New electrical substation powers future campus growth

Michael Hagearty
Institute Communications and Public Affairs

Georgia Tech is in the process of bringing a new electrical substation online, one that will provide for future campus growth and enhance reliability. With construction of the new substation complete, workers are spending the summer shifting each campus facility over to the new distribution system.

The project’s managers are measuring the campus community that a comprehensive plan for the coordination and communication of potential short-term power outages is being followed in a manner that is designed to cause minimum impact.

“The plans are extremely detailed,” said Gary Ward, a consultant who has worked with Georgia Tech to manage this project during the past two years. “We even have a recovery plan. If we get in the middle of a cutover and something goes wrong, we already have a plan to restore power. Anything that can be done to mitigate is being done.”

Details on upcoming outages and the effects on buildings will be communicated in advance through Facilities’ area managers. As buildings are scheduled for switching, the area manager will be contacted, setting into motion a communication strategy designed to give faculty, staff and researchers maximum notification of the timeline. Every measure is being taken to minimize the impact, but as Ward noted, change is unavoidable.

“To stay with what we have means Georgia Tech quits growing,” he said. “The end result is to have a much more robust and reliable electrical system for the entire campus.” The project is designed to meet campus energy requirements for the foreseeable future, and the system is designed to allow for increased capacity if need be.

Ward added that most buildings on campus are dual fed and therefore unlikely to experience more than a momentary outage.

Growing demand
The $36-million project is being financed through Georgia Tech Facilities’ organization within the Georgia Tech Foundation that helps the Institute finance and move quickly on critical construction projects.

An outside design-build firm was

Tech reinforces educational ties in South Georgia

President Wayne Clough signs a partnership agreement with South Georgia College President Torri Lilly that will enable SGU graduates to matriculate to Georgia Tech Savannah for an undergraduate engineering degree. Last week’s signing, in Clough’s hometown of Douglas, Ga., coincided with a city proclamation recognizing his career in higher education and public service.

Alumnus makes first seven-figure commitment to Tech Promise

Dan Treadaway
Institute Communications and Public Affairs

When the new Georgia Tech Promise scholarship program was announced a few months back, Tech administrators felt the new initiative for Georgia students with financial need would be well received by donors — once they had time to learn about and fully appreciate the significance of the program.

That learning curve is proving to be not very steep at all. Alumnus Michael G. Messner and his wife, Jenny, have taken the lead in supporting the Georgia Tech Promise by making the program’s first $1 million commitment.

“Both my wife, Jenny, and I came from families where money was tight but education was highly valued,” said Messner, who has two brothers-in-law with Tech degrees and whose nephew has completed his freshman year at Tech. “When I graduated from Tech, tuition was less than $500 a year. My family and I were able to afford the college costs without going into extra debt. I don’t believe that is the case today for many students.”

That assessment is correct. Even at public universities, costs have begun to outstrip the capacity of lower-income families. Nationally, two-thirds of all public university graduates are forced to borrow money to fund their education, with an average of nearly $20,000 in accumulated debt at graduation.

“As good a value as a Tech education continues to be, the Institute’s ability to meet the financial needs of its lowest income students and families has eroded,” said President Wayne Clough. “The Tech Promise initiative is designed to fill this gap by offering a debt-free education to Georgia undergraduate students with annual family income of $30,000 or less. This will help us ensure that no

Substation continued, page 3

Promise continued, page 2
Provost names four finalists to lead research and innovation

The Office of the Provost and Executive Vice President for Academic Affairs has announced four finalists for the position of senior vice provost for Research and Innovation. As a member of the provost’s senior leadership team, the person in this position will set the Institute’s research and economic development agenda and strategic direction. In addition, he will not only manage Tech’s $425 million research portfolio, but also oversee the commercialization of innovation, ensuring the Institute takes maximum advantage of the intellectual property developed by its community.

The following finalists were selected by a committee comprised of faculty members and campus leaders chaired by College of Engineering Dean Don Giddens.

Mark Allen
• Regents’ professor and J.M. Pettit Professor in Microelectronics, School of Electrical and Computer Engineering and School of Chemical and Biomolecular Engineering

Joseph Hughes
• Professor and chair, School of Civil and Environmental Engineering
• Professor, School of Materials Science and Engineering

François Saintfort
• William W. George Professor of Health Systems and director, Health Systems Institute, Department of Biomedical Engineering
• Associate dean for Interdisciplinary Programs, College of Engineering
• Professor, Stewart School of Industrial and Systems Engineering
• Adjunct professor, College of Management

William Wepfer
• Vice Provost, Distance Learning and Professional Education
• Professor, Woodruff School of Mechanical Engineering

In the coming weeks, the finalists will participate in full interviews, which will include an open forum where each will address his vision and its implementation for research and innovation at Georgia Tech. For updates on the dates and location of these public forums, visit www.provost.gatech.edu.

Game lab initiative merges social activism with play

David Terraso
Institute Communications and Public Affairs

"Can a game change the world?" This question was posed to Celia Pearce a couple of years ago, and now she and the Georgia Tech Emergent Game Group intend to show that it can. Later this month, Pearce’s research lab, in partnership with the Design Studio for Social Intervention (DS4SI), will present ActionQuest: ATL, a large-scale public “Big Game” where the goal isn’t racking up the most points or defeating evil warlords, but making the world a better place and having fun in the process.

