Honda's proposal for NGV as Enhanced AT-PZEV

Near-zero emission Natural Gas Vehicles (NGVs) promote a pathway to zero emission FCVs, and rival even Battery EVs for Well-to-Wheel emissions. They should qualify as Enhanced Silver, at least for an interim (transitional) period, e.g. through 2014. Natural gas is a dominant clean energy source for electricity and hydrogen near term. ZEV policy needs to encourage this ZEV-enabling path and option. We are the only OEM still committed to NGVs, given the challenges of dedicated AFVs and infrastructure. Honda has even been promoting and developing home refueling systems for AFVs.

Enhanced AT-PZEV: definition, proposed modification:

Staff's ISOR Proposed Definition	Modification we propose	Rationale
1.0+ credit	**Increase current NGV credit from 0.7 to 1.0 or greater.**	ZEV enabling, and demonstrated emissions performance is similar to BEVs in SCAB.
"ZEV fuel"	**Qualify the direct use of natural gas for a transitional period (through 2014).**	Natural gas is a clean energy source for ZEV fuels today (electricity and hydrogen).

The credit value for the NGV is not consistent with other Enhanced AT-PZEVs proposed, based on environmental performance and ZEV-enabling component technology as well as infrastructure development contribution.

Credit comparison under latest CARB proposal:

AT-PZEV Techology	Near Term Fuel	'09-'11	'12-'14
H2 ICE Vehicle	H2 from natural gas	**6.9 credits**	**2.3 credits**
Natural Gas Vehicle	Natural gas (directly used)	**0.7 credits**	**0.7 credits**
PHEV	Electricity from natural gas & Gasoline	**3.7-7.2 credits**	**1.2-2.4 credits**

Evidence of dedicated NGV environmental (emissions) performance and benefits:

1. NGV is a dedicated alternative fuel vehicle that introduces the public to non-petroleum options, and serves as a bridge to fuel cell vehicles and hydrogen in terms of vehicle component technologies, infrastructure development, and as a transitional fuel for hydrogen production.
2. UC Riverside Study of Extremely Low Emission Vehicles: recent research on real world emissions impacts demonstrated near-zero emissions impact.
3. GREET 1.6 well-to-wheel comparisons: emission impacts (CO2, VOC, NOx, etc.) similar to BEV on National and CA grid mix.
4. VTT Technical Research Centre of Finland: measured Civic GX and confirmed virtually no PM emissions even in terms of particle number.
5. American Council for an Energy-Efficient Economy: analysis of health-cost related emission impacts and GHG impacts shows Civic NGV comparable to Battery EV model. Rated "greenest" model in recent years.