AMERICAN STATISTICAL ASSOCIATION (ASA)

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COMMITTEE ON ENERGY STATISTICS

MEETING WITH THE ENERGY INFORMATION ADMINISTRATION (EIA)

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THURSDAY, APRIL 2, 2009

The meeting convened at 9:00 a.m. in Room 8E-089 of the James Forrestal Building, 1000 Independence Avenue, SW,

Washington, D.C., Ed Blair, Chair, presiding.

COMMITTEE MEMBERS PRESENT:

EDWARD BLAIR, Chair STEVE BROWN MICHAEL COHEN BARBARA FORSYTH

WALTER HILL VINCENT IANNACCHIONE

NANCY KIRKENDALL

EDWARD KOKKELENBERG

ISRAEL MELENDEZ

MICHAEL TOMAN

JOHN WEYANT

EIA STAFF PRESENT: STEPHANIE BROWN, Designated Federal Official, Director, Statistics and Methods Group (SMG) JAMES BERRY CAROL JOYCE BLUMBERG TINA BOWERS JAKE BOURNAZIAN, SMG EUGENE BURNS MICHAEL COLE, Office of Integrated Analysis and Forecasting (OIAF) JOHN CONTI BRENDA COX, SRA RAMESH DANDEKAR, SMG JOHN PAUL DELEY, OIT DEAN FENNELL STAN FREEDMAN CAROL FRENCH, OOG ADRIAN GEAGLA, OIAF LYNN GEISERT MARK GIELECKI, Office of Coal, Nuclear, Electricity, and Alternate Fuels (CNEAF) HOWARD GRUENSPECHT, Deputy Administrator, EIA LOUISE GUEY-LEE, CNEAF STEVE HARVEY, Director, Office of Oil and Gas TYLER HODGE, Office of Energy Markets and End Use (EMEU) PATRICIA HUTCHINS, CNEAF ALETHEA JENNINGS KATIE JOSEPH FRED JOUTZ MARY JOYCE, CNEAF JAMES KENDELL BOB KING ANDY KYDES TOM LECKEY JANICE LENT, SMG BARBARA MARINER-VOLPE PAULA MASON, OOG FRED MAYES PRESTON McDOWNEY, SMG RENEE MILLER

EILEEN O'BRIEN, Consumption Data Management Team, Office of Energy Markets and End Use (EMEU)

KOBI PLATT

ANTHONY RADICH, CNEAF

MICHAEL SCHAAL, OIAF

ELIZABETH SENDICH, OIAF

SCOTT SITZER

HOWARD STONE, CNEAF

GRACE SUTHERLAND, SMG

EDDIE THOMAS

PHILLIP TSENG, SMG

SHAWNA WAUGH

ALEX WOOD

JASON WORRALL

BIN ZHANG, OOG

ALSO PRESENT:

RON WASSERSTEIN, Executive Director, ASA

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Adjourn

1	P-R-O-C-E-E-D-I-N-G-S
2	9:02 a.m.
3	DR. BLAIR: We're going to go
4	ahead and convene. We won't open the meeting
5	per se. We're going to move immediately to
6	greetings and remarks from Howard because he
7	has very limited time, so he's going to speak
8	to us, then he has to run off, and then we'll
9	open the meeting.
10	MR. GRUENSPECHT: I'm actually not
11	that important. It's a long story. I want to
12	be very clear about this. And we are going to
13	have real quality time which I'm sure you'll
14	regret. But let me say first I guess that you
15	deserved to be welcomed by a real
16	administrator, not an interim one. However,
17	I must suffice for the present since a new
18	Administration fills up slowly. In fact, as
19	of today there's only one appointee in place
20	at the department and that's the Secretary.
21	So I especially want to thank the new chairman
22	of the committee and the new members of the

committee, some of whom I know quite well, 1 2 others who I will meet. And the old members of the committee, actually. I was thinking of 3 4 veterans. 5 MS. FORSYTH: Veterans, not old. 6 MR. GRUENSPECHT: Oh. Well, I'm 7 old, but it's actually - I was trying to think about this last night because I'm not going to 8 9 get into the things, the substantive things, for taking the time really - obviously for Ed 10 to chair it and for the others to serve on the 11 committee and help guide EIA. 12 And I was 13 thinking about this, and I was thinking about when I was in academia and I was young and I 14 always marveled that anyone would be willing 15 to take on any administrative or committee 16 I remember thinking specifically of 17 duties. my dean at Carnegie Mellon who was responsible 18 for dealing with each of about 50 faculty 19 members and would go in and he'd talk about 20 21 salary, levels of secretarial support, and by 22 that of course, those were the days when you

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really had secretaries who were typing things, 1 summer funding, progress on the tenure track, 2 all these wonderful things. And you know, 3 4 they were quite - they weren't - they were 5 cordial discussions, but they weren't exactly joyful discussions. And there always seemed 6 7 to be some slight difference of opinion, you And you thought gee - you were happy 8 know. 9 when it was over, and you thought gee, this 10 person's job is doing this 49 more times. And then for fun they go out and raise money and 11 deal with various and sundry complaints and 12 13 crises.

So of course I'm an economist. 14 Ι quess there's economists and statisticians in 15 16 the room. Economists tend to take preference 17 as a given, so I can - at least, classical ones, so I attributed her willingness to 18 accept, let alone seek this position, as a 19 20 clear signal of aberrant tastes. You know, as 21 the French say, chacun ... son go-t, or to each 22 his own, each to this own taste. In my view

at the time, even service on committees was 1 something to be avoided if at all possible. 2 And then my dad who came to this country in 3 late 1941, for some reason I'm also thinking 4 5 of him, he's getting older, but he's still kind of feisty, and he was immediately 6 7 drafted, kind of learned the same rules as a private and later a sergeant in the U.S. Army. 8 9 As one of his colleagues explained 10 to him succinctly he tells me that the way they do things was to keep your eyes and ears 11 open, your mouth shut, and don't volunteer. 12 13 Well, by definition you guys are all volunteers, so obviously you didn't follow the 14 rules. And when I look back at myself, I 15 didn't follow the rules either because my role 16 at EIA is actually pretty close to that of an 17 academic administrator and one with a lot of 18 committee assignments. And again, you're all 19 20 volunteers. 21 So either we all have warped

22 tastes, or we've decided that there is value

in taking on these kinds of duties, I think 1 there really is, and in you know, really, it 2 sounds corny, I never believed it when people 3 4 talked about when I was young, but that you 5 influence others. You leverage your influence because you're not just doing your own work, 6 7 but you're affecting the work of a larger organization. But all those things are true. 8 9 So there are really few things 10 that are more important to an EIA administrator, whether a real one or an 11 interim one, than interacting with this 12 13 committee. But I did say there are very few 14 things, but there are some things. And one of them is meeting with the appropriations staff. 15 And with respect to their requests we also 16 have a simple rule, which is you call, we 17 And so it's bad luck for me, but maybe 18 come. good luck for you that the requested time for 19 20 me to drop by for a chat is 9:30 this morning and so that, you know, it's not that I have to 21 archive my email, or deal with some massive 22

energy problem, I just said I've got to go on
 my knees and beg for money. But the bad news
 for you is that your reprieve is only
 temporary.

5 We'll have opportunity to discuss later in the day. I think these are very 6 7 interesting times for energy and very interesting times for the Energy Information 8 9 Administration. And what else was I going to I look forward to our discussion and I 10 sav. 11 want to participate as much as possible over the next day and a half. And there are some 12 13 things I'll have to do during the time. But I wouldn't take it, you know, this whole 14 lengthy monologue is an attempt to - you 15 shouldn't take it personally and really, the 16 important people are the people who actually 17 are going to be talking to you about some of 18 our specific problems and issues. But with 19 20 that, I'm going to go put on my knee pads and 21 go up to the Hill and beg for money. So. So 22 anyway, thank you, and again my apologies, but

I think lunch is when you'll hear what you 1 2 should have heard this morning. 3 Thank you. DR. BLAIR: 4 MR. GRUENSPECHT: Congratulations, 5 sucker. (Laughter.) 6 7 DR. BLAIR: We'll go ahead and convene the meeting. Now I have to admit as 8 9 the new chair -MR. GRUENSPECHT: You didn't 10 11 expect that introduction. 12 DR. BLAIR: No, that's right. 13 I'll legally change my name to sucker. 14 (Laughter.) 15 DR. BLAIR: As new chair of the meeting I have to admit I'm a little bit soft 16 on the formalities, so I have to ask do we 17 first have to have everybody announce who's 18 19 present? I think it'll 20 MS. BROWN: Sure. help just from a logistics standpoint. We 21 have a recorder that's going over the minutes 22

and takes the - recording the minutes, and I 1 2 think he needs to know names, so it might be helpful. Would it be helpful for you to do 3 4 that, for us to do that? Okay. So why don't 5 we go around the room and I'll start here, and just introduce yourself, who you are, and if 6 7 you're a new member of the committee we'll get to you later. You don't have to do a formal 8 9 thing now. So I'm Stephanie Brown. I'm the director of the Statistics and Methods Group 10 and responsible for I'll say organizing -11 coordinating these meetings, except that I'm 12 13 really not the coordinator. I will tell you later who really does the work here. 14 So welcome to everybody. 15 DR. BLAIR: I'm Ed Blair. 16 I'm at the University of Houston and a committee 17 18 member. I'm Mike Cohen and I 19 MR. COHEN: 20 work for National Academy of Sciences. 21 MR. BROWN: I'm Steve Brown. I'm 22 with Resources for the Future and I'm located

1 in Texas.

2 MR. HILL: I'm Walter Hill. I'm 3 at St. Mary's College of Maryland. MS. FORSYTH: I'm Barb Forsyth. 4 5 I'm with the University of Maryland. MR. KOKKELENBERG: I'm Edward 6 7 Kokkelenberg and I'm at SUNY-Binghamton. MR. WEYANT: John Weyant, Stanford 8 9 University. 10 MR. MELENDEZ: Israel Melendez, 11 Constellation Energy. 12 MS. KIRKENDALL: Nancy Kirkendall, 13 independent consultant. MR. IANNACCHIONE: Vince 14 Iannacchione, RTI, D.C. 15 16 MR. WASSERSTEIN: Ron Wasserstein, American Statistical Association. 17 18 MS. BROWN: Okay. I think we're still waiting for Michael Toman and who's the 19 other? Cutler, Cutler Cleveland. 20 DR. BLAIR: I think Mike will 21 22 probably be late today. And I think we're now

obliged to have the audience members come to 1 2 the microphone and identify themselves. 3 MS. BROWN: Okay. 4 MS. WAUGH: Shawna Waugh, 5 Statistics and Methods Group. 6 MR. TSENG: Philip Tseng, SMG. 7 MR. CONTI: John Conti, Director of Integrated Analysis and Forecasting. 8 9 MS. JOYCE: Mary Joyce, Coal, 10 Nuclear, Electric and Alternative Fuels. MR. BOURNAZIAN: Jake Bournazian, 11 Statistics and Methods Group. 12 13 MR. HODGE: I'm Tyler Hodge. Ι 14 work on the short-term energy outlook. MR. WORRALL: Jason Worrall, 15 Statistics and Methods Group. 16 MS. MILLER: Renee Miller, 17 Statistics and Methods Group, EIA. 18 MR. DELEY: John Paul Deley. I'm 19 20 the agency's records officer and I am chair of the ASA Committee on Archives and Historical 21 Materials. 22

1 MS. FRENCH: Carol French, Office 2 of Oil and Gas. 3 MR. FENNELL: Dean Fennell, Office of Coal, Nuclear, Electric, and Alternate 4 5 Fuels. 6 MR. DANDEKAR: Ramesh Dandekar, 7 SMG. 8 MR. BRADSHER-FREDERICK: Howard 9 Bradsher-Frederick, SMG. 10 MS. LENT: Janice Lent, SMG. 11 MR. MCDOWNEY: Preston McDowney, 12 SMG. 13 MR. ZHANG: Bin Zhang, Office of 14 Oil and Gas. MS. JENNINGS: Alethea Jennings, 15 16 SMG. DR. BLAIR: Thank you very much. 17 I've now been given a script and realize that 18 I'm already off-script. 19 20 (Laughter.) 21 DR. BLAIR: So allow me to read my script. First of all, good morning. Welcome 22

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to EIA's spring meeting with the ASA Committee 1 2 on Energy Statistics. I want to emphasize that this is an ASA committee, not an EIA 3 committee, which periodically provides advice 4 5 to EIA. That is, the committee periodically provides advice to EIA. EIA is free to choose 6 7 to act on that advice whenever it thinks appropriate. I've already introduced myself. 8 9 I'm Ed Blair. I'd like to provide you with Time will be set 10 some basic information. aside for comments at the end of each session. 11 We'll take a short break in the morning and 12 13 one in the afternoon. Restrooms are located down the corridor in either direction. All of 14 our sessions will be held in this room today. 15 All attendees including quests and EIA 16 employees should sign the register in the main 17 hall. Please include your email address when 18 you sign in. Alethea Jennings is - who just 19 20 stepped out is EIA's liaison for the ASA and she's here to assist us, along with Clarissa 21 22 Davis from the ASA meetings. So I guess

1 Clarissa replaced Chrissy? 2 MS. BROWN: Yes. If you have questions 3 DR. BLAIR: they'll be glad to help you. The telephone 4 5 number to this room should you need to be reached by telephone is (202)586-6273. Lunch 6 7 will be served in the USDA Executive Dining Room so we get like USDA approved. 8 9 MS. BROWN: It was where we went 10 last year. DR. BLAIR: Just across the 11 At the close of our morning session 12 street. 13 we'll take the elevators down to the lobby and walk over together. Please remember that we 14 have a transcriber, Eric Mullen, who is 15 recording this meeting so each person is asked 16 to speak into a microphone when commenting or 17 asking questions. Also, please state your 18 name before commenting so that he can record 19 Those in the audience are asked to use 20 it. the standing microphones and the committee 21 members and others at the head table should 22

speak clearly into the microphone closest to
 them.

3 I'd like to welcome our new committee members, Michael Cohen and Nancy 4 5 Kirkendall, both former EIA employees. We welcome you and we appreciate your willingness 6 7 to serve on the committee. I think Stephanie has some bigger introductions planned. Okay, 8 9 we've already introduced ourselves. I need to 10 inform you that Stephanie Brown is the designated federal officer for the advisory 11 In this capacity she may chair but 12 committee. 13 must attend each meeting and she is authorized to adjourn the meeting if she determines this 14 to be in the public interest. 15 MS. BROWN: You'd like that, 16 wouldn't you? Forget it. 17 18 (Laughter.) DR. BLAIR: Yes, so don't tick her 19 20 off. She must approve all meetings of the 21 advisory committee and every agenda. Also, she may designate a substitute in her absence. 22

And finally, especially for the new members, 1 we'd like to remind the committee members to 2 please turn your tent name vertically when you 3 4 want to make a comment so that you can be 5 recognized for comments or questions. And at this point I think since we've already had 6 7 Howard's remarks we turn it over to Stephanie for updates since the fall 2008 meeting. 8 9 MS. BROWN: Well, welcome 10 everyone. And I'm not going to adjourn the meeting. You're stuck with me for a day and 11 12 a half. You won't even get a substitute. So 13 here I am. My remarks this morning will be basically addressed to update you on things 14 that happened at the last meeting and what EIA 15 has done. I'll try to remind you of what you 16 said we should do and then give you what we've 17 18 done. First, I wanted to give our new 19

20 committee members a chance to say a little bit 21 about themselves, and they are Michael Cohen 22 who's the senior program officer for the

National Research Council's Committee on 1 National Statistics. And Nancy Kirkendall as 2 we know previously sat in this seat. I now 3 sit in her seat. And Israel Melendez who is 4 5 vice president at Grid Optimization, a Constellation Energy commodities group. 6 I'11 7 give each one of you a chance, if you could, to please say a little bit about yourself, 8 9 what your interests are. Really, thank you so 10 much as Howard said for volunteering to serve on the committee. It's an honor to have each 11 12 of you on the committee. Now with Izzy, he 13 came - you were at the meeting last time as an observer so this is your first official time 14 to serve your 3-year commitment. So why don't 15 we start with Mike. 16 I'm a statistician. 17 MR. COHEN: Ι

17 If a statisticial. 1
18 got my PhD at Stanford in ITD and I've had a
19 variety of jobs. Twice at EIA. I was at EIA,
20 my first job, in 1981 in the Office of Energy
21 Information Validation. Nancy Kirkendall was
22 one of the first people I met when I came to

Washington. She was in the Office of Oil and 1 2 Gas I believe at that time. And Arthur Silverman was there, and Bill Winkler, but 3 4 then Reagan was president and decided energy 5 wasn't a going thing so I was asked to leave, or encouraged to leave, and I left. Went to 6 7 Princeton and I went to the Committee of National Statistics at the University of 8 9 Maryland. I went back to the Department of 10 Energy and now - OEID was called OSS I think, Office of Statistical Standards. And I worked 11 there for about eight months and I transferred 12 13 over to the modeling group and worked with Andy Kydes and some other people there for a 14 short while, six months. Went back to the 15 National Academy of Sciences and I've been 16 there since. And I'm interested in public 17 policy and statistics. I do some defense 18 I do some census work and I do some 19 work. work on micro-simulation models and model 20 values. 21 22 Pretty impressive. MS. BROWN:

1 I'm sure you'll add value to our group. Thank
2 you. Nancy?

MS. KIRKENDALL: T retired from 3 4 the Energy Information Administration a little 5 bit over a year ago and that was Stephanie's job. So I'm really interested in seeing and 6 7 watching how EIA progresses over the next couple of years. It's sort of fun to come 8 9 back and sit on the other side of the table. It's a lot easier on this side of the table. 10 Thank you. 11 MS. BROWN: I don't think we gave you this opportunity last time 12 13 so now it's your shot at it. It's a hard act to 14 MR. MELENDEZ: follow these guys. My name is Israel 15 I work at Constellation Energy as 16 Melendez. already stated. I lead a group that basically 17 does power system modeling, both in like low-18 flow modeling and economic modeling to consult 19 our traders, portfolio managers doing deals. 20 21 I - my background is more - I'm a marine 22 engineer. A marine engineer goes out to sea

and operates ships. From there I moved on to become an electrical engineer, a Johns Hopkins grad, and I have a background in business and finance. And my interest is - here is to learn a little bit more about EIA and to contribute from an industry perspective how helpful this data is to the industry.

MS. BROWN: Thank you. Okay. 8 Let 9 me move on to the next slide. I want to give 10 you an update on the various sessions we had 11 six months ago and what's come out of them. As you might recall I believe it was Howard 12 13 Bradsher-Frederick gave a presentation on the results of our Energy Conference. We did a 14 15 post-conference survey and we presented the 16 results to you. You guys recommended that we use a current email list with a shortened 17 questionnaire, that we identify who the 18 employer is or what area the participants were 19 20 coming from. It might be interesting to find out how far they traveled to get there, and 21 you suggested separating renewables from 22

alternative fuels. So what we did is we took 1 the number one advice, or number two on that 2 list, and we shortened the questionnaire which 3 4 was pretty long and had some information 5 probably that we weren't using to - for valueadded in the conference for this year. 6 7 So we did shorten it, and we did add as you suggested the employer information, 8 9 where people are coming from that attend. 10 Because we shortened it we didn't actually do the other things about the distance travel. 11 That would be nice, but probably not real 12 13 important and we took away the sections about some of the fuel things. So we didn't add 14 separate renewables from alternative fuels. 15 But that questionnaire, as you may know, the 16 conference is next week. I'll give a plug for 17 It's on Tuesday and Wednesday of next 18 that. week at the Walter Washington Convention 19 I think each of you received an 20 Center. 21 invitation to that. If you didn't, see me, 22 I'll make sure you get one. And you're

certainly welcome to attend. It will be
 rather informative and we will do another
 evaluation afterwards and have the results.

4 Okav. I believe we had a 5 presentation from Andrew Buck on the Regional Short-Term Energy Model (RSTEM) forecast. You 6 7 guys recommended doing an extensive literature review investigating other energy models and 8 9 the existing processes. And Andy will over 10 time implement these recommendations. I want to preface my remarks for a lot of what we're 11 12 going to see when we say yes, we're going to 13 do it. It's sometimes hard within a 6-month period to tell you yes, we took your 14 recommendation, absolutely did everything. 15 And with the Energy Conference survey it was 16 a little easy, but some of these other things 17 that I'm going to talk about now, you're not 18 going to see a lot of progress, but it's not 19 20 because we're not working on them or 21 considering your recommendations. It's just, it takes time. So this is one of them that'll 22

take time, but we appreciated and valued the
 comments and will move forward in that
 direction.

Okay. Sensitivity analysis of EIA 4 forecasting systems. I think this was the 5 presentation by Preston McDowney and George 6 Lady. You recommended expanding the list of 7 exogenous variables that NEMS accounts for. 8 9 Our plan is - our current goals are to expand 10 the scope of the variables that were included. You suggested establishing - to establish the 11 methodology presented and provide regular 12 13 reports on the forecast accuracy. And we plan to implement reports on the forecast accuracy 14 when actual data for the exogenous variables 15 become available in 2010. 16

17 This presentation, for those of 18 you that were here, this was one of our newer 19 staff, Brian Murphy. You recommended 20 improving the renewable electricity forecast 21 by incorporating resource maps of renewable 22 resources. And again, nothing's happened with

this yet, but we're working on - Brian is 1 working on assessing the available map. You 2 suggested conducting multiple renewable 3 4 electricity forecast scenarios to account for 5 model assumptions, and I think numerous capped carbon cases were run to address that 6 7 recommendation. So a little progress. Janice Lent presented some 8 9 information on the Energy Consumer Price Index Research that she's conducting. 10 This is a very long process. She's plugging away at it. 11 12 When she made her presentation last time you 13 generally favored a producer price index (PPI) for solar energy equipment over a PPI for 14 fuels used in electricity generation. So what 15 she's looking now for the PPI for solar energy 16 equipment, she's investigating that as data 17 and resources permit. And when I say 18 resources permit, this is another thing that 19 20 sort of limits what we can do. Now, money and 21 people. So she's working on it. You also 22 suggested that EIA should measure changes and

cost of wind energy equipment. And she will 1 investigate the option and calculate it in a 2 synthetic PPI for wind energy equipment, but 3 4 it appears from her initial research that 5 useful data is very limited in that capacity. 6 Okay, this was the presentation 7 from another one of our newer staff, Emre Yucel on international biofuels modeling. You 8 9 recommended that EIA consider the cost and 10 effect of converting idle land, crop land, and Emre is incorporating a transportation and 11 food crop model that will take into 12 13 consideration the cost and effect of this type of conversion. 14 Let's see, this was - the next 15 one, estimating monthly ethanol consumption in 16 I think this was Carol Blumberg. 17 the U.S. The committee recommended revising weekly 18 estimates of motor gasoline volume after the 19 20 monthly estimates of motor gasoline volume 21 were obtained. And this was a policy issue. What we found out is that it seems within EIA 22

it's rare to revise weekly data unless there's 1 some compelling reason to do so. So I'm not 2 sure that that one will happen. We'll keep it 3 under consideration. And later on in today's 4 5 presentation Steve Harvey, the director of the Office of Oil and Gas, will be talking about 6 7 the weekly petroleum review, so you'll get some more information about that. 8

9 Jake Bournazian did a presentation on time limits on confidential data. 10 What you recommended is that we ask various energy 11 groups how they feel about reusing their data 12 13 after a specific time period, and then we should listen to what they say and then decide 14 whether or not we want to set a time limit for 15 releasing data. You also suggested providing 16 company-level data in the data enclave for 17 researchers. We did canvass some electric 18 19 power respondents and we agreed that we 20 probably won't set an agency-wide policy for these time limits because we couldn't get any 21 22 consensus out of anybody. So we're sort of

leaving things alone. But we will explore
 alternatives for expanding researcher access
 to survey data. That's a possibility.

4 And finally, these are some things 5 that have been ongoing at EIA. I just wanted 6 to give you an update. This is just sort of 7 an agency-wide thing. To help facilitate our work the agency has made a commitment to train 8 9 people in the use of project management tools 10 and the discipline. So we are now into our second cohort of people being trained which we 11 hope will make some improvements in 12 13 timeliness, data quality, management cost and all of the other goals that project management 14 has in that little triangle for those of you 15 that are familiar with it. This is a big step 16 because EIA had sort of unofficially used 17 project management. Everybody that's been 18 here awhile probably knows how to manage a 19 20 project, but this is a common set of tools and we think that will create portability among 21 our staff as well. 22

1 And then finally I know you've 2 heard about this before, the ISMS, the Internet Survey Management System. I just 3 wanted to briefly give you an update. 4 For 5 those of you that have been around awhile or have been here before this is again an agency-6 7 wide tool that the goal is to use this tool for appropriate surveys - and I will preface 8 9 this with appropriate surveys - to collect in 10 an online web environment. Now not every 11 survey that we do at EIA is appropriate to 12 that, but for those that are we are developing 13 a schedule, rolling those surveys in and with the idea that it reduces respondent burden, 14 there's editing at the source, there will be 15 efficiencies, a common way of doing things. 16 17 So we have made great progress and the plan right now is - and I'm leading up 18 this effort. I have a vested interest in this 19 20 April 20 is the target date for one. 21 deploying the very, very first survey and it 22 will be the bio-diesel survey that you'll hear

about later today in this web environment. 1 So 2 while we've done a lot of planning and meeting, I'm convinced that there will be a 3 lot of lessons learned from our first survey 4 5 roll-in that will improve as we deploy other surveys. The next two to go, we have our 1605 6 7 greenhouse gas survey and electricity, the 826 survey for electricity. So that's the plan. 8 9 Okay. I think that's it. I'm happy to take 10 questions about what we've done over the past 11 six months if anybody has any. 12 MR. MELENDEZ: I've just got a 13 quick question. 14 MS. BROWN: Why don't you - can 15 you say your name? 16 MR. MELENDEZ: Sure. Israel Melendez. My question is with respect to 17 This is a great presentation to give 18 process. feedback to the group. Do you have, say, a 19 20 database or spreadsheet that's posted to keep track of all of these? Because there are 21 22 obviously some things that were

recommendations last meeting, but they haven't 1 - some of them haven't been implemented and 2 they will be implemented in the future. 3 And I was wondering how do you track all of that? 4 5 MS. BROWN: Well, that's a good -6 no, we - let me. We don't have such a 7 spreadsheet. What we do have is we have a recording of what goes on here so we know -8 9 and we do a summary at the end of what you 10 said and what our response is later. But do 11 we keep track of that in a spreadsheet? No. 12 Could we? I mean we probably could, and it's 13 probably a pretty good idea so we can see. Because when I started this and said that we -14 it's not that we don't do things, it takes 15 And you're absolutely right, there 16 time. could be a recommendation from a year ago that 17 we don't act on until a year later or make 18 progress on till a year later, and that would 19 20 be one way. We could update it on a regular 21 basis and let you know what's happening. 22 Would that be MR. MELENDEZ:

1 available to the members? 2 Sure, if we do it. MS. BROWN: If you do it. 3 MR. MELENDEZ: I'll add this as a 4 MS. BROWN: 5 suggestion by the committee of things we can I think that's a doable one, and 6 do. 7 certainly we can probably create a website with you guys having access to it. It should 8 be no problem. While I have - any other 9 10 questions? That's a great suggestion. While I have the floor I just 11 wanted to say one thing. This is my third 12 13 time doing this. The first time I came in it was about three days after I got here. This 14 is my second full time of being involved. And 15 I want to in-front while people are here 16 personally thank Alethea. Alethea, I don't 17 think people realize how much planning goes 18 into something like this. You guys are here 19 20 and sort of it's all happening, but believe me, and after having sat through this for the 21 22 third time now, there's a lot of planning that

goes on, you know, whether it's your 1 2 accommodations working with ASA, or you know, travel arrangements, or the agendas, or things 3 like this suggestion, or getting the dinner 4 5 reservations, it's amazing what Alethea does behind the scenes. And she's a committee of 6 7 one, although I will say that the SMG staff and others at EIA are very - and I want to 8 9 thank all of my SMG staff here - for being so 10 supportive, but it's incredible. And my personal thank you Alethea. 11 12 (Applause.) 13 MS. BROWN: If there aren't any other questions I'll turn it back over to Ed 14 and we can go to next. 15 16 DR. BLAIR: Okay. We're running a bit early, but we'll proceed to our next item 17 on the agenda, and that would be Ron 18 Wasserstein giving us a presentation on an 19 inside view of ASA committees. 20 21 MR. WASSERSTEIN: Thank you, Ed, and I want to thank Alethea and Renee and 22
1 Stephanie for inviting me and for their help 2 with this. I have to say though it feels a little bit like showing up at a party to watch 3 the NCAA Final Four and giving the lecture on 4 5 the subtleties of NCAA recruiting rule compliance. So it'll be probably about that 6 7 level of excitement and it'll be directed to the committee mostly. So to the gallery, you 8 9 know, if you brought your Blackberry, this is the time. 10 11 (Laughter.) 12 But I have been MR. WASSERSTEIN: 13 asked to talk a little bit about committees within the ASA and how this committee fits and 14 so on, and I will try to do that as 15 expeditiously as possible so that you can ask 16 questions if you can remember what they are by 17 the time I'm finished. We have a lot of 18 committees at the ASA. 19 As far as I know, I 20 talked to my executive director colleagues at other associations and we have way more than 21 22 others. And I know we have a lot because I

1 try to connect with all of them. And so we're 2 heavily dependent on volunteers in the association. And I was a volunteer for ASA 3 4 for much longer than I've been a staff member, 5 so I'm very concerned about keeping volunteers happy and making sure that people feel like 6 7 they're using their time in a way that they feel is appropriate and important. And that's 8 9 especially important in committees, and I'll 10 talk more about why that is in just a little 11 bit. 12 So as a reminder, the charge of 13 your committee is to consider energy statistics as they relate to energy policy 14

analysis and the framing of a comprehensive 15 energy data system, and to promote to the 16 greatest degree feasible the integration of 17 energy statistics with other statistical 18 programs and with existing bodies of national 19 So you'll observe in there that 20 statistics. the letters "EIA" don't appear anywhere in the 21 22 charge, okay? So you are historically and

Page 39 very strongly connected to the EIA, but your charge is broader than that. And so when I think about broadening that charge or activities, one of the things that comes to

think about broadening that charge or 3 activities, one of the things that comes to 4 5 mind to me is that one of the things that you could do is to recommend to the ASA board that 6 7 it make an official statement or take an official position on some statistical matter 8 9 related to energy statistics or energy policy. And I can talk more about that a little bit 10 later on if you wish, or I can certainly fill 11 you in on the details of how you go about 12 13 doing that on another occasion. But I sure invite you to think about that. 14 And of course, another important activity that 15 committees can do is to submit proposals for 16 invited sessions to joint statistical 17 meetings. Many of these invited sessions that 18 are set up by committees turn out to be very 19 20 qood sessions. One of the things I've observed 21

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22 from talking to ASA committees over the past

year and a half or so that I've been onboard 1 2 is that committees sometimes feel that they have to just sit and wait for something to 3 4 come to them as opposed to being able to be 5 proactive on things. And that's certainly not 6 the case. You are absolutely able to take 7 initiative and you're encouraged to do so, but within I guess the confines of sort of three 8 broad constraints. One of course is your 9 10 committee charge. So the initiatives you take obviously would be within the - what you 11 consider to be the scope of your committee's 12 13 work. We'd ask you to consider the ASA Strategic Plan when you are taking initiative 14 as well, and that's available on our - on the 15 ASA website, and it's a quick read. 16 It's not like maybe some strategic plans that you've 17 dealt with at some point in your life or 18 another. Probably everybody has had at least 19 20 one bad strategic plan experience. And then finally we take this initiative, we'd want to 21 22 make sure that through the ASA's committee

structure and so on that we kept in touch
between staff and board and committee so that
if you were taking an initiative that might
also synch up with the activities of some
other committee or group working within the
association that we could make sure that you
were working in tandem.

