## Date: March 23, 2015

Case: Notice of Proposed Rulemaking for Hearth Products Standards Meeting



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Page 2 1 Appearances for Department of Energy meeting. 2 Doug Brookman - Public Solutions 3 John Cymbalsky - DOE 4 Ashley Armstrong - DOE 5 6 Timothy Ballo - Earthjustice 7 Leslie S. Bortz - RH Peterson Co. 8 Robert J. Dischner - RH Peterson Co. 9 Michael A. Caldarera - National Propane Gas 10 Association 11 Ryan Carroll - Hearth, Patio & Barbecue Association 12 Rachel Feinstein - Hearth, Patio & Barbecue 13 Association 14 Jack H. Goldman - Hearth, Patio & Barbecue 15 Association 16 John A. Hodges - Wiley Rein LLP 17 Caroline Davidson-Hood - Air-Conditioning, Heating & 18 Refrigeration Institute 19 James E. Houck - Technical Consultant - Energy and 20 Environment 21 Jim Kupsh - SIT Controls USA Inc. 22 Daniel Lapato - American Public Gas Association

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1	Jessica Lewis - Navigant
2	Adam Darlington - Navigant
3	Justin Elszasz – Navigant
4	Michael Rivest - Navigant
5	Barton Day - Law Offices of Barton Day, PLLC
6	David Delaquila - Aquila Consulting LLC
7	Dana Moroz - Napoleon Products
8	Tim Perrin - Polsinelli
9	Theodore E. (Rett) Rasmussen, III - Rasmussen Gas
10	Logs & Grills
11	Raymond T. Reott - Reott Law Offices, LLC
12	Steven J. Rosenstock - Edison Electric Institute
13	John Schlachter - Maxitrol Company
14	Harry A. Sporidis - Polsinelli
15	Frank Stanonik - Air-Conditioning, Heating, &
16	Refrigeration Institute
17	Sue Walker - Empire Comfort Systems
18	Gregory Rosenevist - Lawrence Berkeley National Lab
19	David Siap - Lawrence Berkeley National Lab
20	
21	
22	

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1	PROCEEDINGS
2	MR. BROOKMAN: Please take your seats we
3	will begin. Good morning everyone welcome, glad to
4	see you here this morning. This is the Notice of
5	Proposed Rulemaking Public Meeting on Energy
6	Conservation Standards for Hearth Products. Today is
7	March 23, 2015 here in the Forrestal Building in
8	Washington, D.C. at the Department of Energy.
9	My name is Doug Brookman of Public
10	Solutions Baltimore nice to see you here this
11	morning. We are going to start with welcoming
12	remarks from Ashley Armstrong.
13	MS. ARMSTRONG: Good morning everyone, I
14	would just like to welcome you to the public meeting.
15	We are glad to have such a good turnout and we hope
16	that everyone will participate throughout the date.
17	We are here to at least give you an overview of our
18	proposal and obviously we welcome you to speak up,
19	ask questions, say comments as that is the purpose of
20	this public meeting and we thank you all for coming
21	today.
22	MR. BROOKMAN: We always start with

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1	introductions. Start to my immediate left and you
2	can get used to turning the microphone both on and
3	off please say your name and organizational
4	affiliation.
5	MR. GOLDMAN: Jack Goldman, Hearth, Patio
6	and Barbecue Association.
7	MR. CARROLL: Ryan Carroll with the
8	Hearth, Patio and Barbecue Association.
9	MR. DAY: Barton Day Counsel for HPBA.
10	MR. HODGES: John Hodges Wiley Rein,
11	Counsel for Natural Propane Gas Association.
12	MR. CALDARERA: Mike Caldarera, National
13	Propane Gas Association.
14	MR. DIRCKS: Peter Dircks with Hearth and
15	Home Technologies.
16	MR. RASMUSSEN: Ratt Rasmussen with
17	Rasmussen Gas Logs and Grills.
18	MR. BORTZ: Leslie Bortz with Robert H.
19	Peterson Company.
20	MR. SKOLNICK: Steve Skolnick, Skolnick
21	Associates and Mid Atlantic Hearth Products
22	Association.

Page 6 1 MR. SCHLACHTER: John Schlachter with 2 Maxitrol Company. 3 MR. STANONIK: Frank Stanonik, Air 4 Conditioning Refrigeration Institute. 5 MR. LAPATO: Dan Lapato, American Public 6 Gas Association. 7 MS. WALKER: Sue Walker, Empire Comfort 8 Systems. 9 MR. ROSENSTOCK: Steve Rosenstock, Edison 10 Electric Institute. 11 MR. KUPSH: Jim Kupsh, SIT Controls. 12 MR. STAS: Eric Stas, DOE General 13 Counsel's office. 14 MS. ARMSTRONG: Ashley Armstrong, DOE. 15 MR. BROOKMAN: Let's see if that 16 microphone over there works. 17 MR. ROSENQUIST: Greg Rosenquist, Lawrence 18 Berkeley National Laboratory. 19 MR. RIVEST: Mike Rivest, Navigant 20 Consulting. 21 MR. SIAP: David Siap, Lawrence Berkeley 22 National Laboratory.

Page 7 1 MR. DARLINGTON: Adam Darlington, Nagivant 2 Consulting. 3 MR. ELSZASZ: Justin Elszasz, Navigant 4 Consulting. 5 MS. LEWIS: Jessica Lewis, Navigant 6 Consulting. 7 MR. BROOKMAN: If those of you in the back 8 if you will just stand and introduce yourself please 9 this will not be on the record but we will have 10 business cards so we will know who is here, please. 11 MR. HOUCK: Jim Houck, an Independent 12 Consultant. 13 MR. BROOKMAN: Thank you. 14 MR. DELAQUILA: Dave Delaquila, consultant 15 from Action Company. 16 MS. FEINSTEIN: Rachel Feinstein, Hearth, 17 Patio and Barbeque Association. 18 MR. REOTT: Raymont Reott, R. H. Peterson 19 Company 20 MR. PERRIN: Tim Perrin, Consultant for 21 ACE 22 MR. BALLO: Tim Ballo with EarthJustice.

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1	MR. DISCHNER: Bob Dischner, RH Peterson
2	and Company.
3	MR. BROOKMAN: Okay and once again thanks
4	to all of you for being here for an early start on
5	this day. Nice to see so many folks here, all of you
6	received a packed of information I hope and if you
7	look on page 3 there is an agenda which I will do a
8	very brief review.
9	Immediately following this agenda review
10	and some preliminary information there is an
11	opportunity for opening comments, brief summary
12	statements here at the outset as we get this meeting
13	going. From there moving on to describing the
14	regulatory and authority rulemaking overview and then
15	moving on market technology assessment, we will take
16	a break mid-morning around about 10:15 or 10:30 or
17	so. Returning from the break engineering analysis,
18	markups, energy use characterization, lifecycle costs
19	and payback period analysis.
20	We will take lunch mid-day 12:30-ish.
21	Returning from lunch shipments, national impact
22	analysis, regulatory impact analysis, manufacturing

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1	impact analysis and we will take a mid-afternoon
2	break and then following that or whenever we get
3	there utility impact analysis, environmental impact
4	analysis, indirect employment analysis and at the end
5	of the day whenever that is another opportunity for
6	closing remarks.
7	Issues that you wish to bring to the
8	floor, issues that haven't been covered sufficiently
9	during the course of this meeting today. That's the
10	general plan this is the framework that the
11	Department of Energy observes consistently.
12	Questions and comments on the agenda. Seeing none I
13	would ask for your consideration each time you speak
14	please say your name, please say your name each time
15	you speak.
16	There will be a complete transcript of
17	this meeting made available. I would ask you to
18	speak one at a time please if you could try to be
19	concise share the air time, there's a lot to be
20	covered here in this day. If you could keep the
21	focus here, please turn your cell phones on silent
22	mode.

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1	You are already getting used to turning
2	these microphones on and off and webinar participants
3	we welcome you, so glad you could join us via the
4	web, the Department of Energy is trying hard to make
5	sure all of these meetings are accessible via the
6	web. If you would try to keep your telephone on mute
7	and raise your hand in the software provided to be
8	recognized to speak and then when we unmute you and
9	I'll recognize you to speak, then we should be able
10	to hear you in the room. That's been working fairly
11	well recently and hopefully we won't have any
12	glitches today with the technology.
13	I think that is the bulk of what I am
14	supposed to cover except that I would encourage all
15	participants, everyone here in the room and also
16	those joining us via the web to send written comments
17	following this meeting. I'm saying this especially
18	for those that are joining via the web. We want to
19	make certain that you participate as well as everyone
20	who made it here into the meeting room itself.
21	And for the purpose of the public meeting
22	to John Cymbalsky.

