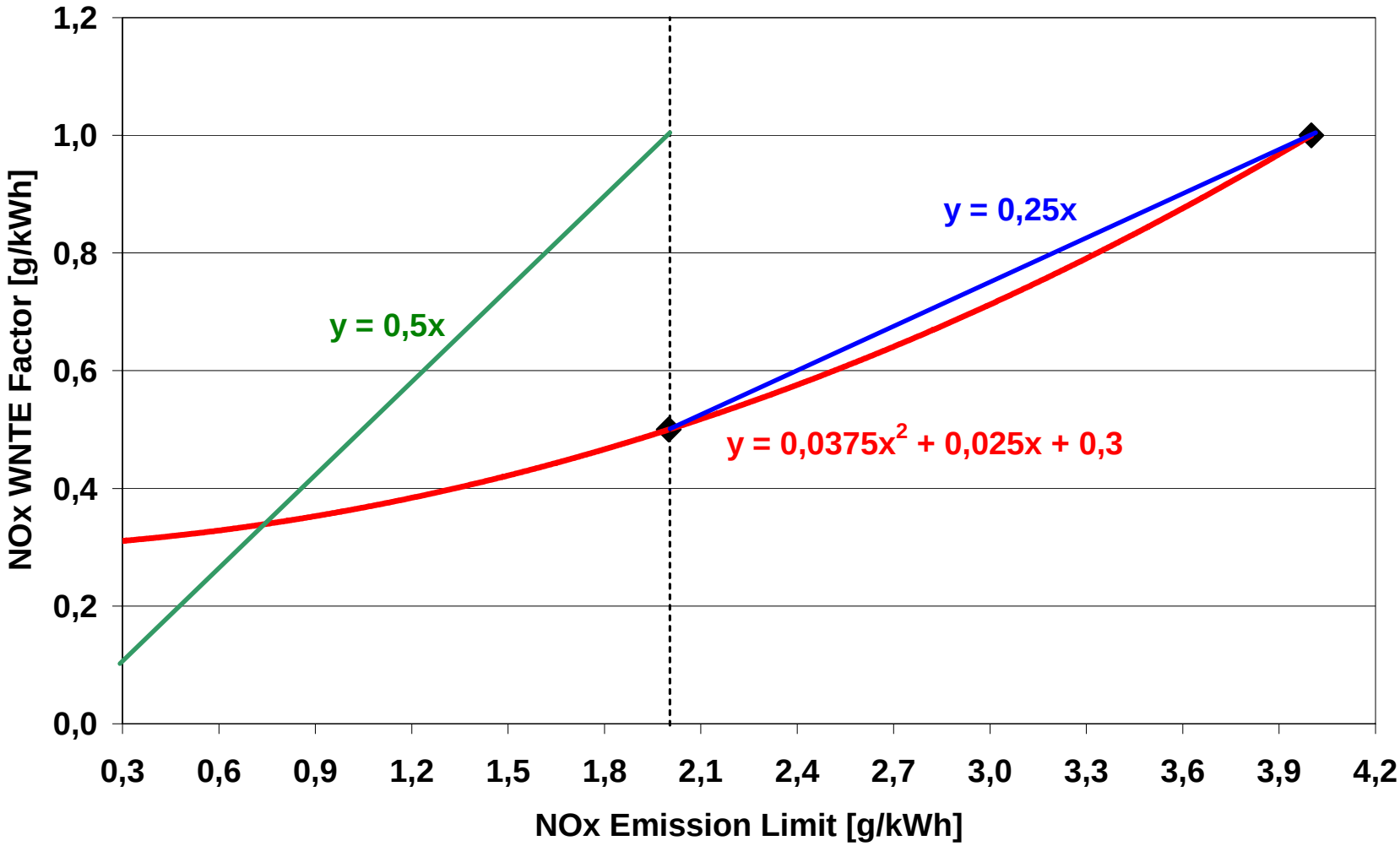
OCE Informal Document No. 52
Fifteenth Plenary Meeting of the Working Group On Off-Cycle Emissions
10 to 11 October 2006
Ann Arbor, Michigan, USA

