2016 Annual Merit Review Questionnaire Results Summary

Following the 2016 U.S. Department of Energy (DOE) Hydrogen and Fuel Cells Program (the Program) Annual Merit Review (AMR), all participants were asked for feedback on the review process and meeting logistics. This appendix summarizes the results of that feedback and is organized by type of respondent, as follows:

- 1. All Respondents
- 2. Responses from "Attendee, neither Reviewer nor Presenter"
- 3. Responses from Reviewers
- 4. Responses from Presenters

1. All Respondents

1.1. What is your affiliation?

	Number of Responses	Response Ratio
U.S. federal government	19	9%
National/government laboratory, private sector, or university researcher whose project is under review	49	23.2%
Non-government institution that received funding from the office or program under review	53	25.1%
Non-government institution that does not receive funding from the office or program under review	40	18.9%
Government agency (non-federal, state, or foreign government) with interest in the work	3	1.4%
National/government laboratory, private sector, or university researcher not being reviewed	25	11.8%
Other	15	7.1%
No Responses	7	3.3%
Total	211	100%

"Other" Responses

- *From two respondents:* DOE contractor
- From two respondents: Industry
- Foreign company
- Foreign university researcher
- Private company
- Academia
- Advanced carbon fiber company
- Foreign public laboratory
- Private-sector contractor
- Independent consultant
- Retiree

1.2. The Joint Plenary Session was valuable in providing an overview, including the purpose and scope of the Annual Merit Review (answer only if you attended the Joint Plenary on Monday).

The top number is the count of respondents selecting the option. The bottom number is the percentage of the total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
2	2	20	66	54
1%	1%	14%	46%	38%

23 Comments

- The joint plenary was excellent.
- It provided a very good top-level review from the Secretariat level to the program level that tied the DOE mission and goals to the programs for each office.
- It was very useful. I am funded through Basic Energy Sciences/x-ray scattering; I, made important connections and expect fruitful future collaborations.
- There were big improvements over previous years' joint plenary sessions in which participants sometimes had to miss some presentations.
- Reviewers were great. They asked tough questions in front of everyone, which was good.
- It was good to see what technology DOE will fund for future development.
- It provided a good overview.
- It was very helpful for a first-time attendee.
- It helped to identify the overall priorities.
- Listening to Senator Dorgan was enjoyable.
- No issues.
- The presentations are needed before the meeting. Some revisions are okay.
- There were good speakers, but it was too long—this set a bad precedent for the rest of the meeting.
- There was too much material for the time available.
- The means and strategy to achieve the vision were not clearly articulated.
- From eight respondents: I did not attend the joint plenary session.
- 1.3. The two plenary sessions after the Joint Plenary Session were helpful to understanding the direction of the Hydrogen & Fuel Cells Program and/or Vehicle Technologies Office (answer only if you attended the Hydrogen & Fuel Cells and/or Vehicle Technologies plenary sessions on Monday afternoon and/or Tuesday morning).

The top number is the count of respondents selecting the option. The bottom percentage is the percent of the total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
2	3	18	73	57
1%	2%	12%	48%	37%

- Great presentations from each office with good details on the research being funded in each technology area.
- The information was helpful in understanding technology trends because some presentations showed future technologies.
- It was good to get a "big picture" of where the Vehicle Technologies Office (VTO) is and where it is planning to go.
- The plenary talks provided good information and vision on VTO programs.
- They showed that a wide breadth of research is presently being performed.

- More specific subsections would be helpful. The reviewers were absolutely great. These sessions should not be parallel. It forced participants to choose one or the other.
- These are probably more useful than the main plenary session for regular attendees.
- The reviews were helpful in understanding what each program does and what it focuses on. There was a lot of material for some programs to cover in 30 minutes.
- These are useful for identifying priorities. The downside was that they did not necessarily allow time to identify projects that were important, but were not mentioned because they are be smaller or outside of large priority areas.
- No issues.
- It was a great overview, but the progress presented was a bit oversold.
- The rooms for the plenary could have been slightly bigger. It was difficult to get a seat. All the parallel sessions had adequate seating.
- The VTO plenary sessions on Tuesday morning ran faster than scheduled. Since I had to alternate between the FCTO and VTO plenary sessions, I essentially missed the first half of the VTO sessions. This was caused by the first presenters finishing in 20 minutes and handing the floor over to next speaker right away.
- Need to revise the presentation format to include the following sections: role; tangible objectives; accomplishments; and vision forward (near-, mid-, long-term).
- A shockingly high number of funded projects seem to have very little potential for commercialization. The focus was on past accomplishments vs. future direction.
- There is no overlap.
- From seven respondents: I did not attend either plenary session.

1.4. The program overviews were helpful to understanding the research objectives (answer only if you attended one or more program overviews).

The top number is the count of respondents selecting the option. The bottom percentage is the percent of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
2	1	7	92	73
1%	1%	4%	53%	42%

- These overview presentations are extremely helpful for the audience to understand all the programs, including mission, interests, and research foci.
- Great presentations from each agency conducting research with good details for each technology area.
- The overviews do set the stage for what participants will see and why the research was done.
- The reviews were helpful to understand what each program does and what it focuses on. There was a lot of material for some programs to cover in 30 minutes.
- No issues.
- I attended several of the overview presentations. It would be good to highlight the overview presentations in the AMR program, perhaps with bold lettering.
- For major priorities, yes, this was useful. For additional, smaller research areas, this was not as useful.
- Objectives were stated; the strategy was not presented.
- These presentations are largely reviews of objectives with which I am already familiar.
- Most reviews provided an adequate amount of data, but more was available that was not disclosed. It is understandable that companies are trying to protect their intellectual property. It is not clear how to solve this.
- Content on future direction was minimal. There was too much focus on past accomplishments.
- The room where the plenary sessions were held was not ideal. There were many seats with obstructed views, and I was not able to see the presenters. The extra video monitors were helpful in viewing the presentations, though.

