DTE Energy®

Planning for the Future

Michigan Clean Energy Symposium

September 4-15, 2009

The Planning Process

The underlying goal of the long term energy planning process is to identify the most effective and least cost plan for supplying the energy needs of customers.

Understand Market Dynamics — Customer demand, fuel costs, transmission costs and infrastructure, emission costs, carbon regulation, etc

Assess Supply — Existing supply, planned additions/retirements, new supply technologies and costs, licensing/construction timelines

Optimize Solution — Reserve margin, customer impacts, cost recovery, environmental and reliability concerns, sensitivity analysis, etc

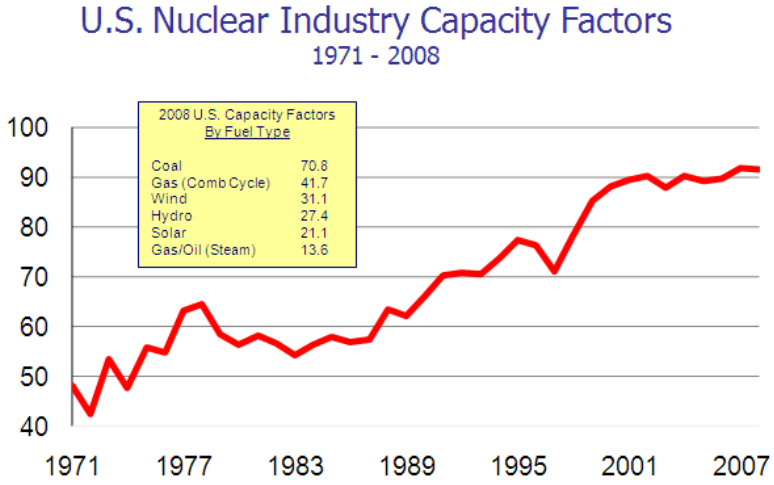
Financial & Deployment Planning — Licensing, certificate of necessity, permitting, site planning, financing

Execution — Detailed engineering, procurement, construction, operation

Nuclear Power is Safe and Reliable…

OSHA statistics show that Nuclear Power has one of the best worker safety records of any industry.

Results from the NRC's reactor oversight process, posted on the agency's web site, show a similar high level of reactor safety performance



The average capacity factor for the U.S. nuclear fleet has risen steadily since the 1970's

In 2008, the U.S. fleet achieved a capacity factor of 91.5%.

