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FISCAL IMPACT REPORT

ORIGINAL DATE 01/25/12
LAST UPDATED 02/10/12 **HB** _____

SPONSOR Leavell

SHORT TITLE Uranium Hexafluoride Sale Gross Receipts **SB** 23/aSfI#1

ANALYST Hoffmann

APPROPRIATION (dollars in thousands)

Appropriation		Recurring or Nonrecurring	Fund Affected
FY12	FY13		
NFI	NFI		

(Parenthesis () Indicate Expenditure Decreases)

REVENUE (dollars in thousands)

Estimated Revenue Impact					Recurring or Nonrecurring	Fund(s) Affected
FY12	FY13	FY14	FY15	FY16		
	\$0.0	\$0.0	\$0.0	\$0.0	Recurring	General Fund

(Parentheses () indicate a revenue loss)

ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

Estimated Additional Operating Budget Impact				Recurring or Nonrecurring	Fund(s) or Agency Affected
FY12	FY13	FY14	FY12-14		
	***	\$0.0	***	Nonrecurring	TRD Operating

(Parentheses () indicate a cost saving)

***See Administrative Implications

Duplicates House Bill 70

SOURCES OF INFORMATION

LFC Files

Responses Received From

Taxation and Revenue Department (TRD)

SUMMARY

Synopsis of SFI Amendment #1

The Senate Floor amendment #1 to Senate Bill 23 adds two paragraphs regarding accountability for taxpayers taking the gross receipts deduction for selling uranium hexafluoride and providing the service of enriching uranium hexafluoride.

The TRD would be required to report annually to the Revenue Stabilization and Tax Policy committee the aggregate amounts of deductions taken, the number of taxpayers claiming the deduction, and any other information that the deduction is performing a purpose that is beneficial to the state.

A taxpayer deducting gross receipts according to Section 7-9-90 NMSA 1978 would be required to report to the TRD the amount deducted in such a manner that facilitates the evaluation by the Legislature for the benefit accruing to the state as a result of this deduction.

Synopsis of Original Bill

Senate Bill 23 (SB23) proposes to amend Section 7-9-90 NMSA 1978 with a technical correction which changes the name of the product exempt from New Mexico gross receipts tax from “enriched uranium” to “uranium hexafluoride.”

FISCAL IMPLICATIONS

Senate Bill 23 contains no appropriation.

According to the TRD the exemption referred to by SB23 in this proposed amendment to the *Gross Receipts and Compensating Tax Act* is already in place and represents no potential loss of revenue to the state.

A letter from URENCO, the company that produces uranium hexafluoride in Lea County, is attached certifying that they have never paid gross receipts taxes.

ADMINISTRATIVE IMPLICATIONS

The TRD forecasts minimal impact to their operations. They would need to modify some forms and instructions. Audit procedures would need to be developed and the impact increases because the effective date of the change is in the middle of a report period. If the change was effective Jan 1, or July 1, then no cost would be associated with the bill.

CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP

This is a duplicate of House Bill 70.

POSSIBLE QUESTIONS

Does the bill meet the Legislative Finance Committee tax policy principles?

1. **Adequacy:** Revenue should be adequate to fund needed government services.
2. **Efficiency:** Tax base should be as broad as possible and avoid excess reliance on one tax.
3. **Equity:** Different taxpayers should be treated fairly.
4. **Simplicity:** Collection should be simple and easily understood.
5. **Accountability:** Preferences should be easy to monitor and evaluate

CH/amm:svb

January 17, 2012

Laird Graeser
Tax Policy Officer
New Mexico Taxation and Revenue Department
PO Box 630
Santa Fe, NM 87504-0630

Dear Mr. Graeser:

Louisiana Energy Services, LLC, (LES), is the owner and operator of the URENCO, USA uranium enrichment plant in Lea County, New Mexico. This correspondence is in reference to the financial impact assessment of proposed Senate Bill 23 of the 50th Legislature, State of New Mexico second session 2012.

Neither LES nor its parent company URENCO purchases or sells the uranium hexafluoride being enriched at its plant. No gross receipts tax has been paid by or assessed against either of them. Further, LES is not aware of any payment by or assessment against any customer of LES, nor anyone selling to them in connection with any sales of uranium hexafluoride in New Mexico. We are confident that had such a payment or assessment been made we would have been notified since it would have been unexpected, and our customers would contend we should reimburse them for any such tax.

