

Re: 1003.

Its good to see they finally snagged this coach. I hope they not only evaluate the powertrain, but the Orion VII chassis as well.

If you read the latest update report on Phase II of the Bus Technology Demonstration project, you will notice that in Phase II that 2 C40LFRs, 2 E40LFRs and 2 D40LFRs will be tested for the same cycle as 1003 and the Hydrogen+CNG C40LFs. The combined results between phases 1 and 2 will probably give the most complete evaluation of transit bus options ever done in Canada and will be a reference point for the entire Canadian transit industry. Its nice to see the trolleys will be given a fair shake on this one too.

Of note about 1003, it is a series hybrid. This is different that 7244 and 7246 which are parallel hybrids. 1003's propulsion would actually resemble a trolleybus more than the other two. A series hybrid has the diesel motor powering a generator which power an electric motor which powers the wheels.....much like a locomotive. A parallel has both the diesel motor and the electric motor powering the wheels directly....theoretically you can have all electric, all diesel or a combination of both. I say theoretically because its only in cars with parallel hybrid systems where you have enough power to run the car solely on electricity for periods with the engine shut off.....like "everywhere else but North America" version of the Toyota Prius.

So it will be interesting to see how the two compare in terms of fuel savings, maintainability, reliability and performance. A key difference you will likely find with 1003 is that the engine will not fluctuate nearly as much in RPM as 7244 and 7246 does, hence it can stay operate at its most efficient RPM as often as possible. On 7244/46, the amount of work the diesel engine does relies greatly on the state of charge the batteries are in.

As for the O7 chassis, at last year's bus show, it was the one that impressed me the most. It impressed me because it was very rugged. The fact that the TTC and NYCTA have ordered large numbers of these coaches is a testament to the design philosophy....designed not for looks but to last. The problem with Orion always has been production and customer support.....something Daimler Chrysler I don't think has quite sorted out yet. We'll see when the Novas arrive how their production fares. All I know is that the stuff coming from NFI these days is very disappointing in terms of quality. At a demonstration of the Nova at STC today that theme came through loud and clear. CMBC was simply tired of NFI's uninspired design and engineering coupled with quality control that is simply too lax. Nova has really bent over backwards to give us a coach that deals with all the objections we had on previous examples. Of course, the Nova unit we have now is just a demo....surely gone through with a fine tooth comb before coming here. Whether the production examples are of the same quality will remain to be seen.

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