A little bit of history - I 8 9 promise to be very brief - on ASA committees 10 that work with agencies. There are two others 11 in addition to yourself that really work closely with - are specifically set up in 12 13 fact, we're set up to work closely with federal statistical agencies. 14 The Committee on Law and Justice Statistics works closely 15 with the BJS, and then there's the Census 16 Advisory Committee. The ASA has had a 17 longstanding role with the Census Advisory 18 Committee professional associations. Now that 19 20 latter one is particularly well-defined and 21 it's just part of the Census Bureau's overall 22 program and strategy for working with advisory

1 committees. But the Committee for Law and 2 Justice Statistics sometimes struggles with similar issues to what Stephanie and Renee and 3 Alethea raised to me about this committee in 4 5 terms of just being - feeling certain about the work and the direction of the committee. 6 7 This committee and the Committee on Law and Justice Statistics both appear to have been 8 9 formed at some point because ASA leadership either saw or learned of the need to provide 10 some sort of assistance to the agency. And as 11 you probably know, this - I'm not sure I've 12 13 traced it all the way back, but this committee goes back to at least 1985. Nancy, longer 14 than that do you suppose? Okay. I certainly 15 saw minutes or whatever back to 1985. 16 The like most committees everywhere, certainly 17 like the committees within the ASA, the 18 success of the committee depends heavily on 19 the skill and interest of the chair. 20 That's how committees work, but of course it also 21 22 depends on members who have a commitment to

the work of the committee, and this committee 1 is very much to be commended in that regard. 2 However, the primary difference between this 3 committee and the other two I mentioned, and 4 5 the 47 or so other ASA committees depending on what you count - I'll talk a little bit more 6 7 about that as well - are unique in that other ASA committees generally tend to be inward-8 9 facing. They are pointing towards the association in some business or issue of 10 direct importance to the ASA itself, whereas 11 these three committees, yours and the two 12 13 others, are pointed outward and generally working on matters of an agency policy or 14 external policy in some way, shape, or form. 15 And so the consequence of my previous two 16 points is that sometimes it would be easy for 17 committees like that to lose their way because 18 they're an ASA committee, but they may not be 19 20 as connected with the ASA because they're facing outward rather than in. And so when 21 22 that happens it's certainly - it's an

organizational problem. It's not a committee problem, it's the responsibility of the ASA and its leadership to guard against that, which leads to my next comment, very briefly, about what the role of the ASA is with your committee, committees in general, and especially board and staff.

The first statement is obvious. 8 9 It's important for committees to stay in touch with the staff and board. 10 While it's obvious it's also not trivial. There are over 50 ASA 11 committees and that doesn't count at all the 12 13 numerous other committees to which the ASA 14 makes appointments and we have representation. There's 20 or so of those as well that we need 15 to stay in contact with as well. 16 In the current committee structure you - each 17 committee has a representative to - or a 18 liaison to the Committee on Committees, a 19 20 dreadful and perhaps most bureaucratic 21 sounding possible name ever. We think we are 22 going to be able to part with that soon. And

so if you have concerns, problems, success 1 2 stories to share, reach out currently to your committee liaison which is Al Tupek. We are -3 4 as long as you've heard of him. 5 MS. BROWN: I know who he is, he's 6 in Census, but I don't think anybody here has ever - well, maybe. He's never come to one of 7 our meetings. 8 9 MR. WASSERSTEIN: All right, 10 because typically the liaison comes at the meetings at JSM, tries to hook up there. 11 We're working on a new organizational 12 13 structure that will not have a Committee on Committees and will have more direct 14 connection between the committees and the 15 board so that in fact each committee would 16 have a direct line to a board member. We hope 17 that that will facilitate communication. 18 That's in the works and probably is likely to 19 20 roll out for next year. 21 There's just a couple of other 22 things that I was asked to talk about. I'11

do those briefly and then I'll be glad to 1 answer any questions that you might have about 2 these remarks or anything else related to the 3 ASA that I could help you with. First of all, 4 5 I was asked to talk about sort of what my experience is with regards to other committees 6 7 regarding the number and length of meetings. You have a very serious committee meeting 8 9 structure compared to what many other 10 committees have, and I know that there are excellent reasons why you do what you do. 11 Ι 12 would say that a great many committees have 13 tried to organize themselves so that they can get their business done in one day. So at 14 most they have to come in the night before and 15 are able to fly out the next afternoon. 16 The way that's been most successfully accomplished 17 has been by having regular between-meeting 18 conference calls. There's several committees 19 20 that are very effective at this. They have a monthly conference call, it's set at the same 21 22 date and time every month, and it's one hour

1 no matter what. So everybody knows that 2 that's their maximum commitment is to be on 3 that call for one hour and then they're done. 4 And that's how they get enough business done 5 between meetings so that they can shorten the 6 meeting time when they are together.

7 I also wanted to mention, I was asked to talk a little bit about what some of 8 9 these other committees have done for the other The Committee on Law and Justice 10 agencies. Statistics has worked with the ASA office on 11 12 a grant from the BJS to provide summer 13 fellowships and small research grants. So the committee has accepted applications for the 14 fellowships and made recommendations to the 15 BJS accordingly. It's also helped administer 16 - work with the FBI to generate and evaluate 17 research proposals on a topic that was of 18 particular interest to the Bureau, and it has 19 20 advised the BJS on a variety of matters. The 21 Census Advisory Committee meets twice a year 22 for a day and a half - well, actually mostly

1 two days - at the Bureau and gets regular
2 updates from Bureau staff, but also does much
3 of what it sounds like you do too in terms of
4 providing - taking an active role in providing
5 guidance.

6 Then the last thing I wanted to be 7 sure to mention was that we are very pleased that we have the joint statistical meetings 8 9 here this year as we do every 10 years have 10 them either in Washington or Baltimore. And much to our surprise and delight with the 11 economy being what it is we have by far the 12 13 largest number of abstracts received for a JSM this year. We have over 400 more than the 14 largest previous meeting which was in Seattle 15 in 2006. So we did a quick little comparison 16 of this year and last year as to where these -17 what states had increased number of abstracts 18 19 over last year. You won't be surprised to 20 know that Virginia, Maryland, Washington, D.C., Pennsylvania, North Carolina are all up 21 22 like 50 to 100 percent depending on the state

in terms of numbers of abstracts submitted,
but somewhat to my surprise I think we're up
15 to 20 percent or something from California
as well. I assume that's grant money and not
state money in all likelihood. So those are
some highly stimulating comments and I'd be
glad to answer any questions.

MS. BROWN: Stephanie Brown. 8 Ron, 9 thank you, and I'm sorry that I didn't do a 10 more formal introduction. I'm really happy that you came here. There's at least one 11 other office director from EIA in the audience 12 13 here, and I think one of the things that we've been struggling with and why I was asking you 14 to come here, but when we have these meetings 15 we want to look for what I'll call meaningful 16 topics to discuss. And sometimes that comes 17 internally from EIA and things that we are 18 working on, but I guess I wanted to brainstorm 19 this with the committee a little bit about the 20 21 possibility of you guys bringing things to us, 22 things that you're working on that have

relevance to EIA. Some of you are economists 1 2 that deal regularly in the energy industry. Perhaps if you have graduate students working 3 with you, or you know, some special research 4 5 you're doing, what about the possibility of you preparing a presentation for us so we 6 7 could see what you were doing. Is that something that would be? Or you know, like 8 9 Israel said, you know, he wants to - he's here because he wants to see or make sure that the 10 information and recognizing the importance of 11 the information we're doing to the industry. 12 13 But if there was something you were working on that - something important to your industry, 14 if you could bring that back to us so we know. 15 Can I hear from the committee about this? 16 Ι mean, that would help us in preparing for our 17 meetings, and also it's open for discussion. 18 Do you guys still want to meet twice a year 19 20 for a day and a half, or do you want to change that in some capacity? And John Conti, the 21 other office director, feel free to chime in 22

here because I know this has been a concern of 1 yours about relevance of the material and the 2 value of what we can get from the committee. 3 There are lots of things I just threw out, so 4 5 feel free to comment. DR. BLAIR: I'm going to go ahead 6 7 and acknowledge Ed. I'm going to guess you're not responding directly, but -8 9 MR. KOKKELENBERG: Well, partially 10 I'm responding. I guess one of the questions I had for Ron was has there been a concern 11 12 that we are meeting too long or too 13 frequently? And I've been on this committee, I don't know, 10 years on and off, on for 14 about six years and then off and then on 15 again, and I was chairman of it years ago. 16 Ancient history. But I never found in that 17 period of time that the EIA wished we went 18 19 away. 20 MS. BROWN: Oh no. 21 MR. KOKKELENBERG: That they were 22 striving to fill our program with something

just to keep us entertained. They seemed to 1 have - since we're a utilized committee, I 2 kind of felt that if EIA wanted to utilize us, 3 we should be available to be utilized and that 4 5 was part of the volunteering that Howard was talking about. And when I was chair I 6 7 sometimes thought that the day and three quarters was too short for all the material 8 9 that EIA wanted covered. I've also been on 10 other committees which tried to do what you said, to meet very short, maybe two hours at 11 the JSM and then maybe one other time for a 12 13 half a day, and I found those committees less than satisfying for me personally because we 14 were not really getting into things. We were 15 kind of doing very superficial advice or 16 The - so one of the beauties of 17 analysis. this committee is that EIA keeps coming back 18 with some of the same problems that they've 19 20 worked on in between our meeting times and 21 giving us two days essentially to discuss them 22 and to look at them and to continue with

exploring the problems and trying to help is 1 2 quite useful. And I know, for example, when the NEMS was created and Mike had talked about 3 this, we were involved in an extracurricular 4 5 way too in providing an awful lot of help with the documentation of the NEMS and advice on 6 7 the various modules. So it seems to me that unless there is a compelling reason to shorten 8 9 the meeting time that - or EIA feels that we are underfoot, that this committee should be 10 considered a commitment to a couple of days 11 meeting twice a year as a standard drill. 12 13 Now, getting to that other idea, years ago we did have occasionally 14 presentations from the staff people, but it's 15 very rare. You're right, it's probably 16 something that may be a useful endeavor to 17 have if there is a committee -18 19 Appropriate -MS. BROWN: 20 MR. KOKKELENBERG: - set forward 21 something useful. 22 DR. BLAIR: Michael?

1 MR. COHEN: Just to - this is 2 going to cost you a little bit of money, so it could be ignored, but maybe expanding the idea 3 just a bit, maybe once a year to have a slot 4 5 where maybe not a member of the committee, but an invited person external to EIA who's doing 6 7 something we think is exciting that EIA should think more seriously about, an academic or an 8 9 industry person. We'd have to pay for their 10 airfare and hotel, so they could maybe stake out an hour and a half for somebody that we 11 think is doing some work we should be more 12 13 aware of rather than just keep it to members of the committee. 14 15 DR. BLAIR: Ron, you wanted to say 16 something? 17 MR. WASSERSTEIN: I thought I might just real quickly respond to Ed's 18 So just to be clear, there's no 19 comment. 20 concern on the board's part or on my part 21 about the length of the meetings. I was asked 22 to just talk about what some of the other

alternatives are. So if you go back to the 1 very first thing I said, the important thing 2 is for you all to feel that your time is well 3 4 spent, and as long as you're happy, then 5 that's my agenda. MS. BROWN: And I want to clarify, 6 7 I am in no way saying that we should change I'm giving you guys the opportunity to 8 them. 9 respond. There's at least three new people on 10 the board and I just want to make the most of 11 the time we have. That's our goal. John? 12 MR. WEYANT: John Weyant. You -13 sort of a disconnected comment. On the meeting frequency, I kind of agree with Ed, 14 but when Ron described what some of the other 15 committees do, if we could kind of go the 16 other way. And I could see a rationale for 17 having maybe one conference call, just an 18 email to help you with agendas and help us up 19 20 here, something like that. I mean, that would be - you know, we all do enough traveling that 21 in a one-hour conference call we would surely 22

1	be able to do that. So that may be too much
2	of an extra burden on you all, but it could
3	also be a high-leverage committee. Actually,
4	the one question I had for Ron was you didn't
5	say when the American Statistical Association
6	meetings were?
7	MR. WASSERSTEIN: Yes, it's the
8	first Sunday in August. So the second through
9	the sixth or something like that.
10	MS. BROWN: No, maybe the seventh.
11	I think the sixth is a Thursday.
12	MR. WASSERSTEIN: Yes, it ends on
13	that. It ends on that Thursday.
14	MR. WEYANT: The third thing on
15	committee member presentations. As some of
16	
	you know, Stephanie knows, John probably
17	you know, Stephanie knows, John probably knows, I did a little experiment in my
17 18	you know, Stephanie knows, John probably knows, I did a little experiment in my graduate energy modeling class where we
17 18 19	you know, Stephanie knows, John probably knows, I did a little experiment in my graduate energy modeling class where we actually have historically recently let people
17 18 19 20	you know, Stephanie knows, John probably knows, I did a little experiment in my graduate energy modeling class where we actually have historically recently let people actually run existing models. And this year
17 18 19 20 21	you know, Stephanie knows, John probably knows, I did a little experiment in my graduate energy modeling class where we actually have historically recently let people actually run existing models. And this year we actually did that, so we had three or four

we're still reading through the results. We
 could do something like that.

MS. BROWN: I would love to - I'm
sure John would like to see the results of
that. Absolutely. That would be a perfect
thing.

7 MR. WEYANT: We had some good results and some bad results, but we kind of 8 9 took - nobody was willing to tackle anything big and integrated, but we did have good 10 projects in the building and it is a 11 commercial building so transport - a lot of 12 13 interest in transport. In fact, we have now part-time at Stanford the shippers. 14 We get that next week. His whole thing is what'll 15 ship which kind of pushes the limits of what's 16 actually done in the module. 17

18 The other thing that occurred to 19 me from the energy modeling forum point of 20 view is we do kind of model comparisons, 21 almost all of which are somewhat relevant. So 22 it may depend on - in fact the DLA has been,

thanks to John, probably the most active 1 energy efficiency study we had coordinated. 2 We have a major study we're going to go public 3 with in June, the first week of June here. 4 5 You see the second week of June, of course that's not when the meeting is, but on 6 department transition scenarios. 7 So we're doing three parts, mostly global sessions 8 9 areas and EU, around the EU modeling already 10 done to develop EU proposal, and then a bracketing of - my heart and admiration goes 11 out to EIA because you actually have to follow 12 13 the bills. We decided we didn't want to do 14 that. In our structure we can't operate that quickly and effectively, so we kind of 15 bracket, you know, from the whatever you call 16 it now, the Bingaman-Spector side to the 17 McCain-Lieberman-Boxer, whatever that's going 18 to be called. Maybe it shouldn't be called 19 20 Waxman. The final thing is just because I 21

21 The final thing is just because I 22 just came from a National Academies study on

1 America's Climate Choice the last few days. One thing you could do for the next meeting is 2 get someone who worked on America's Energy 3 I did not work on that, but I do know 4 Future. 5 that there was a lot of EIA data and some marketing used in that. But that might be 6 7 interesting just to see how that team of outside people get together and stuff. 8 It's 9 really not by EIA standards really modeling. It's kind of numbers-rich, some clever 10 spreadsheets, but it is tied into some of the 11 EIA mainstream data. 12 Thanks. 13 DR. BLAIR: Steve? 14 MR. BROWN: I just wanted to mention, Resources for the Future is currently 15 working on a project to look at a variety of 16 different policies and kind of scoring them 17 for greenhouse gas emissions and energy 18 security, and then we're using them sort of as 19 20 - being done, NEMS work is being done by an 21 on-location. Now, I know John is familiar 22 with this because he was at the meeting a

couple of weeks ago over at RFF where people
 were representing some of their preliminary
 results.

MS. BROWN: 4 What you guys have 5 just described I think is exactly what we were thinking about, that there are certainly 6 7 things that you are involved in that would be of interest to the folks at EIA. And I'm not 8 9 sure how we - I mean, I heard it now, but I'm 10 not sure in a - we have to put in place some mechanism on a regular basis to find out what 11 12 it is that you're doing that would be of 13 interest to the committee. Not just what we're doing that's of interest to you and the 14 broader energy community, but it's a two-way 15 street here. So I hope that we'll be able to 16 - you know, Alethea and Renee and I will try 17 to come up with some sort of mechanism. Maybe 18 that's something we should be doing in a 19 20 conference call once a year, brainstorming 21 appropriate topics to bring up that you guys 22 are working on as well as us.

1 MR. CONTI: John Conti, EIA. We are very much intertwined, as you've heard, 2 with the modeling community, my office is at 3 least, both at the energy modeling forum as 4 5 well as efforts that are continuously starting up and ending as their specific issues go on. 6 7 I always see this committee as broader than the energy modeling frontier, although of 8 9 course it is the most interesting from my 10 perspective. This one has to deal with a lot more data issues. Most of the budget of EIA 11 has to deal with data, has to deal with 12 13 collecting it and disseminating it, so I'm always sort of questioning how much should we 14 focus in on the modeling in this setting 15 versus where we focus in on the modeling with 16 the rest of the modelers, whether they're at 17 RFF or gathering for EMF. Because certainly 18 this group appears to be a mix of both more 19 20 statisticians and modelers. So you know, we 21 could do more modeling things here, but there seems to be other fora for that. 22 So I'm

questioning you know, what do we bring to this 1 2 group from the expertise in those other groups, and how does that benefit EIA? 3 4 DR. BLAIR: John? 5 MR. WEYANT: A good point. I'm surprised that they hadn't actually thought of 6 7 that, but I do think maybe that does suggest a strategy in a way, the purpose. Those are 8 9 background issues that have a high data 10 output. One thing I didn't mention is we have several projects going on now. Patricia is 11 12 trying to use the RECS data. Often those are 13 allowed. It's amazing, but if only the 14 funding hadn't been cut up and the opposite. It should be expanded. So maybe things like 15 that you think the expertise here would be 16 more - going through what you would do with, 17 you know, a proposal, new generation discrete 18 choice techniques and so on. That side and 19 20 even some of the behavioral stuff you know 21 might get into that. So if EIA wanted to make 22 an argument that - not to cut off the funding,

1 in fact expand it, I think the power of this 2 committee through both what would we do with 3 the estimates once we got them, and for this 4 group collecting the data, data quality, the 5 whole statistical part of it is really what 6 are confusing people.

7 MR. CONTI: Let me just butt in for one second. John Conti again. I think 8 9 that's particularly relevant and that you 10 should bring that up when Howard's around the I think you know, after he's come back 11 table. 12 from being on his knees hopefully he'll have 13 some good words for us, and I think those good words might be in areas like that. So we 14 might have additional funding to expand our 15 data activities and maybe you could provide us 16 some insight as to how that money might be 17 best spent. 18

MS. BROWN: Howard will be around at lunchtime if not before. A couple of more comments, one with RECS. We are having a presentation on RECS this afternoon. You

1 mentioned that, right? 2 DR. BLAIR: Yes. Okay. We will have 3 MS. BROWN: The other thing, 4 one with this afternoon. 5 this is related to something that Ron said about one of the things that the committee can 6 7 do, and that's have a session at ASA, right? And we are having a session. Is Janice here? 8 9 Janice, do you want to come up and talk about that just for a second? We do, the committee 10 does - some of the committee have, and I 11 12 thought you might want to hear that. 13 MS. LENT: For this year's JSM this committee will be sponsoring a technical 14 session. It's on the future of the energy 15 situation and what EIA and other federal 16 agencies are doing to try to keep up with the 17 energy situation and provide relevant data as 18 things change. For example, the change from 19 20 fossil fuels to more use of renewables, something that we really can't predict because 21 22 we don't know which renewable energy sources

are going to become marketable in the future. 1 2 But the session is going to be on Monday morning, I think it's at 10:00 or 10:30, and 3 the speakers will be myself and John Elting of 4 BLS and Marshall Reinsdorf of EIA. 5 Marshall will address the issue more from a 6 7 macroeconomic standpoint, and John and I from the standpoint of federal agencies. 8 9 MS. BROWN: And Nagaraj is 10 involved in it also, right? 11 MS. LENT: Nagaraj is chair and Ed is the discussant. 12 13 MS. BROWN: All right, very good. So there is committee involvement with ASA. 14 MS. KIRKENDALL: This is a bunch 15 of random comments. One of them is that one 16 of the reasons behind the committee was we 17 always thought that the modelers should know 18 and identify data issues, in fact back and 19 forth between the data and the modelers. 20 Ι think EIA tries to do that, but maybe we're 21 22 not quite as good at it as we could be. And

then, you know, the data folks need to know how their data are used. We impact the data accuracy here too, so that's one of the reasons we got the committee sort of polarized on two sides, but there's a common ground that we all need to know about.

7 Ron talked about the history of this committee. It may be that the committee 8 9 was officially formed in `85, but there was an 10 ad hoc energy committee which was very much like this that was active before that. I know 11 12 it was going on. I came to EIA in 1980 so it 13 was in place in like `81. There is a history of the ASA energy committee available 14 somewhere. Alethea may know where it is. 15 16 MS. BROWN: Maybe John Paul. Calvin Kent presented on this two meetings 17 18 ago. 19 MS. JENNINGS: It's also on the 20 home page. 21 MS. KIRKENDALL: Can we get a copy 22 or a link at least to Ron so that he can see

1 it?

2 MS. BROWN: Alethea will take care 3 of that.

4 MS. KIRKENDALL: Thank you. And 5 then the other random thought was that I always thought that the idiom "justice 6 7 statistics" was sort of an interesting model because they do basically our advanced 8 9 So the committee doesn't do things program. 10 like we do, they don't provide advice to the agency, but they're a funnel for money from 11 BJS to fund research. So that's a thought too 12 13 is if we wanted to put some proposals out assuming EIA had money which was always a 14 challenge when I was there. And each of us, 15 we could take a look at grant proposals and 16 say which ones we thought were the best. 17 18 DR. BLAIR: Ron? 19 MR. WASSERSTEIN: A couple of 20 comments, and starting with the last point 21 which is excellent, Nancy. The caveat that

22 I'm sure that maybe Howard Snyder as a former

1 chair of the Committee on Law and Justice Statistics would give is that one thing about 2 having a grant program is that it's very 3 4 concrete, and so it's very easy to focus a lot 5 of energy on that, and over time that committee began to focus a lot of energy on 6 7 that to the exclusion of doing some of those other kinds of policy and recommendation 8 9 activities. So they've actually tried to move 10 back in the other direction, continue to address the grant, but tried to make sure that 11 they keep their focus beyond that as well. 12 13 I wanted to mention - go back to something I said early in my remarks about the 14 - about ASA policy statements and positions. 15 One of the things that we can do as an 16 association that and that you could help with 17 as a committee that government employees can't 18 do as individuals or whatever is to suggest 19 20 things that the board could speak out on. One of the things that I've heard a lot over my 21 22 years in the ASA is that nobody listens to us.

They don't listen to us as a profession or us 1 as an association, and to that I say over and 2 over again well then let's say something. And 3 4 then people may or may not listen, but they 5 certainly won't if we're not talking. And so we have been routinely now over the past year 6 7 and a half bringing to the board things about which we'd like them to speak out. 8 All 9 matters of policy that have a statistical 10 relationship at Friday's board meeting the board will consider endorsing the new edition 11 of the Purple Book, Principles and Practices 12 13 for Federal Statistical Agencies, something that - a step that the BSA has not taken 14 before and I think it's an important step. 15 So if you have ideas for that, individually or 16 collectively, that's something that would 17 help. 18 And then the other thing I wanted 19

20 to be sure to mention is that the board comes 21 to Alexandria three times a year. The 22 presidents come a day early and visit various

1 federal agencies and meet with statisticians 2 from those agencies. Later this afternoon the presidents will be meeting with a small group 3 of statisticians from BLS and NASS. They'd be 4 5 delighted to meet with the EIA statisticians and so on at a future point and I can work 6 7 with you to make that happen. MS. BROWN: We're not doing it 8 9 today though, right? 10 MR. WASSERSTEIN: No, no. We 11 definitely would plan well in advance. 12 MS. BROWN: Okay. 13 DR. BLAIR: Other questions, 14 comments? Walter. MR. HILL: Walter Hill. It might 15 even be too minor to mention, but there was 16 this presentation about the replica recently 17 that noted that the EIA was created in the 18 Department of Energy in the late 1970s and 19 then we - the ASA came on, became interactive 20 21 with the Energy Department quite soon Even this December that we had an 22 afterwards.