Please let me know if you have any questions.

Sincerely,

A handwritten signature in blue ink, which appears to read "Gregory OD Smith".

Gregory OD Smith
Chief Executive Officer

GODS-2012-004
CW

LES

LES

enriching the future

URENCO USA

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Foreword

“LES and URENCO USA are poised to meet energy demand with carbon free, sustainable energy.”



Here at LES, we're excited about building and operating the URENCO USA facility – the first of its kind in North America. With energy demands on the rise, LES and URENCO USA are poised to meet energy demand with carbon free, sustainable energy. We'll provide approximately 25 percent of the current U.S. demand for enrichment services using the world's most advanced, energy-efficient and cost effective uranium enrichment technology.

Safety, Integrity, Flexibility, Development and Profitability are our core values and are linked to everything we do. We value all stakeholders and hold firm to our promise to be an outstanding

corporate citizen. Because of this commitment, LES and URENCO USA continue to receive strong support from local residents, state and federal officials.

By building and operating URENCO USA, LES is working to ensure that the United States has access to a safe, efficient, clean and reliable source of energy. As we look to the future, URENCO USA will play an important role in providing energy for America.

Gregory OD Smith
President, Chief Executive Officer

Our mission & values

“Enriching the future” is our commitment, through the global deployment of our nuclear products, services and technology to support sustainable nuclear energy.

URENCO values are at the core of every action the company takes. Our first value is safety, and the commitment to safety is embodied in everything we do. Everywhere we can scrutinize, refine and increase safety, operationally, environmentally or socially, we are committed to doing it. URENCO USA understands the critical contribution to safety that its employees can make, and so workers are regularly consulted for input to improving or maintaining our safety position.

URENCO USA continually maintains and improves the quality and effectiveness of its health, safety and environmental management system. Before any new activity, product or service is introduced it will have undergone a rigorous assessment of its health, safety and environmental impact. The same scrutiny is regularly applied to our existing activities, products and services. Wherever such activity occurs, strict controls are in place to ensure that they are adequately resourced and undertaken by competent people.

We also seek to select suppliers who are committed to a similarly high standard of health, safety and environmental control. We are committed to encouraging their use of materials, and minimizing both the volume of waste produced and our use of natural resources such as water.

“URENCO values are at the core of every action the company takes. Our first value is safety, and the commitment to safety is embodied in everything we do.”



SAFETY
We operate to the highest standards of safety, environmental and security requirements.



INTEGRITY
We conduct all our relationships with honesty, fairness and respect.



FLEXIBILITY
We are responsive to the market to best meet our customers' needs through the flexible deployment of our skills.



DEVELOPMENT
We are committed to the sustainable growth of our business through the continuous development of our employees, services and products.



PROFITABILITY
We are committed to making profits to secure our future and reward our shareholders and employees.

About URENCO USA

LES is building and operating the URENCO USA facility, enriching the future of the United States of America.

LES is a subsidiary of URENCO, an independent international energy and technology group. URENCO USA operates in the pivotal area of the nuclear fuel supply chain which ends with the sustainable generation of electricity for U.S. consumers. The supply chain itself can be subdivided into four key processes: mining; conversion; enrichment; and fabrication.

Using industry-leading centrifugal technology, and with an earned market share of around 25 percent, URENCO is firmly positioned in the enrichment stage, one of the highest added value segments of the supply chain.

Operational Profile

LES is building and operating the URENCO USA facility focusing on enrichment of uranium. URENCO operates plants in the United Kingdom, the Netherlands and Germany. The company has more than forty years of expertise in centrifuge enrichment technology and holds the leading technology for uranium enrichment.

URENCO's focus is on providing safe, cost effective and reliable uranium enrichment services for civil power generation within a framework of environmental, social and corporate responsibility.

“LES’ focus is on providing safe, cost effective and reliable uranium enrichment services for civil power generation within a framework of environmental, social and corporate responsibility.”