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1	MR. CYMBALSKY: Thanks Doug, this is John
2	Cymbalsky from DOE, program manager for appliance
3	standards. The purpose of today's meeting is to
4	present the procedural and analytical approaches to
5	evaluate potential future energy conservation
6	standards for residential hearth products and of
7	course along the way we invite public comment on all
8	of the slides you will see here today and of course
9	any issue you might want to raise please feel free to
10	raise it as we go through the slides.
11	And then as we go through the deck you
12	will see the little issue boxes like you see up here
13	on the slide. Basically you can comment on anything
14	but these are the boxes you will see that DOE has
15	highlighted as important points that it wishes some
16	deeper comment on as we go along.
17	Comment period ends April 10th. Currently
18	I understand there may be a request for an extension
19	coming so please put that in writing and with reasons
20	why you need a comment extension. So at this time we
21	will take opening statements, I think we have a few

<sup>22</sup> in the que.

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1	MR. BROOKMAN: Yes, let's do that. Brief
2	opening statements, fairly brief I hope, summary
3	statements here at the outset who would like to
4	begin, okay is it Jack?
5	MR. GOLDMAN: Yes, my name is Jack
6	Goldman. Good morning I'm President and CEO of the
7	Hearth, Patio and Barbeque Association, the principal
8	trade association representing the hearth products
9	and barbeque industries in North America.
10	HPBA's experience with appliance efficiency
11	regulation has been difficult for both HPBA and DOE
12	in large part because of the unique characteristics
13	of hearth products and the fact that DOE has
14	proceeded on the basis of inadequate information
15	collection analysis and above all dialogue to inform
16	the rulemaking process.
17	DOE's current rulemaking is deficient for
18	the same basic reasons and it is my hope that this
19	can be corrected starting today. As we will explain
20	today significant errors compromise virtually every
21	aspect of DOE's preliminary regulatory analysis and

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1	misunderstandings with respect to the products and
2	the relevant technical and economic issues.
3	As a result, substantially more
4	information and analysis would be required to justify
5	any energy conservation standard and a new notice
6	providing an opportunity to comment on that new
7	information and analysis would be required before any
8	final rule could issue.
9	HPBA has thus requested that the proposed
10	rule be withdrawn and that the notice be treated as a
11	request for information. To facilitate comment for
12	that purpose HPBA is also requesting l) clarification
13	of the range of products at issue 2) additional
14	information and documentation concerning the basis
15	for DOE's regulatory analysis and 3) an extension of
16	the comment period to allow time for adequate review
17	of and comment on the relevant issues.
18	To facilitate comment it is particularly
19	important that DOE clarify the range of products at
20	issue. HPBA does not believe that DOE can lawfully
21	define a variety of different products as a single
22	"covered product" under EPCA. But let's put that

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1	issue aside for the moment. We can't even speak
2	intelligently about the issues raised by the proposed
3	rule without a clear understanding of the range of
4	products at issue. My hope is that we will be able
5	to achieve some clarify on that when we discuss the
6	first issue upon which DOE seeks comment, its
7	proposed hearth products definition.
8	We will need to understand the intended
9	scope of coverage before we can even begin to address
10	how best to define the scope of coverage, let alone
11	the technical and economic issues that may be
12	relevant to this rulemaking in view of that scope of
13	coverage.
14	There is one related point that I cannot
15	emphasize strongly enough. DOE is attempting to
16	regulate products that are unlike any appliances it
17	has ever sought to regulate before. It is also
18	seeking to regulate at one fell swoop products that
19	are materially different from each other in a variety
20	of ways that DOE has failed to recognize. This is a
21	critical problem because most of the basic data
22	required for regulatory analysis has never been

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1	collected and DOE has again and again sought to
2	overcome critical information gaps by assuming
3	incorrectly that information with respect to one
4	product can reasonably be applied to others.
5	Basic misunderstandings concerning the
6	products and markets involved here have also been a
7	source of many areas that undermine virtually every
8	aspect of the technical and economic analysis
9	underlying the proposed rule. We will address a
10	number of these issues when we discuss the specific
11	issues upon which DOE has requested comment.
12	The basic point I would like to emphasize
13	now is that the technical and economic issues raised
14	by the proposal can only be considered on a product
15	by product basis. With that introduction I would
16	like to turn to some HPBA's central concerns with
17	respect to the proposed rule.
18	First the proposed rule is not directed at
19	the issue of appliance efficiency nor is it designed
20	to address standby mode energy consumption which as
21	defined by USC Section 629 Subsection 41 is energy
22	consumption that "cannot be switched off or

1 influenced by the user". Instead the proposed rule 2 is aimed solely at consumer behavior the presumed 3 tendency of consumers to leave pilot lights burning 4 unnecessarily. 5 It isn't clear that DOE has the authority 6 to regulate consumer behavior as an energy efficiency 7 issue and it certainly doesn't have the ability to do 8 so by sweeping a variety of different products 9 together in a single covered product category to be 10 regulated without any regard to the utility or 11 function because consumer behavior is the issue, two 12 of the specific "problems" that the rule is intended 13 to address do not even exist. In particular DOE's 14 review under Executive Orders 12866 and 13563 states 15 that the proposed rule is necessary because a "lack 16 of consumer information and difficulties in analyzing 17 relevant information" caused consumers to miss 18 opportunities to invest in more efficient products. 19 Similarly DOE suggests that misaligned incentives 20 between purchasers and users also result in failures 21 to invest in more efficient products. 22

In fact however, no investment in more

1 efficient products is required because consumers 2 already have the ability to turn their pilot lights 3 on and off as appropriate. DOE's only concern is 4 that they might not do so. As a result we have a 5 proposed rule that is designed not to make products 6 more efficient, but to take control of pilot light 7 operation completely out of the hands of consumers. 8 Second DOE simply presumes the existence 9 and magnitude of the consumer behavior problem it 10 seeks to address. I say presumes because there are 11 no credible data demonstrating the existence and 12 magnitude of the problem that DOE seeks to address. 13 Instead the proposed rule is justified on the basis 14 of a one page article citing data concerning a small 15 number of gas fireplaces in service 20 years ago. 16 DOE simply assumes without any data -- DOE

<sup>10</sup> DOE SIMPLY assumes without any data -- DOE <sup>17</sup> simply assumes without any data that the data cited <sup>18</sup> in this article are relevant to the fireplaces that <sup>19</sup> will be on the market five years in the future. Even <sup>20</sup> more remarkably DOE assumes that these cited data are <sup>21</sup> somehow relevant to completely different types of <sup>22</sup> products such as patio heaters which it should go

<sup>1</sup> without saying they are not.

2 In this regard DOE has completely failed 3 to consider material differences in the ease of pilot 4 light control, a factor that the article it relies on 5 specifically identifies as important. There was a 6 time when pilot lights could only be operated on 7 hands and knees with a flashlight and screw driver, 8 but the prevalence of such products has declined 9 dramatically in the face of industry innovation and 10 consumer demand for more user friendly pilot light 11 controls.

12 Products with standing pilot lights are 13 increasingly being equipped with features such as 14 simple knob and push button controls and remote 15 controls that allow consumers to turn pilot lights on 16 or off with the touch of a button. The proposed rule 17 does not even consider the impact that such controls 18 have on consumer behavior nor does it consider the 19 changes in consumer attitudes that have been driving 20 increased demand for user-friendly pilot light 21 controls. Consumers only seek such controls because 22 they intend to use them.

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1	Third, the proposed rule assumes that the
2	problem with consumer behavior can only be modified
3	by a federal design requirement completely
4	eliminating the consumer's ability to control pilot
5	light use. There is no basis for such an assumption
6	because consumers have a direct financial incentive
7	to avoid unnecessary energy consumption and the
8	products currently available give them the ability to
9	respond to that incentive without any need to accept
10	increased product costs or decrease product
11	performance because benefits can be obtained without
12	sacrifice there is no reason to assume that consumer
13	education would not be sufficient to induce consumers
14	to act in their own economic interest.
15	The message is a simple one and requires
16	easily prompted action. After all the products at
17	issue don't work all but forgotten in closets or
18	basement corners, instead they are prominently
19	located in frequently occupied areas such as living
20	rooms and family rooms where a burning pilot light
21	provides a visible reminder of its presence every
22	evening when the lights are turned off.

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1	Others in the industry will speak more to
2	other issues but suffice it to say that HPBA has many
3	significant concerns about the proposed rule and the
4	regulatory analysis that have produced it. As a
5	result I am pleased that we are finally having an
6	opportunity to discuss the issues and information
7	relevant to the concerns that DOE seeks to address
8	and my hope is that we can now begin to have the kind
9	of dialogue required to address these concerns in a
10	constructive way.
11	Thank you very much and I look forward to
12	the rest of today's discussion.
13	MR. BROOKMAN: Okay any additional
14	comments too at the outset, yes Mike please.
15	MR. CALDARENA: Good morning my name is
16	Michael Caldarena. I am Vice-President of the
17	Regulatory and Technical Services with the National
18	Propane Gas Association. NPGA is the national trade
19	association representing the U.S. propane industry.
20	Our membership includes about 2800 companies in all
21	50 states about 2300 of those companies are retail
22	propane marketers who deliver the fuel to the end use

1 customer including those customers who use hearth
2 products.