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1	made well, do you want to present something,
2	I thought well what could I present. I mean,
3	I have a presentation about a household survey
4	at JSM, but I see -
5	MS. BROWN: We do have a household
6	survey here. The RECS.
7	MR. IANNACCHIONE: That's what I
8	was hoping you'd say, Stephanie.
9	MS. BROWN: Yes, sure.
10	MR. IANNACCHIONE: I see my role
11	more as what are you doing and how can I
12	contribute to it.
12 13	contribute to it. MS. BROWN: This is Stephanie. We
12 13 14	contribute to it. MS. BROWN: This is Stephanie. We have a presentation this afternoon from Eileen
12 13 14 15	contribute to it. MS. BROWN: This is Stephanie. We have a presentation this afternoon from Eileen O'Brien, it's on the agenda, on RECS and I
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12 13 14 15 16 17 18 19 20	contribute to it. MS. BROWN: This is Stephanie. We have a presentation this afternoon from Eileen O'Brien, it's on the agenda, on RECS and I think that would be an opportunity for you to talk to her about what she might have that might benefit from your knowledge. That would be great. If we could do something here, you know, for her staff at another session, the
12 13 14 15 16 17 18 19 20 21	contribute to it. MS. BROWN: This is Stephanie. We have a presentation this afternoon from Eileen O'Brien, it's on the agenda, on RECS and I think that would be an opportunity for you to talk to her about what she might have that might benefit from your knowledge. That would be great. If we could do something here, you know, for her staff at another session, the next one, that would be great. That's the
convinced that each of you is doing something 1 in your work that's meaningful to what we do 2 or you wouldn't be on the committee. 3 You wouldn't have volunteered. You must have some 4 5 interests that relate to what it is that we're 6 doing that you could bring back to us, and not 7 just, you know, us doing a presentation for you. Not that we object to that because we 8 9 are continually doing work and there's a lot 10 that you're going to see today, a lot of good work going on, but I think it definitely 11 12 should be a two-way street here. That's my 13 thought. DR. BLAIR: Well, this is Ed 14 Stephanie, that last comment, I think 15 Blair. you're going back to Howard's presumption as 16 an economist that there's some sort of 17 rationality evidenced here and I don't know if 18 that's such a good assumption. 19 20 MR. WEYANT: Look at the stock market. 21 DR. BLAIR: I've been on the 22

1 committee, I think this is the start of my third year, something like that, so I don't 2 have the history that some people would have. 3 I don't know the last time the committee 4 5 considered what it does, the structure of what it does, how it makes itself valuable. 6 One 7 thing that does strike me is that it is an ASA committee. Ron, you mentioned that ASA is 8 9 involved with the Census committee, but my 10 understanding is that that's a Census committee, ASA recommends potential members, 11 but that it is a Census entity, whereas this 12 13 committee is an ASA entity. And then in theory this committee is loyal to ASA, but as 14 you said, you know, you work with EIA all the 15 time, in effect you serve EIA. 16 And my understanding is that in fact EIA provides a 17 grant to ASA to fund the committee. So in a 18 sense, EIA pays for the advice, pays for the 19 20 committee, and it's a reasonable question how 21 do you get value. And I hear at least two 22 broad things being put on the table today, and

that is what issues does the committee take 1 up, and I think this at least surfaced last 2 time, in our last meeting, a little bit of 3 4 discussion. Currently we take up issues that 5 EIA brings to the committee. And I think one of the ideas is in a sense one possible danger 6 7 you have here is insularity. And are there opportunities for EIA to have value if the 8 9 committee brings issues sometimes to EIA. 10 Sometimes if nothing else just have an open discussion session, what's going on, what are 11 issues that EIA people might want to look at. 12 13 John, at the last meeting you talked about behavioral energy, and I think everybody 14 around the room was going wow, we're not 15 thinking about that, you know. I'm probably 16 wrong about that, but you know, it just seemed 17 like is that something we should look at? 18 Who's looking at that? You know, when -19 20 what's the deal. So I think that's maybe the model for something like that. 21 And then the other issue I hear 22

being discussed, not so much but being 1 2 discussed is how the committee organizes and does its work. You know, a one-day meeting is 3 4 maybe cheaper than a two-day meeting. You 5 know, you save some hotel costs if nothing else, as well as, you know, potentially less 6 7 burden on the committee. And offline, an issue that I received from Stephanie prior to 8 9 this meeting is the idea of how soon in 10 advance EIA presenters provide their materials so that the committee can be reflective in 11 responding to them. One of the things I 12 13 mentioned to her is that I used to serve on the Census committee, though not representing 14 ASA, and there, the last session, you wrote up 15 - the various discussants wrote up remarks. 16 I mean, it was just bullet points, but you had 17 a written record of remarks. One thing that 18 strikes me in the summaries here is that the -19 20 oh, you said, we should look at this, we should look at this, and if you remember the 21 22 meeting you're thinking well, wait a minute,

I think there was this, this, also that, that, 1 that and the other, but the problem is with a 2 verbal discussion, you know, it's not 3 4 necessarily captured. I don't know if that 5 would be valuable, but I think in general maybe the time has come for the committee, for 6 7 EIA to talk generally speaking how do we do our work, what do we do, and are there any 8 9 ideas for how to improve value. I think 10 that's the issue that's being put on the 11 table. 12 MS. BROWN: Yes. 13 DR. BLAIR: Other comments? With that I - we have ASA committee discussion 14 which I presume has been taking place. We'll 15 We're breaking a little bit early, but 16 break. there's no point in reconvening before 10:45 17 since I assume our presenters won't 18 necessarily be available before 10:45. 19 So 20 we'll just have a longer break now and can talk offline. 21 22 (Whereupon, the foregoing matter

went off the record at 10:16 a.m. and resumed 1 2 at 10:48 a.m.) DR. BLAIR: Let's go ahead and 3 convene our next meeting. 4 We have a 5 presentation on EIA's new biodiesel survey by 6 Mary Joyce. 7 MS. JOYCE: I'm going to continue on a theme that we had this morning and Howard 8 9 Gruenspecht was here and he said - gave us some advice from his father's days in the 10 Army. My father always said to jump up first 11 and volunteer to peel the potatoes, because he 12 13 said nobody will ever volunteer to do that, but you should see what the other guys get 14 stuck with. So I quess I volunteered to talk 15 to the committee about the new biodiesel 16 survey, and hopefully I'm getting out of some 17 other onerous chore. Let me go ahead and get 18 my bearings here. 19 20 What I'm trying to do in this session is to first of all provide some 21 22 background on biodiesel and the general

purpose of the survey, and second of all, I'll 1 go through and describe a little bit about the 2 survey, and thirdly I will - hopefully we'll 3 have some time at the end to discuss some 4 5 related data issues. So these are things you 6 might want to think about as we're going 7 through the presentation. There are issues about how to measure biodiesel demand and how 8 9 to quantify biodiesel blending. Not too high-10 tech. So first of all, what is 11 Basically it's a synthetic diesel 12 biodiesel? 13 fuel that's made from vegetable oils or animal

fats, and in the U.S. it's usually made from 14 soybean oil or recycled restaurant grease, but 15 recently mainly due to some economic reasons 16 it's been - the producers have been expanding 17 and trying to use other types of fats and oils 18 to produce the fuel. Biodiesel can be used as 19 20 a substitute for petroleum diesel, either straight or blended with petroleum diesel, and 21 22 the industry has established a convention for

naming the blended fuels. And you will see 1 2 this in the form later. Basically you take the uppercase letter "B" and follow it by the 3 percentage of biodiesel that's in the blend, 4 5 so a B20 really stands for a blend of 20 percent biodiesel and 80 percent petroleum 6 7 diesel. Or in other words, an unblended fuel which would be 100 percent biodiesel would be 8 9 B100. 10 Biodiesel is primarily used as a fuel for on-road vehicles, but it also has 11 uses in other markets. Probably two of the 12 13 most important are that it can be used to power stationary diesel generators, and it can 14 be blended with home heating oil. And the 15 home heating oil market actually got a boost 16 in 2005 when the IRS decided that the blending 17 credits, the tax credits on blending for 18 biodiesel, did apply to the residential 19 20 sector. And it's important for us to from our perspective to look at these different uses 21 22 because we can't - like ethanol, we can't

assume that all the biodiesel that's being
 consumed in this country is actually going for
 motor oil, or transportation fuel.

4 Biodiesel has been sort of brought 5 to everybody's attention recently. We've all heard about some new policies and incentives 6 7 that will encourage the growth of domestic renewable fuels to displace our imports of 8 9 petroleum, and biodiesel also has been found 10 to have some environmental advantages. In particular, the EPA has noted that the blends 11 of biodiesel reduce three different kinds of 12 13 emissions. And so as a result of these sort of driving factors there's been a strong 14 growth in biodiesel production in the last few 15 years, and particularly in the construction of 16 production, biodiesel production plants. 17 And as recently as September of last year there 18 were 39 biodiesel plants under construction in 19 20 the United States, although I think some of 21 those have been put on hold with the recent 22 economy. But the actual production of

biodiesel is now large enough to have some
 impact on the whole energy picture,
 particularly in the transportation area. And
 it's big enough to warrant us putting it in
 the energy accounts that EIA puts together and
 publishes.

7 So a new survey was designed to meet a few different objectives. The first 8 9 thing we wanted to do was be able to respond 10 to an increasing number of requests that we were getting from customers about all kinds of 11 biodiesel data. These people were learning 12 13 about biodiesel through the media and stuff and so they were asking a lot of questions. 14 The second objective of the survey was to 15 fulfill an internal need that EIA had for 16 survey-based data on biofuels that would 17 conform to the definition of "primary energy." 18 And EIA now counts the biomass inputs into 19 20 fuels like ethanol and biodiesel as primary 21 energy production, primary energy consumption, 22 and then the consumption of fuel itself is

secondary - the production of fuel itself is 1 2 secondary energy. But in order to put out publications, and we have started putting out 3 publications with these data in them, but in 4 5 order to do that for biodiesel we've just had to rely on assumptions and estimates from 6 secondary sources. But the main objective of 7 the survey really was to comply with the 8 9 Energy Policy Act of 2005 which actually required EIA to collect biodiesel data. 10 And ^U 1508 of the Energy Policy 11 Act of 2005 said that EIA must collect the 12 13 following data for renewable motor oils. Ιt said we had to collect the quantity of fuels 14 produced, the quantity of fuels blended, the 15 quantity of fuels imported, the quantity of 16 fuels demanded, and market price data. And it 17 gave us sort of a catch-all category which 18 said if we decided we needed other analyses or 19 other evaluation we could collect that too. 20 Section 1508 specified that the data had to be 21 collected monthly, that they had to be 22

collected on a national and a regional basis, 1 2 but it didn't exactly tell us what regional classifications we needed to use. And it also 3 said that we needed to collect or estimate the 4 5 information for the five years prior to the implementation of this section of the Act. 6 7 And the Energy Policy Act indicated, and after some further review and evaluation EIA 8 9 determined that renewable motor fuel really 10 for all practical purposes meant ethanol and biodiesel, at least at this time. 11 And we 12 already had some survey-based data on ethanol, 13 but we had nothing on biodiesel. So that was one of the reasons for getting started on this 14 15 survey.

16 So with these objectives in mind 17 EIA developed the biodiesel production survey 18 which we're calling the EIA-22 survey, and so 19 I'm going to just describe what the survey is 20 like. And if you have a handout, there's 21 copies of the survey that should be at the 22 back of the handout. If you don't have a

handout there are some more on the table in 1 2 the hallway. So you might want to look at the survey forms as we go along. The EIA-22 3 4 survey is built in two parts. The survey is 5 built in two parts. The main part really is the monthly survey, what we call the EIA-22M, 6 7 and that's the ongoing survey that we're going to send out every month and we'll collect data 8 9 for the previous calendar month. There's also 10 a supplement to the survey, and that's called the EIA-22S, and that's designed to collect 11 annual data for the years 2006, `07, and `08 12 13 in order to fulfill that EPACT requirement of going back five years and getting historical 14 We decided to just - we opted for the 15 data. We felt comfortable with some 16 three years. data that we had for 2004 and 2005 that were 17 estimated from a Department of Agriculture 18 program that ended in I think it was early 19 20 2006. So we really just had a gap for 2006, 21 `07, and `08, so that's what this supplement 22 is designed to fill. And this is - the

1 supplement is a one-time survey. Most
2 respondents will fill it out the first month
3 that they fill out their monthly data and
4 they'll never see it again. It's a much
5 smaller set of questions, very much smaller
6 set of questions than the monthly survey.

7 As I said, EIA-22 is a production survey and the respondents are entities that 8 9 produce biodiesel for commercial purposes. 10 And it is mandatory for those entities to submit data on this survey. There are a few -11 we know that there are a few individuals in 12 13 this country who produce very small quantities of biodiesel for their own personal use and 14 they're not going to be required to submit on 15 This is a plant-level survey, so 16 the survey. some companies will be filling out more than 17 one survey. It's not - the industry is 18 structured now so that there aren't very many 19 20 companies who have more than one plant, but of course that could always change. But the idea 21 22 behind the plant-level survey is so that we

can understand the regional distribution of 1 2 the data. Right now biodiesel is produced in about - between 150 and 200 plants across the 3 United States, depending on how you count the 4 5 plants. That was a manageable frame size, so we decided we didn't need a sample and we 6 7 would just do a universe survey at this point. MR. COHEN: 8 Mary? 9 MS. JOYCE: Did I hear a question? 10 Yes. 11 MR. COHEN: How do you learn about births and deaths to the frame? 12 13 MS. JOYCE: Well, the frame is being drawn from the Environmental Protection 14 Agency list. Anyone who produces biodiesel 15 commercially or puts it into commerce has to 16 have a registration number from the 17 Environmental Protection Agency. 18 19 MR. COHEN: Any size? Any amount? 20 MS. JOYCE: Any amount. Any I'm not sure about these small ones 21 amount. 22 who produce it for personal use because

they're not really producing it in commerce, 1 but any amount, they have to have it. 2 So we got their list, and that list is updated 3 continuously, because anytime anyone wants to 4 5 enter in they have to get a registration. So that's where we're starting and we're getting 6 7 - we will get our births from there. Built into our system if anyone goes out of 8 9 business, they report that on the survey. 10 They report that to us and we will follow up I think they also have to 11 and find them. report that to EPA, but I'm not quite sure how 12 13 the EPA list may change on the deaths. Probably not. Monthly, yes. They supposedly 14 update their list weekly, but I'm not sure 15 exactly how that works. 16 So like I said, it's a two-part 17 survey, and it's a universe survey so let me 18 move on to the next slide. 19 I just want to

20 talk a little bit about how this data is going 21 to be processed. Stephanie mentioned this 22 morning that this will be the first survey

1 that's going to use the ISMS system. And I'm 2 not going to really talk about that, but I'm sure there are people around who can answer 3 questions about that system if you want to 4 5 know more about it. What it will have, the good thing it will have is it will have 6 7 editing and quality checks while the respondent is entering the data, and hopefully 8 9 that will speed up our processing of the 10 survey data. So our goal is to close out each monthly survey cycle after 45 days, because 11 we'd like to be able to publish monthly data 12 13 in a reasonable timeframe for our customers. Basically the survey will open on the first of 14 the month, the respondents will be required to 15 submit the data by the 20th of the month, and 16 then we'll spend the next 25 days doing non-17 respondent follow-up and finally making 18 imputations before we publish. And because 19 20 that's a very short period of time we decided to go ahead and have an annual revision. 21 So 22 anything that comes in after that for any

respondent that was imputed or any 1 2 corrections, there might even be corrections from an earlier months from respondents, those 3 will be held in a file until the end of the 4 5 year and then we'll go back and revise all the 6 months for that year. The responses on the 7 individual surveys will be aggregated and published monthly basically in a series of 8 9 tables that - on EIA's renewable web page. 10 They will also go into other EIA information projects such as the annual energy review and 11 monthly energy review. And they'll also be 12 13 used in conjunction with some other survey data that EIA is going to collect to answer 14 some of the Energy Policy Act questions. 15 I'm going to talk about that in a few more minutes 16 a little bit. 17

18 So the survey - again, you might 19 want to look at the survey as we're talking 20 about sort of the data items on the survey. 21 The survey questions were designed basically 22 from the perspective of measuring the inputs

to the production plant and the outputs to the 1 production plant, fairly simple concept. 2 Some of the data on there are collected really just 3 4 to give us a better idea of how the industry 5 and how the plants operate so that in the future we might be able to restructure the 6 7 form and get better data or know what we don't have to collect. In addition to the 8 9 production capacity data we collect data for 10 just a simple volumetric balance. We ask the producers how much biodiesel do they produce, 11 how much of that do they put into storage, and 12 13 how much do they sell out of the plant. There is a losses and adjustment item where any 14 other activity - if there's any other activity 15 going on at that plant, particularly importing 16 and exporting, if the producers themselves are 17 importing and exporting, it will fall into 18 this losses and adjustments category. 19 And 20 because we're trying to find out a little bit more about the operation from the plants we've 21 22 asked them to identify whatever - if they put

a number in that losses and adjustments 1 section, we ask them to identify - describe 2 what that is. So if they're importing or 3 4 exporting we should be able to tell that, at 5 least get some idea. If the number is very large and it looks like there's a large number 6 7 of imports, for instance, we will start collecting import data, or export data, 8 9 whatever, from the producers. 10 The type and the amount of the 11 inputs into the plant and the co-products that are going out of the plant have - effect the 12 13 economic value of the biodiesel that's produced there. And the main co-product and 14 it is a significant co-product is - of 15 biodiesel plants is glycerol and glycerine. 16 And because it has a marketable value itself 17 it can sometimes be used by analysts to offset 18 the cost, the production cost, of biodiesel. 19 So the data in these sections are important 20 21 mainly to our forecasters and to any other 22 data users who are trying to analyze

1 production cost.

2 MR. COHEN: Are the inputs ever 3 imported?

4 MS. JOYCE: Are the inputs - we're 5 not aware of that and we're not asking that. I'm just wondering if MR. COHEN: 6 7 there might be a seasonality to the production. Otherwise if you're stuck with 8 9 stuff that's grown here you kind of -10 MS. JOYCE: We may find that by 11 collecting the input. One of the things we want to do is to find out some answers like 12 13 that. If we find out that the types of inputs are changing over time, or the amounts, or 14 like you say, they're seasonal or something we 15 could expand it. Right now nobody's asked us 16 to find out anymore about the inputs other 17 18 than that.

19 The last page of the survey is 20 kind of the meat of the survey I call it, and 21 it was designed to collect much more detailed 22 information on the sales from the plant and to

help us to estimate a price like the Energy 1 2 Policy Act called for. So I'm going to go just sort of explain why it's designed the way 3 The first thing we're trying to do is 4 it is. 5 to understand how much biodiesel was going directly from the producers to the end user, 6 7 the end consumer. And so we - we know that there are some producers, particularly small 8 9 producers in rural areas that have a fuel pump 10 right onsite or delivered directly to their 11 final consumer. And that fuel never goes 12 through the petroleum distribution system 13 where we think most of the fuel goes. So we want to get an idea of how much that is, so 14 that's why we asked them to put their sales 15 volume in those two categories. 16 We also wanted to know, as I said earlier, something 17 about the final use of that biodiesel. And of 18 course, the producers probably don't have a 19 whole lot of that information, but we did 20 include a section E and we asked anyone who 21 22 reports that they sold directly to end users

to try to identify whether it was for 1 transportation use, particularly if it was 2 blended into home heating oil, or some other 3 And we're anxious to see how much 4 use. 5 information we can really get from that section. It'll tell us a little bit more 6 7 about what's going on, but not the final 8 answer.

9 We're also trying to find out how 10 much blending actually occurs at the production plant as opposed to somewhere 11 further downstream from the production plant. 12 13 And for the blending at the production plant we'd also like to know what's the average 14 But we didn't want to ask them how 15 blend. much B1 did you produce, how much B2, how much 16 B3, how much B4, and so on and so on, so we 17 asked them to report to us how much blended 18 fuel they sold and what was the diesel 19 20 content, the petroleum diesel content, and we'll just calculate the average blend that 21 22 comes out of a production plant.

1 So probably the question that we 2 struggled with the most in trying to design this survey was how to get a meaningful price, 3 4 how to get some meaningful price data at the 5 producer level. And one of the problems with biodiesel is there's not really a retail price 6 7 associated with the sales of biodiesel because most people are buying it as a blend. 8 Most 9 people are going to buy a B2 or a B5 or a B20 that's - most of the price is determined by 10 its petroleum component, and we wouldn't know 11 what the biodiesel price was. And of course -12 13 but since we had a producer survey we thought we would try to attempt to get something like 14 a plant gate price for biodiesel. And but 15 even that was a little complicated and partly 16 because of the blending issue, but also partly 17 because of the tax issue. And there are tax 18 incentives that are in place for producers and 19 blenders of biodiesel, but they're structured 20 in such a way that either the producer can 21 22 take the tax credit and lower his price

basically by what he's gained, or he can not 1 2 take it and let the blender downstream take it, in which case that would give him a 3 4 different price. So we knew if we just asked 5 for prices, for a straight price we would get a hodgepodge of prices that we didn't really 6 7 know what they would represent. We didn't know if they represented B100, if they 8 9 represented a blend, if they represented a 10 tax, you know, a price that had a tax credit, one that didn't have it, or one that maybe 11 they agreed to sort of split the tax credit 12 13 with the next person, the next distributor. So we decided on this sort of revenue per 14 gallon approach, and we decided to collect the 15 revenues and the volumes associated with them, 16 and come up with a price, and we asked them to 17 split that by whether to blend or not - and we 18 will know again the average blend - and 19 20 whether or not they took the credit. So that's what the EIA-22 21 collects. 22 What it won't collect is any

1 blending or biodiesel activity that goes on 2 downstream of the producer. And most biodiesel, because most biodiesel is being 3 sold right now as blend, is going to at some 4 5 point we expect to go through the petroleum supply distribution stream. And of course EIA 6 7 already has surveys that cover that stream, and so at the same time we've developed this 8 9 biodiesel survey, there's also been some 10 redesign to the petroleum supply forms in conjunction with it that will cover a number 11 of things, but in particular for our 12 13 perspective will cover some biodiesel activity that's going on downstream, specifically the 14 EIA-815 is being redesigned into the Monthly 15 Bulk Terminal and Blenders Report. 16 So all bulk terminals and blenders will be covered by 17 that report. It will collect data for 18 biomass-based diesel fuel and it will monitor 19 - not just for biodiesel, but for all fuels, 20 it will monitor the stock changes and the 21 22 amounts blended at bulk terminals. Basically

what they're going to count is any inputs to 1 2 the terminal of these - what are now, at this point after the production, are blending 3 components that come into a terminal and then 4 5 any of those that are input into a final product that's going out of the terminal. 6 So 7 what we won't know is the makeup of those final products that are going out, so we won't 8 9 know if all the biodiesel that went out was 10 blended into 10 gallons or if it was all - you know, if all the products that went out were 11 B2 or B5 or B20 or we just, we won't really 12 13 know that. But we will know how much biodiesel went into the fuel stream. The one thing to 14 note about this 815 survey is that it does 15 have a size cutoff, a size threshold. 16 So if the biodiesel is being blended at some very 17 small terminals we might miss it in this 815. 18 We're not sure. 19 Likewise, the 814 which is the 20 21 Monthly Petroleum Imports Report is also being revised and they're going to add, again among 22

other things, they're going to add biomass-1 2 based diesel fuel to the questionnaire. And this is a questionnaire that covers importers 3 of crude oil and petroleum products. 4 So at 5 this point we're not entirely certain whether that frame is going to capture all the 6 7 biodiesel that's being imported and exported. We'll know more I think when we see some data 8 9 coming out of it. 10 So that actually leads me to some 11 of the questions that we wanted to raise for the committee members, and we're hoping you 12 13 could help us with a little bit. I think - is it better if I - I'll talk about both 14 questions and then we can just sort of open 15 the floor for discussion. 16 And you can raise any question you want. The first question I 17 had is the Energy Policy Act ^U 1508 said that 18 we had to measure the quantity - we had to 19 20 supply data on the quantity of renewable motor fuels demanded. And since we don't have a 21 22 consumption-side survey, EIA will most likely

do the same thing we do for the other 1 petroleum products which is to use the supply 2 side data to estimate the biodiesel demand. 3 4 And basically we'll assume that consumption 5 equals the production plus the net imports less stock change. But for biodiesel there's 6 7 sort of some, you know, it's never easy to do these things. One of the problems we have is 8 9 there's missing data. For instance, we don't 10 have any exports data for biodiesel. The Census Bureau does collect exports of batch 11 and oils which includes biodiesel, but we 12 13 don't at this point have any way to split that and know exactly how much of that is 14 biodiesel. We're also - while we think the 15 16 814 will capture some of the imports, we're not sure we're going to capture all of the 17 imports with survey data, so we're not sure 18 we're going to have a gap there. And if we 19 20 want to do regional demand, then we probably would need some data on regional - inter-21 22 regional transportation of biodiesel, and I'm

not sure that we have - we certainly don't
 have that covered in the survey.

There's also this issue of non-3 4 transportation. Because the Energy Policy Act 5 says renewable motor fuels, and so how do we if we get a good fix on even what the 6 7 consumption of biodiesel is, we don't know we still don't know how much is motor fuel 8 9 used, how to split that between motor fuel use 10 and other uses, and we think that the home heating oil use is going to be kind of large, 11 so that could be a substantial - it could be 12 13 a substantial problem, but we're not sure at this point. So we were just looking to the 14 committee to give us some ideas or suggestions 15 on what we might do in that area. 16 I'm looking forward to that. 17

And the second question is the Energy Policy Act also requests that we provide data on the quantity of renewable motor fuels blended. One of the issues with biodiesel is that blending can really occur in

a number of places and it can occur actually 1 2 more than once. You could cut a B98 into a B50 and I suppose you could later cut it into 3 a B20 or a B10 or whatever. It's sort of 4 5 unlimited. So if we're trying to get a blending it's going to be a little bit 6 7 difficult. We do collect - of course we will have the blending that is done at the producer 8 9 on the EIA-22 and hopefully from the petroleum 10 supply surveys, the changes that have been made to the petroleum supply surveys, we will 11 have at least partially covered what's 12 13 happening and all the blending that's occurring in the petroleum supply chain. 14 But we believe that there are other places where 15 biodiesel can be blended. For instance, some 16 17 consumers, say you're a big transit agency, you might buy it directly from a producer and 18 blend it yourself, or some of it may be flash-19 20 blended right in the vehicle at the end of the So we don't - we should have, when we 21 line. 22 get the results from the 22 producer survey

and the petroleum supply survey we should be 1 able to compare them and see how big that gap 2 is, or at least have a good idea of how big 3 4 that gap is. But we still won't have coverage 5 of that gap. And we also - if we're going to piece together sort of the blending from some 6 7 of these other surveys we need to make sure that they're all compatible in terms of timing 8 9 and regionality, if they have the same 10 regional structure, they have the same So the question for the 11 definitions. committee really is just, you know, suggest a 12 13 good approach for how to measure the quantity of biodiesel that's blended. 14 So before I get started, does 15 anybody have any questions? I mean before we 16 start discussing it? Any questions? 17 MR. COHEN: Just - are you in the 18 field right now with the 22? 19 20 MS. JOYCE: Stephanie mentioned 21 this morning the target launch date is the 20th of this month. 22

1 MR. COHEN: So you have no idea 2 how much missing data you're going to be 3 facinq. 4 MS. JOYCE: Not until we really 5 see it. We've done a little bit of testing. They did go through the effort on process, so 6 7 we think, you know, some idea, but no, not specifically. 8 9 MR. IANNACCHIONE: A related 10 question. You had mentioned imputation for 11 proving missing data. Any ideas on how you would impute it? 12 13 MS. JOYCE: Well, the imputation system that's built now is really simple 14

because I'm not high-tech. Basically if 15 somebody doesn't respond to the survey we put 16 in last month's data. That's the simple one. 17 We do have a little bit different system for 18 the first month if they never report data, if 19 20 they never report data. We do have estimated capacity data for all these plants. We know 21 22 about what size they are and basically if they

don't report ever we'll look at that capacity 1 2 data and make some assumptions about how much it will be used and perhaps not an ideal, but 3 we're hoping there won't be that many that 4 5 never report the first time. But after they report they're stuck with - at least for now, 6 7 whatever they reported the previous month. We might change that to a seasonal thing. After 8 9 we get a year's worth of data we might change 10 it so we can go back and say what'd you put in March of last year, you know, if you're in 11 12 March. It's very simple unfortunately. 13 MR. HILL: Walter Hill. The question I have, looking at this yesterday was 14 how do you get the sample framed? It's look 15 like you have it coming from EPA -16 17 MS. JOYCE: Right. We started with -18 MR. HILL: - producers. 19 The other 20 question was the size. There may be - it 21 seems like there could be producers that are 22 so small that they're under your radar. You

said that probably isn't - because they really
 do have to register, but I thought later then
 you said that there could be these small
 producers out there.

