

Tucked into the Sierra Nevada Foothills of California's Gold Country, Sonora reflects the era when the possibility of finding gold drew men from far and wide. While hitting the mother lode is a thing the past, the town continues to draw that same breed of adventurer, looking for that once-in-a-lifetime jackpot. *by Carey D. Schock, Managing Editor, cschock@pelco.com*

# BLACKOAK





# strikes **GOLD**

with Endura and System 9780

And so it is here, at the 165,000-square-foot Black Oak Casino, amidst a town proudly attached to its past, where one of the world's most advanced video security technologies – a Pelco Endura System – has been installed.

Sitting in the Black Oak Café with Rick Richardson, President of Richardson Casino Consulting Inc., Earl Wearin, Executive Director of the Tuolumne Me-Wuk Tribal Gaming Agency, and Patrick Castro, Director of Surveillance, the conversation centered on this state-of-the-art application. From ease of use to flexibility to the sheer power of Endura, the resounding sentiments are of an installation whose technology and functionality have far surpassed expectations.

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– Rick Richardson

## Tomorrow's Technology ... Today

Endura is the future of video security – and at Black Oak, it is being realized today. Whether installed at a multi-campus school or university, aboard a cruise ship, or to secure a shopping mall or business park, Endura takes advantage of a distributed architecture approach that leverages the power of Ethernet networks. In doing so, Endura delivers video, audio and control wherever – and whenever – it is needed.

It is this total flexibility that separates Endura from other technologies that claim to be a purely digital, IP-based system. And why Black Oak Casino chose Pelco and Endura for this sophisticated video security installation.

To get a true idea of what such a system entails, how it has been implemented and the results being realized, Richardson and Castro led a tour of the casino and its security nerve center. Having worked as a Director of Surveillance in Las Vegas casinos, and with a number of casino installations already under his belt, Richardson was hired by the Me-Wuk Tribe in 2003 to design and oversee the security implementation at Black Oak.

**Endura**  
Endless Adaptability.





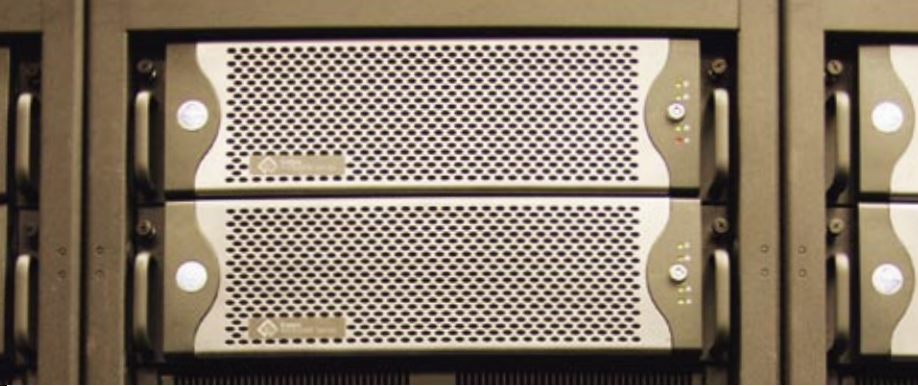
← Pelco Power Supplies line the wall of the data center.

System 9780 Video Matrix Switch. →

L-R: Black Oak's Rick Richardson, Delmar Geisdorff and Patrick

✓ Castro in the control room.

Endura Network Video Recorders. ↓



Richardson understood that the Endura system – working in conjunction with the large System 9780 video matrix switch – would result in a tremendously flexible and powerful video security solution, able to deliver the control and rapid response capabilities mandated by the Tribal Gaming Agency. He contracted with Southwest Surveillance Systems, an Endura Certified and Authorized Reseller, for the actual installation itself.

“When specifying the technological approach for Black Oak, I knew that only Pelco could deliver the systems and overall solutions needed to meet the demands of such an installation,” Richardson said.

### The Equipment

The first stop on the tour was the Black Oak Casino data center, where racks of Endura

Encoders, Network Video Recorders, System Managers, Matrix Digital Decoders and System 9780 Matrix Switches seamlessly and elegantly bring analog video signals directly from the more than 500 cameras onto the Black Oak Casino network.

Far from your typical cabinet-and-shelf system, this room has been specifically designed with an understanding of the mission-critical nature of the Endura system. Advanced fire-suppression and temperature-monitoring systems maintain the integrity of the system. And the racks enable easy access to the components for current updates and future expansion.

### The Control

Continuing down the corridor, we moved through a secured entrance and entered the Black Oak Casino gaming security control room.

