POWERING TOMORROW

A Carbon County Community Series on Nuclear Energy

Workshop #1

Nuclear Now: Understanding Today's Technology

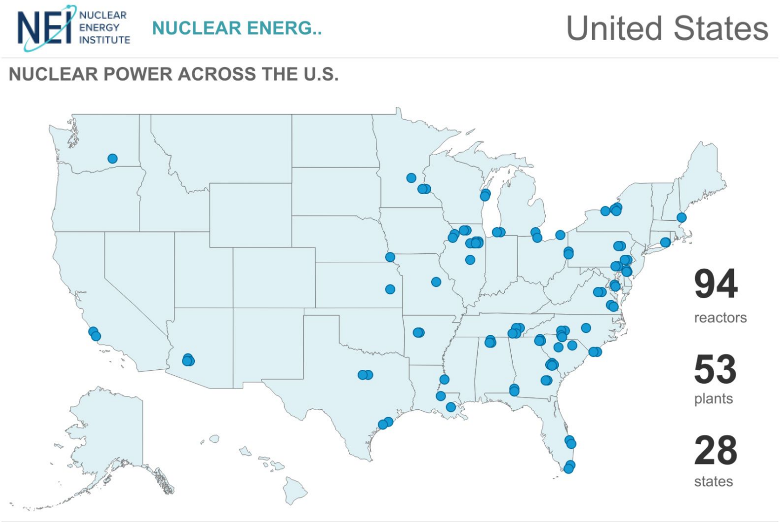
A clear, confidence-building look at today's safer, smaller nuclear technology and how modern SMRs work. Join Idaho National Lab and other nuclear experts to discuss the modern technology. Presentations with question / answer format.

May 21, 2026 7:00 pm
Carbon County Events Center
Light refreshments to be served

SPONSORED BY:

Carbon County Utah
Utah Office of Energy Development
SERDA Southeastern Regional Development Agency
Envoy Public Labs

What does “Current Generation Nuclear” mean?



What does “Advanced Nuclear” mean?

One Hundred Fifteenth Congress
of the
United States of America

AT THE SECOND SESSION

Begun and held at the City of Washington on Wednesday, the third day of January, two thousand and eighteen

An Act

To modernize the regulation of nuclear energy.

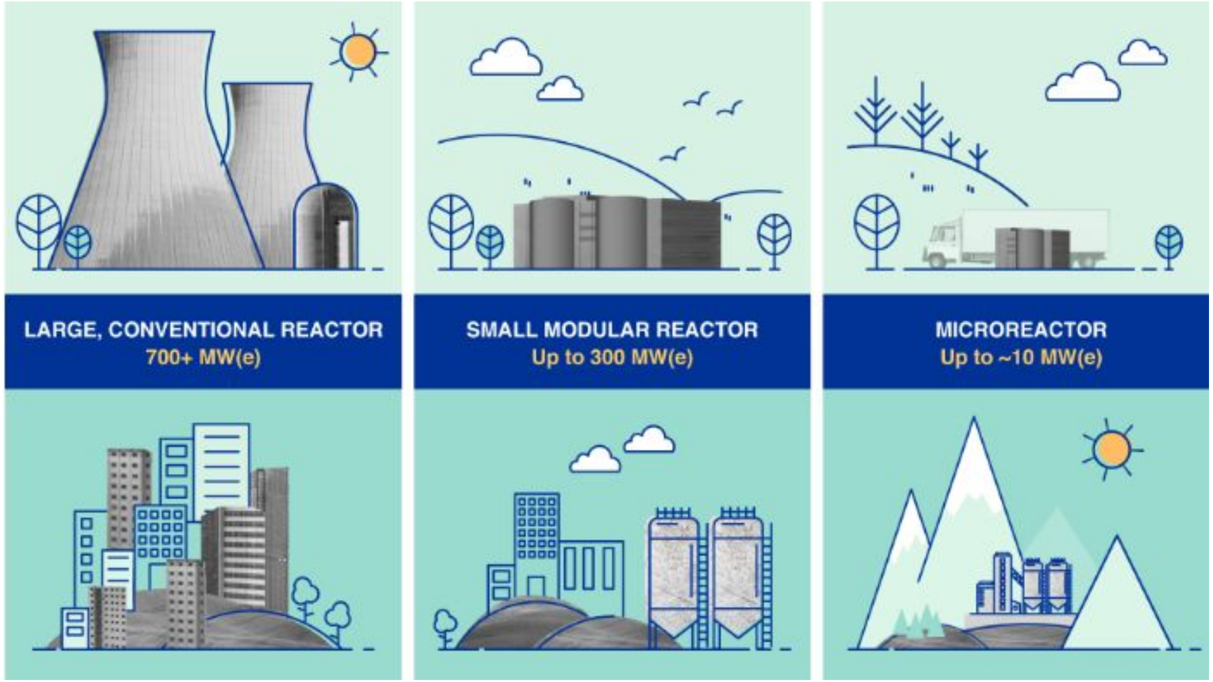
Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