5 MS. JOYCE: This industry really 6 at this point is dominated by small producers. 7 But that could change very quickly. There are a few large companies - I don't know if I can 8 9 name the names - ADM for instance, and 10 Cargill, that have a biodiesel production 11 plant. But even now their plant might be 12 small, but they are a big industry. And so 13 there's always room where that could change, but right now we think that it's dominated by 14 a lot of small producers. We did talk about 15 a size threshold and we might after we get 16 some data and see it, if we see that there's 17 a certain level beyond which they aren't 18 really contributing enough to the data, to 19 the, you know, if 90 percent of the small 20 21 producers are only producing a few gallons of 22 fuel, then we might make a size threshold

cutoff. But we wanted to go through at least 1 2 the first time and get everybody because we think if you add up all the small producers 3 that's going to be a lot of the big push in 4 5 data. But so we'll know more later. Does that kind of answer? 6 7 MR. HILL: You have no idea what the distribution is like? 8 MS. JOYCE: We do. 9 I don't have 10 it off the top of my head. We do because the biodiesel board does have a list of all the 11 12 producing plants in the United States and they 13 list the capacities there. So you could look - we have looked at it and - but you can look 14 at it and see where the small ones and the big 15 16 There aren't very many big ones, ones are. but they're producing - or they may be 17 producing biofuel. Any other questions? 18 DR. BLAIR: Ed Blair. I think we 19 20 might as well be doing discussion along with questions and I think obviously we'd like to 21 22 focus on your discussion questions, but if I
1 could ask just a quick background question. 2 Respond by the 20th of the month. Could they respond by the 10th of the month? 3 4 MS. JOYCE: Oh yes. They can 5 respond as soon as the survey - on the first of the month the answers will open. 6 7 DR. BLAIR: I understand. My question is what's the earliest date by which 8 9 you could demand response. 10 MS. JOYCE: Oh, I don't know. 11 DR. BLAIR: Are you getting pushback on that? Well, we can report 12 13 production pretty quick, but sales, you know, takes us awhile? Just from the point of view 14 you're trying to report within 45 days. 15 The faster you close it out the faster you can 16 17 report it. 18 MS. JOYCE: Yes. The only - I don't know what the earliest is we could 19 20 collect it. The only comment we got - we sent this out as a Federal Register notice for 21 22 public comment. We only received one comment

that said that the 20 days was too short, that 1 they could not, you know, would not have the 2 data available. So, take that to mean that 3 4 everyone else - you can take that to mean that 5 everyone else says 20 days is enough. I don't The reason for the 20 days is because 6 know. 7 it's in synch with the petroleum supply surveys. They also have a 20-day window. 8 9 Now, I think that's one of the things we're 10 going to find out, you know, but we did decide after that comment that since no one else had 11 the issue that it was probably going to. 12 13 DR. BLAIR: Any committee thoughts about these - I'm going to say imputation 14 issues, questions presented to us? 15 I just wonder if 16 MS. KIRKENDALL: you have any idea how much B100 or B98 is used 17 in consumption? Because with petroleum - how 18 much you get that, but it seems like 19 everything else is blended. 20 21 MS. JOYCE: You mean in total for the United States? 22

1	MS. KIRKENDALL: Yes.
2	MS. JOYCE: No and yes. I know,
3	that's a bad answer. Probably none. Probably
4	at this point none.
5	MS. KIRKENDALL: So you think so
6	far -
7	MS. JOYCE: Maybe a little bit.
8	Maybe a little bit. Most vehicles are only
9	warranted to use up to a B20. Buses and a few
10	other vehicles that have special warranty or
11	have special design are really the only ones
12	who might use - are likely to use a B100. Or
13	if you want to risk violating your warranty or
14	whatever. But so we think probably very
15	little. We used to measure that on our 886
16	survey because it used to be that you had to
17	have a specially designed vehicle to use B100.
18	Now they've changed that a little bit and we
19	used to collect those as alternative vehicles,
20	but we don't do that anymore because it's not
21	really worth it. But we were only getting
22	three or four vehicles at the time that were

1 using B100.

2 MS. KIRKENDALL: How about if somebody uses home heating oil. 3 Is that similarly constrained to require blended? 4 5 MS. JOYCE: I don't know. That's 6 a good question. I'd have to look into that 7 more. MS. KIRKENDALL: It should be -8 9 all the biodiesel. 10 MS. JOYCE: Right. 11 MS. KIRKENDALL: That way you 12 could estimate it. 13 MS. JOYCE: Right. Now, one issue - I mean, that's a problem with consumers. 14 The B98 stuff, that's kind of a funny issue 15 because B98 is really just an intermediate 16 blend so they can take the tax credit, really. 17 And so everything that's come - we think that 18 maybe everything that's coming out of the 19 20 biodiesel plant might be B100 and going into the stream, but we think it's going to be cut 21 22 down the stream. So I don't know if that

1 answers your question.

2 The - you DR. BLAIR: Ed Blair. know, you labeled blending with regard to 3 4 discussion when you labeled blending as a 5 problem, then on Discussion Question 2 the quantity of renewable motor fuels blended. 6 7 For policy reasons or however the law is written, are you being asked how many gallons 8 9 of final product are demanded regardless of 10 the content, or I mean is this a pre-blending or post-blending world we're living in? Does 11 it matter to anybody, or is it enough to 12 13 simply say this is how much biodiesel fuel went out, or was consumed? 14 MS. JOYCE: Well, that's actually 15 16 one of the questions is what did they mean when they said quantity of fuels blended. 17 That's the only direction. That's the 18 direction, quantity of fuels blended. And we 19 20 kind of interpreted - we interpreted that from two sides. It's how much biodiesel is being 21 22 blended into the petroleum stream, and I think

that's kind of what they were trying to get at 1 is because the stated purpose of the ^U 1508 2 was to monitor or track, better track the 3 renewable fuel standard. I think that was -4 5 something like that, the use of renewable fuels in the motor fuel supply. So that's one 6 7 of our questions and that's kind of where we're trying to track on the petroleum issues. 8 9 On the other hand, there were a lot of people and a lot of customers who want to know what's 10 the average - what blends can I buy out there. 11 What blends are on the market, how much of 12 13 this blended fuel is B2, B5. The marketplace seems to be converging on three or four, five 14 different standardized blends. 15 I mean, theoretically you can blend at any level 16 whatsoever, but it seems to be converging on 17 B2 which is sort of a premium diesel fuel, 18 being sold as a premium diesel fuel, and then 19 20 В5. B20, which is sort of the maximum limit 21 that most vehicles, and probably a couple of 22 So it's hard to say what's going to others.

happen, but people would like to know are we 1 just a B2 world, are we a B5 world? 2 Well, I may really 3 DR. BLAIR: profoundly misunderstand this, but it seems to 4 5 me that your life is just a lot easier if you interpret this as how many gallons of 6 7 biodiesel are being produced, how many gallons of biodiesel are being blended, being 8 9 demanded. And then if somebody later on says 10 well you know, see my concern is that consumers are being sold green biodiesel which 11 is really only 2 percent, and really it should 12 13 be 5 percent qualified for that, you know. Cross that bridge when you come to it, but it 14 just seems - unless I'm missing something, 15 your life is just a lot easier if you say how 16 many gallons of biodiesel are we talking 17 18 about. 19 MS. KIRKENDALL: Not a question. 20 Some of your comments have to do with what 21 consumers are actually buying, or how it's

22 provided to the consumer to buy. Has there

been any thoughts of revising the marketing 1 surveys to get detail on the biodiesel in the 2 market, or is that collected? 3 MS. JOYCE: I really don't know 4 from that perspective. We talked a little bit 5 about - just informally about the old 6 7 transportation consumption survey, but I haven't heard anything. But possible. 8 9 DR. BLAIR: Ed Blair again. I'm 10 going to need better statisticians, you know, Vince, Mike to speak to this, but is it 11 possible - would you have data sources 12 13 possible that with regard to your missing data problems - and I'm going to include your home 14 heating oil in the missing data problems on 15 the demand side - that you measure production, 16 have some sort of periodic survey of someone, 17 something that allows you to establish ratio 18 estimators and then just sort of occasionally 19 20 update the ratio estimators. Am I making any 21 sense to anybody out here? 22 This is Vince. MR. IANNACCHIONE:

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Yes, you could do that Ed. I think though what Mary's talking about just using the previous month's, or maybe some seasonal replacement from the same - if you have the prior data, that's a pretty common imputation tactic.

7 DR. BLAIR: Oh, I'm not worried 8 about missing it from a particular reporter. 9 I'm worried about not knowing how much is 10 dropping out into home heating oil, not 11 knowing how much is dropping out to export, 12 not knowing how much import is coming in, some 13 of these issues.

Mike Cohen. 14 MR. COHEN: One thing I'm worried about is this thing could be very 15 sensitive to the price of gasoline and to 16 other kind of, you know, weather conditions, 17 et cetera. So if you're going to do this on 18 a spotty basis like every six months or year, 19 20 I have no idea what dynamics you might be missing. So it would make me nervous to do 21 22 Though I'm not offering anything that.

1 better.

2 DR. BLAIR: You have to say 3 something.

MS. KIRKENDALL: Well, there's 4 5 only two of the plants so right now you can survey all of them, or you've got to refine 6 7 those to the process later as you see what's going on in the industry. I mean, a lot of 8 9 what they're trying to do is learn more detail 10 about what's going on in this market. MR. IANNACCHIONE: I think - this 11

12 is Vince - to really get at what's going on 13 downstream you have to sample stuff.

MS. KIRKENDALL: To go downstream.
MR. IANNACCHIONE: Yes.
MS. KIRKENDALL: And that would probably not this survey. You have other

18 surveys that you can look at to try to capture

19 some of that. This one is a nice, tight

20 survey that gets at a piece of the market that

21 you can get at, and then some of the other

22 things I think you just have to keep working

at it. Work with the Census Bureau to see if
 there's anything that they can do about
 splitting up the exports.

4 MS. JOYCE: Right. We have 5 actually initiated some discussion with them to see about splitting that out, getting it 6 7 separated. I guess it's a coding issue, getting a separate code for biodiesel. We 8 9 have the same problem with ethanol. I mean, 10 I'm really just talking about biodiesel, but a lot of these issues parallel what's going on 11 with ethanol. 12 13 DR. BLAIR: This is Ed Blair. I'd like to follow up on a comment Mike made. 14 Okay, so the easy way to measure this is to 15 measure it at the point of production. 16 17 MS. JOYCE: Right. 18 DR. BLAIR: But what you're charged with doing is estimating demand, not 19 production, and estimating blending. 20 It's not clear to me that that's really significantly 21 22 different from demand at the end of the day.

And you know, Vince has made the obvious point 1 that, well, if you want to know what's 2 happening downstream you have to measure 3 4 downstream. But that's a much more 5 complicated, much more expensive measurement process, so it seems to me the issue on the 6 7 table is: is there a way to get from this production survey which is kind of clean, not 8 9 that expensive, to impute, unless I'm missing 10 something. And Mike has made the point, you know, there's going to be issues with that 11 12 imputation. And so maybe a way to put the 13 question back is what are the possible issues with the imputation, and then work on solving 14 those issues. So he mentioned that relative 15 use of this could very much depend on the 16 price of petroleum, could depend on 17 seasonality issues. I don't know if this 18 stuff turns gelatinous or something like that 19 20 in extreme cold or whatever. Can you say what 21 the issues are, in a sense what the problems 22 are in terms of across time or across location 1 getting from upstream to downstream?

2 Estimating downstream?

3 MS. JOYCE: Oh. Well I hadn't4 really thought that through.

5 MR. COHEN: What's going to turn 6 the crank that this is going to go into cars 7 or people's homes? What's going to impact 8 that process?

9 MS. JOYCE: I think that's a good 10 question, and one of the issues that always is legislation, we don't know, and tax credits 11 and things like that which are changing all 12 13 the time. So the economics is part of it. The - physically I'm not sure if there are any 14 barriers to putting. There is this barrier of 15 what will work in your vehicle, and there is 16 a question about cold weather use of some of 17 these fuels, so there are some physical 18 barriers toward using the vehicle. I don't 19 20 know if there are physical barriers for using it as home heating oil. Did you want to -21 22 there are some questions I think in the

audience, so I don't know if you want to ask 1 2 those? DR. BLAIR: Use your microphone 3 from there. 4 5 PARTICIPANT: You had already hinted at this, but as ethanol is part of the 6 7 EPACT questions what is your data source for How are you handling some of these 8 ethanol? 9 questions with ethanol and the data there, and 10 how would that impact the approach for biodiesel? 11 MS. JOYCE: Well, it's interesting 12 13 because it's actually - ethanol has traditionally been looked at as a blending 14 component for gasoline, and so actually I'm 15 16 not the expert on that. Our petroleum people are really the expert on ethanol, but we do 17 have a production survey for ethanol which 18 similar to the - it does not collect, and we 19 talked about collecting, all the input stuff, 20 the feedstocks and things like that on the 21 22 ethanol side. It mostly just collects actual

production. They have talked about adding 1 this regional component. I know they talked 2 about that, trying to find out how much is 3 4 going from one region to another. The - what 5 they have is, as I said, they can assume all ethanol or everything that's labeled fuel 6 7 ethanol is going to transportation fuel. So they don't have that issue on the ethanol 8 9 side. A couple of the other issues - while a 10 lot of the issues are parallel, a couple of them are not the same, but they're also adding 11 to the 815 and the 814 ethanol stuff just like 12 13 biodiesel. I just didn't mention it. 14 DR. BLAIR: Can you come to the microphone, please? 15 Stan Freedman. 16 MR. FREEDMAN: Τ work at EIA. We've been working with Mary's 17 group going into the field and doing some 18 testing of the survey. We did some actually 19 20 design visits before they even constructed the 21 survey to get some idea of what was going on. And so to address Dr. Cohen's concern, what we 22

1 found out, and we talked to a very small number of people, like maybe seven or eight, 2 and they were very small producers, that the 3 price of biodiesel at least at the time we 4 5 were going out and talking to folks - this is when the price of all petroleum products was 6 7 higher than it is now - was very dependent on the rack price of diesel itself. 8 And what 9 some of the - and these tended to be small 10 operations, and so they would make biodiesel and hold it in the tank until the price of 11 diesel went up to offset their cost of 12 13 producing it, and then they'd load it on a truck and take it over to the bulk terminal. 14 And it might kind of get blended on the way 15 sometimes depending on who was picking it up 16 and that kind of thing. So it was our 17 impression that because it was a relatively 18 new industry with a lot of small producers, 19 20 that the economics were very dependent on what 21 was going on and very closely paralleled the 22 petroleum market. Some of the people even

said to us if you're interested in the price 1 2 of biodiesel this month, look at the price, the rack price of diesel and it'll be real 3 They couldn't give us an idea if it 4 close. 5 was 5 percent more, 5 percent less, but at this point it was not, you know, like a 6 7 separate industry that was competing. It was - yes. So that's - I don't know if that 8 9 directly addresses your question or not, but 10 at least at this point that seemed to be what 11 was going on, and that was about a year ago when we talked to those folks. 12 13 DR. BLAIR: We have another 14 question or comment from the audience. Hello, I'm Fred Mayes. 15 MR. MAYES: I'm with the same office that Mary's with. 16 Just wanted to make one point about the market 17 for biodiesel. There's an interesting 18 coincidence between the ultra-low sulfur 19 20 diesel that's coming through now and biodiesel because when they took the sulfur out of 21 22 diesel they also took out a lot of the

1 lubricant. And biodiesel is an outstanding lubricant. It's not the only lubricant, but 2 there is the possibility that B2 could wind up 3 being in effect your standard diesel just in 4 5 order to get the lubrication value and also possibly to satisfy some of the renewable fuel 6 7 standard credit. So we just won't know this until we collect data awhile and see how 8 9 things shake out. 10 DR. BLAIR: Ed Blair again. Biq 11 picture, Mary. Unless I'm missing something, 12 you want to measure production because that's 13 easy to measure, but you're charged with estimating downstream phenomena. You're 14 charged with estimating demand. Well, you're 15 either going to have to look where you dropped 16 the key. You're either going to have to 17 measure downstream demand, or you're going to 18 have to have some form of a model that allows 19 20 you to estimate the demand based on withdrawals from, you know, from production 21 22 inventory. Which is not insane. I mean, why

else would you send it out of inventory if you 1 2 didn't expect somebody to buy it? And this is not the sort of thing I think that necessarily 3 sits in downstream inventories for long, long, 4 5 long, long periods of time. You all would know that better than me. So now the question 6 7 is what does that model look like, and what would be the relevant variables that translate 8 9 production into demand. Answer those 10 questions, you'll have done the best you can and then periodically check the model. Again, 11 unless I'm missing something. 12 13 Well, I can see that our session has come to an end and we'll have the other 14 group be joining us. 15 16 MS. JOYCE: Thank you, everyone. 17 (Applause.) (Whereupon, the foregoing matter 18 went off the record at 11:45 a.m. and resumed 19 20 at 11:50 a.m.) 21 DR. BLAIR: Well, let's go ahead and reconvene and for the next half hour what 22

we have is summaries of the two preceding 1 sessions, the breakout sessions and additional 2 committee discussion. And Ed, you're going to 3 4 fill in for Cutler on summarizing? Okay. 5 Well, why don't we go ahead and reverse order and let Barb start us off on the biodiesel 6 7 session summary while Ed's getting organized. MS. FORSYTH: Okay. Well, our 8 9 session met on the New Biodiesel Survey. And 10 I'm not an economist, I don't know anything 11 about energy, so I'm just going to throw out some memory cues for the rest of the 12 13 discussants to pitch in when I confuse their The biodiesel survey is designed to 14 answers. estimate basically I think five quantities: 15 the quantity of biodiesel produced, the 16 quantity blended, the quantity imported, the 17 quantity demanded and then the price. And 18 it's a survey that'll be collecting these data 19 20 on a monthly basis and reporting out monthly 21 quantities and prices. And there's a 22 supplementary component to get retrospective

data for the past three years I guess. 1 But 2 that is the general purpose. And the agency had two questions for us. There are likely to 3 be various kinds of missing data, and I think 4 5 both the questions had to do with what do we do about missing data and estimating in the 6 7 absence of data. And the first is - the first question is what is the most effective way to 8 9 make use of supply data to estimate demand 10 since we won't have demand data directly, and the second question was how do we go about 11 estimating blends since some of them occur at 12 13 the producer, but blending also occurs further downstream and we don't necessarily know the 14 amount of it from the survey anyway. So those 15 are the two questions, how do we estimate 16 demand and how do we estimate blends. 17 And it seemed like the answers to both questions were 18 19 similar. If you want to measure it then 20 measure it, and if you want to estimate it 21 then either select an imputation or modeling 22 strategy and do it with careful eyes on

factors likely to influence the outputted 1 2 imputed or modeling results so that you can select an imputation or modeling strategy that 3 takes those variables into account and adapts 4 5 to them. So for example, if you want to well, and - I'm sorry, before I go on. And a 6 7 corollary to what a guest said, you know, either impute or model, is keep the survey 8 9 simple. The survey right now is relatively 10 simple. The questions are relatively simple, 11 how much did you produce and what types and 12 where did they go. Keep the survey simple and 13 use the statistics to overcome these complications, rather - or make the survey 14 complicated and make it more expensive. And 15 I think the discussion kind of oriented toward 16 the former, keep the survey simple and use 17 statistical approaches to address the missing 18 data issues. 19 20 DR. BLAIR: Very fine summary, 21 thank you Barb. 22 MS. FORSYTH: Additions? Yes, I

1 have lots of notes, but.

2	DR. BLAIR: Any quick comments on
3	that before we summarize the other session?
4	Okay, Ed.
5	MR. KOKKELENBERG: Quick question.
б	DR. BLAIR: Oh sure.
7	MR. KOKKELENBERG: I don't know
8	how to phrase it exactly, but let's argue and
9	ask the question. BTUs, how big is the BTU on
10	biodiesel, the BTU market? Or in terms of
11	gallons, or in terms of tons, or in terms of -
12	how big is this market?
13	DR. BLAIR: It's a question of
14	order of magnitude?
15	MR. KOKKELENBERG: One-tenth of 1
16	percent. Okay. So now you're mandated to do
17	these things by a number of congressional and
18	public interest groups, this production. But
19	that may play into how complicated the survey
20	should be in - to get all the other - other
21	99.9 percent. Even if this triples every
22	fortnight it's going to be awhile before it's

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going to be driving the energy economy. 1 So I would underscore your statement about keeping 2 it modest at this point. Doing it because you 3 have to do it, recognizing that the interest 4 5 groups and Congress is interested, and that's 6 what you're paid for. Recognizing that there 7 are other results also. MS. BROWN: This is Stephanie. 8 9 I'm sure Mary probably told the folks here 10 that this is a brand new survey, right? You mentioned that? First time, brand new. 11 Mary, 12 you need the microphone. 13 MS. JOYCE: Yes, I just want to 14 add in answer to your question about how big is the market. We are starting to publish 15 these data, and if you look at the Annual 16 Energy Review Table 10-3 and I think it's 17 Table 10-4, the Monthly Energy Review, you can 18 get an idea of that. But just - the 2007 19

20 number is 63 trillion BTUs for consumption of

21 biodiesel. That's the estimate for 2007.

22 MR. WEYANT: Actually, so this -

1 biodiesel I think fits in the congressionally 2 mandated part of it, is that right? So even the target which is for some future 3 production, that's still a really small 4 5 percentage which I think most people as kind of a stretch goal, is that correct? 6 7 MS. JOYCE: Yes, I think the target for 2022 is like 36 billion gallons, 8 9 and that includes both ethanol and biodiesel. 10 So I'm not sure how that compares to the 11 total. 12 MR. WEYANT: But that percentage 13 should give - is still probably only a percentage. It doesn't make the politics any 14 less. 15 DR. BLAIR: Ed, can we go ahead 16 and proceed with the summary of your session? 17 We heard 18 MR. KOKKELENBERG: Sure. a very interesting study about EIA actually, 19 20 and they talked about trying to model coal production, coal activity. The objectives -21 and coal mines. The objective here was to 22

look at technical progress, labor 1 productivity. They were concerned about 2 resource depletion as it affects the cost of 3 production, and trying to develop a 4 5 methodology for projecting labor productivity and how this might tie into regional issues on 6 7 productivity. The presentation was well received, but we had some issues. One of the 8 9 basic issues, I suppose, was statistical. 10 Now, there are questions that Steven brought up about stationarity of time series. And we 11 are looking at both time series and aggregate 12 time series in individual mine data. 13 There were problems with the Durbin Watson statistic 14 which indicated that the dynamics of this 15 16 model haven't quite captured correctly yet. And there's issues of frequency of data. Some 17 of the data is weekly, most of the data is 18 annual, although it used to be more frequent 19 20 and there was some issue about quarterly data as well. 21

22

One of the problems that they

discovered was that they were getting negative 1 coefficients on variables that they thought 2 should be positive. Now, if after they had 3 4 done adjusting the dynamics of these models, 5 Jim Wagner, AR processes, they still find these kinds of coefficients, then they're 6 7 worried they're maybe really not modeling a supply function, but modeling the intersection 8 9 of supply and demand, or maybe just the demand 10 function. And so some suggestions were made to use proxies to model the demand, such as 11 12 the price of electricity and electrical 13 reduction issues. The - another issue that came up and we were talking about was the -14 we've got a short run and a long run issue. 15 16 Market bond prices are very short-run and some of the analysis is done with that, but most of 17 the analysis is done with long-run issues and 18 how a plant may do on a short-run cost curve 19 20 is one of the issues of productivity questions 21 here, and it's not clear that we really - the 22 models that we've developed so far can handle

And particularly in terms of modeling 1 it. questions of economies of scale. So that was 2 discussed at some issue. Inventories and 3 4 their changes were brought into the picture 5 also by our comments. Some of the comments include coal is not coal is not coal. 6 That. 7 was the plant issue, it's not homogenous. And so this becomes like almost anything you do 8 9 with census-level or plant-level data. It's 10 very dirty data, and that doesn't have anything to do with coal. 11 The data has nuances that we don't pick up in aggregation, 12 13 and yet are important to the decision-making of the individual mine, in this case, as to 14 what it can do. 15 Some other issues that were raised 16 were we had a rather full discussion about 17 econometrics data, modeling mines, the issue 18 of substance fuels. The bottom line was I 19 20 think as we pointed out at the end, the objectives of the study had to do a lot with 21

22 labor productivity and we really didn't come

around to addressing that. And so the 1 suggestion was made that perhaps this should 2 be on the docket to be revisited at a future 3 4 meeting after they had a chance to look at 5 what we were talking about on this. Now with that said, Izzy, do you have any further 6 7 comments, you or John? MR. WEYANT: I just thought of 8 9 something totally different, but kind of it's reflective of one of the issues within EIA. 10 And so the question, was this analysis done 11 primarily to feed into NEMS or STEO or is 12 13 there a separate way? Because this seems parallel. 14 15 MS. BROWN: Phil? 16 MR. TSENG: Philip Tseng. One of the intentions of this exercise is help with 17 NEMS input assumptions. Some of the 18 assumption in terms of labor productivity or 19 20 capacity expansion need to be addressed in the modeling framework. And we want to understand 21 22 exactly how industry actually use market

1 information to make decisions.

