

by david a. aus, marketing communications writer

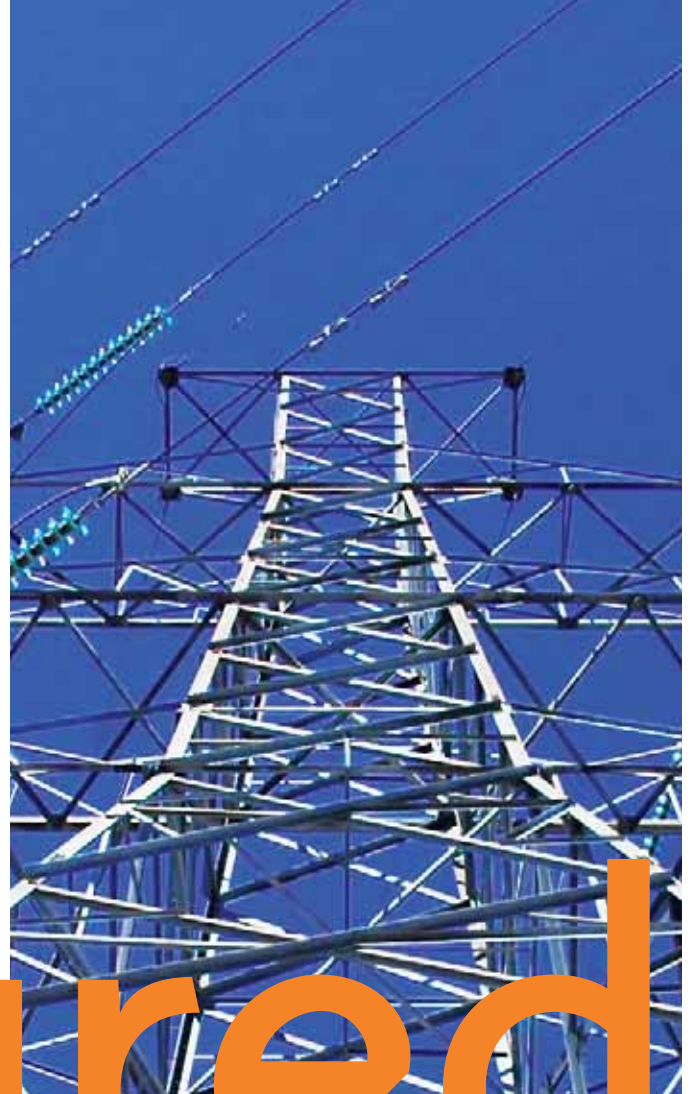
# secured

It powers every aspect of our lives. Whether generated from coal plants, nuclear energy, or the forces of nature (water, wind, solar), our society has never been so dependent on electricity as we are today. At a time when even a momentary disruption causes our daily lives to be thrown askew, the importance of securing those facilities that generate the energy that keeps our world moving forward has never been so important.

The Infrastructure Security and Energy Restoration (ISER) Division of the Department of Energy's (DOE) Office of Electricity Delivery and Energy Reliability leads the federal government's effort to ensure a robust, secure, and reliable energy infrastructure.

Under Homeland Security Presidential Directives 7 and 8, the DOE is tasked with protecting critical energy assets and assisting state and local governments with disruption preparation and response. On a site-specific basis, each plant follows its own guidelines and protocols as far as infrastructure security is concerned. And as you will read in the case studies to follow – as well as in future issues of Pelco Press – Pelco continues to deliver advanced video security solutions to help protect these vital assets.

From the use of comprehensive IP-based systems in Lithuania to centralized video management software in Detroit, Pelco has



dedicated significant resources to both understanding the issues surrounding plant security and designing systems that maximize existing capabilities and ROI.

## leituvos energija

Few enterprises have a greater mission for reliability than electric utilities. As dependent as we are on electric power, nobody thinks of it until there's an outage. Power system operators, however, think about reliability all the time and are continuously working to ensure the constant and consistent availability of their service. In the Baltic nation of Lithuania, an Endura IP-based video system from Pelco is playing a key role in helping system operators do just that.

As the main player in the electricity sector, Lietuvos Energija functions as the owner of the electricity transmission grid, the system operator, and the market operator. Lietuvos Energija ensures electricity transmission from Lithuania's power plants to its distribution companies and together with neighboring power systems, is involved in electricity export, import and transit.

