



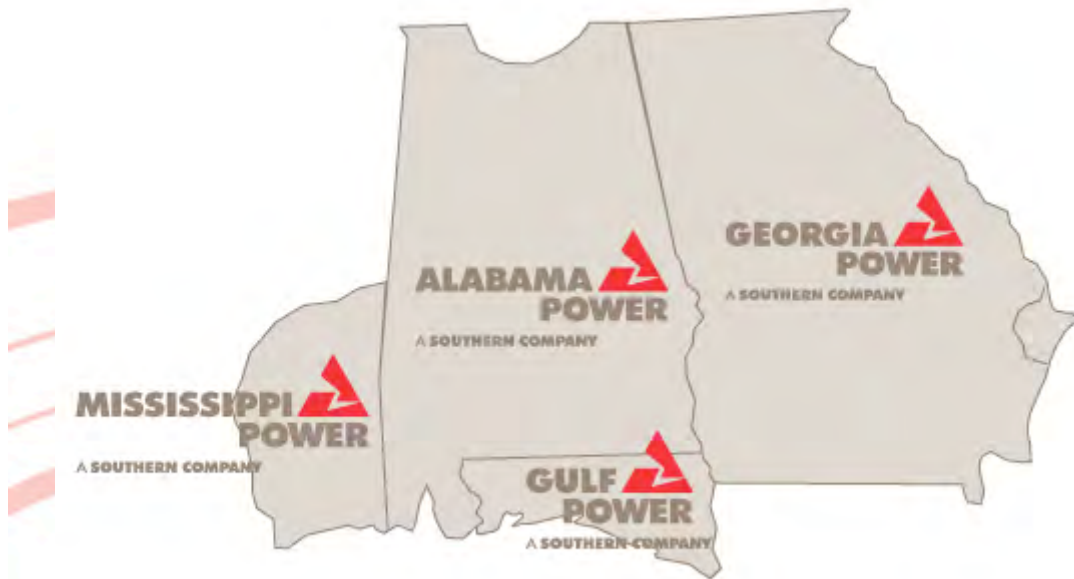
Hurricane Katrina: A Business Continuity Story

