## 2014 Annual Merit Review Survey Questionnaire Results

Following the 2014 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	18	9.4%
National/government laboratory, private-sector, or university researcher whose project is under review	44	23.1%
Non-government institution that received funding from the office or sub-program under review	42	22.1%
Non-government institution that does not receive funding from the office or sub-program under review	33	17.3%
Government agency (non-federal, state, or foreign government) with interest in the work	6	3.1%
National/government laboratory, private-sector, or university researcher not being reviewed	23	12.1%
Other	20	10.5%
No Responses	4	2.1%
Total	190	100%

## "Other" Responses

- Industry
- Consultant
- Supplier and distributor
- HRS equipment manufacturer
- Reviewer
- Non-U.S. government organization who does not have funding from DOE
- Think tank in Japan
- Japanese company
- National organization in a foreign country
- DOE contractor
- Intern

## 1.2. Purpose and scope of the Annual Merit Review were well defined by the Joint Plenary Session (answer only if you attended the Joint Plenary on Monday).

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	1	4	40	51
2%	1%	4%	41%	52%

- All speakers provided an outstanding overview of DOE efforts and the purpose of the AMR.
- Good information about the purpose of the AMR was presented at the plenary session and reinforced during review sessions.
- The Joint Plenary Session (Joint Plenary) did a good job presenting the variety of program areas that were going to be reviewed. The General Motors vehicles shown by Dr. Taub were especially enjoyable.
- A clear description of the purpose of the AMR was provided.
- The Joint Plenary helps principal investigators (PIs) at laboratories to see the big picture, where efforts are going, and how the different DOE offices are integrating their efforts to address energy issues.
- The Joint Plenary was well organized with a very-well-defined purpose.
- The overviews were useful; however, they are so compressed that it is hard to follow the details.
- The plenary speakers did a very good job of stressing the importance of this review meeting in deciding the fate of the projects that DOE funds. It would be nice if someone would include some real-world examples of how the AMR has actually led to changes in project priorities and/or changes in DOE funding priorities (without using specific PI/project names).
- It would be good to first show how the program aims to fulfill the goals of emissions legislation, and then how it aims to reduce imports of oil (unless emission requirements are on the same level of importance as reduction of oil imports).
- Speakers attempt to cover an enormous amount of information, and covering it all distracts from the highlevel purpose and scope of projects supported (and how they tie together).
- Overviews need to be higher level and shorter in duration to allow overview presentations from similar programs in the Advanced Research Projects Agency Energy (ARPA-E), National Science Foundation, the Office of Science, and a rollup of U.S. Department of Defense activities. The opportunity for cross-fertilization and reduction of redundant investments would be valuable to the overall research program and the individual researchers. Maybe the Joint Plenary could be devoted to a federal program overview, while the AMR sessions could be focused on Office of Energy Efficiency and Renewable Energy (EERE) projects.
- Including DOE Bioenergy Technologies Office (BETO) projects in the AMR is a good idea.
- It would be good to capture the whole supply chain for sustainable transportation; bioenergy is a part of that. Adding BETO to the review in future years seems like a good idea.
- BETO should be added.
- The AMR is already 4.5 days long. It is a bad idea to add BETO to this AMR. The whole AMR effort would be diluted too much.
- Adding BETO to the AMR is not favorable.

1.3. The two plenary sessions after the Joint Plenary Session were helpful to understanding the direction of the Hydrogen and Fuel Cells and Vehicle Technologies Programs (answer only if you attended either the Hydrogen and Fuel Cells or Vehicle Technologies plenary sessions on Monday).

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	0	7	46	45
2%	0%	7%	46%	45%

10 Comments

- The Vehicle Technologies Office (VTO) overview presentation was very clear and gave a good sense of directions.
- For someone without much familiarity with the entire Program, these sessions were very informative.
- It was good to see a high-level overview of all projects.
- The Fuel Cell overview presentation was very good. The presenter of the Manufacturing R&D overview presentation did a great job relating her projects to the Advanced Manufacturing Initiative. This is a good way to leverage funding and promote research and development (R&D) that can help fuel cell commercialization. It would be nice if EERE technical development managers were more involved in the DOE Basic Energy Sciences and ARPA-E projects that relate to fuel cells.
- The VTO session helped to provide an overview of the directions of the Program.
- The presentations were interesting regarding progress since the last AMR. However, there was too much information on each slide.
- The presentation of the California fuel cell activities was quite interesting, but it is not clear if it helped in understanding the direction of the DOE Programs, as the survey question asks.
- It is unfortunate that they were parallel sessions and it was impossible to attend both. The limited time to cover the material prevented the briefers from providing all of the relevant information. Also, it was very unfortunate that the plenary briefs were not available on the CD or website, because they are most useful to this respondent's agency. The respondent would have taken more copious notes, because it is also not clear when those might be available.
- DOE's slide presentations in general are filled with way too much detail. It is impossible to read most of the text because it is so small, and the slides are really overcrowded. The slides become a distraction, rather than an aid to understanding the material. The presentation on the Fuels and Lubricants program was enjoyable. The slides were not overwhelming, and the presenter did a good job of presenting what the program does.
- Most everyone who comes to the AMR already knows the purpose and scope. Hence, there is a better use for this time.

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

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	2	4	63	58
2%	2%	3%	49%	45%

16 Comments

• The overviews were particularly useful for showing the overall relationships among projects in each technology area; this is something that can be lost in individual sessions. In addition, they provided an

opportunity to hear the major thrust in all technology areas, which was helpful because attendees cannot be in all technology area sessions at the same time.

- The sub-program overviews were extremely useful.
- Presenters provided good insight to the research being funded and how it fit into the overall VTO mission.
- In all cases, the presentations made it clear what the research objectives were, and this helped to frame the respondent's appreciation for the project presentations.
- The Hydrogen Delivery sub-program overview provided good explanations of the goals and objectives of the sub-program.
- It was very informative hearing from the different program areas in VTO.
- Good information was provided in the VTO plenary sessions.
- It was interesting to see what other program areas within VTO were doing and how it is intended to mesh.
- It would be highly beneficial to have these overviews available on the CD or on the website (although having to download them individually is a big hassle) in time for the review.
- The presentations were interesting regarding progress since the last AMR. However, there was often too much information on each slide. Connecting the sub-program overviews was really appreciated and should be repeated at the next AMR.
- Including the presentation materials on the CD would be appreciated.
- The sub-program overviews were well placed; however, there still needs to be a little time for this at the start of the project review sessions throughout the week, because the topics covered in the sessions should be aligned with DOE goals.
- The presentations were more of an overview of the sub-programs than about objectives.
- DOE should continue to evaluate sub-programs.
- It is not always clear how specific objectives tie into the larger goal of technology commercialization and what the path toward commercialization is.
- There was a range in how the respondent would rate the sub-program overviews (some would have been rated as "agree" and some as "neutral"). Some of the presentations could have been more specific with respect to describing research objectives.