The company-controlled transmission system is interconnected by four electric lines with Latvia, five with Belarus and three with Russia (the Kaliningrad Region). One of Lithuanian Energy's main objectives is the integration of the country's power system into the Western



# energy



European electricity market, along with the development of regional co-operation. Expansion of the transmission grid is planned in the near future by interconnecting it with the Polish electricity system. The Lithuanian-Polish interconnection project is of immense importance for the development of an integrated EU electricity market and for the improvement of the reliability of supply. By utilizing the common capabilities of the power systems of the Baltic States, establishment of the Common Baltic Electricity Market needed for successful integration of the Baltic States into the electricity markets of Western Europe and the Nordic countries is projected.

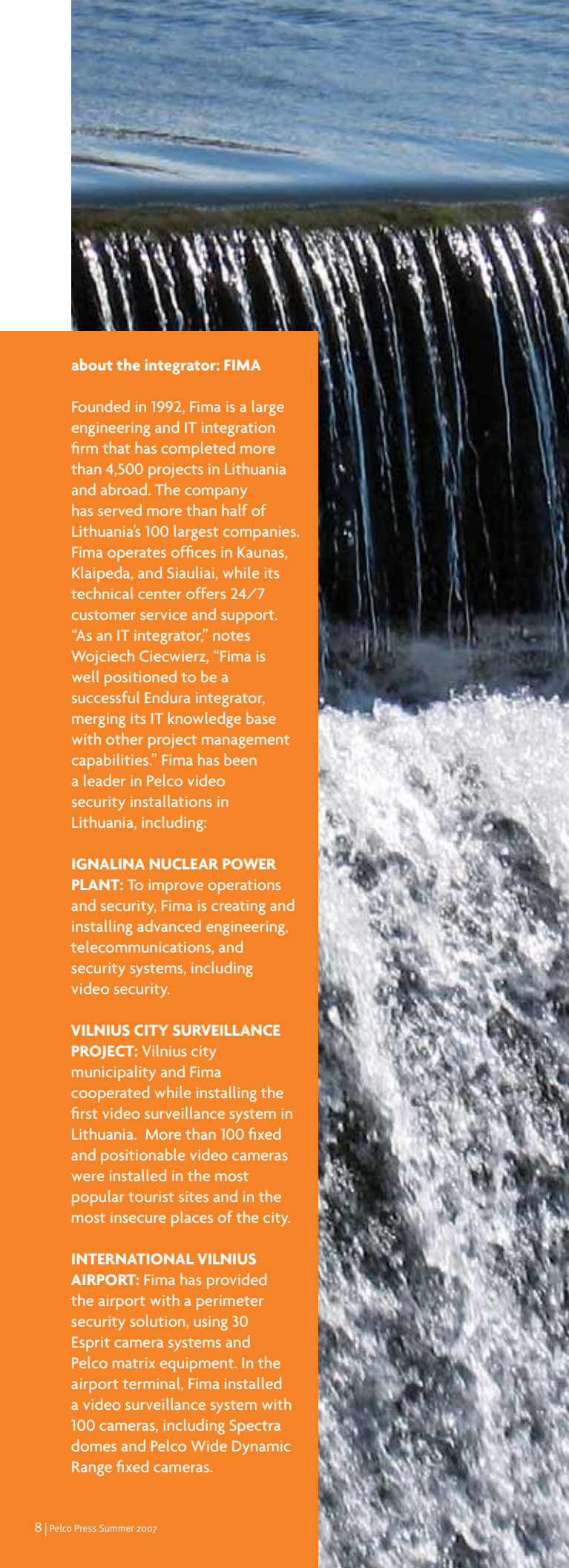
As it strives to improve the efficiency of its operations, Lithuanian Energy devotes significant resources to training its specialists and implementing the latest scientific and technical advancements. The company's choice of Endura is yet another groundbreaking use of technology to achieve the twin goals of system reliability and operational efficiency.

Lithuanian Energy sought a video security solution to monitor ten power substations located throughout its grid, covering the country's entire 65,000 square Kilometer area. A distinguishing feature of this installation is the great distances between the sites – for example, one substation is 250km from the main center. "Lithuanian Energy knew that the span of their operations would be an important criterion

when selecting a solution," explains Wojciech Ciecwierz, Pelco Area Manager for Central Europe. "After considering a hybrid system, Lithuanian Energy determined that Endura would offer the flexibility and scalability they desired for the long run, and the picture quality and PTZ responsiveness that matches analog performance, even over the extreme lengths in their network."

