

Independent producers trust in ENEXSA's settlement systems

Long-term purchase agreements for power and water require flawless settlement systems

Power and seawater desalination plants require substantial investment, state-of-the-art technology and superior technical know-how in operation and maintenance. The concept of independent producers in form of public-private-partnerships has proven to be a win-win-solution for private investors and the governments of the MENAT region, because it effectively improved the supply of electricity and water at lowest tariffs while at the same time ensuring high efficiency and availability. The instrument behind this magic is the purchase agreement which not only converts the production into revenue, but also penalizes deviations from contractual guarantees for capacity, efficiency and availability. Given the complexity of the contract procedures and equations, and the amount of data to be processed, the settlement of the purchase agreement must be performed by a comprehensive software system.

ENEXSA – formerly VTU Energy – is the major supplier of settlement systems in the Middle East.

The core team of the Austrian expert company ENEXSA came into the business of settlement systems from the very beginning of independent projects in the Middle East, through its know-how in thermodynamic simulation for fuel demand models which calculate the contracted fuel demand for gas-fired power and water plants. Under the company name VTU Energy, it expanded its portfolio to cover the entire scope of the settlement system and became a major supplier in the entire region while also expanding into North Africa and South-East Asia. After a management buy-out in early 2019, the company was renamed to ENEXSA (which stands as acronym for Energy Expert Software Applications) and continued with the exact same team and focus.



Discussions during the factory acceptance test for the Sakaka PV IPP project in KSA

understanding of the settlement process between the independent producer and the off-taker has proven to be a cornerstone of the success of the implementation.

Technical user support and software maintenance, proactive reviews of data quality and remote hardware health-checks by our service team ensure that the settlement system works reliably over the entire contract term.

Transparency of the invoice data is essential for the off-taker, equally important to data integrity.

The monthly payments under the purchase agreement are the sole income of the independent producer; and if an invoice is rejected by the off-taker, this will cause substantial problems. In such a critical business transaction, it's definitely wrong to rely on a spreadsheet no matter how sophisticated; it may still be prone to unwanted handling errors or data loss.

ENEXSA's design provides full transparency of the invoice data from raw input to payment component. Various reports of the settlement system enable the off-taker to quickly review the underlying operational data and to effectively reconcile the invoice in his copy of the audited settlement software

Day-to-day operations under a long-term purchase agreement show the real value of diligent engineering

There are many things that can make the life under a purchase agreement miserable for an independent producer. Continuous disputes over invoices, inhumane manual correction tasks on thousands of input data every month, frequent hardware failures; we have seen this happen – but never with our settlement systems.

Considering that the settlement system is business critical, an investment in highest quality and diligent execution should always be justified. ■



Noor Abu Dhabi, the world's largest solar IPP, uses ENEXSA's settlement system (picture courtesy of Sweihan PV Power Company)

The settlement system is the tool to generate the monthly invoice of the independent producer. No invoice, no money

For every hour (or shorter periods, in the case of renewable power generation) the meter data and other required inputs are processed in accordance with the tariff equations specified in the purchase agreement. The equations may vary by season, other external conditions, or other contract parameters which can vary over the term of up to 25 years. To further increase the complexity of the task, the purchase agreements evaluate capacity and availability declarations, and unscheduled outages.

What are the differentiators of ENEXSA's solution?

ENEXSA brings in a proven track record of flawless execution for more than twelve years and has collected vast experience to apply the required diligence in the design phase of the project to identify and to support – in mutual agreement of the parties – the resolution of any discrepancies in the tariff equations or settlement procedures. ENEXSA's team has a profound understanding of power technology and has built up a comprehensive software solution that can cover all aspects of the tariff calculation. Our proven implementation process includes design reviews by all parties, customer-witnessed tests and support of third-party audits. Creating a common