Research and Development Project Evaluation Form

This evaluation form was used for the following Hydrogen and Fuel Cells sub-program review panels: Hydrogen Production and Delivery; Hydrogen Storage; Fuel Cells; Manufacturing R&D; Safety, Codes and Standards; and Systems Analysis.

Evaluation Criteria: U.S. Department of Energy (DOE) Hydrogen and Fuel Cells Program Annual Merit Review

Please provide specific, concise comments to support your evaluation. It is important that you write in <u>full sentences</u> and <u>clearly</u> convey your meaning to prevent incorrect interpretation.

1. Approach

To performing the work – the degree to which barriers are addressed and the project is well designed, feasible, and integrated with other efforts. (Weight = 20%)

- 4.0 Outstanding. Sharply focused on critical barriers; difficult to improve significantly.
- 3.5 Excellent. Effective; contributes to overcoming most barriers.
- 3.0 Good. Generally effective but could be improved; contributes to overcoming some barriers.
- 2.5 Satisfactory. Has some weaknesses; contributes to overcoming some barriers.
- 2.0 Fair. Has significant weaknesses; may have some impact on overcoming barriers.
- 1.5 Poor. Minimally responsive to project objectives; unlikely to contribute to overcoming the barriers.
- 1.0 Unsatisfactory. Not responsive to project objectives; unlikely to contribute to overcoming the barriers.
 - □ 4.0 Outstanding
 - □ 3.5 Excellent
 - □ 3.0 Good
 - □ 2.5 Satisfactory
 - □ 2.0 Fair
 - □ 1.5 Poor
 - □ 1.0 Unsatisfactory

Comments on Approach to performing the work:

2. Accomplishments and Progress

Toward overall project and DOE goals – the degree to which progress has been made and measured against performance indicators, and the degree to which the project has demonstrated progress toward DOE goals. (Weight = 45%)

- 4.0 Outstanding. Sharply focused on critical barriers; difficult to improve significantly.
- **3.5 Excellent.** Effective; contributes to overcoming most barriers.
- 3.0 Good. Generally effective but could be improved; contributes to overcoming some barriers.

2.5 - Satisfactory. Has some weaknesses; contributes to overcoming some barriers.

2.0 - Fair. Has significant weaknesses; may have some impact on overcoming barriers.

1.5 - Poor. Minimally responsive to project objectives; unlikely to contribute to overcoming the barriers.

1.0 - Unsatisfactory. Not responsive to project objectives; unlikely to contribute to overcoming the barriers.

□ 4.0 - Outstanding

- □ 3.5 Excellent
- □ 3.0 Good
- □ 2.5 Satisfactory
- □ 2.0 Fair
- □ 1.5 Poor
- □ 1.0 Unsatisfactory

Comments on Accomplishments and Progress toward overall project and DOE goals:

3. Collaboration and Coordination with Other Institutions

The degree to which the project interacts with other entities and projects. (Weight = 10%)

4.0 - Outstanding. Close, appropriate collaboration with other institutions; partners are full participants and well coordinated.

3.5 - Excellent. Good collaboration; partners participate and are well coordinated.

3.0 - Good. Collaboration exists; partners are fairly well coordinated.

2.5 - Satisfactory. Some collaboration exists; coordination between partners could be significantly improved.

2.0 - Fair. A little collaboration exists; coordination between partners could be significantly improved.

1.5 - Poor. Most work is done at the sponsoring organization with little outside collaboration; little or no apparent coordination with partners.

1.0 - Unsatisfactory. No apparent coordination with partners.

- □ 4.0 Outstanding
- □ 3.5 Excellent
- □ 3.0 Good
- 2.5 Satisfactory
- □ 2.0 Fair
- □ 1.5 Poor
- □ 1.0 Unsatisfactory

Comments on Collaboration and Coordination with other institutions:

4. Relevance/Potential Impact

The degree to which the project supports and advances progress toward the Hydrogen and Fuel Cells Program goals and objectives delineated in the Fuel Cell Technologies Office Multi-Year Research, Development, and Demonstration Plan. (Weight = 15%)

4.0 - Outstanding. Project is critical to the Hydrogen and Fuel Cells Program and has potential to significantly advance progress toward DOE RD&D goals and objectives.