- From three respondents: I did not attend the program overviews.
- 1.5. The working lunch at the 2016 AMR was significantly different than in previous years. It included multiple brainstorming working lunches, a lunch poster session, and a bag lunch as opposed to a sit-down lunch. The awards were not held during lunch. Please indicate your preference for the AMR lunch program, and share your comments relative to the new lunch format.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

	Not Interested	Neutral	Somewhat Interested	Highly Interested
Proinstorming Sossions	33	52	62	36
Brainstorming Sessions	18%	28%	34%	20%
Poster Sessions	17	45	57	64
Poster Sessions	9%	25%	31%	35%
Dec Lunch	39	54	51	37
Bag Lunch	22%	30%	28%	20%
Other (place specify upday Comments)	4	19	8	12
Other (please specify under Comments)	9%	44%	19%	28%

- *From three respondents:* the working lunches were a great way to have time to talk with colleagues, brainstorm, and network. This format was good, so it should be kept.
- From three respondents: Holding the awards during lunch was good.
- *From four respondents:* The bagged lunch did not seem to be a very good idea. It forced people to stand while eating and also did not provide enough food for everyone.
- The brainstorming session was a much better use of the lunch hour. It facilitated networking and discussion much better than the lunch presentations from previous years.
- The group lunches are a good opportunity to network and have detailed discussions with various colleagues. Arrangements that facilitate this are good (e.g., there should be plenty of tables for different groups of colleagues to mingle at lunch).
- The blended networking and brainstorming opportunities were fantastic.
- The networking opportunities were immensely enjoyable.
- Simpler lunches are good. In the past, the award lunches and various presentations were of interest to only a few. It is much better to have time for discussions and interactions.
- The brainstorming approach provided good cross-talk at the tables and was better than someone trying to give a presentation while people are eating and talking. The only drawback would be that the results of the brainstorming at each table may not have been recorded on the feedback sheets provided.
- The brainstorming working lunch was preferred over the previous years' awards. However, a bit more instruction during the lunch regarding the group brainstorming would have been appreciated. Also, more specific questions would have made for easier discussion. The generalness and open-endedness of the questions left the exercise a bit too vague.
- These sessions were much more useful for discussions of research and research needs with colleagues. This lunch was much better than the awards, which serve only a few, and much better than having one person on stage trying to get the participants to all be quiet.
- The poster lunch was pretty good, but the overall schedule felt somewhat tight. There were a lot of talks and poster sessions running one after the other with few breaks.
- It was good to be able to network and talk to researchers over lunch to discuss projects. It is difficult to find time otherwise. It was difficult to focus on answering the brainstorming questions during lunch, but it is good that it was only one question per lunch.
- Really enjoyed the format of the lunch, but during the boxed lunch session they did run out of sandwiches.
- Thanks for not having the awards over lunch.

- No issues.
- The brainstorming sessions worked well, but it would have been beneficial to have a speaker or even a slide announcing that there was a card at the table to fill out. The bag lunch presented administrative challenges, particularly with seating arrangements. If bag lunches are held again for future reviews, including more seating close to the posters is suggested.
- Holding the awards during lunch is not my preference; the format this year was good. Lunch breaks are a great time for interaction with other attendees.
- While I liked the awards at lunch, presenting awards at the plenary is better because people could not be quiet during the presentation of awards during the lunch.
- The working lunches did not seem to stay on topic; the poster session lunches were beneficial.
- The poster sessions at lunch were a good idea. However, the execution of the bag lunch was poor. Either the number was way off, or the initial people took more than they were allotted, and many people were left searching for food. Since the items were not in bags or boxes, it is possible people did not know what one serving was supposed to include. If they were pre-boxed or bagged, it probably would have gone better.
- The brown bag lunch was not well organized, as food ran out before everybody arrived. Having the posters with the lunch was good, but this should be extended, as there was not enough time to attend poster sessions and to eat lunch (even if not reviewing the posters).
- The bag lunch/poster session is a reasonably good idea, but it was poorly executed with insufficient lunches and seating. It would be nice to sit and eat during such an event.
- I do not have a good reference for previous years, since I have not attended in the past. The bag lunch was fine, but there was no designated area to eat it.
- It was a good idea to hold the awards separately and not during lunch. The concept of having a poster session at lunch was good, but the bag lunch process was not well organized.
- Perhaps people should be assigned to tables based on an interest that they showed during registration.
- Perhaps attendees can pay for lunch instead. Most people have not seen each other in a while, and they use lunch time to catch up since most of the day is packed full of information. Actual work/brainstorming has occurred at the poster sessions. At a sit-down lunch, people are fixed and cannot freely mingle and brainstorm.
- The poster session presenters need to know they need to bring water and it is difficult to get a snack.
- The poster session during lunch was not interesting. A sit-down lunch is better because it gives the opportunity to talk to people. Brainstorming is not very well organized. A professional is needed to run these activities.
- The brainstorming session did not work at my table (i.e., no one paid attention). The poster sessions were fine, but some people did not receive any of the bag lunch. The Wednesday evening poster session had very meager meals; some participants left early to go to restaurants.
- I suggest that there be no bag lunch next year. Many folks came late because they were busy doing networking at/after the presentations and ended up with no food or paying for their own lunch at hotel restaurant.
- The bag lunch had some major flaws: (1) no details were given regarding the food, and many people took more food than they should have; (2) there were not enough tables (high and low); (3) there were not enough chairs, so many people had to sit on the floor, even people in their 60s; and (4) there was not enough food, and many people left without any. This concept may work if it is better organized and thought out. The brainstorming lunches were okay, but the questions were too general.
- The brainstorming topic should be communicated earlier (e.g., at the overview session) so that the attendants have some time to digest and think about it. It is hard to get something meaningful just in the 20–30 minutes during lunch. It might be a good idea to create a website for the brainstorm questions. The lunch poster session was good for additional social time, but it also makes a long day even longer. It is not clear why this was not done at an evening poster session. There were not enough tables and seats during the lunch poster session.
- I got no lunch Tuesday or Wednesday and know a bunch of other people who did not either. The room for the plenaries was way too small the second day—for the second year in a row. It would have been much better, to have the plenaries the second day in the big room and the lunch downstairs that day.
- Too many people took multiple sandwiches and salads, filling their bags to capacity. The lunches should have been pre-bagged and labeled to avoid this chaos.

- It was very difficult to eat the bag lunch while standing around. There were nowhere near enough chairs and tables. I ended up returning to my hotel room to eat, which completely defeated the purpose of the bag lunch poster session.
- It is not a good idea to have a poster session during lunch for two reasons: (1) some people have to present at the poster session and again right after the poster session, which makes it impossible for them to have lunch, and (2) most people are more interested in having lunch and interacting with folks than going through the posters.
- Lunch was not well organized. There was not enough seating on the first day and not enough sandwiches on the second day.
- The Tuesday brainstorming session was not effective because the brainstorming question were too broad. It was hard to come up with a meaningful answer.
- The bag lunch was too chaotic. Since people moved around between locations, it was difficult to balance the amount of food for each distribution location. Also, there was not enough seating for the bag lunch, or at least it was not obvious where to find seating.
- Lunch was chaotic with no directions. It was spread across two rooms, and few tables and chairs were available. Finding associates with whom to have discussions was difficult.
- Lunch was crowded and chaotic. It is not clear how to fix this.
- There was too much plastic for the bag lunch. It was not environmentally friendly.
- The lunch room was noisy.
- The bag lunch was a disaster. In addition to running out of food, putting the buffet tables near the posters did not have the desired effect. People just put food in their bag, walked into the adjacent rooms, sat down, and ate their lunch, since it is difficult to stand and discuss a poster while holding a salad or sandwich and a drink. I was not aware of the brainstorming working lunches.
- I had to go outside to get lunch, which meant I missed out entirely on the posters.
- I only attended Tuesday and Thursday lunches, so missed the bag lunch session.
- From three respondents: I did not attend the working lunches.
- 1.6. What was your role in the Annual Merit Review? Check the most appropriate response. If you are both a presenter and a reviewer and want to comment as both, complete the evaluation twice, once as each.

