Challenges and Solutions to Sustainable Hydropower in Canada. \*Terry Toner, Nova Scotia Power, Director Environmental Services (terry.toner@nspower.ca; presentation).

More than 60% of Canada’s electricity is provided by existing hydropower. Maintaining those systems and constructing new developments has become increasingly difficult as companies are faced with a broad array of expectations and requirements ranging from the science challenges (biodiversity, endangered species, nutrient depletion, wetland encroachment, and many more) to the socioeconomic and human aspects (including recreation, integrated resource planning, and other competitive water and land use). Furthermore, the advent of increased recognition of the rights and title of aboriginal people has created another important dynamic. The presentation will provide a broad perspective on this collection of competing challenges, exploring a few representative more detailed examples and identifying some of the emerging solutions in place or being developed.