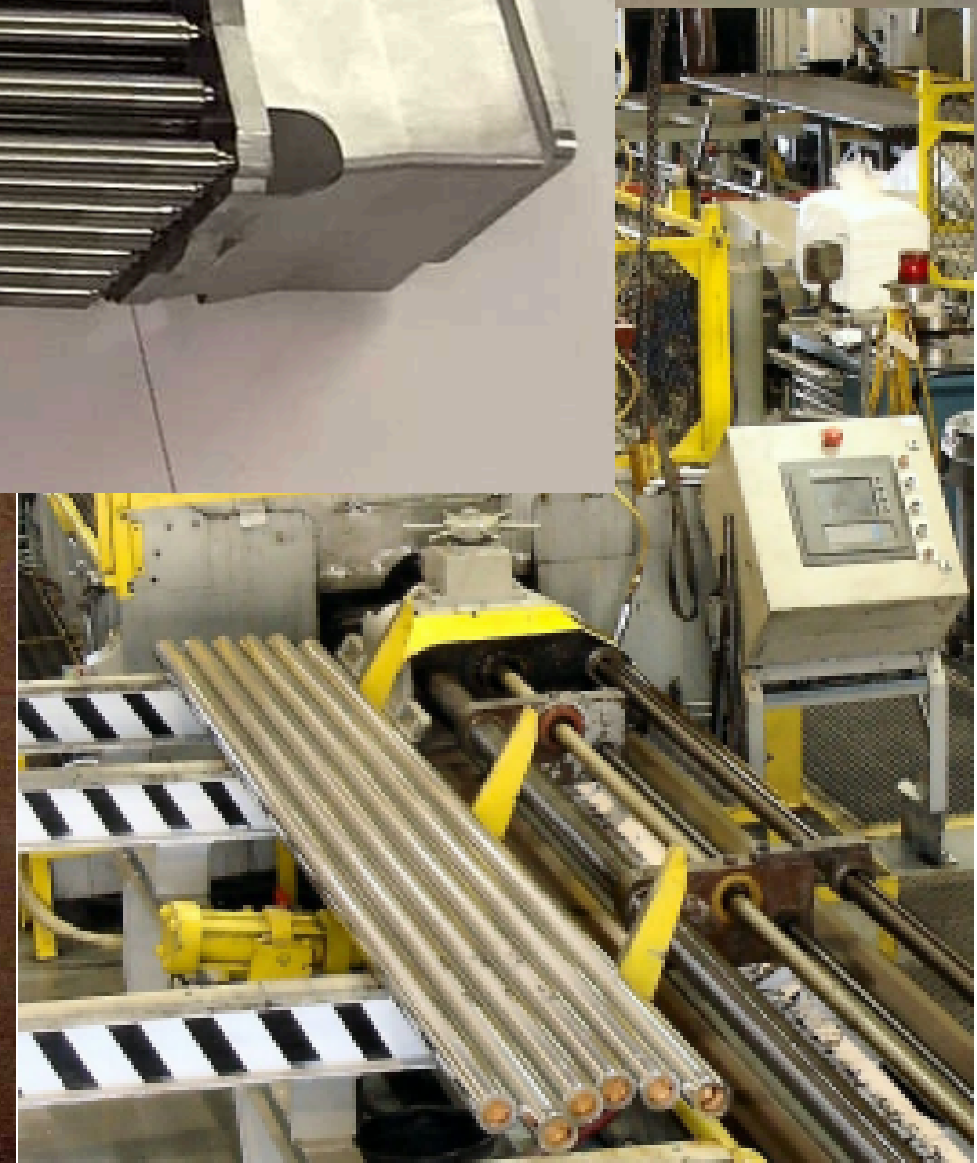
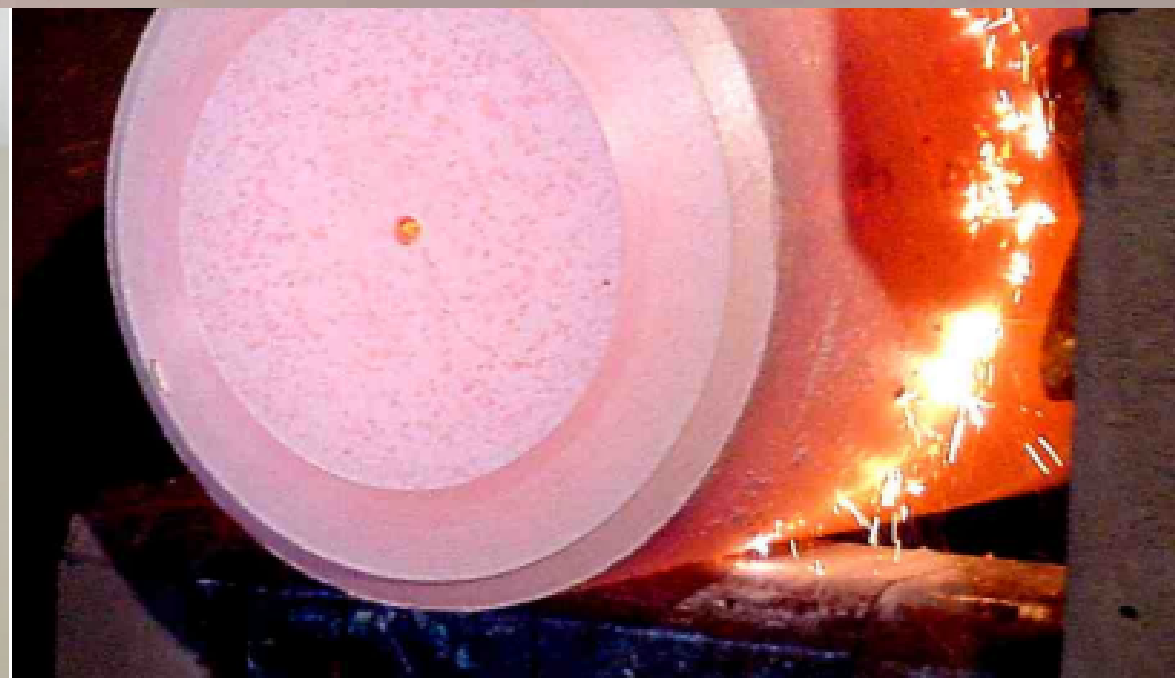
