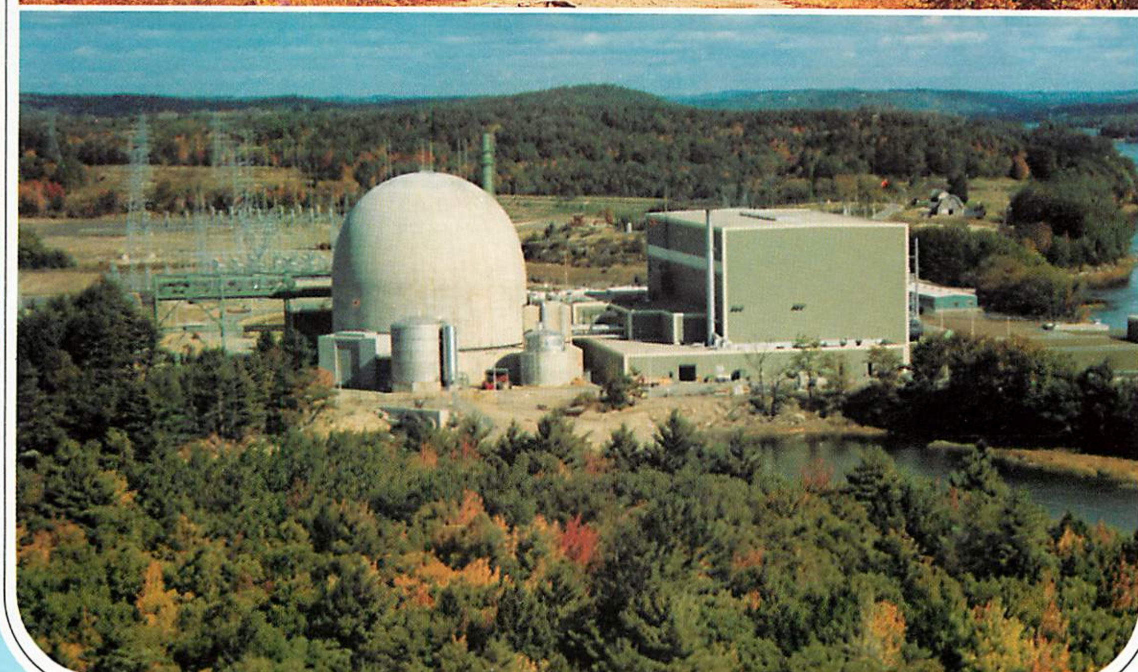
Yankee Ingenuity



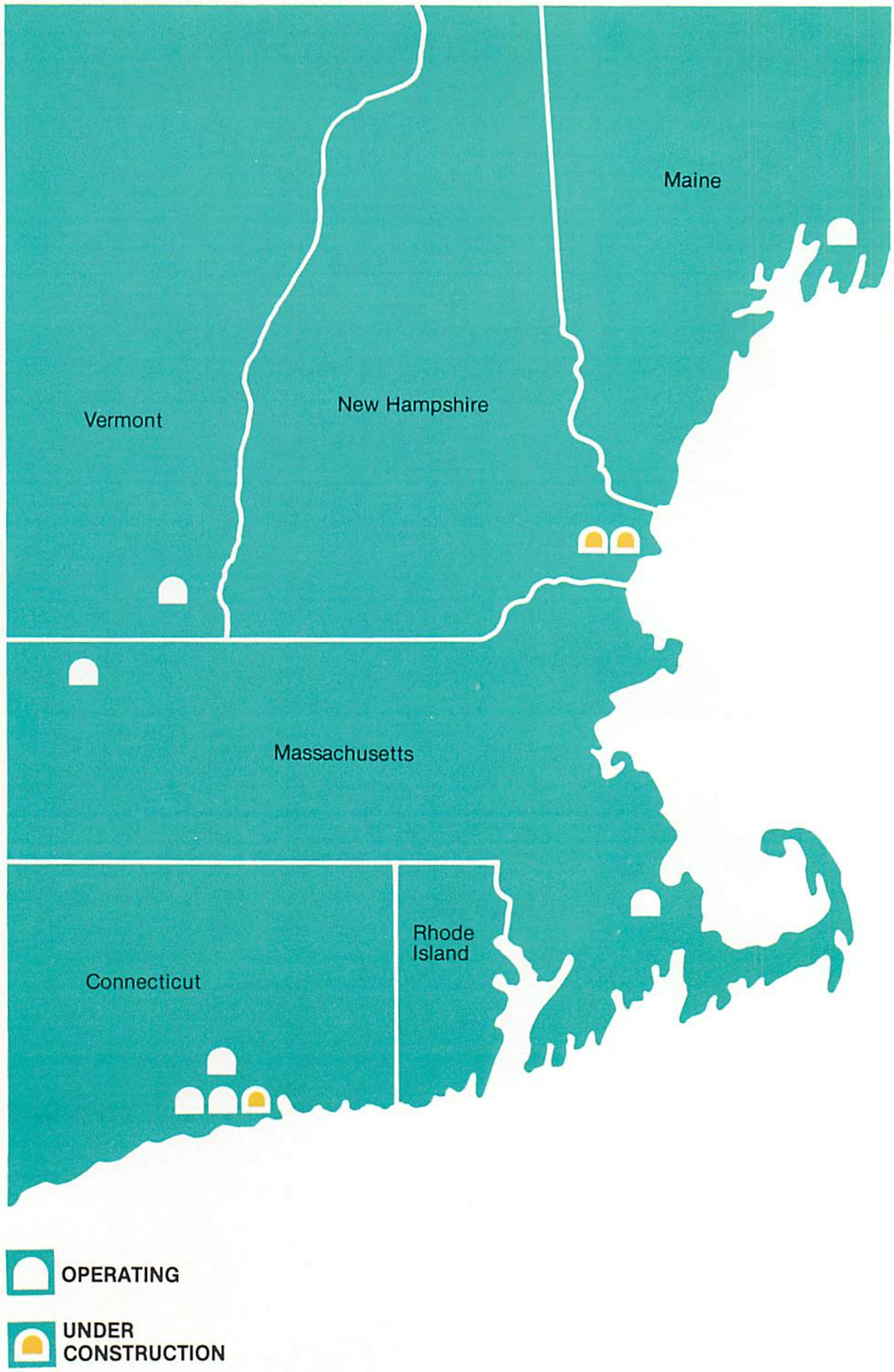
Preface

Bound together by heritage, climate and geography, New Englanders are a certain breed. The hallmarks of New Englanders are the tenacity to get things done and the cleverness to use imaginative methods to do them. Call it *Yankee Ingenuity*. From water wheels to nuclear power, new energy forms have taken root in New England.

The day after President Dwight D. Eisenhower signed the amended Atomic Energy Act in 1954, representatives of New England's major electric utilities met to plan the first privately owned nuclear plant to generate electricity. The products of this and later meetings were the Yankee Atomic Electric Company and New England's first nuclear plant, Yankee Atomic, which began service in 1960.

During the next two decades, the same resourceful New Englanders proved the economy, safety, and cleaniness of nuclear energy and added to the region's nuclear generating capacity.

Today, over 30 percent of New England's electricity is produced by nuclear power plants, a leadership founded on the heritage of *Yankee Ingenuity*.



Published by the Nuclear Information Committee of the Electric Council of New England

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Electric Energy Choices for New England

HYDROELECTRIC

Hydroelectric power from falling water has been used since soon after the Pilgrims landed in New England. Originally used to grind grains and drive machinery, falling water has been supplying electricity since before the turn of the century, although nearly all the sites available for hydroelectric dams have been developed, economic forces (costly imported oil, mainly) have prompted New England's electric utilities to upgrade and refurbish what once were considered obsolete hydroelectric power plants. Hydroelectric power contributes five percent to the area's electric needs.

COAL

Coal is a major fuel for generating electricity nationally, accounting for about 52 percent of the total. Its use in New England is becoming increasingly significant so that today coal represents approximately six percent of New England's generation mix. Reducing dependence on imported oil has resulted in many utilities converting oil-fired units to less expensive and abundant coal while maintaining environmental quality.

OIL

Oil provides 55 percent of the region's electric power — the largest share. This is a reduction of five percent since the beginning of the 1980's. Since oil is mostly imported and can be better used to produce gasoline, plastics, pharmaceuticals, fertilizers and many other important commodities, New England's utilities continue to shift their focus on other fuels such as coal, uranium and supplemental sources.

HYDROELECTRIC

NUCLEAR

COAL

WIND

OIL

SOLAR

NUCLEAR

Nuclear power plants in New England now produce one-third of its electricity. Since 1960, when the area's first reactor came on line, nuclear plants saved millions of barrels of oil, representing hundreds of millions of dollars. Nuclear-produced electricity continues to keep customer energy costs from rising even more rapidly.

WIND

Wind is an age-old energy source, yet conversion of wind energy to electricity is still in its infancy. In 1941, one of the first windmills to generate electricity was located at Grandpa's Knob in Vermont. Now, utilities are becoming more aggressive when exploring wind as an energy source — from designing "windmill rates" to developing internal "windmill policies".

