

ATTACHMENT IV

**Table II-3: Support Costs**

**(A) Development and Calibration Cost of Heavy-Duty Diesel OBD Technology (Research)**

Staff	Number of Staff	Staff Cost (a)	Testing Costs (b)	Equipment and Limit Parts	Cost/vehicle(c)
	(person yrs.)	(in dollars)	(in dollars)	(in dollars)	(dollars/veh.)
Engineer	0 75.73	0 9,713,866	23,402,785 0	<del>4,000</del> 1,212,950 0	<del>54.18</del> 56.98 22.49
<b>Total</b>					<b>76.66</b> 79.47

**(B) DDV and PVE Testing Cost of Heavy-Duty Diesel OBD (Engineering Support)**

Staff	Number of Staff	Staff Cost (a)	Testing and Equipment Costs (d)	Cost/vehicle(c)
	(person yrs.)	(in dollars)	(in dollars)	(dollars/veh.)
Test Cell Technician	0 0.60	0 59,980	0 156,038	0.00 0.50
<b>Total</b>				<b>0.50</b>

**(C) Legal and Administrative costs**

	No. of Staff required	Number of years	Staff cost (in dollars)	Cost/vehicle (c) (dollars/vehicle)
Legal	0.25	3	150,000	0.35
Administrative	1	6	900,000	2.08
<b>Total</b>				<b>2.43</b>

- (a) Development cost includes personnel, overhead and other miscellaneous costs at a total rate of \$150k/yr for an engineer and \$100k/yr for a technician.
- (b) Testing Costs includes Labor Costs for Technicians needed to staff the Tests
- (c) Staff cost has been distributed over 72,000 diesel engines per year for a total of 6 years.
- (d) Equipment costs have been distributed over 72,000 diesel engines per year for a total of 6 years

**Table II-4: Incremental Consumer Cost of Heavy-Duty Diesel Vehicle OBD System**

		HDDV (in dollars)
Variable costs	Component Assembly	37.18
	Warranty	0.68
	Shipping	1.64
		1.20
Support costs	Research	22.49
	Engineering Support	0.14
	Legal	0.35
	Administrative	2.08
Investment recovery costs	Mach. & equipment	0.00
	Assembly plant changes	0.00
	Development/Testing	<u>54.54</u> 57.34
Capital recovery (a)		<u>7.22</u> 7.39
Truck/Coach Builder costs	Cost of capital recovery (b)	<u>4.87</u> 1.91
<b>Total cost</b>		<b>129.37</b> 132.39

- (a) Cost of capital recovery was calculated at 6% of the total incremental costs.
- (b) Cost of capital recovery was calculated at 6%. Engines are assumed to remain in inventory for 3 months.

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