# 1.5. 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	88	46.3%
Presenter of a project	53	27.8%
Peer Reviewer	46	24.2%
No Responses	3	1.5%
Total	190	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 percentage is the percent of the total respondents selecting the option.

	Highly Disagree	Disagree	Neutral	Agree	Highly Agree
Presentations	0	3	3	51	26
Fresentations	0%	4%	4%	61%	31%
Question and answer	0	2	10	46	25
periods	0%	2%	12%	55%	30%
Answers provided to	0	2	17	50	14
programmatic questions	0%	2%	20%	60%	17%
Answers provided to	0	1	12	44	25
technical questions	0%	1%	15%	54%	30%

9 Comments

- Using the same format for each presentation made it easier for the reviewers to "check off" the topics that needed to be covered by the presenter. Many question-and-answer (Q&A) periods were cut short. Adding 2–3 more minutes to these periods could be useful.
- Questions were mostly technical in nature and primarily from the reviewers.
- Some project presenters were posed with programmatic questions that should have been directed to the DOE lead. This is to be expected, considering that the programmatic overview happened two full days before the project presentations from that sub-program occurred.
- The time for Q&A seemed to be less, and hence many times there were only few questions asked. There does not appear to be a follow-up strategy for the questions asked.
- The general public was invited to attend the review; however, the information was not presented clearly enough to be easily understood by the general public. Sometimes, a 1–2 minute introduction explaining the goals and a description of the overall general topic would enhance understanding of the scope and details of the project. It is understood that the presentation was mostly targeted at reviewers who are familiar with all aspects of a given project, but then it is not clear why the general public is invited.
- Programmatic input should be provided to reviewers electronically, and not presented during the presentation. The presenters should focus more on the technical accomplishments of the projects and their impacts.
- One of the high-profile presentations seemed to side step the hard questions.
- Some sessions did not have enough time for Q&A.
- It is difficult to cover the breadth and depth of deployment projects with a structured presentation template that is identical for every project.

## 2.2. Enough time was allocated for presentations.

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
0	2	6	49	27
0%	2%	7%	58%	32%

- The DOE briefing format, with key information (e.g., project start/end, funding, partners, and barriers) presented first ensures that those items are covered with adequate additional time/slides for technical depth.
- The time for each presentation was very well controlled. None of the presentations appeared rushed at the end.
- Presentations were about the right length. In some cases the time provided for Q&A (10 minutes), did not allow all questions to be asked.
- It is not clear whether a standard template was provided, because there was considerable variability. Most of the presentations were quite good, but not all used the same format, which would have been helpful.
- There could be a lot more valuable, in-depth information shared if presentation time slots were longer. Although Q&A time was sufficient for most, there were definitely some presentations that evoked a lot of questions and could have used more time for Q&A.
- More time would have been nice, but this has to be balanced against the fact that the AMR is already five days long.
- For larger projects (\$2 million/year or greater), a longer presentation and Q&A time would be beneficial.

## 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 percentage is the percent of the total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
0	7	13	47	16
0%	8%	16%	57%	19%

5 Comments

- Reviewers did an excellent job challenging the presenters on various aspects of their research.
- Several sessions only had two reviewers and the bulk of the Q&A time went to the audience.
- In many presentations there were no reviewer questions.
- Sometimes reviewers did not seem too knowledgeable about the subject matter, which would then be a disadvantage in terms of the comments, either positive or negative.
- Often questions were very good, but frequently reviewers seemed to ask irrelevant questions that sort of played to their own particular interests/expertise.

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

	Number of Responses	Response Ratio
About right	74	38.9%
Too frequent	3	1.5%
Not frequent enough	1	<1%
No opinion	6	3.1%
No Responses	106	55.7%
Total	190	100%

- The frequency of the review is very appropriate. A shorter time between reviews would cause too much repetition, and a longer time would not allow for adequate frequency of input.
- When projects only last for 12–18 months, having an annual review is the only way to capture feedback regularly.
- An annual review with this mix of participants is valuable in assessing progress, sharing knowledge, and facilitating collaboration to address challenges and keep projects on track. It is valuable to conduct this type of review meeting annually. A formal review (peer review with resumes, documented and collated

comments, subsequent PI responses, etc.) every year may not provide the best return on investment, given the significant additional logistics. A formal review every two or three years might be more effective.

- It would be more helpful to have a midterm review on-site.
- A biannual review would be sufficient.

## 2.5. Logistics, facilities, and amenities were satisfactory.

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
0	2	4	32	46
0%	2%	5%	38%	55%

21 Comments

- From two respondents: The hotel was expensive.
- The facilities and logistics were outstanding!
- The facility was excellent in every way.
- The hotel and general area are perfect for the VTO AMR.
- The hotel was very nice, and the food was particularly good. This meant the respondent did not have to go out and get food, and thus could spend more time getting in touch with folks and listening to presentations.
- This year's location was much better than previous years, and it was good to have it all in one hotel.
- The provided meals and refreshments were outstanding.
- The facilities were very nice.
- Having the AMR in one hotel, rather than two, is preferred. It made it much easier to connect with colleagues.
- The Wardman Park location was greatly appreciated. Not having to hop between hotels makes the meeting much smoother.
- This location is better than the Crystal Gateway.
- The location, rooms, food, and the Marriott hotel in general were excellent.
- The new venue is good.
- It was a little expensive, although it was good.
- A location with cheaper parking would be appreciated.
- Wi-Fi service is requested.
- Parking was expensive for those who did not have access to the Metro.
- The accommodations were very expensive. A bottle of water cost \$4; a beer cost \$8. It might be better if this were held in Baltimore.
- This was a difficult location with few alternatives.
- The Crystal City location is better.