URENCO USA Part of a Global Company



Our strategy

Enriching the future

With increasing demand for energy in the United States, LES was formed to provide a safe, reliable and domestic supply of enriched uranium through its URENCO USA facility. Using the world's most advanced centrifuge technology, URENCO USA plays a pivotal role in helping to meet demand for energy not only today, but into the future.

Our strategy reflects our desire to be the leader of enrichment services in the United States. Our approach is designed to ensure the quality of our services continues to improve, and that we offer the most committed reliable and flexible service to our customers. To accomplish this, URENCO brought together a diverse and experienced team to both build and operate URENCO USA. This team of dedicated professionals will continue to build positive relationships with both our utility customers and the community in which we operate.

“URENCO brought together a diverse and experienced team to both build and operate URENCO USA.”

Safety

How is “Safety” Defined for URENCO USA?

- **Nuclear Safety** – We build and will operate in accordance with our design, procedures and processes, and we procure and build to the highest quality.
- **Occupational Safety** – We prevent accidents through work systems which are aimed at minimizing the risk of injury.
- **Construction Safety** – We establish a safe work environment, identify and control work hazards and provide training with oversight.
- **Personal Safety** – We issue Personal Protective Equipment, train our workforce on safe practices with formal emergency planning and evacuation capabilities.
- **Information Safety** – We identify, track and control classified information to prevent unauthorized use.
- **Environmental Safety** – We control hazardous materials and minimize disturbance to the environment.

The nuclear fuel supply chain

Uranium is the raw material for nuclear power, and thus an important source of energy. Before it can be used for electricity generation in a nuclear power plant, it must undergo several processing steps.

1 Mining

Uranium ore is extracted from the ground and milled to become uranium oxide. This solid is then transported to specialist converters for the next stage of the cycle.

2 Conversion

The uranium oxide powder is mixed with chemicals which form a compound called Uranium Hexafluoride (UF₆), a gas at higher temperatures.