Becky Blalock, Southern Company Senior VP & CIO



Southern Company

Brands you know and trust



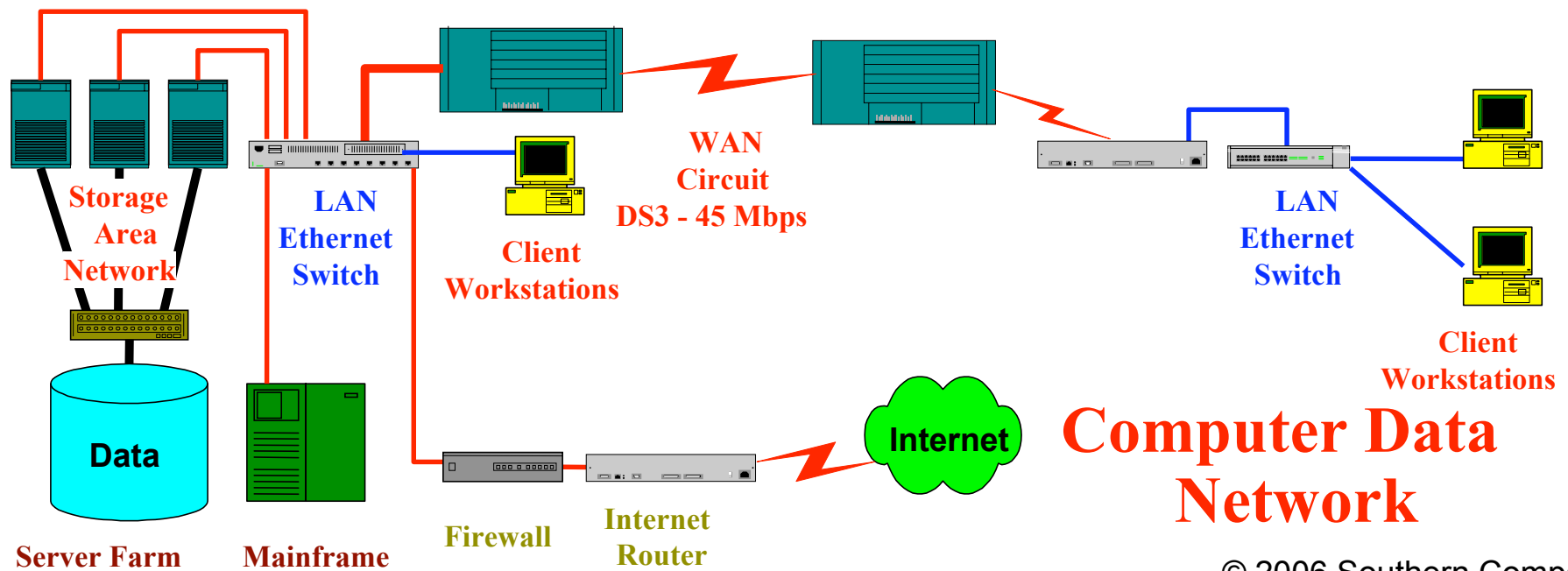
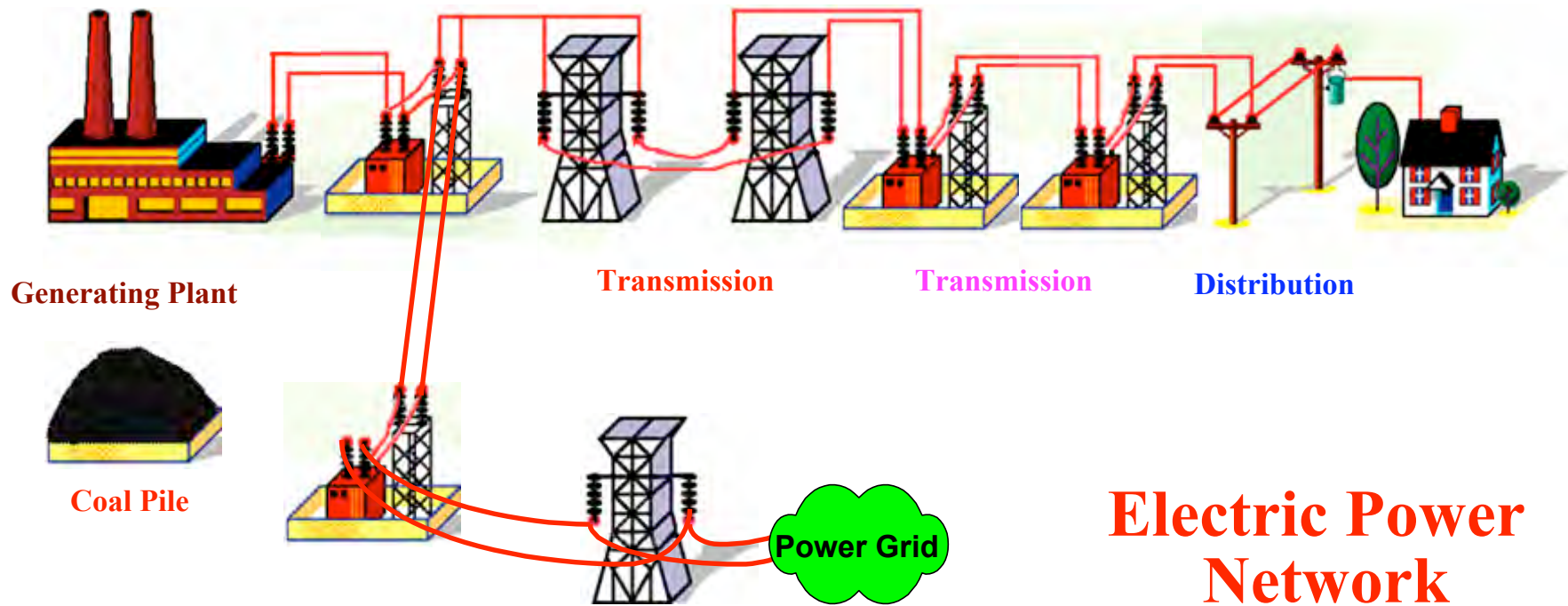
- SouthernLINC Wireless
- Southern Power
- Southern Nuclear
- Southern Telecom



Southern Company IT

- ❖ Employees: 1,015
- ❖ Annual Budget: \$268 million
- ❖ Technology Trends & Planning
- ❖ Products & Services
 - ❖ 23,000 desktops over 120,000 square miles
 - ❖ Pagers, Phones, Printers, Fax Machines, PDAs
 - ❖ Infrastructure to support the business
 - 850 applications
 - 627 locations
 - Fiber: 3,500 miles
 - 1,150 servers
 - Storage: 320 terabytes