## 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 percentage is the percent of the total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
2	6	16	38	23
2%	7%	19%	45%	27%

- *From five respondents:* It was a little difficult for the people sitting in the back of the giant, long rooms to see the presentations.
- *From two respondents:* The majority of the presentations were easy to see, and only a few needed to have the projection screen a little higher.
- *From two respondents:* Some rooms were long and narrow. The screen must be on a platform in all of the rooms for those more than halfway back to read.
- Some of the conference rooms were long, making the presentations hard to see unless sitting very close. Also, some rooms had seating along the walls, which then made it impossible to see the screen at all.
- Some presenters used fonts that were too small to read, but most presenters used good visual aids.
- This respondent had some trouble seeing some of the presentations, despite sitting fairly close to the front for most. The reviewers' computers got in the way. It might work to have the screen set off to one side, with the reviewers on the other side.
- The fonts on slides were too small to be seen clearly. This respondent was looking at his laptop monitor all the time. However, it was wonderful and really helpful that all the presentation slides were provided to attendees.
- It was sometimes very difficult to see the details of the slides, especially when they were too busy. For people with some hearing difficulties, it was very hard to understand what was being presented and discussed.
- Some presenters try to put too much information on a single slide, making it difficult to read and comprehend all of the information in the time it is on the screen. This is even more difficult for those sitting in the back of the room.
- The screens in some of the meeting rooms were set up in a corner and were difficult to see from some angles.
- Too many speakers apologized because a particular slide was difficult to read. In addition, the room geometry did not always work well for speakers.
- Screens were too small to see any details, or too much information was presented on each slide to be useful.
- The bigger rooms made it hard to see.

## 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 percentage is the percent of the total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
1	4	3	40	37
1%	5%	4%	47%	44%

- *From two respondents:* The sound quality was excellent.
- As long as presenters used the microphones, the audio was fine. Some presenters elected to walk around and not use the microphones from time to time.
- The audio was acceptable—it could have been louder.
- Some presenters would have benefitted from lavaliere microphones because they had a difficult time speaking into the microphone or moved around.
- Sometimes it seemed like the microphone on the podium was not turned on. Also, many speakers did not focus on speaking into the microphone. All this led this respondent to attempt to sit near the front of the rooms.
- In some cases, the speaker could not be heard clearly. When coupled with the fact that the screens were small or too much information was on each slide, the talks became very cumbersome.

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

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
0	1	19	23	26
0%	1%	28%	33%	38%

7 Comments

• The accommodations were excellent.

The accommodations were a little expensive, although they were good.

- This was a great hotel for this meeting. It was a little too expensive, but the quality was outstanding.
- The room was good, although it was noisy outside.
- The hotel costs were incredible—not just the room costs, but also the parking cost and the cost of connecting to the Internet. This respondent travels quite a bit, and this is the first hotel that he has ever stayed in that wanted to charge for an Internet connection.
- This respondent was in a first-floor room in the Wardman Tower, and there was construction taking place directly above the room beginning before 7 am.
- The hotel seemed to be a bit expensive compared to the comfort and the amenities provided.
- The rooms were gone too fast.

## 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 percentage is the percent of the total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
0	1	8	34	39
0%	1%	10%	41%	48%

2 Comments

- Information on the review was very comprehensive. This respondent does not recall receiving anything on hotel accommodations.
- This respondent was informed one week before the review that he was not needed as a reviewer. This is a little late. He had already booked a couple of days to attend.

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

- *From nine respondents:* The opportunity to meet and network with other participants.
- *From five respondents:* The Q&As after each presentation.
- *From five respondents:* The presentations.
- From four respondents: Getting updates on R&D projects and results.
- *From three respondents:* The Program and sub-program overview sessions are very helpful in setting the direction, providing the big picture of the current technology status, and providing background for the project presentations.
- *From two respondents:* The poster sessions.

- Bringing government, researchers, technologists, and industry together in a single platform is very useful. It gives a good orientation and vision of how the Program is progressing. In particular, the way the sessions are organized to move from broad overviews to detailed project presentations is a good approach.
- The actual presentations and Q&A, plus the time after the presentation to get to know some of the reviewers and attendees and to talk more about this respondent's project.
- The ability to get an overview of the research activities supported by both the VTO and Hydrogen and Fuel Cell Programs.
- Learning the true status of projects, not the typical story presented to the public.
- The technical descriptions in oral and poster presentations and the ability to meet and network with presenters.
- The face-to-face time with award recipients. In addition, the ability to hear questions from the attendees and reviewers helps attendees better understand the recipients' perspectives.
- Meeting up with everyone, seeing what researchers are working on in batteries and fuel cells and vehicle modeling.
- The different subjects that were discussed were varied and interesting.
- Having the same location for both the Hydrogen and Fuel Cells Program and VTO.
- The presentations and Q&A sessions, as well as hallway/break/meal discussions.
- Hearing details of the projects, and hearing how PIs speak about their work.
- The information on the projects' progress and the ability to talk to the presenters in the poster sessions.
- This is a one-stop shop for high-level overviews and deep technical talks.
- The sub-program overviews right at the beginning of the session.
- The electronic data of the presentation documents being distributed in the DOE AMR meeting place.
- The information about the market development of hydrogen technologies.
- The information exchange and the contributions (experience/knowledge) of the reviewers.
- It seems that the process is trying to get the national laboratories more engaged with industry.
- Having the recipients present the status and challenges of their projects.
- The Keynote and Joint Plenary sessions.
- The good technical discussions.
- Getting information on fuel cell and vehicle applications.
- Learning about future funding opportunities.

## 2.11. What could have been done better?

- From two respondents: Not much could be improved. The review seemed well planned and executed.
- From two respondents: More time is needed for poster sessions.
- From two respondents: There should be longer break times to allow more interactions among the attendees.
- The DOE AMR offered information that will be useful in determining future directions for the development of this respondent's company.
- DOE has done a great job.
- The AMR is already at a very high level. If something were to be improved, maybe the reviewer questions should be more oriented to the DOE barriers and targets.
- One negative is the industry partners having to pay for the national laboratories. National laboratories should be funded separately by DOE without industry support. The current structure makes it a disincentive for the industries to work with the national laboratories.
- Requiring presentation attendees to wait until a presentation (Overview and Q&A) is over to enter/exit the presentation room would decrease distractions. Additionally, prohibiting typing on a laptop during a presentation would also decrease distractions and would provide respectful attention to the presenter(s).
- Speakers should be encouraged to give 1–2 minute general introductions on why their project is important. This could involve providing a background of their technology and what they are trying to improve overall, rather than what they are improving based on previous years.
- The format for each presentation is still too rigid. Even though speakers have 20 minutes, several of them have commented that it feels they have only half that, given the prescribed structure of the talk.