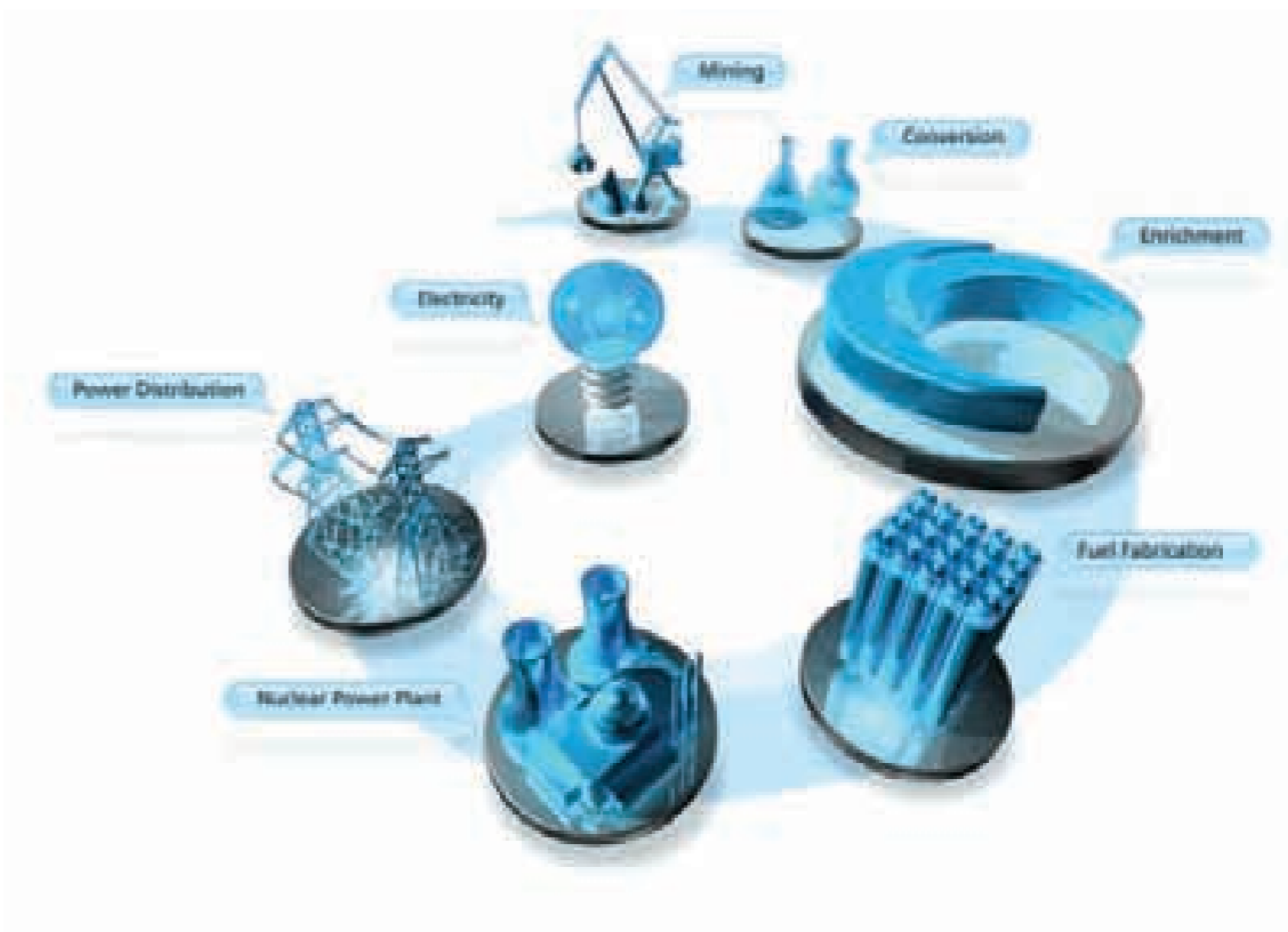
3 Enrichment

The UF₆ is then fed into the uranium enrichment plant at sub-atmospheric pressure. The enrichment process concentrates the fissile uranium to a level that will sustain a reaction in a nuclear power plant.

4 Fabrication

Once the uranium has been enriched, it is transported to fuel fabricators for conversion into pellets which are loaded into fuel rods. These are moved to nuclear fuel plants and inserted into the reactor to generate electricity.

These steps make up the 'front end' of the nuclear fuel cycle. After uranium has been used in a reactor to produce electricity, it is known as 'spent fuel' and may undergo a further series of steps including temporary storage, reprocessing and recycling before eventual disposal as waste. Collectively, these steps are known as the 'back end' of the fuel cycle.



What we do

URENCO USA is a domestic provider of value added services and technology to the nuclear generation industry worldwide. The enrichment services that we supply to nuclear power utilities are used to produce a safe, efficient, clean and reliable source of electricity.

World-leading centrifuge technology

At URENCO USA, we will use world-leading centrifuge technology that is the result of over 40 years of continuous development by our parent company URENCO. The ongoing development of our technologies and services is a cornerstone of URENCO's strategy to globally establish its technology as the predominant technology for uranium enrichment.

URENCO has developed world leading technology for the provision of uranium enrichment. The gas centrifuge process is employed in all URENCO's operational plants providing uranium enrichment services to customers worldwide.



Why does uranium need to be enriched?

Uranium, in its natural state, contains only 0.7 percent of the isotope uranium-235 (U235), which by fission in a nuclear reactor releases the thermal energy necessary for electricity generation. The balance of the uranium comprises the isotope uranium-238 (U238), which is not fissionable in a thermal reactor.

At naturally occurring levels uranium does not contain enough U235 to use in nuclear power stations with light water reactors or advanced gas-cooled reactors. The concentration of the U235 isotope in the fuel has to be increased, usually into a concentration of between 3 percent and 5 percent. The process for achieving this is known as uranium enrichment.

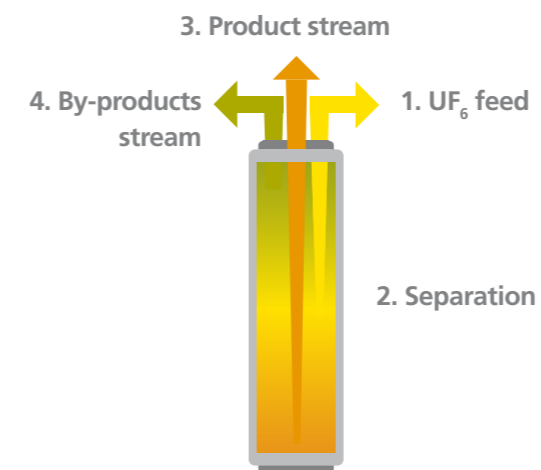
Uranium enrichment

Our gas centrifuge technology is the leading technology for uranium enrichment available today, having consistently proved over time to be more reliable, efficient and safe than alternative technologies.

