

safety **POWER** News for September 2009

Welcome to this issue of the Safety Power News. Safety Power is Canada's largest provider of environmental solutions for large scale diesel and natural gas standby generators. In this issue we focus on a recent project implemented in York Region and some new information related to the Ministry of Environment. We hope you enjoy the articles. As always your feedback is most welcome - Bob Stelzer, Chairman, Safety Power Inc bob.stelzer@safetypower.ca . More info is also available at www.safetypower.ca

New Projects – York Region



York Region is one of the fastest growing regions in Ontario. It spans an area that extends from Lake Simcoe in the north to Steeles Avenue in the south. Over 1 million people and almost 30,000 businesses call York Region home. York Region has always prided itself on environmental stewardship and ensuring it builds a strong sustainable energy portfolio.

Safety Power has completed installation of a Selective Catalytic Reduction (SCR) system on a 1 MW generator at York Region's Aurora Pumping Station. The system dramatically reduces the NOx emissions from about 1200 ppm (parts per million) to around 100 ppm (a reduction of over 90%).

Melloney Syrotiuk is the Sustainable Energy Initiatives Co-ordinator for York Region. "The Demand Response program offered by the Ontario Power Authority and operated by Rodan Energy has helped to ensure effective energy usage in York Region at critical times when the supply infrastructure is heavily constrained. This particular project enables us to use the Region's existing generator in a way that increases our Demand Response capability and provides the opportunity to supply much needed peaking power to the region. The emission reductions achieved by Safety Power's system will allow us to meet the provincial government's stringent environmental standards."



In addition Safety Power has completed the installation of electrical equipment which allows the system to reduce the electrical load on the grid. PowerStream, the Local Distribution Company, was a key proponent of the project. According to Brian Bentz, the President and CEO of PowerStream, "Peak electricity loads are a concern in many parts of Ontario. The system designed by Safety Power makes it possible to offset some of our electrical load during peak times. It was very important to us that any solution comply with the environmental requirements set up by the Ministry. To our knowledge this is the first application of a policy sanctioned by Ministry of Environment in February of 2009 that allows non-emergency use of standby

generators provided stringent environmental limits are met."

The Safety Power engineering team was very pleased with the results of the project. Bob Charlton is Safety Power's Director of Engineering. Bob's assessment is that "the Aurora Project met all of our technology targets. We also used the site to test our new closed loop control system. This new system employs sophisticated model based control technology and new sensor technology which allows us to easily reach NOx reductions that exceed 90%. This puts our system at the leading edge of the technology for large scale engines."

New Ministry of Environment (MOE) Policy

In February 2009 MOE published a new policy through its Environmental Bill of Rights (EBR) process. This policy received extensive stakeholder input. The net effect of this policy is that any reciprocating engine based generator (whether run on natural gas or diesel fuel), provided it meets stringent emissions requirements, can be utilized beyond its original intended emergency use. For example engines that realize appropriate emissions limits can be used in non-emergency applications such as Demand Response. This allows the generator to participate in attractive programs offered by the Ontario Power Authority (OPA). In order to qualify it is necessary for the generator to obtain a new Certificate of Approval (CofA) for the air emissions and for the generator to comply with more stringent emissions limits. Many generator owners are planning to comply with the new policy even if they have no aspirations to use their generator for Demand Response applications. Robert Desnoyers is the President of Safety Power and has been involved closely with MOE during the verification of Safety Power's technology through extensive testing over the last 3 years. According to Robert, "by equipping their generators with our technology, asset owners significantly reduce the risk that there will be potential future health issues or complaints from neighbours. Our technology offers significant emissions reductions and is well proven in many installations in Canada."

For more information visit us at:

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