	Number of Responses	Response Ratio
Attendee, neither Reviewer nor Presenter	109	51.6%
Presenter of a project	54	25.5%
Peer Reviewer	41	19.4%
No Responses	7	3.3%
Total	211	100%

2. Responses from "Attendee, neither Reviewer nor Presenter"

2.1. The quality, breadth, and depth of the following were sufficient to contribute to a comprehensive review:

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

	Highly Disagree	Disagree	Neutral	Agree	Highly Agree
Presentations	1	1	7	54	39
Presentations	1%	1%	7%	53%	38%
Question and answer	2	1	9	50	38
periods	2%	1%	9%	50%	38%
Answers provided to	1	0	17	59	22
programmatic questions	1%	0%	17%	60%	22%
Answers provided to	2	2	16	55	25
technical questions	2%	2%	16%	55%	25%

7 Comments

- It would have been nice to have more time, because in some cases the reviewer questions took all the time in the question and answer period.
- For some projects, the presenters were simply unprepared to respond to the questions presented to them.
- It seems sometimes criticisms were misunderstood most likely because of the differences in the backgrounds of the presenter and reviewer. For example, chemists and physicists (or theoreticians and experimentalists) tend to see and explain things in different ways.
- The general consensus of the people I spoke with seemed to be that the fuel cell work is way too focused on the same few companies/teams with the national laboratories The funding focus should have pivoted more to those who are working on manufacturing fuel cell materials today. It is still too research-focused. Too many materials are moving offshore.
- Not enough information was released by presenters to justify the funding. Some bigger programs should be given more time for presenting. Reviewers were nicer to big original equipment manufacturers than they were to small startups. Anonymous questions should be sent by reviewers online spontaneously.
- Far too many presentations contained "obscured" methods and results. This is especially egregious when the obtained performance is referred to only as "greater than the milestone" and numeric estimates are not provided.
- Not enough data were presented.

2.2. Enough time was allocated for presentations.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
0	4	9	56	33
0%	4%	9%	55%	32%

7 Comments

• This was very good: the time per presentation and question-and-answer session (Q&A) was nearly always strictly respected.

- There was good overview in the presentations and lots of time afterwards to follow up. The flash drive with the materials set was awesome.
- The monitors showing the time remaining worked very well, and both presenters and DOE session managers were cognizant of the clocks.
- While many presentations I attended ran over their time allotment, the issue was probably with presenters trying to provide too much information, rather than insufficient time.
- There was enough time for the presentations, but presenters consistently tried to include too much in the slides and cover too much. It should be reinforced that they should cover a few key technical points that fit in the twenty minutes and point to any additional information in back-up slides.
- Maybe five more minutes in some cases would have helped.
- Fifteen minutes would be better.

2.3. The questions asked by reviewers were sufficiently rigorous and detailed.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
2	1	13	60	23
2%	1%	13%	61%	23%

10 Comments

- Some questions were very appropriate, and others were rude and unhelpful.
- It varied. Some presentations had few reviewers and few reviewer questions.
- There should be more reviewers from industrial practitioners.
- There was not enough time for reviewer questions in almost all of the talks I attended. Perhaps reviewers should pre-submit questions based on the presentation so that these can be addressed in a timely manner in the oral presentation.
- The reviewers tended to ask harder (and better) questions of external presenters (non-DOE). An equal level of rigor should be expected.
- Occasionally, reviewer questions were not detailed enough for the presenter to understand; however, it most likely occurred because they came from different fields. Trivial basics for a chemist are not trivial for a physicist. This has to be addressed in order to have a fair evaluation. The meaning of rigorous tends to be different between a physicist and chemist, or an engineer for that matter.
- Often the reviewer questions were already addressed in the presentation or were outside of the project scope.
- There was too much restricted information.
- Some reviewers were a bit harsh.
- Only once or twice did I hear questions such as "Okay, so what?" or "What problem are you solving?" Reviewers were trying to let everyone know how smart they were. And not once did I hear "Where did all the rest of the money go?" or "Are these results as fast as you can go?" The presenters got off too easy sometimes.

	Number of Responses	Response Ratio
About right	94	44.5%
Too frequent	4	1.8%
Not frequent enough	1	<1%
No opinion	4	1.8%
No Responses	108	51.1%
Total	211	100%

2.4. The frequency (once per year) of this formal review process for this Office or Program is:

1 Comment

• It is hard to get everyone together for a week, so once a year is good.

2.5. Logistics, facilities, and amenities were satisfactory.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
0	2	4	48	48
0%	2%	4%	47%	47%

15 Comments

- From two respondents: The hotel is very expensive.
- Very well organized and well run.
- It was nice to have a bit more space than in the Crystal City location.
- Room temperature was not cold as usual, so it was very comfortable. But sometimes the room capacity was not enough.
- There was only one set of rooms that was difficult to find.
- Some space should be left between chairs in the meeting rooms.
- A venue with Wi-Fi would be good.
- A bigger room for the second session of plenaries was needed, as was more food (the food ran out for lunch two days in a row—for the same people).
- Although the hotel seemed to be a good venue for the AMR, there was no Internet available in the guest rooms, which made working in the hotel difficult. This issue needs to be overcome in the following years to make sure that guests can use the Internet in their rooms without additional charge.
- It was too cold. Reducing the air conditioning would save energy.
- I got sick because of the occasionally too-strong air conditioning.
- Car parking fees of \$45 are too high.
- This participant could not get a government-rate room at the meeting venue. A colleague said that the sleeping rooms were subpar. The meeting rooms were fine, and the full-time audio/video (AV) and door monitor staff in the room helped the sessions go smoothly. The sit-down lunch was crowded and claustrophobic with 10–12 settings per table and little space to navigate between tables.

2.6. The visual quality of the presentations was adequate. I was able to see all of the presentations I attended.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
1	11	11	48	30
1%	11%	11%	48%	30%

24 Comments

- *From seven respondents:* Many presentations were too hard to read from the rear of the room because of small font, driven by presenters trying to put too much data/information on each slide.
- *From two respondents:* Having copies of the presentation on a thumb drive was very helpful. I mainly followed along on a laptop during presentations.
- *From two respondents:* The projection screens need to be higher for everybody in the technical presentations to see.
- Most rooms had adequate visual quality, but one room was very long and narrow, and it felt like the screen was really far away.
- In the lower rooms, the screen was small for the size of the rooms. This can be easily fixed for the following years.
- A lot of material was packed into a few slides and it was a little tough at times to see, so I brought my laptop and followed along quite well. The hotel should have had Internet connectivity everywhere for free.
- There is too much information crammed onto each slide, making it difficult to see/read.
- The plenaries were the worst, with half the top banner cut off from the top. Smaller rooms had fewer issues. There is a simple fix: running through the slides ahead of time in the room where they will be shown. Also, the stage lights in the plenary room on the first day were blinding for the speakers.
- Some of the rooms were long and set up with seating far away from the screen. It made it difficult to see the details of the presentation and hear the presenter speak.
- The template requires slides that have far too many words, which leads to small fonts, graphs, and photographs. The information is often duplicative.
- Some presenters do not know how to make a captivating presentation. A lot of slides were filled with bullets and had no visuals to soften the view and engage minds. If the viewers are not 100% interested in the topic presented, it can be a struggle to follow along.
- A few rooms are long and narrow, but there is only one screen. It was very hard to see the slides from the back. Adding screens or suggesting a minimum font size to presenters is recommended.
- I had to look around the person in front of me to see the screen while trying not to block the person behind me.
- Bigger screens would be beneficial.
- Some rooms had columns blocking the view.