In this Act:

(1) ADVANCED NUCLEAR REACTOR.—The term “advanced nuclear reactor” means a nuclear fission or fusion reactor, including a prototype plant (as defined in sections 50.2 and 52.1 of title 10, Code of Federal Regulations (as in effect on

the date of enactment of this Act)), with significant improvements compared to commercial nuclear reactors under construction as of the date of enactment of this Act, including improvements such as—

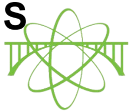
(A) additional inherent safety features;
(B) significantly lower levelized cost of electricity;
(C) lower waste yields;
(D) greater fuel utilization;
(E) enhanced reliability;
(F) increased proliferation resistance;
(G) increased thermal efficiency; or
(H) ability to integrate into electric and nonelectric applications.


LARGE, CONVENTIONAL REACTOR
700+ MW(e)
SMALL MODULAR REACTOR
Up to 300 MW(e)
MICROREACTOR
Up to ~10 MW(e)

Advanced Nuclear Versatility

SPECTRUM OF SIZES AND OPTIONS

Mini
(10s of MW)



Small
(100s of MW)

Large
(1,000+ MW)

Small Town: 1 Megawatt
Mid-size City: 1 Gigawatt
The U.S.: 1,000 Gigawatts

VARIETY OF OUTPUTS

Electricity

Hydrogen

Process Heat

MULTITUDE OF END USES

Homes

Vehicles

Businesses

Aviation

Rail

Shipping

Concrete

Steel

Factories

Desalinization

Space

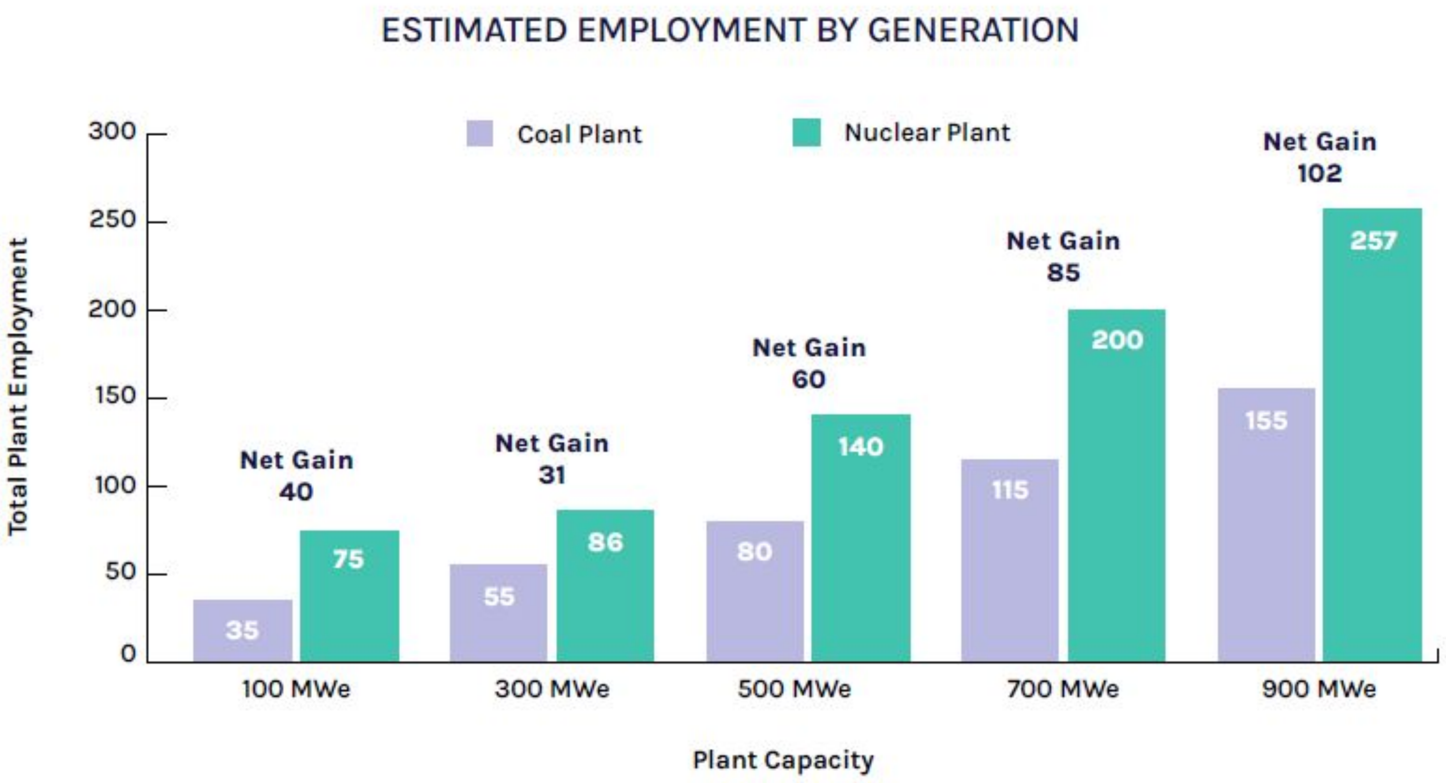


Figure 6: Number of jobs to support operations at typical coal plant and typical nuclear plant of comparable generation size

BASED ON 500 MWe PLANT	Occupation Code	Occupation Title	Coal Jobs	Nuclear Jobs	Jobs Gained or Lost
Management, Business, and Financial Operations Occupations	11-1021	General and operations managers	1	1	0
	11-3010	Administrative services and facilities managers	1	0	-1
	11-3051	Industrial production managers	1	2	+1
	11-9041	Architectural and engineering managers	1	3	+2
	13-1020	Buyers and purchasing agents	1	1	0
	13-1111	Management analysts	1	1	0
	13-1151	Training and development specialists	0	4	+4
	13-1198	Project management specialists and business operations specialists, all other	1	0	-1
	13-2011	Accountants and auditors	1	0	-1
	13-2098	Financial and investment analysts, financial risk specialists, and financial specialists, all other	1	0	-1
