

## An Overview of the Nuclear Licensing Process

### What's most important to know?

Florida is the nation's fourth most-populous state and ranks third nationally in overall energy consumption. Homes are bigger – with central air conditioning, computers, large-screen TVs and all our modern appliances (even energy-efficient ones) – and the average home today uses more electricity than ever before.

Even considering the current short-term economic slowdown, we have calculated that demand for electricity in our service area will grow by 25 percent in the next 10 years. Growth within local electric cooperatives and municipal utilities is expected to keep similar pace. This growth and associated energy use requires long-term planning and long-range solutions.

In late 2005, Progress Energy notified the U.S. Nuclear Regulatory Commission (NRC) of its intent to file an application for a combined construction and operating license (COL) for a potential new nuclear power plant in Florida. Because the process of siting, licensing, engineering and building nuclear plants takes about 10 years, the company must consider nuclear energy in advance of the expected need for additional generation.

### What is a combined construction and operating license?

The COL process combines licensing procedures that were treated separately in previous nuclear plant siting applications. In the past, the permit to build a plant did not ensure that the plant would be allowed to operate when completed. The separation of those processes often drove up costs and uncertainty significantly for companies and their customers. Combining the processes helps to minimize the overall cost and, therefore, the rate impact on customers while maintaining significant oversight by the federal government agency responsible for ensuring nuclear safety and security. The process also provides significant opportunities for public involvement.

The approval process for the nation's first COL applications, including the application filed by PEF, could take three to five years. Subsequent approval of COLs for identical plants is expected to take less time.

### What is the licensing process timeline?

The NRC has established a clear process for licensing a nuclear power plant. It begins with selecting a potential site and technology. The application for the combined construction and operating license was filed in July 2008. The NRC accepted and docketed our combined construction and operating license in October 2008. If approved by the NRC, construction could begin as early as 2012 for a new plant to begin commercial operation around 2016.

### How many reactors does the license permit?

The NRC's combined construction and operating license is structured to allow companies to license two reactors essentially at the same time.

Progress Energy will continue to work cooperatively with regulators, community leaders, and other stakeholders in Florida to ensure the company makes the best long-term decisions to meet Florida's future energy needs. Nuclear power may prove to be our state's best option to provide reliable, affordable and emission-free energy.