SOLAR

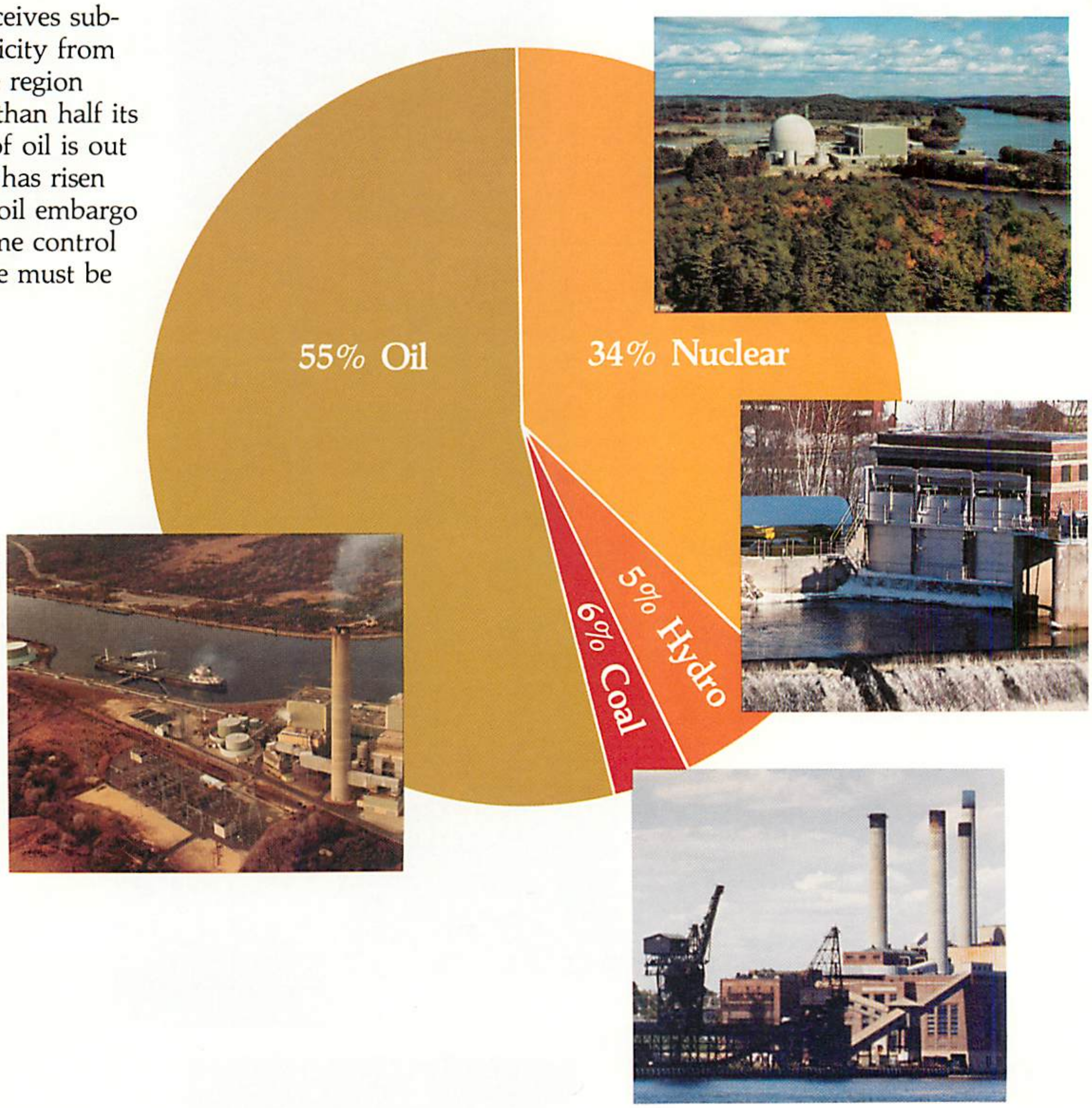
Solar power is available now for heating homes and water, but making electricity directly from the sun is still a developing field. The government's efforts in solar electric research may have beneficial results near the end of this century if technological and economic problems are overcome. Nevertheless, utilities sponsor solar research and development, conduct independent programs and initiate projects such as computerized solar audits and the building of homes to demonstrate solar-assisted heating and cooling.

OTHER

The production of electricity from other than conventional sources runs the gamut in New England. Wood burning, biomass, tidal power and municipal waste are all active processes but are not expected to make a significant contribution to New England's electric energy supply in the foreseeable future.

Sources of New England's Electricity

Though New England receives substantial amounts of electricity from nuclear power plants, the region depends on oil for more than half its requirements. The price of oil is out of American control and has risen sharply since the foreign oil embargo of 1973-74. To regain some control over energy prices, oil use must be reduced.

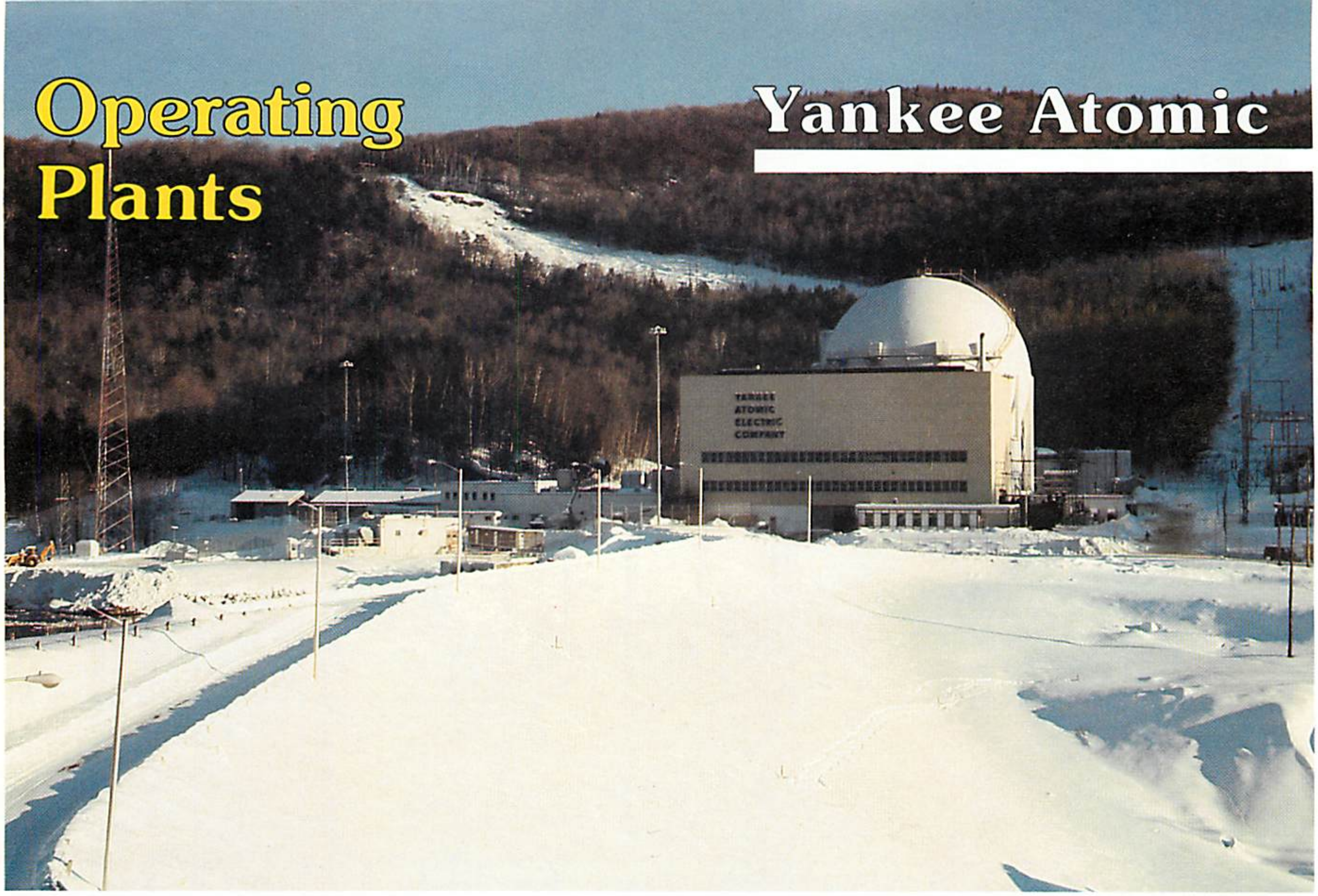


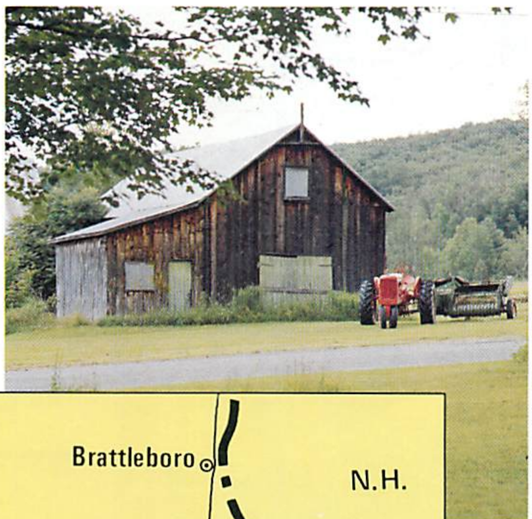
NEW ENGLAND ELECTRIC COMPANIES AVERAGE COST OF OIL PER BARREL

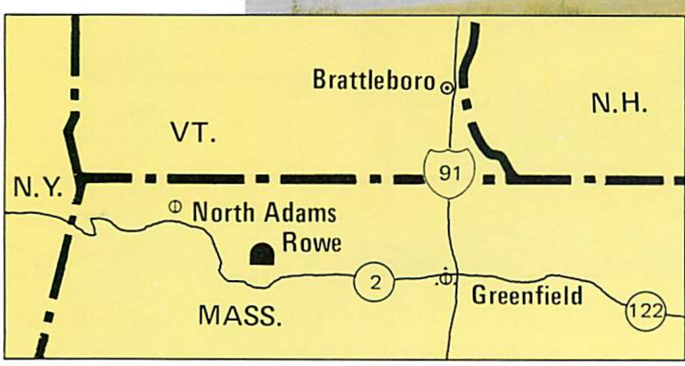
1970	$ 2.19
1971	3.37
1972	3.69
1973	4.38
1974	11.48
1975	12.08
1976	11.45
1977	13.10
1978	12.37
1979	17.07
1980	24.82

Operating Plants

Yankee Atomic







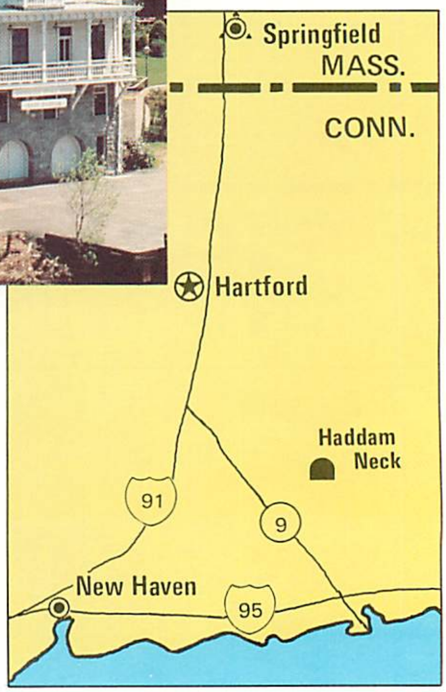
Location: on the Deerfield River in Rowe, Massachusetts
Started Operation: 1960
Output: 186,000 kilowatts
Reactor Type: Pressurized Water
Reactor Manufacturer: Westinghouse
Ownership:

New England Power
Northeast Utilities
Boston Edison
Central Maine Power
Public Service Co. of New Hampshire
Eastern Utilities Associates
Commonwealth Energy System
Central Vermont Public Service

Yankee saves more than 1.6 million barrels of oil each year.

