

# Pacific Fusion in New Mexico

Legislative Committee Overview

Fall 2025



# Fusion has been the holy grail of energy for 70+ years.



Affordable, firm power



Inexpensive, limitless fuel



No long-lived radioactive waste



# Three breakthroughs in 2022 changed everything:

1

First-ever controlled fusion ignition via lasers

2

Far more efficient path to ignition via electric pulsers

3

Mass-manufacturable, modular electric pulsers



# Pacific Fusion raised a \$900M+ Series A to build on these breakthroughs.

- Round led by General Catalyst, with many top investors participating.
- Team is now >140 staff, including many world experts.
- Mission: Power the world with abundant, affordable clean energy

## OUR INVESTMENT IN PACIFIC

Expanding What's Possible with a \$900M+ Series A





#### We are excited to be in New Mexico

- We admire New Mexico's commitment to clean and renewable energy.
- We would build on New Mexico's historic achievements in advancing groundbreaking energy innovation, including around fusion.
- Our work is based on breakthroughs from the Z Machine at Sandia National Labs; we are proud collaborators with the lab.
- Future workforce needs are well aligned to Albuquerque and the region.





# What this project will bring to New Mexico:



~ \$1 billion investment



200 permanent jobs + hundreds more jobs to the region



Ideal fit with the momentum at Mesa del Sol



Builds on New Mexico's proud history of fusion innovation



Education/STEM partnerships



# Focus on hiring and workforce development



#### We are making immediate hires

- · 200 full-time roles on site once operational
- Hundreds of construction jobs
- First roles advertised:<a href="https://www.pacificfusion.com/careers">https://www.pacificfusion.com/careers</a>



## We will invest in workforce training and development

Meeting with UNM, CNM, local school districts, and Department of Workforce Solutions

10P STORY

#### Pacific Fusion to invest in build center in Los Lunas

By Clara Garcia | News-Bulletin Editor Oct 16, 2025 Updated 5 hrs ago





LOS LUNAS—Weeks after announcing it had selected New Mexico — Albuquerque's Mesa del Sol — to build its \$1 billion facility, Pacific Fusion announced Monday it has selected Valencia County to begin its endeavor.









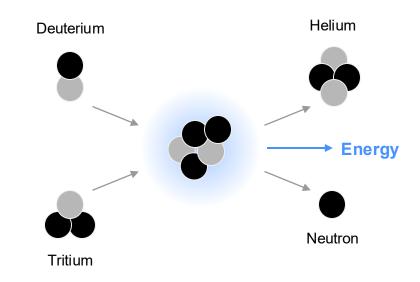


#### How does fusion work?

- Light atoms in our case,
   Deuterium and Tritium are
   confined under high temperature
   and pressure.
- · They fuse and release energy.

# Why has it taken us 50 years to figure out how to burn fusion fuel?

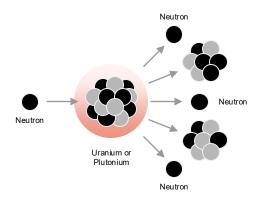
- The conditions required for fusion are challenging to achieve - like the inside of stars.
- Any disruption halts the reaction.



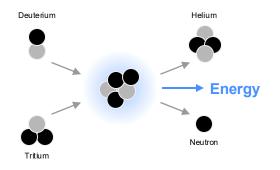


#### Fusion ≠ Nuclear Fission

#### Fission



#### **Fusion**



ADVANCE Act (Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy Act of 2024)



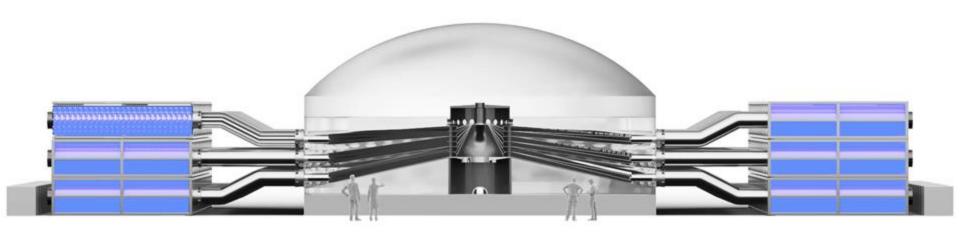
No risk of meltdown.

No long-lived waste.

No fissile material.

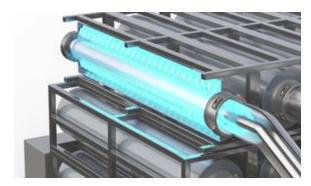
As a result: Much simpler regulatory environment due to passing of the Advance Act in 2024.