Bathed in red light and housed in the same cabinetry used by NASA for their mission control operations, a bank of 57, 19-inch and 45, nine-inch Pelco monitors enable total surveillance of gaming floor activity, back-of-house areas, count rooms, parking structures and much more.

According to Delmar Geisdorff, Chairman of Tribal Gaming Agency, “There is no comparison [to Endura] when it comes to video quality, playback features and functionality, as well as the ability to immediately review video to resolve problems. Likewise, searching video is easy and, of course, we have realized great savings when it comes to changing tapes and the costs associated with doing so.”

From PC Workstations and Pelco KBD9760 keyboards, operators have full control over Spectra III and Esprit positioning systems for

## Endura: Breaking the Mold

Pelco Endura engineers made it their mission to dispel industry objections to digital video. They succeeded.

**Video Quality.** The industry perception was that digital video equated to poor quality. No longer. Endura delivers high-quality, 4 CIF (704 x 480) images, at a full frame rate of 30 IPS. And for those who think that full frame rate, 4 CIF video adds to storage costs, Pelco has pioneered a patented technology called EnduraStor that automatically reduces stored video to 2 IPS after a user's pre-determined amount of time.

**Performance.** The industry said that transporting video over the network would be slow and that PTZ control would be unacceptable. Endura engineers have greatly reduced the latency that security professionals expect when driving digital video. While competitive systems have not

been able to improve upon an average latency of 170 ms, with an Endura installation, that number is at 114 ms.

**Scalability.** It was thought that because of bandwidth availability and networking overhead required to deliver video over a network, the ability to connect any camera to any monitor would not be possible. The Endura system can scale – from a few to a few hundred to a few thousand devices all using the same hardware and software footprint. And thanks to Endura's distributed architecture design, users can view any camera on any monitor at anytime from anywhere. Moreover, with such patented technology as EnduraView, we guarantee the delivery of video when you need it the most – any event can be viewed simultaneously by any number of authorized users to the Endura system.



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pan, tilt and zoom capabilities. Camera signals are routed through the System 9780 Video Matrix Switch, providing security personnel with immediate and precise control.

#### **Doubling Down – Endura and System 9780**

On its own, Endura is a purely digital video security solution. In this specific installation, however, there are a number of advantages to integrating it with a large switch system, such as the Pelco System 9780. Such an approach provides Tribal Gaming Agents with the ability to pull digital video – both live and recorded – through the analog keyboard. Most important of all, this operation is completely transparent to the end user.

Pelco has gone to great lengths to ensure its customers achieve all of the advantages of digital-based recording while leveraging the established and accepted feature sets of analog-based matrix switching and control systems. Developed over the past 15 years, these include, among others, priority-based control over PTZ-equipped cameras, authorized access to camera views and 16.6 milliseconds (ms) switching time for fast call-up and response.

With unlimited storage and encoder connectivity, there is no limit to the number of cameras or length of storage this system can achieve.

#### **Seamless Security**

Endura technology is advanced. Years of research, design and testing were required. But that matters little to the security professional

tasked with using such a system. Designed with the end user in mind, Endura is easy to learn and intuitive to use – and that’s what matters most.

“A couple of the guys in the control room never really had much computer experience before starting here (Black Oak Casino),” explained Castro. “But the Endura system is literally as easy as pointing, clicking and dragging the mouse. After minimal training, it’s as if they’ve been working it for years.”

And that is the difference. In this application, Endura is a transparent digital extension of an analog system that offers security personnel unmatched functionality. By taking advantage of existing Ethernet capabilities, high-quality live and recorded video is delivered quickly to any number of authorized users.

Moreover, the system is so robust that meeting storage and archival requirements is easily accomplished. “Endura was the obvious choice for this installation because we are mandated by the National Indian Gaming Association to provide recorded video of certain gaming devices,” explained Richardson. “Also, the State of California Gaming Control Board has various requirements, and I knew that only Pelco could provide the sophisticated approach and advanced technology needed.”

*If you are interested in becoming an Endura Authorized and Certified Reseller, or simply wish to learn more about the Endura video security system, visit [www.pelco.com/endura](http://www.pelco.com/endura) for more information.*

## **Proud Partners: Southwest Systems**

#### **Pelco & Southwest Systems Ltd.**

Since its founding, Southwest Systems has focused on providing services to the gaming industry, regularly integrating video security, access control, slot data and POS systems, along with other casino equipment to provide customized facility controls. A Certified and Authorized Endura Reseller, Southwest Systems was invaluable in the installation, integration and implementation of the Pelco Endura and System 9780 matrix systems at Black Oak Casino. For more information about Southwest Systems, visit their Web site at [www.southwestsys.com](http://www.southwestsys.com).

