



CPFL adopts Cargill's vegetable fluid in its distribution network

The company innovates and consolidates its leadership in sustainable energy by migrating its energy distribution network to green transformer technology using Cargill's FR3™ vegetable fluid

São Paulo, April 10, 2014 – CPFL Energia has partnered with Cargill to use Envirotemp FR3™ vegetable-base dielectric fluid in the utility's transformers. CPFL Energia is migrating its entire distribution network to green transformers, which use vegetable fluid. This initiative makes it the first energy company in Brazil to start replacing all of its installed transformers with equipment developed with sustainable technology. The work is the result of a structured research and development program spanning more than a decade and culminated with the Cargill partnership.

With more than 5,000 green transformers already operating, the migration of all CPFL Energia transformers involves the acquisition of 11,000 green transformers in 2014, which use Cargill's FR3 vegetable fluid as well as the conversion of older equipment over the coming years, an initial investment of R\$55.8 million.

"Our interest in vegetable-oil-based fluids stemmed initially from a dissatisfaction with mineral oil and with the risks associated with its handling as problems of leaks, and of the safe disposal of transformers at the end of their useful lives," says Caius Vinicius Sampaio Malagoli, Maintenance and Engineering Standards Manager at CPFL Energia.

In addition to being less harmful to the environment, the new vegetable fluid transformers are also efficient in terms of fire safety and have a flash point that is twice as high as mineral oil. The FR3™ fluid is self extinguishing, eliminating the risk of fire. "Transformers using vegetable fluid are also better equipped than mineral transformers to absorb problems in the grid – things like capacity overloads," says Malagoli. "They fail less."



The project of the green transformer began to be conceived in 2002 when CPFL Energia initiated a research program on green transformer technology, made possible by a pioneering initiative of Itaipu Transformers.

Transformers containing the FR3™ fluid perform better than mineral oil transformers, their structure is more compact, and their overhead cost is lower because they require less material in their manufacturing. "But as well as gains in operational efficiency and costs, it also became clear that the fluid could provide technical advantages," says Malagoli.

From 2014 on, all transformers in CPFL Energia's distribution network will be replaced with green transformers, filled with Cargill's Envirotemp™ FR3™ natural ester. When asked why CPFL Energia decided to invest so heavily in this new technology, Malagoli concludes: "It's simple: green transformers add value to our business in terms of cost efficiency and savings."

"The project developed by CPFL Energia stands for pioneering the joint use of all the benefits of vegetable oil and contributed to the main standards of equipment, electrical installations and fire protection were updated to include these features, especially on thermal performance", says Marcelo Neves Martins, manager of Business Development at Cargill. "The update of these rules will help other engineering firms, industries and power utilities with a guideline on how to enjoy all the benefits of the vegetable oil applications," concludes.

To meet growing demand for the vegetable oil FR3™, Cargill expanded the production capacity and storage of its unit in Mairinque, in São Paulo. "Our plant exports for all South America and we are prepared for a growth of 400% in volume product in the next two years through new business in Brazil and South America," says Martins.

About Cargill

Cargill produces and trades food, agricultural, risk management, and industrial products and services. In partnership with farmers, customers, government, and communities, and using nearly 150 years of experience, we help society thrive. We have 142,000 employees in 67 countries committed to feeding



the world in a responsible manner, reducing environmental impacts, and improving the communities where they live and work.

Cargill has been in Brazil since 1965; today the company is one of the largest food companies in the country. Based in São Paulo, SP, the company is present in 14 Brazilian states. Cargill has plants and branch offices in nearly 158 cities nationwide and employs more than 9,000 people. For more information, visit the company's website at www.cargill.com.

About CPFL Energia

CPFL Energia is the largest private conglomerate in the Brazilian electricity industry; it is active in distribution, generation, energy trading, and services.

*After its IPO in 2004, CPFL Energia is listed on the New Market of BM&FBovespa exchange and on ADR Level III of the NYSE, **which require the highest levels of corporate governance**. For the ninth consecutive year, the company's shares have been part of BM&FBovespa's Corporate Sustainability Index (ISE). In 2012, the year CPFL Energia celebrated its centennial, it joined the Dow Jones Emerging Markets Index, of which it is part in 2013 for the second year.*

Press information

Cargill Press Relations

Daniela Martins

daniela_martins@cargill.com

(11) 5099-3127

Amanda Pires

amanda_pires@cargill.com

(11) 5099-3388

CPFL Energia Press Relations

Karam Valdo – jornalismo@cpfl.com.br

(19) 3756-8197 / 992174870