- DOE should remove all side meetings and keep this dedicated as a review meeting. It is getting too crowded with side meetings that take people out of the reviews.
- This respondent received material on Monday, and it was really useful. Receiving it one week earlier would be more beneficial for study and preparation.
- A significant amount of work is missed from the time recipients' submit their presentations and the date of the AMR.
- Maybe there were too many topics and subjects; the attendee could not limit his or her time to a select few to analyze.
- The DOE Program/sub-program managers could have done even better jobs of providing the background information to set the stages for the project presentations.
- The quality of information provided during the presentations was difficult to ascertain because of the audiovisual concerns.
- There should be more electrochemistry presentations. Perhaps two rooms could be used simultaneously because there are many good posters that are not presented.
- There should be more focus on accomplishments and impact. DOE should provide the programmatic information on the projects to the reviewers electronically.
- Many of the projects were not new, and many of the researchers appeared to ignore much of the literature in the area of interest.
- The project objectives should be on the first slide of the presentations, rather than launching into the details of cost, etc.
- The event is a bit jammed! The suggestion of adding BETO might push it to the breaking point.
- For the lunch exercise, DOE should have displayed the topics more prominently at each table.
- There should be more information on future funding opportunities.
- There should be at least one good technical question for each presenter.
- There should be directions to find the rooms, although the people helping with that were very helpful.
- Using a USB drive instead of a CD would be better.
- There should be more critical review—"marketing" efforts should be resisted.
- Attendees need to have the plenary and overview talks available in advance of the review.
- The event should be at a lower-cost hotel.
- More information should be provided on the market effects and the infrastructure.
- The presentations could be done better.
- Breakfast could be improved.

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

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
0	0	4	51	27
0%	0%	5%	62%	33%

- This is the first time this respondent attended this meeting. It was very well organized and efficient. The big picture and detailed research presentations are balanced. It has been a good learning experience.
- This is a good meeting. It allows for good networking, including with fuel cells stakeholders. The subject of national laboratories or universities is getting more like industrial company subject. Hope they stay more in scientific approaches.
- This meeting is well worth attending.
- It would be nice if the DOE program and sub-program managers made more effort to be available to stakeholders.

## 2.13. Would you recommend this review process to others, and should it be applied to other DOE programs?

	Number of Responses	Response Ratio
Yes	76	40.0%
No	3	1.5%
No Responses	111	58.4%
Total	190	100%

6 Comments

- The nature of the review process should depend on the type and scope of projects. This format is probably sufficient for small, applied projects. It is not clear whether the format allows a sufficiently thorough review of larger projects, given the time limitations of the presentations, as well as the reviewers' schedules. The format may not be appropriate for other DOE programs, such as those with basic science projects.
- DOE persons should also be involved in the review. This may be a separate group that does not talk with the reviewers during the review process.
- It would be good to see an Advanced Manufacturing Office annual merit review.
- Each program should design its own review process to meet its needs.
- Yes, but with more rigor.
- There should be more reviewers.

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

- The management of the meeting was perfect. DOE deserves many thanks. This respondent is looking forward to next year.
- This is a highly unique forum not only because it involves reviewing the DOE programs, but also because of the high number and quality of scientists and engineers brought together in one place, which facilitates discussions that would not otherwise occur.
- The review process was well executed, and there was plenty of opportunity to interface with the PIs, especially those at the poster sessions.
- This is a very good event.
- The location in Washington, D.C. was better than in Arlington, Virginia.
- The review process has come a long way to become transparent. It is not perfect yet, which is quite acceptable. At the same time, the process by which the projects are selected remains opaque—in fact, more so than before. The process for selecting the reviewers and, worse yet, the quality of the feedback provided to the unsuccessful proposals is poor.
- This is a great process for everyone to see what is going on with DOE funding. One thing that is missing is cross-pollination. Maybe this does not occur because teams view each other as competitors. Cross-pollination seems like a good development, so DOE may want to think about how to achieve it.
- This looks like a transparent process. Some statistics on how reviewers' comments are taken into account (e.g., continue/discontinue/modify projects) would be interesting.
- If BETO is added to future reviews, DOE should hold one review on vehicle electrification (i.e., batteries, motors, power electronics, and fuel cells), and the other review on biofuels and engines.
- If the agenda includes industrial subjects, some reviewers with experience in large industrial settings should be selected.
- Presenters are sometimes allowed to avoid difficult questions—researchers appear more interested in presenting positive results and "winning" than true inquiry.
- Each sub-program team leader needs to specifically discuss the reviewer comments with the PI or project manager. It does not appear that this is systematically accomplished.

- The DOE AMR should distribute the electronic data of the presentation document on a website a few days earlier to deepen understanding of the audience.
- A couple of reviewers were late to the sessions this respondent attended. DOE should stress the importance of reviewers being in their assigned rooms early.
- The review is expensive and time consuming. A biannual review would be adequate.
- A strategy must be in place to follow up on the Q&A sessions.
- BETO would not be a fit at this time.

## 3. Responses from Reviewers

3.1. Information about the sub-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 percentage is the percent of the total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
0	0	3	17	25
0%	0%	7%	38%	56%

9 Comments

- There is a well-documented process for review, and the online refresher tutorial was helpful prior to the AMR.
- Reviewers were able to review project information for the reviewed projects prior to the meeting. The website had big-picture information available for those who wanted it.
- Being able to review the presentations ahead of time was very beneficial—it allowed reviewers to concentrate on the speakers and the material being presented. Reviewing the sub-program overviews beforehand helped, but they may not have been necessary to review the projects.
- Those organizing the meeting have the process well in hand.
- Oak Ridge Associated Universities made all presentations available to reviewers. It would have been nice to also have the DOE presentations in advance.
- The presentations from the previous year and the current year were provided; it may be useful to have a brief outline of the original proposal.
- Providing the information one week earlier would have been appreciated.
- Receiving the information a little earlier would have been better, but it was acceptable.
- For most of the projects this reviewer was asked to review, there was not much additional information beyond the presentation (most of them were also rather new projects and/or not reviewed in 2013).

