


Technical Seminar in the **IEEE Montreal Section** by the  
**Power Electronics Society (PELS)**, **Industrial Applications Society (IAS)**,  
**Power & Energy Society (PES)** & **Industrial Electronics Society (IES)** chapters

**BOMBARDIER**  
the evolution of mobility

*“Propulsion System Configurations in Rail  
Passenger Transportation Applications”*

<b>Date</b>	Tuesday, Oct 11 <sup>th</sup> 2016
<b>Time</b>	06:00 PM to 07:30 PM
<b>Location</b>	Room 1150, Pavillon A, ÉTS Montréal
<b>Speaker Bio</b>	<b>Gaëtan Bilodeau, P. Eng</b> Senior Expert in Product Management Bombardier Transportation Americas
	<p>Mr. Bilodeau joined Bombardier in 1982 as Design Engineer. During his career with Bombardier he has held different positions as project engineer on several rolling stock and systems projects in Canada and the USA. He has also been involved in advance engineering activities, and as such has participated in numerous technical studies for the implementation of rail systems, rolling stock and product definition, including inter-city trains, suburban rail cars, light rail vehicles, metros and automatic rapid transit systems. He served in the business development team during the introduction PRIMOVE Technology on the market. As Senior Engineer with Bombardier, he has conducted many internal management and engineering audits on critical projects around the world.</p>



### Abstract

The use of electric power has encountered an impressive evolution during the past two decades with the use of high power electronics and digital controls in the field of rail transportation. The rail transportation field must marry requirements of severe environmental conditions and difficult mechanical interfaces. For example, traction and dynamic braking must rely on wheel/rail adherence to provide service performance. Traction and dynamic braking controls must be designed to maximum efficiency in diverse and ever-changing climate and load conditions. This seminar presents an overview of different propulsion system configurations for mainline rolling stock, metros and light rail systems. The application of “Variable Voltage – Variable Frequency” Inverters to Traction Motors will be presented.

### About Bombardier Transportation

Bombardier Transportation is a global leader in rail technology and offers the broadest portfolio in the industry. It covers the full spectrum of rail solutions, ranging from trains to sub-systems and signalling. The company also provides complete transport systems, e-mobility technology and maintenance services. As an innovation driver, Bombardier Transportation continuously breaks new ground in sustainable mobility. It provides integrated solutions that create substantial benefits for operators, passengers and the environment. Headquartered in Berlin, Germany, Bombardier Transportation employs around 39,400 people and its products and services operate in over 60 countries.

**Admission:** Free for all interested IEEE members & non-members.

**Registration is required:** <https://meetings.vtools.ieee.org/m/41141>

*Food & refreshments will be served.*