For further information contact:
Information Center
Yankee Atomic Electric Co
Star Route
Rowe, MA 01367
(413) 625-6140

Connecticut Yankee



Location: on the Connecticut River in Haddam Neck, Connecticut
Started Operation: 1968
Output: 582,000 kilowatts
Reactor Type: Pressurized Water
Reactor Manufacturer: Westinghouse
Ownership:

Northeast Utilities*
New England Power
Boston Edison
United Illuminating
Central Maine Power
Public Service Co. of New Hampshire
Eastern Utilities Associates
Commonwealth Energy System
Central Vermont Public Service

**Principal owner*

Connecticut Yankee saves more than 7 million barrels of oil each year.

Information Center open weekdays 9 a.m. to 4 p.m. and 7 days a week during summer.

For further information, call or write:
Connecticut Yankee
Energy Information Center
Haddam Neck Rural Route #1, Box 127F
East Hampton, Connecticut 06424
(203) 267-9279

World's most productive nuclear unit — set world record of 50 billion kilowatt hours in 1980.

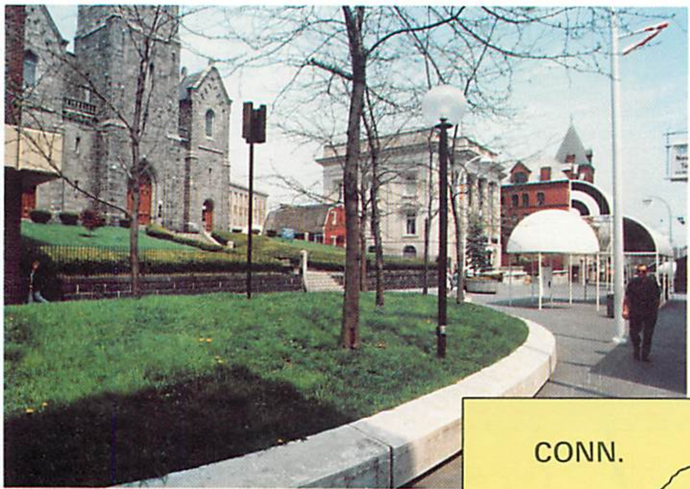
Millstone 1 and 2

Location: on Long Island Sound in Waterford, Connecticut

	UNIT 1	UNIT 2
Started Operation:	1970	1975
Output:	660,000 kilowatts	865,500 kilowatts
Reactor Types:	Boiling Water	Pressurized Water
Reactor Manufacturers:	General Electric	Combustion Engineering
Ownership:	Northeast Utilities	Northeast Utilities

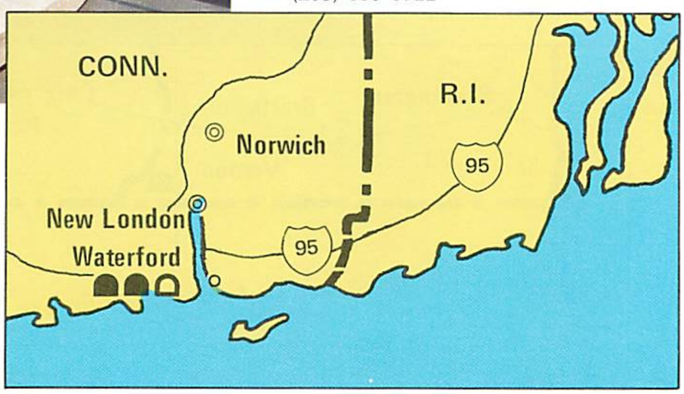
Millstone 1 saves more than 7.3 million barrels of oil each year.

Millstone 2 saves more than 10 million barrels of oil each year.



For further information, call or write:

System Communications
Northeastern Utilities
P.O. Box 270
Hartford, CT 06101
(203) 666-6911

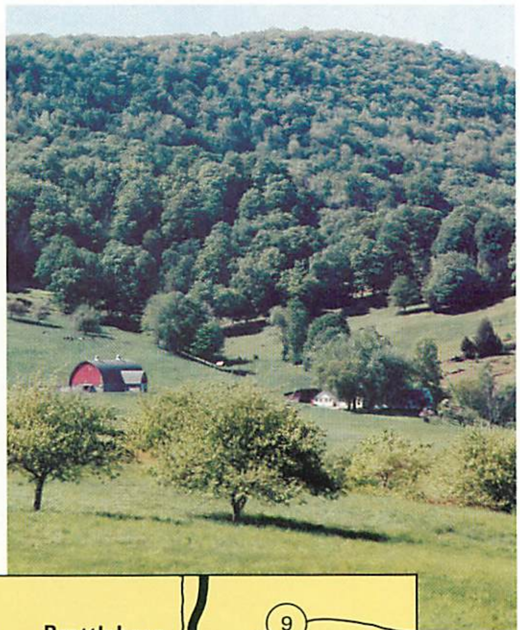


Vermont Yankee

Location: on the Connecticut River in Vernon, Vermont
Started Operation: 1972
Output: 540,000 kilowatts
Reactor Type: Boiling Water
Reactor Manufacturer: General Electric
Ownership:

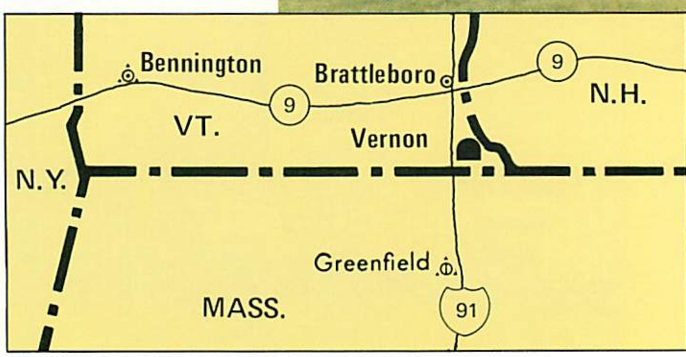
Central Vermont Public Service*
Green Mountain Power
New England Power
Northeast Utilities
Central Maine Power
Public Service Co. of New Hampshire
Cambridge Electric Light
Eastern Utilities Associates
Burlington Electric Dept.
Lyndonville Electric Dept.
Vermont Electric Coop., Inc.
Washington Electric Co-op, Inc.