2.7. The audio quality of the presentations was adequate. I was able to hear all the presentations I attended.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
0	0	3	50	47
0%	0%	3%	50%	47%

7 Comments

- From two respondents: Good job. No issues.
- The full-time AV helper was quick to make sure microphones were working and available for speakers.
- The AV team did a great job.
- The public address system could be better.
- Some of the reviewers did not speak loud enough.
- Some of the rooms were long and set up with seating far away from the screen. It made it difficult to see the details of the presentation and hear the presenter speak.

2.8. The meeting hotel accommodations (sleeping rooms) were satisfactory.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
1	5	21	23	38
1%	6%	24%	26%	43%

19 Comments

- From six respondents: I did not stay at the hotel.
- *From two respondents:* I was not able to stay at the hotel because there were not enough rooms.
- From two respondents: Costs were too high, and I decided to stay elsewhere.
- Excellent hotel and location.
- Good hotel but expensive.
- The rooms were satisfactory, but Internet was not available.
- Rooms booked up very quickly this year, and many had to use less convenient lodgings.
- I could not get a government-rate room at the meeting venue. A colleague said that he saw a mouse in his room at the Marriott and that the rooms were subpar.
- The hotel conference area was good, but the sleeping rooms were terrible. There was a mouse in my room, and the bathtub clogged during showers. The televisions are 15 years old.
- There was a mouse in the room on the first night. The new room's air conditioner had a large temperature fluctuation, and the room got very dry.
- The hotel room was a bit dated and way overpriced.
- Too expensive.

2.9. The information about the Review and the hotel accommodations sent to me prior to the Review was adequate.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral Agree		Highly Agree	
0	3	5	46	44	
0%	3%	5%	47%	45%	

3 Comments

- The website was great.
- Based on the information I received when registering, I thought there was going to be a meeting app to download and use for scheduling, but it turned out it was only for signing up to an account with the meeting host service. The Portable Document Format (PDF) schedule and information provided on the AMR website were more helpful.
- Internet connection was poor from various personal computers. Once in a while, it connected. The reason for this is not clear.

2.10. What was the most useful part of the review process?

- *From eight reviewers:* The presentations.
- From four respondents: Networking.
- *From three respondents:* Questions and answers.
- *From two respondents:* Plenary overviews.
- All slides are available to the attendees.
- Electronic copies of the presentations prior to the review.
- The presentations and the availability of the presentations via the Internet and USB.
- The breadth of information that was covered, as well as the ability to connect across the agencies. With technology at this stage of development, it is crucial to bring everyone together on a regular basis to understand everyone's overlap as well as "underlap." It is great that it is an open forum.
- Hearing reviewer feedback and questions about the project. The experienced perspective was helpful in understanding and analyzing the projects.
- Ability to hear from DOE leaders and principal investigators (PIs) directly about research projects and ask questions.
- The presentations were quite clear and precise and the networking and discussions in the breaks were useful.
- The AMR is an excellent time to see the progress in the field, a motivation to continue to make progress in this participant's own program, and an excellent time to discuss projects with peers.
- Great and relevant content. Great exposure to see the work in progress. The quality of the reviewers was impressive.
- Learning about the state of technology and networking with colleagues.
- Seeing new information.
- Hearing about the direction of the programs and meeting with people.
- The opportunity to see the latest projects and network with fuel cell personnel.
- The presentation of the technical progress of each PI.
- Concentrated session organization (for example bundled by motors or power electronics).
- Gaining insight on the advancements of hydrogen technology and the future possibilities.
- Opportunity to meet with DOE and attendees to discuss the projects' approach and progress.
- Technical presentations, poster session, and ability to talk to people.
- Opportunity to learn about many projects in progress at DOE.

- Information sharing and networking driven after/prompted by the reviews.
- Compact update with key findings and status of the projects.
- Learning about projects.
- Political insights. Networking.
- The breadth of topics and the chance to choose.
- Getting to know the programs that DOE is sponsoring.
- Seeing the program's projects and gaining a better understanding of the program's direction and interests.
- Presenters got real feedback from experts and the broad public.
- Understanding the big picture, the shared goal, and the role of individual projects.
- The review discussions, content, and networking.
- The announcements regarding new request for proposals that are burgeoning and interacting with new colleagues who may become collaborators.
- The condensed format with rigid time control facilitated exposure to the broad set of projects.
- Poster sessions and technical review presentations.
- Gathering all stakeholders in the DOE program in the same forum.
- Networking and getting quality feedback on the projects.
- The presentations, the Q&A, the posters, and the breaks to network were the most useful.
- The overview recap at the beginning of the sessions was really enjoyable.
- To learn the scope and the breadth of work, and to meet stakeholders.
- The technical reviews were the most relevant part.
- The presentations and following discussions during the poster sessions (at night).
- Open discussions.
- Interacting with others.

2.11. What could have been done better?

- *From two respondents:* The title of each of the presentations did not always accurately reflect the content. It would be helpful if a better description of the content or scope of the project was provided in a listing ahead of time.
- From two respondents: This participant was very satisfied with the entire meeting.
- Nothing. Everything was great.
- The viewers could ask more questions.
- Give input opportunities to and by practitioners.
- More time for Q&A by the audience, after official reviewers were finished.
- More questions or comments about the performers should be collected through the website and be taken into consideration in the final review.
- Perhaps have a standing microphone for the audience to ask questions.
- Try to group similar program presentations on the same floor of the hotel (e.g., VTO presentations on the one floor and Hydrogen and Fuel Cell presentations on another).
- Keeping similar technology presentations closer. This was done, but even closer could be better.
- Last year it seemed that the sessions for transportation and hydrogen were more separated, so it was a bit easier to meet people of the same group. This year, it was more mixed (this has, of course, advantages as well).
- Meeting room locations could be better arranged/organized. It was hard to find some of the meeting rooms and some meeting rooms were far away from each other.
- On the second day, a bigger room for plenaries was needed. There should be sufficient food for attendees or else tell them to buy their own lunches so they don't waste time looking for lunch.
- The food in the lunch bag was good. It was just awkward to eat it. Perhaps have a shorter sit-down lunch with a poster session.