Using play as an engine for social change, ActionQuest: ATL is believed to be the first “Big Game” with activist aims and the first “Big Game” ever held in Atlanta. Hosted in conjunction with U.S. Social Forum, the game engages players in a series of cooperative quests that involve taking real-world social action in specific locations. After completing a “quest action,” players e-mail or text message photographic evidence of its completion to an online action map created from the collective evidence. The more quest actions, the more complete the map becomes.

Every day, millions of people log onto online games and spend hours working collaboratively on very difficult problems in imaginary worlds,” said Pearce, director of Tech’s Emergent Game Group and the Experimental Game Laboratory. “We wanted to see if we could harness that same energy and apply it to real-world problems.”

She and her collaborators at DS4SI also saw the opportunity to connect Atlantans with the 10,000 social activist attendees of the U.S. Social Forum. By spreading activist activities all over the city, game organizers hope to not only raise awareness of the conference, but also give locals a fun way to engage with social justice issues in Atlanta. The game also gives attendees of the conference an alternate way to tour the city.

“We are partnering with activist organizations to develop a wide range of challenge levels for players, from throwing seeds in empty lots to trying to navigate Atlanta in a wheelchair,” said Peace. “We also think this will be a great weekend outing for families who can have fun together while learning about social justice issues.”

For more information.

Experimental Game Lab
egl.gatech.edu
U.S. Social Forum
www.ussf2007.org

Promise, cont’d from page 1

qualified Georgia student will be forced to decline an offer of admission to Tech because of finances.” Students who receive Georgia Tech Promise scholarships will be required to maintain a GPA of at least 2.0 and earn at least $1,250 per semester through work-study or other work arrangements to offset educational expenses.

“There is an absolute goal to graduate students at Tech. What the Georgia Tech Promise, Jenny and I can help some students afford the much higher cost of Tech tuition today without the burden of debt hanging over them,” said Messner. “I have made very good stock investments over the years, but for return on investment, the Georgia Tech degree is by far my best investment. Even though my degree was in civil engineering, I was able to transfer the analytical skills I acquired at Tech to the financial field. And my Georgia Tech degree is very highly regarded by everyone I meet.”

Aside from supporting the Georgia Tech Promise, the Messners’ commitment will support other need-based scholarships for both in-state and out-of-state students. The Messners previously supported the construction of the new College of Management building at Technology Square.

For more information.

Georgia Tech Promise
www.promise.gatech.edu

WWW.WHISTLE.GATECH.EDU
IN BRIEF:

ACM ranks CoC graduate programs among nation’s best

The Association for Computing Machinery (ACM) has ranked the graduate programs in Georgia Tech’s College of Computing as fourth in the nation. In an article published in the June 2007 issue of Communications of the ACM, the College ranks Tech third in the nation for software engineering and lists Professor Mary Jean Harrold as the number one software engineering scholar in the world.

The rankings framework uses publishing data from 1995 to 2003 to rank computing graduate programs automatically and objectively. One of the most well-known rankings, the U.S. News and World Report, includes both objective indicators and subjective polls, and currently ranks the College of Computing graduate programs 11th in the nation. Software engineering institutions and scholars were ranked based on data from 2000 to 2004 from journals and conferences that are considered to be the most prestigious in the field.

ATDC hits $1B milestone

Companies associated with Georgia Tech’s science and technology incubator have raised more than $1 billion in venture capital since 1999 — and in 2006 accounted for 10 of the top 25 venture deals in Georgia, including the two largest.

The incubator, the Advanced Technology Development Center (ATDC), has turned out two semiconductor firms and a developer of early-stage firms — three Internet companies, six firms raised more than $50 million while in the incubator.

For more information about ATDC’s billion-dollar milestone, visit www.atdc.org/billion.

Cooperative Education named to national Hall of Honor

At a ceremony earlier this month at the University of Cincinnati (UC), Georgia Tech was inducted into the Cooperative Education Hall of Honor. Division of Professional Practice Executive Director Tom Akins was in attendance to accept the honor on behalf of the Institute.

Each year, UC honors individuals and institutions fundamental to the historical success of cooperative education by inducting them into the Cooperative Education Hall of Honor. UC founded the world’s first co-op program in 1906 and created the Hall of Honor in recognition of co-op’s centennial. Another former Georgia Tech co-op director, James Wohlford, was part of last year’s inaugural class.

Tech’s Co-op Program is the fourth oldest in the nation and one of the leaders in cooperative education on the national level. From the time U.S. News and World Report created the "Top 10 Programs that Work," Georgia Tech has been listed each and every year.

Quick facts:

- Located in the North Avenue Research Area
- Two fully redundant transformers
- Installed 300,000 feet of new power cable and more than two miles of new electrical duct bank
- Boundary fence designed by students in the College of Architecture

That land will eventually become a new campus green space. A second phase of this project will provide improvements and upgrades to the campus electrical infrastructure over the next two years and will further enhance reliability in conjunction with the new substation.

Bill Miller, Facilities project manager
william.miller@facilities.gatech.edu

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The incubator, the Advanced Technology Development Center (ATDC), has turned out 112 science and technology companies since 1986 — including 31 that have been represented on the public markets through IPOs or acquisition. At a May 10 event held to showcase the incubator’s companies, ATDC “graduated” six early-stage firms — three Internet companies, two semiconductor firms and a developer of homeland security technology. Together, those six firms raised more than $50 million while in the incubator.

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