



WÄRTSILÄ HOUSTON EXPERTISE CENTER

Assets are at the core of your business – and in an increasingly tough market, it is critical that they run as reliably and efficiently as possible. Being able to support and serve power plant operators remotely is now more important than ever. Wärtsilä's Houston Expertise Center is able to expand its reach by supporting energy customers with a team of engineers on demand.

Power plants around the world have benefited from remote monitoring and diagnostics for many years. Due to the nature of having a remote connection, our expert team can support multiple plants without ever going on site.

The Houston Expertise Center (HEC) delivers remote support to its U.S. and Canadian energy sector customers with advice and recommendations based on analysis of monitoring data. They are the contact point through which power plant owners and operators receive support in the day-to-day operation of their plants as well as unforeseen situations.

The new expertise center combines state-of-the-art technology with highly experienced technical specialists having expert knowledge of Wärtsilä's power plant technology and energy storage systems, including GEMS Digital Energy Platform.

What does this mean?

- Increase reliability with less unplanned downtime
- Higher power plant availability as issues can be solved remotely, even during the same day
- Increase efficiency through the availability of on demand technical support
- Enabler for flexible operations and better asset-management decisions through collaboration between HEC experts and power plant teams
- More efficient and better planning for scheduled site visits
- Support on spare parts
- NERC Audit support
- Engagement growth between our experts and asset groups encouraging collaboration efforts to solve issues

INTRODUCING REMOTE OPERATIONAL SUPPORT AND EXPERT INSIGHT

The Remote Operational Support and Expert Insight advisory services solution supports you in achieving optimal running conditions and optimized maintenance for your power plant. In the event of operational issues, the solution supports you in receiving prompt responses from Wärtsilä experts to ensure safe, reliable and cost-effective plant operations. Remote Operational Support and Expert Insight is a solution sourced from Wärtsilä's new Expertise Center, a NERC/FERC compliant (CIP) facility in Houston, Texas.



Remote Operational Support provides real-time diagnostics, on-call support and integrates with existing systems. We have live Wärtsilä-trained, highly-experienced mechanical and electrical experts available to help customers.



Expert Insight is a predictive maintenance service aimed at detecting and advising resolutions to deviations in asset operating data. Potential equipment failures and efficiency deterioration is proactively identified by the combination of artificial intelligence (AI) techniques, advanced diagnostics rules, and OEM expertise.



An **assigned expert** in the Wärtsilä Expertise Centre evaluates the deviations highlighted by the detection system and provides a diagnosis with recommendations proactively to customer.

KEY BENEFITS/FEATURES



Risk Mitigation

Improved engine reliability, maintainability, and performance with the use of the cyber secure remote connection solutions. With the addition of Expert Insight analytics groups can identify root cause and avoid unplanned outages.



Outage Reduction

24/7 support applies Wärtsilä's extensive engine and storage knowledge to quickly resolve concerns.



Fact-Based Decision Making

Historical data made available through multiple tools enables Wärtsilä engineers to assess key performance indicators and provide corrective action steps and improvement evaluations.



Cyber Security

The HEC platform was configured to provide customers with a secured data connection, compliant with North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) protocols

Highlights:

- Security System Management
- Internal Compliance Program (ICP)
- Physical Security Perimeter (PSP)
- Incident Reporting and Response Planning
- Recovery Plans



Remote engine controls diagnostics

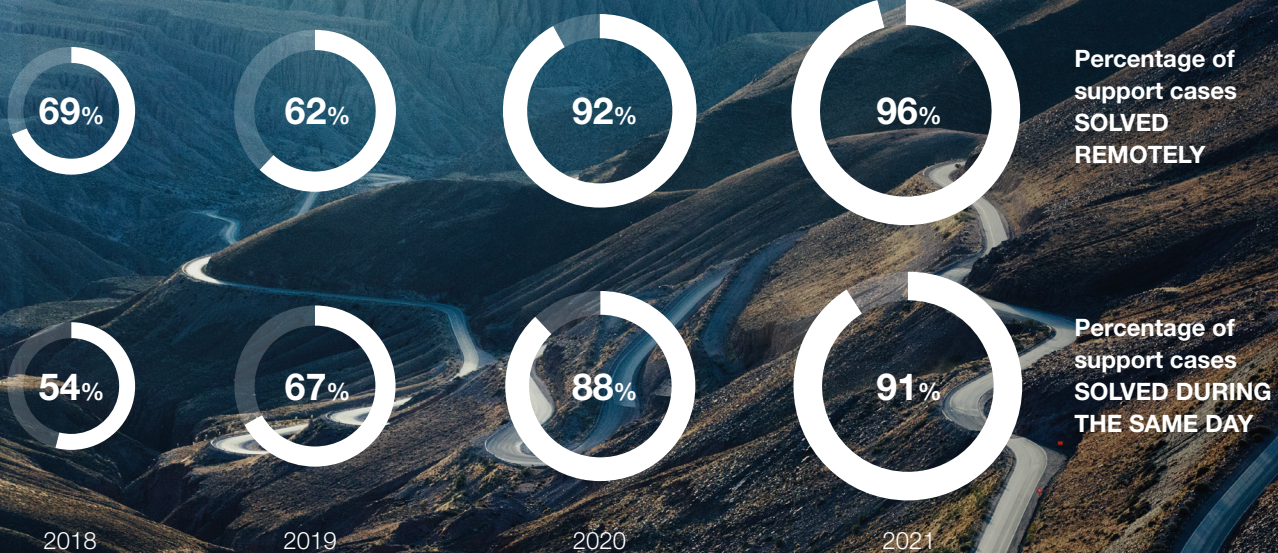
Real-time diagnostics, 24/7 on-call support. Integrates with existing systems. Requires a Remote Services Gateway (RSG) for data viewing, this allows for customer controlled remote access to the control system software.



Addition of Expert Insight (EI)

Uses cutting-edge artificial intelligence models and advanced rule-based diagnostics to take predictive maintenance to the next level helping power plant operators improve asset efficiency and reduce operating costs. With the help of an HEC expert, the advisory service provides crews with invaluable support by detecting minor problems and ensuring they are addressed before they become major issues.

THE DEMAND FOR REMOTE SUPPORT FOR POWER PLANTS IS CONSTANTLY GROWING. YET, WE SOLVE MOST CASES DURING THE SAME DAY.



CONTACTS

For questions about the content of this bulletin, or if you need Wärtsilä assistance, services, spare parts and/or tools, please contact your nearest Wärtsilä representative. If you don't have contact details at hand, please follow the link: www.wartsila.com/contact



wartsila.com/energy

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