## 3.2. Review instructions were provided in a timely manner.

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
0	0	1	11	33
0%	0%	2%	24%	73%

- *From three respondents:* The instructions and Q&A in the webinar the week before the meeting were very helpful.
- *From two respondents:* The timing of the tutorial webinar allowed enough time for reviewers to experiment with the system and get questions answered.

- It was good to have someone affiliated with the review process in the reviewer room to help with logging in and answering questions about the review website. This person was also able to quickly provide paper forms for reviews, if desired.
- There were good instructions and adequate timing.
- The reviewer instructions were fine.
- An orientation for new reviewers (beyond how to use the review website) would have been helpful. This reviewer figured it out but would have preferred to have been better prepared.

## 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 percentage is the percent of the total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
1	1	7	23	13
2%	2%	16%	51%	29%

- Most presentations followed the proposed outline and were easy to review.
- Past years' presentations are especially helpful for those who have not been tracking the project they are asked to review.
- Most presentations were very good, but the newer projects needed to concentrate more on the approach and plans rather than the accomplishments.
- Generally, yes, it was adequate, although there were obviously varying levels of detail provided across all the presentations. Some provided useful roadmaps to answering evaluation questions, while others left a lot to be gathered "between the lines."
- Generally yes, it was adequate, but the level was not fully consistent. Some projects had more useful information than others. The comments from previous reviewers were very helpful.
- The information was usually adequate, especially with the provided backup slides.
- Presentations were informative and fit the time allowed. Some slides contained too much detail.
- Most presentations were very good, but some with lots of progress/data were pressed for time and had to leave some information out that had to be asked about in the Q&A time.
- Presenters probably did as well as can be done in the time available.
- Providing technical information in this presentation format limits the ability of the reviewer to gain insight that may provoke more meaningful feedback, both during and after the actual presentation by the researchers. A technical paper that accompanies the presentation would be helpful to provide additional details.
- Even though the presentations covered the objectives of the projects and how they address the barriers, it would be useful to see the evolution of the project. For this to happen, the original proposals would need to be reviewed. As the projects are carried out, the direction set in the original proposals may be varied, and it will be difficult to judge progress from only the presentations.
- Actual project activities were frequently well beyond the material provided for review and were sometimes significantly different from the material presented. Because investment decisions are meant to be the result of reviewer remarks, the disconnection between actual activities and reported activities could make those decisions inappropriate.
- It is extremely difficult to review a project based only on the presentations submitted. There should be guidelines for the PIs on what information should be on the slides. Additional text would have been valuable to understand major assumptions, calculations, methodology, and results.
- Sometimes it was difficult to determine why certain decisions were made in the project. When presenters were asked for more detail, often the answer (particularly in cooperative research and development agreement [CRADA]-related projects) was that this was proprietary information.

- It is unreasonable to expect presenters to share enough information in a 20-minute presentation to allow review of a \$100 million project. That is \$5 million per minute.
- The technical content provided in the American Recovery and Reinvestment Act project presentations was minimal.
- The presenters were required to squeeze too much information onto the first chart after the title slide.
- Most presenters did a good job, but it was hard on some of the longer or newer projects because they either had too much information on the charts or not enough detail. In all cases, it was possible to glean enough to evaluate progress.
- Some timing charts were hard to follow—it would be better to have a standard format such as a Gantt chart or some other standard. The location was hit or miss, but it is not necessarily overly important unless it is indicative of collaboration among team members.
- Not all of the presenters gave their milestone schedules. Milestone schedules must be required.

## 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 percentage is the percent of the total respondents selecting the option.

	Highly Disagree	Disagree	Neutral	Agree	Highly Agree
Delemente	0	1	2	25	17
Relevance	0%	2%	4%	56%	38%
A	0	0	1	28	15
Approach	0%	0%	2%	64%	34%
Technical	0	1	0	24	19
Accomplishments and Progress	0%	2%	0%	55%	43%
Technology Transfer	0	1	2	24	18
and Collaboration	0%	2%	4%	53%	40%
Proposed Future	0	0	5	25	15
Research	0%	0%	11%	56%	33%

- It helped to have clearer explanations on the evaluation form of what each score would mean, and it was also good to add the half-point levels.
- The list of evaluation criteria was very clear; this reviewer has nothing to add.
- Most presentation slides had titles that helped track the content being presented to the evaluation criteria. New projects had some minor issues, but one expects them to get better—they were mostly first-time presenters.
- It was confusing to hear about the project barriers before knowing the project objectives. The objectives were also sometimes hidden in the approach slides. In addition, the titles of the projects are sometimes completely different than the objectives, approach, or results. It would also be good to add an "overall comments" section to allow more general observations, such as oral presentation effectiveness/ communication or impressions about the projects.
- This reviewer is not sure that collaboration needs to be a criterion. It might be a good thing to encourage in general, and certainly in specific cases, but other times none is needed, and the project should not be rated down because of that.
- The technical accomplishments criterion is still too vague. For a number of projects, the accomplishments are just completing the last few months of research or catching up with the milestone schedule. In addition, not all presenters provided a milestone schedule. This should be required.
- The Relevance section may not be necessary, because the proposals have been prepared to address specific targets; their usefulness to petroleum savings has been reviewed and approved, so relevance may not be useful as an evaluation criteria.

- Some presentations did not follow the required outline, and some information required for the review was missing. DOE managers must ensure that all necessary slides are included.
- For projects that at least nominally aim to address future commercial prospects, perhaps evaluation criteria to assess this aspect should be included.
- Some projects that recently started had very limited progress/accomplishments. Proposed future research is also difficult to assess when projects are just getting underway.
- There should be a "Not Applicable" option for the Future Research question for completed projects.

