Energy - Docket Optical System

From: Colin Armstrong [carmstrong@htec.ca]
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To: Energy - Docket Optical System
Subject: Docket 12-HYD-01
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Categories: Ready to Docket

Topic – Mobile Fuelling Station

Our experience designing, installing, operating, and the mobile refueller for BC Transit's FC bus program along with a container based station in Vancouver, suggest the following items should be considered prior to issuing the PON.

Total allowable foot print – including protective barriers, dispensers, h2 supply, power supply.

Capacity – the challenge is more on consecutive days since hydrogen will need to be brought to site.

Power – this can be large and we had lots of debates whether a diesel generator was acceptable. Perhaps fixed stations need to have suitable plug available. Or maybe demand that an onboard fuel cell is required.

Definition of Mobile – does a 20ft ISO container as shown count that is dropped on site for example?

How many different places/jurisdictions will it need to be deployed? – it typically takes a reasonable effort to convince local authorities that it is acceptable. You may need stations to get pre-approval of space and setup at site. Bollards and setbacks are a challenge. We used mobile highway type barriers.

How often and how fast a response time is required – will operators be given $x per setup and per day and per kg of H2 dispensed, and is this part of the $1 million. Who pays and how much – station operators? Who decides when needed?

Emergency Response Plans – station operators will need to incorporate into their plans but who writes/administers/owns.

Hydrogen Price – how is this accounted for. As a cost to proponent? Including shipping and cylinder rental.

Noise – what is acceptable?

Recommendation – do not include a mobile refueller request in the PON. The system for BC proved to be too expensive to deploy for the amount of hydrogen dispensed. I would suggest considering 2 alternative plans:

1. Fining operators for every customer that comes to a station and does not get a fill.
2. Creating a central number that drivers can call anytime for support – whether if a station does not work or other. That operator can then direct the call to maintenance personnel or other. They can also track complaints.
3. It would seem to make sense to have a mobile refueller that can drive up to a vehicle on the side of the road to fill if empty. But I would suggest that would be problematic and offering free towing would be much more cost effective.
4. Change the mobile refueller request to a request for Network Support Services for say five years for the above items and others such as a fuelling station location app.

Please do not hesitate to contact me if you require further clarification or information. Attached are a couple pictures for reference.

Good luck,

Colin

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