Nuclear Power is Clean and Affordable…

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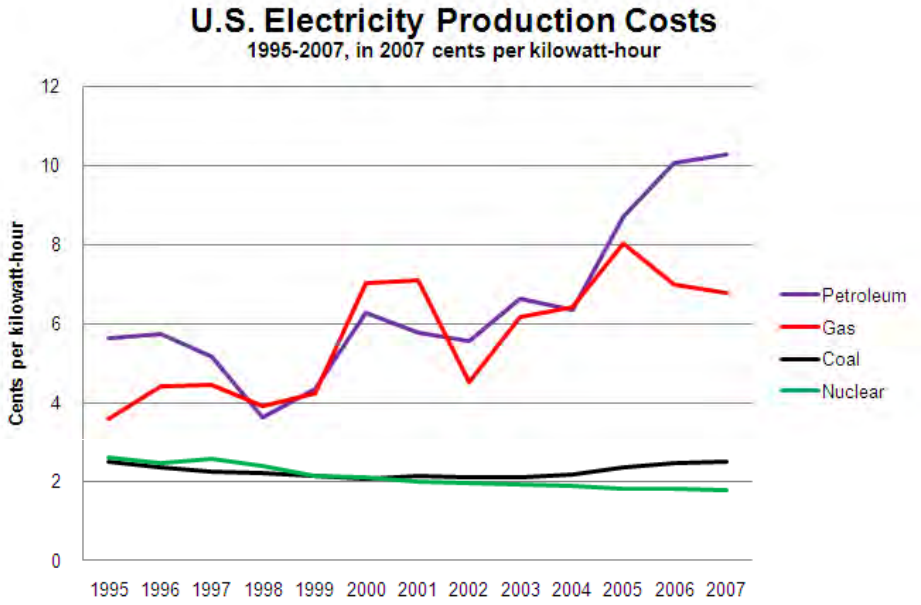
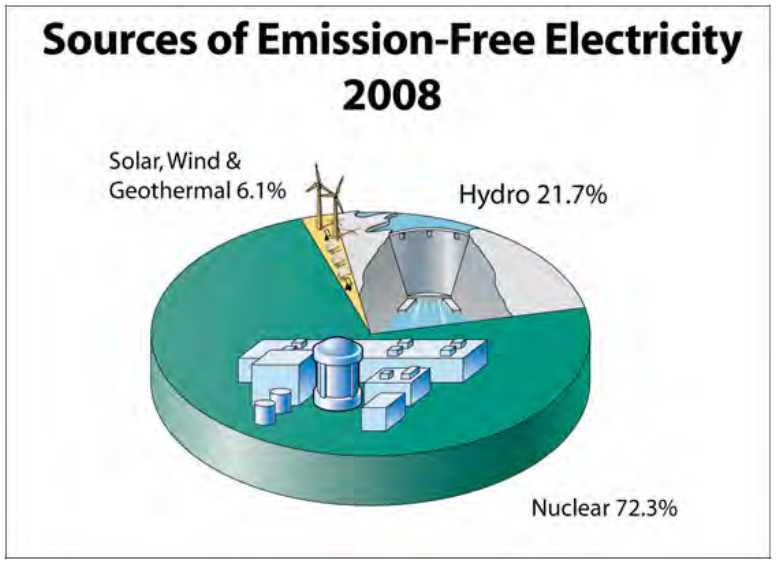
Nuclear plants are the lowest-cost producer of baseload electricity. The average production cost of 1.87 cents per kilowatt-hour

A nuclear plant will save $ billions in fuel costs over its lifetime vs. fossil fuel alternatives.

Any form of future carbon reduction requirement will widen this gap significantly





Nuclear energy currently accounts for nearly three-quarters of emission free U.S. generation.

General Electric estimates that new plant output will offset 7.4 million tons of greenhouse gases and 5.1 million tons of coal each year.

In 2008, U.S. nuclear power avoided carbon emissions equivalent to that released from all U.S. passenger cars combined.

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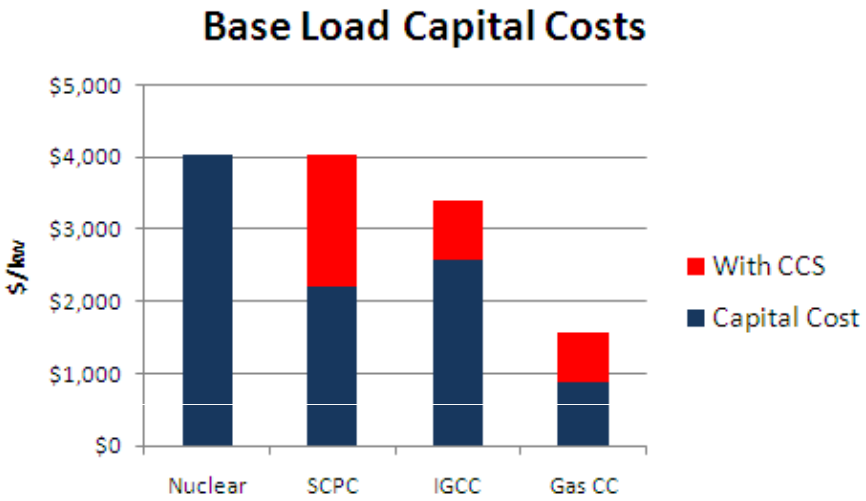
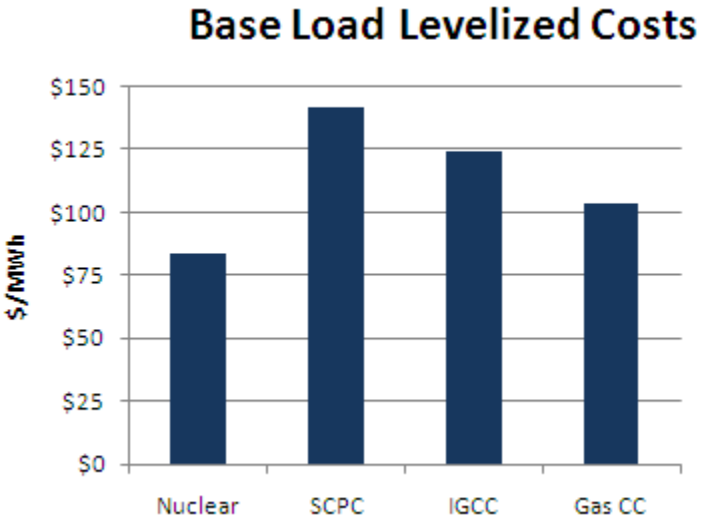
Base Load Levelized Costs

