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Subject: H2 Fueling Station economic data reporting
Attachments: Requirements for H2 station data.docx

California Energy Commission

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California Energy Commission

In time it will be necessary that capital providers find it attractive to build and operate H2 fueling stations. Financial analysts looking at the business opportunity presented by H2 stations will be interested to know in detail how existing stations supported by California under AB8 performed economically. Therefore it would be useful if the existing stations funded under PON 13-607 and those to be funded under the forthcoming solicitation were required to provide financial data along the lines outlined in the attachment to this email.

I am sending this email as a result of a suggestion made by Catherine Dunwoody at an H2USA WorkingGroup meeting yesterday (9/10). The data description was hastily prepared and could no doubt benefit from discussion and refinement.

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**Suggested Requirements for
Reporting Financial/Performance Data
For Each H2 Fueling Station Supported by California Under AB 8**

1. Capital Costs: Both for initial construction and later additions (i.e. more storage, increased capacity, equipment upgrades)
 - Component level costs for all station equipment, e.g.
 - Compressor(s)
 - Chiller
 - Dispenser
 - Storage tanks: CGH2/LH2
 - Monitoring and control equipment
 - On site H2 production equipment if appropriate
 - Containment/building(s)/trailers as appropriate
 - Other
 - Site work, broken out in detail
 - One time costs of energy supply (e.g. electric connection)
 - Permitting and approval costs
 - Other
2. Hydrogen Costs and Pricing: by calendar quarter
 - Delivered cost/kg if appropriate, specifying
 - Mode of delivery: tube trailer, liquid carrier, pipeline, other
 - Typical kg/delivery if appropriate
 - Cost of production if H2 is produced on site: by electrolysis or with small SMR
 - Price charged to customer/kg
 - From which gross margin/kg on H2 sales can be determined
3. Operating Costs (other than H2): At a detailed quarterly income statement level, including as appropriate
 - Labor: salaries and benefits
 - Rents/lease costs: e.g. land, equipment, etc.
 - Energy (electricity, natural gas, propane)
 - Insurance
 - Taxes, if any
 - Maintenance of capital equipment
 - Services (e.g. site cleaning, snow removal, etc.)
 - Other (e.g. incentive awards, bad credits, theft, damage)

4. Cost of Capital

- By financing source (debt: senior, junior; equity: common, preferred; grant, gift, internal corporate capital)
- How measured if appropriate: interest, shares (price/share)

5. Operations Data:

- Total unique vehicles filled or served/day: recorded daily, reported quarterly
- High, low, and average amount/fill
- Total kg of H2 sold/day, reported quarterly
- Daily sales: average, maximum, minimum, per quarter
- Station capacity factor: each quarter
- Annual return (or loss) on total invested capital (including grants)

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These data should be made available publically on a per station basis; aggregation of data reported to NREL is not useful for actual business analysis.

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