- I was always able to find a seat, but not everyone was, and it seemed like there was a too-wide aisle in some session rooms that could have accommodated another chair in each row. It is great that meals were provided, but the lunch sessions were chaotic and crowded.
- When there is a major dispute between presenter and reviewer, there should be a formal procedure for the presenter to respond. The review should not focus on grading the project but on giving constructive feedback in order to re-direct the project. The former seems to lead to competition over resources (funding), not outcome.
- The reviews are too cursory, almost collegial, given the amount of taxpayer money spent on these programs. Reviewers need to take a critical look at whether the money is being spent wisely and whether the approaches are appropriate to the objective and will lead to useable outcomes.
- Reviewer quality seemed quite low. At times it appeared that it was the same group of reviewers. Most presenters were also reviewers, and they kept supporting each other. Reviewers that are independent and knowledgeable of the subject matter are needed. Reviewers should be selected by someone other than program managers.
- Internet access could be better. A little less focus on the national laboratories would be better. Money goes in, but very little comes out, and even less gets to production. The process needs to be streamlined at national laboratories. The voucher program does not help get money to startups—it just propagates the status quo at the laboratories. More focus on economies of scale manufacturing is also needed.
- Further separate the VTO and the Hydrogen and Fuel Cell sessions/conference rooms.
- The size of the meeting rooms was too small during the two first days of the event.
- Presenters should be allowed to add more recent data, since most had to submit slides two months in advance.
- Multiple presentations on the deep dive programs could have been consolidated into one concise presentation.
- The opening standard slide—the one with budget and timing, etc.—is boring. Maybe AMR needs a standard template that is more exciting.
- Maybe this participant is just not tuned into them, but the poster sessions seemed distributed and unclear.
- Poster networking.
- The bag lunch during the Wednesday poster session; several people were not able to eat.
- Lunches seemed disorganized.
- The projection screens need to be higher for everybody in the technical presentations to see.
- Follow the schedule; do not start early. This will allow attendees to bounce between rooms.
- The font size for affiliation on the nametags should be the same as for the name.
- Visual quality.
- Make slides more readable (font is too small).
- More standing tables for the bag lunch.
- Seating at the bag lunch.
- The lunch poster session should either be eliminated or organized better.
- More breaks.

2.12. Overall, how satisfied are you with the review process?

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
2	1	8	53	36
2%	1%	8%	53%	36%

2 Comments

• This was a very good AMR, and attendees were generally pleased.

• The concept of open review of federal funding is very good and would work, provided the reviewers are independent. Reviewers should not be chosen by the program managers who are allocating projects and funds.

2.13. Would you recommend this review process to others?

	Number of Responses	Response Ratio
Yes	93	44%
No	5	2.3%
No Responses	113	53.5%
Total	211	100%

6 Comments

- Already recommended this process in Europe.
- These events are needed. Industry benefits enormously from the learning and networking.
- It is a great chance for an overview of projects.
- It might be better to have smaller, individual merit reviews for Hydrogen and Fuel Cells and VTO.
- Some of the reviewers' comments were harsh.
- Too much of the material is repetitive year after year: same milestones, collaborators, background, justification, etc. There is not enough time for accomplishments.

2.14. Please provide comments and recommendations on the overall review process.

- From two respondents: Great event.
- It was fantastic.
- This was my first trip to AMR, and I was a non-funded participant. The AMR was very informative and offered great networking. I will be back and will recommend it to others in the new technology, advanced materials, and processing fields, as well as in heavy truck efficiencies.
- The registration check-in process went extremely smoothly.
- This event is always very impressive. It is the all-in-one shop for energy technology, to meet researchers and hear/see progress. The organizers should charge a fee (a few hundred dollars) to help defray the cost of provided meals.
- The distribution of all presentations upfront is extremely helpful and a good contrast too many meetings.
- Looking forward to attending future events. This was an excellent meeting.
- It was good that the hotel had more entrances and exits open so it was easier to move around than at prior meetings. The easier access to the Metrorail with a simple ramp was also appreciated.
- It is not clear whether there is a less expensive hotel alternative.
- On the nametags, the font for the affiliation should be the same size as for the name.
- More focus on U.S.-based manufacture of fuel cell system components, membrane electrode assemblies, and station components. Getting to economies of scale is needed now, and the technology can be refined in the process. I do not want to see another study on where stations need to go. Ten years of street model funding and planning is enough.
- Hold the AMR meeting closer to the completion of the fiscal year in which the presenters are reporting. Ensure that presenters hold to the DOE presentation format.
- A simple approach is suggested: (1) reviewers should be chosen based on their knowledge of the subject, (2) reviewers should be selected by program managers not allocating projects, and (3) reviewers should be from customers, i.e., the industry that is intended to benefit from the project.
- There may be room to improve communication between DOE and reviewers. Some reviewers do not seem to have a good idea about the new systems that DOE is introducing (e.g., EMN, consortium), which operate

in a different way. Also, presenters should be given an opportunity to respond to reviewers outside of the AMR.

• The bag lunch was a terrible idea.

3. Responses from Reviewers

3.1. Information about the program(s)/project(s) under review was provided sufficiently prior to the review session.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
0	1	1	19	17
0%	3%	3%	50%	45%

7 Comments

- Guidance was very good. Training and presentations to be reviewed were provided well in advance.
- Having both the 2015 and 2016 presentations was very valuable to determine actual progress (or slippage).
- No issues.
- As always, the information was provided in advance. The only issue was the timing of the overview presentation availability—these were available largely last-minute (as usual).
- This was my first time to review the projects. In the future, I will print the presentations out and review them prior to the meeting. I would want at least two weeks to review them prior to the meeting, especially given that I had eight projects to review.
- PDF documents cannot replace face time with the PI, and although the quality of the slides was good, they left many questions.
- Too much information—too many emails. Reviewers just need to know when they are reviewing and in what room. The details of all the sessions are of some interest—but not much.

3.2. Review instructions were provided in a timely manner.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
0	0	0	17	20
0%	0%	0%	46%	54%

- The written and oral training sessions were made available well in advance.
- The instructions were excellent, as always.
- No issues.
- The webinars that were held in advance were appreciated, as they helped me prepare for the meeting. I did not understand how soon the presentations were made available, and how much preparation time I would need to go over them prior to the meeting.
- The reviewer webinars were held at reasonable times.
- Too much information was provided.
- I have reviewed before so did not attend the instruction sessions.