3 Our members also are engaged in the 4 production and wholesale of propane equipment and 5 manufacturers and distributors of propane gas 6 appliances and equipment as well. NPGA believes that 7 DOE has issued this NOPR without observance of its 8 own rulemaking procedures and without pre-proposal 9 outreach and dialogue required by executive orders. 10 Due to this the proposed rule we believe and the 11 regulatory analysis, including the technical support 12 document cannot support the issuance of a final rule 13 at this time.

14 We therefore urge that DOE withdraw the 15 proposed rule and treat this NOPR as a request for 16 information. It should also clarify the potential 17 scope of the rulemaking and make additional 18 information and documentation available for review 19 and comment. In light of this DOE also should 20 suspend the April 10th deadline for public comment. 21 NPGA also urges that DOE eliminate 22 coverage of propane fueled products from this or any

1	other related rulemaking to the extent that DOE	
2	conducts rulemaking it should limit its hearth	
3	product definition to natural gas fueled products	and
4	clarify that its proposed energy conservation	
5	standard should not apply to the propane fueled	
6	products.	

7 In this regard DOE appears to recognize 8 that its proposed standard cannot be justified for 9 propane fueled products with its discussion on page 10 7101 of the NOPR where DOE acknowledges that propane 11 is a "relatively expensive fuel". In addition 12 propane is supplied for household use in cylinders or 13 tanks of limited size or capacity. So as DOE 14 recognizes in light of the discussion with regard to 15 consumer behavior, consumers with propane products closely monitor their pilot light operation, hence 16 17 there's no reason to presume that propane fueled 18 products would be left with their pilot lights 19 burning unnecessarily.

If DOE includes propane fueled products in the proposed hearth product definition the proposed energy conservation standard would apply to them and

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1	subject these products to a completely unjustified
2	regulatory burden. We intend to submit more
3	substantive written comments by the comment deadline
4	we thank you for your time.
5	MR. BROOKMAN: Thank you. Yes, please
6	Peter?
7	MR. DIRCKS: Good morning my name is Peter
8	Dircks, I'm Vice President of Marketing of Hearth &
9	Home Technologies. We are headquartered in
10	Lakeville, Minnesota and the market leader in the
11	manufacture of wood, pellet and gas burning
12	fireplaces, stoves and inserts. Our well-known
13	brands include Heatilator, Heat and Glow, Quadrifire,
14	Harmon and Pelpro. We employ over 1200 member owners
15	and have manufacturing plants and distribution
16	centers in Iowa, Minnesota, Pennsylvania, Washington,
17	North Carolina, California and Maryland.
18	At HHT we believe in the importance of
19	continuous improvement of our products for both our
20	end consumers and the environment and are proud of
21	our industry leading efforts in the areas of both
22	safety and innovation. On behalf of HHT we have the
1	

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1	following concerns about the proposed rule.
2	First we seek further clarification around
3	DOE's analyses that current energy consumption by the
4	products proposed to be covered by the NOPR meet
5	EPCA's jurisdictional threshold both for product
6	consumption per household in a 12 month period as
7	well as for the aggregate energy use within the
8	United States in a 12 month period.
9	Secondly we seek further clarification
10	around the scope of the proposed rule and there's
11	really three sections of this, first is delineating
12	the definition of hearth product to a reasonable
13	range of products, clarifying the narrative
14	description of the intended scope of this proposed
15	definition as well as eliminating coverage of
16	specific products entirely such as outdoor products,
17	propane fueled products and products that by
18	definition lack pilot ignition systems all together.
19	And then thirdly we object to the proposed
20	energy conservation standard calling for a
21	prescriptive design requirement that would completely
22	disallow the use of a standing pilot and standby mode

1	as defined in the NOPR as we believe it would have
2	the effect of a lessening competition within the
3	hearth product by reducing consumer choice for hearth
4	products of the kind that would still provide
5	substantially all of the reported energy savings from
6	the proposed prescription while providing significant
7	product utility that would be lost under the proposed
8	prescription.
9	And then secondly it would also eliminate
10	future potential designs and applications where the
11	use of a pilot in standby mode would be essential to
12	those designs or applications but could still be
13	designed to achieve substantially all of the
14	purported energy savings claimed by the NOPR. So we
15	at HHT also respectfully request that the proposed
16	rule be withdrawn, that the NOPR be treated as a
17	request for information and that DOE provide the
18	clarification information and documentation necessary
19	to facilitate comment and that the April 10, 2015
20	deadline for submission of comment be extended
21	pending clarification of the information and the
22	issues to be addressed here today. Thank you very

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1	much.
2	MR. BROOKMAN: Okay thank you yes, I don't
3	believe I got your name the first time.
4	MR. DIRCKS: Sure I'm Peter Dircks Vice
5	President of Marketing at Hearth and Home
6	Technologies.
7	MR. BROOKMAN: Thank you and I was
8	referring to the gentleman next to you there, Peter
9	thanks for being complete that was good, your name
10	please?
11	MR. RASMUSSEN: Rett Rasmussen.
12	MR. BROOKMAN: Okay.
13	MR. RASMUSSEN: Good morning I am Rett
14	Rasmussen, President of Rasmussen Iron Works, Inc.,
15	also known as Rasmussen Gas, Logs and Grills. We are
16	a five generation family business founded in 1907.
17	We have been manufacturing gas logs since 1958,
18	infrared gas grills since 2000 and distributing
19	radiant patio heaters since 2011.
20	There is no monolithic hearth product.
21	The similarity between the products and our industry
22	start and end with their consumption of gas lumping

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1	them together is ambiguous, overbroad and unworkable
2	as a definition. We submitted comments on this
3	definition last year. Why didn't DOE give us an
4	improved definition to comment on in this NOPR?
5	Gas logs are also not a monolithic
6	product. There are countless variations in the sizes
7	of wood burning fire places with differences in the
8	front width, rear width, depth, opening height, gas
9	line location, number of openings and all
10	combinations of these different factors. Gas log
11	sets are retrofit appliances to this vast variety of
12	fireplace sizes, restrictions and combinations.
13	If there were a one size fits all gas log
14	set my life would be much easier but there is no such
15	solution. Accordingly gas log sets are designed to
16	meet the market for these vast number of
17	combinations. Some manufacturers focus on the sweet
18	spot of sizes, 18 inch to 30 inch widths, but
19	Rasmussen is a specialty manufacturer, offers
20	standard solutions of up to 96 inches and custom
21	solutions for large and unusual fireplaces with a
22	variety of safety control systems.

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1	Adding an electronic ignition system which
2	I will refer to as an EIS to a gas log set presents a
3	very challenging proposition. It is not as easy as
4	merely replacing the safety pilot control valve as
5	the NOPR suggests. EIS components are greater in
6	number, valve control module, wiring, battery pack
7	for transformer and greater in size that that for a
8	standing pilot.
9	Gas long sets are not constructed as part
10	of an entire enclosure like gas fireplaces. Gas long
11	manufacturers do not have the voids in the sides or
12	under the floor of the fireplace in which to hide the
13	EIS components. Accordingly unless the installation
14	is part of a new construction or an extensive remodel
15	both of which are very small proportions of the gas
16	log sales and the components can therefore be
17	installed outside of but adjacent to the fire box,
18	the EIS components must be installed in the fire box
19	along with the gas log set.
20	Unfortunately EIS components are also more
21	heat sensitive than those of standing pilot systems
22	further complicating the location of components

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1	issue. If not located properly the components could
2	become damaged from the heat, potentially creating a
3	safety hazard. A further issue with EIS is that they
4	require outside power to operate. Since it is highly
5	unusual for a wood burning fireplace to have a 120
6	volt receptacle installed inside of it, batteries
7	must be used to power the functions of the EIS.
8	Unfortunately batteries are also very heat
9	sensitive, discharging at temperatures below that
10	which adversely affect the EIS components. Again it
11	is very challenging to include these large components
12	while maintaining the aesthetically pleasing
13	decorative effect of gas logs. This NOPR would
14	severely reduce our ability to provide solutions for
15	36 inch and large gas log set sizes. The EIS
16	controls are the least developed systems in the
17	hearth industry.
18	Battery powered electronic ignition
19	systems with variable flame height remote control, a
20	feature many people desire is only available with a
21	gas capacity that allows for the use in 30 inch and

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1	there is only one safety control solution for
2	installation inside the firebox and that is with a
3	millivolt safety standard pilot system.
4	The only EIS solution is furnace controls
5	that must be installed outside of the fire box and
6	require 120 volt electricity. They are only
7	available with on/off control, no remote flame
8	modulation. My quest for over a dozen years and
9	every conversation I have with gas control
10	manufacturers is that they product a high BTU
11	capacity battery powered electronic ignition system
12	with variable flame height remote control but they
13	have always told me that they just don't anticipate
14	sufficient sales volume to warrant their extensive
15	costs of design, testing, certification, tooling,
16	marketing and other costs.
17	You see gas log manufacturers only have
18	available to us safety control systems that have been
19	made for other products or industries of greater
20	sales volume but unfortunately lesser BTU flow than
21	what our larger fireplaces need for gas log sets.