MR. BROWN: I think that was the 2 case - something where I raised a concern 3 4 because it seemed to me that the analysis was 5 much better - did a much better job of capturing short-term phenomena than long-term 6 7 phenomena, even when we were looking at contracted parts. And so I raised a concern 8 9 about that. And I think there - I also raised 10 a possibility about how to think about it in terms of looking at individual mine data and 11 12 seeing whether there are these so-called high-13 cost mines that kind of appear and disappear and that you maybe have this underlying set of 14 mines that have a relatively constant 15 production and tend to supply the contract 16 And Philip indicated that they had 17 market. some data that would allow them to look at 18 that question. 19 20 MR. TSENG: Actually, we can sort 21 out those in and out coal mines, but we 22 actually also looked at the production

pattern. Some mines, production has probably 1 2 declined. Some coal mines are actually increasing production year after year. So the 3 4 trend is all over the place. But the total 5 number of mines in each region is decreasing. That's why we were making an assertion that 6 7 it's economies of scale. Those bigger mines tend to dominate in the marketplace. 8 9 MR. KOKKELENBERG: I have one 10 correction. I have called Jason many names, but his name is really Jason Worrall. 11 I'm sorry. I called him Randy, Randall and a few 12 13 other things I suppose. I apologize for that. DR. BLAIR: Ed Blair. I'd like to 14 15 ask a question about this. The - you have this negative relationship between price and 16 production, and without getting into it, one 17 thing I wondered about since I understood the 18 analysis to be across mines, I wondered if 19 20 basically it was the result of some sort of 21 endogeneity problem where the bigger mines are 22 more efficient and consequently they sell

their product at a lower price. The smaller 1 mines are less efficient, they participate in 2 special markets, you know, regional markets, 3 whatever, where for some reason they're able 4 5 to get a higher price. Maybe there's less 6 transportation bundled into it so the price of 7 their coal is higher, but that essentially it was an endogeneity problem, that it was not 8 9 price influencing production, but production 10 influencing price. And I'm going to need an economist to correct me on this one, but I'm 11 thinking that the solution to that is to use 12 13 instrumental variables of some kind so that we're not putting in, in a sense, their price 14 compared to everybody else's price, but their 15 price compared to what their price should be 16 given what else we know about them, if that 17 makes any sense to you, and whether that might 18 then clear up that problem. 19 20 MR. KOKKELENBERG: I have an observation. I wonder if mines are kind of 21 22 like vineyards and wineries in the sense that

you have a plant that cleans up the product 1 and rolls it into - and you take from various 2 mines, primarily from your own mine which has 3 an establishment or mine ID, but you might 4 5 take from some other mines when there's excess demand. You know, the demand goes up but are 6 7 small or in the area, and therefore they have their own mine ID, but they don't have their 8 own - shipping ID. What's the establishment? 9 Is it the mine and the beneficiating and 10 loading, or is it what? 11 12 MR. TSENG: Each mine arranges its 13 own system so that the reporting is - we have this EIA Form 7A. Each mine ID, the MSHA ID, 14 we use that to identify coal mines and each 15 mine reports production and the price they 16 So that's the way that that is 17 receive. structured. But I'd like to respond to Ed's 18 We actually ran simple correlation 19 comment. 20 using the cross-section panel data, time series panel, looking at the mines, and we 21 22 found, say for example Appalachia, northern

Appalachia. We see the correlation between 1 production and price is negative which means 2 the way we interpret it is that it is economy 3 of scale. Larger mines will have lower prices 4 5 or lower costs. So that's one dimension. But. I think one of the - Ed's comment about the 6 7 negative price coefficient is we also ran regression, we aggregated all the production 8 9 in one region and we looked at time series data from `83 through 2007. So those are 10 aggregated. And we also received negative 11 price coefficient. And one of the comments 12 13 from Ed is because of the Durbin Watson statistics, we need to address some of the 14 serial correlation problems. We need to 15 identify, clean up so-called stationarity 16 issue, and that we intend to do right away. 17 18 MR. BROWN: Kind of following on your point. Certainly one - I don't know if 19 20 the data supports it, but one possibility would be to see how far the coal is 21 22 transported from that particular mine to the

power plants where it's used. And it might 1 turn out to be the case that some of the 2 higher cost, smaller coal mines are closer to 3 their electric utilities than the big, lower 4 5 cost ones. And it might actually be the case that there are some little coal seams in 6 7 Wyoming that no one bothers to produce because it would have to be transported way too far, 8 9 but if you have a little tiny coal seam that's 10 really close to an electric power plant, boy that - even though it's costly to produce, you 11 12 just carry it next door and transportation is 13 cheap so you could end up with sort of these high-cost small mines that are close to the 14 big power plants. I think you have 15 transportation data of some sort. 16 That points to a more complex project, but it would be 17 another thing that could kind of identify this 18 issue. 19 20 MR. COHEN: This might be an 21 ignorable comment like a lot of mine today, 22 but I'm just nervous that this number could be

very non-linear in many ways, and taking a 1 linear approach - it would be nice just to see 2 what's going on, take a little bit more of an 3 4 exploratory approach and a little more 5 graphical assessment of how these things are changing in time. And also, I don't have much 6 7 experience with regression trees, especially in kind of a time dynamic environment. 8 So 9 maybe we're talking about adding some variables which are differences rather than 10 the level variables, but I think just some 11 kind of - looking at just kind of molt 12 13 progression, looking at a different approach towards modeling might help eliminate some of 14 the ways these variables are interacting. 15 Ιt seems just a very complicated situation, and 16 molt progression is a wonderful tool that 17 answers a lot of questions, but there's some 18 other tools out there that could be looked at 19 20 without too much trouble. 21 DR. BLAIR: Did you have any you

22 wanted to -
1	MR. COHEN: Well, I think
2	regression trees is one obvious thing to look
3	at, which is kind of a very, kind of non-
4	linear approach to modeling a surface.
5	DR. BLAIR: Can you explain -
6	MR. COHEN: What a regression tree
7	is? You just - you take a bunch of - on your
8	covariates you kind of have a bunch of split
9	points, and so you keep kind of - keep kind of
10	splitting your data set into different pieces.
11	In each piece you're basically taking the
12	mean, conditional mean of what's left and if
13	the splits don't do anything you stop dividing
14	the tree in those points, but other places you
15	keep adding covariates, keep adding new splits
16	to the data to see if there's any kind of
17	additional. So there's no - when you're done
18	you don't have a formula, you have this weird
19	tree structure, but you get predictions and
20	sometimes the kind of if/then assessment of
21	these splits makes some sense to analysts when
22	they interpret, sometimes.

1	DR. BLAIR: Sort of like
2	regression meets automatic interaction
3	detector.
4	MR. COHEN: Yes, yes.
5	MR. KOKKELENBERG: So you're
6	essentially sequentially partitioning -
7	MR. COHEN: Yes. Yes, exactly.
8	MR. KOKKELENBERG: - to try to
9	estimate a coefficient within each partition.
10	MR. COHEN: Yes, exactly. But the
11	time dimension bothers me. I've never seen it
12	with that window.
13	DR. BLAIR: Other comments?
14	MR. MELENDEZ: Izzy Melendez.
15	Just mine are pretty empirical. Just
16	basically I've noticed that at least with
17	statistical organizations that they typically
18	get data, they analyze and then they say okay,
19	this is what we think based on information
20	we're getting. And I was just wondering at
21	least in Philip's case, have you reached out
22	to like the industry itself and you know, made

some phone calls to find out whether or not at 1 least with labor productivity dropping, any of 2 your observations, do you reach out into the 3 industry and you know, say confirm some of 4 5 what you're finding? 6 MR. TSENG: So far we just look at 7 the data. Actually, before we started running

regression analysis we started looking at the 8 9 data. We did some plotting, scattergram, and 10 we found some anomaly and we kind of addressed. We talked to in-house experts who 11 12 actually prepared the data and collected the 13 data and processed information. And a few of them have probably like 25-30 years of 14 experience analyzing the data. So they 15 understand the industry very well. 16 So to us as a modeler we talk to our in-house expert 17 first. We haven't reached out to the industry 18 vet. But we - I think when we reach that 19 20 stage we'll probably try to talk to some 21 people. 22 Stephanie. MS. BROWN: Just an

1 observation that this is a point in question of what you said your area of expertise is, 2 coming from industry that you would recommend 3 doing that, trying to solicit input from those 4 5 involved in the coal industry, right? 6 MR. MELENDEZ: Exactly. 7 MS. BROWN: Yes. A lot of times I go 8 MR. MELENDEZ: 9 to the website and I see electricity forecast, 10 and sometimes I guess there's a phenomenon 11 that's going on from an engineering standpoint, from a market standpoint, that can 12 13 help explain some of the drivers that you give in your forecast, and that's all I'm saying. 14 Well, it sounds like 15 MS. BROWN: 16 you're also saying that maybe our in-house experts aren't the ones - while they're in-17 house experts, I'm not diminishing that in any 18 way, shape, or form, but there's another side 19 20 from those that are working actually in the 21 field that we probably need to hear. 22 MR. MELENDEZ: Exactly.

1	MR. HILL: You know, sometimes
2	I've noted - maybe Ed asked this question, but
3	the AR scores are very large. Did somebody -
4	I wasn't at the session, but maybe somebody
5	noted? Often that means that - sometimes that
6	means that the variable on the right-hand side
7	is really equivalent to the variable on the
8	left-hand side. They're almost too similar.
9	MR. KOKKELENBERG: Well, I don't
10	think the issue - as was pointed out, that
11	very high AR scores are probably - I don't
12	think we can verbalize them, but we recognize
13	that. The dynamic issue, the data
14	displacement issue.
15	DR. BLAIR: We just have a couple
16	of minutes before the public comment period.
17	I'd like to invite Mary or Philip, did you
18	have any questions based on subsequent
19	conversation in here?
20	MS. JOYCE: No, I didn't have any
21	- too many additional questions, but Renee and
22	I were discussing a little bit the idea of

1 modeling demand from the data that we are 2 getting from the biodiesel part. So anything 3 you can suggest on specifics on that would be 4 wonderful.

5 MR. TSENG: I think we really benefit from the committee this time because 6 7 there are so many approaches to address the And I think because the data set is 8 issues. 9 very rich, we have cross-section and we have 10 mine-level data, so we can actually try a lot of different variations in terms of analyzing 11 the industry and then probably tease out a lot 12 13 of useful information. That's what we plan to do and I probably will get in touch with a few 14 of them in the near future because I took 15 note, but some of the stuff I tried. 16 I think I was still - I may still have some questions 17 and I'd like to continue this dialoque. 18

DR. BLAIR: Philip, can I say? Ed Blair. You know, you made the comment that well, you've aggregated the results so it's not necessarily just mine by mine. But again,

I need an economist to comment on this. You
 could still - I think you could still have an
 endogeneity problem and you know, that there's
 relatively simple fixes that would then fix
 your price coefficient. But I could be wrong.
 I usually am.

7 MR. TSENG: Actually, it's very If we are looking at causality 8 possible. 9 problem as in one of the discussion is the 10 model identification issue. Actually, Steve and Ed all mentioned approaches to look at 11 both the demand side equations and supply side 12 13 equations, and then let the system estimate those equation simultaneously. And then we 14 maybe would correct some of the negative sign 15 16 problems. Because if we can properly identify the system we may be able to capture the 17 coefficient more properly. 18

Another thing is this stationarity Another thing is this stationarity issue, or the dynamic issue of the time series data. I think we will try that as well. And I think once we get those, we probably will

have some more interesting results to report 1 2 next time. 3 DR. BLAIR: Other comments? At this time we are scheduled to 4 invite public comments. Is there any member 5 of the public who would like to comment? 6 7 Please. MR. JOUTZ: Hello. My name is 8 9 Fred Joutz. And I was listening to the biodiesel fuel discussion. A useful data set 10 that wouldn't be costly to collect would be 11 the flex fuel sales that manufacturers are 12 13 putting out monthly. You get some idea of the market size at least for that aspect of 14 transportation whether it's pickup trucks, or 15 what, the large semi tractor-trailer. 16 DR. BLAIR: 17 Mary? 18 MS. JOYCE: This is Mary Joyce. Just commenting on that. We do collect the 19 flex fuel vehicles, the ethanol flex fuel 20 21 vehicles on our 886 survey, EIA-886 survey. 22 The name of it? MS. BROWN:

Page 153 1 MS. JOYCE: It is the - the Annual 2 Alternative Fuels Survey or something like 3 that. Alternative Transportation Fuels Survey. And we did at one time collect B100 4 5 vehicles on that survey, but we weren't getting more than a handful, so you might want 6 7 to look there for more information. DR. BLAIR: Other public comments? 8 9 Well, in that case -10 MS. BROWN: Can I give a couple of lunch logistics? 11 12 DR. BLAIR: Absolutely. 13 MS. BROWN: Is that where we are 14 now? 15 DR. BLAIR: That's where we're 16 going. 17 MS. BROWN: Okay. Yes. I just want to - I assume that everybody on the 18 committee is going to go to lunch with us. 19 Ιf you don't know where it is that we're going we 20 can go as a group. We can meet downstairs and 21 22 give everybody restroom time, meet downstairs

in about 10 minutes in the lobby. But just in 1 2 case you get separated from us we're going to cross Independence Avenue, walking towards the 3 4 Monument. We're going to go up to 12th Street 5 and turn right, and it's the USDA building. It's the same building - if you were here last 6 7 year it's the same building although this time we know which side of the building to go into 8 9 if you're a visitor. We'll go in the Mall 10 side and we'll show our badges and sign in and whatever. Anybody not going so I know not to 11 wait for you downstairs? Okay, not going. 12 13 Okay. And then one more thing while I have Is anybody not going to your attention. 14 dinner tonight? Just show - raise your hands 15 if you're not going to dinner. One, two, 16 three, four. So four not going to dinner. 17 Okay. And we'll -18 19 MR. KOKKELENBERG: Are we still 20 going to -21 MS. BROWN: Georgia Brown's is it. 22 I apologize, it was my suggestion. I do

apologize, it's hard to please everybody, but 1 I was trying to find someplace that was a 2 little less pricey than the place we went to 3 last year. So this one was a little bit 4 5 better. I'm open to suggestions. If anybody wants to pick a place for the next meeting, 6 7 just send me a note if you know a place. I'11 be glad to have Alethea organize that. Okay. 8 9 So it's, what, 20 after. We're going to the 10 Whitten Building across the street at USDA and I can - it's 20 after, so how about if we 11 assemble downstairs for the 2-3 minute walk 12 13 over there at about 12:30? Does that give everybody time to get their stuff together? 14 Okay. See you downstairs in five. 15 (Whereupon, the foregoing matter 16 went off the record at 12:24 p.m. and resumed 17 at 2:15 p.m.) 18 19 DR. BLAIR: Our next agenda item 20 is a presentation on oil and gas program 21 agenda. Steve Harvey. 22 Thank you all so MR. HARVEY:

My name's Steve Harvey. I'm the 1 much. 2 Director of the Office of Oil and Gas. I've been here a little bit over a year, a week or 3 4 two longer than Stephanie has, and I very much 5 appreciate the chance to talk to you all a little bit about some of the things that we're 6 7 doing right now. Over the course of the year we have really become convinced that we need 8 9 to systematically look at some of the data 10 collections and management that we're doing really to review first what we have in our 11 portfolio, focusing on sort of the highest 12 13 priority, highest profile, most significant things first, either high-risk, or high 14 visibility, or some combination of both, and 15 really look at them pretty hard and figure out 16 what we need to do with regard to them. Over 17 time I think it would be really useful to 18 review the whole program and make sure we're 19 20 collecting what we need to be collecting, but 21 at least at this point it's going to be a little bit more reactive. We've got a sort of 22

established portfolio and want to start 1 2 working through that, all of which is in the context of why I'm glad to be talking to you 3 all, of looking to really forge I think a more 4 5 strategic interaction with the Office of Oil and Gas with you folks to look for your 6 7 guidance, look for your insights as we deal with some of these things. And so that's 8 9 really the context of why I want to talk about 10 two initiatives that we're going to be working with through the course of this year. And all 11 this wireless stuff is really impressive. 12 13 So the two collections that we're really going to take under review in a fair 14 amount of detail this year are first, the 15 Weekly Petroleum Status Report, or WPSR as we 16 It's an extremely complex product. 17 know it. It is in effect a balance of petroleum and 18 associated inputs and outputs pulled together 19

20 every week and published with a sort of
21 balance across that. It's based on six weekly

22 supply surveys, it's got information from two

1 weekly price surveys, and then models that 2 produce information with regard to U.S. production, exports, processing gains, minor 3 products, a couple of other things, and the 4 5 other sources often modeled from other sources like natural gas liquids coming from outside 6 7 in effect the division that produces this, the petroleum division. As a little bit of 8 9 background, the six supply surveys are samples 10 of the monthly reporting with regard to petroleum supply that attempts to cover the 11 entire universe as we know it. 12 And the 13 samples of the six surveys in December 2008 ran from 44 respondents on the low end to 404. 14 So weekly information from each of those. 15 The key data, these balances then, 16 are released in a data form at 10:30 on 17 Wednesday morning with some adjustment for 18 holidays or other things. And what's 19 20 interesting about that is that you can observe over time the effects on the marketplace at 21 22 10:30 on Wednesdays that come directly from

market responses to this report. 1 Now, I 2 haven't been collecting these, but it turns out sort of close to the high end last summer 3 somebody had - actually Doug had sent me this. 4 5 It's a little hard to read from a distance. This is a Bloomberg terminal response. 6 This 7 is 10:25-10:30 and what you see is really at the instant of 10:30 when our report came out 8 9 a jump of between 1 and 3 percent in the 10 trading range for crude oil on the NYMEX 11 futures market. So very, very immediate effect for trading right now. Actually, 12 13 trading above the next month's oil. So this was - this was trading on May 29, 2008, would 14 have been trading July oil, about information 15 that's lagged at least a week already in the 16 first place. But there just isn't much other 17 information about these kind of fundamental 18 balances available to the marketplace, and so 19 20 there's a big reaction at times. If it's 21 within expectations there can be very little 22 reaction, but very often there is a pretty

significant reaction at that point based on
 this particular product.

The other report I want to talk 3 about a little bit is what we tend to refer to 4 5 internally as the EIA 914 report. I think you all have talked about this report at times in 6 7 the past. It is a monthly natural gas production report. It's an estimate of gas 8 9 production, I say in seven states, in fact in 10 sort of seven regions, the Gulf of Mexico, major producing states, and the remainder of 11 the lower 48 states. We pull Alaskan 12 13 information from separate sources. It's based in general on what you can think of as an 85 14 percent cutoff sample. A little bit of 15 variation in terms of regions, but mainly with 16 regard to that it appears in general with some 17 variations that you pull from basically the 18 same frame as our annual report, our annual 19 20 survey of reserves and production, EIA-23. 21 Though those two surveys are really not managed in conjunction with one another at 22

all. I believe the 23 makes some comparisons
to some of this kind of data, but that's it.
This 85 percent cutoff sample then is adjusted
to deal with some sample issues, and I'll come
back to that in a few minutes because that's
one of the issues, one of the reasons we're
looking at that today.

Now, just as an illustration, 8 9 natural gas production information is of a 10 fair amount of interest these days. I saw this on my physical version in the New York 11 Times in the business section of less than two 12 13 weeks ago. Here's the online version which again, New York Times March 20 and the focus 14 very explicitly on volumes of natural gas and 15 the effect in the overall market because of 16 the volumes of natural gas. So this is an 17 issue certainly within the industry that has 18 a lot of focus and attention, but even more 19 20 broadly than the industry in terms of its effect on the overall energy picture in the 21 U.S. 22

1 Now let me back up a little bit 2 and go to sort of the general background in which I'm coming to talk to you about these 3 two reviews. And I'll tell my tales of woe to 4 5 start with that I think many of you are familiar with anyway. It's been a difficult 6 7 environment for the Office of Oil and Gas as for EIA for a long time, and you've really got 8 9 two kinds of issues. For at least the last 10 decade, extremely tight budgets compared to, with industry changes, additional need for 11 information collection. And the illustration 12 13 I've got on there is ethanol and in fact we're publishing - may have already put it up - a 14 new round of monthly petroleum reports that 15 are beginning to much better and much more 16 explicitly pick up ethanol in the overall 17 balance. We kind of did that on our own 18 nickel because we kind of had to get that done 19 20 and how to figure out how to do that, and that's been an interesting process to get that 21 22 done with very, very little additional

funding. But that's kind of the world that 1 we've been living in, that's what we've kind 2 of done. As a result over time you really -3 and we've talked about this. We talked about 4 5 this with Congress. You begin to see some deterioration in the quality of what's going 6 7 Cobble things together, do what you have on. to do in order to get out a product under a 8 9 reasonable period of time with some reasonable 10 capabilities. And you run that forward for the better part of the decade and there are 11 issues that you've got to start dealing with. 12 13 So we decided that we really needed to start systematically looking again at some of these 14 key big data collections. We actually started 15 that last year. Worked with SMG to do a 16 review of the Natural Gas Weekly. The Natural 17 Gas Weekly is a very simple survey compared 18 certainly to the Petroleum Weekly. 19 It's a 20 rifle-shot look at storage facilities. But 21 that review is very helpful. We found a lot 22 of new things, we made some changes in that

It was helpful even in the case of 1 process. a survey that was fairly simple and in fairly 2 good shape. So we decided even before our 3 Fiscal 2009 funding solidified and solidified 4 5 in a way that was pretty advantageous for us. 6 We've got sufficient money to actually invest 7 in these kind of efforts now. But we decided to go ahead and start this process, money or 8 9 not, that we had to kind of look at the things that were most vulnerable and deal with those. 10 But, in the world with money, the 11 12 place we chose to start again was the Weekly 13 Petroleum Supply Review. And the review really wants to focus on kind of four things. 14 First of all, the statistical methods and 15 16 documentation. Is there a way we could do 17 this better. Is there a way we could think about the information we're trying to convey 18 19 better. And then, are we explaining what 20 we're doing well? There are places where 21 certainly with the reaction of the marketplace 22 to some of this information. Do they

understand how much of this is collected 1 2 information versus how much of this is modeled information? Do they understand some of the 3 implications of that? Our best defense of 4 5 that is to make sure we've got clear documentation tied to our business processes 6 7 very tightly. That's one of those things that's hard to hang onto when you're operating 8 9 on the cheap for long periods of time. So we 10 wanted to start there. Second, the business processes. Again, they've been cobbled 11 12 together. Can we make sure that they're as 13 strong as they need to be? Tied to the information technology infrastructure. These 14 are some pretty old systems at this point. 15 16 They've been very durable systems, but they are pretty old and they may need some 17 attention as well. And then finally, there 18 are a whole set of dissemination issues. 19 20 Technology - information technology has 21 developed in many ways. The way we interact with the folks who use this information have 22

changed in many ways. I didn't mention it 1 2 earlier, but I had on the slide, this report is probably the largest single report accessed 3 through the internet. A large chunk of that 4 5 access is not by people clicking through, it's by robots designed to come in and pull that 6 7 information out of the system automatically, often into trading programs that then trade 8 9 automatically. So our customer base is a 10 little different, the needs are a little bit different, issues come up - integrated sort of 11 12 issues here with regard to the security of the 13 information. The information that's going to be published at 10:30 if broadly known could 14 convey advantages. We've had some issues over 15 16 the last year of early access that raised lots of political concerns about that. So there's 17 a lot of work that needs to be done to make 18 sure we've got this really premier kind of 19 20 flagship product as tightly managed as we want 21 to have it managed as we go forward. Now, to 22 do this we're using a process that's kind of

new I think for the office, but very much in 1 terms of an initiative that Stephanie has been 2 pushing which is to use a project management 3 approach to dealing with this. And there's a 4 5 couple of good reasons to do it. One, project management - tightly run project management is 6 a wonderful thing as a manager. 7 The other is we knew that we might have a real difference 8 9 in terms of how much money we had and 10 budgetarily over time, and I was looking for ways to be able to expand the capability of 11 12 spending money when we could and to contract 13 it when we didn't. And so breaking these kinds of efforts into a format that can be 14 managed sort of and expanded or contracted was 15 In this case our executive sponsor 16 important. is John Cook who runs the petroleum division, 17 very familiar with that area. We decided in 18 this case given the size and the complexity of 19 20 the project and the earliness in the process of using this method that we wanted a very 21 22 qualified project manager on the job. So we

actually hired as a contractor David Rice 1 2 who's fully accredited and he has the training in doing this kind of work. We've done a lot 3 of this work in the information technology 4 5 area. And then we've augmented some of our technical staff with folks from SAIC because 6 7 we're of course doing this review on top of producing this thing every week as well. 8 So 9 it really is kind of a balancing act that way. And then the idea is that we will 10 come back to you - this is one of the reasons 11 I'm here talking to you today - that we'll 12 13 come back to you in October with a set of observations and recommendations of where we 14 would like to go with this, and that that will 15 then turn into hopefully additional projects 16 consistent with funding as we go into 2010. 17 Again, it's very complex, there's a lot of 18 moving pieces in it, but we're trying to staff 19 20 and we've - in fact I was just reviewing the 21 project plan before coming up here, and the 22 timing is very much designed to be able to

come back to you all and to use you all as a
 way of getting some feedback with regard to
 that.

We switch now to EIA-914 and some 4 5 of the issues are a little bit different here. 6 As I had shown you recently and particularly 7 recently the importance of natural gas production information has been underscored as 8 9 the debate begins to continue of how much gas 10 is available. But in late 2008 we began to kind of get a sense that we might have some 11 problems in the performance of this, different 12 13 folks at different times, and those concerns began sort of bubbling up both inside and as 14 it turns out in retrospect outside. 15 Μv understanding is SERA put out an alert in late 16 2008 saying that our numbers were beginning to 17 get a little bit higher than they were 18 comfortable with and sort of put out a warning 19 20 on our numbers which I found out only in the 21 last couple of days. And so as a result 22 beginning to ask some questions. Well, as we

came to the end of 2008 and we began looking 1 at what was going to happen as we pulled a new 2 sample going into 2009, what popped out was an 3 4 extremely large discontinuity running from 5 December to January. And before I go in I'm going to show you and talk a little bit about 6 7 that today. It turns out that with some further research the discontinuity was not as 8 9 big as what I'm going to show you today, that 10 in fact there were some other methodological changes that were creeping in, we were able to 11 strip that stuff back out, and it doesn't look 12 13 as discontinuous, but it still raises some fairly serious issues. So these were the 14 numbers before we figured the other part out. 15 You see, this is Texas. These are billions of 16 cubic feet a day and months starting in 17 January `05 through January 2009. You see 18 this explosive growth in Texas. 19 This is one 20 of the big stories about natural gas, one of 21 the really interesting things going on in the 22 natural gas industry right now. And you can

see some things that make a certain amount of 1 Hurricanes come sweeping through Texas 2 sense. and you have an effect on production. So it's 3 not nonsensical by any stretch of the 4 5 imagination. The original discontinuity was on the order of 6.3 percent that didn't seem 6 7 to be coming from the underlying data at all. In fact, what's published is more on the order 8 9 of 1.8 percent down. And that seems to be 10 coming from the change in these adjustments that were put into place to help manage some 11 12 concerns about the underlying sample. Now, if 13 you can, and we're really peeling this stuff If you look at the actual out right now. 14 collected data from the sample that is the 15 same in 2008 and 2009, which is a very large 16 chunk of the total, on the order of 85 17 percent, so you have an 85 percent cutoff 18 sample kind of thing. Not random, but a 19 20 pretty big chunk. You actually saw a slight 21 increase in production in Texas. And so this movement down is clearly the result of these 22

1 calculations built around the outside to deal 2 with what was perceived as a problem in the way that the sample was handled in the past, 3 and I think our fix might have come back and 4 5 kind of gotten us on the back end. So very much ripe for looking at thinking about it a 6 7 little bit differently and handling it a little bit differently. Now, because this is 8 9 a pretty big deal, and I don't know if you all have seen it, but if you looked there was a 10 huge surgeon investment in drilling up until 11 the middle of last year, and that's really 12 13 come back down again. So people are looking very carefully for the inflection point when 14 the reduction in drilling will make this kind 15 of production start to drop off. 16 And we've just kind of sent them a signal that looks 17 like it's dropping off when we don't 18 necessarily believe that's true. Certainly 19 20 probably stabilizing and not on this path anymore. As a result, we felt like it was 21 22 very important and when this information went

out today, a couple of days late as we were 1 trying to pull it all together, we in fact -2 well, I should say, I talked about the 3 4 problems a little bit. We in fact recognize 5 that we've got to do some work on this to rebuild our confidence in what we're doing, 6 7 and we need to send as clear a signal as we could that there were some questions around 8 9 this. And so as a result today we put a 10 disclaimer on our monthly natural gas 11 production language, and in fact I printed it out from the site before coming up here. 12 It's 13 the language in the box there. I'm not going to go through it in a bunch of detail, but it 14 does point out the fact that there is a 15 discontinuity kind of issue with regard to the 16 methodology, that we will be reviewing that 17 and that we will be making adjustments at some 18 point to resolve that issue. Not - I'm 19 20 looking at Howard sitting over there - not a 21 position any of us want to be in, and 22 certainly the position we want to work

ourselves out of as quickly as we possibly
 can.

