

The News Media is All Over DALI

Barbara Cianci Horton and Lee Brandt know more about DALI than that it stands for Digital Addressable Lighting Interface. The designers from Horton Lees Brogden Lighting Design (HLB), New York, incorporated the fairly novel technology for a newsworthy project they were involved with—a new home for the Associated Press in west Manhattan.

The news agency recently moved from its prestigious home in Rockefeller Center to a space formerly occupied by a now-defunct dot.com. In refitting the facility, lighting and control were big concerns. Energy management, however—despite the fact that the project immediately resulted in a 25% energy savings—wasn't the priority that drove the technology's adoption. The main driver was a desire to better satisfy the space users—AP's reporters and photographers. "In the news business," said Brandt, "space and amenities are a real barometer [of desirable places to work]—even down to things like who has the best coffee maker."

In this case, the system HLB specified gives the news staff individual control over their work areas. For example, Brandt said that the sports department can be almost totally dark while other areas can be almost totally bright. That said, there is a need to maintain a minimal 25% light level.

Of course, Horton pointed out, individual control is more the cherry on top, considering other advantages of DALI such as the reconfiguration flexibility it gives a space, or its owner-friendly operation. "It's a very manageable system that can be administratively controlled," said Horton.

For example, a maintenance plan, with a monitoring scheme and change-out schedule, can easily be set up. The key, she said, is that the client must be ready and willing to make the jump as it will be a push to educate the client and the contractor. Budget also may be an issue, and was at AP, where only one floor was so equipped. "Is it a niche technology? No," said Horton. "But it is a niche owner."

According to Meg Smith, a sales manager with Lightolier, whose iGen system HLB employed, the company has been involved in about 20 DALI projects in North America. In general, she said, those who have embraced the system are those who have a long-term outlook on their buildings. In the case of AP, the other big benefit of DALI was its ability to reconfigure the space. For example, during the Republican National Convention—in New York—last year, the size of the news bureau artificially expanded, and AP needs to be able to address such sudden influxes of staff.

In general, any large open spaces, according to Horton, are good candidates for DALI. Other strong markets include senior health-care facilities or 24/7 medical facilities where nurses on three different shifts might require three different light levels. The good news for engineers, she added, is that DALI is fairly easy to implement as it really reduces the detail intensity of electrical drawings. "You barely need to know what the exact fixture will be," said Horton. "The technology also allows for much more control and zoning opportunities, as much of that is determined in the actual commissioning process."

According to Greg Northcut with Universal Lighting, which displayed both DALI ballasts and its own proprietary line of digital addressable ballasts at Lightfair—not all digital addressable ballasts are DALI—the big benefit of such systems, he believes, is that the whole thing can be controlled in one loop, where ballasts are assigned to specific zones. Scenes can then be set for those zones. This is particularly useful in spaces like a ballroom or auditorium. For example, Universal's non-DALI Address Pro product allows for 12 zones with 12 different scenes. "It allows you to set up zones where you can graduate the degree of darkness from each zone," he said.

From an engineer's perspective, Northcut agrees with Horton in that DALI-type systems are relatively simple, even as far as how they wire up. "It's a two-wire system," said Northcut. "In the past, you'd have to run power to each zone, which can be very complex," he said. "But with digital addressable technology you simply reprogram the ballasts."

Of course, AP is not the only news outlet experimenting with digital addressable technology. The *New York Times*, in its new skyscraper HQ, currently under construction, won't employ DALI, but will use a proprietary digital addressable system to take advantage of daylighting and reconfiguration opportunities. While the *Times* did stop by to see what AP was up to, they instead opted for Lutron's Ecosystem product.

Reconfiguration was also a big issue with the *Times'* management, but, according to David Bennett, Lutron's manager of commercial marketing, one thing that differentiates Ecosystem is that it actually generates its own addresses and automatically notifies staff if a ballast goes down. And as far as reconfiguration, Bennett said it's simply a matter of deleting the old ballast from the system.

As far as individual control, Bennett said Ecosystem does allow individual remote control, but he said Lutron has found that most building managers they've spoken with still prefer administrative control. That said, a facilities staff member can walk around and manually adjust light levels to suit employee preferences. And even in instances where individual control is allowed, a constant light level can be achieved, he said, by creating cone diffusion schemes. A final benefit is that Ecosystem is Class 2 rated, meaning it wires directly to the closest fixture.