22 Accordingly eliminating the millable safety control

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1	will severely lessen the utility of my products for
2	larger fireplaces, limiting them to match lighted
3	natural gas, extensive remodels and new construction
4	all of which would result in the virtual elimination
5	of this category for my company.
6	I do not see in the TSD that has taken
7	into account the cost of annually replacing batteries
8	over the life of the gas log set which greatly
9	reduces the economic benefit of switching to
10	electronic ignition. DOE has determined that 90
11	manufacturers would be impacted and that 66 of these
12	are U.S. based small businesses, less than 500
13	employees.
14	I know of only two large manufacturers in
15	this industry, those greater than 500 and only one of
16	which is U.S. based. Who are these other 22 large
17	businesses? The hearth products industry is a small
18	family business industry including not just the
19	manufacturers but the distributors and retailers who
20	sell their products to the consumer.
21	This NOPR strikes at the heart of free
22	enterprise which DOE admits on page 7115, table V.8

	Page 32
1	it projects up to a 58% decrease in production
2	workers as a result of the standard, ouch, how about
3	we cut out 58% of DOE's workers and contractors might
4	have evince a bit of empathy from DOE on the impact
5	of this proposal?
6	I also agree with the NOPR on page 7116
7	which states that the manufacturer product cost for
8	gas log sets are likely to see a greater increase
9	than for other products resulting in declining
10	consumer demand and negative impacts on gas log
11	manufacturer profitability.
12	I also agree with the NOPR on page 7125
13	that larger manufacturers will have a competitive
14	advantage due to their size and that this proposed
15	standard would have a significant impact on a
16	substantial number of small businesses. A dealer of
17	mine in Michigan wanted me to be sure to read this to
18	you. Rett please let Washington know that in the
19	northern states the pilot which costs about \$3.00 a
20	month to run actually keeps the cold air and moisture
21	out of the fireplace box.

Without a standing pilot the fireplace is

22

	Page 33
1	allowed to get cold and the cold actually travels
2	through the glass or screen and makes the room cold.
3	The furnace kicks on fully which uses up any savings
4	from not running the pilot. Also animals and insects
5	nest in the flus and venting which creates a
6	potential hazard for fire and carbon monoxide backup
7	with the blockage. This could potentially hurt or
8	kill people and cause damage to property. Pilots
9	reduce the chance of this occurring.
10	Lastly gas log sets are an excellent
11	source of emergency warmth in the case of a power
12	outage in areas where electric heat pumps are the
13	primary source of heat consumers would be cold and
14	dark during ice storms and hurricanes that knock out
15	power lines except for their gas log sets.
16	Bill from Maryland wrote to me "our power
17	was knocked out yesterday evening by Hurricane Sandy
18	and we used our Rasmussen unit to stay warm and even
19	do a little cooking. It was a big help to have the
20	unit which didn't need electricity to operate. No so
21	for many if this NOPR is adopted.
22	This proposed rule will have negative

	Page 34
1	impact on the safety, wellbeing and choice of
2	consumers as well as the financial and employment
3	health of many small businesses. I respectfully
4	request that gas log sets be excluded from a final
5	rule. Thank you for the opportunity to present.
6	MR. BROOKMAN: Okay thank you. Other
7	comments here at the outset, yes please and your name
8	again please?
9	MR. BORTZ: Leslie Bortz from the Robert
10	H. Peterson Company. I am Leslie Bortz, I am the
11	President of the R. H. Peterson Company. Peterson is
12	one of the larger manufacturers of gas logs in the
13	United States we employee approximately 235 people at
14	our manufacturing facility in California.
15	Can you hear?
16	MR. BROOKMAN: Yes.
17	MR. BORTZ: We sell our products through a
18	network of small specialty distribution businesses
19	across the country. We also manufacture other
20	products that would be affected by the proposed
21	rulemaking including gas barbeques, outdoor
22	fireplaces and pits and to a lesser extent other

1 hearth products.

2 Although our volume is a significant 3 portion of the gas log industry, we are still a 4 relatively small business which will be profoundly 5 affected by DOE's proposals. I have traveled here 6 today to speak to you again in the hope that the 7 Department of Energy would listen and re-evaluate its 8 overbroad proposal that would treat gas logs like all 9 other hearth products despite the acknowledged 10 differences between gas logs and those other hearth 11 products that would make the proposed rule 12 particularly burdensome to the gas log industry. 13

Peterson opposes DOE's proposed definition 14 of hearth products making gas logs a covered product 15 under EPCA. Peterson also opposed the proposed 16 regulation of hearth products to ban what DOE calls 17 constant burning pilot lights. First the definition 18 of hearth products is over broad. Currently there is 19 not a statutory definition of hearth products however 20 there is a proposed definition which states hearth 21 products means a gas fired appliance that simulates a 22 solid fuel fireplace or presents a flame pattern for

Page 36 1 aesthetics or other purpose and that may provide 2 space heating directly to the space in which it is 3 installed. 4 Do you really intent to adopt the 5 definition of hearth products which does not include 6 wood burning fireplaces, coal burning fireplaces, 7 alcohol burning fireplaces, pellet burning 8 fireplaces, electric fireplaces, water, coal stoves, 9 these are all normally considered hearth products but 10 your definition does include gas ovens, gas cooking 11 ovens, outdoor gas lights, outdoor barbeques, 12 infrared heaters, garage heaters, and indoor gas 13 lights. 14 DOE's definition is unnecessarily 15 confusing because it mixes products designed to 16 provide heat with those designed only for aesthetics. 17 The DOE definition would include a variety of 18 products which serve very different purposes 19 including gas log sets and other decorative products 20 within the definition of a covered product, is not 21 consistent with EPCA's purpose. When you examine

<sup>22</sup> EPCA's original product categories they are all

	Page 37
1	products designed to use energy to deliver functional
2	purposes to the consumers.
3	Decorative products are designed instead
4	for aesthetic experience. Next topic DOE is
5	designing different products into one category. At
6	several points in its analysis DOE concedes that gas
7	log sets are very different from other types of
8	hearth products. Gas log sets must be installed in
9	an existing solid fuel typically word burning masonry
10	or factory built fireplace.
11	As DOE acknowledges the gas log set
12	manufacturer is not able to change the physical
13	environment in which the gas log must operate. Gas
14	logs also don't have an outside enclosure within
15	which to hide the components that DOE assumes would
16	replace standing pilots. The cumulative effect of
17	these differences is that gas log sets will face
18	severe challenges in complying with DOE's proposed
19	rules that will not be present for many other types
20	of hearth products.
21	Unlike other types of hearth products
22	intermittent ignition is still a relatively new and

	Page 38
1	infrequently used device to be able to be added to a
2	gas log set. For vented gas logs DOE estimates that
3	only 6% currently use intermittent products. The
4	reason for this low percentage is that it is
5	difficult to do, expensive to do under any scenario
6	and anything that adds to the cost of the products
7	which are at the lower end of the hearth products
8	market like gas logs has a disproportionate adverse
9	impact on sales of gas logs.
10	It's difficult to add intermittent
11	ignition system to gas log sets because anything that
12	can make the gas log sits off center within the
13	fireplace which interferes with the aesthetic
14	experience of the consumer. If batteries are
15	necessary it detracts from the appearance.
16	In addition DOE agrees that adding
17	sensitive electronic components within the industry,
18	within the masonry or factory build fireplace where
19	they are subject to high heat is often impossible.
20	There are also many varieties of masonry or factory
21	build fireplaces into which gas logs must adapt. The
22	entire market for gas logs is to retrofit

	Page 39
1	pre-existing masonry or factory built fireplaces.
2	Anything like DOE's proposed rule which
3	sharply limits the flexibility of gas log sets
4	unnecessarily makes installation of gas log sets
5	impossible in a significant portion of the available
6	masonry or factory built fireplace. To accommodate
7	this market we sell 20 different types of burners
8	with 10 12 different sizes, 600 different log sets
9	and another several thousand add on options.
10	In the fact of this broad range of
11	installation requirements DOE is attempting to impose
12	a one size fits all solution which will severely
13	restrict consumer choice. In addition DOE has
14	significantly underestimated the cost of switching
15	from constant burning pilot lights to the
16	alternative.
17	DOE would increase the MSRP price of a
18	typical base log set not including installation these
19	are our numbers, from \$511.00 to \$891.00 I would
20	chart this. A roughly 75% increase. In turn there
21	would be little financial savings to the consumer for
22	change in pilot lights. As always the consumer can