How centrifuges work

A centrifuge comprises an evacuated casing containing a cylindrical rotor, which rotates at high speed in an almost frictionless environment. The uranium is fed into the rotor in the form of gaseous uranium hexafluoride (UF₆), where it takes up the rotational motion.

As the centrifuge spins, the centrifugal forces push the heavier U238 closer to the wall of the rotor. As the process continues, the gas closer to the wall becomes depleted in U235, while the gas nearer to the rotor axis conversely becomes enriched in U235.



Cascades

In practice, the enrichment level achieved by a single centrifuge is not sufficient to achieve the desired concentration of about 3-5 percent U235. To achieve these levels of enrichment, a number of centrifuges are connected in series. To increase the throughput of material, centrifuges are also operated in parallel. The arrangement of centrifuges connected in parallel and in series is known as a 'cascade'.

Within the separation halls of an enrichment plant several cascades are operated in parallel.

One of the compelling advantages of the centrifuge method of enrichment is that plant capacity can be expanded on a modular basis. Additional capacity can therefore be implemented relatively quickly as the market demands, delivering compelling economic advantages. It also allows the most advanced technology to be implemented in each new increment of capacity.

Another persuasive benefit of the centrifuge process is its low energy consumption. The bearings inside the centrifuges are almost friction-free, so the energy used by the most recent centrifuges is only about 50kWh of electricity for the production of 1kgSW (separative work) – less than 2 percent of the electricity used by some of its competitors.

What is separative work?

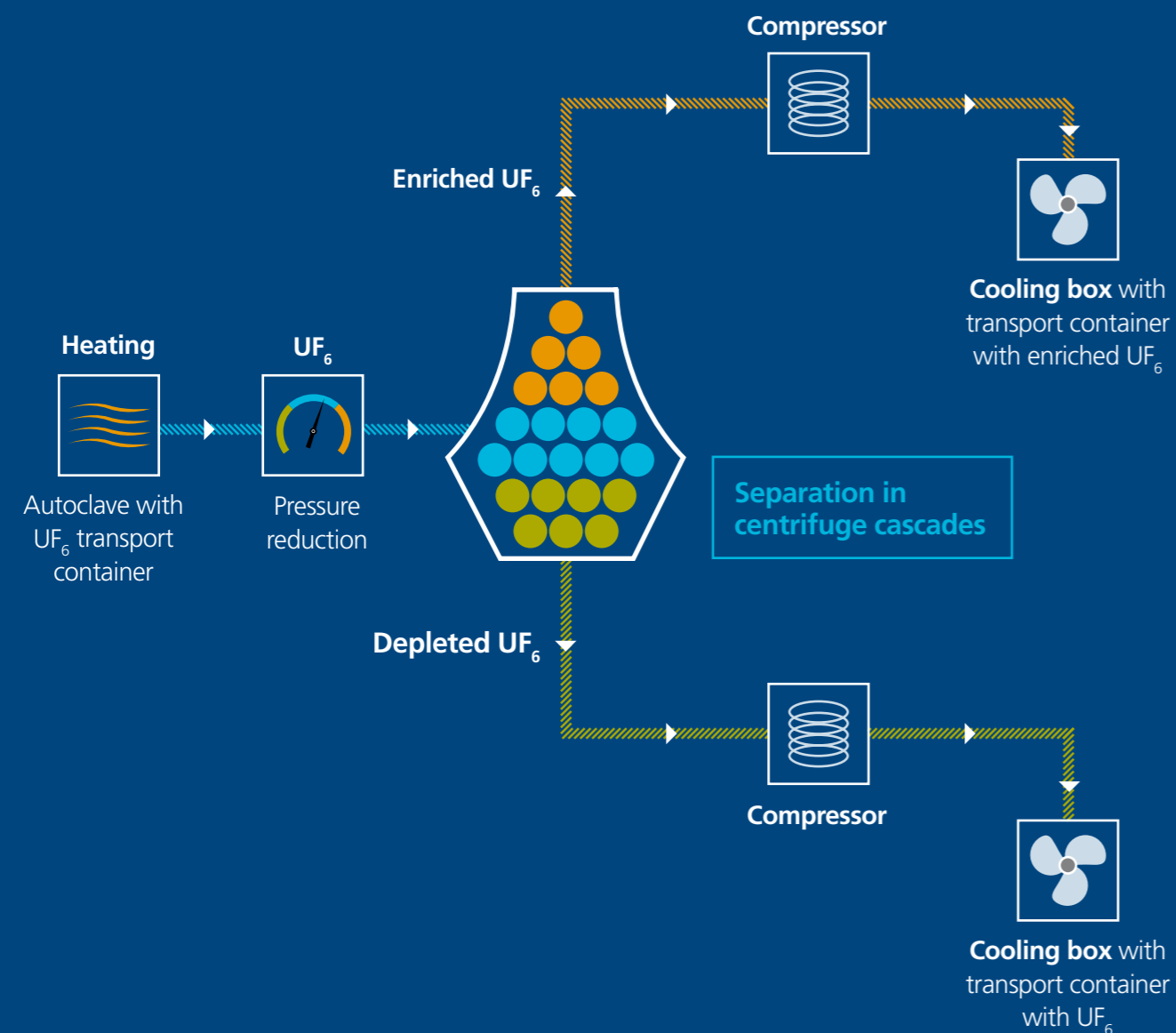
The unit used to express the effort necessary to separate U235 and U238 is the separative work unit (SWU or kgSW). A larger unit, a ton of separative work (1tSW = 1000kgSW), is also used. The capacity of enrichment plants is measured in tons SW per year (tSW/a). A large nuclear power station with a net electrical capacity of 1000MW annually requires about 25 tons of enriched uranium with a concentration of about 3.5 percent U235. The production of this enriched uranium from natural uranium requires about 120tSW. Thus an enrichment plant with a capacity of 1000tSW/a is able to enrich the uranium needed annually for the re-fuelling of about eight large nuclear power stations.

