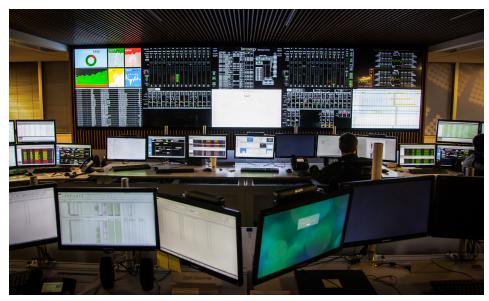
# **Invenergy Control Center**



Invenergy recently upgraded its control center with a Christie solution comprising a tiled LCD panel video wall and a Christie Phoenix content management system.

## Control and monitoring at Invenergy

With a focus on the development of clean energy, Invenergy's North American assets include more than 10,300 MW of projects that are in operation, in construction, or under contract, including wind, solar, and natural gas-fueled power generation projects and energy storage facilities. Housed in the company's Chicago headquarters, the Invenergy Control Center (ICC) helps Invenergy control and monitor its power generation and storage facilities. In addition to monitoring facilities, the ICC is also a communications hub for the company.

"Communication is extremely vital to the effective operation of the Invenergy fleet," says Brad Purtell, Director of Operations Support at Invenergy. "Control room personnel are responsible for having a very high level of attention to detail. Their ability to monitor certain indications surrounding projects is vital for the timely response to an emergency as well as trouble shooting issues remotely."

As a result of rapid company growth, the decision was made to upgrade the ICC and increase monitoring and communication capabilities. The design work for the new iteration of the ICC fell to Chicago-based firm Interior Architects, who subcontracted the technical audiovisual expertise to long-time Christie® partner AVI-SPL. After understanding the project requirements, AVI-SPL specified a Christie control room solution comprising a tiled video wall made up of ten Christie FHD552-X ultra-narrow bezel LCD panels controlled by a Christie Phoenix® content management system.

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They're durable, they're more energy
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warranty and support."

Adam Stanton
Test Engineer, AVI-SPL

"They needed a 5x2 video wall," explains Adam Stanton, Test Engineer at AVI-SPL.

#### Customer

- Invenergy LLC
- Invenergy Services LLC

Location: Chicago II

Industry/Market Energy

#### Partners:

- AVI-SPL
- Interior Architects

#### Requirements:

- High brightness and resolution
- Ultra-narrow bezel tiled array
- Scalable content managemen system
- 24/7 reliability
- Warranty and support

#### Summary:

After experiencing significant company growth, clean energy developer Invenergy decided to upgrade its control and monitoring capabilities. Following a product demo, the team at Invenergy chose a Christie solution comprising a tiled LCD panel video wall powered by a Christie Phoenix content management system.

#### Products:

- Christie FHD552-X (10)
- Christie Phoenix
- Extended warranty and support

#### Results:

With the integration of new Christie control room solutions, operators at the Invenergy Control Center are capable of effectively monitoring the company's energy assets and respond quickly to any issue



"They also wanted the ability to upscale the system to do additional streaming sources and it needed to be reliable and operate 24/7, 365 days a year."

With so many options for LCD panels in the market, choosing Christie for the video wall came down to a couple factors. "High brightness and low bezels," states Purtell speaking of features that made the FHD552-X an attractive choice. "The ability to have the 3.5mm distance between pixels, as well as no overlap from pixel to pixel across wall displays, drove us toward Christie."

"Christie panels are really high quality," echoes Stanton. "They're durable, they're more energy efficient compared to other panels in their class, and they're backed by the Christie warranty and support. So if one of those things goes down, the turnaround time on them versus another manufacturer is less. There's more uptime and a faster turnaround if something does go down."

Driving the video wall and tying the solution together is a Christie Phoenix open content management system. After a product demo, Purtell and his team decided that Christie Phoenix had the features they required. "Being able to move content, the ability to expand the display to whatever size between the dimensions of the video wall surface; those were things that we thought were going to inspire a new way of operational thinking in the control room," says Purtell. "We have the ability to display operational or market-related data that could be important during certain situations in our industry and display that one page on all ten screens so the focus is on that issue or event."

Looking toward the future, the scalability of the Christie Phoenix system was another attractive feature for Invenergy. "If they decide they want more inputs, they can add another Phoenix, or even a Phoenix Quad-T," shares Stanton, adding: "you can also have an entire redundant wall somewhere else if you wanted to."

For Mark Senkevicius, the Senior Systems Manager at Invenergy, the user-experience played a big factor in choosing Christie Phoenix. "The ease of administration was pretty attractive to me from the get-

go. We had determined that our control room staff would be able to manipulate the layout on the wall without too much difficulty. That was very attractive to us to place that power in their hands."

Not only has the upgraded ICC proven to be a great performance enhancement over the older version, but visually, the space impresses. "Aesthetically speaking, it looks better than our old system. When we put the large screens up, there were a lot of people blown away by how the system looks," comments Senkevicius, adding: "Functionality-wise, there are a lot of things under the hood that we still need to go further with. The system has the functionality and flexibility that we need."



Contact us today to find out how your organization can benefit from Christie solutions.



Operators at Invenergy's upgraded control room are capable of monitoring multiple informational streams and respond quickly to any issue.



Christie Phoenix provides a scalable platform for the Invenergy Control Center to increase monitoring capabilites as required.

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