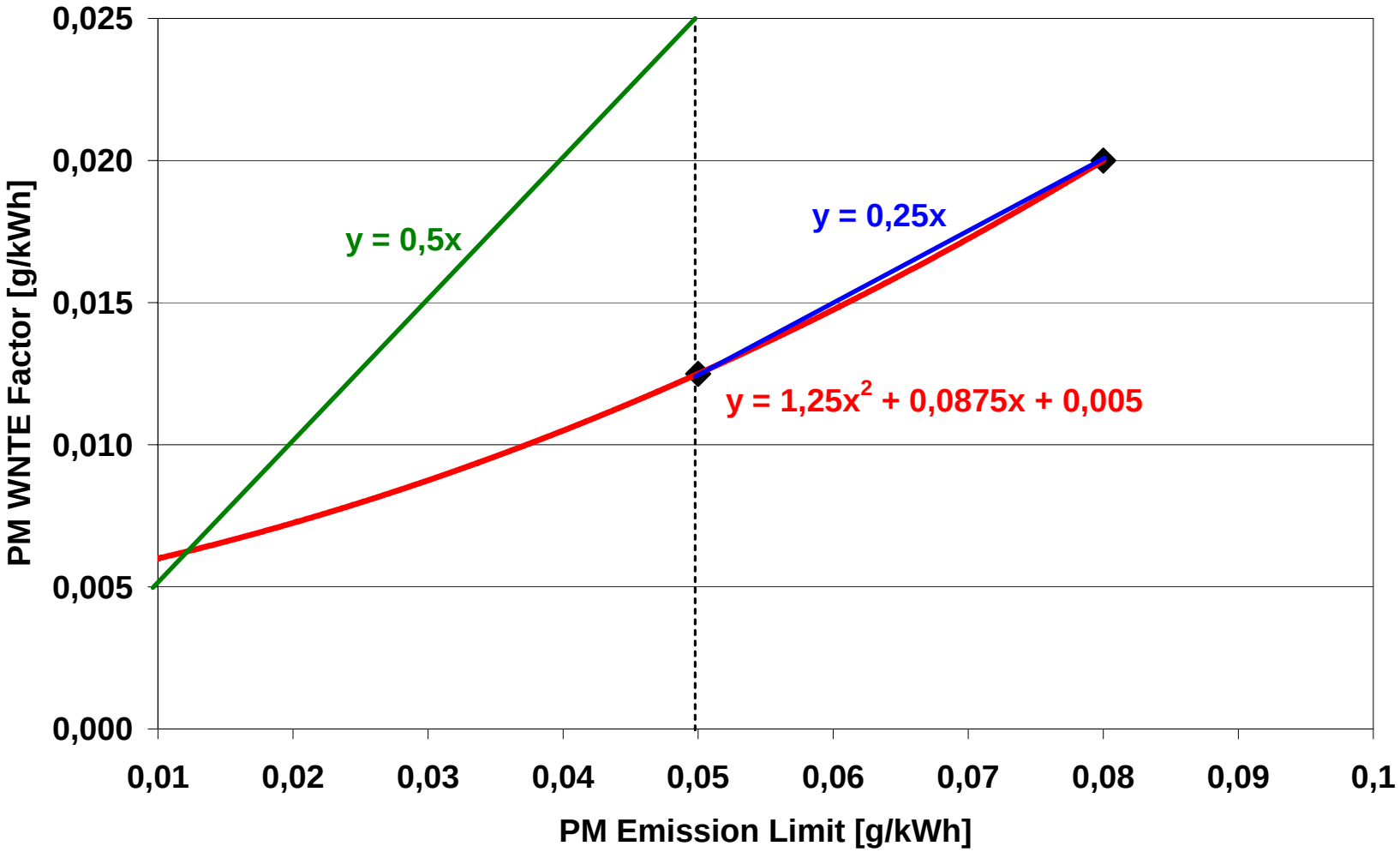
OICA WNTE Proposal

- OICA proposed an alternative approach for the WNTE factors at the 13th meeting (05. April 2006, Den Haag)
- This approach would replace the current gtr proposal (table 1) with its emission limit dependent step with a continuous function
- The continuous function using a quadratic equation together with a fixed y-intercept for low values was presented at the 14th meeting (06. June 2006, Geneva) for NOx and PM
- At the request of the Chairman, a quadratic equation was also developed for HC and CO
- At the request of the OCE working group, the WNTE additive factors were calculated for a set of limit values
- This presentation summarizes the functions and tables for all regulated emission components