3.5 - Excellent. The project aligns well with the Hydrogen and Fuel Cells Program and DOE RD&D objectives and has the potential to advance progress toward DOE RD&D goals and objectives.

3.0 - Good. Most project aspects align with the Hydrogen and Fuel Cells Program and DOE RD&D objectives.

2.5 - Satisfactory. Project aspects align with some of the Hydrogen and Fuel Cells Program and DOE RD&D objectives.

2.0 - Fair. Project partially supports the Hydrogen and Fuel Cells Program and DOE RD&D objectives.

1.5 - Poor. Project has little potential impact on advancing progress toward the Hydrogen and Fuel Cells Program and DOE RD&D goals and objectives.

1.0 - Unsatisfactory. Project has little to no potential impact on advancing progress toward the Hydrogen and Fuel Cells Program and DOE RD&D goals and objectives.

□ 4.0 - Outstanding

- □ 3.5 Excellent
- □ 3.0 Good
- □ 2.5 Satisfactory
- □ 2.0 Fair
- □ 1.5 Poor
- □ 1.0 Unsatisfactory

Comments on Relevance/Potential Impact:

5. Proposed Future Work

The degree to which the project has effectively planned its future in a logical manner by incorporating appropriate decision points, considering barriers to its goals and, when sensible, mitigating risk by providing alternate pathways. Note: if a project has ended, please leave blank. (Weight = 10%)

4.0 - **Outstanding.** Sharply focused on critical barriers; difficult to improve significantly.

- 3.5 Excellent. Effective; contributes to overcoming most barriers.
- 3.0 Good. Generally effective but could be improved; contributes to overcoming some barriers.
- 2.5 Satisfactory. Has some weaknesses; contributes to overcoming some barriers.
- 2.0 Fair. Has significant weaknesses; may have some impact on overcoming barriers.
- **1.5 Poor.** Minimally responsive to project objectives; unlikely to contribute to overcoming the barriers.
- 1.0 Unsatisfactory. Not responsive to project objectives; unlikely to contribute to overcoming the barriers.

- □ 4.0 Outstanding
- □ 3.5 Excellent
- □ 3.0 Good
- □ 2.5 Satisfactory
- □ 2.0 Fair
- □ 1.5 Poor
- □ 1.0 Unsatisfactory

Comments on Proposed Future Work:

Project Strengths:

Project Weaknesses:

Recommendations for Additions/Deletions to Project Scope:

Technology-to-Market Project Evaluation Form

This evaluation form was used for the following Hydrogen and Fuel Cells sub-program review panels: Market Transformation and Technology Validation.

Evaluation Criteria: U.S. Department of Energy (DOE) Hydrogen and Fuel Cells Program Annual Merit Review

Please provide specific, concise comments to support your evaluation. It is important that you write in full sentences and clearly convey your meaning to prevent incorrect interpretation.

1. Relevance/Potential Impact

The degree to which the project supports and advances progress toward the Hydrogen and Fuel Cells Program goals and objectives delineated in the Fuel Cell Technologies Office Multi-Year Research, Development, and Demonstration Plan. (Weight = 15%)

4.0 - Outstanding. Project is critical to the Hydrogen and Fuel Cells Program and has potential to significantly advance progress toward DOE RD&D goals and objectives.

3.5 - Excellent. The project aligns well with the Hydrogen and Fuel Cells Program and DOE RD&D objectives and has the potential to advance progress toward DOE RD&D goals and objectives.

3.0 - Good. Most project aspects align with the Hydrogen and Fuel Cells Program and DOE RD&D objectives. **2.5 - Satisfactory.** Project aspects align with some of the Hydrogen and Fuel Cells Program and DOE RD&D objectives.

2.0 - Fair. Project partially supports the Hydrogen and Fuel Cells Program and DOE RD&D objectives.

1.5 - Poor. Project has little potential impact on advancing progress toward the Hydrogen and Fuel Cells Program and DOE RD&D goals and objectives.