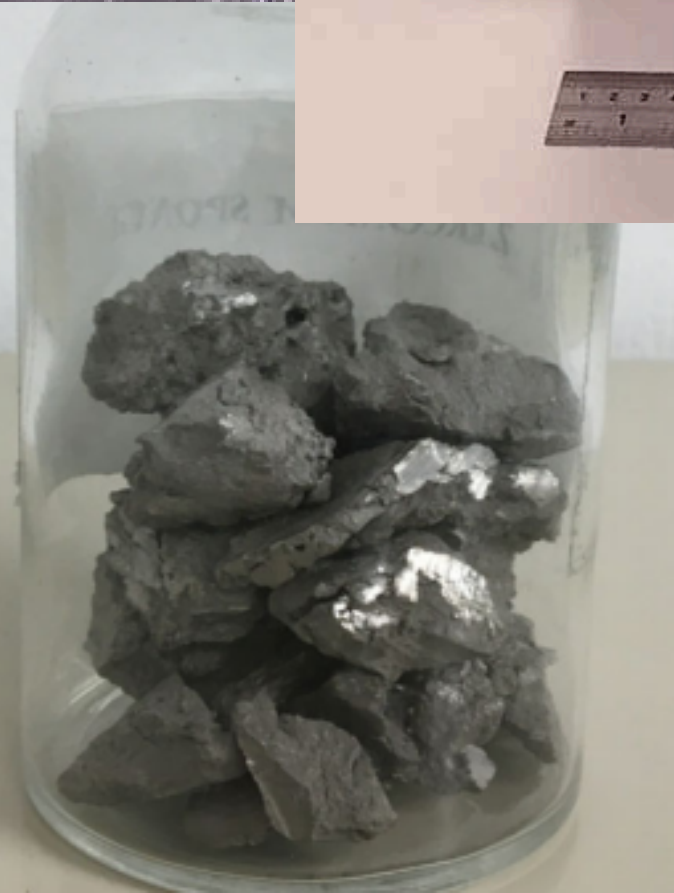
Fuel Loading

