

Lynne A. Bellizzi Manager – Marketing & Communications Strategic Power Systems, Inc.[®] <u>Bellizzi@spsinc.com</u> Ph 704.945.4612

FOR IMMEDIATE RELEASE

Utilizing ORAP[®] Data Like Never Before – Data Fusion[™] is the Future

Charlotte, North Carolina – October 21, 2022

For over 35 years Strategic Power Systems, Inc. (SPS) has provided the global energy market with highly curated field data through ORAP[®] – a well-recognized data base of operating experience. The highly curated ORAP time series data has been used by equipment operators, equipment manufacturers, and R&D associations to drive product improvement, technology growth, and supporting the improvement of asset operating capability. The market is evolving and the need for predictive analytics is placing a greater value on ORAP data.

SPS has been working with a US Department of Energy (DOE) National Laboratory to apply Machine Learning (ML) techniques and models to strengthen the value of the ORAP data – these new ML techniques are a game changer.

ORAP Data Fusion answers the questions, what, and when, is the next significant event? This tool allows Asset Managers to PREDICT and PREPARE for the adverse behavior of physical systems, components, materials, and designs, while providing sufficient time and guidance for cost effective corrective action. Equally as important, ORAP Data Fusion takes into account changing service demands based on required operating flexibility (e.g., fast starts, hard stops, rapid ramp rates, and load following in support of renewables), providing details that allow action to be taken directly at the plant.

Unique to this process is the 35+ years of historical operating data only available in ORAP. ORAP facilitates the transfer of learning and experiences, on an anonymized fleet basis, from one plant operator to another. Operators who have not yet experienced emerging field problems and issues to learn from those who have. Mitigation and planning steps may then be taken earlier to avoid costly and disruptive forced outages.

Put the ML models to the test... ORAP is your data – make it work for you right now...

Key to the ORAP Data Fusion process is artificial intelligence (AI) auto-learning techniques that require no additional input or training by the power plant operator and end user. Typically, many AI techniques employed by power plants for diagnostics require constant monitoring by an engineer and often must be retrained manually. This process was designed from the outset to work with automated learning and updating so plant engineers can spend their time using the results, rather than having to tinker with models.

The concept of the cyclical, continual collection of data into ORAP (both historical and real-time, from various sources) and the "fusion" of that data into a singularity/epicenter of knowledge offers Asset Managers and Plant Operators enhanced decision-making capability anticipating equipment issues before they happen and allowing time for preventative measures to avoid downtime.

About Strategic Power Systems, Inc.

SPS' philosophy is Data First. Data is what we do. We are experts in the field of data collection, validation, analysis, and benchmarking of power plant performance across the various technologies. We provide key performance metrics or (KPIs), following industry standards, to power plant owners, operators, Original Equipment Manufacturers (OEMs) and other industry stakeholders through the Operational Reliability Analysis Program (ORAP[®]). This information allows them to make informed business decisions relating to the performance and operational readiness of their equipment. There is no system in the world that collects power plant data in such a comprehensive way as ORAP. Visit us at <u>www.spsinc.com</u> for more information.