COMPUTERWORLD

Florida IT Workers Help Mississippi Regain Power

Utility employees deliver supplies, satellite phones

BY THOMAS HOFFMAN

When Hurricane Ivan tore through the Florida panhandle a year ago, IT. Young was one of hundreds of residents whose homes were damaged. So when Hurricane Katrina slammed into the Gulf Coast on Aug. 29, the regional CIO at Gulf Power Co. was quick to lend support to some of the more than 600 workers at sister company Mississippi Power Co. who either lost their homes or suffered significant property damage.

the utility to communicate with Atlanta-based Southern Co. — its parent company — and with suppliers and business partners that were in its restoration.

"My home was damaged by Ivan, so I know firsthand what it's like to be in the said."

NETWORK WORLD

WiderNet

Weathering Katrina

Three IT organizations share their storm stories.

BY PHIL HOCHMUTH

A s Hurricane Katrina swept over New Orleans, Ochsner Hospital stayed open. But it was getting hot inside. With two of three generators down, fans were brought out to cool patients in the 95-plus-degree heat after air conditioning failed. And as temperatures topped 150 degrees inside critical computer and network equipment, Kurt Indani, the hospital's network services manager, had a call to make. "We decided after we went down to one generator to shut all critical patient care systems down," Indani says. "We didn't want to take more power than we needed. It's kind of odd to say but we shut down the patient care systems first to protect them for after the storm was over when we would need them most." To conserve power for critical patient life support and other medical gear, hospital staff shut down the mainframe that runs the

See Katrina, page 20

TO THE RESCUE

How volunteer efforts by network experts are making a difference. Page 14.

With its Gulfport headquarters destroyed, 300 of Mississippi Power's employees now work from mobile offices connected via satellite and VoIP.

CIO DECISIONS



LEADSHIP PHOTOGRAPH
Aline Ward

THE ULTIMATE KATRINA

As it rained through the Gulf Coast in late August, Aline Ward, CIO of Mississippi Power, took out the emergency center. Ward and other executives in the department had an extensive disaster plan. A backup of all critical data was stored in a secure location. Ward and other executives in the department had an extensive disaster plan. A backup of all critical data was stored in a secure location. Ward and other executives in the department had an extensive disaster plan. A backup of all critical data was stored in a secure location.

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CTO

BUSINESS TECHNOLOGY LEADERSHIP

trendlines

EDITED BY LAURIANNE McLAUGHLIN NEW • HOT • UNEXPECTED

Katrina Plus One: Disaster Plans Stress Communication

DISASTER RECOVERY A year has passed, but Aug. 29, 2005, remains a fresh memory for Mississippi Power CIO Aline Ward. As Hurricane Katrina slammed the Gulf Coast, Ward scrambled to keep communication lines open from a command center in the utility's Gulfport plant. Because this storm center was located several miles inland, Ward thought equipment would be safe from flooding. "We were on the second floor, but soon the water started to rise and cover outside the building," recalls Ward. Working in the dark, Ward and her IT colleagues piled sandbags against the door and bailed water from the rooms to keep radio communications equipment up and running. The result? Ward kept one radio system running throughout the storm and its aftermath, while her IT department worked through the night and logged 16-hour days for more than a week after the storm to help restore power to 100,000 customers who could safely receive it in 23 counties throughout southeastern Mississippi. Many of the employees—including Ward—lost their homes to Katrina. "The personal side was huge," Ward says, noting that many employees still don't have homes and that all corporate offices remain located in trailers or one of five temporary buildings, all of which IT had to quickly reequip.