The Brattle Group, under contract to Connecticut Light and Power and United Illuminating, recently published an IRP for the state of Connecticut with the following information

Although nuclear project costs are undeniably large, total project cost does not measure a project's economic viability.





The relevant metric is the cost of the electricity produced over the life of the project relative to the market and other supply options.

Nuclear is competitive with all forms of supply when full life cycle costs are taken into account

New Nuclear Licensing Process

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The Design Certification process allows vendors to secure NRC approval of advanced plant designs. This is the key to design standardization. Design certification is required before a COL can be issued.

The Early Site Permit process enables companies to obtain advance approval for a nuclear power plant site before deciding to build a plant or even what kind of plant to build. ESPs resolve environmental and safety concerns associated with the site

The licensing process for new nuclear power plants provides for issuance of a combined construction permit and operating license (COL). Granting a COL signifies resolution of all environmental and safety issues associated with the plant.

ITAAC are Inspections, Tests, Analysis, and Acceptance Criteria established as a condition of the combined license that must be completed before the plant is allowed to operate. ITAAC cover design, construction, operational, and various site specific aspects of the plant.

Fermi 3 Development Activity Summary

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- In February, 2007, Detroit Edison announced its intention to begin preparing a Combined License Application (COLA) for a new nuclear unit at the Fermi site.
- A COLA was filed with the Nuclear Regulatory Commission (NRC) in September 2008 that referenced the General Electric-Hitachi Economic Simplified Boiling Water Reactor (ESBWR) design.
- The NRC completed its Acceptance Review and approved the application for docketing in November 2008 and formal review of the application is underway.
- The NRC has indicated that the license review process could take approximately 42 months. This would result in a Combined License award in 2012.
- By filing a Combined License Application before the end of 2008, Detroit Edison maintains eligibility for Federal Production Tax Credits on behalf its customers
- General Electric – Hitachi is proceeding with Design Certification of the ESBWR. Design Certification will be completed before a Fermi 3 Combined License will be issued.
- Detroit Edison has not announced or committed to build a new unit, but is keeping that option open given the long term environmental and economic advantages of nuclear power.