3.3. The information provided in the presentations was adequate for a meaningful review of the projects.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
0	2	5	21	9
0%	5%	14%	57%	24%

15Comments

- One could always say more time is needed, but it is not practical given the large number of presentations and four-day duration. The 20+10 format (and allowing the presenter a few minutes grace) should be continued. Presentations were technical and informative. Overall, nice job.
- The organization of the presentations was very good for the time allowed and allowed for the presentation of all aspects of the project.
- All presentations were consistent in their construction, making evaluations and comparisons much easier. The effort by DOE and the PIs is appreciated.
- As always, it was well done.
- In most cases this was true, and the presenters did a good job of answering questions.
- In most cases, yes. A few were lacking in detail.
- No issues.
- Yes, except for the case of models, in which case it is impossible for the reviewer to validate the assumptions and calculations.
- In one or two instances, presentation content could not be understood without a presenter explaining it.
- Some of the information was truncated, particularly with posters.
- Some had better information than others.
- Many presentations were very short on data. This is especially troubling in national laboratory and academic talks. While the need to keep proprietary data secret is understandable, some company work was egregiously void of content. It is suggested that the team or person paying for or monitoring the work review the slides and demand content at an appropriate level as a condition of further funding of the project.
- The short length limits information.
- The time that the investigators spent on the slides is appreciated, but in some cases the information was inadequate. This may be due to the fact that some projects had just begun, while others had some data to report. Projects that did not have clearly stated goals and metrics were difficult to review, as the approach did not make much sense.
- Some of the presenters spoke in terms and at a pace that only those involved in the project could understand.

3.4. The evaluation criteria upon which the review was organized (see below) were clearly defined.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

	Highly Disagree	Disagree	Neutral	Agree	Highly Agree
Delement (Detential Imment	0	1	2	19	16
Relevance/Potential Impact	0%	3%	5%	50%	42%
Approach	0	1	2	16	19
	0%	3%	5%	42%	42%
Technical Accomplishments and Progress	0	1	2	16	19
	0%	3%	5%	42%	50%
Collaboration and Coordination	0	1	4	16	16
Conadoration and Coordination	0%	3%	11%	43%	43%
	0	2	1	18	16
Proposed Future Research	0%	5%	3%	49%	43%
Resources (for Vehicle Technologies Office	0	0	9	13	10
Projects)	0%	0%	28%	41%	31%
Strategy for Technology Validation or	0	3	10	7	7
Deployment (for Market Transformation and Technology Validation Projects)	0%	11%	37%	26%	26%
Alternative Fuel Market Expansion and/or	0	2	12	8	5
Petroleum Reduction Potential (for Technology Integration/Clean Cities Projects)	0%	7%	44%	30%	19%

- This set of criteria will provide a good review of the project in most cases and was documented adequately in most presentations.
- The criteria make sense.
- Good structure for time-limited reviews.
- The criteria are correct. Interpretation and response relative to the criteria need be communicated to the researchers.
- No issues.
- Criteria largely made sense. The only issue was with criteria for overviews—at least three of the questions were asked multiple ways and should just be combined. In particular, the collaboration questions and the gaps in the program questions should be combined.
- The difference between "Outstanding" and "Excellent" ratings is not clear. It seems that a project can be improved upon, no matter how good it is.
- Some investigators used the future work section of the presentation to propose future work beyond the scope, and others used it to provide guidance on the future work of the project. The guidance for the investigators is unclear, and it should be clarified.
- More emphasis on the specific measurement of each project against technology deployment and market expansion would be beneficial.
- It is hard to tell whether there are enough resources on a project just from the presentations. It would take a more in-depth assessment to make that call.
- In the past, DOE did a better job of screening slides; here there were some clear mistakes, and sometimes metrics or goals were ambiguous.

3.5. The evaluation criteria were adequately addressed in the presentations.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

	Highly Disagree	Disagree	Neutral	Agree	Highly Agree
	1	2	5	20	7
Relevance/Potential Impact	3%	6%	14%	57%	20%
Approach	0	1	3	21	11
	0%	3%	8%	58%	31%
Technical Accomplishments and Progress	0	1	2	18	14
	0%	3%	6%	51%	40%
	0	1	5	17	13
Collaboration and Coordination	0%	3%	14%	47%	36%
	0	3	3	22	8
Proposed Future Research	0%	8%	8%	61%	22%
Resources (for Vehicle Technologies Office	0	2	7	14	4
Projects)	0%	7%	26%	52%	15%
Strategy for Technology Validation or Deployment (for Market Transformation and	0	6	8	9	2
Deployment (for Market Transformation and Technology Validation Projects)	0%	24%	32%	36%	8%
Alternative Fuel Market Expansion and/or Petroleum Reduction Potential (for Technology	1	6	8	7	2
Integration/Clean Cities Projects)	4%	25%	33%	29%	8%

- No issues.
- Generally true. About half of the presentations I reviewed did not stick to this format, so I had to read between the lines.
- Some of the presenters did not adequately present the information that was requested in the guidelines; however, most did.
- This is a difficult question to answer because unfortunately not all the presentations had the same elements, and each criterion was addressed differently by different presenters.
- There is not enough time for real presentation of technical results unless the reviewer is already pretty familiar with the work.
- Judging the approach is more difficult than judging the technical progress, collaboration, relevance, and future plans.
- Relevance was merely a listing of DOE barriers. What is badly needed is a statement of the state of the art when the project began, the quantitative goals it is aiming for, the current status toward those goals, and why it matters—that is to say, what will be better about the world if the project succeeds.
- Projects need to be more clearly structured to support the overall objectives of technology deployment. Not all of the projects were clear on how they were relevant to the end goals.
- Some investigators used the future work section of the presentation to propose future work beyond the scope, and others used it to provide guidance on the future work of the project. The guidance for the investigators seems to be unclear, and should be clarified.
- Resources are rarely addressed by presenters.
- The collaboration category rewards large teams, which are almost always a waste of money.

3.6. The right criteria and weightings were used to evaluate the project(s)/program(s).

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

	Highly Disagree	Disagree	Neutral	Agree	Highly Agree
	0	2	1	22	12
Relevance/Potential Impact	0%	5%	3%	59%	32%
Approach	0	2	1	23	11
	0%	5%	3%	62%	30%
Technical Accomplishments and Progress	0	1	2	19	13
	0%	3%	6%	54%	37%
	0	3	4	22	8
Collaboration and Coordination	0%	8%	11%	59%	22%
	0	1	5	22	9
Proposed Future Research	0%	3%	14%	59%	24%
Resources (for Vehicle Technologies Office	1	0	6	15	5
Projects)	4%	0%	22%	56%	19%
Strategy for Technology Validation or	0	4	9	7	4
Deployment (for Market Transformation and Technology Validation Projects)	0%	17%	38%	29%	17%
Alternative Fuel Market Expansion and/or	0	2	10	7	4
Petroleum Reduction Potential (for Technology Integration/Clean Cities Projects)	0%	9%	43%	30%	17%

10 Comments

- All had reasonable weightings, with accomplishments/progress placed properly as the priority.
- Weighting is appropriate for the type of research being funded.
- Weighting appeared to make sense.
- Criteria are correct; the weighting factors are probably okay.
- No issues.
- Technology deployment should be weighted higher.
- Collaboration is not needed in some cases, and teams should not be marked down. This also drives bad behavior, such as listing suppliers as collaborators. No one talks about resources other than to list the payment plan, which is not very useful; presenters need to discuss whether the resources are adequate.
- Collaboration needs to be managed but not made a requirement. The need for collaboration with universities and federally funded research laboratories should be project-specific vs. encouraged.
- Not enough choices were provided for the "resources" criteria.
- This reviewer was unaware that the criteria were weighted.