	Page 40
1	simply choose to extinguish the pilot light when the
2	log set is not in use thereby achieving all of the
3	savings without any of the costs.
4	By the way there are gas companies all
5	over the south especially that seem to be educating
6	their consumers about doing this. Finally, all the
7	intermittent pilots options have a higher
8	installation cost than the constant burning standing
9	pilot. Every intermittent pilot option is more
10	expensive to install. Also if the unit could not use
11	a battery powered millivolt system an electrician
12	must also be hired to install a 110 volt suitable
13	electrical hookup in or near the fireplace which is
14	not designed to hold the electrical components.
15	In response to question 14 based on our
16	experience we conservatively estimate that the
17	additional cost of the electrical hookup alone is
18	\$335.00. At these costs given the limited energy
19	savings the additional costs to the consumer is more
20	than the three times value of the first year's energy
21	savings. Actually it's nearly 8 times the value of
22	the energy savings which violates the so-called EPCA

Page 41 1 rebuttable presumption. 2 Based on prices of today using a constant 3 burning pilot light equipped with one of our actually 4 equipped with BTU's that you speak of for gas logs, 5 it costs the consumer less than \$50.00 a year to 6 operate the pilot year round, that is compared to 7 \$335.00 and the extra cost. DOE supposedly, our 8 national energy partner is using natural gas prices 9 from 1993 to 2012 to overstate the gas costs of 10 manual safety pilots. 11 Surely DOE understands that the world is 12 changed forever and gas reserves are expanding 13 rapidly. 14 Last week Morning Star the respected 15 financial analyst described the following natural gas 16 prices as the new normal for the United States. 17 Examining the impact of abundant low cost supply we 18 are reducing our estimate for natural gas prices by 19 25%. Residential natural gas prices are now less 20 than 90 cents a therm and falling fast. 21 Rather than the much higher numbers in 22 parts of DOE's chosen period used for setting prices.

	Page 42
1	By the time this rule takes effect in 2021 DOE's
2	analysis will be even more unrealistic. DOE
3	understands fully that taking the price of a product
4	and increasing it by roughly 75% will drive down
5	sales. DOE admits that this financial burden will
6	fall disproportionately on gas log manufacturers,
7	that's page 7116 of your NOPR.
8	Because gas logs are a product designed to
9	go into existing fireplaces, consumers will simply
10	stop buying and just continue to use wood in their
11	existing wood burning fireplaces. Sales of gas logs
12	will necessarily plummet.
13	My next topic is rulemaking. The
14	rulemaking will adversely affect small businesses.
15	Under the Regulatory Flexibility Act DOE must
16	consider the impact of its rulemaking on small
17	business. DOE has identified 66 businesses in its
18	rulemaking that are small business manufacturers of
19	gas logs.
20	That's better because we started with I
21	think 16. DOE is ignoring the impacts on hundreds
22	and possibly thousands of other small business

entities that will be adversely affected. The entire gas log industry and the vast majority of hearth industry are composed of small businesses. Anything that makes gas log sets less attractive to purchase will have an impact on hundreds or thousands of small businesses.

7 I acknowledge that DOE believes that it 8 only needs to focus on manufacturers for purposes of 9 the Regulatory Flexibility Act Analysis, we will 10 outline in our written comments why we disagree with 11 that limitation. In any event, however, even if it 12 is not required by the Regulatory Flexibility Act, 13 the impact on these additional small businesses is 14 undeniable. Nothing prohibits DOE from considering 15 that impact, even if it is not required to consider 16 the impact.

Even if you limit the search for business entities in the hearth industry to manufacturers DOE's list is far too small. It is easy to pick up any month's edition of Hearth and Home Magazine, trade magazine, and find many additional small businesses that are not on DOE's list that are

Page 43

	Page 44
1	manufacturers in this industry. I found 20
2	additional manufacturers with ads in the March 2015
3	Hearth and Home Magazine.
4	I looked at another actually I looked
5	at an internet site called Woodland Direct and found
6	another 18 additional small business manufacturers,
7	almost all making outdoor fireplaces. These are
8	numbers that just blow me away. DOE identifies key
9	market participants, the manufacturers, wholesalers
10	and the entities into two types of distribution
11	channels.
12	100% of our gas log products are sold
13	through a distribution retailer marketing system or
14	what is commonly called a two-step distribution
15	system. If you look at your information and take a
16	look at those products and break them up as best you
17	can which we did, on a conservative basis 56 1/2% of
18	the hearth products in the DOE proposals are sold in
19	this system.
20	They are not sold to builders, 56 l/2% are
21	sold through distribution and retailing. For gas log
22	sets these key market participants are almost all

	Page 45
1	small businesses. I anticipate that there are over
2	150 small business manufacturers, another 200
3	specialty hearth product distributors and
4	representative companies, hundreds of retailers
5	throughout the country and as the gentleman from NPGA
6	mentioned, 2800 LP companies, I believe there are
7	thousands of small companies that will be affected by
8	this rule, not 66.
9	DOE has not cooperated with the industry.
10	At every step in this process DOE has had and ignored
11	numerous opportunities to sit down with the hearth
12	products industry and develop more accurate
13	information. DOE did attempt to gather some
14	information from the hearth products industry, excuse
15	me and for its part in the analysis Navigant was
16	reasonable responsive.
17	But DOE's other contractors would not
18	cooperate with the hearth industry and particularly
19	we tried several times to contact Lawrence Berkeley
20	National Labs by the way we did not know that they
21	were a part of this until we were told last summer
22	and the representatives from that entity which

	Page 46
1	performed important analysis important parts of
2	the analysis for DOE. They refused to return our
3	numerous telephone calls or emails or provide any
4	information about the process.
5	I don't know where they got their
6	information. DOE has ignored other technical options
7	in large part because of the lack of communication
8	with the industry DOE seems unaware that there are
9	products on the market that would address many of its
10	concerns. These products are pilot lights with a
11	so-called time out option, this is a constant burning
12	pilot light that is designed to shut itself off after
13	a specific period of time in the event the main
14	burner is not activated.
15	A time out pilot would address 98 to 99%
16	of DOE's energy savings. DOE's proposals will
17	actually cause consumers to use excess natural gas.
18	Presently the most common manual pilot light that we
19	sell allows the consumer to adjust the flame on the
20	log set and people want adjustable. This enables the
21	consumer to decide to use the log sets with different
22	flame heights depending upon the consumer's choice

	Page 47
1	for the aesthetic experience. There are some
2	significant gas savings from giving consumers the
3	ability to turn down the log sets rather than forcing
4	the consumer to run the gas log set at the maximum
5	possible BTU usage.
6	DOE's proposal will force many consumers
7	to run their logs at the maximum BTU usage even if
8	they otherwise would prefer not to. This is because
9	many battery powered intermittent ignition systems do
10	not allow for varying the size of the flame. The
11	intermittent system that DOE would require is a
12	binary on and off which forces the consumer to run
13	the gas log set at the maximum usage.
14	DOE's proposal will cause consumers to
15	waste considerable gas that they would otherwise not
16	and wipe out the limited savings.
17	There are limitations to the use of
18	intermittent pilots particularly with gas log sets.
19	We have tried to offer a battery powered intermittent
20	pilot capable of variable log flame height control.
21	It has not worked in the market so far. Last year
22	for example we added a battery powered intermittent

	Page 48
1	pilot capable of an adjustable log flame control to a
2	particular gas log product. We shipped many of these
3	units in 2014 a significant number of these units
4	came back to us because the intermittent pilots would
5	not work well within the confines that must be
6	addressed by gas log sets.
7	For this reason as DOE has acknowledged on
8	page 7103 intermittent pilots are an infrequently
9	used device added to a gas log set installation.
10	Where intermittent pilots are easier to install and a
11	hearth appliance such as a free-standing fireplace or
12	fireplace insert where the housing for the fireplace
13	can protect the intermittent pilot and also limit its
14	adverse aesthetic impact, intermittent pilots are a
15	growing part of the market and now save 50% of the
16	units sold. This kind of market penetration for
17	intermittent pilots is simply not happening for gas
18	log sets because of their physical limitation.
19	In addition the market penetration for
20	intermittent pilots is not happening for gas log sets
21	because the cost implication of adding intermittent
22	pilots is felt more strongly for gas log sets because

	Page 49
1	they have a lower initial price. DOE's forcing
2	consumers to add an expensive device that they really
3	have rejected so far only 6% of vented gas log sets
4	have an intermittent pilot.
5	The consumer faced with paying the
6	additional money to purchase a gas log set with an
7	intermittent pilot often will choose to simply fall
8	back and use its existing wood burning fire place as
9	it was originally designed with wood burning fires.
10	DOE is ignoring trends. In 2011 DOE
11	estimated that 75% of gas log users kept their pilots
12	on year round. In 2013 DOE estimated that 25% of
13	hearth products users kept their pilots on year
14	round. In the current proposal DOE estimates that
15	20% of the standing pilot users leave their pilot
16	ignited year round. As evidenced by DOE's own
17	estimates the percentage of users leaving their
18	pilots on year round is declining.
19	In the current proposal DOE estimates that
20	a far greater percentage of users 40% leave the
21	standing pilot ignited only seasonally during the
22	months when they are more likely to have a reason to