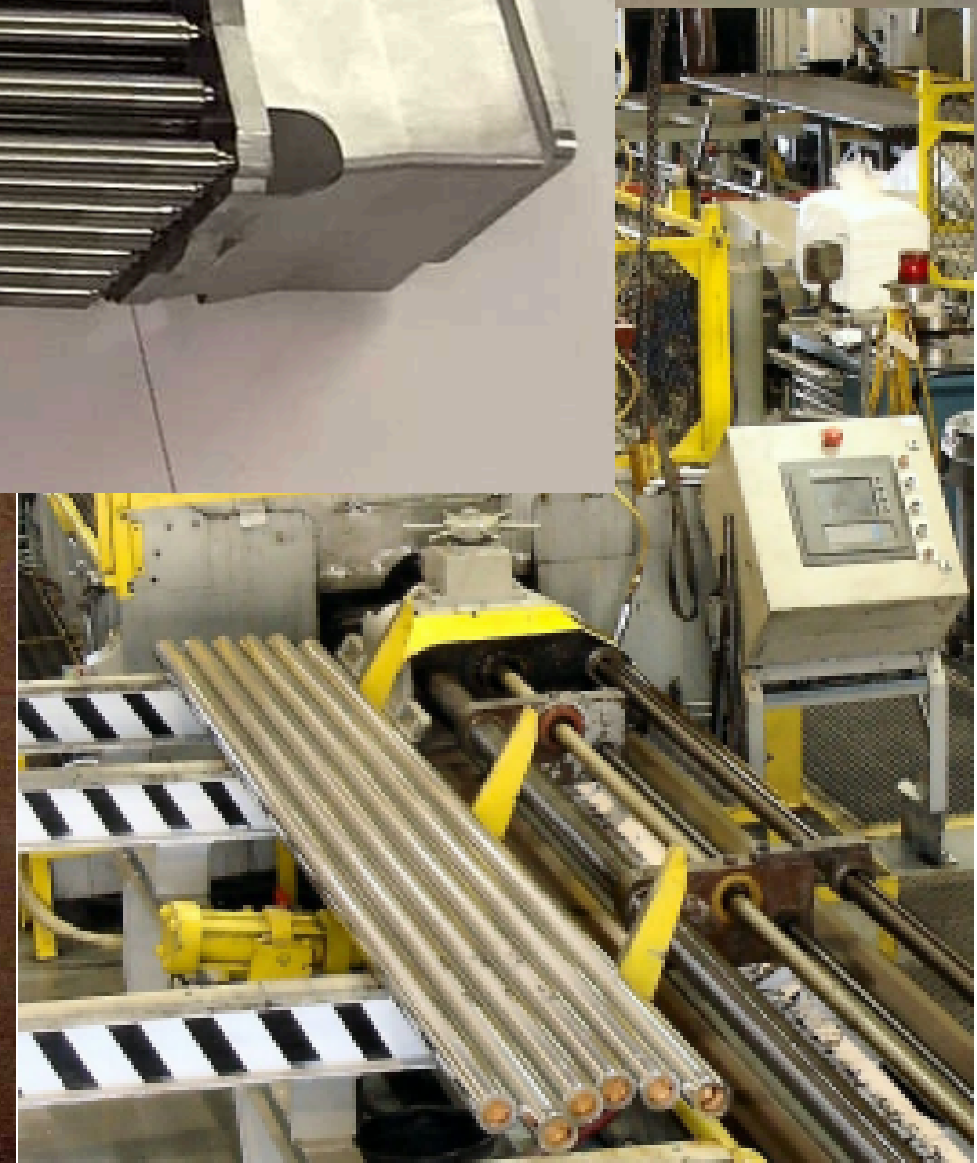
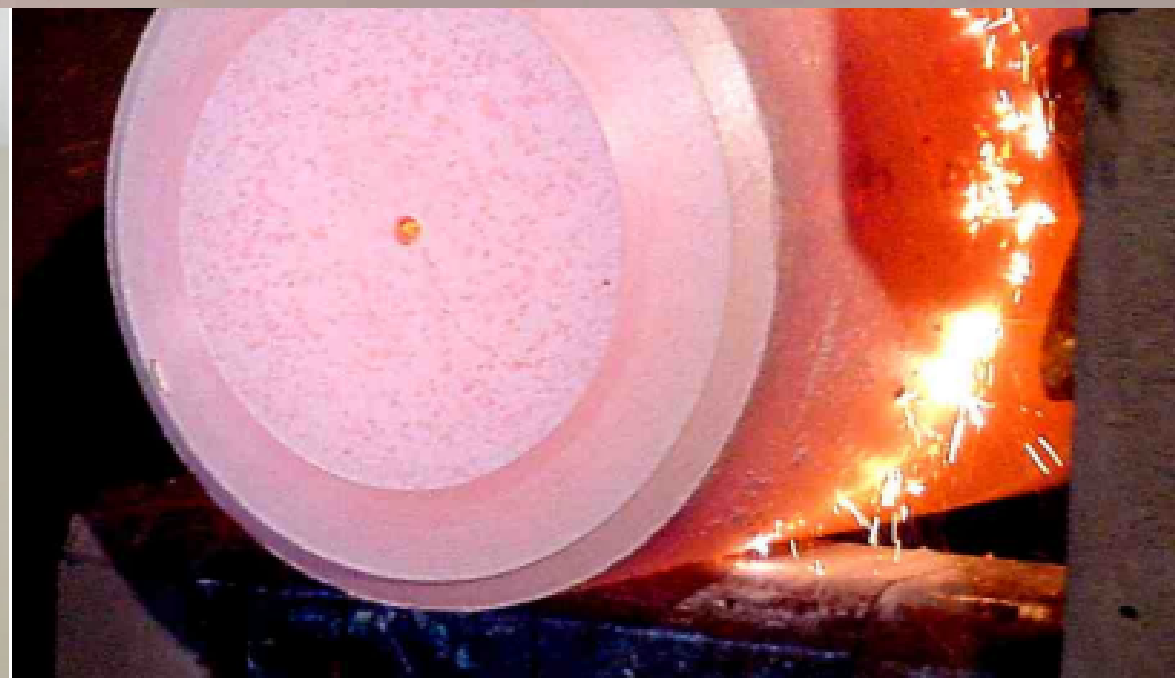