So quickly, the review scope in 3 this case is first of all to really review 4 5 what the current processes are and to document 6 them as clearly as we can. We need to make 7 sure we know what we're doing and that we can support all of those and make sure that that's 8 9 qoing. Second, to really review and assess 10 the methodology and these issues with regard to market coverage and the potential for that 11 to be a bit of a problem over time. 12 I'm also 13 asking that they look at the broader production program. Is it reasonable for us 14 to be operating sort of the monthly - is in 15 effect a different thing than an annual data 16 collection, or do we need to be looking at 17 that more programmatically to make sure that 18 they fit together in an effective way. 19 And 20 related to that is also the question that there are different ways of extracting 21 information about this, and several of them 22

have come up in this process. Data collection 1 is one way to do it. There are other ways of 2 getting at information about what's going on 3 4 productively in the United States, and we want to examine some of those. We've got the money 5 to be able to do some pieces of this. We can 6 7 look at pipeline flow information, contracts for pipeline flow information. There is some 8 9 work and some of the motivation for the 10 concern about where we were, but we can look at state tax data and in fact a lot of the 11 12 concern came with regard to forecasting state 13 tax data and that began to look very different than what we were collecting. But to me 14 15 there's an opportunity as we lay these pieces out to say, you know, maybe these different 16 sources of information give you different 17 kinds of information and that if we can lay 18 them out in a coherent way, if they start 19 20 diverging from one another that's an important signal that it would be good for EIA to be 21 22 developing, working on and then talking to

people about as we go forward. So then what 1 we'll do is identify options that could fall 2 into a number of those categories and try to 3 4 start implementing them as soon as possible. 5 I will say the other issue is - we need to verify this - but structurally this 6 7 approach to gathering this information seems to be working really well. The issues don't 8 9 seem to be coming from the data collection 10 themselves, and so the opportunity to use that part of what we're doing and apply it to oil 11 where we use much more antiquated means to 12 13 look at monthly production, and to look at more areas in the United States as the 14 Hainesville develops in Arkansas or some of 15 the other interesting shales in the Northeast, 16 are there more places that we can do this 17 rather than less? 18 We're also going to handle this as 19 20 a project. We're still trying to kind of pull that together. The executive sponsor of the 21 project will be Charlie Whitmore who's a SL 22

This is in part to deal with 1 reporting to me. 2 the fact that I have learned this week that John Wood I think may have talked to you 3 before is going to retire, and so we needed to 4 5 keep moving, and so we're going to put together the process to make that happen 6 7 otherwise. Our intention is to give you a report when you meet again in October, but I'm 8 9 going to tell you in all honesty I hope to 10 have implemented some changes by then because I sure don't want to live with that disclaimer 11 any longer than I have to, so I can't 12 13 guarantee to you that there will be a lot of opportunity at that time to give as much 14 feedback other than to decide whether you like 15 what we did or we didn't. But having said 16 that, I want to come back and kind of end on 17 this theme of strategically engaging more with 18 you all, and that can really fall to me I 19 20 think in a couple of categories. One is your advice which really is related to your level 21 22 of interest, the other is actual consultation

which is related to even more level of 1 interest as we're going to start launching 2 into this. If you all want to be very 3 involved, then again, we're really looking for 4 5 ways to stabilize and strengthen what it is we're doing and so many good strong viewpoints 6 7 is important to us that way. And then at very least we'll be reviewing this material with 8 9 you in October so you won't lose the story of 10 that. And that's what I wanted to talk to you 11 about. 12 DR. BLAIR: Thank you very much. 13 Discussant is Nancy Kirkendall. Okay. Well, I'd 14 MS. KIRKENDALL: like to - I'm really pleased to hear about 15 these initiatives. One of the things that 16 Harvey told me on the phone was that he thinks 17 that EIA needs to say what we do and do what 18 we say which I think is definitely the right 19 20 direction on both of these projects. They're both really different. The first one would be 21 22 petroleum - it used to be called the

statistics report, so that's probably what 1 2 I'll call it. That one, the methodology was developed in about 1983. I worked on it I 3 4 believe when I was a new employee at EIA. And 5 so that goes to show that it's probably time for a fresh look at it. Not that it's bad, 6 7 but the situation has really changed. The survey is much more important. It drives 8 9 markets now. Nobody would have thought that 10 that would happen when the thing was developed 11 that long ago. 12 MR. GRUENSPECHT: There were no 13 markets. 14 (Laughter.) MS. KIRKENDALL: 15 Yes. So its Some of the 16 importance has certainly changed. technologies is probably still fine, but it's 17 sort of interesting that the documentation for 18 the methodology was written in 1983. So, and 19 20 it's not clear that the people who worked on 21 the survey really understood the methodology 22 because the people who developed it moved onto

other jobs. So everybody tried to do the 1 right thing and continue doing everything 2 right, but you got new surveys, new data 3 4 elements added to the surveys. People did the 5 best they could to put things together when you had to change the software because the old 6 7 software was going away and you had to put it in a new system they recorded it. So there's 8 9 all sorts of opportunities for the 10 improvements and enhancements to the system. So I'm really looking forward to that. 11 It'll 12 be great to see.

13 The natural gas production survey 14 was much more recent. You can see the data only started in `85 - 2005. And we did work 15 16 on it, and part of the problem with that one was the frame data. Somebody in SMG did a 17 simulation study and they looked at different 18 kinds of sampling and it was just a challenge. 19 20 Probability sampling ended up not doing very well partially because you found all these 21 22 companies that changed drastically in size.
And the cutoff sample did just as well as - it 1 did better than anything. It protected you 2 from bigger errors. But if you can get a 3 4 better handle on the frame data, maybe you can 5 do something different, or maybe a cutoff sample is fine, but it's really great to take 6 7 a fresh look and pick a methodology and stay with it. So, that's - I look forward to 8 9 whatever we come up with that in October or 10 before. 11 DR. BLAIR: Other comments? 12 MS. BROWN: Actually I have a 13 question. 14 MS. KIRKENDALL: Stephanie? 15 MS. BROWN: For the committee, as 16 Steve begins this research project and he's seeking your advice, is there something that 17 you would recommend particularly that he look 18 Anything off the top? I know you haven't 19 at? 20 seen anything yet, but if there's some area 21 that you think that we should focus on, or 22 some type of documentation that would help you

that they should focus on? 1 2 DR. BLAIR: Vince may give an opinion. Vince? 3 4 MR. IANNACCHIONE: I think that 5 this may be just a question, or it may be a recommendation, but I look at the 6 7 discontinuity very often and I wonder about a margin of error. I mean, you just publish the 8 9 point estimate, or is there some indication of 10 how volatile things are? MR. HARVEY: As far as I 11 understand, and I think I do - I think I can 12 13 actually answer that question. I'm learning every minute on this one. We did not develop 14 any kind of error estimate or concern around 15 that that we discussed. And again, it would 16 be hard to do that I think given the current 17 methodology because there are these - in fact, 18 it's really trying to deal with the frames 19 20 issue and trying to deal with the movement of these companies within that I think does some 21 22 strange things. I think we've seen did some

strange things in 2008 pretty clearly and 1 2 would make it very difficult to do that. Now, that's again under the current methodology. 3 I will admit, I mean, my bias is to simplify 4 5 things and then be clear about where your uncertainty is as a general matter. And so I 6 7 think there may well be some opportunities to make corrections like that. 8 9 MR. IANNACCHIONE: Yes, some sort 10 of methodology where you have - it's between there's some upper and lower bound kind of 11 thing that would give you a little bit of 12 13 tolerance. 14 MR. HARVEY: Right. No, exactly. Well and, you know, I'll say when I talk to 15 folks about the 914 the argument is it was 16 important because it brought us two months 17 closer in terms of information. And to me -18 so you know, really, it was released January 19 20 to today, and that's pretty good, that's a 21 pretty good turnaround for this kind of thing 22 given the history. The problem is if you're

1 doing that you're really looking for signals 2 that trends might have changed. And if you're building in a bunch of kind of controls based 3 on historical trends which is really what was 4 5 going on there, you're going to miss that. You're going to beat that out of the number 6 7 that comes out of the other end. And so I think either ranges or perhaps looking at the 8 9 problem in a couple of different ways that would give you different kinds of information 10 and then seeing how things relate to one 11 I guess at the end of the day you 12 another. 13 still have to have one series where someone comes in and says I just want to grab this in 14 my model. You have to kind of give them 15 something that looks like that. 16 But that doesn't mean you couldn't break a couple of 17 approaches down and then talk about how they 18 relate to one another. 19 20 MS. KIRKENDALL: What they have 21 done, at least they used to periodically do 22 graphs that would show what the 914 data

looked like compared to the best data that 1 2 So this is after the fact that you came in. can get mean squared errors or something that 3 would give you a feel for how far off they 4 5 are. And EIA has published those in the past as an indication they were related. 6 So that 7 could certainly be done.

MR. KOKKELENBERG: To me the most 8 interesting problem right now is this what you 9 10 call benchmark-driven change. And I know you listed potential problems, and you probably 11 said about how you're going to investigate 12 13 each one of these, but it probably eluded me to some extent, but the - do you have any feel 14 now for how much of this is a real change and 15 how much of it is a change that was induced by 16 benchmark changes or statistical noise as was 17 asked about earlier? Do you have any? 18 19 MR. HARVEY: One of the things we 20 started to do and just kind of started is we did look at what the results were from the 21 22 overlap samples, basically.

1 MR. KOKKELENBERG: Right. 2 Which is sort of like MR. HARVEY: the cutoff sample, pretty close, and is also 3 4 very large. It's about 85 percent, both Texas 5 and in the lower 48. So it's a good size. In fact, what just the survey responses from 6 7 those folks were showed a small increase in production, both in the lower 48 and in Texas. 8 9 So to me that suggests we probably have a 10 couple of percent of sort of a benchmarking issue in there. Now, having said that the 11 12 methodology, the adjustments that were being 13 made were being applied on a monthly basis and we're basically looking at historical data 14 that indicates that over time that 85 percent 15 cutoff sample deteriorates and becomes 16 smaller. And so it's grossing up a little 17 higher with every month. So some of that may 18 just be a kind of tilt we put in on top of 19 20 everything else based on that, which when it 21 comes back out of the system for the next year 22 and starts over again. But for that to be

true, it means that trend that's in the past 1 has to have gone the other direction. Now, 2 I'll admit - I mean, I don't have much 3 4 statistical experience. I have a great deal 5 of experience in the oil and gas, and that trend in the past doesn't completely - I'm not 6 7 completely comfortable with. I know it's been looked at a fair amount. I want it to be 8 9 looked at a little bit more. But it does 10 strike me that thinking about what happened in the last couple of years with regard to the 11 industrial organization of oil and gas 12 13 exploration, and assuming that will continue into a period of time like we've just seen in 14 2008 where prices went way up and then came 15 16 back down, it was a very discontinuous year and so that kind of an adjustment could really 17 throw you off and I think that's probably what 18 happened. 19 20 MR. KOKKELENBERG: One - well 21 actually, it's a compound question. If you 22 smooth this over time you won't see such a

discontinuity, but it looks to me like you'd 1 still see a discontinuity. Now, the second 2 thing is that unless you have, you know, like 3 a light year of smoothing -4 5 MR. HARVEY: Right. 6 MR. KOKKELENBERG: And what about 7 geographical smoothing? Because when you have a hurricane in Texas and Louisiana, then 8 9 doesn't Oklahoma spring to the breach and 10 supply more natural gas or what? 11 MR. HARVEY: Not really. I mean, to a certain degree it's possible, but in 12 13 general traditionally once you drill a well you try to produce it as fast as you can, and 14 so if you get knocked out, you get knocked 15 This is where the storage information we 16 out. collect and publish becomes so important 17 because really the market is swinging off that 18 19 storage. 20 MR. BROWN: I think you partially 21 answered this in the sense of what you were -22 in response to Ed, but you were sort of saying

you had some discomfort with the rate of 1 growth of gas that you projected for the end 2 of 2008, and you're thinking that maybe what 3 4 happened is that some of the firms that 5 dropped out of the sample and you just kind of said well, they probably were growing the same 6 7 as everyone else, gross them up. Maybe they dropped out because they stopped producing or 8 9 something. Do you have any sense, has there 10 been any follow-up work with any of these firms that dropped out to find out whether 11 they still exist? 12 13 MR. HARVEY: Yes. The way to think about it is we would expect based on 14 drilling that at some point this growth in gas 15 in Texas is going to flatten out and it may 16 even actually decline. The problem is then 17 you're going to be linearly related to 18 drilling because you put the old rigs out of 19 commission first, and you've got the new high-20 tech ones going, and you're still adding a 21

22 whole lot more per process. But everybody is

1 looking for the place where this crests and 2 then starts coming back down again which they assume will happen at some point. This is a 3 number which takes that 85 percent cutoff 4 5 sample, assumes that over the course of the year it's become like an 83 percent cutoff 6 7 sample and grosses it up a little bit more. So it doesn't actually touch the real behavior 8 9 of companies coming or going, it models what 10 you think that overall picture is going to look like and grosses it up based on that. 11 The problem was that it looked like - if I'm 12 13 understanding the math and we're just digging into it, what that did was that didn't happen, 14 that sort of deterioration you expected didn't 15 And so that meant that what we were 16 happen. showing was showing a faster ramp-up, was 17 grossing up when it really shouldn't have been 18 grossed up. So when you take the new sample, 19 20 it dropped it back down again to where it should have been. So, should there have been 21 22 growth in Texas in 2008 which would be from

here to here? Yes, but it wouldn't have been 1 2 this. It would have been something more like this and we wouldn't have had the 3 4 discontinuity coming up here. Is that - am I 5 getting close to answering your question, or is it? 6 MR. BROWN: Well, I'm better 7 understanding now. 8 9 MR. HARVEY: Okay. 10 MR. BROWN: So, you said that the 11 firms didn't drop out of the sample? 12 MR. HARVEY: It's not really about 13 firms dropping out of the sample. It's about assuming that the sample represents less than 14 the total of the time it did in the past. 15 Ιt looks like - whatever 85 percent cutoff sample 16 17 always within a year is represented. 18 MR. BROWN: Okay, so the fact that gas prices were extremely volatile in the last 19 20 couple of years wouldn't be taken into 21 account.

MR. HARVEY: We would have paid no

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attention. We were looking in effect at what 1 I would call industrial organization 2 information from the preceding several years. 3 4 MR. BROWN: And yet we know, at 5 least those of us living in Texas know that in fact the industry responded pretty sharply. 6 7 In the Barnett Shale for instance we know that landmen have been let go. Of course, 8 9 production is going to be slower coming down -10 11 MR. HARVEY: Right. - but landmen were let 12 MR. BROWN: 13 go, rigs are stacked. Well, that's why to me 14 MR. BROWN: one of the important questions here - it turns 15 out our guys are really comfortable that they 16 can look at for example Texas tax information 17 that begins to roll in, and it rolls in over 18 a certain period of time. They feel real 19 20 comfortable that they can forecast that and within a few months of rolled-in information 21 22 from Texas they can tell you where they think

the Texas tax information will come out. 1 And they have a lot of comfort sort of in that, 2 and that's one of the reasons this seemed kind 3 of different. But that's the kind of number 4 5 that has some information content to it, but it also has a lot of modeling about how the 6 7 Texas bureaucracy works in terms of tax information. And as long as that works pretty 8 9 much the same way that's fine. 10 There's also in the underlying methodology here a similar kind of assumption 11 that says big companies tend to get smaller. 12 13 The biggest companies tend to get smaller relative to overall production over time, 14 which is about a percent a year based on 15 information. That's also a behavioral kind of 16 model, and that kind of behavior model 17 wouldn't work very well in a year like last 18 year where prices did this and drilling did 19 this and everything came off on the other side 20 That raises the fundamental question 21 of it. 22 which is if we're going out and collecting

from 85 percent of production equivalent real 1 2 information, submitted information about what they're doing, that would have high value to 3 me about learning about when trends might 4 5 change, certainly out of what's going on in the sample. But if we're going to go back in 6 7 and undo that in effect based on previous year's industrial information, the changes 8 9 that we would gross that up, we're going to 10 lose that signal. So the question becomes how do we sort of separate out the different kinds 11 of information that we have confidence in 12 13 coming to different places and start thinking about how to use that, and not - my concern -14 model away in effect the data that's actually 15 coming in and that could be useful to people 16 because they would receive the national 17 potential. 18 Mike, yours will be 19 DR. BLAIR: 20 the last question of the session. Well, my recollection 21 MR. COHEN: 22 of this is pretty hazy because this research

was done in the late `70s, early `80s, but 1 2 Richard Royal and some of his colleagues did some work where you've basically got a cutoff 3 4 sample, but you did some minor sub-sample 5 little guys, and you would model the little guys and if the little guys tended to be 6 7 different, had a different dynamic than big guys did you could kind of build that into 8 9 your survey. And I think now it's been 10 developed by the Swedes, it's now called model system survey sampling and I think that one of 11 the things you might look at is the work that 12 13 Richard Royal did with Keith Eberhaus, one of his co-authors. I think, Nancy, you're pretty 14 familiar with some of the work he's done. 15 16 It's a good place to start. 17 MR. GRUENSPECHT: Don't we do something similar to that in the natural gas 18 19 storage survey? 20 PARTICIPANT: What we do is we use 21 a - we use a cutoff sample and then we do a 22 proportion probability to size sample of the

So we get a 90 percent coverage of 1 remainder. 2 natural gas storage volumes and then we overall that's what we get in our sample, and 3 4 I can't remember how much a proportion of the 5 total the large companies are, but it's significant. It's probably about 90 percent 6 7 of the 90 percent, and then we estimate for the remaining 10 percent using a medium based 8 9 estimator. 10 MR. GRUENSPECHT: But you don't 11 use the whole sample to estimate the smalls. You use a sample, a sub-sample to estimate the 12 13 - right? PARTICIPANT: Well, yes. 14 I mean, we do use everyone, but we use a median 15 estimator to kind of control for the outliers 16 because we were having trouble in the 17 beginning when we first rolled out this 18 survey. We were having trouble with just 19 20 using a fixed estimator and trying to update the estimator on a monthly basis. 21 And we 22 would wind up having discrete jumps. So we

would up having to do what is using a median 1 2 estimator, trying to target our end-of-month stored volumes which were going to be 3 4 published two months after the weekly came 5 out. And using the median-based estimator somehow just made everything work a little 6 7 better because we were able to throw out the outliers and the overly small and overly big 8 9 companies and get something that captured how 10 the population behaved. DR. BLAIR: Sounds like that may 11 be a story in itself. We have to call time 12 13 and move on to the next session which is RECS Statistical Estimations. We started off this 14 session about 15 minutes behind, we're 15 laboring to stay 15 minutes behind, and then 16 we'll have a question whether to crater the 17 break or run a little past 4:30 at the end of 18 the day. 19 20 MS. O'BRIEN: It occurred to me 21 during the last talk that one of the major

22 difference between establishment surveys and

1 demographic surveys is that establishment 2 surveys use numbers to refer to them and demographic surveys use letters. So to help 3 4 you as I work through the acronyms I'm going 5 to put these up here because I'm not going to - once I get going I'm not going to slow down. 6 7 And I'll take up the distinguishing word in Let's see if I can spell. You probably 8 each. 9 can't tell that I messed it up. Okay. I don't 10 know - keep the bio in there? I'm Eileen I'm the team leader with the -11 O'Brien. what's the word, not the programs, but Gene is 12 13 on the Methodology and Analysis Team and I'm on the - sort of I run the projects. I have 14 some survey managers working for me and all 15 the people that work for them. 16 Let's see. You probably had a weak title coming into this 17 session, but the one I came up with since then 18 which I've only been thinking about this for 19 20 four weeks. Using the American community 21 survey as the benchmark, the RECS and other EIA efforts. 22 The American Community Survey is

the second survey listed there, the American Housing Survey, Housing Vacancy Survey, the current population survey and our survey is the Residential Energy Consumption Survey, the RECS.

So, we design surveys to provide 6 7 precise estimates of population means and totals to build models for things not 8 9 measured, such as consumption by end uses and 10 areas, and use in forecast here at EIA. We 11 also expect these survey estimates to be unbiased if they're designed well. But the 12 13 smaller the sample, and believe me the RECS is a very small sample, about 5,000 households, 14 the more likely our sample with high variances 15 could look like a bias sample. So what we do 16 is we do post-stratification to reduce this 17 bias. It answers the question what if we drew 18 a bad example, i.e., one that gave us the 19 20 wrong answer, what would we have? A poststratification brings us in line with the 21 correlated characteristics of the variables 22

1 unique to our study.

2	So the questions I have for you
3	are which benchmark should we use for our
4	demographic survey? We have choices now and
5	what should be the criteria for choosing and
6	monitoring the impact of our choice in
7	benchmark? I'll cover some basics about the
8	Residential Energy Consumption Energy Survey,
9	I won't go into that ad nauseam, and I'll
10	discuss the new data sources for benchmarks
11	and how we might use them in the future and
12	appeal to you for guidance.
13	So post-stratification. I got
14	this from the Standards and Guidelines for
15	Statistical Surveys, something put out by OMB
16	in September of 2006. So this talk is going
17	to focus on the last part of that sentence and
18	that's the control totals, our source for
19	control totals. And in those guidelines they
20	say that agencies must ensure that the frames
21	are evaluated against the target population
22	for quality and that we evaluate the quality

of the estimates and projections using them, and that when we use auxiliary data to improve precision we have to reevaluate that and the error associated with it.

5 RECS basics. In your handout you've got on the appendices a list of the 27 6 7 self-representing PSUs, 148 non-self representing from which we drew randomly, and 8 9 a total of 175 PSUs for the RECS sample. We 10 use a stratified multi-stage area probability sample drawn from the last census with 11 12 addressed updates or segments selected. It's 13 designed to produce estimates of energy expenditures for households within the 14 following RSEs. I'm new to EIA and I'm new to 15 this survey relatively compared to the people 16 who worked on it who are still at EIA, but I 17 probably wouldn't have chosen that to control 18 RSEs for the year 2005, energy expenditures 19 20 for household. We know the energy prices were 21 very volatile that year. I'd probably have 22 preferred a consumption per household as a

1 control variable. And we make several 2 adjustments to the sample weights to compensate for unequal probabilities of 3 4 selection and responding. By the way, our 5 Northeast region, census region, did not meet its target for RSEs largely because there's a 6 7 lot of variability in New York State, naturally high because of the heterogeneity of 8 9 the features that we measure there. Just in 10 case you don't know, this is how the Census defines the country in terms of regions and 11 divisions. Other agencies use different 12 13 demarcations so the Bureau of Labor Statistics would have economic regions and so on. 14 But these are the domains under which we control 15 16 our sampling error. So what are the estimates that we 17 do to the RECS weights? So we adjust for 18 unequal selection of the PSUs to calculate 19 20 what we call a base weight. We use a half open interval technique when we go to a 21

22 segment which means if we go to an address and

find that there's an apartment building there 1 that we sub-sample and we have to adjust the 2 base weights to reflect that. We adjust for 3 4 ineligible units. We thought the house was 5 occupied, we thought it was a house and it's We thought there wasn't a house and 6 not. 7 there was so we make those adjustments at the base weight level and we also adjust for unit 8 9 non-response. Those are household-level 10 adjustments to the weights, but when we're done with all of that we have what we call a 11 12 pre-weight. And the thing that this talk is 13 about is what do we do once we go from the pre-weight to the final weight, that is, we're 14 using external data, data external to our 15 survey, to sort of - it's like when a woman 16 walks around and finds out her zipper's on the 17 wrong side and she has to adjust it. So it's 18 this major adjustment after you've done all 19 20 your surveys, you're turning your survey 21 around and lining it up with these external benchmarks. 22

1 To do that for post-stratification 2 needs two ratio adjustments. The first stage ratio adjustment used the decennial 2000 data. 3 4 We adjusted the RECS estimates sub-housing 5 units by type, and that would be single family detached, detached mobile homes, multi-6 7 families two to four, multi-families five or more units per building. We also adjusted for 8 9 the main space heating data that's available from the decennial census. When we did the 10 second stage ratio adjustment, we're taking 11 the estimates for the sample domains that we 12 13 have and we are adjusting for the total number of housing units and the differential non-14 response probabilities depending on the type 15 of household it is. By "household" I mean is 16 it a one-person household, and we make 17 separate adjustments whether it's a one-person 18 female household or a one-person male 19 20 household because they have different probabilities of being available to be 21 22 interviewed. And then the other group is

everybody else that has, you know, more than
one person there.

For this we have in 2005 -3 actually, this took place in 2006 or `07, we 4 5 had to decide whether to continue to use the current population survey which till then was 6 7 the only source of intercensal data about housing units and those sorts of adjustments, 8 9 or to use the new American Community Survey. 10 Well, if you take two measurements they're 11 never going to line up. Steve's not here, but that's the cruel fact of survey-taking. You 12 13 take three surveys, you'll have three measurements. So we're using a very large 14 external data source. The current population 15 survey in March samples about 100,000 people 16 and whatever number of households that takes. 17 The American Community Survey or the ACS 18 samples annually 3 million households and is 19 20 of course more current than the last census 21 when we're conducting our residential survey 22 mid-decade. Once we made those adjustments we

got our final sample weight. We called it n weight. It's always been called n weight. And we can get sort of a crude assessment of the effect of that final adjustment by comparing our pre-weight, or pre- and poststratification adjustments to the final adjustments.

Before I do that, I want to talk 8 9 about things that are affecting our 10 adjustments overall. Imagine that, vacancy rates are changing very dynamically. They're 11 12 unequal across regions and the trends are 13 diverging, and the reasons for vacancy are different. You know, there's vacation homes 14 which we don't survey, there are people who 15 have homes that are built and not yet 16 occupied, people who abandon their homes. 17 And we are really looking forward with trepidation 18 in 2009 given the effect of the housing crisis 19 20 and market conditions on our ability to find 21 people at their addresses.

22

Response rates, everyone knows

federal demographic survey response rates have 1 been declining for about two decades, so the 2 net effect is that we have bigger non-response 3 adjustments, bigger adjustments for single-4 5 person households. People are less at home, they're working multiple jobs or whatever the 6 7 case they may be, they're just - we have an increasing refusal rate, we have an increasing 8 9 inaccessibility rate, and these things interact with our final adjustments. 10 So the ultimate question is should we continue to use 11 our current population survey, or our final 12 13 adjustment or the American Community Survey? The 2005 documentation for the RECS, just to 14 make sure - this is sort of subtle, the first 15 stage ratio adjustment for post-stratification 16 was using the decennial data to adjust for 17 type of housing unit and main space heating, 18 and the second stage was using it to adjust 19 20 for differential accessibility and response by type of household. These choices affect not 21 22 just our main estimates, but all of the

analysis we're doing in the tails of these 1 2 distributions because there are relationships between these measures and the things that 3 4 drive energy consumption. So just to give you 5 a picture of what's going on with these vacancy rates, these are averages from the 6 7 Housing Vacancy Survey. So if you look at the South, 20 years ago around 10 or 11 percent. 8 9 We're going to out to the field where the 10 average vacancy rate is over 16 and I'll bet you in Florida that's much higher. And the 11 West is having its own issues. Midwest is 12 13 surprisingly leading the West. We don't know what 2009 is going to show us. We'll be out 14 in the field later in the year, earlier next 15 This is driving effort and the cost of 16 year. doing this survey, so 30 years ago when we 17 went to a household we had to talk to about -18 or we had to knock on about 20 percent more 19 20 doors then to get one household. Now it's 21 about 50 percent more. And the net effect is 22 you're knocking on doors that are less

eligible and the cooperation rate, meaning
accessibility and the willingness to
participate is lower now.