Continued on Page 28



Disaster Recovery

- Prepare
- Respond
- Restore



Prepare

- Critical Situation Process
- Fill and test generators
- Application stress testing
- Plan reroute scenarios
- Wrap PCs in plastic and move to interior
- Charge batteries (2 batteries for each radio)
- Check inventory and plan staffing
- Freeze changes to infrastructure
- Ensure access to satellites

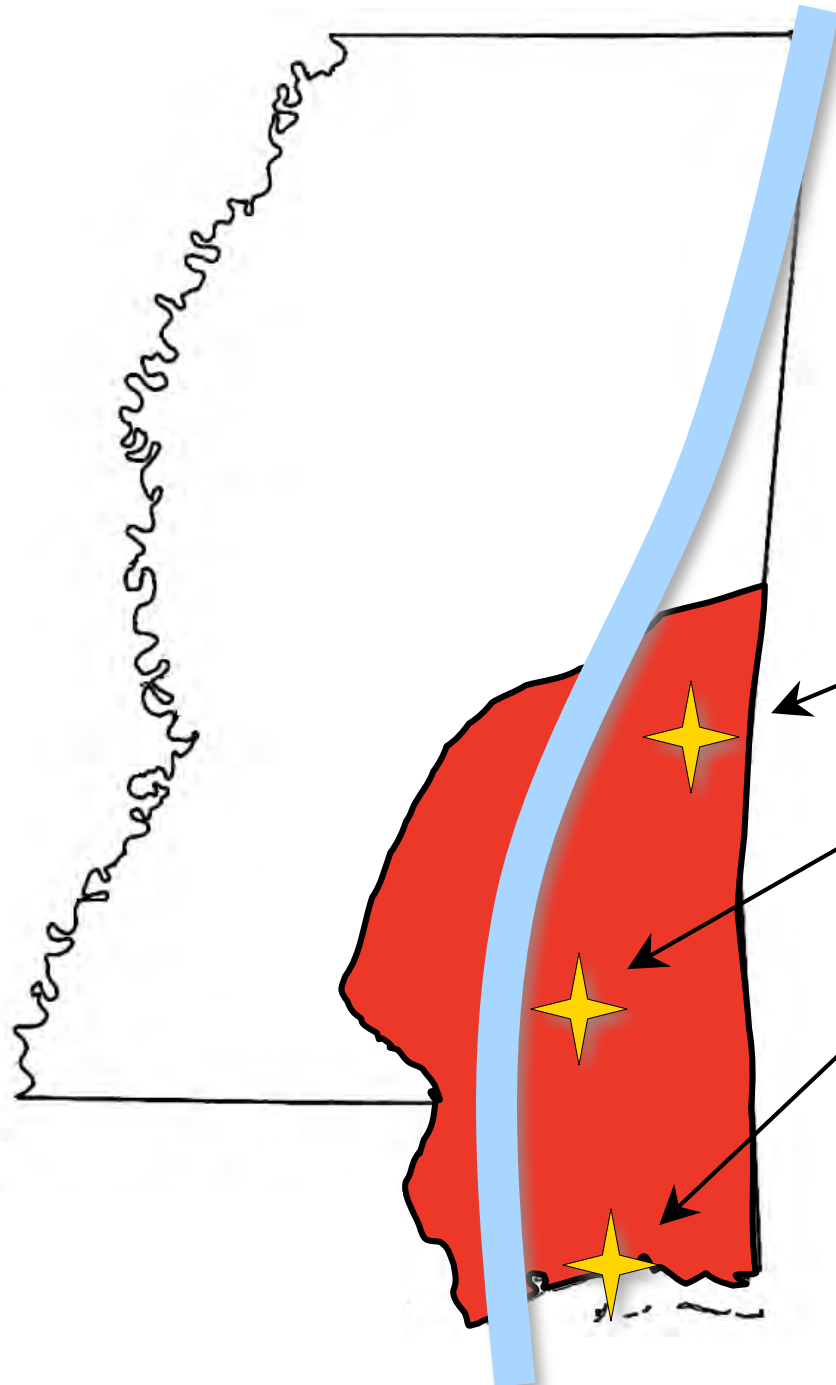


Respond

