HVC avoids financial hangovers and simplifies administration

When HVC's administrative partner was taken over by a new energy supplier, the company had to go looking for a solution for its invoicing and programme responsibility, amongst other things. HVC now does its invoicing internally, but the programme responsibility is outsourced to PVNED. "That is a job for specialists. The PVNED programme responsibility services are amongst the best in the Netherlands," says Maarten de Wit, Energy Market Business Development Advisor at HVC.

PVNED takes care of the required communication with the national distribution network operator, TenneT. HVC avoids substantial imbalance costs thanks to the PVNED pooling system. PVNED also trades the residual profile on the spot market (APX), and checks the measurement results sent by the measurement company. Maarten de Wit: "Imagine that there is a reduction of fifty MW in production for a whole day. That has an enormous financial impact. We don't follow the figures so closely ourselves, so we are happy that somebody like PVNED does this for us."

With sustainable energy generation, we often first think of natural sources like water, wind and the sun. Energy generation from the incineration of domestic waste is also half a renewable source. Around half of all domestic waste consists of biomass. Energy generation from the incineration of treated waste wood is even 100% green. In the Netherlands, HVC is one of the most important producers of electricity and heating from waste incineration. As an energy supplier, HVC must report its energy programme or expected production and consumption to the national network operator in accordance with the programme responsibility principle. HVC fully outsources this task to PVNED.

The programme responsibility fell to HVC in 2005. A partner took over the company programme responsibility as well as the invoicing. When this partner was taken over by another energy supplier, HVC went looking for a solution for its administration. “We bought some software and have done the invoicing internally ever since,” explains Maarten de Wit, Energy Market Business Development Advisor at HVC. “But programme responsibility is a job for specialists. And PVNED is a specialist. Their programme responsibility services are amongst the best in the Netherlands.”

PVNED sells electricity on the APX

HVC produces energy for its own shareholders first and foremost. These are fifty-seven communities in North-Holland, South-Holland, Flevoland and Friesland. But HVC produces more energy than the communities consume. PVNED predicts what HVC customers are going to use the following day and subtracts the expected production. This additional electricity, the so-called residual profile, is sold via PVNED on the energy markets: the spot market (APX) where the energy is processed at an hourly rate, or by HVC itself on the wholesale market, where the energy is sold for a longer term.

Profile

The waste energy company HVC processes the waste from 12 percent of the residents of the Netherlands every year. This amounts to almost 1.1 million tonnes of waste. In processing this, HVC produces 850 million kilowatt hours of electricity – enough for more than 265,000 households – and 43 billion kilojoules of sustainable heat. More than 800 people are employed by HVC.

Challenge

When HVC’s administrative partner was taken over by a new energy supplier, the company had to go looking for a solution for its invoicing and programme responsibility, amongst other things.

Solution

HVC bought some software and has done the invoicing internally ever since. HVC fully outsources its programme responsibility to PVNED. PVNED takes care of the necessary communication with the national network operator, TenneT. Thanks to the PVNED pooling system, HVC avoids substantial balancing costs. PVNED also handles the residual profile on the spot market (APX) .

Programme responsibility

Electricity cannot be stored. The supply must always be well harmonised with the demand. Surplus amounts result in problems such as overloading and if there are shortages, extra electricity has to be found. To keep the network balanced, energy companies have to submit their energy programme to the national network operator, TenneT, every day. They signal the expected production and consumption using so-called ‘nomination’. Energy suppliers will however produce more or less, and customers will also consume more or less. TenneT sends the allocation or the actual data to the bodies responsible for the programme, and calculates the differences or the imbalance.

Advantages

- Portfolio advantage means lower imbalance costs
- No complex administration
- External checking avoids errors in production figures
- Imbalance pooling benefits practically eliminate PVNED rate
- HVC does not have to concern itself with sales on APX
- Independent programme responsibility service provider

“As a rule, we sell around 1 million kWh per day from our residual profile,” explains de Wit. “If I sell this electricity on the wholesale market, we get a stable and fixed price. If the prices are higher on the spot market, you have perhaps sold too early. So you have to manage your risks properly. This year, for example, in the first few months we decided to sell a bit more on the spot market than on the wholesale market.”