The process of uranium enrichment

Cascade halls

The cascade halls are the core of the plant, containing multiple centrifuges connected into cascades. Each cascade hall houses a number of cascades connected in parallel. In some earlier plants the centrifuges are contained in blocks, which are themselves connected into cascades. In later implementations, the centrifuges are free-standing.

Alongside the cascades are cabinets housing the electricity supply equipment required to drive the motors of the centrifuges. The gaseous UF₆, in the pipework system and the cascades is at sub-atmospheric pressure, which means that, in the event of any puncture in the system, external air would be drawn in and there would be no escape of UF₆.



Product and depleted uranium take-off

After the UF₆ has passed through the cascades, the enriched UF₆ (known as 'product') and the depleted UF₆ (known as by-products' or 'tails') pass through compressors located in service corridors and into the take-off area.

The product gas is collected in 30-inch diameter product containers, each holding about 2.2 tons of UF₆. These are cooled and the gaseous UF₆ solidifies on the cold walls of the container. The weight of each container is monitored continuously. When each is full, the flow is diverted to an empty container.

Samples are taken for quality control and to check the level of enrichment (known as the 'assay') before the product is delivered to the customer. Uranium is normally enriched to exactly the assay required by the customer. However, if assay adjustment is required, two containers with UF₆, at different enrichment levels, can be heated and their contents transferred and blended until the precise assay required is attained.

Depleted uranium gas is collected in 48-inch diameter containers, each holding about 12.5 tons of UF₆. These are air cooled, and their weights are monitored. When each is full the flow is diverted to another empty container and the filled container is removed.

Liquid sampling

Before sampling, the UF₆ in the product container is homogenized within a container which has been filled in separate layers, to ensure that small fluctuations in the enrichment assay are removed.

The UF₆ is liquified by heating the container for several hours in an autoclave. The autoclave and the container in it are then tilted, and a small quantity of UF₆ is extracted into sample bottles attached to the container. Once the container has sufficiently cooled down and the UF₆ has solidified again, the autoclave is opened for the removal of the container and the sample bottles.

Weighing and materials accounting

Both empty and full transport containers are weighed prior to being brought into the container hall, the product transfer station or other storage areas. The scales used are extremely accurate, being able to indicate differences as small as 100g even with loads of up to 16 tons. Precise weights of incoming feed and outgoing product are required for commercial accounting for customers.

Product and storage area

The filled containers of enriched UF₆ are kept secure awaiting delivery to customers. Deliveries to customers are made only in 30-inch containers which are transported in a licensed protective casing, known as an 'overpack'. Both the container and the overpack meet international standards.

Depleted uranium storage

Depleted uranium material is stored in 48-inch containers on a well-drained concrete pad in the open air, pending possible re-feeding to extract more U235 if feasible, or disposal to waste storage, if appropriate. The containers are routinely inspected for any damage or corrosion.

URENCO USA and the environment

We believe that nuclear power is a vital part of a future energy mix that will deliver a sustainable global energy supply. With global energy demands set to continue rising, nuclear energy is now widely recognized as a vital part of the solution to the world's key sustainable energy challenge, providing safe, secure and reliable energy in the vast quantities required.

At URENCO USA, we are committed to ensuring that our business operations are truly sustainable. We appreciate, monitor and mitigate the impact our operations have on the outside world, from economic, social and environmental perspectives. Our responsibilities encompass a wide ranging group of stakeholders, from the local communities in which we operate, to the well-being and environmental security of the planet.

In fact, URENCO USA will operate with minimal effect on the external environment. Our enrichment technology is the most efficient technology commercially available. We continually endeavour to reduce our impact on the health and safety of our employees, contractors, members of the public and on the environment.

We comply with and often exceed all relevant legislation on health, safety and the environment. Our site adheres to all applicable licenses, authorizations and consents in relation to relevant standards and guidelines.



Doing business the right way

We believe in doing business with fairness, respect and honesty. We have built strong relationships with our industry stakeholders, including both suppliers and customers.

URENCO USA will be a profitable and reliable business, built on the foundation of our proven and reliable technology. At the same time we are a flexible and responsive organization ready to meet the needs of our customers.

The importance of URENCO USA's Vision, Mission and Values has been formally shared with our suppliers in order that they understand how we do business. Our position as a reliable and flexible business partner, known for its integrity, is reflected by the continued rise in our market share and strong forward order book.

URENCO USA's commitment

URENCO USA is committed to its customers. But deep commitment extends to partnering with local communities. URENCO USA and its employees support a wide variety of activities and organizations on not only at the local level, but the state and national level as well. URENCO USA is vitally concerned with corporate citizenship, the environment and education.

URENCO USA is committed to its customers. But deep commitment extends to partnering with local communities. We support a wide variety of activities and organizations, not only at the local level, but the state and national level as well. URENCO USA is vitally concerned with corporate citizenship, the environment and the local economy. This is our home.

Scholarship programs have been established at New Mexico Junior College and University of the Southwest, two local colleges within Lea County. Scholarships may be applied towards tuition, books and fees.

The Eunice Community Foundation was established by URENCO USA in December 2005. The foundation supports education and community improvements benefiting the residents of Eunice. Grants to the City of Eunice have been used for the construction of a new community swimming pool and to extensive remodel both the Girl Scouts and Boy Scouts buildings.

URENCO USA and its employees take special pride in helping the elderly and underprivileged in our community. Employees have given freely of their time and talent to renovate homes to make them safe and accessible for those less able to help themselves. URENCO USA has donated time, money and materials for many such projects.

URENCO USA is sponsor for the "Uranium Cycle" exhibit, one of the 13 new exhibits at the National Museum of Nuclear Science and History in Albuquerque. The exhibit explains the front end of the nuclear fuel cycle. This local presence will ultimately enable us to continually improve our service and ensure we can offer the most committed reliable and flexible service to our customers.

The Community Partnership Committee (CPC) was formed in March of 2007 to further our goal of being a good community partner to Lea County and the surrounding area. The CPC consists of 28 community leaders from throughout the region, including Jal, New Mexico and Andrews, Texas. The committee meets bi-monthly with members of the URENCO USA senior management staff regarding the status of URENCO USA and to answer any questions or concerns CPC members may have.