1.0 – **Unsatisfactory.** Project has little to no potential impact on advancing progress toward the Hydrogen and Fuel Cells Program and DOE RD&D goals and objectives.

□ 4.0 - Outstanding

- □ 3.5 Excellent
- □ 3.0 Good
- □ 2.5 Satisfactory
- □ 2.0 Fair
- □ 1.5 Poor
- □ 1.0 Unsatisfactory

Comments on Relevance/Potential Impact:

2. Strategy for Technical Validation and/or Deployment

Rate the degree to which barriers are addressed, the project is well designed, and it is feasible and integrated with other efforts. (Weight = 20%)

4.0 - Outstanding. Sharply focused on critical barriers; difficult to improve significantly.

- 3.5 Excellent. Effective; contributes to overcoming most barriers.
- 3.0 Good. Generally effective but could be improved; contributes to overcoming some barriers.

2.5 - Satisfactory. Has some weaknesses; contributes to overcoming some barriers.

2.0 - Fair. Has significant weaknesses; may have some impact on overcoming barriers.

1.5 - Poor. Minimally responsive to project objectives; unlikely to contribute to overcoming the barriers.

1.0 - Unsatisfactory. Not responsive to project objectives; unlikely to contribute to overcoming the barriers.

- □ 4.0 Outstanding
- □ 3.5 Excellent
- □ 3.0 Good
- □ 2.5 Satisfactory
- □ 2.0 Fair
- 1.5 Poor
- □ 1.0 Unsatisfactory

Comments on the Strategy for Technology Validation and Deployment:

3. Accomplishments and Progress

Toward overall project and DOE goals – the degree to which progress has been made and measured against performance indicators, and the degree to which the project has demonstrated progress toward DOE goals. (Weight = 45%)

- 4.0 Outstanding. Sharply focused on critical barriers; difficult to improve significantly.
- **3.5 Excellent.** Effective; contributes to overcoming most barriers.
- 3.0 Good. Generally effective but could be improved; contributes to overcoming some barriers.
- 2.5 Satisfactory. Has some weaknesses; contributes to overcoming some barriers.
- 2.0 Fair. Has significant weaknesses; may have some impact on overcoming barriers.
- **1.5 Poor.** Minimally responsive to project objectives; unlikely to contribute to overcoming the barriers.

1.0 - Unsatisfactory. Not responsive to project objectives; unlikely to contribute to overcoming the barriers.

- □ 4.0 Outstanding
- □ 3.5 Excellent
- □ 3.0 Good
- □ 2.5 Satisfactory
- 2.0 Fair

- □ 1.5 Poor
- □ 1.0 Unsatisfactory

Comments on Accomplishments and Progress toward overall project and DOE goals:

4. Collaboration and Coordination with Other Institutions

The degree to which the project interacts with other entities and projects. (Weight = 10%)

4.0 - Outstanding. Close, appropriate collaboration with other institutions; partners are full participants and well coordinated.

3.5 - Excellent. Good collaboration; partners participate and are well coordinated.

3.0 - Good. Collaboration exists; partners are fairly well coordinated.

2.5 - Satisfactory. Some collaboration exists; coordination between partners could be significantly improved.

2.0 - Fair. A little collaboration exists; coordination between partners could be significantly improved.

1.5 - Poor. Most work is done at the sponsoring organization with little outside collaboration; little or no apparent coordination with partners.

1.0 - Unsatisfactory. No apparent coordination with partners.

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- □ 2.0 Fair
- □ 1.5 Poor
- □ 1.0 Unsatisfactory

Comments on Collaboration and Coordination with other institutions:

5. Proposed Future Work

The degree to which the project has effectively planned its future in a logical manner by incorporating appropriate decision points, considering barriers to its goals and, when sensible, mitigating risk by providing alternate pathways. Note: if a project has ended, please leave blank. (Weight = 10%)

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- □ 1.0 Unsatisfactory

Comments on Proposed Future Work:

Project Strengths:

Project Weaknesses:

Recommendations for Additions/Deletions to Project Scope: