

gions and between these regions and the Internet backbone," the company said. "GCI is committed to using private capital to deploy modern broadband service over time to as much of these sparsely inhabited regions as possible on an economically feasible and sustainable basis. It is clear, however, that the economic viability of deploying terrestrial second/middle-mile facilities over the next five to ten years will depend at least in part on government-backed capital, sustained support programs to anchor tenants, and the addition of broadband to Lifeline-supported services." -- *Howard Buskirk*

Not Easy Being Green

Federal CTO Says Telecom Has Big Role in Promoting Energy Efficiency

Telecom is central to making the U.S. more energy-efficient, federal CTO Aneesh Chopra said at a Nokia Siemens environmental conference Tuesday. "Technology and telecommunications have an opportunity to advance the sustainability agenda in part because we're such energy hogs," Chopra said. "I come from Virginia, where half the economic prosperity of the state is born out of the telecommunications sector and these massive data centers, which are deployed all around the state, and boy do they consume a ridiculous amount of energy."

Chopra said the U.S. uses only about 25 percent of data centers' capacity. "We as a society will benefit greatly if we can basically maximize the capacity of our footprint," he said. "It's reducing excess capacity and it's maximizing the efficiency of the capacity that ultimately exists."

Chopra said the communications industry can also play a big role in making the nation more energy efficient through better management of consumption. "FERC, the nation's [energy] regulatory body, has estimated that if we maximize the potential of demand response we can cut peak demand by 20 percent," he said. "That is a pretty big target to hit if we can get there."

Nokia Siemens Networks sponsored the conference on making the telecom sector greener "because it is what we believe is the way we need to do business," said Susan Spradley, head of North America for the company. "It is fundamentally part of our belief as a company." The company has hit the 95 percent recyclability mark for its products, she said. "We've gone from needing tremendous amounts of power to what you need for a microwave, but that's still not good enough," she said. "I believe we are at a point now where as an industry we can make a difference."

Energy and environmental issues still rank behind health care, reviving the economy and national security on the Obama administration's agenda, but they will get more attention, said Yale University professor Dan Esty, who was on the Obama transition team. The president considers green energy an engine of economic growth, he said, noting some stimulus money is going to activities such as energy-efficiency projects, alternative energy, battery storage and the smart grid.

Green intersects with the FCC's National Broadband Plan, which will aim for sustainable development, said Nick Sinai, the commission's energy and environment director. Smart grid offers the biggest emission savings and has shown significant efficiency potential, he said. Licensed and unlicensed spectrum needs and usage for smart grid applications, alternative spectrum approaches, and the effect of dedicated spectrum on smart grid deployment will be taken up in the plan, Sinai said.

Telecom companies are facing the challenges of increasing capacity while maintaining service quality, raising data throughput and reducing latency, balancing new energy measures against effects on people's lives

and meeting industry requirements for emerging markets, said Cheryl Blum, a vice president at the Telecommunications Industry Association (TIA). TIA is working on green standards efforts, including smart device communications, small wind turbines, building automation systems standards, an emerging technologies group and a telematics group, she said.

Rules that would restrict the use of information and communications technology by indiscriminately limiting total power consumption would be counterproductive, warned Tim Jeffries, a vice president at the Alliance for Telecommunications Industry Solutions (ATIS). And state and local level incentives can be difficult to navigate and lead to a fragmented regulatory framework, he said. Standards and best practices around the world should be harmonized to meet the needs of the information and communication industry's multinational reach, Jeffries said. Greenhouse gas and life cycle assessment reporting practices like labeling that aren't uniform can cause customer confusion and distrust, he said. He cited the ATIS' Network Power and Protection Committee's release of three specifications outlining measurement methods for calculating telecom equipment energy ratio.

Developing a green business strategy is crucial, said Mary Brusewitz of the Strasburger & Price law firm. Businesses are increasingly judged on whether they're reacting or taking the initiative in green energy, she said. Companies can be ranked on their environmental impact, green policies and reputation, she said. But figuring out what green means can be difficult, because there are multiple jurisdictions and systems, differing state laws, evolving environmental reporting rules, major expenses, climate change litigation and international laws, she said. Balance is crucial, said Jack Rowley, a director at GSM Association. Setting up green efforts can stimulate innovation and may help other industries, he said. -- *Yu-Ting Wang, Howard Buskirk*

Comm Daily® Notebook

FCC Chairman Julius Genachowski believes "any regulation should be effective and targeted, not micromanagement, and that it should strive for technological neutrality," he said in a keynote speech at the ITU Global Symposium in Beirut, Lebanon. The FCC's network neutrality proceeding "is not about government regulation of the Internet," he said. "It's about ensuring that no one, not the government and not companies that provide Internet access, restricts the free flow of lawful information and services over the Internet." Promoting competitive markets and "empowering and protecting consumers" are complementary goals, he added. Genachowski also said the commission is "studying ways to accelerate the roll-out of 4G" wireless broadband "by ensuring the availability of sufficient spectrum; promoting spectrum efficiency and flexibility; and identifying and removing barriers to 4G deployment."

The cable and wireless industries joined phone companies in opposing a petition on broadband data collection by state regulators. The National Association of Regulatory Utility Commissioners had asked the commission to decide that federal rules don't limit states' collection of information from broadband service or infrastructure providers (CD Nov 4 p5). In reply comments Monday, NCTA said states don't have jurisdiction over broadband Internet because it's an interstate service. The states' role "is limited to the functions assigned by Congress under the Broadband Data Improvement Act (BDIA) and the American Recovery and Reinvestment Act (ARRA)," the cable association said. CTIA rejected the petition in separate reply comments. "While the FCC may need to take steps to improve the timeliness of the data it provides to states, states already have access to federal data," the wireless association said. "The petition cites no specific problems regarding access to needed datasets or lack of cooperation from providers." States have received resistance when trying to collect data for NTIA grants, the D.C. Public Service Commission said. "We don't believe that voluntary efforts on the part of broadband service providers will be