

Prof. Jonathan Wong, PhD MH  
Professor, Department of Biology  
Director, Sino-Forest Applied Research Centre for Pearl  
River Delta Environment  
Director, Hong Kong Organic Resource Centre  
Hong Kong Baptist University  
Kowloon Tong, Hong Kong

April 19, 2013

Dear Professor Wong:

Thank you again for your kind invitation to attend the upcoming conference in Hong Kong. Unfortunately we will be unable to personally attend due to travel conflicts. In lieu of our attendance we are sending a document that may be of further help in your discussions regarding advanced thermal treatment options for Hong Kong waste. In our Summary of Qualifications document you will find information related to technical, commercial and facility related aspects of the Westinghouse technology. With almost 30 years of development, over 10 years of commercial operation and the current construction of facilities in China and the United Kingdom, we believe that Westinghouse Plasma gasification should be a realistic consideration for Hong Kong.

As Hong Kong has very large waste disposal issues, it is critical that technologies that can process at scale be considered. We would submit that with the recent investment of almost \$450 million USD by Air Products for its 1000 ton per day municipal solid waste facility, a true global testimonial to the validity of plasma exists. This facility is under construction and is slated to commission in early 2014. As an added consideration, Air Products recently announced its intent to build a second facility on adjacent land. This facility will process an additional 1000 tons per day and has announced that it will have an off-take agreement with the government of the United Kingdom. Air Products has signed a Power Purchase Agreement with the Government of UK for its second Tees Valley project which would be similar to the first project. This is a major milestone for another potential gasifier equipment sale to Air Products, and below are excerpts from the UK government recent announcement.

Air Products expects to invest an amount similar to that of their first plant and the new agreement means government – via the Government Procurement Service (GPS) – will buy a portion of its energy directly from the UK-based generator. This innovative Power Purchase Agreement will provide at a low fixed price rather than buying entirely through short-term wholesale markets which are subject to unpredictable price fluctuations. The UK government has chosen the company as Air Products has long-standing expertise in building and operating large, complex industrial gas and energy plants ensuring its projects are delivered safely, reliably and cost-effectively.



215, 4000 - 4th Street SE  
Calgary, Alberta, Canada T2G 2W3  
Main 403 806 3875 Fax 403 806 3721  
www.alternrg.com



Westinghouse Plasma Corporation  
a division of Alter NRG Corp.

P.O. Box 410, I-70 Exit 54  
Madison, PA 15663, USA  
Main 724 722 7053 Fax 724 722 7057  
www.westinghouse-plasma.com

Moreover, advanced plasma gasification is a more efficient energy-from-waste process than incineration and has a lower overall environmental impact.

In China, we continue to progress steadily. Now in our 4<sup>th</sup> year of development in the China market, we have most recently seen the start-up of the first facility using Westinghouse Plasma gasification technology in Wuhan. The facility – owned by Wuhan Kaidi - completed construction of its demonstration facility and was commissioned during the first quarter of 2013. The facility is expected to take 100 tons per day of biomass waste and convert it into liquid fuels. Upon successful demonstration (expected in 2013), Kaidi has more than 100 additional sites identified to convert biomass into power and liquid fuels.

A second facility using Westinghouse technology is currently under construction in China. This projects is a hazardous waste demonstration facility in Shanghai China being constructed by GTS Shanghai. We have delivered the detailed engineering on the gasifier and torches and the facility is under construction. The facility is co-located with its partner Shanghai Environmental and targets to commission the facility in mid-2013.

Although not specific to plasma gasification, Westinghouse also signed an agreement to provide \$12 million of Westinghouse Plasma Torches to Beijing Huanyu Guanchuan Plasma Technology Ltd. During the first quarter of 2013, the company ordered the first torches to be delivered in the second quarter of 2013. The company is using the torches for proprietary industrial furnace applications related to the Chinese steel and iron industry. The use of the Westinghouse torches both improves overall efficiency of the processes as well as significantly improving the environmental emissions – a significant focus for China today.

In other parts of the world, our company recently finalized scope with SMS Infrastructure on two projects which have advanced into the formal regulatory approval phase (SMS has already constructed two hazardous waste facilities utilizing Westinghouse Plasma technology). These projects are two of the more advanced projects within a larger pipeline of projects which SMS is developing and marketing in India and the Middle East. SMS is a licensee of the Westinghouse Plasma Gasification Technology and provides turnkey hazardous waste facilities to the market and has approximately 140 people in their gasification division.

In addition to the highlights above, customers around the globe continue to advance their business development efforts using the Westinghouse Plasma Gasification Solution. This includes exclusive license agreements for territories that are in advanced negotiations.

We believe that with the right partners, the Westinghouse Plasma Gasification technology could be a viable solution for Hong Kong waste treatment. We hope that the enclosed information is of further help in your discussions and we would look



215, 4000 - 4th Street SE  
Calgary, Alberta, Canada T2G 2W3  
Main 403 806 3875 Fax 403 806 3721  
www.alternrg.com



Westinghouse Plasma Corporation  
a division of Alter NRG Corp.

P.O. Box 410, I-70 Exit 54  
Madison, PA 15663, USA  
Main 724 722 7053 Fax 724 722 7057  
www.westinghouse-plasma.com

forward to an invitation to return and meet with appropriate governmental and technical teams that are evaluating technologies for Hong Kong's waste disposal.

Kind regards



Richard J. Fish

President, Westinghouse Plasma Corporation/AlterNRG

**ALTERNRG**

215, 4000 - 4th Street SE  
Calgary, Alberta, Canada T2G 2W3  
Main 403 806 3875 Fax 403 806 3721  
[www.alternrg.com](http://www.alternrg.com)



**Westinghouse Plasma Corporation**  
*a division of Alter NRG Corp.*

P.O. Box 410, I-70 Exit 54  
Madison, PA 15663, USA  
Main 724 722 7053 Fax 724 722 7057  
[www.westinghouse-plasma.com](http://www.westinghouse-plasma.com)