Fermi 3 Aerial Illustration

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Current Worldwide and U.S. Status of Nuclear Power

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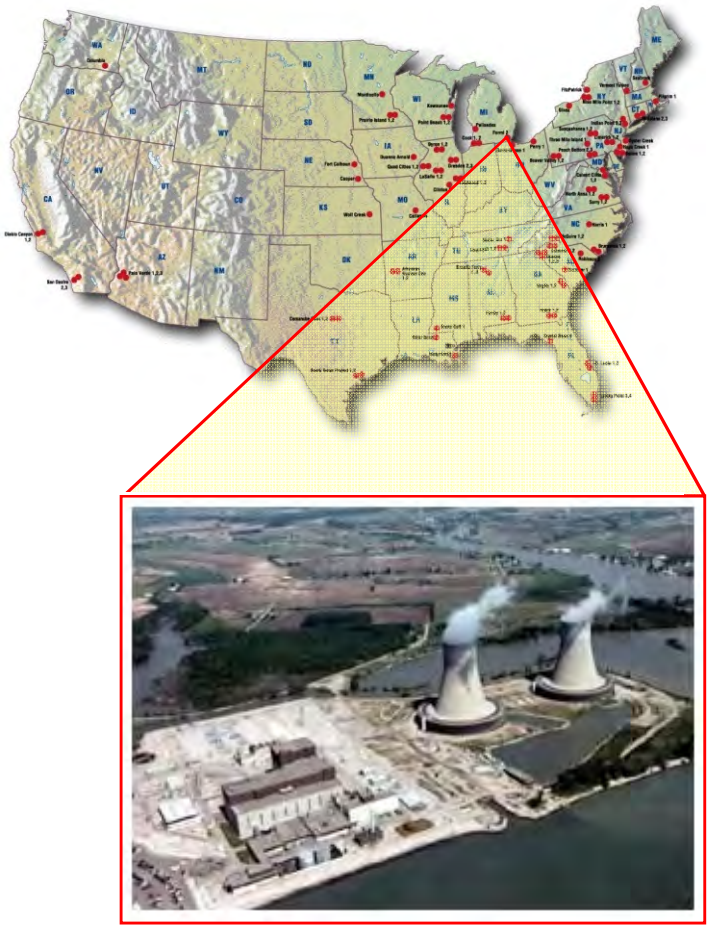
104 nuclear power plants currently operate in the United States located at 65 sites in 31 states.

17 license applications for new plants have been files with the Nuclear Regulatory Commission with several more expected.

Over **400** nuclear power plants operate in 31 countries.