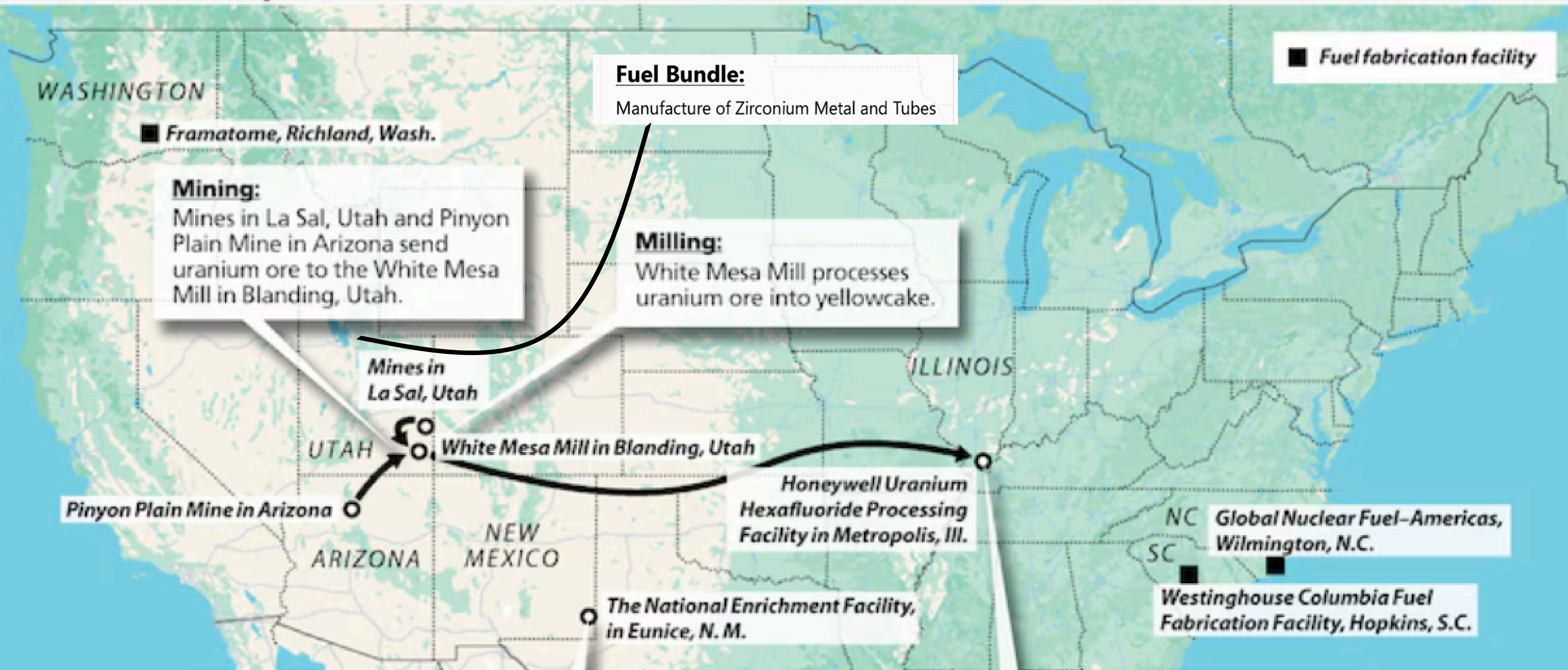


Westinghouse









Next steps:

