Written Comments

Draft Solicitation Concepts For Hydrogen Refuelling Infrastructure

Docket Number 15-HYD-01

Comments submitted by ITM Power Inc.

In addition to attending the Workshop on August 13 and 14, 2015 we hereby submit a list of additional points and commentary. This document is provided with the objective of offering ITM-Power's thoughts and ideas in response to numerous topics addressed in the entitled docket and referenced Workshop.

Any clarifications, questions and further communications regarding these comments should be addressed to either:

Stephen Jones
MD
ITM Power Inc.
2875 Michelle Ste. 100
Irvine
California
92606-1024
Work: +1 (949) 852 3570
Mobile: +1 (714) 453 8141
sj@itm-power.com

Or,
Geoffrey Budd
Business Development Representative
NA
ITM Power Inc.
2875 Michelle Ste. 100
Irvine
California
92606-1024
Work: +1 (604) 620 8525
Mobile: +1 (604) 617 5588
gb@itm-power.com

1. Hydrogen Station Location Priority Areas.

    a. Consider sites outside of the Priority Areas based on merit and which are supported by documented reasons and justification for this site. By way of example a supporting letter and data prognosis from an OEM.

    b. Do not penalize stations that are not located on existing fueling sites, especially if the supporting organizations and OEMs deem it a worthy site. This also allows for co located sites in areas such as City fueling yards, wastewater treatment, energy storage etc.

2. Capex Funding. 100% Renewable Hydrogen.

    a. Consider including as in the past PON opportunities to bid for a 100% renewable station award at a cap of $3,1500,00. This is in order that onsite hydrogen generation is not excluded from this follow on GFO (PON). The opportunity will offer another alternative that will be scored on its merits in the evaluation process. This route has the potential to bring the cost of hydrogen and renewable hydrogen down at the pump, even when one considers the price of electricity in California. Delivered renewable hydrogen is likely to be higher in cost to the station owner than hydrogen generated from from reformed natural gas.

    b. Consider supporting a central hydrogen production concept at a cap of $4 MM that includes a station that has the ability to supply renewable hydrogen to multiple stations within the CA network and has the opportunity to demonstrate and support the use of curtailed renewable electricity and that supports energy storage and grid balancing.

    c. Consider decreasing match share to 15% for stations that are able to supply 100% renewable hydrogen. This is an add-on to ITM's verbal comments in the workshop.

    d. Consider the removal of the requirement that the stations must be upgradable to 250kg per day at the station owners costs. This will add unnecessary idle capex costs to the station. If there is high station utilization and a reasonably high demand for hydrogen the upgrade will be privately financeable. If there is a future shortfall of hydrogen supply for fuel cell vehicles free market forces will pick up on the opportunity to produce more!

    e. Ensure that station developers are able to utilize part of the capex funding to procure centralized hydrogen generation plants. That is do not restrict the capex funding to equipment that will be sited at the filling location only.

3. O&M funding.

    a. The amounts and incentives proposed in the Draft Solicitation Concepts document we agree are sufficient.

    b. The exclusion of the costs for hydrogen generation we recommend is changed back as per the last PON to include hydrogen generation especially for renewable energy sources. This will once again go a long way to support the early introduction of renewable hydrogen into the supply chain. At the very least the additional cost premium of renewable hydrogen generation should be allowable under the O&M grant.

    c. We support the inclusion of O&M costs for renting or leasing the real estate from a fueling station owner.

    d. We support the O&M payments to be eligible from the completion of construction and costs associated to commissioning of the station.

4. Station upgrades.

    a. We recommend the removal of the stipulated earlier than 2010 cut off date in the current draft prior to which stations can be eligible for funding. We recommend that each case be scored on its merits. If a valid case can be made for an upgrade with for example the support from OEMs and other stakeholders this should not be excluded by a cut off date.

    b. Suggest the provision of a list of upgradable stations.

5. Renewable Hydrogen Category and Scoring Criteria

    a. Recommend that a new category for Renewable Hydrogen be created.

    b. This category should have a value of 50 points. The reason for this recommendation is that renewable hydrogen needs to continue to be supported for use in fuel cell vehicles as the ultimate goal. This will not impend the targeted deployment of as many stations possible, which is the short-term goal of the State.

    c. The categories that could yield points that would be used for this new category could be:

        i. Market viability.

ii. Safety planning – this is in our minds a given and has too high a value as was commented on by Mercedes in the workshop.

iii. Project implementation. The match share funding levels incentivizes this.

iv. Project budget. Either it is prepared effectively and completely. If not the funding application is not considered.

d. Innovation category, we fully support. The intent is to consider new ideas and creativeness however high scoring in this section should not hinder scoring of other categories. Example if an innovative approach leads a station to be slightly outside of a location area or not located with other fueling facilities it should not be adversely penalized.

e. Sustainability.

i. We fully support this category and suggest that the last item in this category wording be changed to “The proposed project uses curtailed electricity and offers a project proposal that has a direct link to Power to Gas (hydrogen energy storage) and grid stabilization”. The latter two are tied hand in hand with the future supply of renewable hydrogen for mobility and with the ever-increasing amounts of renewable electricity that will be produced in California. By the way this is the case in a number of European countries for their respective future hydrogen infrastructure roadmaps.

ii. We fully support maximizing the efficient use of water. This would be important in the case of onsite or central electrolytic hydrogen production. Especially because of the fact that the production of hydrogen from natural gas that has been extracted as fracked natural gas has a very high water usage.

iii. Any scoring system linked to water use needs to be scored using an agreed upon and verified metric of well to wheels water use.

Consider the addition of wording that allows the funding from this solicitation to be used in projects which also draw upon energy related funding via for example EPIC, ARB or other state and/or federal funding which create a holistic project of renewable energy transfer between the power and mobility fuel sectors for example.