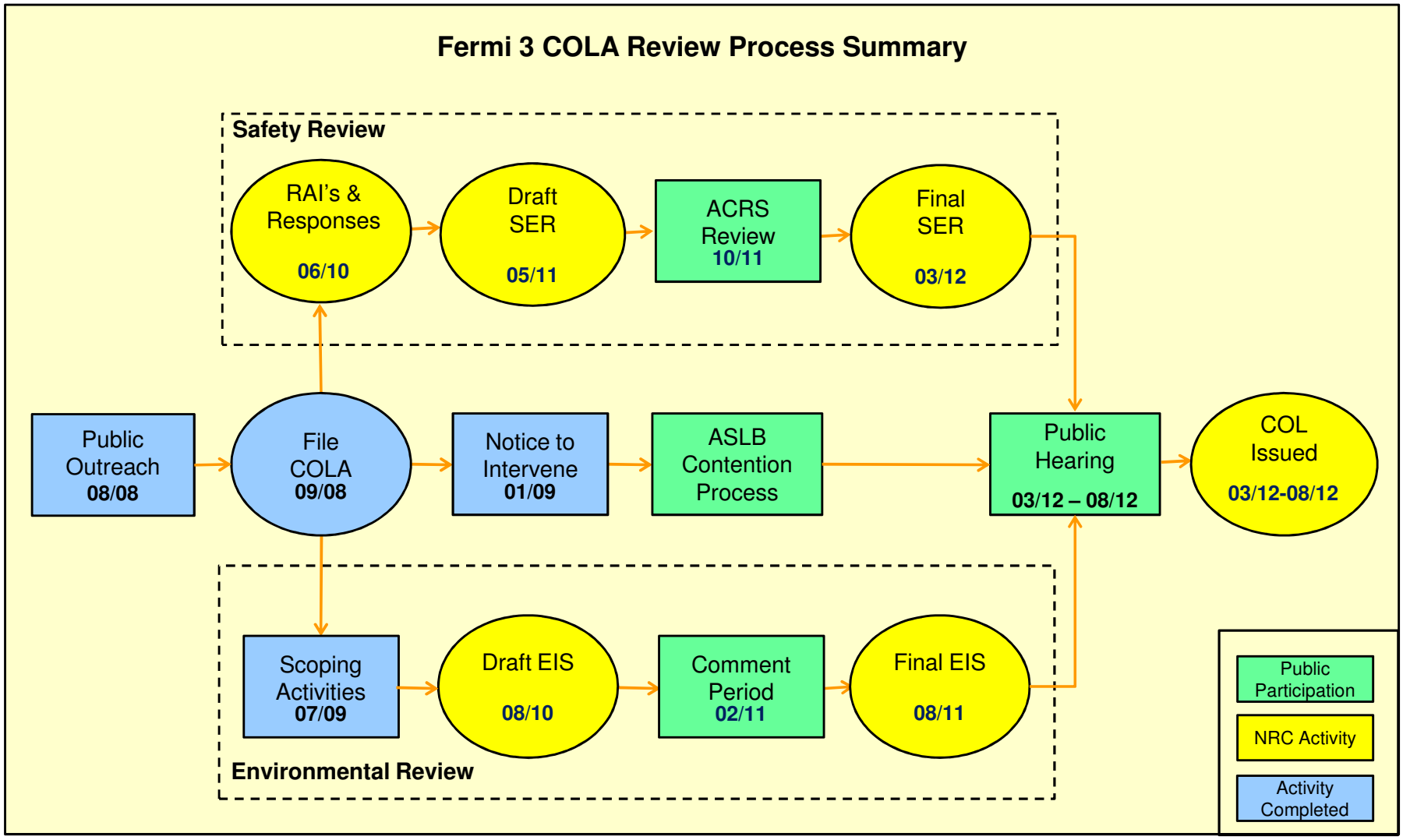
Over **40** new nuclear plants are under construction.



The Nuclear Energy Institute (NEI) estimates that a new nuclear power plant will create up to **2,400** construction jobs and **400 to 700** permanent high tech jobs. This is in addition to another 400 to 700 local non-plant jobs related to goods and services.

NEI also estimates that the average U.S. nuclear plant generates approximately **$430 million** in sales of goods and services in the local community and nearly **$40 million** in total labor income each year.