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

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
Deleveres	0	1	9	25	10
Relevance	0%	2%	20%	56%	22%
A	0	0	4	29	11
Approach	0%	0%	9%	66%	25%
Technical	0	0	4	23	18
Accomplishments and Progress	0%	0%	9%	51%	40%
Technology Transfer	0	2	5	29	9
and Collaboration	0%	4%	11%	64%	20%
Proposed Future	0	2	6	28	9
Research	0%	4%	13%	62%	20%

- On average, the PIs did an excellent job of addressing the criteria.
- Everyone had standard slides on these topics, so the information was available. Some presentations missed commenting on the real impact of their work. Yes, accomplishments and progress were reported, but no one shared excitement about how those translated into real-world impacts. It would be good to hear things like "people have been calling DOE for guidance," "industry is applying these lessons learned and seeing results," or "the results are really changing the way..."
- Many of the projects that this reviewer reviewed did not include the big-picture application—how the investigators hope to implement the work. It would have been good to have a little more time spent on the relevance of the work.
- Most were clear; however, technology transfer/collaboration information typically included identifying partners, but not how they were involved or what was going to be transferred. Even a high-level description would help.
- Some presentations did better than others. Most projects addressed the criteria toward the front of this list (relevance, approach, accomplishments) better than the back.
- It is hard to answer this question, given that each presentation had a different level of detail.
- Some did very well, while others did not, but information was presented that allowed the projects to be evaluated based on the criteria.
- There was a wide range—some presentations were excellent, and others were borderline. This reviewer's rating of "agree" is an average figure.
- This was variable among the projects; therefore, it is difficult to answer this question in a general way.
- This varied (which is to be expected, given the different styles).
- The time devoted to proposed future work often got trimmed due to lack of time in unrehearsed talks.
- Technology transfer was not always clearly addressed.
- Not all the presenters agreed in their interpretation of the criteria.

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

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
Relevance	0	1	4	27	13
Kelevance	0%	2%	9%	60%	29%
Ammussah	0	0	2	26	17
Approach	0%	0%	4%	58%	38%
Technical	1	0	4	24	16
Accomplishments and Progress	2%	0%	9%	53%	36%
Technology Transfer and Collaboration	1	4	3	24	13
	2%	9%	7%	53%	29%
Proposed Future	0	0	7	27	11
Research	0%	0%	16%	60%	24%

- This reviewer is not sure how DOE could improve the weightings because an "apples to apples" comparison is required. However, some projects are finishing and others are just getting underway, making it difficult to assess accomplishments and future research of projects at these different stages. If possible, variable weightings based on project progress should be considered.
- Sometimes a project is important for other reasons than relevance to the mission of DOE. Somehow, such reasons should be accommodated. Also, not all projects have aspects that are immediately amenable to technology transfer—this criterion should be revised to "future applicability of a concept or principle as well as a technology."
- Relevance may not be a proper review criterion. Of course these projects are relevant, and the question is provided as only a "yes or no" question. If DOE is trying to figure out which projects are most relevant, then it should ask that (with a scale). More specific questions (or at least a question) are needed on how the project is going and how well it is being managed. The only place to discuss that now is buried in Accomplishments and Progress. Management (schedule) is often where projects struggle.
- DOE might consider having some different criteria for science-based projects than for projects dealing with technology assessment, demonstration, or tangible (engineering) deliverables. Whether milestones for scientific projects are met is an artificial metric and often does not reflect the real value of the work.
- It did not seem like future plans had been analyzed in terms of their chance of achieving ultimate success for the project, just in terms of what would be good to do next.
- Technical accomplishments and progress should not be 45% of the weight. A PI could be on target for a project that is not meaningful. Impact should have a higher weight.
- Weighting and scoring were not too important. This reviewer made sure that projects that did not seem useful had a low score and those with a big potential/impact had higher scores.
- Technology transfer is the underlying purpose of these projects—if it does not get into industry, it is not going to help anybody.
- Getting the information/technology into the hands of consumers is the goal—it is important that this is done. Accomplishments and plans are very good, but the goal is production!

## 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 percentage is the percent of the total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
0	0	3	22	20
0%	0%	7%	49%	44%

11 Comments

- Reviewers were treated like rock stars!
- Giving the reviewers first priority for asking questions is good. The only issue was if the PI was not there, but the stand-ins did a good job.
- The process of allowing reviewers' questions to be addressed first worked well.
- The PI was in the room, so if there was a need to speak to him or her, it would have been possible.
- This is one of the benefits of the AMR.
- There were no issues.
- There was enough access during the Q&A sessions, but not enough access for any follow-up questions.
- In addition to reviewing a session, this reviewer was an audience member during a separate, earlier session, when a question was taken from the general audience before the reviewers got a chance to ask a question. Clearly, this was an exception to practice and probably little more than an honest mistake by the session chair. This reviewer does not recall ever seeing this in earlier AMRs.
- There is not enough time during one poster session to talk with 6 to 8 PIs. Reviewer assignments need to be split between poster sessions and oral presentations.
- This issue gets to the insufficient time/depth of questions; a smaller meeting with more in-depth review would be much better.
- This reviewer did not have enough time to ask all of his questions after the presentation, but he caught up with one of the PIs afterward.

### 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 percentage is the percent of the total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Neutral Agree	
0	1	4	18	22
0%	2%	9%	40%	49%

- This is a super-well-run event!!!!
- The location this year was so much better than last year! It was easy to get to all the sessions from the hotel.
- There was perfect organization.
- The organizers have this down.
- The timing was acceptable, but the location was not. The location should have been better advertised because it was not in the same place as the previous AMR. The Crystal City location is preferred.
- This reviewer assumes this question means "presentations" instead of "projects."

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

	Number of Responses	Response Ratio
Too many	5	2.6%
Too few	5	2.6%
About right	35	18.4%
No Responses	145	76.3%
Total	190	100%

9 Comments

- *From two respondents:* The number was acceptable for this meeting because the reviewer was primarily interested in the projects that he was reviewing. However, in future meetings it might be too many, especially if the reviewer is assigned projects in other topic areas.
- This reviewer appreciates DOE not scheduling back-to-back reviews, which allows time for evaluation.
- This reviewer was able to switch her block of presentations to ones she was more interested in reviewing; she appreciates that last-minute flexibility.
- This reviewer had three reviews, which was appropriate.
- Because this reviewer was attending locally, this was not a problem, but if he had to travel to do the reviews, he would have needed more than two projects to review to justify the trip.
- This reviewer reviewed perhaps a few more projects than desired. If the reviewer had not conflicted out on several, it would have been many more than desired.
- Reviewing 18 projects makes it hard to do an excellent and thoughtful analysis for each.
- This reviewer had six; four may be a better number.