Page 50 1 use the gas log set. 2 DOE acknowledges that the industry now 3 uses labelling to suggest users extinguish their 4 pilot kits when the log set is not in use. Our 5 systems are designed to make extinguishing the 6 standing pilot and closing the gas valve at the end 7 of the season if not more frequently, this is easy to 8 do. We also provide clear instructions for how to 9 reignite the pilot after the consumer has 10 extinguished it. It is clear from DOE's estimates 11 that consumers are responding to the industry's 12 labeling efforts. 13 DOE says labelling is not achieving the 14 maximum economically justified energy savings but 15 that conclusion is only supported by ignoring the 16 growing success of labeling inflating the costs of 17 gas usage, artificially under-estimating the cost of 18 intermittent pilots for gas log sets. 19 Recommending that consumers operate their 20 units in this manner would be a far more cost 21 effective solution than charging a seasonal user 22 \$380.00 extra to save them less than \$13.00 worth of

	Page 51
1	natural gas. DOE's overstated the energy savings in
2	its proposed rulemaking. This product will be
3	addressed by other witnesses. To avoid repetition I
4	will not focus on it any longer except to say that
5	the actual energy savings from DOE's proposal may in
6	fact be negative.
7	As DOE's own programs recognizes houses
8	with gas log sets are more whole home efficient than
9	the whole homes with the product with which they
10	compete which is wood and wood burning fireplace or
11	wax logs and wood burning fireplaces.
12	For many years the DOE has supported the
13	transition from consumers burning wood in their wood
14	burning fireplaces to instead using natural gas based
15	products. DOE recognizes that houses with gas log
16	sets and decorative fireplaces are more efficient
17	than those with wood burning fireplaces.
18	When a consumer has a wood burning fire
19	they consume more BTU's per hour, wood takes three
20	times the amount of oxygen, heat and home air to burn
21	to achieve the same aesthetic appeal. In addition
22	consumers will leave the flue fully open over night

	Page 52
1	following a wood burning fire, allowing the home to
2	vent heated indoor air to the outside. In contrast
3	gas logs and decorative fireplaces are instant on
4	instant off the flue does not stay fully open beyond
5	the period of usage.
6	In order to show more substantial energy
7	savings for the cost of upgrading to an intermittent
8	pilot, DOE also assumed that gas log sets would last
9	approximately 16 years. In our experience the
10	consumer who uses his gas log sets regularly will
11	replace them in 10 years. DOE estimates that 80% of
12	the consumers either turn their manual pilot units

13 off after each use, 40% or use the pilot seasonally, 14 another 40%.

15 This makes it unlikely that the average 16 consumer will ever recover the cost of the expensive 17 upgrade DOE is trying to force on unwilling 18 consumers. DOE uses the wrong housing measures to 19 estimate the energy saving, therefore overstating 20 those savings from its proposal. DOE's process for 21 estimating the energy savings is unduly complicated 22 but it is under any analysis unable to assess the

	Page 53
1	actual energy impact of prohibiting standing pilots.
2	To begin with DOE is using housing starts
3	with its analysis. We believe it should be using
4	housing completions, that is what is used by Bureau
5	of Census I suspect whatever. For many years there's
6	been a significant difference between housing starts
7	and housing completions. If you use housing
8	completions the numbers are smaller and all of the
9	energy savings in turn become smaller.
10	For gas log sets its wrong to use either
11	for housing starts or housing completion. A tiny
12	percentage of our sales go into new construction.
13	Gas logs are a retrofit product. Sales do not
14	correlate with housing starts at all. If you are
15	going to try to do an analysis using housing starts
16	or completions you also need to focus on single
17	family homes.
18	Housing start data that uses multi-family
19	construction ignores the reality that very few
20	multi-family dwellings will have suitable masonry,
21	fireplaces or factory built openings for gas log
22	sets. That's just a fact. When DOE does its

	Page 54
1	analysis it begins with a level of housing starts
2	starting in 2014 it uses a figure of approximately
3	1.25 million housing starts for 2014.
4	That number is roughly double the number
5	of single family housing completions in this country
6	last year. Then DOE projects outward to a distance
7	future using a typical level of housing starts of 1
8	million five. If you look at the level of housing
9	starts for single family homes cited by James Houck
10	in his article in Hearth and Home Magazine, there are
11	only isolated years in the last 40 where the U.S. has
12	it a level of 1.5 million housing starts in a given
13	year and that level has never continued for more than
14	a few years in a row.
15	DOE's analysis assumes that we reach that
16	level and sustain it for 30 consecutive years. These
17	factors combine to overstate the purported energy
18	savings.
19	DOE is ignoring a safety issue with its proposal. A
20	safety pilot kit uses a constant burning standing
21	pilot as a safety device. The pilot device will
22	block the flow of gas to the burner as a safety

	Page 55
1	mechanism is the pilot is not lit.
2	The pilot we sell prevents the homeowner
3	from turning on an unlit system and filling the home
4	with gas. Gas log sets are safer than their
5	alternative which is wood burning fireplaces.
6	Anything that discourages consumers from switching to
7	gas logs will only increase the number of home fires,
8	injuries and death. Gas logs are far safer than
9	their alternative which is burning wood in the
10	fireplace.
11	With respect to gas logs, DOE's proposal
12	will hurt the environment. Gas log sets are also far
13	cleaner from an environmental prospective than the
14	product they are replacing. As USEPA has recognized
15	in its burn-wise program, consumers would be well
16	advised to shift from wood burning fires to gas log
17	sets in terms of an overall reduction in critical air
18	pollutants.
19	In its analysis DOE is assuming there is
20	some environmental benefit from limiting gas log
21	sets. To the contrary, anything which discourages
22	people from making the transition to gas log sets

	Page 56
1	from wood burning fires will have an immediate and
2	major negative impact on the environment.
3	Many state environmental agencies and
4	other environmental and health groups like the NRDC
5	and American Lung Association have adopted the same
6	environmental position endorsed by U.S. EPA favoring
7	the transition to gas log sets. For example the
8	leading air quality agents in the country in charge
9	of improving air quality in the difficult Los Angeles
10	region has what it calls healthy hearth program. As
11	part of that program to improve public health, the
12	South Coast Air Quality Management District actually
13	pays consumers to change their wood burning
14	fireplaces and use gas log sets.
15	The agency adopted this position after
16	extensive rulemaking examining health and
17	environmental benefits of this transition to gas log
18	sets, using the analysis done by the very experts
19	cited by DOE and its NOPR Jim Hauck who will testify
20	here today.
21	DOE simply assuming a non-existent
22	environmental benefit in its analysis and ignored the

	Page 57
1	considerable environmental detriment that will come
2	about by making a gas log set three times as
3	expensive as they are now. When properly account for
4	the net environmental impact of the rule is negative
5	as applied to gas log sets and would trigger
6	requirements that DOE would evaluate the rule under
7	the National Environmental Policy Act.
8	Conclusion, natural gas is plentiful in
9	the United States. Natural gas reserves are higher
10	now than they have been any time in our history.
11	Natural gas prices are dropping each year as we find
12	more sources for natural gas at a rate that exceeds
13	consumption. In addition natural gas is a local fuel
14	with virtually all of the United States natural gas
15	consumption coming from sources within North America
16	in exchange for modest energy savings of a very
17	plentiful resource DOE's rulemaking would sharply
18	limit consumer's ability to afford gas log sets.
19	Based on our customer feedback, customers
20	like gas log sets because they look great but they
21	don't heat a room. If they want heat they buy a
1	don e neat a room. If they want neat they buy a

	Page 58
1	quality, improved health, lack of allergens, instant
2	on/off, no creosote build-up in the chimney, no
3	chimney fires, no sparks, ashes, relative in expense
4	to purchase and operate, cleaner operation, improved
5	safety, save trees and flexibility of use. The
6	proposed rule will interfere with these
7	characteristics by making the units prohibitively
8	expensive or too unattractive to replace the wood
9	burning fire.
10	Gas logs represent by far the lowest cost
11	alternative for consumers tired of the inefficiency
12	and pollution of their wood burning fireplace. DOE's
13	proposal would rob consumers of that low cost choice,
14	providing no offsetting financial benefit because of
15	the gas savings if any from the proposed rule.
16	As it applies to gas log set, DOE's
17	proposal does not achieve greater energy savings
18	because homes with gas logs in terms of whole home
19	efficiency are more efficient than the alternative.
20	Because the savings from the pilot restriction is
21	trivial it would be offset by the significant cost
22	that would be created by eliminating or discouraging
ł	

