

During the next five years, Con Edison will make the significant capital investments necessary to upgrade our electric system. Our investment in critical infrastructure is imperative if we are to meet — and meet reliably — the increasing demand for energy in our service area. A reliable, safe energy supply is crucial to the region's economic growth.

The careful, focused investments we are now making in our infrastructure reflect both Con Edison's deep experience and understanding of our region's needs and a determination to ensure that we continue to successfully deliver power to the world's most dynamic and demanding marketplace.

On It in the Field

Accomplishments in Electric Operations

In 2003, as our customers found new and greater uses for electricity, Con Edison of New York's weather-adjusted peak load rose to 12,600 megawatts, up 200 megawatts from 2002. Adjusted for weather, our peak

load is expected to increase by an average annual rate of 1.6 percent over the next five years. To meet this increased demand and ensure our ability to meet future demand, in 2003 we invested more than \$660 million to enhance the reliability and security of our electric transmission and distribution systems. As we do each year, we invested significant resources to prepare for the summer peak load season. In 2003, we replaced 158 miles of underground and aerial feeder cables, replaced 345 thermally sensitive cable joints, installed 211 new transformers, and upgraded several substations.

Each year, Con Edison invests in research and development projects that are closely integrated with the company's business objectives and strategy. We have been especially successful in identifying and developing innovative uses for new technologies and tools that meet the unique needs of our densely populated region. By using advanced analytic systems, such as computer models that

evaluate individual components within our system, we manage resources more effectively. For example, we developed the Poly Voltage Load Flow (PVLf) program to analyze how electric usage impacts network components under both normal and emergency operating conditions. The analysis helps us to determine the resiliency of electric networks during consecutive, hot summer days. Such efforts help us channel resources so that they improve overall performance and reliability.

Every year, a large portion of our investment is devoted to ensuring that our system can accommodate growth. We are preparing our New York City transmission system so that it will be ready to accept power from the new generating plants that are coming on line in our service area. We're also working to build the delivery infrastructure needed for both new customers and existing customers who are using more energy. Our major projects provide load relief for existing facilities that are near or have reached capacity. One such facility is a new substation

Page 6, Left: Fred Schmitt, operating supervisor, and Nick Williams, chief line constructor specialist, perform high-wire maintenance over Staten Island. **Center:** The electronic landscape of our homes continues to change. **Right:** One of three transformers installed in the new World Trade Center substation. **Page 7, Left:** Con Edison supports numerous organizations that make life in our communities more vibrant. **Center:** At the Dunwoodie station, equipment was installed that will help the company's system accept power from new generating plants. **Right:** Kevin Carl, troubleshooter Hv, assessing overhead lines.