## 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 percentage is the percent of the total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
1	1	4	26	12
2%	2%	9%	59%	27%

- The format is appropriate; the content of the presentations can vary.
- For the most part, the process works for oral presentations. It is less clear whether it works well for the poster reviews; researchers often get locked into making their entire presentations, rather than simply responding to reviewers' questions. Yes, it is tough to present a poster; however, poster reviewers are usually trying to do multiple reviews simultaneously and are not planning to spend a half-hour at each.
- Most were very good, but it would have been good to see more information on how accomplishments are feeding into future work or impacting plans, such as changing them because of test results, etc.
- Yes, if a reviewer had reviewed the same project for multiple years; the depth was a bit lacking for new reviewers, but it was acceptable.
- There were a couple of presentations that would have benefited from a full hour, but most were able to address everything in the 20-minute session.
- There is never enough time to go into details, regardless of the time provided. Nevertheless, discussions were frequently cut off because of time limitations.
- A technical paper that accompanied presentations would be helpful to provide additional detail. This is especially true for reviewers to review in advance of the actual presentations.
- The materials were adequate, but they did not provide enough information at times.

- This was variable among presentations.
- Advance copies of the DOE presentations would have been helpful.
- Perhaps it was sufficient for small projects.
- The presentations did not provide enough information to do a fair review.

## 3.11. Please provide additional comments.

- This was a very interesting review regarding technical progress and personal exchanges. As usual, it featured excellent organization. Congratulations!
- This reviewer did not make it to the opening presentations on Monday and would have liked to have seen a summary page on the objectives of the AMR and how reviewers could contribute to the process. The reviewer attended the webinar, but that was more about the mechanics of being a reviewer. The reviewer appreciated the opportunity and will participate in 2015.
- It was great that the sessions started and ended on time or slightly early. The room setup was acceptable.
- It was a very busy week, but it was enjoyable.
- There was excellent time keeping in the sessions. The only concern is traveling between presentations if they are during the same break-to-break interval, but it is unclear how DOE would fix that problem. The facility and location were good, but some rooms were very cold.
- This reviewer was asked to review individual investigators for a project set up as a team effort. This is difficult to do and unfair to the individual investigators. DOE can still ask the investigators to present on different aspects of the project, but if significant collaboration is required, DOE should ask the reviewers to review the project as a whole.
- This may seem like a small point, but a 12-hour day of service and then having to get dinner afterward makes for a grueling week with little sleep. The snacks offered during the poster sessions were only good for people with no dietary restrictions. The AMR may be too big, and it is not clear whether adding BETO would be a good thing.
- The meeting is too big. Not only should BETO NOT be added, but VTO and the Hydrogen and Fuel Cells Program should get split back out. Having one in-depth meeting for each program area (e.g., Energy Storage) would be even better.
- It is unclear whether BETO should be added. It may result in an unmanageable event. It would also likely cause greater schedule conflicts for attendees and/or reviewers, because there may be some alternative fuel production and alternative fuel utilization (deployment) or R&D sessions up against each other. It is already difficult for some reviewers to attend all of the sessions they desire.
- It would be better to have two full weeks following the AMR to complete reviews, particularly because the review website was unavailable on the Sunday immediately following the AMR. Many reviewers are reviewing on their own time and need weekend time to complete the reviews.
- A major goal of DOE funding appears to be stimulating R&D activities. Research, by definition, also requires providing a fundamental picture. By contrast, a lot of reported findings lacked a clear explanation about the fundamentals, possibly because the PIs had never been asked to use first principles to describe their findings.
- Expanding the review by adding BETO is a bad idea. The meeting is already too large. Adding another Office's program area will limit site and scheduling options and make logistics for the meeting more difficult.
- The information should be sent a month before the AMR so reviewers have enough time to read all the presentations and prepare their questions.
- The bio-production of hydrogen is a field in its own right. The differences in technology and terminology are a reason not to include it in the currently constituted AMR.
- The presentations followed a similar format. It would be good (if not provided already) for the AMR to have a specific format. Some of the presenters put too much information on each chart. The presentation abstracts have a very nice and consistent format; it would be nice if something like this could be enforced at the AMR.

## 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 percentage is the percent of the total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree	
1	3	1	22	24	
2%	6%	2%	43%	47%	

7 Comments

- The save the date was sent early enough to plan around, but the guidance for the presentation was not received far enough ahead to sufficiently draft the presentation in advance of the deadline. This reviewer wanted to begin drafting his presentation earlier, but he was told to wait until revised guidance was issued because of potential substantial changes.
- The request was sufficient, but the due date is still too far in advance to get the latest available information into the presentation.
- It is unclear why presenters have to submit their presentations so far in advance. By the time of the AMR, this presenter has forgotten what she wrote in March, and conclusions may have changed with the additional time and effort.
- The request might be too early. During the presentation, one had to go back in time to present based on where the project was when the presentation was created.
- Yes, it was requested in early April, and most of the presenters had to note during their presentations that the data was outdated.
- If the deadline is pushed back, more recent results can be included in the presentations.
- The presentation was due far earlier than necessary.

## 4.2. Instructions for preparing the presentation were sufficient.

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
0	1	2	25	23
0%	2%	4%	49%	45%

- The instructions were helpful.
- The instructions were sometimes a little overly detailed.
- The guidance was thorough but confusing. Including a complete sample presentation as an additional file, not interspersed with other guidance, would be helpful.
- The amount of detail was confusing, but the examples were very helpful.
- Unfortunately, the amount of mandatory slides was increased for this year's AMR by making the presenters include slides addressing "Response to Previous Year's Reviewers' Comments" and "Remaining Challenges & Barriers." These are important slides and must be included; unfortunately, the time (20 minutes plus 10 minutes for Q&A) for each presentation was kept the same as in previous AMRs. This presenter was not able to include sufficient information for the Results/Accomplishments section.
- Directions changed after the submittal date, requiring revision of this presenter's presentation.
- The instructions were very lengthy, especially for a deployment project.
- Changes were made late into the process.

### 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 percentage is the percent of the total respondents selecting the option.