Page 59 1 customers from switching from wood burning fireplaces 2 to gas logs. 3 The proposed rule would also undermine 4 consumer alternatives because it would limit severely 5 the number of available products on the market, 6 particularly for customers looking for low cost 7 alternatives to wood burning fireplaces. The 8 proposed rule only adds restrictions and 9 manufacturing burdens which would have dramatic and 10 negative impact on the gas log industry. 11 Thank you for allowing me to go through 12 that. 13 MR. BROOKMAN: Okay. 14 MR. BORTZ: I would like to present Jim 15 Houck is he on your speaking --16 MR. BROOKMAN: We are taking opening 17 remarks, hopefully summary remarks and do you -- can 18 you make a brief summary remark here or will it fit 19 in the content in the presentation materials that are 20 coming, Jim? 21 MR. HOUCK: I can make it short. 22 MR. BROOKMAN: Okay briefly here, just

	Page 60
1	stand right up and use that microphone right there.
2	MR. HOUCK: Yes my name is James Houck.
3	Okay now can you hear me?
4	MR. BROOKMAN: Yeah.
5	MR. HOUCK: Okay my name is James Houck.
6	I am an independent consultant. I worked for about
7	25 years with the hearth industry, primarily on air
8	pollution and environmental issues and I guess my
9	short opening remark is that the rule as proposed
10	will do environmental damage rather than as quoted in
11	the proposed rule, in addition the proposed hearth
12	product standard would have significant environmental
13	benefits. It will not and I will discuss that in
14	more detail when we get to the environmental section.
15	MR. BROOKMAN: Thank you that's helpful
16	and let me note, maybe I wasn't clear at the outset.
17	No one wants to diminish your capacity to comment in
18	any way here. We are hoping though and it's
19	typically beneficial to get more detailed comments
20	during the course of the review of the packet itself,
21	that way all of these features line up in the record
22	you understanding my meaning here.

	Page 61
1	So now let me ask additional opening
2	remarks perhaps final opening remarks before we move
3	on to the content at hand? Yes is it Steve?
4	MR. SKOLNICK: It is Steve and I'm going
5	to be very, very short since I don't have prepared
6	remarks to read. I represent in addition to my own
7	company the mid-Atlantic Hearth Product Association
8	the local retailers and distributors and
9	manufacturers reps. We have about 800 small
10	businesses that we represent. We are very concerned
11	that you are not addressing the differences between
12	these products and just as you look between
13	discussions from HHT on their products and gas logs
14	there is a lot of differences just in the electronic
15	ignition so how electronic ignition works in a gas
16	fireplace is dramatically different than how it works
17	in a gas log versus outdoor so lumping these products
18	together are very concerning.
19	Also in a gas fireplace the electronic
20	ignition has challenges so while there are
21	differences in the challenges as you look through
22	each of the product categories challenges still exist

	Page 62
1	so in a gas fireplace or a direct vent fireplace, the
2	challenge primarily exists in cold climate so the
3	standing pilot while it has electronic ignition in
4	many of the applications, it also has that backup
5	standing pilot and the backup standing pilot is very
6	important in cold climate because the flue gets cold,
7	everything just doesn't work right if there isn't
8	that heat in that cold climate providing the
9	environment in the fireplace.
10	The other thing we are very concerned
11	about is that with your proposed rule we believe a
12	lot of the product in the marketplace will be
13	eliminated and many of our small businesses will
14	suffer dramatically thank you.
15	MR. BROOKMAN: Thank you. Are we ready to
16	move on now? Move on to the content at hand? Given
17	the detail and length of these opening remarks I am
18	hoping that as we go through these slides you can
19	apply the same level of specificity in your comments
20	to the Department as we are going along here, okay?
21	That would be helpful. So then let's proceed with
22	the packet and we are going to have an overview first

	Page 63
1	commencing with regulatory authority. Yes, Leslie?
2	Please take feel free to take your jacket off,
3	everybody make yourselves comfortable we are going to
4	be here for a while.
5	Dana you didn't get a chance to introduce yourself,
6	do you wish to do so, turn that microphone on, name
7	and organizational affiliation?
8	MR. MOROZ: My name is Dana Moroz I
9	represent Wolfe Steel Limited. I'm a foreign
10	national I understand. I would also point out that
11	we also have a manufacturing facility in Quinton,
12	Kentucky. We employ 96 U.S. citizens at that
13	facility so we are domestic as well.
14	MR. BROOKMAN: Thank you and I'm sorry for
15	the run around here this morning.
16	MR. MOROZ: It's nothing like being made
17	to feel special.
18	MR. BROOKMAN: Okay. So then we are going
19	to begin with the regulatory authority and this is on
20	slide number 10 in my packet here.
21	MR. CYMBALSKY: Okay so this is John
22	Cymbalsky from DOE. Thank you everyone for our

	Page 64
1	opening remarks, we definitely heard from you and I
2	think we can as Doug said pretty much map your
3	opening remarks to the particular slides but as we go
4	through it again if you can briefly again comment
5	when we get there that would be great.
6	So regulatory authority so as the slide
7	says EPCA of 1975 established the energy conservation
8	program for consumer products other than automobiles
9	so that is the program at hand here today that
10	granted DOE the authority to classify additional
11	types of consumer products as covered products,
12	there's the site to the statute.
13	And we can prescribe energy conservation
14	standards for those products if certain statutory
15	criteria are met and for those who read the proposed
16	coverage determination, DOE spelled out its calculus
17	there in terms of energy consumption and the mapping
18	to the statutory authority to cover hearth products.
19	EISA came along and required that any
20	final rule establishing or revising energy
21	conservation standards for a covered product must
22	incorporate standby mode and off mode energy use into

Page 65 1 a single amended or a new standard and you could see 2 this site there. 3 As I mentioned DOE published a proposed 4 determination of coverage for hearth products on 5 December 31, 2013 there's the site to the Federal 6 Register. DOE used the definition for hearth product 7 as proposed in the notice of proposed determination 8 to define the scope for the notice of proposed 9 rulemaking that we are discussing here today and 10 there are currently no energy conservation standards 11 or test procedures for hearth products. 12 MR. BROOKMAN: Yes Steve Rosenstock? 13 MR. ROSENSTOCK: Steve Rosenstock, Edison 14 Electric Institute. I think it is important to talk 15 about the process because for many years after the 16 Process Improvement Rule was created by the 17 Department of Energy in 1996 for a long time every 18 product went through a process of having a framework 19 document with a public meeting and public input. 20 There's advanced notice of notice of 21 proposed rulemaking now also called the preliminary 22 analysis with notice and then public meeting and then

	Page oo
1	time for stakeholder input then the NOPR the proposed
2	rule with obviously seeking public input and then the
3	final rule, it was a four step process. Things have
4	changed over the last years where products that have
5	been regulated before we can you know a lot of times
6	the framework was skipped because you know it has
7	been done before. But I think that it seems like now
8	things have really been I guess it was starting
9	with the refrigerator proposed rule last December
10	that things have been I'll use the word streamlined
11	especially with a product that there have never
12	been regulations before to go from termination of
13	coverage all the way to proposed rule without those
14	intermediate steps for entities that have never been
15	regulated before.

I think in my view or again just speaking of process I'm wondering if this is going a little bit too far too fast. Again I'm saying this just as a process geek. I've been involved with this process for many, many years and especially to streamline the process for a product that's never been regulated before I think there are significant issues, thank

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Page 67 1 you. 2 MR. BROOKMAN: Thank you Dana? Turn the 3 microphone on thank you. 4 MR. MOROZ: I just wanted to comment on 5 that statement that I think is a little erroneous it 6 says that there is currently no energy conservations 7 standards or test procedures. I believe that test 8 standard to which fireplaces at least have fireplace 9 heaters are subjected to and the harmonized standards 10 do address efficiencies. 11 MR. BROOKMAN: Do you have a citation? 12 MR. MOROZ: Not with me no, it would be NC 13 2188. 14 MR. CYMBALSKY: That's an industry 15 I'm sorry I should be more specific, standard. 16 there's no federal U.S. test procedure that you must 17 comply to. You may comply to your industry standard. 18 MR. MOROZ: Okay. 19 MR. BROOKMAN: Okay thanks for raising 20 that. Frank Stanonik? 21 MR. STANONIK: Frank Stanonik, AHRI and 22 I'm going to join my process geek friend over here

	Page 68
1	and raise a procedural issue specifically with regard
2	to the undetermined definition of hearth product. In
3	fact when DOE came out with the proposed
4	determination it specifically stated in the federal
5	register notice and I am quoting here "if after
6	public comments DOE issues a final determination of
7	coverage for this type of product, DOE will consider
8	both test procedures and energy conservation
9	standards for all hearth products."
10	MR. BROOKMAN: And Frank what is that
11	source?
12	MR. STANONIK: That would be the federal
13	register December 31, 2013 page 79639.
14	MR. BROOKMAN: Thank you for that.
15	MR. STANONIK: And the point is that the
16	time that DOE came out with that proposal the
17	presentation to all stakeholders and interests were
18	that this issue of standards and test procedures for
19	whatever hearth products were determined to be
20	wouldn't occur until in fact the determination
21	rulemaking was completed and in this case DOE has
22	stepped back from that process. We think that is a

	Page 69
1	significant error and in fact is causing many people
2	to spend a lot of time that may or may not have been
3	required including the people doing the analysis if
4	there had been a final determination of what a hearth
5	product is and one final point on that is that as
6	presently proposed and we don't agree with the
7	definition that proposed definition does include
8	unvented products and in fact there is a DOE test
9	procedure on the books for unvented heaters.
10	And you can call an unvented gas, or
11	whatever you want to call it but it is undoubtedly a
12	heating product, unavoidable. They are unvented
13	heaters they have always been considered unvented
14	heaters and there is a DOE test procedure for
15	unvented heaters.
16	MR. BROOKMAN: Okay Dana you had a follow
17	up?
18	MR. MOROZ: I just in response to John
19	mentioned that there was no federal test procedure
20	the standard I referred to with said 2188 is an ANSI
21	standard which I believe is a national standard.
22	MR. BROOKMAN: Yeah okay thank you.

