Hydrogen Infrastructure Subcommittee Report Update

Robert Rose

Issues and Concerns

- Stakeholder reaction
- Report prepared for Dr. Chu
 - Perhaps more defensive than necessary
- Changing circumstances
- Rapid progress in 2013 toward station financing and deployment internationally
 - H2Mobility up to 350 stations majority funded privately
 - Japan up to 100 by 2015-2016, \$120M+ from government
 - California \$100M over 7 years, 100 stations by 2023
 - UK, Scandinavia, Korea
- Changing US Landscape
 - Hawaii
 - H2USA

Options

- Reconvene Subcommittee
- Develop a new draft for approval
- Develop recommendations for the Secretary in letter form
- Other?

Current Recommendations

- 1. Emphatic public support by the U.S. government for fuel cell electric vehicle (FCEV) deployment will give public and private stakeholders confidence and attract much-needed private investment in the U.S. and around the globe.
- 2. The U.S. government has an opportunity to work collaboratively with infrastructure initiatives in Germany, Japan, Korea, the United Kingdom) and elsewhere to coordinate rollout plans; doing so would reduce costs and accelerate deployment.
- 3. DOE support for state level hydrogen infrastructure initiatives would accelerate deployment in California, Hawaii, and, to a lesser extent, other states and would yield valuable experience in developing a national rollout plan.
- 4. These efforts would be most effective if integrated with a well though-out strategy to support both 2016 and 2025 corporate average fuel economy mileage standards recognizing that hydrogen fuel cell vehicles can play an important role by 2025 along with hybrid, battery, biofuel, and improved conventional vehicles.
- 5. The hydrogen fueling infrastructure build-out should be part of a comprehensive National Energy Policy.
- 6. DOE's hydrogen and fuel cell research budget has shrunk by about 50% since FY 2009; a strong commitment to research and development would ensure U.S. technology leadership and to build on the impressive current U.S. knowledge base.

New Draft

1. Emphatic public support by the U.S. government for fuel cell electric vehicle (FCEV) deployment will give public and private stakeholders confidence and attract much-needed private investment in the U.S. and around the globe.

Suggested change:

Emphatic public support by the U.S. government for fuel cell electric vehicle (FCEV) deployment will give public and private stakeholders confidence **and increase public awareness at a critical point in the commercialization cycle**.

2. The U.S. government has an opportunity to work collaboratively with infrastructure initiatives in Germany, Japan, Korea, the United Kingdom) and elsewhere to coordinate rollout plans; doing so would reduce costs and accelerate deployment.

Suggested change:

The U.S. government has an opportunity to work collaboratively with infrastructure initiatives in Germany, Japan, Korea, the United Kingdom and elsewhere to **collaborate on technical and regulatory issues** and coordinate rollout plans; doing so would reduce costs and accelerate deployment.

New Draft

3. DOE support for state level hydrogen infrastructure initiatives would accelerate deployment in California, Hawaii, and, to a lesser extent, other states and would yield valuable experience in developing a national rollout plan.

Suggested change:

Direct DOE **investment in** hydrogen infrastructure in collaboration with the States and with industry would accelerate deployment **in early markets, attract much-needed private investment,** and yield valuable experience in achieving a national rollout.

4. These efforts would be most effective if integrated with a well though-out strategy to support both 2016 and 2025 corporate average fuel economy mileage standards recognizing that hydrogen fuel cell vehicles can play an important role by 2025 along with hybrid, battery, biofuel, and improved conventional vehicles.

Suggested change: No change

New Draft

5. The hydrogen fueling infrastructure build-out should be part of a comprehensive National Energy Policy.

Suggested change: Delete

6. DOE's hydrogen and fuel cell research budget has shrunk by about 50% since FY 2009; a strong commitment to research and development would ensure U.S. technology leadership and to build on the impressive current U.S. knowledge base.

Suggested change:

DOE's hydrogen and fuel cell research budget has shrunk by **more than** 50% since FY 2009, **while research budgets in other countries have grown significantly**; a stronger commitment to research and development would ensure U.S. technology leadership and build on the impressive current U.S. knowledge base.