Highly Disagree	Disagree	Neutral	Agree	Highly Agree
0	0	1	21	28
0%	0%	2%	42%	56%

4 Comments

- It worked fine for this presenter's presentation.
- Presenters should use lapel microphones instead of podium microphones.
- There were not any glitches except that two presenters had problems with "movies" embedded in their presentation files.
- The equipment did not work great for this presenter, but it seemed to for everyone else.
- 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 percentage is the percent of the total respondents selecting the option.

	Highly Disagree	Disagree	Neutral	Agree	Highly Agree
Relevance	0	2	5	23	17
Relevance	0%	4%	11%	49%	36%
Approach	0	1	3	26	17
Approach	0%	2%	6%	55%	36%
Technical	0	1	2	25	19
Accomplishments and Progress	0%	2%	4%	53%	40%
Technology Transfer	0	1	5	26	15
and Collaboration	0%	2%	11%	55%	32%
Proposed Future Research	0	2	7	23	14
	0%	4%	15%	50%	30%

- The criteria make perfect sense and are clearly defined; however, it does not seem like reviewers take into consideration whether the sequence and breakdown are followed or ignored in the material presented. It is more important to make sure that the presenter gets a chance to express the project's relevance/approach/etc. in his/her own way than trying to make sure that all slides are formatted with a common template. The instructions for the template are too rigid in that regard.
- The structure is mostly good! However, PIs should also have a section where they can explicitly emphasize the innovation aspect of their project.
- The reviewers of this presenter's project did NOT use the evaluation criteria appropriately. The questions and comments presented by the reviewers displayed a remarkable lack of qualification on the part of the reviewers and a remarkable focus on trying to discredit the project without reason.
- "Proposed Future Research" is unclear and does not apply well. "Relevance" is also unclear, as well as too broad; presenters should just be asked to state the applicable funding opportunity announcement to which the project applied.

• The guidance was generally confusing and dictated an order that was quite awkward for presenting and explaining the many facets of projects.

### 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 percentage is the percent of the total respondents selecting the option.

	Highly Disagree	Disagree	Neutral	Agree	Highly Agree
Deleveres	0	2	5	24	15
Relevance	0%	4%	11%	52%	33%
Annacah	0	1	3	27	15
Approach	0%	2%	7%	59%	33%
Technical	0	1	4	26	15
Accomplishments and Progress	0%	2%	9%	57%	33%
Technology Transfer	0	1	4	27	14
and Collaboration	0%	2%	9%	57%	30%
Proposed Future Research	0	2	5	23	15
	0%	4%	11%	51%	33%

3 Comments

- The explanation was very clear.
- The "Barriers" section is a good example of why the explanation of the criteria is invalid. The instructions clearly state that barriers should be taken from DOE's list in published reports, but all reviewers have their own interpretation of how to pick barriers. This presenter was penalized one year for limiting barrier selection to the DOE report, so now the presenter follows the majority of other reviewers and selects more specific barriers—with better feedback from reviewers so far.
- It is unclear what "questions" this question refers to.

### 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 percentage is the percent of the total respondents selecting the option.

	Highly Disagree	Disagree	Neutral	Agree	Highly Agree
Relevance	0	0	10	23	12
Kelevance	0%	0%	22%	51%	27%
Annuach	0	0	9	25	11
Approach	0%	0%	20%	56%	24%
Technical	0	1	7	23	13
Accomplishments and Progress	0%	2%	16%	52%	30%
Technology Transfer and Collaboration	0	1	12	23	9
	0%	2%	27%	51%	20%
Proposed Future Research	0	1	11	24	9
	0%	2%	24%	53%	20%

- There is always room for debate on weighting, because there are many different projects whose purposes do not align perfectly (nor should they be made to). Overall, the weighting seemed adequate.
- The criteria and weightings were acceptable.
- Reviewers this year seemed to be non-experts. Also, there was a person from Pacific Northwest National Laboratory sitting in the audience throughout the sessions whose role seemed to be to ask hardball questions to projects from other laboratories, although he was not a reviewer. This format seemed strange.
- More thought should be given to this weighting. For example, third-year projects should have less weight on future work and more on accomplishments. First-year projects should have more weight on future work and less on accomplishments. Similarly, technology transfer should not apply to all projects.
- Collaboration should have more weight in projects that provide substantial cost share. Keeping all collaboration partners happy and engaged takes a lot of effort.
- This presenter's project contains five development approaches. It is not possible to accurately communicate all the work that has gone into the project in 20 minutes.

## 4.7. Please provide additional comments:

- The criteria for evaluation are well established. The flexibility that presenters received in creating their posters (slides or traditional poster style) was good. This presenter had no complaints.
- The meeting is good for networking and seeing what other people are doing; however, it would be more cost effective to have reviewers look over the material in a report rather than have everyone come to Washington, DC, for presentations.
- This was an excellent venue. It was overwhelming with so many people involved. There should be better food for the poster sessions. DOE should not add BETO.
- The cost of this review was much higher than it needed to be. The review should not occur in an expensive hotel in downtown Washington, DC. DOE should have used hotels perhaps 50 miles outside of Washington, DC, which would have cost much less and allowed more dollars to be used for research.
- Some of the reviewers do not understand the projects, as evidenced by their uninformed questions and assertive but unhelpful comments. Some comments are unclear, and there is no opportunity to clarify them. Some reviewers have their own agendas. However, this presenter understands that a systematic review is necessary and that DOE program managers are doing their best.
- After a talk, the most time for questions has always been given to the reviewers. The general audience has fewer opportunities to communicate with the presenters. The reviewers have multiple options to talk to the presenters before and after the presentations. DOE should leave more time for the audience to ask questions.
- Unfortunately, the amount of mandatory slides was increased for this year's AMR by making the presenters include slides addressing "Response to Previous Year's Reviewers' Comments" and "Remaining Challenges & Barriers." These are important slides and must be included; however, the time (20 minutes, plus 10 minutes for Q&A) for each presentation was kept the same as in previous AMRs.
- It would be helpful to all parties if the request for reviewer availability were made after the presenters know the date(s) and time(s) of their presentations. Doing the reverse forces potential reviewers to commit to review projects outside of their travel plans.
- It was unclear how many reviewers there were going to be or how projects were judged. This may have been included in the presentation template, but an email explaining the entire process would have been helpful.
- It was somewhat embarrassing to hear some speakers say that their slides were either old or not the latest version. It implied there were errors and/or omissions, which, in itself, gives a negative perception.