- Energy Fuels sends 90% of White Mesa Mill's yellowcake to Illinois, where the only uranium conversion facility in the U.S. further concentrates it into uranium hexafluoride gas.
- The next step uses gas centrifuges to separate uranium atoms into two streams, enriched and depleted. The only commercial facility doing this in the U.S. is UUSA: The National Enrichment Facility, in Eunice, New Mexico.
- The enriched gas is chemically processed into a powdered form of uranium dioxide at fuel fabrication facilities. There are three in the U.S., the Department of Energy says. The facilities compress the powder into small pellets that are fed into nuclear reactors.



Thank You!
energy.utah.gov



**Energy
Development**



The Green River Advanced Nuclear Project

What it is, what's already been done, and what it means for the region

Blue Castle Holdings + **Fulcrum Point Holdings (Hi Tech Solutionsexperience)** + **Holtec International**

Project site: Emery County, near Green River

A head start most projects never get

Initial groundwork is already done, so this project moves toward building from a position most never reach.



ALREADY DONE

- Site studied and de-risked
- Land and access secured
- Years of data in hand



IN PLACE NOW

- Blue Castle, Fulcrum, HTS& Holtec
- Right-sized SMR technology



WHAT'S AHEAD

- Federal licensing
- Construction, built in stages

The hard groundwork is done, and the technology is now right-sized, so the path ahead is shorter, not longer.

What it is, four simple ideas



Built smart, in stages

A compact, standardized design that grows in planned stages.

Like building from a proven blueprint, not a one-off megaproject.



A proven design

A standard, “light” water reactor type used around the world.

Like a proven engine in a new model of car.



Smart about water

Built to cool with air, so it needs very little water.

Like cooling with a fan instead of a pool.



Advanced safety, built in

A proven platform with a next-generation safety shutdown.

It cools itself safely, even with no power. A known design, made safer.



What it means for the region

An Emery County project with benefits across Southeastern Utah



New jobs

Good local careers



Local business

Work for nearby suppliers



County tax base

Revenue for schools and roads



Power day and night

Reliable in every season



Built to last

Runs for decades



Compact site

A small piece of land



The jobs it takes, and the many ways in

It takes many different skills and there's no single pathway in



Welders & machinists



Pipefitters & boilermakers



Electricians & instrument techs



Crane operators & riggers



Reactor operators



Quality & safety inspectors



Security Force

Many ways in

No single path into the industry



High school



Technical College



Apprenticeship



University degree



Military & veterans



Experienced trades

**The nuclear
workforce**

A headstart. In good hands. Regional benefits.



Real and far along

The site is studied and de-risked, with a team ready to build.



Additive, not a replacement

A new piece of Utah's all-of-the-above energy mix.



Local benefit

Jobs, suppliers and tax base across Castle Country.

Emery County site · Southeastern Utah workforce

Who keeps watch, start to finish

Independent oversight at every stage, from the first permit to daily operation.

Siting & licensing



Construction



Operation



Independent federal safety regulator (NRC)

Must approve every step · inspectors on site · can halt the plant at any time



National policy & fuel

U.S. Dept. of Energy



Air, water & radiation

EPA + Utah DEQ



Permits & emergency planning

State of Utah + county

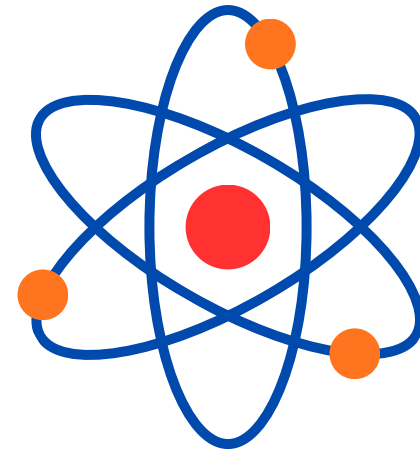


Industry peer review

INPO & WANO

Independent eyes at every stage. The company never signs off on its own safety.

Thank you!



POWERING TOMORROW

A Carbon County Community Series on Nuclear Energy



Workshop #3

Fuel for the Future: What Happens After Power Generation

A straightforward look at how modern nuclear waste is safely handled, stored, and reused in today's systems. Join industry partners that are developing the solutions to spent fuel. Presentations with question / answer format.

July 16, 2026 7:00 pm
Carbon County Events Center
Light refreshments to be served