4 So, you know, we are concerned 5 about the effect on the ratio adjustments using new control totals because these surveys 6 7 are operationalized in very different ways. The American Community Survey gives you three 8 9 strikes to get out. You don't respond by 10 mail, you don't respond by telephone, they knock on your door the third month. 11 The other 12 survey instrument is done in a very tight 13 timeframe, it's the current population survey, and it's done by telephone most of the time. 14 Now, what did we do before we had to consider 15 the American Community Survey? We used the 16 CPS and when I looked at the documentation for 17 the post-stratification adjustment procedures, 18 the first step in that just really kind of 19 20 floored me. There's - it's literally like 21 switching your skirt around. You take these 22 numbers from March of the previous year and

March of the current year and you take some 1 2 estimate of year-to-year change and you apply some factor of one-third to get you to July 1. 3 4 That factor of one-third seems very arbitrary. 5 Things that happen between March and July are 6 so different than happen between October and 7 March. You know, new construction, people move from the South to the North, all these 8 9 things would affect occupancy and eligibility 10 rates. So that in a sense, it's a little too 11 quirky for my taste. You go to all this trouble to do a very complex, expensive sample 12 13 design, and then you do this right before you turn it into your national totals. So that 14 alone was one thing that sort of furrowed my 15 brow. 16

But when we went to the American Community Survey I wasn't too concerned. The reason we did was because we had a lot more data so we were going to lower the variances of the things we were ratcheting up to. And RECS does a poor job of estimating housing

unit totals. I mean, it's a small sample 1 survey. In itself, it can give us an estimate 2 of housing units. It's just that it's so 3 4 small that the variance is going to be so 5 large. So we're always a little bit under, like by several million each time. But in 6 7 2005 we found 2 million more housing units, occupied housing units, and this is a 8 9 distinction I should make right now is we 10 don't estimate total housing units, we're only estimating occupied housing units, and that 11 necessarily by Census definition excludes 12 13 vacant homes, group homes, dormitories, sort of tertiary housing. And just for 14 convenience's sake we don't interview military 15 on bases that would have like a single-family 16 We account for that in our post-17 home. stratification adjustment. RECS is low in 18 these three examples, so it's biased downward 19 20 maybe, but a gap did grow in 2005 as we 21 applied the American Community Survey to our 22 adjustment procedure. So something about the

1 ACS is clearly having a different impact.

Here's this alphabet soup of 2 federal demographic surveys and the estimates 3 4 that they create for all housing units. So 5 the population estimating program at Census incidentally creates an all-housing unit 6 estimate. Well, the story here is that most 7 of these things wind up pretty close. 8 That 9 orange line is just - that shows what the 10 estimates for the vacancies, total housing 11 unit from the vacancy survey was prior to this post-decennial adjustment. You see that all 12 13 these different surveys line up pretty much on But when you get to the estimates of 14 that. occupied housing units, that is there's this 15 gap, this clear gap that emerges between - for 16 the decennial current population survey, 17 American Housing Survey-based estimates and 18 this new American Community Survey, and you 19 see that we're the blue triangle on RECS and 20 we're jumping on that black line. So that's 21 22 a big deal for us because energy intensities

per housing unit depend on that denominator, and if we start saying different things about energy intensities that has real effect on programs and program monies in the billions. But we chose ACS in 2005.

I wanted to talk about the 6 7 advantages and disadvantages just in a general sense. One of the advantages of choosing the 8 9 ACS is that the ACS measures several key 10 concepts that align better than the long-form census did. So if you're into the labor 11 market estimates, you're going to like the ACS 12 13 a lot better because it actually has real measures that relate to your concepts. 14 The long form, you know, had just sort of a 15 generic labor estimate. 16 The ACS provides direct estimates for occupied housing units. 17 When we did the CPS we derived them from -18 because the CPS is really counting people and 19 20 backing into housing units. The ACS provides direct estimates of occupied housing units. 21 22 And they also publish relative standard errors with those benchmarks which we do not have when we are backing into them from the CPS. And we have more variables at the county level. All intercensal data that come out are mostly about people and housing units, but not the other variables that we care about from an energy perspective.

8 So the concepts agree. We have 9 the same target population, occupied housing 10 units, as our concept. We have the same 11 sample population. But my concerns started with - well, I always knew that there was this 12 13 disconnect between the residency rules, the current residence is the concept in the 14 American Community Survey. So you either have 15 16 lived there for two months or you probably will live there for two months, or it's your 17 usual residence which is the decennial, the 18 long-form concept and the CPS concept, and the 19 20 American Housing Survey concept. And the ACS is a period of time estimate whereas the other 21 22 surveys, the traditional surveys were a point

1 in time estimate. So we're capturing people 2 differently which is creating this overestimate, they believe, in occupied housing 3 units and the ACS are a benchmark. 4 Fred 5 Eggers who was with HUD for many years published a comparison of the American Housing 6 7 Survey and the American Community Survey, and he said well, looks like the ACS is 8 9 overestimating occupied housing units because 10 they get three strikes to get excluded, so it's not random, and it's falling in the line 11 of that they're estimating more single-family 12 13 detached housing units than single-family - or then multifamily two to four. So there's some 14 shifting of the distribution which has 15 implications for energy characteristics. 16 There's this literature that 17 started accumulating much to my chagrin around 18 2007 after they released the data where they 19 20 started talking about use the ACS with caution, or some things that haven't been 21

22 resolved. It sort of became clear to me that

Census wasn't really going to worry about it 1 till it started hovering around the decennial 2 period. But these concepts that they had been 3 4 arguing about internally and started 5 publishing data, they were still sorting out. I heard a talk in the spring of 2007 where the 6 7 key mathematical statisticians on the project were saying, `Oh, we noticed this problem 8 9 where the number of people who report being 10 married is not equal to the number of people who have spouses.' You know, so there's this 11 12 kind of - those are the things you'd expect to 13 get right if you are the Census Bureau. And so to fix that they started messing with the 14 occupied housing units. And I said, well, 15 you've got to go back and fix 2005 because 16 you're changing your statistical methodology. 17 And they said, no, we're not going to do that. 18 So that's our benchmark. We only do this once 19 20 every four years. And that essentially is one 21 of the problems with the ACS is that the 22 intercensal population estimating program is
always making adjustments to housing unit 1 totals and the ACS isn't doing that, isn't 2 using those adjustments. They're not making 3 any revisions at all. That's very nice for 4 5 everyone else. But the net impact is that we do have reduced variances as our benchmark, 6 7 but are we incorporating a bias which economists hate, right? They'd rather sort of 8 9 have some random error than something that 10 says it's always a little bit wrong. So for modeling we need to use - oh, and upward bias 11 12 on single-family homes. 13 Uncertainty - there's still some uncertainty about the 2010 methods. 14 GAO has this nice report that says Key Unresolved 15 Issues, and one of them is what are you going 16 to do about the long-form - the virtual long-17 form that ACS is supposed to provide, and they 18 hadn't sorted it out at the time of that 19 20 publication. The choice for the control 21 totals, again, affects our intensity 22 estimates, but we do use this in very

important other EIA programs. The - John 1 Symbalski's AEO makes use of the ACS through 2 the RECS. He's capturing our division-level 3 The STEO, the Short-Term Energy 4 estimates. 5 Forecast, makes direct use of the ACS. These are fairly subtle issues that I barely 6 7 understand, and if you are a secondary data user even in a sophisticated group as EIA you 8 9 just have to go a few generations away from 10 that before you wonder how this is affecting major estimates and forecasts. So the AEO 11 12 uses this for modeling housing counts, 13 appliance counts and end use intensities, but they supplement it with numerous outside 14 sources, so maybe they're a little 15 desensitized from the impact. The STEO uses 16 this in estimating the number of households 17 that consume natural gas, propane and other 18 major fuels and the trans - annual household 19 20 data as explanatory variables in the forecasting models of residential consumption. 21 22 My questions remain. What

1 criteria should we use before we look at the 2 sources of data, and how do we use and monitor the impact of that choice over time? It's not 3 4 constant to the decade clearly as you get 5 further away from the decennial census. And this kind of emerged because I think we may be 6 7 capturing some vacation homes and you know, should we be trying to measure that component 8 9 of residential consumption in some way? These 10 were totally excluding anything that's not occupied by definition. So I look forward to 11 12 your questions and comments now and in the 13 future on this topic. 14 DR. BLAIR: Thank you. Mike, 15 you're our discussant. 16 MR. COHEN: Thanks. I'm going to talk for about six minutes, but I don't think 17 I'm going to answer your questions, Eileen. 18 19 Okay, that's fine. MS. O'BRIEN: 20 MR. COHEN: It's not that fine. Ι 21 want to - whoever decides who gets to discuss 22 what papers I want to thank them because this

is a paper on a topic that I'm interested in, 1 I know a little bit about, so. So I got the 2 presentation slides on Tuesday morning and 3 since I didn't work on RECS when I was at EIA, 4 5 I'm not that familiar with it, I downloaded the 1997 and 2001 data quality papers, and the 6 7 1997 and 2001 survey methods papers, all of which were by Eileen O'Brien, so you have been 8 9 here a little while. 10 MS. O'BRIEN: No, I think that's an artifact of let's put someone's name on it. 11 But I have read much of that. 12 13 MR. COHEN: Oh. They're very well-written and I also - I also skimmed the 14 RECS quality profile. 15 That was excellent. 16 MS. O'BRIEN: 17 MR. COHEN: A lot of people here had something to do with those written, maybe 18 Tom Divine who does superlative work 19 20 obviously. And all these sources were really 21 well-written and they were very helpful to me. 22 I think it's probably not too strong a

1 statement that I think the three most important surveys in the federal government 2 over the next 20 years are very likely to be 3 NAEP, National Assessment of Educational 4 5 Progress, NEPS, the HRQ's survey on health costs, and RECS and its energy consumption 6 7 siblings. Obviously some of the main interests of the current Administration and 8 9 understanding energy consumption at a fairly detailed level is going to be crucially 10 important and RECS will be the vehicle for 11 helping us do that. In fact, I wonder if -12 13 and this might be the wrong time to raise this issue, or maybe it's always wrong - but 14 thinking of RECS as supporting some type of 15 micro-simulation model would be a really 16 interesting idea, but RECS would have to 17 change kind of dramatically. It would have to 18 really be a much longer survey, we'd get more 19 20 detailed information on people's economics and 21 demographics, et cetera, et cetera. But 22 anyhow, one should and could make a very good

1 argument for increasing the sample size for 2 RECS. It's only 5,000 housing units for a 3 very important part of our economy, so maybe 4 that's something to think about a few years 5 from now.

6 Let's see. I want to make a 7 straight comment. I think this is Tom Divine's, and maybe this is without - but I 8 9 thought it said somewhere that there are a lot 10 of answers that change dramatically in RECS as a result of fairly modest changes in the way 11 the questions were posed. And if that's the 12 13 case I think it might be useful for EIA at some point to bring in someone like Nora Cate 14 Schaeffer - these are cognitive survey experts 15 16 - to see whether there are re-wordings that might reduce confusion of the respondents. 17 I'm also a little concerned about - I mean, I 18 know nothing about - when I was a renter, I 19 20 had no idea if I had gas or electric heat, to 21 tell you the truth, and I wonder if - if you had foreign language difficulties I wonder if 22

there is some problems there. And if you had 1 an internet alternative, I was happy to see 2 the ISMS idea raised this morning. I think 3 some people would probably prefer not to have 4 5 an interviewer in their house and on the internet you could motivate the survey, you 6 7 could say why these questions are being asked and you could also put in help online for 8 9 those struggling to answer some of the 10 questions. You could also include foreign language questionnaires or foreign language 11 12 help for answering some questions. But sorry 13 I got off topic, I just wanted to throw that 14 out there.

The question at hand deals with 15 post-stratification which is used for three 16 purposes: sample variance reduction, and 17 reduction of non-response bias, and reduction 18 of under-coverage bias. These are all really 19 20 important to address and post-stratification 21 if a classic approach. If anybody else wants 22 to get into this business besides Eileen, the

best paper is by Holt and Smith called Post-1 2 Stratification which is a good title for it. It's in JRSSA 1979. But there's a lot of more 3 recent work that should be looked at a little. 4 5 I'm not quite sure it's relevant, but there's work on what's called calibration and 6 7 generalized regression estimates. I'm not quite sure what the data requirements are, but 8 9 you do need to have some information on the 10 entire population which may not be available here. But it would be worthwhile inviting 11 Phil Cobb or Bob Day to lunch. They are both 12 13 in the area and they're two of the best people in the world in this area, and just ask them 14 if they think there's something there that I'm 15 16 not seeing.

Now, the main issue at hand is that you're using the - replacing the CPS controls with ACS controls and I have a few comments, but I don't think they're going to be that helpful. The first thing, you're worried about the change in residency rules

1 from the census to the CPS. I've talked to people like Kirsten West of the Census Bureau. 2 There aren't a lot of people that that 3 changes, it's a fairly small fraction of the 4 5 population, so I kind of think that's ignorable, but you know, certainly check up on 6 7 that. But they said it was something like, I don't know what, half a percent or a percent 8 9 of the population where that would make a 10 difference. The census had been promising for a long time that it actually asked both 11 questions of a sub-sample like the ACS. 12 13 They're not doing it as far as I know so maybe pressure them to do that, really help us out. 14 You mentioned that one problematic 15 aspect of the ACS is that it does not provide 16 point estimates, it provides period estimates, 17 and you know, the obvious thing that it could 18 do, I'm not sure it'd be all that helpful, is 19 20 you can ask the Census Bureau to provide the 21 annual estimates to you, given you're a 22 government agency. And then you could just

perform exponential smoothing on those and get
something that's closer to a contemporaneous
estimate. I think that would be better for
your purposes than period estimates. It's a
trivial calculation.

The second thing you raised which 6 7 is a very serious issue is that there will be a 2010 discontinuity. When we get to 2010 the 8 9 ACS controls and the Census has not justified 10 this in any real - any methodological sense. They control to major demographic groups at 11 the county level. If you talk to any of the 12 13 people in the population estimates division they're unhappy that they do this because the 14 estimates at that level are really unreliable. 15 They should be controlling in some kind of 16 smooth way, but it just - they have a lot on 17 their plate and they're just trying to get 18 the, you know, the trains to run on time and 19 20 so they can't really handle any changes at 21 this point. But what you're going to have is 22 you're going to have estimates from ACS that

are kind of roughly smoothed be going on 1 2 towards 2010 and obviously drastically change the controls after the census because the 3 4 population estimates they're controlling are 5 going to change dramatically as a result of the 2010 census. And there will be a big gap 6 7 either up or down in your series and there won't be an explanation for it. So somebody 8 9 has to pressure the Census Bureau to issue a before and after estimates, before and after 10 the change of the controls, so you can help 11 12 your users both with a contemporaneous 13 estimate and a change estimate at the same Otherwise you're going to have some 14 time. unexplained jump. So that is something that 15 you should plan for in advance and lobby the 16 Census Bureau to help you with it. 17

Now, one problem you have is you're making use of these I think very good ratio adjustments, but you never really know if they're helping you or not because there's no real true values right now to make

1 comparisons. One thing that you could do 2 though and I think would be a little bit interesting is I think you could. 3 If the Census Bureau is nice they could give you 4 5 individual household data for your respondents and your non-respondents, and you could do 6 7 some checking to see how different they are and on what covariates they differ on, and see 8 9 if those covariates - you know, one thing you 10 do is you do a geographic control, controlling the use of demographic controlling for the 11 second phase. You know, maybe there's other 12 13 variables that would be as valuable or more valuable to include in the ratio adjustment 14 process. And you could probably - ACS is a 15 fairly rich questionnaire. 16 It seemed like it had 40 questions on it in different areas. 17 Maybe that would be - could be valuable to see 18 if some kind of - this is a partial answer to 19 20 one of your questions - to see if you're doing a good job with the ratio adjustments. 21 But 22 there is this difficulty of knowing when you

have made an improvement in RECS and I think 1 one thing that Tom Divine error profile was it 2 had a lot of nice comparisons with kind of 3 national and high-level data for a lot of 4 5 different administrative sources and survey sources. That should be done. 6 I'm not sure 7 if it is, it probably is, but those kind of comparisons should be done as often as 8 9 possible. They're really incredibly valuable. 10 And the last question I guess you asked was - I'm not really sure how to answer, 11 but there's this - you have an increasing rate 12 13 of vacant houses and you have got a decreasing response rate, and you're worried that those 14 15 two things together are I guess resulting the 16 gap you have between RECS and the HAS I don't know enough about, you 17 estimates. know - one thing is RECS might be getting it 18 right and the Census might be getting it 19 20 wrong. The math is what's used to set up the frame for the ACS. The math has tons of 21 22 duplicates in it. The Census doesn't take

duplicates out unless they really know they're 1 a duplicate, and so there's a lot of 2 duplicates that are kind of not completely 3 4 sure duplicates in the math. The math doesn't 5 really get enough black eyes for how, you know, it was not a very high-quality operation 6 7 in 2000. So, but I don't know where that leaves you, but I'm just not as concerned 8 9 about it maybe as you are because the gap 10 might be in the other direction. Also, the ACS is controlled to addresses that they get 11 from these demographic address estimates, kind 12 13 of a demographic analysis in the housing division, and I don't know what the quality of 14 those Division of Housing estimates are 15 And so they may be kind of a little 16 either. bit - so there's a lot of errors here and they 17 may not all be on your side of the equation. 18 So that's all I have. 19 20 DR. BLAIR: Other comments? 21 MR. KOKKELENBERG: It seemed to me 22 that in about the last 12 months, maybe even

only the last six months, this data has been 1 2 changing dramatically, and anything like the ACS which is the base on housing data from 3 4 even three years ago is not going to pick this 5 up as fast as you might in the RECS. The other thing though that you might pick up is 6 7 that these people who are now vacating these units are going somewhere, and so you should 8 9 see household sizes increasing. And I don't 10 know if you have any indication of that or finding that, but if that's the case then 11 12 energy usage per household that is occupied 13 may be going up, and that could make a difference in how you proceed with this. 14 Beyond that I would toss it back to Mike who 15 16 knows more about these surveys than I do. MR. COHEN: The Census is quite 17 worried about a lot of people living in 18 foreclosed homes illegally also. So they're 19 20 causing a lot of dynamics. 21 DR. BLAIR: John? 22 MR. WEYANT: On the energy side,

I'm not an expert in survey design or 1 evaluation so I appreciate Michael's comments 2 on that, but one thing that you said I would 3 4 support is I think this is going to be a very 5 important area in the next 5, 10, 15, 20 years I think we have to work through. At the 6 7 Precourt Center we're finding a couple of projects even with the existing data using 8 It hates traces 9 advanced econometric means. 10 like that. I actually know what that means and it took me about six months to figure it 11 out. But there's a couple on different 12 13 appliance sets. I have a student that's doing insulation retrofits and things like that. 14 But - so the challenge may be things are 15 changing fast on the energy side. 16 In California we have these million - roofs. 17 We probably won't get to that. Scheduled, but 18 we'll get to that. We have smart meters. 19 So smart meters as defined in California allow 20 you to immediately do different pricing. 21 Of 22 course the total can be important to consider,

but so-called HANs, home area networks internally, and if they need stuff which could enable you doing realtime control and affects the ability on pricing. Not saying everybody is going to be struggling to study that, but looking ahead if you have more budget then it would be good things to do.

And then finally, I think this was 8 9 Michael's point. If you look at the stimulus 10 package, there's these things like weatherization that seems to be billions of 11 billions of dollars, so that's going to 12 13 potentially change this series. You know, how they do the wallboard and they're kind of a 14 poster child of the Administration. 15 They've opened six factories in the last year or so. 16 They've become very highly efficient in bar 17 values from 6 to 15 or something like that. 18 We used to think 3 was good, the higher the 19 20 better. So I think you're going to - there's 21 going to be a huge need, so a lot of these things will be done I think without much 22

analysis, just kind of rough, you know, 1 2 strategic rules of thumb, but then I think as we go along there will be an opportunity and 3 perhaps a large benefit for being able to - to 4 5 be able to analyze that. So I know this is probably adding a lot more to your plate, but 6 7 I think looking at that a little bit as you get into the next stage of design and so on. 8 9 So I could say I didn't know a lot, but I know something about the econometric methods and 10 those are being proved pretty rapidly. You 11 know, back in my day we used to have the kind 12 13 of combination of diffusion models and conjoined survey type things all continuous 14 and you had discrete choice and you had these 15 kind of nested maximum likelihood fixed point 16 And now they're working on the 17 things. dynamic version of that. I think the data 18 probably isn't enough yet, but could be enough 19 to do the dynamics well, but the methods are 20 being improved, so I actually know a couple of 21 people working on - at a dynamic version of 22

1 the fixed point interface which are very 2 computationally grained. But I just think this is going to be a huge - I actually know 3 4 the new Assistant Secretary for Energy 5 Efficiency Renewables. I think she's going to be really interested in this. Inclining to 6 7 Howard - if they would put some money into this, at least moral support if not money 8 9 would help. That's my little speech. 10 DR. BLAIR: Other comments? Т think we're going to make this the last one 11 just because of time. 12 13 MR. IANNACCHIONE: This is a short 14 On your second question about does comment. the Census monitor the impact in the future, 15 why don't you use two different sets of 16 weighs, one that's used as the CPS and one 17 that's used as the ACS? Just kind of track 18 them along -19 20 MS. O'BRIEN: Sure. Yes. And I 21 would have done that for you today, but I was 22 sort of a latecomer to your program, so. But

that's something I will be doing with the
2005, because that's the year we'll be using
both, so.

DR. BLAIR: Time-wise we're due 4 5 for a break. Strictly speaking - yes, 6 exactly, we're due to be back from break and 7 five minutes into the next presentation. Ι think as a practical matter we have to take 8 9 some kind of break. Ten minutes which will 10 leave us, unless we shorten the last presentation, will leave us finishing at 4:45 11 instead of 4:30. Well, maybe a bit later with 12 13 public comments. (Whereupon, the foregoing matter 14 went off the record at 3:39 p.m. and resumed 15 at 3:55 p.m.) 16 DR. BLAIR: Our next session is 17 Electricity 2011 from Howard Stone. 18 Good afternoon. 19 MR. STONE: My 20 name's Howard Stone. I'm an industry analyst with the Electric Power Division in the Office 21 22 of Coal, Nuclear and Alternative Fuels. My

presentation today is to provide you more of 1 a for-your-information presentation on the 2 process that we're just really starting in the 3 4 last month to update the forms that our 5 division collects that feed into a lot of the other analyses done by our forecasting office 6 7 on the electricity side and other parts of the agency. So I'll move right along. 8 Just 9 briefly, an overview of my presentation. 10 Our process for renewing the forms 11 is subject to clearance by the Office of 12 Management and Budget. There's a formal 13 regulatory process that we have to go through that requires notice and comment through the 14 Federal Register that gives the public, 15 industry the opportunity to comment on the 16 scope of the data that we're collecting, 17 address confidentiality issues, comments on 18 whether we're collecting the right things, 19 20 things ought to be removed from the surveys, 21 or whether they're burdensome. And as part of 22 that process we first go through sort of a

1 collegial process internally and then consult 2 with the public to issue a Federal Register notice, respond to the public's comments and 3 4 then develop a package and pass it on to the 5 Office of Management and Budget who then also puts it out in the Federal Register for notice 6 7 and comment. And they weigh in on it, taking into account the public's comments and their 8 9 obligations as well as ours under the 10 Paperwork Reduction Act to minimize the burden 11 on respondents. 12 We go through this process every 13 three years. Our surveys that just opened up this year reflect our Electricity 2008 process 14

which was a herculean effort by my colleagues 15 in consolidating a number of forms. 16 We have a new form now, the EIA-923 which covers power 17 plant operations. As part of that process 18 we've consolidated a number of forms. 19 The 20 Monthly Cost and Quality of Fuel Report public utilities regulated by the Federal 21 22 Energy Regulatory Commission filed their fuel

1 data on a monthly basis with the FERC. 2 They're editing and guality assurance on the data are somewhat different than ours. 3 We had 4 a similar form. The two data sets were merged 5 for purposes of coming up with a national time series of monthly and annual data on cost and 6 7 quality of fuel. In the EIA-906, the power plant reports at the unit level so if there's 8 9 more than one unit at a power plant there would be multiple units described in that. 10 And the 920 dealt with combined heating power 11 cogeneration facilities. All those forms as 12 13 well as elements of electric plant design that had a requirement for environmental reporting 14 information were all consolidated into a 15 We believe it improved the 16 single form. quality of data, particularly with respect to 17 combining and giving us complete control over 18 the cost and quality of the fuel collection. 19 FERC has terminated their collection of that 20 data and has been turned over exclusively to 21 22 And we also address some confidentiality EIA.

issues in matters relating to precluding the
disclosure of market-sensitive data,
particularly in the markets that are
deregulated either at the retail or wholesale
level.

6 Our approach for revising the 7 forms falls into four phases and we're right now in Phase I. We're just in the beginning 8 9 audit where we're internally developing what's 10 the key issues that we have observed going 11 through the recent survey cycle and events in the industry, legislative events, regulatory 12 13 events, changes in technology and so forth. And once we come up with an initial cut of 14 what the forms and changes will be we'll have 15 informal dialogue with the industry and then 16 issue the first Federal Register notice for 17 We expect to have that completed in 18 comment. February 2010. We'll move that package on to 19 20 OMB for clearance and have that completed by December 2010 and open the surveys in 2011 to 21 22 collect annual data found in the year 2010.

Go through our normal quality control and
editing of the data, and move into the
publication phase, and then have our 2010 data
go through publication, and then the various
data sets that we put out on our website,
September 2011.

7 I'm briefly going to go over some of the significant changes that we're thinking 8 9 about with each of the forms. The first form that I'll discuss is the 861 which is our 10 annual Electric Power Industry Report. By and 11 large the respondents on this form are 12 13 utilities of all ownership class that are serving retail customers. And one element on 14 the form that we currently collect data on is 15 net metering which is done typically at the 16 state level under regulated tariffs in which 17 customers who may have installed distributor 18 generation, solar facilities, and so forth, 19 20 have the ability to use self-power out onto 21 the grid. We have currently been collecting 22 kilowatt hours net and gross with the utility

providing an estimate of in effect what was avoided by what's put back out onto these grids. So now we're also going to be getting a little bit more detail to determine exactly what the megawatt amount of capacity is by fuel type that's actually a fine meter, so to speak.

One of the problems from a 8 9 definitional standpoint and that's affected in some instances our time series is we 10 historically instructed companies to try and 11 report between the four major customer 12 13 projects, residential, commercial, industrial and transportational or electric traction for 14 the subways and railroads basically. But the 15 NAICs code as opposed to utility tariff data 16 is - you've found at times the companies have 17 gone back and forth as they've used the 18 eligibility criteria in their tariffs, 19 20 particularly when they've transitioned from a regulated market to a deregulated market, and 21 22 we see for some companies, one in particular

in Maryland that kind of the 1 percent of the 1 2 nation's industrial load and it suddenly went from industrial to commercial because they 3 4 went from the NAICs code over a 3-year period 5 to the eligibility provisions in the tariff which were based on the characteristics in the 6 So we're looking at how can we better 7 load. clarify our definitions and better standardize 8 9 how the companies report their customer sales 10 and revenue data by customer class. On Schedule 4, Part D, I'm sure 11 you're aware that a number of states have 12 13 deregulated their retail markets where 14 individual customers have the ability to choose their energy supplier and have that 15 energy delivered to them over the distribution 16 of wires connected to their home. And we have 17 broken out our customer sales and revenue data 18 right now into four parts, one called full-19 service customers, those that you had a 20 bundled product and since we haven't chosen. 21 22 Parts B and C are the energy-only sale and the

distribution component. In theory the two 1 should match. Part D because Texas adopted a 2 different form of billing mechanisms. 3 We 4 actually had to set up a separate schedule for 5 Texas to report even though they deregulated. It's the actual energy market that does the 6 7 billing as opposed to the distribution companies. So we had to make an accommodation 8 on the form for that. But one of the things 9 10 that's gone on at the state level where there has been deregulation is that for those 11 customers who've chosen not to go out and do 12 13 the comparison shopping so to speak to pick an energy supplier remain on the system of the 14 traditional utility that they've been hooked 15 up with and historically taking service. 16 Those entities in most instances now move on 17 to their own generation. They were required 18 under state law to divest. The public service 19 commissions hold a competitive solicitation so 20 21 those customers are actually getting a 22 competitive generation component in their

energy supply and as if they were making the 1 2 So we want to segment them out so we choice. get a better picture of those customers that 3 are choosing on their own as well as those 4 5 that are having the choice made for them. Those who are getting paid market-based 6 7 generation as opposed to those who are getting a true cost-based component in their rate. 8 So 9 we're trying to clarify the sample a little 10 bit more as to who's getting the comparative 11 energy supply.