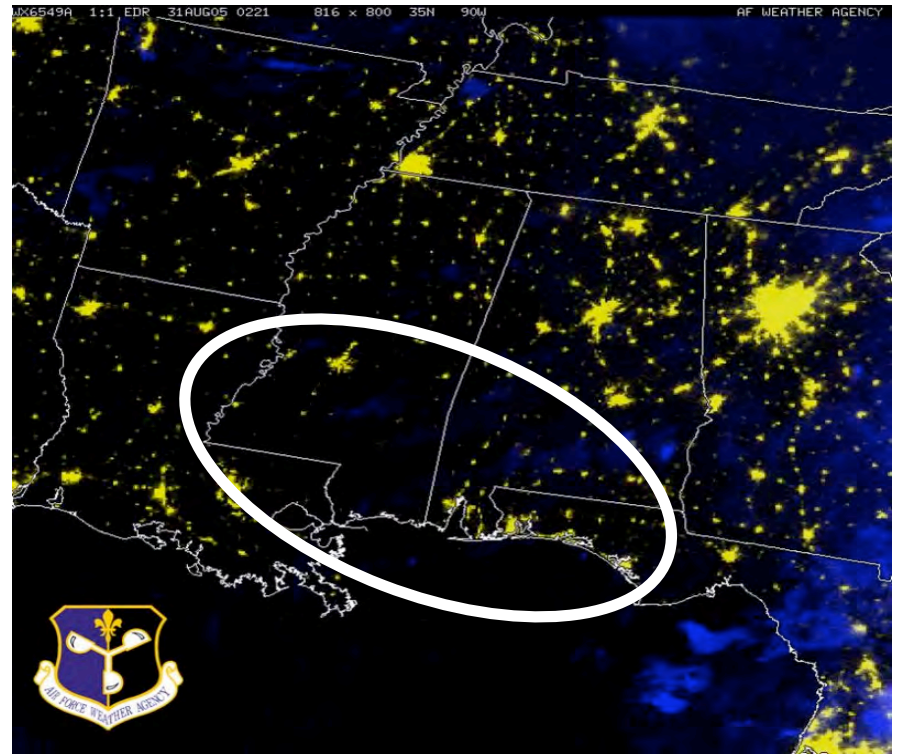
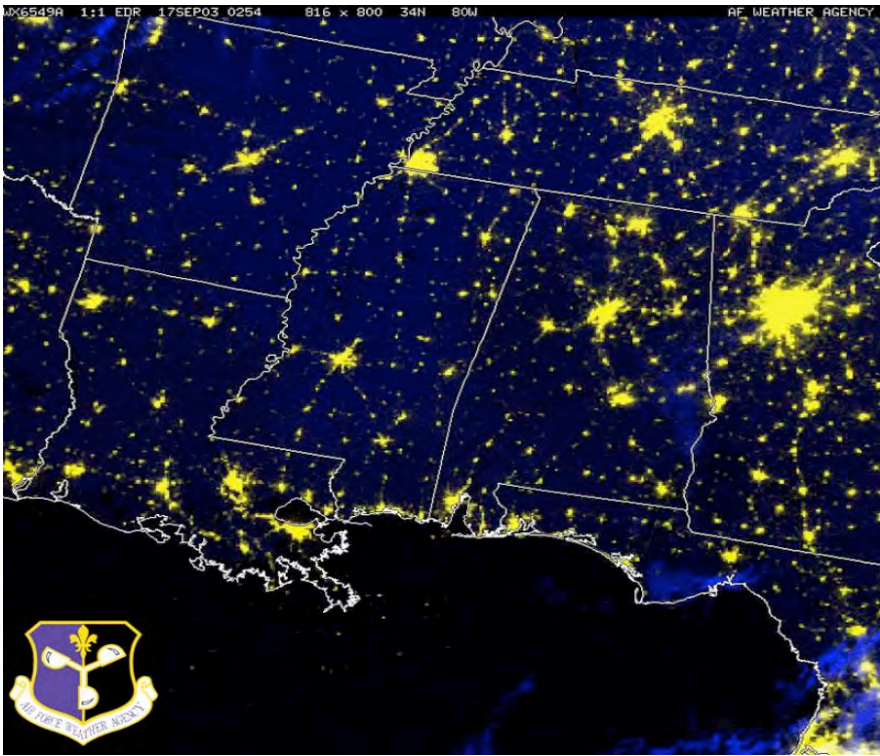
- No telephone service
- No cellular service
- SouthernLINC Wireless had a heartbeat



Peak Wind Speed Comparison



	Katrina	Camille
Meridian	90 mph	75 mph
Hattiesburg	110 mph	
Gulfport	140 mph	190 mph
Tidal Surge	35-40 Feet	20-28 Feet





Tent City: Plant Daniel



- Switchyard – Saltwater contamination
- System support checking out Unit 3 & Unit 4