**Principal Owner*

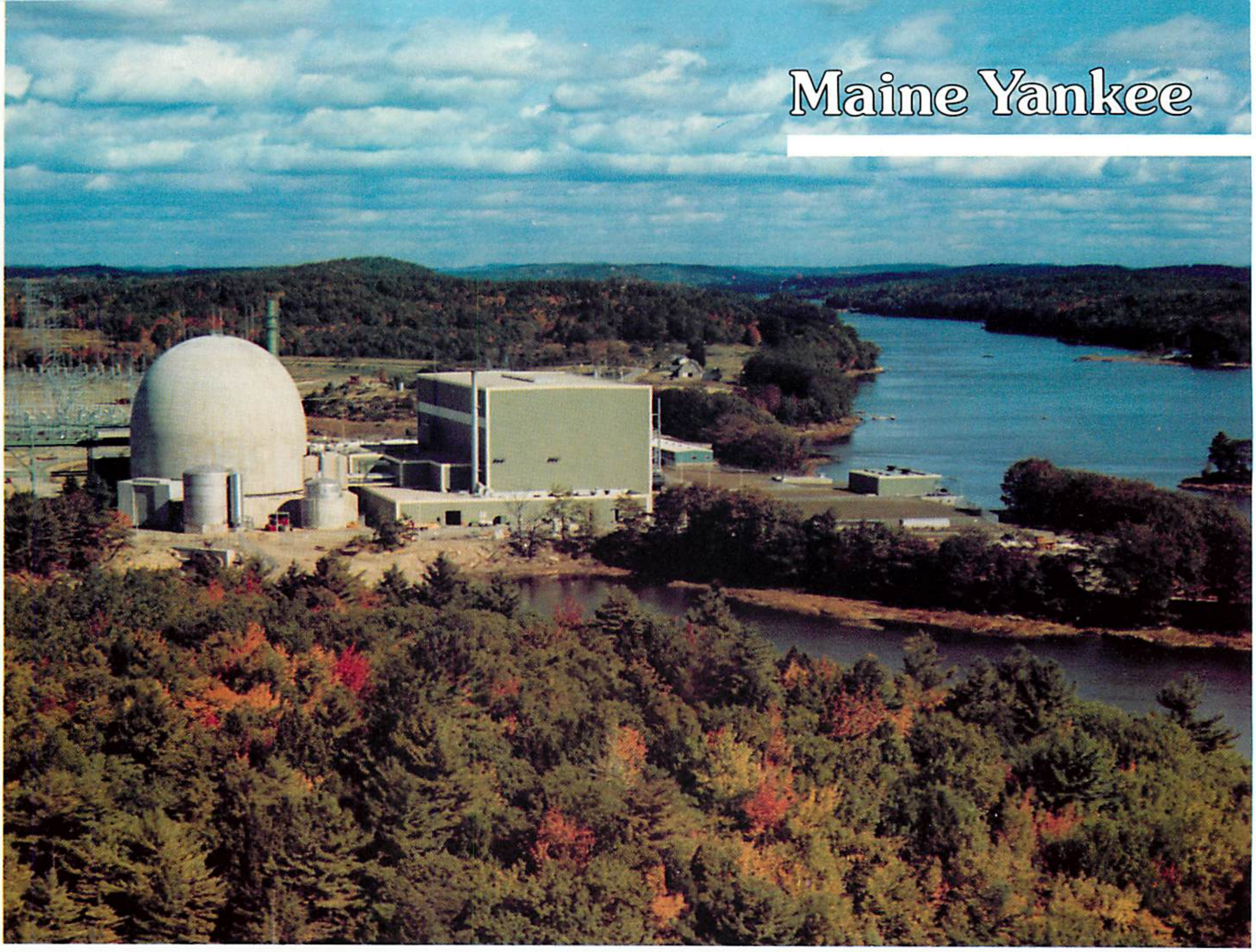


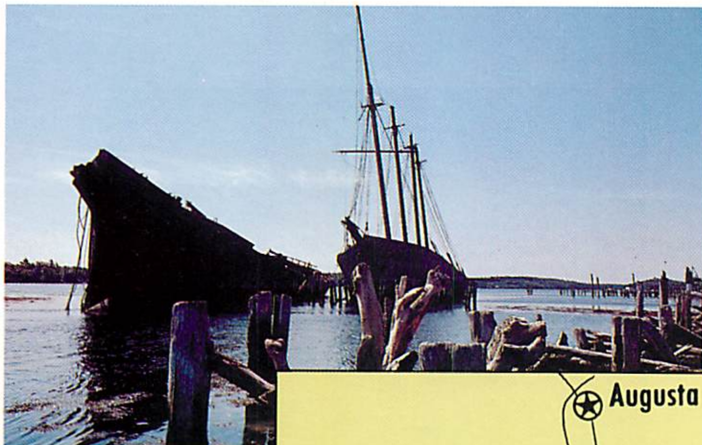
Vermont Yankee saves more than 5 million barrels of oil each year.

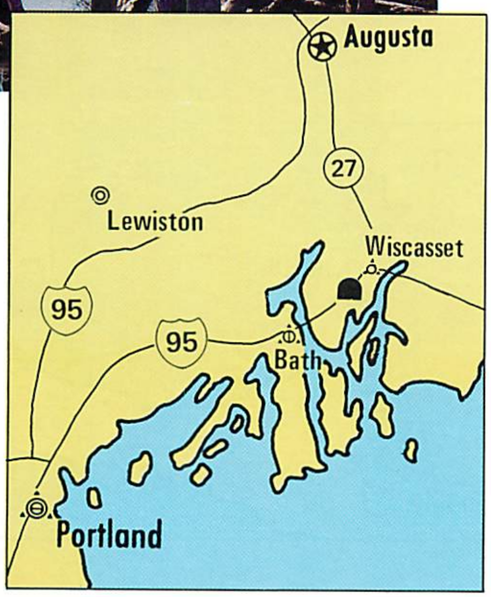
For further information, call or write:
Vermont Yankee
Energy Information Center
P.O. Box 157
Governor Hunt Road
Vernon, TV 05354
(802) 257-1416



Maine Yankee







Location: on the Montsweag Bay in Wiscasset, Maine
Started Operation: 1972
Output: 825,000
Reactor Type: Pressurized Water
Reactor Manufacturer: Combustion Engineering
Ownership:

Central Maine Power*
New England Power
Northeast Utilities
Bangor Hydro-Electric
Maine Public Service
Public Service Co. of New Hampshire
Cambridge Electric Light
Eastern Utilities Associates
Central Vermont Public Service
**Principal Owner*

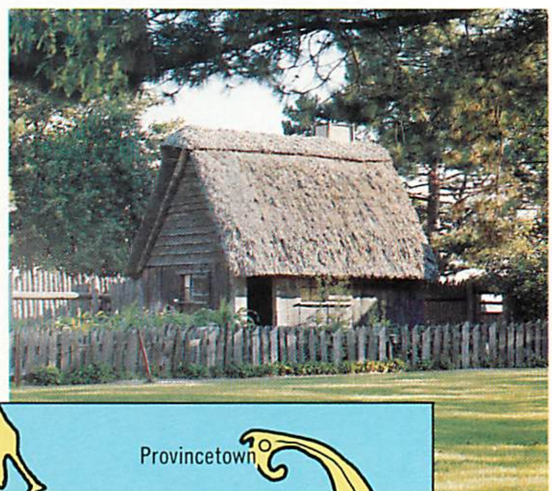
Maine Yankee saves more than 8 million barrels of oil each year.

For further information, call or write:
Information Office
Maine Yankee Atomic Power Co.
Edison Drive
Augusta, ME 04336
(207) 623-3521

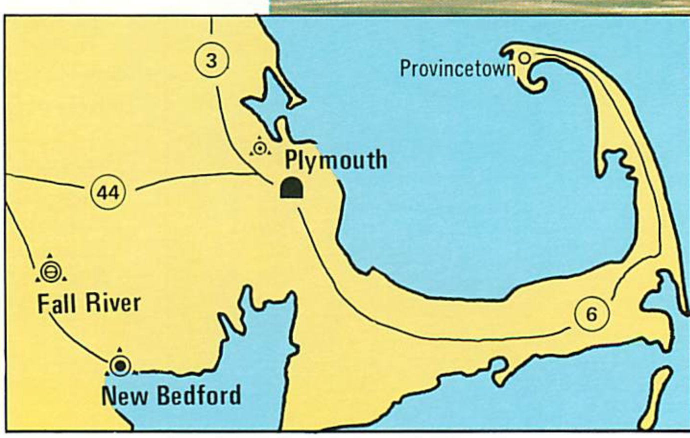
Pilgrim 1

Location: on Cape Cod Bay in Plymouth Massachusetts
Started Operation: 1972
Output: 670,000 kilowatts
Reactor Type: Boiling Water
Reactor Manufacturer: General Electric
Ownership: Boston Edison

Pilgrim 1 saves more than 6 million barrels of oil each year.

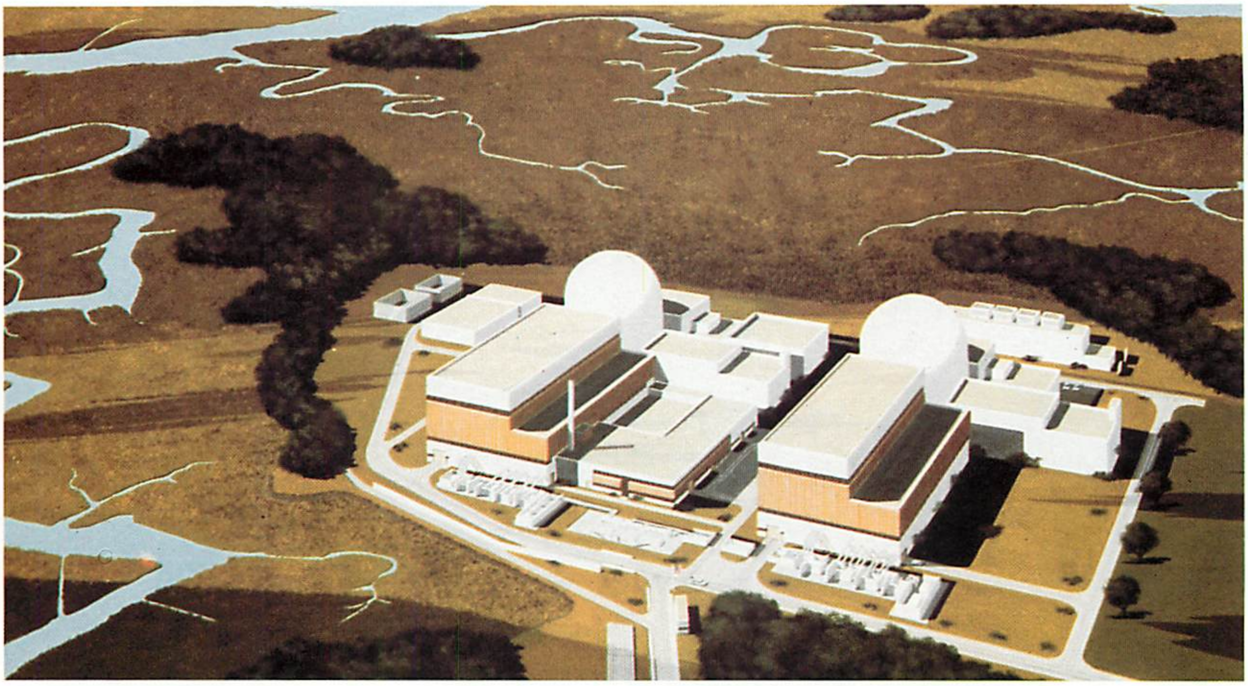


For further information, call or write:
Public Information
Boston Edison
800 Boylston Street
Boston, MA 02199
(617) 424-2459



NUCLEAR PLANTS UNDER CONSTRUCTION

Seabrook



Units 1 and 2

Location: Seabrook, New Hampshire
Planned Operation: Unit 1: 1984
Unit 2: 1986
Output: 1,150,000 kilowatts each
Reactor Type: Pressurized Water (both)
Reactor Manufacturer: Westinghouse
Ownership:

- Public Service Co. of New Hampshire*
- United Illuminating
- Northeast Utilities
- New England Power
- Central Maine Power
- Eastern Utilities Assoc.
- Commonwealth Energy System
- Fitchburg Gas & Electric Light
- New Hampshire Electric Cooperative
- Central Vermont Public Service
- Bangor Hydro Electric
- Hudson Light & Power Dept.
- Maine Public Service
- Mass. Municipal Wholesale Electric
- Taunton Municipal Lighting Plant
- Vermont Electric Coop.

**Principal Owner*

Seabrook will save 23 million barrels of oil each year.