The substations are spread over a wide geographical area and connected to a 1GB Ethernet WAN. Three of the substations connect to the WAN via wireless links. Lithuanian Energy wanted control rooms in each of five sites. Each control station contains an Endura B block, consisting of an Endura Workstation, a Video Console Display, and Endura encoders. The main management/control center in Vilnius houses an Endura NVR and Storage Expansion Boxes, where all video in the system is recorded and stored. All the cameras in the system can be operated from any of the five control centers. The 1GB Ethernet WAN carries data traffic between the various control centers, including information about voltage and other operating factors. Various other security systems, including biometric and fire detection, communicate across the same network.

Throughout this multi-phase product, Lietuvos Energija will be adding 150 cameras to the system over a span of 10 years. The first phase of the project, which included 10 cameras, was completed in



December 2005. The second phase, which included the installation of 20 Spectra dome systems, was completed in 2006.

The Endura solution is providing key actionable information for Lithuanian Energy. Before the installation of this system, the areas under surveillance had not been protected by a camera system. In the past, when operators received an alert – a fire, an intrusion, an operations problem – they had to dispatch a worker to the alerting site to investigate the incident. That meant deploying a costly resource and, often, waiting many hours to gain necessary insight into an event. Today, the Endura video system gives operators the ability to instantly see what is going on at each site, from any control station. What's more, the expandable Endura platform will give Lithuanian Energy the flexibility to scale and adapt their system, as their needs evolve into the future.

### dte energy

DTE Energy is one of the United States's largest diversified energy companies. Headquartered in Detroit, Michigan, DTE Energy is involved in the development and management of energy-related businesses and services nationwide. Its largest operating units are Detroit Edison, an electric utility serving 2.2 million customers in Southeastern Michigan, and MichCon, a natural gas utility serving 1.3 million customers in Michigan. The DTE Energy portfolio also includes non-utility energy businesses focused on power and industrial projects, coal and gas midstream, unconventional gas production and energy trading.

Faced with the need to upgrade security equipment in their Sub-Stations and Service Centers, DTE selected Security Corporation. For more than 30 years, Michigan-based Security Corporation has been solving the security and protection needs of its customers using the latest cutting edge security components and software available. "We chose Security Corporation because of their reputation in the industry," said Neil Kennings, Security Director for DTE.

"After several site surveys and customer meetings, Pelco was chosen for the CCTV piece of the puzzle," stated Jeff Brandt, Account Executive with Security Corp. "Pelco's commitment to quality and customer service is a key factor for us," added Randy Holloway, Executive Vice President of Security Corp.

A Pelco solution with DX8100 DVRs, Day/Night ImagePaks, IR Illuminators, and Spectra III dome positioning systems have been deployed at DTE's Sub-Stations and Service Centers, keeping watch over all perimeters and entry points.

As a value-added integrator, Security Corp. wanted to give DTE an intuitive way for their Security Personnel to interact with the alarms and video in their Security Command Center. The Pelco VMX300-E was installed to meet that need. Maps of the facilities were imported into the system with camera and intrusion icons programmed to react to an intruder. With the integrated solution, Security Personnel can respond quickly and efficiently to any potential threats.

### about the integrator: FIMA

Founded in 1992, Fima is a large engineering and IT integration firm that has completed more than 4,500 projects in Lithuania and abroad. The company has served more than half of Lithuania's 100 largest companies. Fima operates offices in Kaunas, Klaipeda, and Siauliai, while its technical center offers 24/7 customer service and support. "As an IT integrator," notes Wojciech Cieciewicz, "Fima is well positioned to be a successful Endura integrator, merging its IT knowledge base with other project management capabilities." Fima has been a leader in Pelco video security installations in Lithuania, including:

**IGNALINA NUCLEAR POWER PLANT:** To improve operations and security, Fima is creating and installing advanced engineering, telecommunications, and security systems, including video security.

**VILNIUS CITY SURVEILLANCE PROJECT:** Vilnius city municipality and Fima cooperated while installing the first video surveillance system in Lithuania. More than 100 fixed and positionable video cameras were installed in the most popular tourist sites and in the most insecure places of the city.

**INTERNATIONAL VILNIUS AIRPORT:** Fima has provided the airport with a perimeter security solution, using 30 Esprit camera systems and Pelco matrix equipment. In the airport terminal, Fima installed a video surveillance system with 100 cameras, including Spectra domes and Pelco Wide Dynamic Range fixed cameras.