HVC calculates production, PVNED nominates

HVC does its own production prediction. “These are complex calculations based on our own measurement data and maintenance plans,” says Maarten de Wit. “How much heat are we going to provide to consumers? How hot or cold is it outside? The outside temperature affects our steam turbines and so also our energy production. We have five teams in each location who work on production around the clock, and this forms the basis for the nomination that PVNED places for us with the national network operator, TenneT. If there is a problem during the night, PVNED has to find out about it quickly.”

The communication with PVNED is already largely automated, but the programme responsibility service provider is also developing a web portal. This must secure the version management better and make the data easily accessible, amongst other things. Then customers will not be able to upload any more production data and the parties involved will avoid unnecessary communication. After all, when the nomination has been taken, it doesn’t make any sense to change the production prediction anymore.

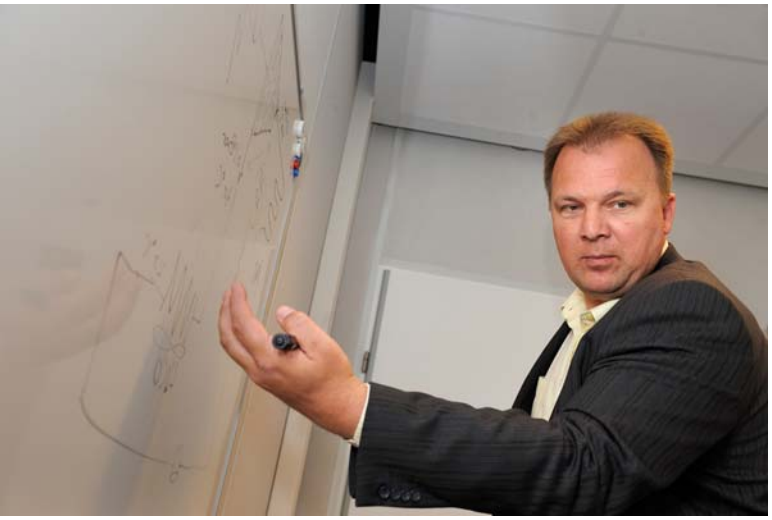
No incorrect production data thanks to PVNED

One day after the market agreements and sale on the energy market, the measurement company measures the exact consumption and the exact production. The consumption by the customers is recorded annually, and the production is measured via telemetry. There are meters in each HVC production plant that can be read remotely. The measurement company sends the information to the national network operator and PVNED, where they are checked for a first time.

“Because PVNED provides everything to TenneT collectively, the positive imbalance from one customer eliminates the negative imbalance from another. The PVNED service rate even often falls away against the imbalance benefit that we receive.”

Maarten de Wit, Energy Market Business Development Advisor at HVC

"If the measurement company has measured zero production on one of our production plants on a certain day, PVNED contacts the network operator," says de Wit. "You have to respond within a fortnight. We don't follow the figures so closely ourselves, so we are happy that somebody like PVNED does this for us. Imagine that there is a reduction in production of fifty MW for a whole day. That has an enormous financial impact.



"Imagine that there is a reduction of fifty MW in production for a whole day. That has an enormous financial impact. We don't follow the figures so closely ourselves, so we are happy that somebody like PVNED does this for us."

Maarten de Wit, Energy Market Business Development Advisor at HVC

Always in balance

The national network operator also receives the measurement results for the exact consumption and actual production. They calculate the difference with the nomination that PVNED has submitted for HVC, and sends the allocation with the imbalance to the programme responsibility party, PVNED.

"PVNED receives this allocation for various affiliated energy companies. Because PVNED provides everything together to TenneT, the positive imbalance from one client at certain times eliminates negative imbalance from another. The imbalance pooling system therefore means the customers are less imbalanced collectively. This means PVNED achieves a simultaneous benefit on the imbalance from the affiliated customers. They then divide this pro rata between their customers. The PVNED service rate even often falls away against the imbalance benefit that we receive."

A lot of saving

The work by PVNED means de Wit avoids a lot of administrative work. "If HVC had to do its own programme responsibility, we would have to get a specialist and not necessarily cheap information system in house. And one of the employees would have to spend at least half their time on it. This is perhaps economically interesting over ten years, but then you also miss out on the imbalance pooling benefit," concludes Maarten de Wit.

PVNED
+31-(0)118 883 330
info@pvned.eu
www.pvned.eu