Fermi 3 COLA Review Status



Used Fuel Management

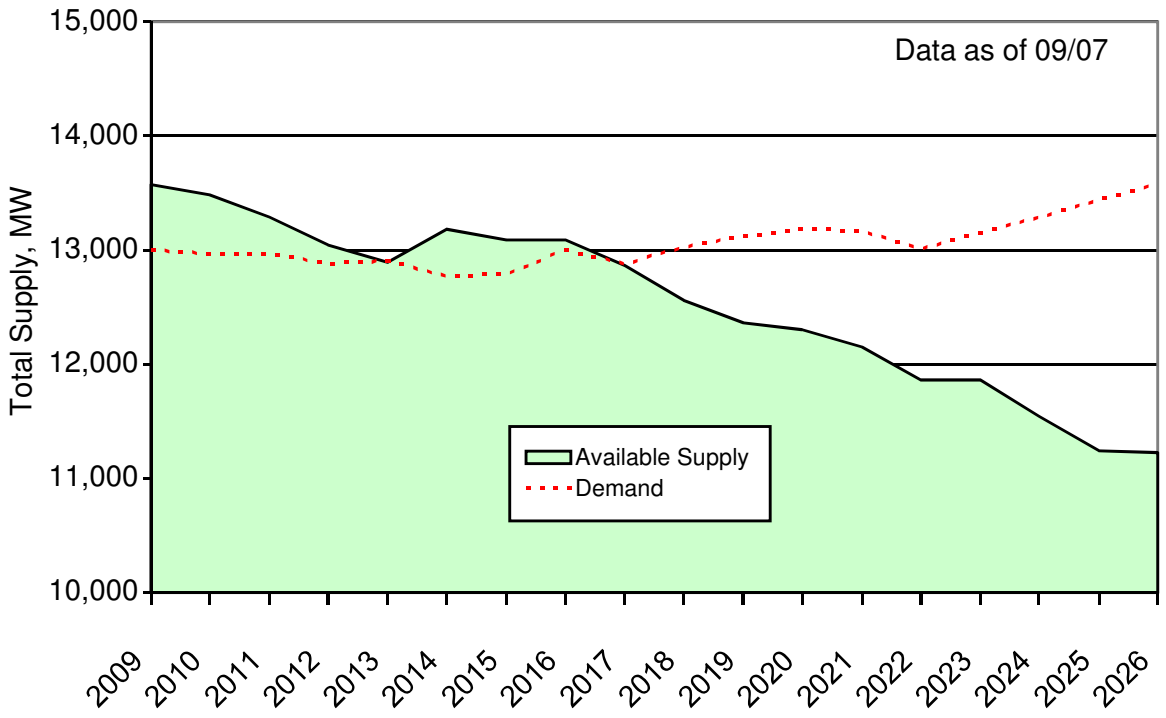
Background

- Used nuclear fuel consists of small ceramic uranium fuel pellets the size of a pencil eraser.
- All the used nuclear fuel produced by the U.S. nuclear energy industry in nearly 50 years - if stacked end to end - would cover an area the size of a football field to a depth of less than 10 yards.
- All used fuel generated since the plant began operation at Fermi 2 is safely stored inside the plant. An additional dry cask storage facility is planned once the fuel pool inside the plant is full
- Although the U.S. Nuclear Regulatory Commission determined that used fuel could remain in safe storage at plant sites for at least 100 years, such storage was never intended to be permanent.
- When removed from the reactor, used fuel has significant remaining energy potential

Integrated Used Fuel Management

- Temporary storage at Nuclear plant sites and/or centralized volunteer locations
- Advanced fuel reprocessing and recycling of used fuel to reduce the volume and toxicity of nuclear waste and recover useful materials
- Permanent disposal of the small amount of remaining byproducts at a deep geologic repository.