For further information, call or write:

Public Information Dept.
Public Service Co. of N.H.
1000 Elm Street
P.O. Box 330
Manchester, NH 03105
(603) 669-4000

Seabrook Education Center
P.O. Box 700
Seabrook, NH 03874
(603) 474-9521 Ext. 2721

Millstone 3

Location: on Long Island Sound in Waterford, Connecticut
Planned Operation: 1986
Output: 1,150,000 kilowatts
Reactor Type: Pressurized Water
Reactor Manufacturer: Westinghouse
Ownership:

Northeast Utilities*
New England Power
Central Vermont Public Service Corp.
Eastern Utilities Associates
Fitchburg Gas & Electric
United Illuminating
Public Service Co. of New Hampshire
Central Maine Power
Massachusetts Municipal Wholesale Electric Co.
City of Chicopee, Massachusetts
Lyndonville Electric Dept.
City of Burlington
Vermont Electric Cooperative

**Principal Owner*

Millstone 3 will save 12 million barrels of oil each year.

For further information, call or write:
System Communications
Northeast Utilities
P.O. Box 270
Hartford, CT 06101
(203) 666-6911

Response to the Three-Mile Island Accident

The President of the United States established a twelve-member Presidential Commission to conduct a comprehensive investigation of the accident of March 28, 1979 at the Three-Mile Island Nuclear Plant in Pennsylvania.

The major conclusion of the President's Commission was:

"To prevent nuclear accidents as serious as Three-Mile Island, fundamental changes will be necessary in the organization, procedures, and practices — and above all — in the attitudes of the Nuclear Regulatory Commission and, to the extent that the institutions we investigated are typical, of the nuclear industry."

The response by industry has created two major institutions, (Nuclear Safety Analysis Center and Institute of Nuclear Power Operations) to deal specifically with the technical and human operational aspects of nuclear safety. This will provide evaluation teams to annually inspect the operation, maintenance, and training procedures for individual power plants and set "standards of excellence".

How Nuclear Plants Work

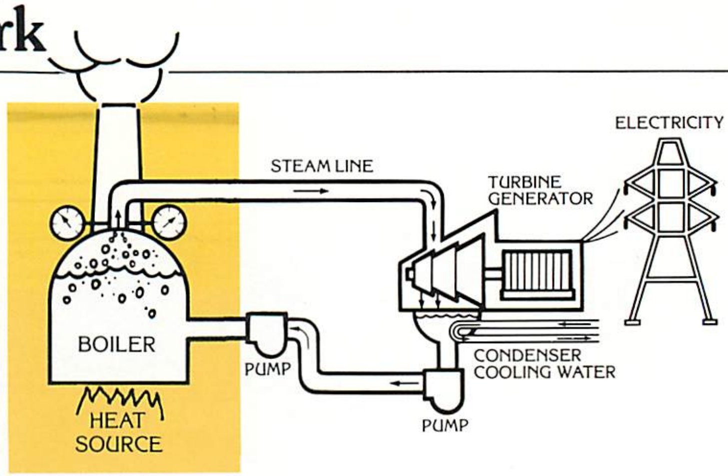
STEAM IS THE NAME OF THE GAME

The basic difference between a nuclear plant and a conventional (oil-, gas- or coal-fired) plant is the fuel. Splitting atoms of uranium does the same thing as burning fossil fuels. It produces heat that changes water to steam. The steam turns a turbine, which turns a generator that makes the electricity. The steam is then condensed back to water for reuse.

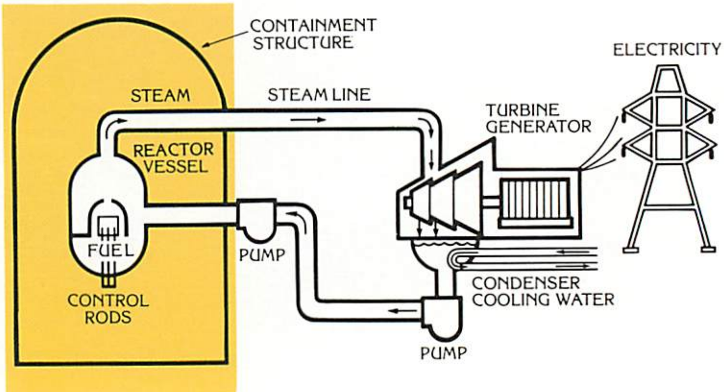
Water, drawn from a separate source, such as a river, lake or ocean, cools the steam in a condenser and returns to its origin. This cooling water does not contact the fuel in either type of plant (see diagrams).

Burning fossil fuels produces gases and wastes that are released through a smoke stack.

Oil or Coal



Nuclear

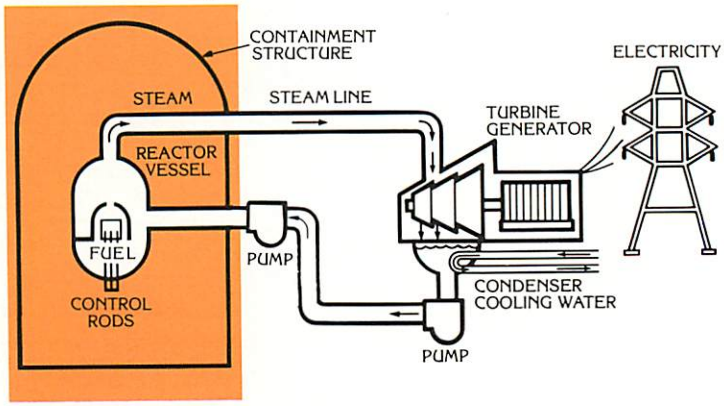


TWO TYPES OF REACTORS

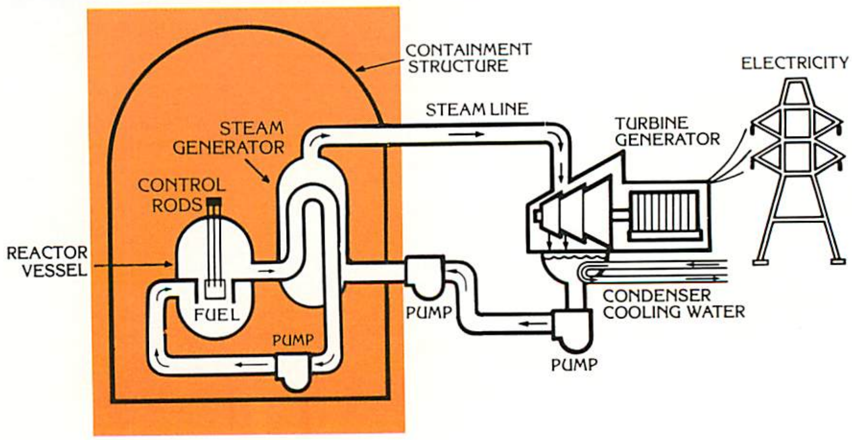
Two types of reactors are currently used in New England: boiling water reactors (BWR) and pressurized water reactors (PWR). They both use essentially the same fuel and operate on the same principles.

In BWRs, the water boils directly to steam in the reactor vessel much like a conventional power plant. In PWRs, the reactor is heated but kept under pressure to prevent boiling. This water is pumped through heat exchangers where a separate supply of water is allowed to boil to produce steam. In both types of plants, the steam is then sent on to spin a turbine.

Boiling Water Reactor System

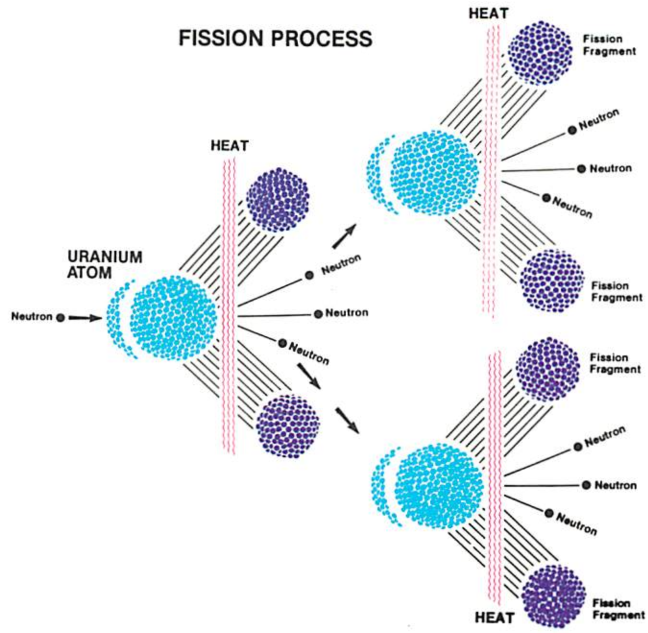


Pressurized Water Reactor System



The Nuclear Process

Splitting uranium atoms to produce heat is a process called fission. When a neutron is absorbed by an atom, it will split, producing two smaller atoms, two neutrons and a large amount of energy. The neutrons go on to split other atoms, producing more neutrons and more energy. The energy released heats water to produce steam. This chain reaction takes place entirely within the nuclear fuel.

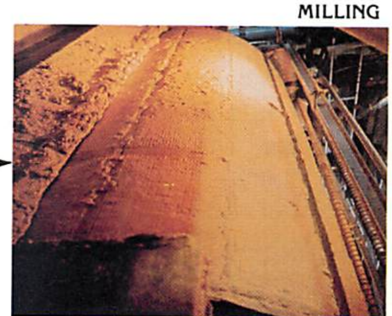


Making Nuclear Fuel

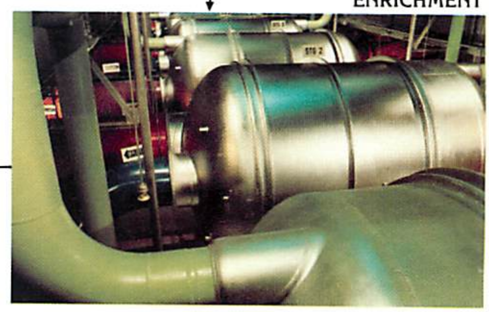
After uranium ore is mined, it must pass through several processing steps before it can be used in a power plant. The ore is milled to remove chemical impurities. Then, the fissionable uranium isotope (U235) is concentrated in a process called enrichment. The enriched uranium in powder form is pressed into small pellets and sealed into metal tubes. The tubes are bundled into fuel assemblies and shipped to a nuclear plant and put into the reactor.

