

PEAK RELIABILITY HOSTED ADVANCED APPLICATIONS

RELIABILITY AND COMPLIANCE

NERC's TOP-001-3 R13 requires Transmission Operators (TOP) to perform a real-time assessment every 30 minutes. Real-time assessments require an evaluation of system conditions using real-time data to assess existing (pre-contingency) and potential (post-contingency) operating conditions.

Utilities can elect to provide their own tools to perform real-time assessments. But doing so requires multiple dedicated FTE, as well as significant investments in hardware and software systems – a cost that even for smaller utilities can easily exceed \$1 million per year.

“Acquiring the Peak RC Hosted Advanced Applications has significantly enhanced the reliability of the El Paso Electric Company (EPE) system through increased situational awareness and accuracy of its Near-term and Real-time studies by leveraging on many Western Interconnection wide efforts (e.g., West-wide System Model, Outage Coordination) that this tool incorporates. Its web-based portability provides flexibility to gauge Real-time conditions and conduct studies, just about anywhere.”

– Ismael Aguayo, Senior Engineer,
System Operations, El Paso Electric Company

THERE IS A BETTER SOLUTION

Peak's Hosted Advanced Applications (HAA)

For less than half the total cost of a single FTE, a Peak HAA subscription:

- Used as your primary real-time assessment tool, HAA allows your company to comply with the requirements of TOP-001-3 R10.2 and R13. Alternatively, it can be used as a backup to your existing tools.
- Gives your company access to Peak's wide-area view using the West-wide System Model (WSM), as well as State Estimator and Real-Time Contingency Analysis (RTCA) solutions, without dedicated servers or other hardware
- Spares you the expense of developing, staffing and maintaining your own RTCA function
- Allows you to run your own studies using Peak's State Estimator – we provide a file conversion to widely used study tools that you already use in your planning operations

- Provides peace of mind – Peak's RTCA solution provides an accurate real-time assessment of your TOP area every five minutes, exceeding NERC's 30-minute requirement
- Gives you a five-minute snapshot of the state of the Western Interconnection based on the 147,000+ data points we receive from grid operators



PEAKRELIABILITY
assuring the wide area view

**THE WESTERN INTERCONNECTION'S
TRUSTED RELIABILITY ADVISOR**

WHAT HARDWARE, SOFTWARE AND OTHER ON-SITE SUPPORT IS REQUIRED?

None. Peak's Hosted Advanced Applications are accessed online, via the peakrc.org website that is available 24X7 and operates within Peak's stable and secure IT architecture.

WHAT ABOUT SUPPORT?

Peak's Hosted Advanced Applications are fully supported to help your company learn how to make most effective use of these tools and integrate them seamlessly into your real-time operations environment.

If you'd like to see how it works before you subscribe, Peak will schedule a demonstration of the HAA tools for your utility. In addition, your operators can try out the full suite of HAA tools during a **45-day free trial**. Peak also will prorate the cost of your 2018 HAA subscription based on when you sign up.

OTHER BENEFITS

- Peak's model covers the entire Western Interconnection and provides a platform for performing operational planning analysis as required by the TOP-002-4
- It provides real-time insight into external contingency impacts on your TOP area, as well as visibility into your internal contingency impacts on the BES
- All HAA users see the same data, the same contingencies, the same solutions

UTILITIES THAT HAVE ALREADY CHOSEN TO BECOME HAA SUBSCRIBERS INCLUDE:

- Avista Corp.
- Chelan County PUD
- Clark Public Utilities
- Douglas County PUD
- El Paso Electric
- Eugene Water & Electric Board
- Farmington Electric Utility System
- Grant County PUD
- Hetch Hetchy Water & Power
- Idaho Power Co.
- Intermountain Rural Electric Association
- Modesto Irrigation District
- NorthWestern Energy
- Platte River Power Authority
- Sacramento Municipal Utility District
- Seattle City Light
- Silicon Valley Power
- Snohomish County PUD
- Tacoma Power
- Turlock Irrigation District
- Tucson Electric Power Co.
- WAPA - Sierra Nevada
- Western Area Power Administration

"Seattle City Light (SCL) is a full participant and endorses Peak RC Hosted Advanced Applications (HAA). SCL is committed to coordinating consistent model validation and providing greater system awareness with other TOPs and Peak RC using the Hosted Advanced Applications model. SCL System Operators currently monitor the HAA RTCA results and we plan to implement HAA RTCA alarming. SCL Operation Engineers use HAA to confirm Next Day study results. System Operators use HAA to assess system conditions for all planned BES outages prior to switching equipment out of service. SCL believes that HAA is an excellent tool in our effort to improve BES reliability."

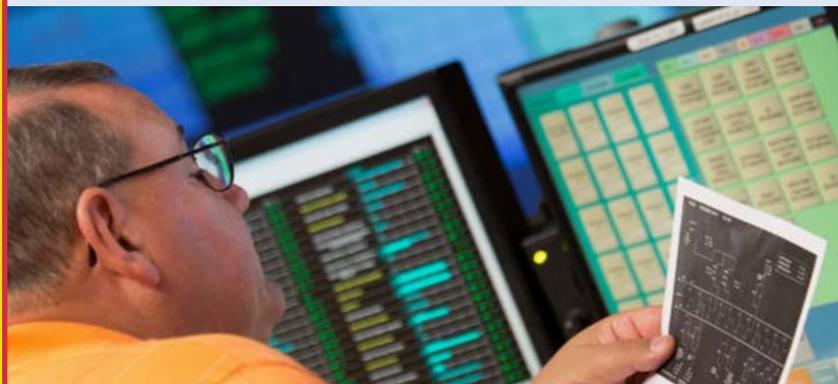
—Pawel Krupa, Director of System Operations, Seattle City Light

YOUR HAA SUBSCRIPTION INCLUDES

- **The West-wide System Model** fully represents the Western Interconnection, allowing visualization of the entire Interconnection down to individual substations. It includes both real-time SCADA data and equipment parameters and connectivity data.
- **State Estimation** provides a snapshot of the entire Western Interconnection Bulk Electric System (BES) every five minutes. This provides situational awareness through identification of System Operating Limit (SOL) violations, electrical islands, power flows, voltages and phase angles.
- **Contingency Analysis** simulates more than 8,000 contingencies (potential transmission or generation outages) to identify where the BES may not be prepared for the next contingency.

Option available for additional fee:

- **Study Network Applications** allow users to perform ad-hoc studies based on actual BES conditions. The studies include power flow and contingency analysis applications. This study environment also can be used to perform day-ahead studies, and will provide a platform for better coordination of day-ahead studies for those using the HAA system.



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TO FIND OUT MORE
email us at hosted.apps@peakrc.com