Illustrative supply and demand forecast

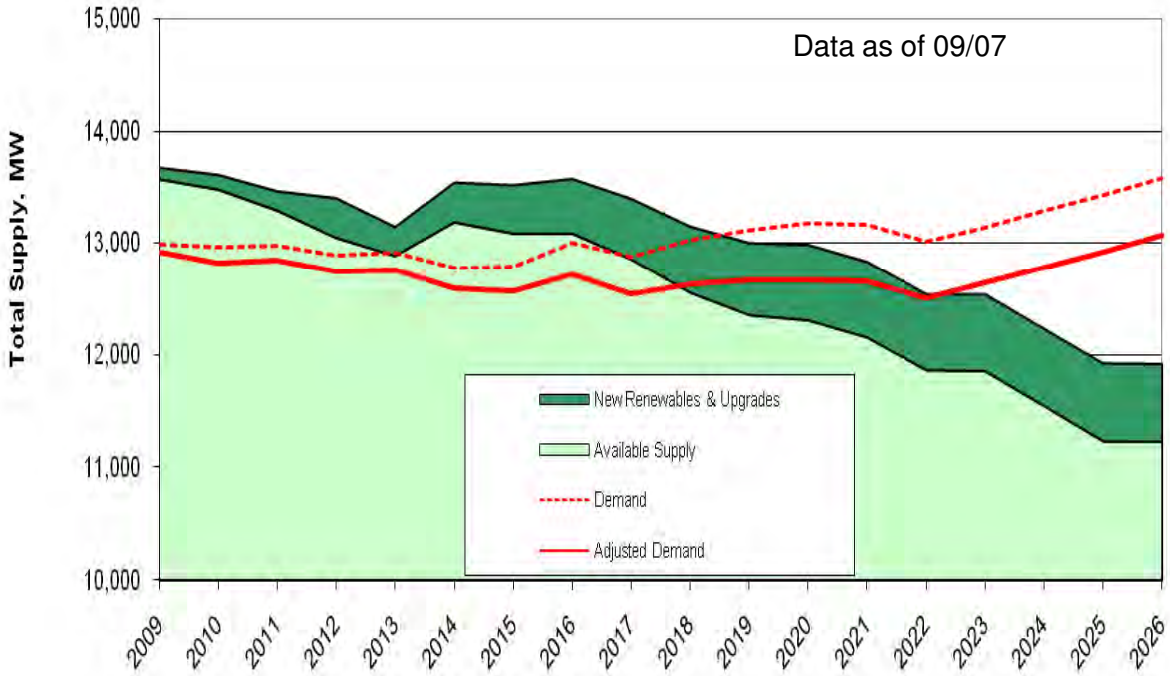


Total supply includes owned capacity and import capability

Customer peak demand includes reserve margin

Drop in supply over time is predominantly due to a forecasted reduction in external supply to Michigan as the greater Midwest rebounds and excess supply in other utility areas is reduced. Also includes a small amount of old coal retirements.

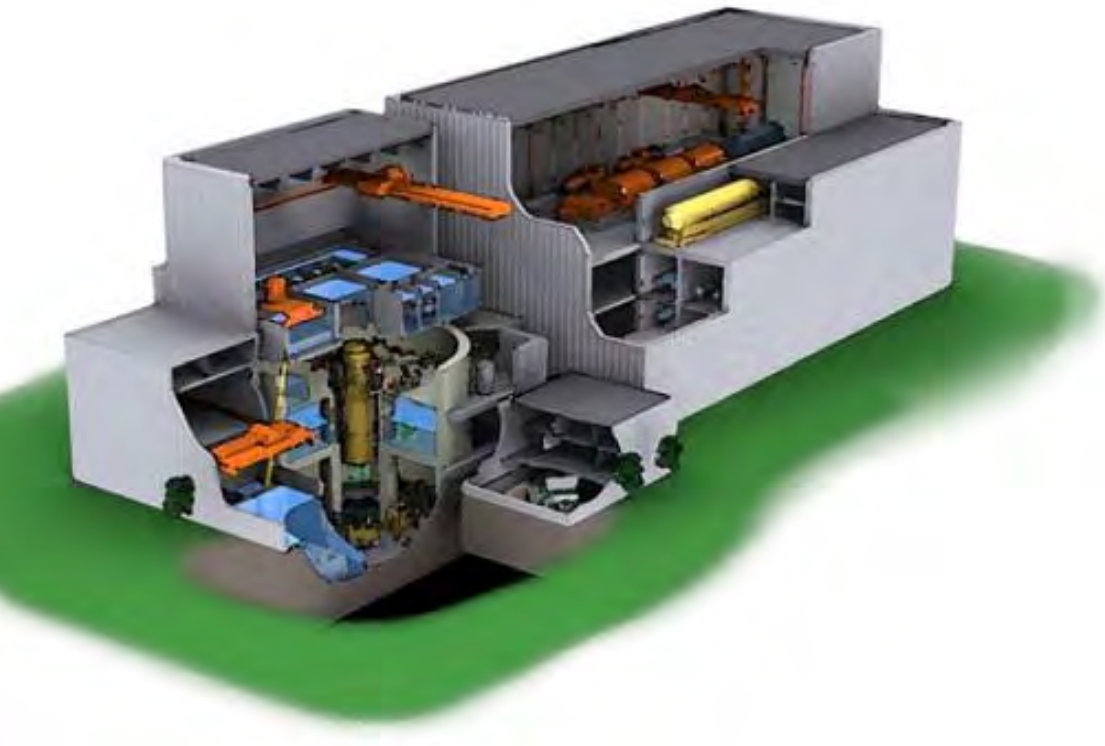
Illustrative Impact of EO & RPS



Energy Optimization and Renewables will buy time, but not replace need for new baseload.