Restore

- 100% or 195,000 MPC customers out of power
- 10 fiber breaks to COAM
- 18 generators running
- 65% of T&D facilities damaged
 - 1,000 miles of line down
 - 300 transmission structures (47 - 230 kV Structures)
 - 9,000 distribution poles
- 3% of 3,000MW of capacity available
- 6 units at Plant Watson and Unit 5 cooling tower damaged







Cables connecting temporary generator to 7th floor

Original Generator

4 3:32 AM



IT Lessons Learned

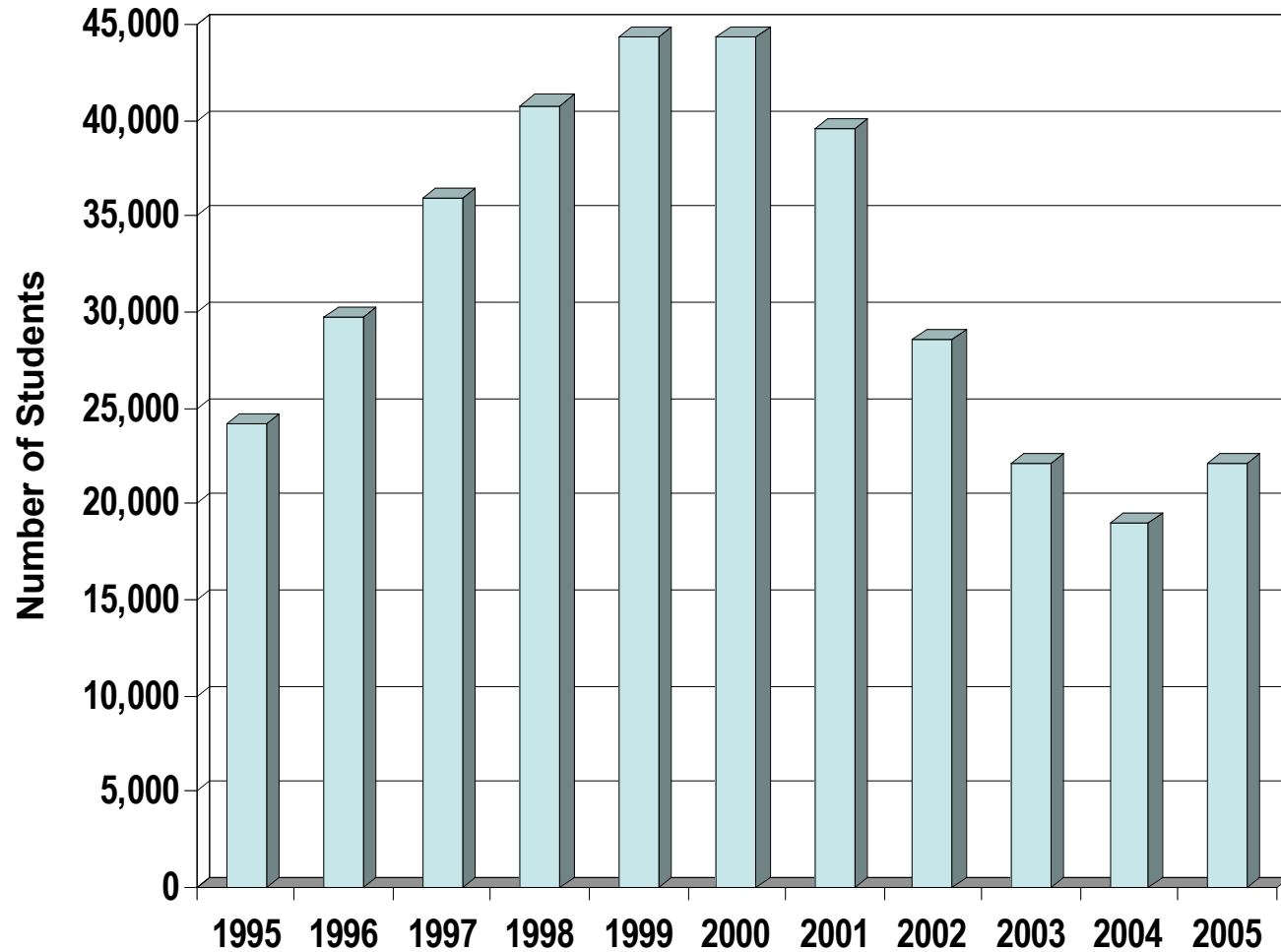
- Communication is critical
- Move IT equipment to higher ground
- Owning fiber network gives you control
- Near coastal areas, put fiber underground when possible
- Prepare for remote access to servers and equipment for longer amount of time
- Ensure access to fuel
- Satellite communications were critical
- Planning and post-critiques work



