NEW YORK — The rail-shipping business is off by double-digit percentages, but railroad giant Union Pacific Corp. doesn't want to worry about meeting demand if and when it rebounds.

For that reason, almost a third of Union Pacific's 5,000 furloughed workers are operating on a retainer, with full benefits and partial wages, even though it is costing the company $50 million a year.

James R. Young, Union Pacific's chief executive, said the company is determined to avoid a repeat of a 2004 fiasco, when it was caught unprepared for a sharp upturn in business. The U.S. had gradually emerged from the recession that followed the dot-com bust and the 2001 terror attacks. Then suddenly in 2004, the company's shipping volumes jumped roughly 10% to 12% in a six-month period. Union Pacific wasn't ready and the result was a network meltdown, with rolling bottlenecks and delays that had disastrous repercussions for its thousands of customers.

"We just flat-out cut too far" in the years preceding the 2003 and 2004 recovery, said Mr. Young, who was named CEO of the Omaha, Neb., company in 2005.

To make sure it has adequate staffing should the economy recover quickly this time around, Union Pacific is paying full health benefits for 1,600 of its roughly 5,000 furloughed employees. These 1,600 employees, many of them train conductors, also work eight days a month so that they can remain current on their training and qualifications. Mr. Young estimates that calling one of these employees back to work will take fewer than 30 days, compared with 60 to 90 days for other furloughed workers.

"This thing could snap back pretty quickly, and in our business we don't have the luxury of telling a customer 'No,' " Mr. Young said.

All big U.S. railroads face a complicated calculus now: how to cut expenses as freight volumes fall without leaving themselves unable to respond quickly as the economy rebounds. Union Pacific's approach represents a compromise of sorts. While it is furloughing a larger percentage of workers than its largest competitor, Burlington Northern Corp., it is also investing millions to make sure these sidelined employees can return to work as quickly as possible.

Railroads are expected to experience a jump in volumes several months before a broader economic recovery. Getting caught unprepared could cost them business and could hamper a larger economic rebound by snarling the movement of the goods that railroads transport. More than 40% of freight in the U.S. moves by rail.

Until December, rival Burlington Northern had a furlough policy similar to Union Pacific's. A certain percentage of furloughed workers kept their benefits and were paid a "modest monthly income," spokesman Patrick Hiatte said. But the Fort Worth, Texas, company discontinued the practice "when it became clear to us that the recession was getting worse" and that costs needed to be cut, Mr. Hiatte said.

Now, furloughed workers at Burlington Northern, like the other big railroads, CSX Corp. and Norfolk Southern Corp. , lose their benefits after several months.

Burlington, which has a current work force of 38,000, has furloughed roughly 7.8% of its employees, compared with more than 10% for Union Pacific, which employs 45,000.

James Stem, national legislative director for the United Transportation Union, which represents 55,000 conductors working on the North American railroads, praised Union Pacific's approach and predicted the other railroads would spend more money in the long run on hiring and retraining.

Norfolk Southern, the nation's fourth-largest railroad by revenue, says that rather than mimic Union Pacific's furlough policy, it has chosen to minimize the number of furloughs. The company has furloughed only 1,200 from its 30,000 work force, compared with 2,300 for CSX, the nation's third-largest railroad and Norfolk Southern's main competitor in the eastern half of the U.S.

Union Pacific's furlough program comes at a time when the railroad has been making what some customers and analysts say are noticeable gains in its performance in recent years.

The company's reputation was in need of burnishing. Aside from the problems of 2004, many customers still remember 1997 and 1998, when Union Pacific's merger with Southern Pacific Rail Corp. caused widespread service problems and paralyzed ports on the West Coast.

Rick Paterson, a UBS analyst, said Union Pacific's average train speed, considered a good measure of performance, has increased 22% during the past year. Only some of this improvement is a function of lower volumes, which result in less-congested tracks, Mr. Paterson said.

By comparison, Burlington Northern's average train speed has improved only 11% in the past year, Mr. Paterson said.

The true measure of the company's progress, Mr. Young says, will come when the economy improves, adding that Union Pacific simply can't afford another poor performance. "Customers have a long memory," he said.