"45 by 20" or similar plan will likely have dramatic negative impact on supply side and pull forward the need for new base load

ESBWR Overview



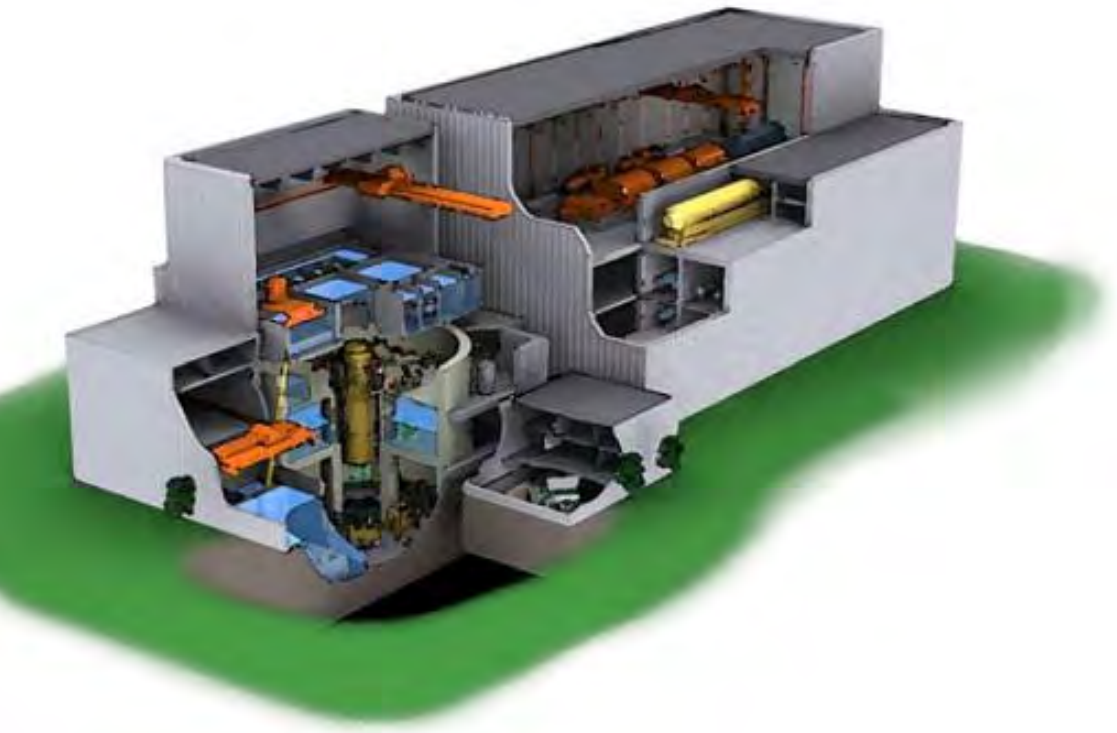
Detroit Edison has selected the General Electric-Hitachi ESBWR for reference in the COLA.

The ESBWR is currently proceeding through the Design Certification process (2011)

Selection of the ESBWR resulted from internal and 3rd party evaluation of the various available reactor technologies and included numerous aspects

- Technical
- Safety
- Operational
- Commercial
- Strategic

ESBWR Overview



A 3rd generation advanced design boiling water reactor (BWR) with a capacity ~1,560 MW.

Employs modular integrated structure construction, saving construction time and cost

Designed to meet demanding security requirements.

Employs 25 percent less pumps, valves and motors than previous BWR's

Utilizes advanced safety features utilizing natural circulation, gravity powered cooling systems and non-mechanical safety features.