3.7. During the Annual Merit Review, reviewers had adequate access to the Principal Investigators.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
0	1	2	18	17
0%	3%	5%	47%	45%

- Great opportunity to meet with the researchers—they are in the room.
- Poster presenters were much better about being present this year.
- This was the highlight of this form of a review.
- No problems.
- Reviewers were given the first opportunity to ask questions.
- Most presenters finished in the allotted time or were stopped to allow for questions so the session could finish close to on time.
- No issues; however, others need reminding that this is a peer review, not a conference. Some of the questions were not germane to the project being reviewed.
- It would be good to have an email address to send questions to before and after the AMR.
- Some presentations went long, which did not allow for a full Q&A session. Keeping presenters to the 20-minute slot is suggested.
- All reviewers typically got for Q&A was a few minutes at the end of the presentation. Usually that was enough, but if it was not, it was not clear that there was any recourse.

3.8. Information on the location and timing of the projects was adequate and easy to find.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
0	2	1	17	18
0%	5%	3%	45%	47%

9 Comments

- The AMR coordinating organization did an outstanding job of getting the information to the attendees well in advance of the AMR.
- Nicely organized. Easels with the schedule were very handy.
- Excellent layout.
- Highly organized, as usual (except for the interim program organized by time slot—that one really did not work).
- Please just send the when/where details of the session the reviewer is reviewing. All of the other details can be picked up once the reviewer arrives in the District of Columbia.
- Participants still have to choose between similar programs sometimes.
- The program is pretty dense and took a while to figure out.
- It is hard to find the time and location of each presentation since the number in the presentation sequence was random.
- The website with the agenda was not functioning the week prior to the Review.

3.9. The number of projects I was expected to review was:

	Number of Responses	Response Ratio
Too many	2	<1%
Too few	5	2.3%
About right	30	14.2%
No Responses	174	82.4%
Total	211	100%

- This year the workload was well balanced.
- There were no problems.
- Three is about right.

- I had six but could have done eight or even ten. The lighter workload was appreciated, though.
- I was able to complete the 13 reviews that I was assigned.
- Only two.
- I was pleased to see the automatic extension to June 20 for reviews—not that it was critical, but the close of business Friday date had always seemed unnecessary.
- I did four reviews, all on Thursday. The reviewer could have done more reviews (if needed by DOE staff).
- I only had two; three to five would have been doable.
- I only received 4 to review initially, which I did not think justified the expense of coming. After I complained, it was increased to nine, which was just about right.
- It was very difficult to justify the trip expenses to do a single review.
- I would have liked to not have had back-to-back sessions to review so that I could finish my comments from each session before the next session. Also, since I had back-to-back sessions, I was running between rooms on different floors and at times missed the first 10 minutes of the next session. If the AMR has reviewers perform back-to-back reviews, please make sure that they are in the same session room for those reviews. That would be more conducive for quality.

3.10. Altogether, the preparatory materials, presentations, and question and answer period provided sufficient depth for a meaningful review.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral Agree		Highly Agree
0	1	4	19	14
0%	3%	11%	50%	37%

9 Comments

- For the number of days allotted and for the number of projects being reviewed, there was adequate depth of the subject matter for a meaningful review.
- For most presentations, this worked well. There were a few where the time for the Q&A session ended up being insufficient, either because of a presentation that ran long or significant questions.
- For the topics I reviewed, which were multi-year projects, it was adequate. For a new reviewer or a new project, more time would be nice.
- It was sufficient for some, but insufficient for others.
- Yes, but I learned more time should be spent before the meeting reviewing the presentations and preparing questions. I'll make sure to do that next time.
- There could be a longer presentation period. Most presenters packed too much into their slides for the time available.
- It is recommended that the AMR allow more time after each presentation.
- A 20-minute talk is not enough time to describe the major points in a year of work to those not closely following the work already. But with several hundred projects, it is not clear what else can be done.
- Not in the case of models. One cannot evaluate a model based on a presentation in which the PI does not even get to run the model.

3.11. Please provide additional comments.

- Together, with many other researchers, I rate the DOE AMR as the most informative meeting in the energy area in the world in terms of quality of presentations and the attendance.
- The DOE team has been running the AMR for over a decade, and it shows. It runs very smoothly and professionally. The only issues were with the meals (more and better selections are required). The actual facilities were quite nice.

- The Wi-Fi for reviewers was flawless this year. There was a delay in getting on but only a minute or two, and it never dropped out—not once—while I was reviewing. This is a nice improvement. The ORAU staff were polite and helpful. There was sufficient room in the poster sessions (that has not always been true).
- The annual DOE AMR is always useful not only for the reviews but also for the opportunity for on-site collaboration in many areas. This year's AMR had more than usual.
- As always, it was an interesting, enjoyable, and valuable session.
- It would be beneficial if the researchers were required to show how their activity is value-added. At this point in the Hydrogen and Fuel Cells Program, the research should be in applied, not pure, science. Also, the support from ORAU, in the peer review office, was fantastic as always.
- The venue was good and reasonably sized for the number of participants, but the rooms tended to be on the cool side.
- It would be great if the reviewers could have some freedom to pick the projects they would like to review and specify the projects that they do not want to review.
- Please consider reworking the overview questions and combining several areas into single questions. In addition, the instructions for individual projects indicated a score should be left blank for Future Work for projects that were over (or ending). When doing so, no overall score was provided in the project list.
- Some presenters followed the review template (Approach, Technical Progress, Future Work, etc.), but some did not.
- One PI indicated he assumed reviewers have access to reports provided outside of the review process. This is not the case. It is recommended that the instructions for the preparation of presentations make it very clear that evaluation will be made solely on information provided in the presentation. Reviewer-Only slides should be used to communicate additional information that the presenter feels is important to the project's evaluation.
- The fruit and coffee service should not be taken away after 9:00 a.m.
- DOE must make an effort to better define primary and secondary objectives for the Program and to provide better tools for measuring progress. A good example would be the preparation, distribution, and management of gap charts for the appropriate research areas.

4. Responses from Presenters

4.1. The request to provide a presentation for the Annual Merit Review was provided sufficiently prior to the deadline for submission.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
1	1	2	16	33
1%	2%	4%	30%	62%

- Yes, the timing was adequate, and follow-through was beneficial.
- The time is sufficient. However, projects might be evolving, so a balance is of value.
- Perhaps the presentation was provided too far in advance.
- The presenters all know when to expect the request, so a month to prepare it is probably adequate. However, requiring the slides two months in advance of the review is not reasonable. Researchers who try to comply with that deadline are placed at a disadvantage. Some Researchers did not receive their fiscal year 2016 funding until March. The projects would look better if the researchers had more time to work before the slides are assembled and if they could present more current information at the review.
- The deadline to submit the presentations is too early (over two months before the meeting). By the time of the actual presentation, the results being presented are over three months old, which makes for an awkward discussion.