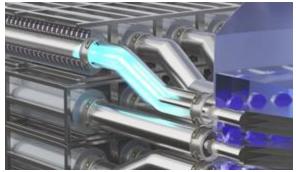
## Step 1: Charge and prepare chamber

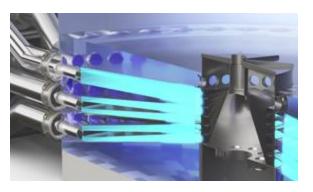


Pulser is charged while the chamber is prepared and target/electrodes are inserted.

## Step 2: Discharge

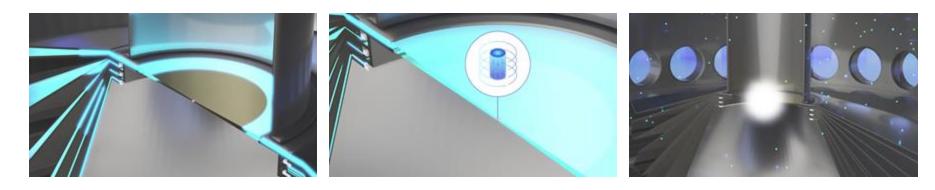






Electrical current flows inward on transmission lines.

## Step 3: Drive fusion and harness the output



Electrical current drives high-gain fusion. Output is captured to generate electricity.



# We've selected Mesa del Sol as the home of our Demonstration System.



It is <u>not</u> a power plant. It will not have noise or vibrational impacts on the community.



## The facility will have minimal impact on the environment.



#### Not a drain on local water supply

Our facility will not place unusual demand on the community's water supply – less than other commercial buildings of a similar size.



#### Limited electricity use

Facility requires ~3.3 megawatts from Public Service Company of New Mexico (PNM).

### Safety is our top priority.



## Our Demonstration System is designed for safety.

We've partnered with third-party experts to define our life safety systems and regulatory framework.



# Any use of radioactive materials is regulated by the State of New Mexico.

The New Mexico Environment
Department (NMED) Radiation Control
Bureau regulates all radioactive
materials to ensure safe operations.

NMED will oversee all waste disposal protocols to protect communities and the environment. A waste management plan will be made publicly available.



# Universities and hospitals safely use radioactive materials for research and treatments.

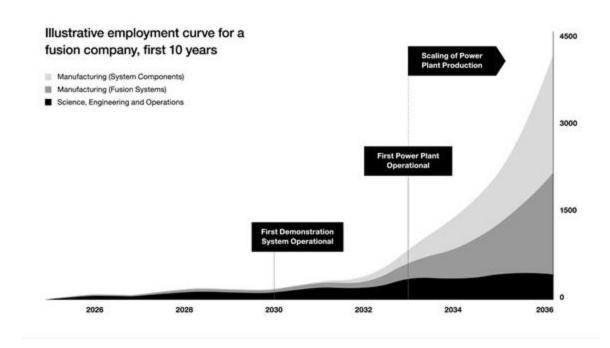
Major medical centers routinely employ high-activity gamma emitters to destroy cancer cells.

Universities use radioisotopes in devices such as tritium-filled neutron generators for materials testing and bacterial sterilization studies.

## Anchoring a global fusion industry in New Mexico

The location of a first fusion facility will shape where future plants, supply chains and manufacturing clusters take hold.

This is a defining moment for New Mexico to become an epicenter for fusion, anchoring thousands of high-wage jobs, manufacturing growth and lasting leadership.





### What policy changes are needed to make this a reality?

#### **Advanced Energy Equipment Tax Credit**

- Current: 20% credit, \$25M cap, tied to federal 45X list
- Gap: Fusion equipment excluded
- Ask: List eligible equipment directly in NM statute; add fusion

#### **C-PACE** Financing

- Current: C-PACE financing via property tax assessment;
   IRB-leased property excluded from eligibility
- Gap: CPACE financing for an IRB project is not possible
- Ask: Join other states that have clarified that private property financed through an IRB is eligible for CPACE funding; align with CO, VA, GA, TX, KY

#### **R&D Tax Credit**

- Current: 5–10% credit, enhanced credit capped at 50 employees / \$5M; not transferable or stackable with IRBs
- Gap: Larger R&D opportunities are excluded
   Ask: Remove caps; make transferable/stackable; consider making tax credit refundable

#### Technology & Innovation Office (TIO)

- Current: Supports clean tech, advanced industries; limited funding
  - Gap: Too small to support fusion and other industries with high capital needs
- Ask: Recapitalize TIO at level that meets demands needed to scale; further resource RD&D with additional appropriations



# We look forward to keeping an open line of communication

Community engagement and transparency are very important to us. We've had the privilege of meeting with people across New Mexico, from Tribal governments and local organizations to businesses, schools, and residents, and we look forward to meeting with more communities in the months ahead.

We'd love to hear from you and welcome your thoughts, questions and feedback!

Please reach out to our Community Engagement team if you'd like to speak with us or join our mailing list: <a href="mailto:alex.doniach@pacificfusion.com">alex.doniach@pacificfusion.com</a>.