Another issue that we're dealing 12 13 with, as I mentioned before, we're trying to make sure that we're matching up the unbundled 14 delivery service with kilowatt hour sales. 15 And while we have strived to make sure we have 16 everybody in the frame, the energy marketers 17 were not - were clearly not getting them. 18 And we had a discrepancy where we have to make an 19 20 imputation, an adjustment to balance what's being reeled into the system relative to 21 what's being sold in some states. 22 In some

states it's over, in some states it's under. 1 So we're now asking on the monthly 826 for 2 respondents to identify every power marketer 3 4 that's moving energy on a retail basis over 5 their system and paying distribution transportation charges so we can better match 6 7 up, get those respondents - get those entities in the frame. They may have reported. We're 8 9 doing that on the 861 now. We've got it on 10 the 826 which is a monthly survey. So again, that's a data quality improvement feature this 11 time around. 12

13 Moving on to our 860 which is an annual generator report at the plant level. 14 So it would be more than one, potentially more 15 than one plant at a location. 16 There's a few issues that we're addressing there. 17 As you know, there's been a great push both in the 18 stimulus bill and at the state level with 19 20 renewable portfolio standards. And the introduction of new forms of generation that 21 22 are going to fit into that title and ocean

wave projects. Projects in that category that 1 are over a megawatt we are seeking to put in 2 more specific codes in the reporting to 3 4 monitor the progress of projects planned and 5 ultimately coming online. And then with the expected expansion of variable generation, in 6 7 some there are a multitude of new technologies that are evolving that will be coming onto the 8 9 grid and are not traditional generation. They 10 may be going on the grid to provide generation services to maintain the stability of the 11 12 transmission system. So they may actually be 13 producing electricity for less than a minute and actually storing electricity and then 14 putting it back out onto the grid. So we're 15 examining the technologies, the extent to 16 which those technologies are employed and 17 assessing whether we want to start at least 18 getting the foot in the door on the survey 19 20 cycle of identifying who the respondents are and the type of services that they're 21 22 providing. So we know when we go to the next

1 cycle do we need to be expanding the form 2 because there's a whole new market of services 3 being developed and there may be a 4 requirement, an interest or the need for 5 modeling purposes to collect more detailed 6 data.

7 We've had an issue on the last goround where we work with the North American 8 9 Electric Reliability Council to collect data 10 on reactive power, and there seems to be some ambiguity in instructions, and the results we 11 got were not what we expected, not what NERC 12 13 expected. We're working with NERC and I was speaking to one of their colleagues before the 14 start of my presentation. He has some 15 suggestions that I think will be helpful and 16 could help us work through that issue. We're 17 going to be trying to clarify that. Reactive 18 power is a very important element of 19 maintaining stability of the grid and 20 effective utilization of generation, so it is 21 22 an important thing to get a handle on,

particularly as we move into these forms of 1 2 variable generation, solar and wind power in particular. The 860(m) has currently a 5-year 3 planning horizon where utilities tell us five 4 5 years out of the estimated date of commercial operation when they're going to put a plant 6 7 online with the expectation because of some of the programs the department has put into 8 9 effect that nuclear plants are going to be 10 planned. Whether they ultimately become part of the mix remains to be seen, but the 11 construction lead time is such that if we 12 13 don't account for that we're not going to pick it up and we may be understating from the 14 planning standpoint. But our capacity, what 15 the fleet is going to look like in the future. 16 NERC has already changed that as a reporting 17 requirement and has been - have a reporting 18 requirement with the NERC where we seem to 19 maintain consistency with the data that 20 21 they're going to be relying on. 22 On the Form 923 as I alluded or

mentioned before, we had already made some 1 2 significant efforts in consolidating and proving the quality of data, so at this point 3 we don't anticipate making significant changes 4 5 to that form. Any new technologies that we add to the 860 which really deal with capacity 6 7 itself and the characteristics of the capacity will be reflected on the 923 in terms of the 8 9 generation and operating characteristics, fuel and efficiencies and so forth. 10 We're also qoing to be putting in - right now I requested 11 12 the respondents to identify who the supplier 13 of the natural gas is to natural gas plants. There's been some disparity in what we're 14 collecting versus what the Office of Oil and 15 16 Gas is getting back from gas transporters at various levels on the system, what they're 17 delivering to the electric power industry. 18 So we're going to try and make a modification to 19 20 our survey question to try and make sure both 21 sides of the agency are getting the full scope 22 of the frame for our work and for theirs, and

1 to make sure that our numbers balance out. And finally, the efficiency rating on CHP. 2 It's been a number of years since we've 3 4 updated those numbers that we use. You're 5 calculating useful thermal output and so we're going to go back and revisit the efficiency 6 7 formula and what we'll be collecting from combined heat power producers in this next 8 9 cycle. The final form is the EIA-411 10 11 which is the consolidated bulk power report. NERC submits to us, as I mentioned before, 12 13 they're returning the 10-year data projections capacity and other components in the long-term 14 planning elements that they're providing to us 15 on that form, so we're going to move into a 16 consistent framework on that. And they will 17 also be reporting - there's eight regions. 18 Some of them are not broken up into sub-19 They'll be reporting them to us at 20 regions. that level. So over time we'll be able to 21 22 come up with a more disaggregate level of

supply and demand characteristics, reserve 1 2 margins types of capacity, demand response, and so forth that's contributing to the 3 balance between supply and demand in each 4 5 region and then how they run their reserve margin, what their future planning 6 7 requirements are going to be for their capacity. 8

9 As I mentioned before, while we go 10 through a Federal Register process, unlike a regulatory agency like the Nuclear Regulatory 11 Commission or the Federal Energy Regulatory 12 13 Commission or EPA we tend to meet with our try to meet with our principal stakeholders 14 both within the government and within the 15 industry on an informal basis to give them an 16 idea through similar presentation before we 17 put together our Federal Register notice. And 18 it's primarily to expedite the process. 19 We want to get this done as quickly as possible. 20 There's programming requirements involved 21 22 behind changes in the form. We want to try
and develop a consensus and move the process 1 2 So once we have finished our internal along. federal government deliberation we - the 3 department within EIA, we'll visit with these 4 5 various organizations and some that are not on the list to get their input on issues that 6 7 we're intending to address in these forms as well as elicit comments from them if only to 8 9 submit their name to be removed from the form 10 as no longer being necessary or other things that they feel are important that ought to be 11 in the form, and we'll take that into 12 13 consideration as we move forward, put together our Federal Register notice, and put the draft 14 forms out for public comment. 15 2007 we began our internet data 16 collection process where we have now gotten to 17 the point where across the various surveys 18 forms are now roughly 37,000 forms that have 19 20 filed. Over 90 percent of the forms are now 21 filed electronically. We've historically 22 called internet data collection the system

without precedent in the government. 1 We're seeking to get people used to the concept of 2 using an e-file. One of the benefits that we 3 have found with this is in our programming of 4 5 the forms and the interface that the public has, or the respondents have in supplying the 6 7 data is that we can build in edits based on either industry standards or pulling in 8 calculation ratios where we've actually 9 10 messaged back to their historical responses to 11 come up with a range in what we would expect 12 to be a reasonable response in a particular 13 data field by the respondent. They do have the ability to override a response and provide 14 a written comment. That will typically elicit 15 direct review by our staff and call-backs to 16 verify the changes that they had made are 17 appropriate. It's reduced our time and how 18 we've been able to significantly have timing. 19 20 A lot of the time it's taking products out to our customers, both documentary reports as 21 well as to historical time series data that's 22

1 out in a spreadsheet.

2	And that concludes our summary of
3	our process, and I would - I know my other
4	colleagues from the agency have asked you to
5	respond to specific questions. We are
6	providing this more as an informational thing,
7	and we welcome your comments now based on your
8	experience in dealing with our survey data as
9	to what you believe might be appropriate, and
10	welcome comments now and your participation in
11	the Federal Register process once we move into
12	that stage. I'd be happy to answer any
13	questions you have at this point.
14	DR. BLAIR: Thank you, Howard.
15	Our first discussant is Izzy.
16	MR. MELENDEZ: Okay. Howard, can
17	you go back to Slide 6? I only have - 6, yes,
18	that one. Okay. Just a couple of comments,
19	just suggestions for you. Right now with the
20	influx of grid integration one of the big
21	concerns in the industry is regulation
22	service, right? The regulation market is

starting to become very important and because 1 2 of these intermittent resources, developers, plant developers are now starting to try to 3 4 understand do you build plants because of the 5 ancillary requirements that are - not so much for the energy, but the ancillary portions of 6 7 it. The storage devices that you have there, battery, flywheel, they also will play a role 8 9 in mitigating some of the problems that you'll 10 see with regulation service. So my suggestion is are you look at like perhaps including 11 12 something with regard to ramp rate capability 13 of power plants, and especially with these new like flywheel, what kind of response rates can 14 they get back? 15 16 Well, we are MR. STONE: considering it and we are very much aware that 17 this is an emerging technology. 18 There was in the Energy Independence and Security Act 19 20 there was a mandate to the department as part 21 of the smart grid to deal with energy 22 electricity storage and a report was prepared

by the advisory committee for Secretary Bodman 1 that generally addresses this issue. 2 We're also aware that some of these things are on 3 4 the grid already. There's a 1-megawatt 5 flywheel on the Yankee P system now. The department in fact has just approved the 6 7 environmental assessment for a 20-megawatt project that's going in upstate New York and 8 9 it's in a loan guarantee program which is when 10 the EPA was formed. The Federal Energy Regulatory Commission has required the 11 independent system operators to modify their 12 13 tariffs and regulation service to accommodate these demands, non-generating - they're 14 generating, these sources, but they're not 15 16 generators in the typical sense. So yes, we're working through the issues as to what 17 the technology is, particularly flywheels 18 clearly play an element for regulation service 19 20 because they can turn on a dime. The ones that I've looked at from a technology 21 22 standpoint, they can be taking energy off the

grid and putting it back on in less than four 1 2 seconds. So there's a tremendous capability It improves the use of fossil-fired 3 there. 4 generation, kind of making it available for 5 energy production, for sale, improves the efficiency of operation of fossil plants 6 7 because they're not being held back so to speak to provide some element of voltage 8 9 regulation. The batteries present a different 10 issue because depending on the battery technology, for instance the sodium sulphur 11 batteries tend to put the tandem of the one 12 13 plant, and put power back out onto the grid at full capacity for seven hours and basically 14 increase the capacity factor for the given 15 amount of installed capacity. So we're 16 working through these issues to try and 17 understand at this point how much is out 18 there, what services are going to be and is 19 20 this the time to sort of get ahead of the 21 curve and - or are we still internally 22 deliberating as to how we're going to address

1 those issues.

2	MR. MELENDEZ: I have a couple of
3	other comments. Basically are you keeping
4	track of NRs and ERs, network resources and
5	energy-only resources? A network resource can
б	sell capacity which is another market that's
7	out there and I think that information would
8	be useful to the industry.
9	MR. STONE: Well, and we collected
10	in the context of by fuel type. So if you
11	were to take wind, solar, those right now are
12	energy-only. I think the bigger question is
13	going to be particularly as battery storage
14	comes into play and the multi - facilities,
15	thermal storage for solar, do they start to
16	get capacity accreditation? NERC does have a
17	formulation where for wind that you provide
18	some of the barriers around the capacity
19	credit for variable generation. So in the
20	sense that we tabulate by fuel type and really
21	by renewables we keep track of it that way.
22	We're not asking at this point on our surveys

how much of the credit actually comes in on
the 411 in aggregate for the regions that have
data on the 411.

MR. MELENDEZ: 4 I quess one comment 5 on the 5- to 10-year horizon. I was on a team that visited with PJM, the plant for 6 7 interconnection, the nuclear plant at Calvert Cliffs. This is all public information. 8 One 9 of the interesting things there was PJM at the 10 time only had a 5-year planning horizon. They were really one of the first nukes to submit 11 12 for an interconnection request, PJM, and 13 through our conversation it came out that they needed to expand their planning horizon to 14 accommodate nuclear. So I'm glad to see that 15 16 that's in there. I think it's very 17 appropriate.

And one question on Slide 8. Why do you - when you report the data, do you report the data by market? Because one of the frustrating situations on our end, at least on the industry end, is that we get the data, a

NERC reliability footprint and not a market 1 2 footprint. And a lot of these RTO/ICOs are becoming - they're becoming responsible for 3 4 the regional planning aspect of things. So I 5 was just wondering if you could at least report on a market region versus on a NERC 6 7 region. It would be useful.

MR. STONE: I guess the simple 8 9 answer to that question is much of the data, 10 certainly wholesale transactions, because we 11 are precluded, or part of our approval process 12 is to ensure that there's no imputation data, 13 at least with respect to public utilities and cooperatives and municipals that are in -14 cooperatives that are in ISOs. Much of that 15 data is collected by NERC. So if we were to 16 go in and seek all the power data from an ISO, 17 while that may be a different respondent, the 18 transactional data itself is actually being 19 20 collected by the NERC. For most of the 21 generation and transmission cooperatives that 22 are RUM borrowers, they report to RUS, so

again we're getting imputation data, albeit 1 it's not in the market form that you want. 2 The only other thing is to the extent we would 3 collaborate and collect data, and budget 4 5 constraints play a role in our ability to take that data, analyze it, vet it, before we'd be 6 7 able to put it into the market format. That was something our office was granted the 8 9 resources to be able to perform. 10 MR. MELENDEZ: And just the last point is on Region 9 your list of 11 stakeholders. I just wanted to - a data 12 13 vendor was trying to get us to submit comments on a change that EIA requested to survey data, 14 or to some of their forms, and I just thought 15 that you may want to include third party data 16 providers in this list of stakeholders. 17 Yes, I can understand 18 MR. STONE: 19 what their motivation is and they're certainly 20 free to comment. 21 Well, what they do MR. MELENDEZ: - it just seemed like a process. What they do 22

is they go contact all their clients, right, 1 and then their clients then submit, you know, 2 they make them aware that this is data that's 3 4 no longer made and no longer being collected, 5 and they disseminate that to their customers, and then the customers submit. 6 So just to 7 smooth out your process, if you were able to just go and talk to them also I think you 8 9 might get a smoother ride. 10 MR. STONE: I agree with that. 11 There's a second element to that, is that there are a number of organizations out there, 12 13 vendors that collect the information that are sanctioned by the FERC because they enter into 14 agreements with say power marketeers where in 15 confidence contract data is provided and those 16 contracts are used for appendices, and are 17 actually - those vendors are basically given 18 pre-grant approval including also power 19 20 marketing contracts and any adjustments reasonable. So that's sort of the basis. 21 In 22 many instances there's obviously compensation

going back to the limited disclosure that the information. Respondents aren't identified to the public, but it's warehoused by individual entities who are in the business to collect money and get a royalty so to speak for having to pay to use their contract.

7 MR. MELENDEZ: It was just a 8 suggestion.

9 MR. STONE: No, I understand. Т 10 mean, you know, and there are, you know, people are free to use our data and there are 11 firms out there that have developed some 12 13 imaginative tools both collecting with our data as well as data from other federal 14 agencies, the RUS to the extent they get their 15 data on electric cooperatives, and doing the 16 things that you're suggesting, actually going 17 out and actually acquiring the data under some 18 degree of confidentiality before they make it 19 20 available to the public. So yes, they've got 21 some greater insight, I agree with that. They 22 also have a different motivation as well, an

economic motivation that for us to go out and 1 get things that, you know, people out in the 2 market want. And there's a natural tension 3 4 there because people - the players in the 5 market don't want to provide a lot of this information, and that all gets worked through 6 7 in our process in the Federal Register. You know, is it undermining current transactions 8 9 in the wholesale or retail competitive markets 10 if for instance were we to put something other than average revenue data at the state level 11 12 saying - that something more than transaction-13 specific and saying RSO or sub-region of RSO or something like that. People get a little 14 bit concerned about that, how much - it's the 15 tension of how much should be out there for 16 price discovery versus how much the people who 17 are actually selling this stuff don't want to 18 have it discovered. 19 20 DR. BLAIR: Thank you. Steve is also a discussant. 21 22 Thank you, Ed. MR. BROWN: And

I'm glad that convention - sort of this is 1 more of a presentation than something you need 2 a lot of comments on. Because when I looked 3 4 at it I really sort of didn't see something 5 that was looking for comments, so I really only have a few. And one of them is I think 6 7 actually this is an important time to get ahead of the curve when we're looking at the 8 9 electricity markets because we're seeing an 10 unprecedented push of new technology through legislation, and most of that is because of 11 12 new ways or different ways of generating 13 electricity, and it's going to be - if you're not ahead of the curve this year it will be 14 easy to be behind the curve next year. So I 15 think that's really important. 16

And so I would encourage you in that direction. And one of the things that is unclear to me, and I have to admit some lack of familiarity with the forms in their current format, is to what extent you're capable of distinguishing between let's say purchased

electricity under what are now called
renewable electricity standards instead of
regional portfolio standards, versus what we
might call distributed generation.

5 MR. STONE: On the Form 861 we collect information on distributed and 6 7 disbursed generation, how much is on the meter, how much that meter is going to run. 8 9 This cycle one of the things that we are 10 contemplating changing is for that generation behind the meter to have it broken out by fuel 11 type so we know how much is renewable, how 12 13 much is microturbines using natural gas, how much is solar, wind. 14 MR. BROWN: I think that is 15

16 important because if you look out west, you 17 know, you go to like Arizona State University 18 they have solar photovoltaics sitting on the 19 roofs of all the parking lots at the 20 university and they're selling electricity to 21 APS. And that's I think very different than 22 Apple Computer in the Bay Area having a diesel

power plant that they're going to switch on if
the grid goes down. I think these are very,
very different things.

4 MR. STONE: And we are seeking -5 this time around we will be proposing, we 6 anticipate, requirements. Respondents did 7 provide that data at that level as expected, 8 but comment -

9 MR. BROWN: And also I quess for this distributed - what I'll call distributed 10 generation capacity which I will distinguish 11 from let's say stuff purchased under renewable 12 13 portfolio standards, are you going to be collecting that kind of information too, or 14 only to the extent that the utilities are 15 actually making use of it? 16

MR. STONE: We are going to be we're having internal discussions now on looking at collecting RPS data in terms of what the components of the utilities compliance with RPS. How much of the RPS renewable capacity that they purchased, how

much of it is only that they build themselves. 1 How much of it are they meeting the state 2 requirement by using renewable energy 3 4 certificates. So they're not necessarily 5 selling green power, but somebody else is because they've entered into a financial 6 7 transaction under a state program that allows them to say, okay, you've brought green power 8 9 that's generated - and so we'll be, we're 10 looking at developing construction questions, an element that can conform itself in the 861. 11 12 We'd seek to capture that. 13 MR. BROWN: But to distribute

14 generation that's not renewable and may be coming from diesel or natural gas, I think one 15 thing that would be important to know is 16 whether an EPA regulator is going to operate 17 the power plant there. Because some of these 18 power plants sitting in Los Angeles don't meet 19 20 clean air standards, but they could be turned 21 on if there was some sort of power emergency. 22 I think it's also - the metering may be

1 important because if you don't have time of 2 day metering, or time of year metering, some of this distributed generation may not be 3 turned off because if you can't sort of sell 4 5 it when there's really a shortage of power to get a premium price, that distributed 6 7 generation is probably less potentially useful to the grid. 8 9 MR. STONE: Well, you know, on the 10 metering side we do now collect data on a number of customers that have AMI and AMR, and 11

12 the way the question is worded that the more 13 intelligent AMI users do not necessarily use 14 in that capacity because they clearly don't 15 necessarily have the -

Time of day tariffs. 16 MR. BROWN: MR. STONE: - time of day tariffs 17 to take advantage of it. But over time so 18 We're collecting data on that. 19 will we. Ι 20 would point out that as a general matter we are collecting that data and elements of it 21 22 The statutory authority survey was right now.

1 done on that. It's done by the FERC. They do a survey every other year and report to 2 Congress annually. One year is sort of on a 3 4 policy basis and the next year a report based 5 on the most recent survey that they've conducted. But we are in consultation with 6 7 them in terms of providing some of the metering data that we collect, and they then 8 9 have additional information that they've put 10 together to show what the status is, the progress of advanced metering technologies are 11 and how the distribution can also power 12 13 operations.

Then one last comment 14 MR. BROWN: or question would be I don't know that it's 15 going to happen, but a lot of people are 16 talking about there being a transition to this 17 kind of nationally integrated grid, getting 18 away from NERCs, not necessarily for the 19 purposes of planning, but for the purposes of 20 generating electricity in places like North 21 22 Dakota and moving it to Chicago. And I'm

wondering to what extent the current set of 1 forms would be able to create a transition to 2 collecting the data looking forward to the 3 next 20 years if such technology emerges. 4 5 MR. STONE: Well, right now we had 6 a form that for budget reasons that did 7 collect some transmission data from in fact from government-owned entities. In fact, two 8 9 of the entities that received considerable 10 funding in the stimulus bill. Because of budget constraints that form was suspended. 11 We're hoping that at some point in time we'll 12 13 have sufficient budget authority to possibly resume that data collection. But it's 14 something we're certainly aware of, and doing 15 the best we can to deal with it in the budget 16 17 plan. Okay. Those are all 18 MR. BROWN: my questions. 19 20 DR. BLAIR: Ed? 21 MR. KOKKELENBERG: I have a couple 22 of comments here. First of all, flywheels in

one sense aren't any different than coal piles 1 so you're looking at a method of storing the 2 energy as opposed to generating the energy. 3 4 So capacitors, pump storage, compressed air 5 storage, these are all into the storing as 6 opposed to the generating. So if you're 7 collecting power supply data at the generating level, then you might have to have separate 8 9 ways of looking at this energy storage thing 10 and include coal piles. That comes to this whole idea of 11 dynamic smoothing, and that I understand, 12 13 particularly in short time spans you want to be able to smooth production, smooth 14 consumption and have this storage in my 15 16 flywheel as it were. And I would suggest you look at the airlines who go into dynamic road 17 models and pricing models which are the reason 18 that if 20 of us got on an airplane today to 19 20 go from here to New York City, we'd have 40 different prices for that flight. They're 21 22 really good at doing that, and you might want

to check into how they model this dynamic
smoothing thing.

MR. STONE: The tariffs that have 3 been earning in the centralized wholesale 4 5 markets where there's - they span multiple states, multiple utilities and generations 6 7 where the services are unbundled so regulation is an unbundled generation-related ancillary 8 9 service that's required to be purchased, 10 potential purchase and transmission service. The pricing for a flywheel providing 11 regulation service, it follows exactly 12 13 conceptually the model that you're talking They usually refer to it as location-14 about. based margin of cost. 15

MR. KOKKELENBERG: So a good idea two years from now. Okay. The second thing that, and this is just a longer term one, if we're now going to re-regulate the financial industry, are we going to re-regulate sectors of electricity and energy industry? Nancy just reacted to that quite a bit, and I don't

1 know, but I would think this current 2 Administration might feel that that's necessary. That goes beyond the ken of your 3 work at this point, but it is something I 4 5 think that in long-term, because you've mentioned deregulation at the state level and 6 7 so forth, and those things 10 years out might be something you have to think about. 8 9 MR. STONE: I can give you two 10 comments on that. The President has just appointed John Wellinghoff as chairman of the 11 FERC managing department, and I would urge you 12 13 to go on the FERC's website. He just expressed his views on competition and I'll 14 let those speak for themselves. 15 MR. KOKKELENBERG: Well, what are 16 they basically? 17 18 MR. STONE: He's pro competition. MR. KOKKELENBERG: 19 More 20 competition. Wait till Congress looks at it. Well, you know, the 21 MR. STONE: 22 second element of that on the retail side some

states are re-regulating. Virginia repealed 1 2 their deregulation status, Maryland is considering a bill now, Delaware has reversed 3 4 it, Ohio has reversed it. The issue that 5 you're dealing with where the original deregulation bills resulted in divestiture is 6 7 how do you put Humpty Dumpty back together again into a cost of these regulations. 8 And 9 if you look at the bills that have been passed 10 for instance in Illinois, they have created a state agency that will be the buyer for the 11 customers from all the utilities that have 12 13 more than 100,000 customers, and it will be done in the wholesale market on a competitive 14 solicitation basis, so it is still going to be 15 - the retail component of generation is still 16 going to be market-based which is one of the 17 reasons why we want to make that modification 18 in the form. 19 20 MR. KOKKELENBERG: The third point 21 I want to make is that the terms of your potential stakeholders, I think in a sense

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that you might have misinterpreted what Izzy 1 2 was saying here. These are stakeholders who are people who are interested in the product 3 4 that you're going to deliver ultimately and 5 the changes that you are suggesting to be made, at least that's the way I understood it. 6 7 And if that's the case, then the addition of those people that he suggested is certainly I 8 think well within it. It's certainly not 9 10 screwing up competition. And I would add that you should probably throw Congress in there as 11 well as some of the large financial firms that 12 13 have big energy sector units. Now, those may have changed so much in the last few years 14 that they don't exist, but there were banks 15 that used to really follow energy or brokerage 16 17 houses.

And finally I would say that I suspect that perfect is the enemy of efficient here in terms of taking two and a half years to get a change in the forms through this whole process and out, the end result. And

yes, there are all these steps. I don't know 1 if you've done a critical path on these steps, 2 but the bottom line is that if you really need 3 to make changes, why does it take two and a 4 5 half years to get the change done? This is 6 appalling. So on that note I step back. 7 DR. BLAIR: Mike and Steve, if you still have something? Since we're running 8 9 late on the public comment, let me just ask 10 this. Is there any member of the public who wished to make comment at scheduled time? 11 12 (No response.) 13 DR. BLAIR: All right. 14 DR. TOMAN: Do I need to do something with this or is it on? 15 16 MS. BROWN: Just speak loud because they're not working real well. 17 18 DR. TOMAN: Okay. I'm also one of the folks who doesn't know the details in 19 20 these forms, so these may be naive questions 21 but so be it. Do you have the ability in the 22 forms now or could it be easily introduced to

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1	measure whether a utility is essentially
2	obligated to run that conservation or
3	efficiency program, the displaced demand, the
4	megawatts, pardon the term?
5	MR. STONE: On the metering that's
б	done under state-approved rate schedules. We
7	ask them to provide an estimate of how many
8	megawatts of generation that they've afforded,
9	how the load is.
10	DR. TOMAN: I understand that, but
11	I'm thinking of the case which could become -
12	could be the way that the utility industry is
13	regulated as opposed to the more traditional
14	utility regulation. The utility is told go
15	out and install compact fluorescent bulbs in
16	all of your, you know, customers'
17	establishments.
18	MR. STONE: Demands like that -
19	DR. TOMAN: Yes, well, ESM.
20	MR. STONE: Well, I mean we
21	collect data on DSM on kilowatts, kilowatt
22	hours achieved incrementally cumulatively

under various programs and you know, at this 1 point say what, you know, is it, what the 2 nature -3 No, no, I understand. 4 DR. TOMAN: 5 But you are measuring -6 MR. STONE: Yes, we are. 7 DR. TOMAN: Okay. MR. STONE: And the FERC is also 8 9 doing it at the wholesale level on what they 10 refer to as demand response. And a lot of what historically has been done at the retail 11 level is now being aggregated from individual 12 13 customers to be bid into the wholesale market to provide some of these services. So right 14 now the FERC is - the wholesale level is 15 collecting it. 16 DR. TOMAN: I think it was that 17 last part I didn't know. I thought maybe 18 these things were only being recorded in 19 20 individual states. The other thing I wanted to ask is you mentioned a couple of times the 21 competitive pricing, including your example in 22

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1	Illinois. Does anybody keep track of how many
2	bidders there were in these different
3	solicitations?
4	MR. STONE: The state commissions
5	have regulations under which they - the
6	solicitations they've done under their
7	control.
8	DR. TOMAN: Right. So you don't
9	directly -
10	MR. STONE: We don't directly
11	control it. The regional trade - they
12	generally disclose how many bidders there are.
13	In fact, Maryland has terminated because they
14	didn't have any bidders in their solicitation.
15	DR. TOMAN: That was one of the
16	reasons I was asking. I know these are state
17	functions, but I wondered if there was any way
18	that as part of a more comprehensive EIA
19	measurement assessment of what's going on in
20	electricity whether there would be an ability
21	to pull together information to give insight
22	about how much activity there is in these

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1	markets.
2	MR. STONE: That's a question that
3	we can certainly entertain.
4	DR. BLAIR: Is that it? Other
5	comments, questions? Well, at this time we'll
6	formally ask if there are any public comments.
7	(No response.)
8	DR. BLAIR: Hearing none I believe
9	we're adjourned. Have a good day.
10	(Whereupon, the above-entitled
11	matter was adjourned for the day at 4:50 p.m.)
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