

# **TPS iCenter**

Digital Advanced Services

## **Baker Hughes iCenter support**

Three iCenters provide 24/7 monitoring and engineering support for the global fleet

~1,500 assets under monitoring

**2.1M** parameters acquired

240K active analytics

~8,200 insights sent in 2019 < 4 hrs

**~630** trains





### iCenters 360° engineering synchronized support



iCenter analytics **Emergency calls Technical cases** Data



#### **Baker Hughes global** engineering teams



- Technical cases
- Investigations

#### **Customer HQ &** engineering teams



- Benchmark with fleet
- Performance and KPI analysis



Insights

**Site operators** 

Reports



# Convert your assets into lloT machines

# Turn smart data into solutions through people









## iCenter digital portfolio

#### Early warning

- Data-driven, physics-based analytics
- Early warning and mitigation actions
- 24/7 iCenter experts' support

#### Managed service

- Fast support and expert analysis
- Performance assessment
- Advanced troubleshooting
- Monthly report and review

#### **Advanced services**

- Gas turbine health index
- DLE health status
- Spinning reserve
- Filter change advisory
- Ceco oper. Point
- Operating profile

- Water wash optimization
- Thrust bearing load
- Trip reduction program
- Combustion rem. tuning

# Flexible operation for units covered by LTSA

- Condition based maintenance
- Remaining useful life evaluation
- Optimized maintenance intervals and SoW
- Production optimization

#### Connect

- Digital Infrastructure for 24/7 continuous data streaming
- Data processing and analysis layer for data quality and cleansing
- Data storage and visualization



### iCenters solutions

#### **Advanced data collection**

- Continuous data acquisition
- Data quality check
- Experts ready to support, leveraging available data, in case of technical issue/request from sites

# Early warning & event detection/analysis

- Application of physics-based and data-driven analytics
- · Machine status and events detection
- Early warning insights:
  - Unscheduled event mitigation
  - Trip avoidance
  - Operation enhancement
  - Secondary damage prevention
- Trip analysis

# Advanced services & digital APP

- Performance assessment
- Optimization of operation and maintenance
- Trip-reduction program
- Digital APP to share advanced services outcomes through web
- Dynamic maintenance online

Physics-based, data-driven methodologies to enhance iCenters diagnostic capabilities



### iCenters advanced services

#### **Protect**

Increase reliability reducing unplanned outage

- Health index
- Thrust-bearing load
- Pilot
- Remote tuning
- Trip-reduction program

#### **Produce**

Optimize operation increasing production and efficiency

- Spinning reserve
- Water-wash optimization
- CeCo operating point
- Filter change advisory
- Power peak
- Carbon optimizer

#### Plan

Improve effectiveness and flexibility of planned maintenance

- Operating profile
- DLE health status
- Dynamic L1
- CeCo flexible maintenance
- Maintenance optimizer



# Baker Hughes >