Computer and Mathematical Occupations	15-1211	Computer systems analysts	1	0	-1
Engineering Occupations	17-2071	Electrical engineers	4	4	0
	17-2112	Industrial engineers	0	2	+2
	17-2161	Nuclear engineers	0	20	+20
	17-3023	Electrical and electronic engineering technologists and technicians	1	1	0
Life and Physical Science Occupations	19-2031	Chemists	0	1	+1
	19-4031	Chemical technicians	0	1	+1
	19-4051	Nuclear technicians	0	14	+14
Technical and Protective Service Occupations	29-9011	Occupational health and safety specialists	0	1	+1
	33-1099	First-line supervisors of protective service workers, all other	0	2	+2
	33-9032	Security guards	0	14	+14

BASED ON 500 MWe PLANT	Occupation Code	Occupation Title	Coal Jobs	Nuclear Jobs	Jobs Gained or Lost
Office and Administrative Support Occupations	43-1011	First-line supervisors of office and administrative support workers	1	0	-1
	43-4051	Customer service representatives	3	0	-3
	43-5061	Production, planning, and expediting clerks	1	1	0
	43-6011	Executive secretaries and executive administrative assistants	0	1	+1
	43-6014	Secretaries and administrative assistants, except legal, medical, and executive	1	1	0
	43-9061	Office clerks, general	1	1	0
Construction and Extraction, and Installation, Maintenance, and Repair Occupations	47-2073	Operating engineers and other construction equipment operators	1	0	-1
	47-2111	Electricians	2	3	+1
	49-1011	First-line supervisors of mechanics, installers, and repairers	2	4	+2
	49-2095	Electrical and electronics repairers, powerhouse, substation, and relay	4	4	0
	49-9012	Control and valve installers and repairers, except mechanical door	2	0	-2
	49-9041	Industrial machinery mechanics	2	4	+2
	49-9051	Electrical power-line installers and repairers	5	1	-4
	49-9071	Maintenance and repair workers, general	1	1	0
Production Occupations	51-1011	First-line supervisors of production and operating workers	3	7	+4
	51-8011	Nuclear power reactor operators	0	14	+14
	51-4121	Welders, cutters, solderers, and brazers	1	0	-1
	51-8012	Power distributors and dispatchers	2	0	-2
	51-8013	Power plant operators	14	2	-12
	51-8031	Water and wastewater treatment plant and system operators	1	0	-1
		Total	62	116	+54

Figure 7. A sample of occupations and how they change during a coal-to-nuclear transition, based on a 500 MWe plant

Occupation Code	Occupation Title	Jobs Gained
17-2161	Nuclear engineers	20
33-9032	Security guards	14
51-8011	Nuclear power reactor operators	14
19-4051	Nuclear technicians	14
51-1011	First-line supervisors of production and operating workers	7
49-2095	Electrical and electronics repairers, powerhouse, substation, and relay	4
49-1011	First-line supervisors of mechanics, installers, and repairers	4
49-9041	Industrial machinery mechanics	4
13-1151	Training and development specialists	4
17-2071	Electrical engineers	4

Figure 8. Estimated 500 MWe nuclear power plant staffing patterns

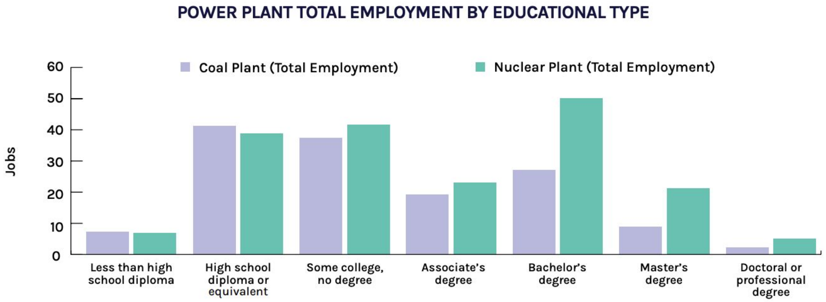


Figure 9. Total jobs by educational requirement across all coal and nuclear plant jobs in the United States for 500 MWe power plants

LOCAL INCOME GAINS BASED ON POPULATION SIZE AND POWER PLANT CAPACITY

	Population Range	< 20,000	20,000-39,999	40,000-89,999	90,000-199,999	200,000+
100 MWe	Income with Coal Plant	$6.0 M	$6.5 M	$6.9 M	$6.8 M	$8.4 M
	Income with Nuclear Plant	$14.6 M	$15.5 M	$16.2 M	$16.4 M	$20.0 M
	Added Income	$8.6 M	$9.0 M	$9.3 M	$9.6 M	$11.6 M
300 MWe	Income with Coal Plant	$10.9 M	$12.0 M	$12.8 M	$13.0 M	$17.1 M
	Income with Nuclear Plant	$22.4 M	$24.9 M	$26.8 M	$27.3 M	$36.5 M
	Added Income	$11.5 M	$12.9 M	$14.0 M	$14.3 M	$19.4 M
500 MWe	Income with Coal Plant	$16.4 M	$18.3 M	$20.3 M	$20.0 M	$26.7 M
	Income with Nuclear Plant	$32.8 M	$36.9 M	$40.0 M	$40.9 M	$55.9 M
	Added Income	$16.4 M	$18.6 M	$19.7 M	$20.9 M	$29.2 M
700 MWe	Income with Coal Plant	$23.5 M	$26.1 M	$28.9 M	$28.4 M	$37.9 M
	Income with Nuclear Plant	$46.6 M	$52.4 M	$56.7 M	$58.0 M	$79.1 M
	Added Income	$23.1 M	$26.3 M	$27.8 M	$29.6 M	$41.2 M
900 MWe	Income with Coal Plant	$31.2 M	$34.6 M	$38.2 M	$37.6 M	$49.9 M
	Income with Nuclear Plant	$60.5 M	$67.8 M	$73.5 M	$75.0 M	$102.2 M
	Added Income	$29.3 M	$33.2 M	$35.3 M	$37.4 M	$52.3 M

Figure 4: Income

* Income generated during the construction phase is not included in the calculations. The data includes income generated by jobs at the plant and associated activities.

** Calculation of these values may be affected by rounding.

Questions?

Submit questions by going to slido.com and using the code: #nuclear

Or scan the QR code.

Thank you!

POWERING TOMORROW

A Carbon County Community Series on Nuclear Energy

Workshop #2

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
Light refreshments to be served

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