Another Storm Brewing

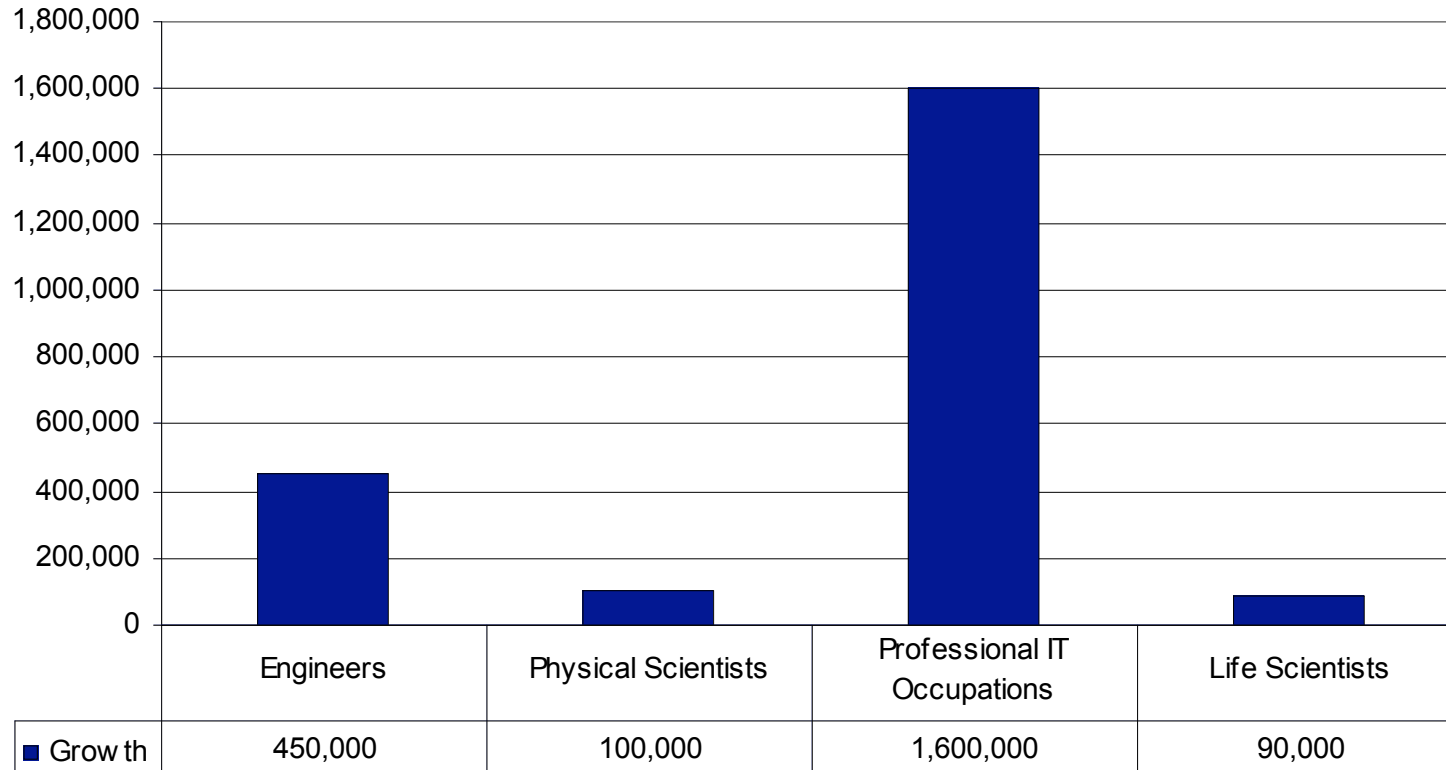


U.S. Freshmen Declaring a CS Degree



SOURCE: Higher Education Research Institute at UCLA

Fastest Growing Occupations 2002-2012



Source: Bureau of Labor Statistics

Money Magazine's Best Jobs in America

Rank	Title	Job growth (10-yr forecast)	Average pay
1	Software engineer	46.07%	\$80,427
7	Computer/IT analyst	36.10%	\$83,427