4.2. Instructions for preparing the presentation were sufficient.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
1	1	1	22	29
2%	2%	2%	41%	54%

4 Comments

- They were very useful—and I had no problem putting my presentation together.
- The detailed instructions are very valuable, but some presenters attended last year and would benefit from a shorter summary of the changes from last year.
- This was my first AMR meeting, and I don't think the instructions really captured how to prepare a poster correctly. The instructions were orientated toward an oral presentation format. More visual examples, e.g., actual pictures, would help.
- It was overly sufficient. The AMR presentation format is bad and leads to a boring, confusing presentation.

4.3. The audio and visual equipment worked properly and were adequate.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
3	2	3	16	28
6%	4%	6%	31%	54%

6 Comments

- They worked great.
- For the presentations in the Washington rooms, it was difficult to see the presenter due to large pillars in the room, and if one was in the back, the noise from people outside the room was a distraction.
- Generally, the clarity of the projections was a little bit low. In many cases, presentations had small print that was difficult to make out clearly. Also, the projected colors were often a bit different from the colors in the digital version. The presenter was difficult to see, depending on one's positioning (in the Washington 4 room). The audio worked generally quite well.
- Washington 4 had big pillars. It was hard to use a laser pointer with the projection screens in line with the podium.
- The room was poor. Columns forced the presentation to be split on four screens. The pointer could point to only one screen. There was no mouse, so pointing and talking was awkward, as the mouse pad wanted to move the mouse and flip slides.
- The layout in the large room (Washington 4, bottom floor) for Energy Storage was very poor. Speaking from the podium, the presenter could not see almost 20% of the audience because of the large pillars throughout the room. Seeing the speakers was equally frustrating. Walking around the pillars was not convenient. Several people clipped their shoulders and heads on the flat panel monitors mounted on the pillars while trying to get around them.

4.4. The evaluation criteria upon which the Review was organized were clearly defined and used appropriately.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

	Highly Disagree	Disagree	Neutral	Agree	Highly Agree
	1	2	2	24	23
Relevance/Potential Impact	2%	4%	4%	46%	44%
	1	2	2	26	21
Approach	2%	4%	4%	50%	40%
Technical Assemulishments and Drograss	1	1	2	23	25
Technical Accomplishments and Progress	2%	2%	4%	44%	48%
	1	3	4	26	18
Collaboration and Coordination	2%	6%	8%	50%	35%
	1	1	б	28	15
Proposed Future Research	2%	2%	12%	55%	29%
Resources (for Vehicle Technologies Office	1	5	5	23	10
Projects)	2%	11%	11%	52%	23%
Strategy for Technology Validation or	1	3	12	20	б
Deployment (for Market Transformation and Technology Validation Projects)	2%	7%	29%	48%	14%
Alternative Fuel Market Expansion and/or	1	3	13	16	5
Petroleum Reduction Potential (for Technology Integration/Clean Cities Projects)	3%	8%	34%	42%	13%

3 Comments

- This presenter was never made aware of the evaluation criteria used for the review. It may have been addressed in a general session. It is recommended that this information be emailed to presenters in the future.
- Some of these criteria are not applicable for my project.

4.5. Explanation of the questions within the criteria was clear and sufficient.

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

	Highly Disagree	Disagree	Neutral	Agree	Highly Agree
	1	2	2	28	20
Relevance/Potential Impact	2%	4%	4%	53%	38%
	1	1	4	28	19
Approach	2%	2%	8%	53%	36%
Technical Accomplishments and Decences	1	1	3	26	22
Technical Accomplishments and Progress	2%	2%	6%	49%	42%
Collaboration and Coordination	1	3	4	26	18
	2%	6%	8%	50%	35%
Proposed Future Research	1	1	6	30	15

	2%	2%	11%	57%	28%
Resources (for Vehicle Technologies Office Projects)	1	3	7	22	13
	2%	7%	15%	48%	28%
Strategy for Technology Validation or	1	2	11	18	10
Deployment (for Market Transformation and Technology Validation Projects)	2%	5%	26%	43%	24%
Alternative Fuel Market Expansion and/or	2	2	10	17	9
Petroleum Reduction Potential (for Technology Integration/Clean Cities Projects)	5%	5%	25%	43%	23%

1 Comment

• The criteria are questions that are very subjective—it is up to the reviewers to interpret what is Outstanding vs. Excellent vs. Good. The collaboration criterion seems to be especially subjective.

4.6. The right criteria and weightings were used to evaluate the project(s)/program(s).

The top number is the count of respondents selecting the option. The bottom number is the percentage of total respondents selecting the option.

	Highly Disagree	Disagree	Neutral	Agree	Highly Agree
	1	1	5	26	19
Relevance/Potential Impact	2%	2%	10%	50%	37%
	1	1	5	26	19
Approach	2%	2%	10%	50%	37%
	1	1	5	25	20
Technical Accomplishments and Progress	2%	2%	10%	48%	38%
	1	2	7	23	18
Collaboration and Coordination	2%	4%	14%	45%	35%
	1	2	8	26	15
Proposed Future Research	2%	4%	15%	50%	29%
Resources (for Vehicle Technologies Office	1	3	9	18	13
Projects)	2%	7%	20%	41%	30%
Strategy for Technology Validation or	1	3	10	18	9
Deployment (for Market Transformation and Technology Validation Projects)	2%	7%	24%	44%	22%
Alternative Fuel Market Expansion and/or	1	4	9	15	8
Petroleum Reduction Potential (for Technology Integration/Clean Cities Projects)	3%	11%	24%	41%	22%

0 Comments

4.7. Please provide additional comments:

- Having DOE program managers chair the oral sessions was excellent and well received.
- Overall, it was a good AMR.
- The four-day format was good. There should be more posters and fewer presentations. Reviewers should show up at the posters. The awards process is very unclear. DOE should open it up to make it transparent.

- Overall, the meeting went very well, but there was a lot of focus on the academic and review side of the work, and there were missed opportunities for interactions and meetings between attendees. The meeting should try to increase opportunities for individuals to interact.
- Please have regular sit-down luncheons.
- A whole day should be dedicated to allow serendipitous meetings between people.
- This presenter was never made aware of the evaluation criteria used for the review. It may have been addressed in a general session. It is recommended that the presenters are emailed that information in the future.
- It is hard to find good reviewers, but the process really needs to be more selective. During a Q&A session this year, a reviewer was trying to promote their own research program, and I had a reviewer contact me shortly after the review to inquire about having funding diverted to their own company.
- There are still concerns about the open access nature of the review, e.g., open meeting and slides on the Internet.