MINING

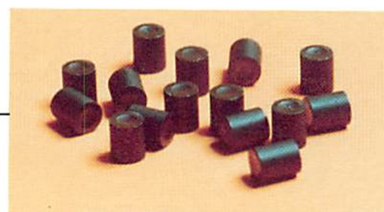
MILLING



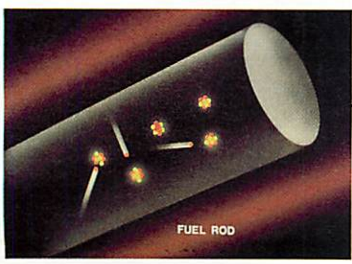
ENRICHMENT



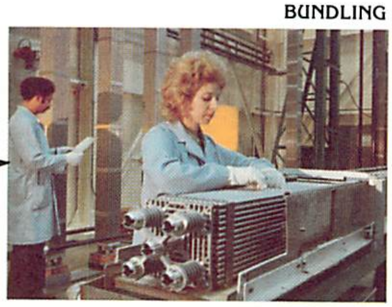
PELLETS



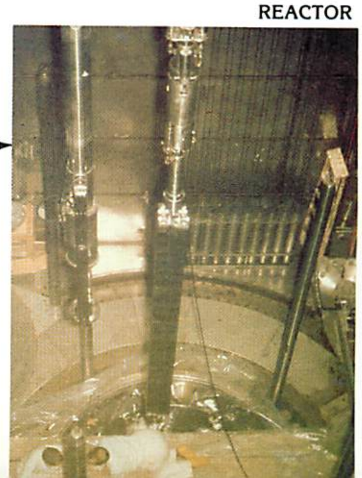
INSERTING PELLETS INTO TUBES



BUNDLING



REACTOR



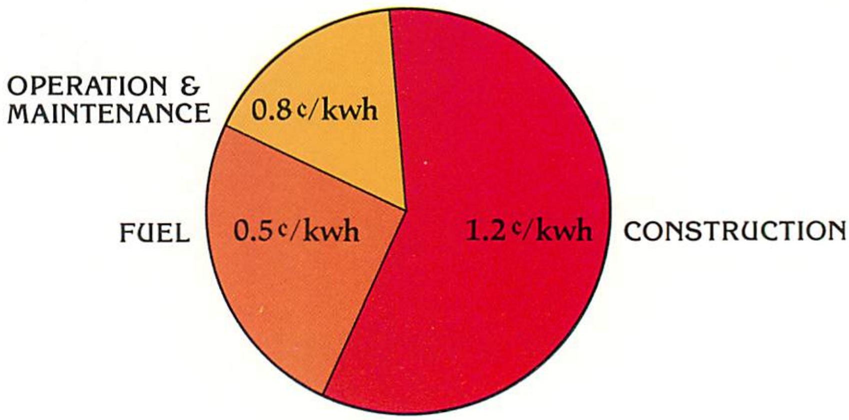
Costs

The cost of generating electricity is determined by three main factors:

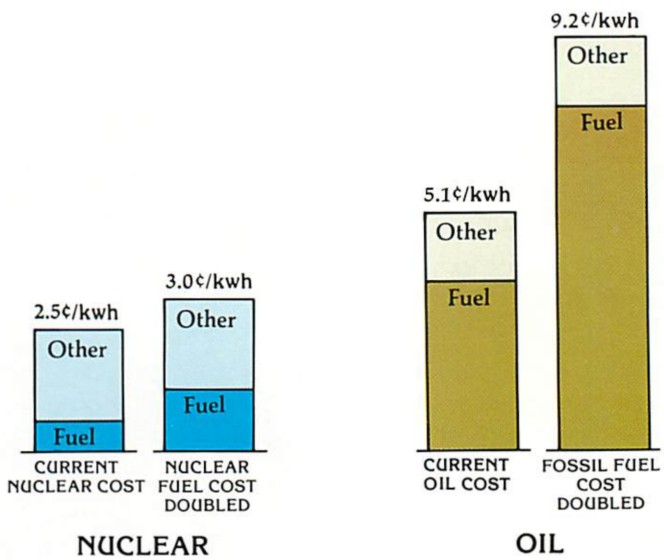
1. Carrying Charges: The cost of "carrying" the generating unit investment, including a return on the investment, depreciation, state and federal income taxes, property tax, and, in the case of some nuclear units, the cost of eventual plant decommissioning. Carrying charges are like the costs of owning a house — a mortage and taxes; or owning a car — car payments and taxes.
2. Operation and Maintenance Expenses (O&M): The day-to-day costs associated with keeping the plant "running" and in good condition.
3. Fuel Costs - includes the cost of fuel itself and, in the case of a nuclear unit, the cost of spent fuel disposal.

The annual total of these factors is divided by the amount of electricity produced by the plant in a year. The result is an annual "busbar" cost per kilowatt-hour. This measure — cost per kilowatt-hour — is a useful way of comparing the cost of electricity generated at different kinds of power plants. It does not reflect the final cost of electricity to the consumer, a cost that includes transmission, distribution, service, etc.

Total Cost of Generating Electricity
from Existing New England Nuclear Plants is About 2.5¢/kwh.
Electricity from Oil-fired Plants Costs Twice as Much.



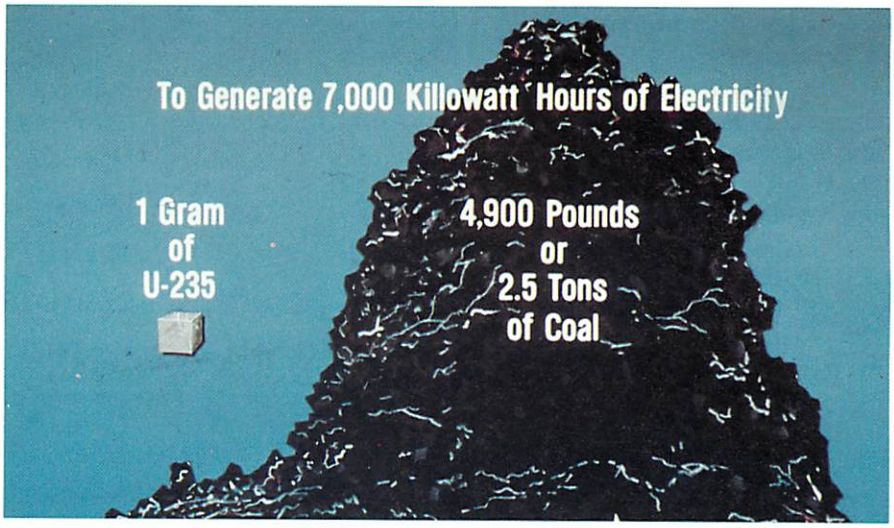
What if Fuel Costs Double?



How Much Uranium is There?

With the current concern over the projected shortages of oil and natural gas, we must pay close attention to our supply of uranium for nuclear fuel. A small amount of uranium goes a long way. According to U.S. Department of Energy studies, existing U.S. uranium supplies are adequate for the 40-year lifetime requirements of all nuclear plants expected to be operating at the turn of the century.

If lower-grade uranium ores can be mined competitively and exploration proceeds, additional quantities will become available.



How Can Nuclear Fuel Supplies be Extended?

There are two ways to extend our nuclear fuel supplies.

REPROCESSING

If the fuel that has been used in a nuclear power plant is recycled (reprocessed), nuclear fuel supplies would increase about 30 percent. Reprocessing is the chemical separation of the still-useful fuels — uranium and plutonium — from the wastes. These fuels can be recycled as new fuel for nuclear power plants.

U.S. reprocessing plant, Barnwell, S.C., not yet operational.

BREEDER REACTORS

Breeder reactors can extend nuclear fuel reserves for hundreds of years in two ways:

- they can use large uranium stockpiles that are not now usable. This stockpile already in storage has the energy equivalent of 1⅓ times our national yet-to-be-mined coal reserves.
- they produce more fuel than they consume.

Many countries have sizable breeder reactors operating or under construction. They are France, Great Britain, West Germany, Japan and Russia. The U.S. has successfully operated several small-scale breeder reactors and has a breeder research project underway.

Phenix, French Breeder Reactor. Operational since 1973.

Nuclear Safety

In two decades of commercial nuclear power generation there has been no injury to any member of the public. This record speaks for itself and is a direct result of the careful attention paid to stringent safety standards. It is unparalleled in United States industry.

THE BOMB MYTH

The atomic age was introduced with a bomb, not a nuclear power plant. Thus, it is understandable that many fear that a reactor can explode like an atomic bomb. It CANNOT, the fuel is too weak.

Because of this excellent record, the safety risks of nuclear installations have to be estimated, rather than measured. To do that, the U.S. Nuclear Regulatory Commission enlisted Professor Norman Rasmussen of Massachusetts Institute of Technology to lead a three-year multimillion-dollar evaluation of reactor safety, comparing nuclear accident risks to natural and man-made risks.

A peer review report (Lewis Committee) concluded that the risk numbers assigned for reactor accidents may vary and should not be used as absolute values.

This report concluded that everyday risks are far greater than those connected with nuclear power.

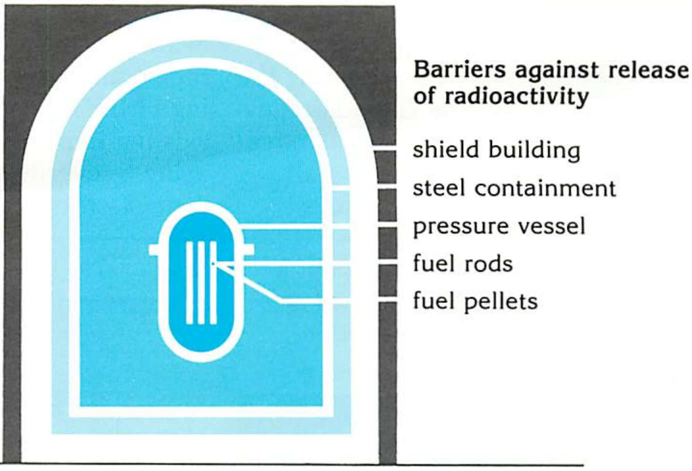
RISK OF FATALITY FROM VARIOUS CAUSES:

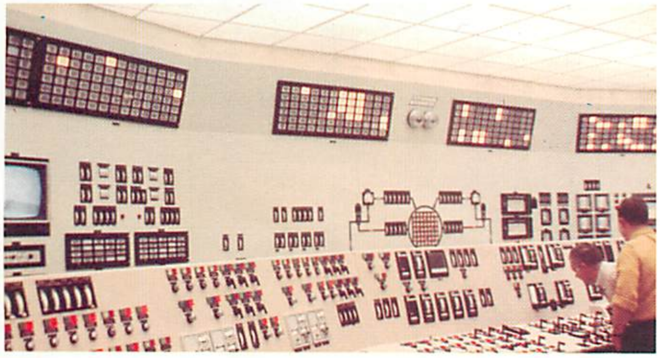
Cause	Individual Chance Per Year
Motor vehicles	1 in 4,000
Falls	1 in 10,000
Fires and hot substances	1 in 25,000
Drowning	1 in 30,000
Firearms	1 in 100,000
Air Travel	1 in 100,000
Electrocution	1 in 160,000
Lightning	1 in 2,000,000
Tornadoes	1 in 2,500,000
Hurricanes	1 in 2,500,000
All accidents	1 in 1,600
Nuclear reactor accidents (100 plants)	1 in 5,000,000,000

The Rasmussen study is a professional in-depth analysis of nuclear reactor safety by an independent, highly competent group of technical experts. It involved a composite of technical judgment, detailed plant descriptions, quantified reactor safety evaluations, known component failure rates and direct research and experimental measurements.

Risks are Low Because...

To ensure that the radioactive materials used in a nuclear reactor are contained within the reactor system, they are enclosed by a series of physical barriers. The fuel pellets, fuel rods, steel reactor pressure vessel, inner containment structure and the reinforced concrete building comprise the multi-layer defense-in-depth design.





Nuclear plants are specifically designed with multiple independent and redundant safety features to assure safe operation under unusual or accident conditions, including equipment and operator malfunctions, maximum earthquakes, storms, floods, etc. No other technology is designed with such deliberate attention to safety.

Thousands and thousands of pages of detailed engineering and design studies are submitted to responsible federal and state regulatory bodies for review and approval prior to construction and operation.

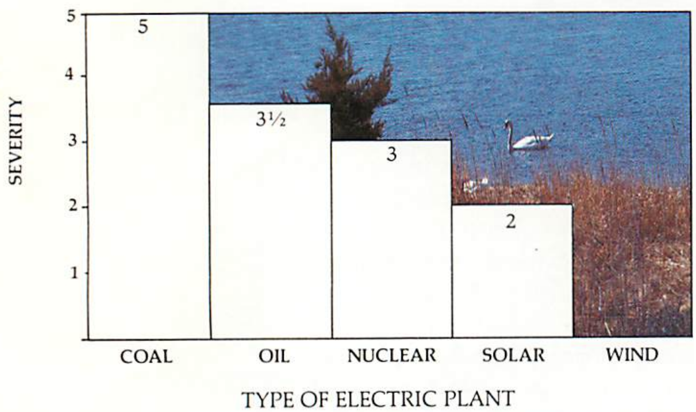
Public scrutiny is built into the licensing process to assure that all public concerns are addressed.

Extensive tests are performed before and after the nuclear plant is operating to assure minimal impact on the environment.

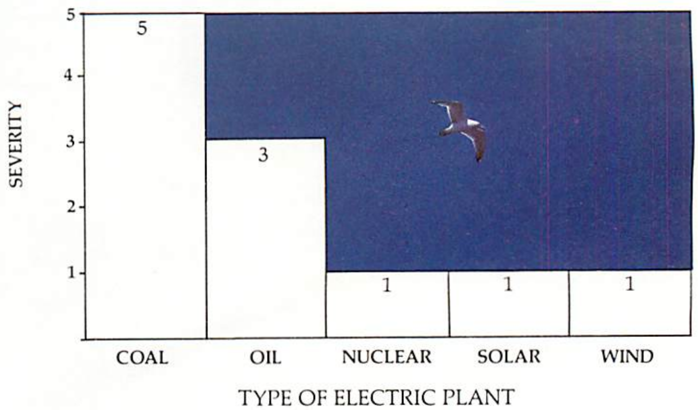
Public Health and Environmental Impacts

All sources of electric energy have an impact on the environment. Many studies, such as those done by the Council on Environmental Quality, the Canadian government and the American Medical Association, have found that the impacts of nuclear energy are small when compared with the alternatives. The studies evaluated the entire production cycle, from mining the fuel, transporting it, producing electricity and disposing of the wastes. The charts below summarize the existing impact studies for a 1000-MWe electric plant using a severity of impact rating: (5 - Serious, 4 - Significant, 3 - Moderate, 2 - Small, 1 - Negligible, 0 - None.)

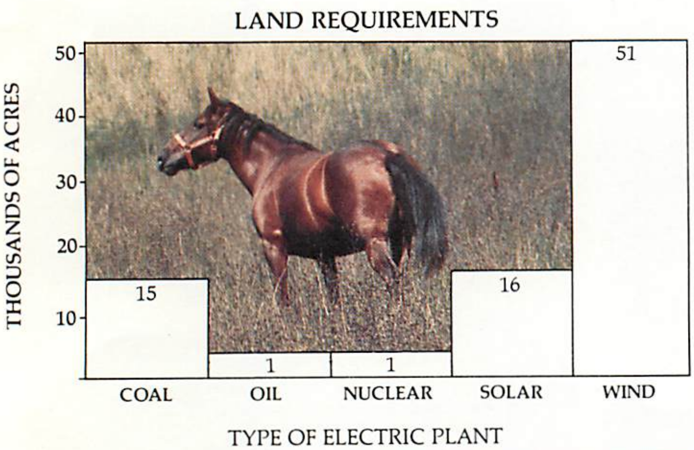
WATER — Coal- and oil-fired power plants have more impact on water than nuclear plants. This is chiefly due to acid run-off from coal mining and risks of spills for oil.



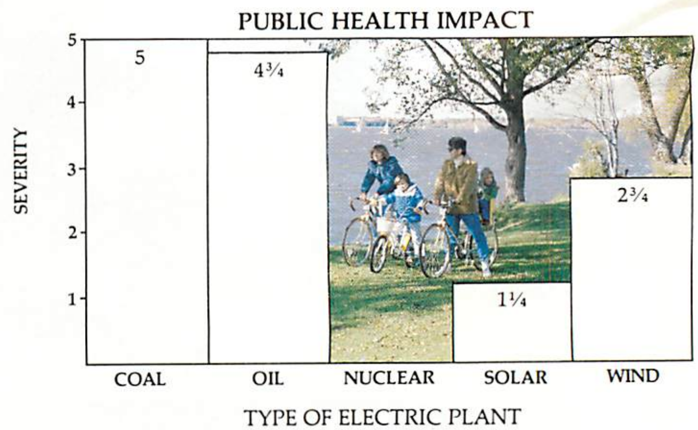
AIR — The fossil fuels — coal and oil — are the greatest air polluters, emitting ash or soot and harmful gases.



LAND — Electricity from wind and solar plants would require large parcels of land. The impact of surface coal mining is already large and growing.



PUBLIC HEALTH — All sources of energy have some impact on public health. The impacts may be surprising.



PUBLIC HEALTH IMPACT EXPLAINED

According to a first-of-a-kind study by the Canadian government which compared the occupational and public health risk of conventional and alternative sources of electricity, nuclear power was found to be between 10 and 20 times safer for workers than solar energy and about 300 times safer than solar for the public. Why? Because nuclear energy is a very concentrated source as compared to very diffuse sources such as solar or wind. Nuclear power can produce more energy with less material. The less material you need to mine, manufacture, transport and dispose of, the lower the occupational risk, pollution and public health risk.

Radiation in Perspective

We live on a radioactive planet, and that is why radiation is all around us, indeed within us. Naturally occurring radioactive elements are found in our air, food and ground. We get exposed to radiation coming from the sun and deep space.

The average American receives from 150-200 millirems of radiation each year from both natural and man-made radiation. Most man-made radiation comes from medical sources such as X-rays and radiation therapy. A nuclear power plant contributes approximately 0.01 millirems to the environment per year.

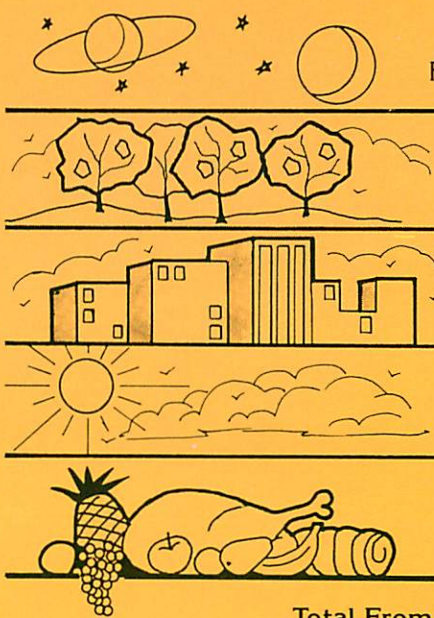
Water discharged from nuclear power plants contains less radiation than many liquids we use in our daily lives.

LIQUID RADIOACTIVITY LEVELS

	(Picocuries/liter)*
Typical nuclear power plant radioactive water discharge	1-10
Domestic tap water	20
River water	10-100
4% beer	130
Ocean water	350
Whiskey	1200
Milk	1400
Salad oil	4900

*A curie is a unit used to measure radioactivity.
A picocurie is a trillionth of a curie.
A liter is approximately 1 quart.

NATURAL BACKGROUND RADIATION
(Millirem/Year)



From Cosmic Rays	35
From Ground	11
From Buildings	34
From Air	5
From Food	25
Total From Natural Sources	**110**

MAN-MADE SOURCES OF RADIATION
(Millirem/Year)

From Medical Exposure	35
From Coast-to-Coast Jet Flight	2
From Fallout	4
From Color Television	1
From Nuclear Power Plant	.01
Total From Man-made Sources	**42.01**

Total from All Sources	152.01

Safe Disposal of Wastes

Radioactive wastes are produced during a nuclear power plant's operation. Two kinds are produced, high- and low-level wastes.

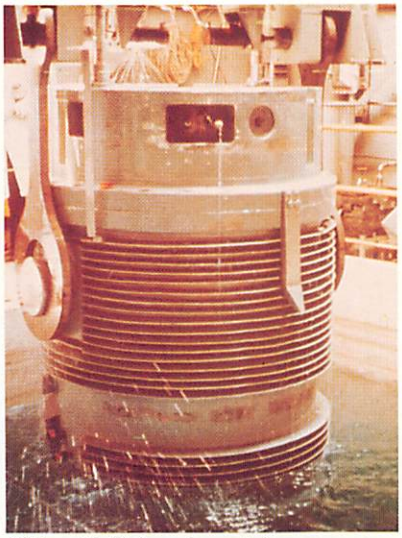
LOW-LEVEL wastes are materials such as paper, plastic, cloth, rubber and filters that are contaminated with small amounts of radioactive materials. These wastes are compacted, mixed with a solid binder (such as concrete) and shipped in steel drums to private disposal facilities where they are buried.

Low-level radiation disposal site in Barnwell, South Carolina.

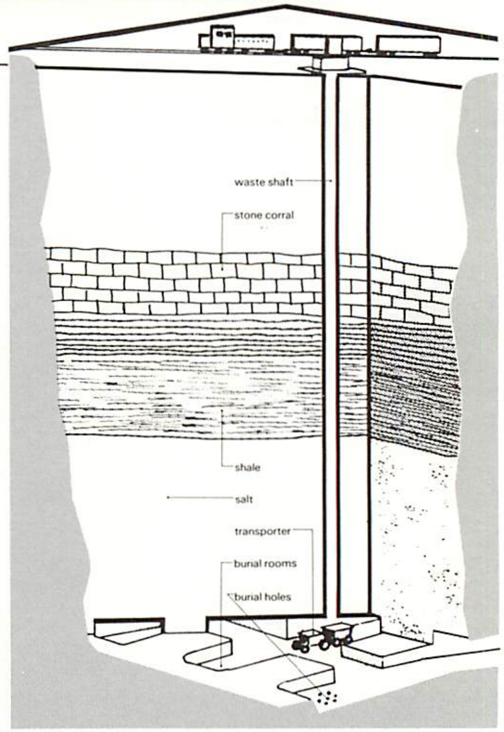
HIGH-LEVEL wastes are more radioactive and include used (spent) nuclear fuel. These wastes will be carefully packaged in 20-ton shielded containers and transported from the nuclear plant. The government plans to bury these materials in deep salt caverns thousands of feet below the earth's surface starting in the 1990's. Salt caverns are dry, geologically stable formations that have experienced no disturbance for hundreds of millions of years. One such repository could hold all the wastes from all U.S. nuclear plants operating through the year 2000.

While high-level wastes are quite radioactive, their quantity is very small. A 1,000,000-kilowatt nuclear plant produces about 11 tons of high-level waste annually. A comparable coal-fired plant produces 30 pounds of waste per second, or 230,000 tons of waste annually.

Nuclear waste disposal is not new. The U.S. government has reserved the area of waste disposal for its exclusive control. The technology is established — indeed, the West German government has operated a deep salt formation repository since 1967 — and our government is committed to having a facility operating in the 1990's.



22-ton shielded waste container.



Sketch of a high-level waste repository 3000 feet below the surface in a salt cavern.

A salt cavern waste repository in Asse, Germany, in operation since 1967.

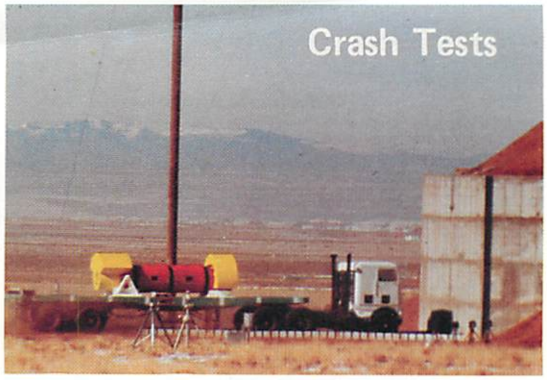
Transportation

Shipping casks containing spent nuclear fuel or high-level wastes are the safest transportation containers ever built.

Each shipping cask must meet rigid U.S. Nuclear Regulatory Commission and Department of Transportation test requirements to ensure no leakage in case of an accident. The required container test conditions are equivalent to the cask riding at 150 mph on a train that collides with a bridge pier, with the cask tumbling off the bridge and landing on a propane barge that explodes, burns and later sinks.

Full-scale tests have been performed for the Department of Energy at the Sandia Laboratories in Albuquerque, New Mexico. To date, a 22-ton loaded cask mounted on tractor-trailers was smashed into a concrete wall at 60 mph and again at 84 mph.

In a third test, a tractor-trailer carrying a 28-ton cask was struck broadside by a 120-ton diesel locomotive traveling at 65 mph. The same cask was then mounted on a flatbed rail car that was propelled by rockets at 80 mph into a 690-ton concrete embankment.



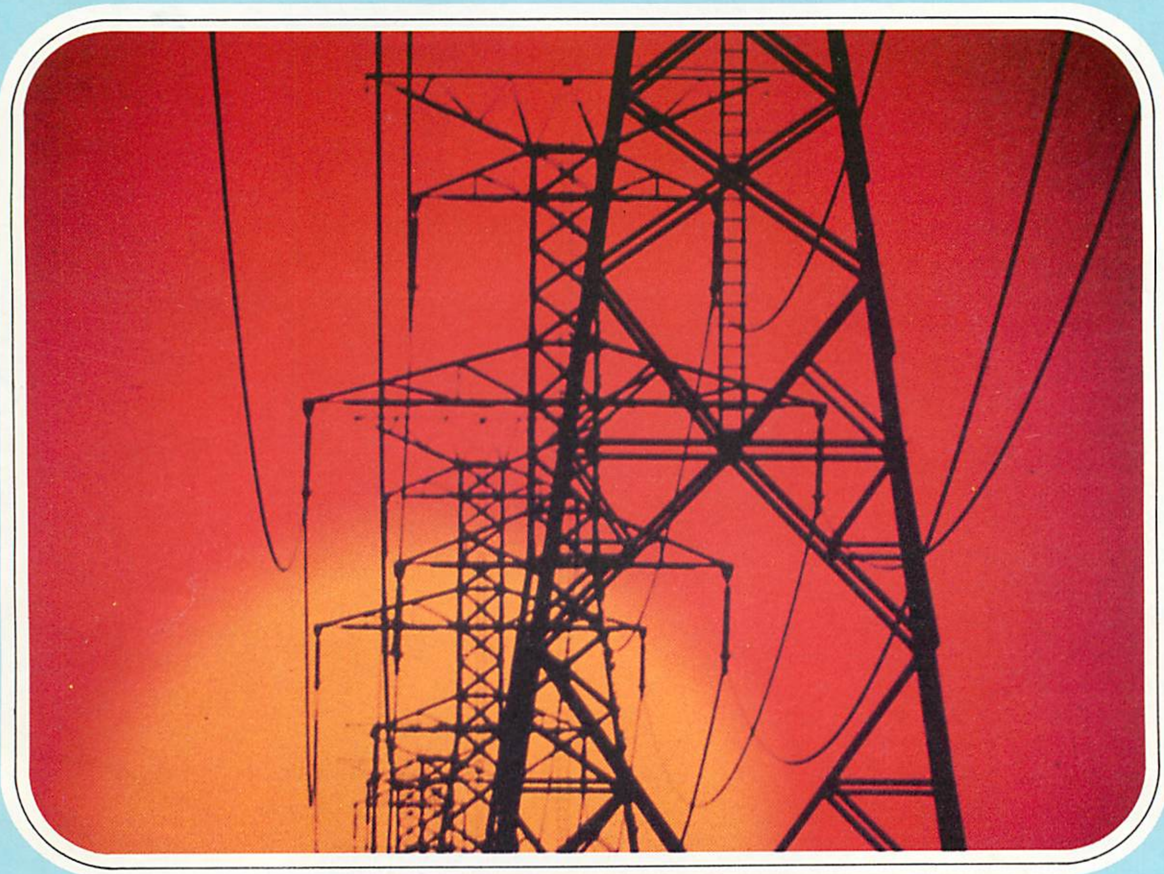
THIS 22-TON CONTAINER, used to transport spent nuclear fuel, was loaded on a truck and slammed into a 10-foot thick concrete wall at 60 mph.

LATER, THE SAME CASK was slammed into the concrete wall at 84 mph.

WHILE THE TRUCKS were totally demolished, the container suffered only a few dents.

THIS 28-TON CASK was struck by a 120-ton diesel locomotive going 65 mph. The vehicles were demolished, but the container survived with no leaks.

IN ONE OF its latest tests, Sandia engulfed a 74-ton shipping cask in burning jet fuel for a half-hour at temperatures between 1800 and 2100°F. The casks did not leak.



Nuclear power is not the only answer to our growing need for electricity. Conservation and coal will continue to have an important impact. Supplemental sources such as solar, wind, tides and geothermal power will continue to be explored and researched. But nuclear power is proven, reliable and available now. Nuclear power is essential if this nation's energy requirements are to be met.

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