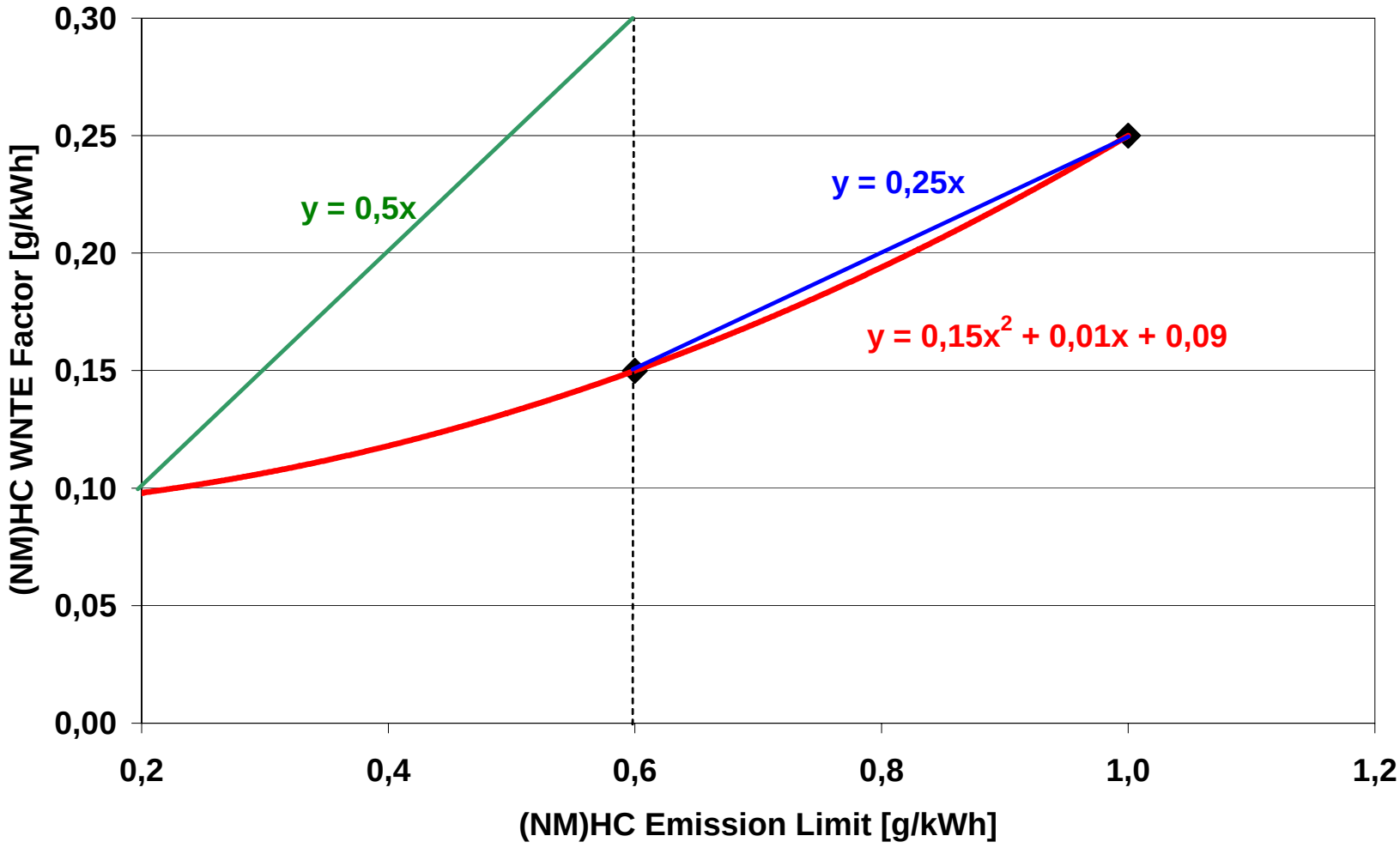
OICA WNTE Proposal - NOx



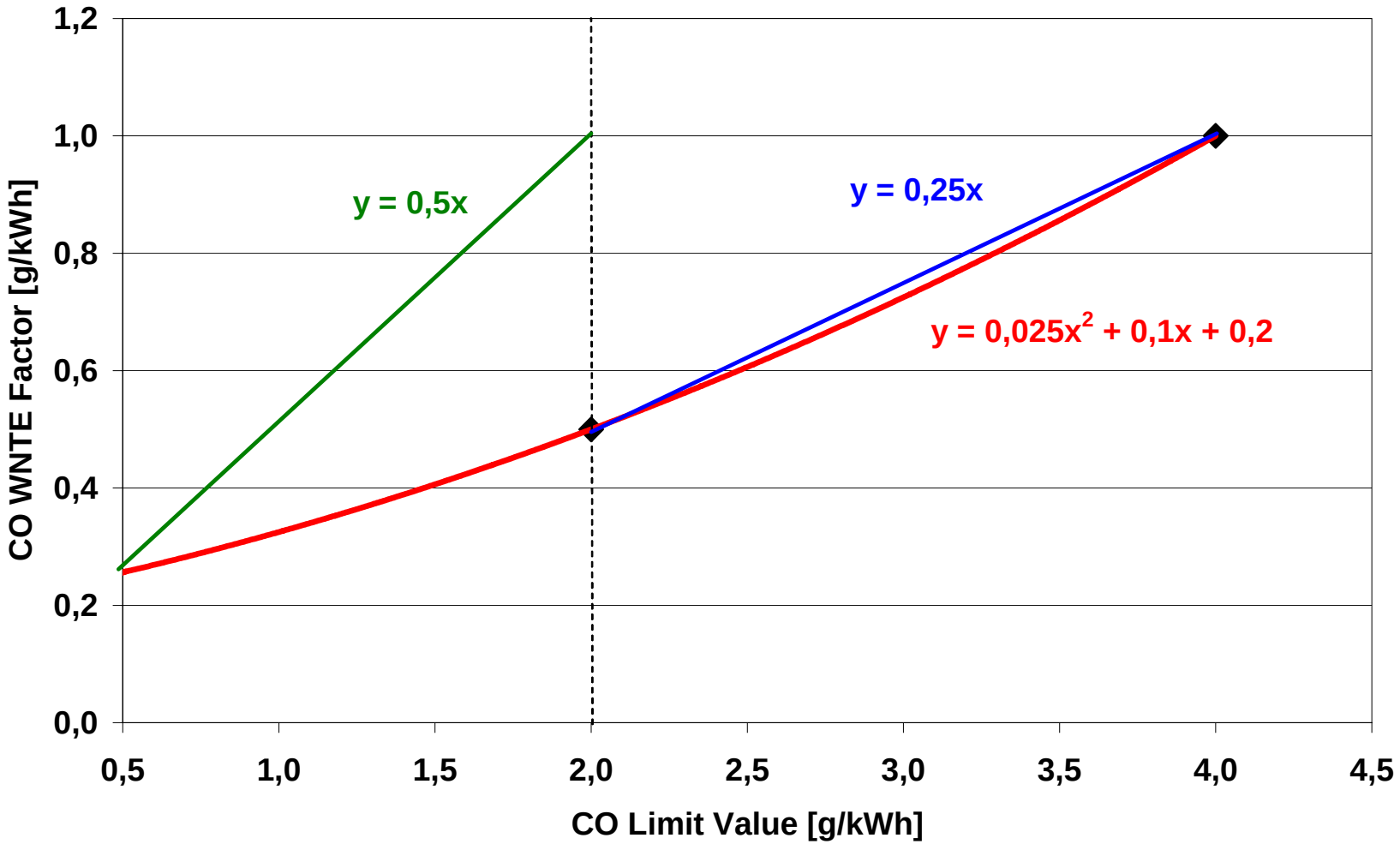
OICA WNTE Proposal - PM



OICA WNTE Proposal - HC



OICA WNTE Proposal - CO



NOx and PM WNTE Limits as Function of Existing Legislation

	Emission Limit	Additive WNTE Factor	WNTE Emission Limit	Remark
NOx	3,5	0,85	4,35	Euro IV
	3,4	0,82	4,22	US 04; Japan 04
	2,0	0,50	2,50	Euro V; Japan 05
	1,5	0,42	1,92	US 07
	0,7	0,34	1,04	Japan 09
	0,3	0,31	0,61	US 10
PM	0,13	0,038	0,168	US 04
	0,10	0,026	0,126	Euro III
	0,07	0,017	0,087	US 04 Bus
	0,03	0,009	0,039	Euro IV/V; Japan 05
	0,02	0,007	0,027	Euro IV/V; US 10
	0,01	0,006	0,016	Japan 09

All values in g/kWh

HC and CO WNTE Limits as Function of Existing Legislation

	Emission Limit	Additive WNTE Factor	WNTE Emission Limit	Remark
	0,78	0,189	0,969	Euro III
	0,55	0,141	0,691	Euro IV/V ETC
HC	0,46	0,126	0,586	Euro IV/V ESC
	0,19	0,097	0,287	US 10
	0,17	0,096	0,266	Japan 05/09
	20,8	13,10	33,90	US 04/07/10
	5,5	1,51	7,01	Euro III
CO	4,0	1,00	5,00	Euro IV/V ETC
	2,2	0,54	2,74	Japan 05/09
	1,5	0,41	1,91	Euro IV/V ESC

All values in g/kWh