



Highlights of [GAO-07-1129](#), a report to congressional committees

## Why GAO Did This Study

Nearly three decades after the last order for a new nuclear power reactor in the United States, electric power companies plan to submit 20 applications in the next 18 months to the Nuclear Regulatory Commission (NRC) for licenses to build and operate new reactors. Since 1989, NRC has developed a new license review process that allows a power company to obtain a construction permit and an operating license through a single combined license (COL) based on one of a number of standard reactor designs. NRC expects its new process to enhance the efficiency and predictability of its reviews. GAO reviewed NRC's readiness to evaluate these applications by examining the steps NRC has taken to (1) prepare its workforce and manage its workload and (2) develop its regulatory framework and review process for new reactor activities. GAO reviewed NRC documents for new reactor workforce staffing and training, examined NRC's guidance for the review of license applications, interviewed NRC managers and representatives of nearly all of the COL applicants, and observed NRC's public meetings.

## What GAO Recommends

GAO is making recommendations to better ensure that NRC's workforce and review processes efficiently and effectively facilitate the review of new reactor license applications. In commenting on a draft of the report, NRC agreed with GAO's recommendations.

To view the full product, including the scope and methodology, click on [GAO-07-1129](#). For more information, contact Mark Gaffigan at (202) 512-3841 or [gaffiganm@gao.gov](mailto:gaffiganm@gao.gov).

## NUCLEAR ENERGY

# NRC's Workforce and Processes for New Reactor Licensing Are Generally in Place, but Uncertainties Remain as Industry Begins to Submit Applications

## What GAO Found

NRC has taken many steps to prepare its workforce for new reactor licensing reviews, but several key elements of its preparations are still underway. As a result, uncertainties remain about NRC's ability to manage its workload associated with the surge of applications. Specifically, NRC has increased its funding for new reactor activities, created the Office of New Reactors and reorganized several other offices, and hired a significant number of entry-level and midlevel professionals. To assist its staff in reviewing the applications, NRC also plans to contract out about one-third of its fiscal year 2008 workload. However, several elements of NRC's preparatory activities are still in progress, including hiring for some critical positions; developing key training courses; and developing computer-based tools intended to enhance consistency and coordination in reviewing like sections of COL applications. In addition, NRC has not fully developed criteria for setting priorities if the workload exceeds available staff and contractor resources. Finally, while the Office of New Reactors established a cross-divisional resource management board early in 2007 for coordinating certain office review activities, it has not clearly defined the extent of the board's responsibilities.

NRC has significantly revised its regulatory framework and review process to prepare for licensing new reactors, but until NRC completes certain additional actions, it may not fully realize the anticipated benefits of the new process. NRC has revised, augmented, and clarified most rules, guidance, and inspection oversight criteria to provide for early resolution of issues, standardization, and predictability in the license review process. However, NRC has not yet completed several actions to implement this process. For example, NRC only recently modified its acceptance review process to include an evaluation of the application's technical sufficiency in addition to its completeness. NRC plans to complete new acceptance review guidance and tools reflecting this change by the end of September 2007. NRC also is refining its process for tracking requests to each applicant for more information but has not developed a coordinating mechanism to avoid unnecessarily requesting information from multiple applicants.

### Anticipated COL Applications by Fiscal Year

Expected submission date	Number of applications	Number of reactor units
First quarter, FY 2008	5	9
Second quarter, FY 2008	4	6
Third quarter, FY 2008	1	1
Fourth quarter, FY 2008	4	6
FY 2009	6	9
<b>Total</b>	<b>20</b>	<b>31</b>

Source: NRC.

Note: Information as of September 10, 2007.