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1	MR. MOROZ: I'm sorry that was my foreign
2	national.
3	MR. BROOKMAN: We are familiar with 2188,
4	yes please Sue?
5	MS. WALKER: Yes just to follow up very,
6	very, very briefly on Frank Stanonik's comment regard
7	vent free gas products and their inclusion in this
8	NOPR. And this is all regarding what is referred to
9	as a pallet but is in fact a very, very important
10	safety device called the oxygen detection safety
11	pallet or ODS and it's been required on these
12	products by ANSI standard since 1980.
13	All products on the market must be tested
14	and listed to this standard and this is the only
15	product in the U.S. market that incorporates this
16	important safety device. So to just call it a pallet
17	or standing pallet is a real mischaracterization
18	function of the product. It has a unique a
19	remarkable safety record. In the 34 years since the
20	product has been in the U.S. market the Consumer
21	Product Safety Commission confirms that there has
22	never been a documented death or carbon monoxide

	Page 71
1	poisoning attributed to a product using this
2	important device and also just briefly comment on the
3	standby heat emergency heat benefit of other
4	products, this is very, very important in the gas of
5	vent free gas products.
6	At this point almost no products on the
7	market require any electrical input to operate. They
8	are a primary resource to consumers during the event
9	of power outages whether brief or extended. In fact
10	one way you can tell that is right after a power
11	outage the sales of these products spike, people
12	basically say never again will I be in this
13	circumstance.
14	So to require the oxygen detection safety
15	pallet to somehow be contrived to have electrical
16	input and use batteries as backup would largely
17	defeat that very, very important consumer benefit.
18	One more brief point the controls from these products
19	are very visible, accessible, consumer friendly and
20	as others have pointed out you just can't miss it in
21	the room.
22	The people who buy these products are very

	Page 72
1	focused on the energy savings so they are going to
2	extinguish that pallet during periods of extended
3	non-use or at the end of a season. I think that
4	factor alone mischaracterizes these products in terms
5	of this NOPR thank you.
6	MR. BROOKMAN: Thank you, additional
7	comments here? Yes please go to the microphone and
8	make sure it is turned on.
9	MS. DAVIDSON-HOOD: I just wanted to
10	I'm too short for this. Caroline Davidson-Hood from
11	AHRI I just wanted to raise a procedural issue
12	tacking on to what Frank mentioned before that the
13	fact that the determination has not yet been
14	finalized renders I think a problem under the
15	American the APA, the Administered Procedures Act
16	because you have no statutory authority for this
17	rulemaking and it probably raises potential due
18	process issues so I definitely think that the
19	determination needs to be finalized before a
20	rulemaking can be undertaken on products that are not
21	even included in the statute yet, thank you.
22	MR. BROOKMAN: Thank you. Okay so back to

Page 73 1 John Cymbalsky. 2 MR. CARROLL: Ryan Carroll with HBPA. 3 Procedurally I would like to also say that we have 4 been frustrated to some extent in the process because 5 we have had over the course of the last 18 months or 6 so a number of requests one in writing to our 7 comments on the proposed coverage of determination. 8 We have had attorney to attorney contact 9 seeking meetings as well and you know we are exciting 10 to be here for dialogue but it has been a rough road 11 to get there. 12 MR. BROOKMAN: Okay thank you. Let's 13 proceed with the content and I think back to John 14 Cymbalsky. 15 MR. CYMBALSKY: Okay thank you Doug. This 16 slide shows the criteria for selecting standards 17 levels so EPCA directs DOE to consider to the 18 greatest extent practicable the following 7 factors 19 in determining whether potential energy conservation 20 standards are economically justified. 21 We refer to these as EPCA 7 factors and 22 you can read them here. I think Leslie did a good

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1	job pretty much in his opening remarks going through
2	each and every one of these but and you could see
3	that there are things like the impact on consumer
4	utility or performance and lifetime operating costs,
5	the impact on both consumers and manufacturers so we
6	are going to go through all these here in the slide
7	packet one by one pretty much and so we will be able
8	to comment as we go through these factors.
9	Okay and here's a slide I think we have
10	heard a lot about already and we will give you a
11	chance to again comment upon. So here is the
12	proposed definition of hearth product and I'm going
13	to read it for you. A gas fired appliance that
14	simulates a solid wood fuel fireplace or presents a
15	flame pattern for aesthetics or other purpose and
16	that may provide space heating directly to the space
17	in which it is installed and so here's our first
18	comment box.
19	We have heard a lot of comment already but
20	if anyone else would like to comment on the proposed
21	definition here's your chance.
22	MR. BROOKMAN: It would be helpful whether

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1	now or in your written comments, it is especially
2	instructive to be able to say what it should be, not
3	what you don't like about it okay so yes, over here
4	to is it Barton?
5	MR. DAY: Following directions diligently
6	I'll start by saying we can't offer any suggestion as
7	to what it should be for two reasons. One is we
8	still don't know what it is intended to cover and
9	until we figure that out there's no point in pursing
10	language.
11	The second issue is that we just don't
12	think DOE has the legal authority to take completely
13	different products and bundle them together as a
14	single product. I mean
15	Congress didn't go in the statute and say you know
16	HVAC products are a covered product they said well
17	room heaters are a covered product and furnaces are a
18	covered product and water heaters are a covered
19	product.
20	DOE's proposal sweeps together products
21	that are far more different than those examples and
22	treats it all as a covered product and in the process

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1	essentially renders the limitation on their authority
2	to impose standards irrelevant. Congress had a no
3	Twinkie rule it said that there has to be an
4	aggregate annual energy use of a certain level of a
5	product for it to be worthy of a regulation in the
6	first place. There are products covered in this
7	rulemaking that I think pretty clearly would never
8	meet that test and the fact that all of these
9	products are being combined together willy nilly has
10	the effect of aggregating the gas consumption of
11	different products in order to avoid the need to
12	justify regulating them individually.
13	I think that's not lawful but you know
14	we've got a number of legal issues and concerns.
15	What I would like to do is see if we can get some
16	clarity on the proposed definition and there are a
17	couple of issues I would like to raise in that
18	respect. One is just looking at the language. There
19	are a lot of disjunctions in here and if you look at
20	it it is a gas fired appliance that simulates a
21	solid fuel fireplace or presents a flame pattern
22	okay.

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	rage //
1	So you could pretty much cross out that
2	simulates a solid fuel fireplace because it's not
3	particularly meaningful. I mean it's that or
4	presents a flame pattern for aesthetics or other
5	purpose seems to mean any purpose so where are we
6	now? We have a gas fired appliance that presents a
7	flame pattern for any purpose and it may or
8	presumably may not provide space heating directly to
9	the space in which it is installed so that whole
10	clause is in parts no meaning.
11	So we are looking at a definition that
12	says a hearth product is a gas fired appliance that
13	presents a flame pattern for any purpose. And then
14	we see the TSD we wouldn't have guessed this from
15	looking at the proposed rule but in the TSD there are
16	specific references to patio you know, ready and
17	patio heaters that don't have a visible flame.
18	In plain English that doesn't present a
19	flame pattern, it has a flame so I guess we have to
20	read the definition as a gas fired appliance that
21	produces a flame for any purpose. That covers
22	everything under the sun, I mean it covers kitchen

Page 78 1 stoves and ovens, it covers gas lights, it covers --2 there's just no way to look at that definition and 3 have any reasonable sense of what products we have to 4 address. 5 And so we have struggled with that all 6 along and John if we could could we go on to the next 7 slide because you have got some pictures here that I 8 think you know it's helpful to look at examples and 9 try to understand what it is we are talking about. 10 MR. CYMBALSKY: Before we move on I should 11 probably take some more comment on the definition. 12 MR. BROOKMAN: Yeah, yes Frank. 13 MR. STANONIK: Again we obviously are not 14 in agreement with the definition but as proposed it 15 is difficult for us to understand how that definition 16 leads to a determination that unvented or vent free 17 gas logs whichever you choose to call them would be 18 included in this definition and I will point out that 19 it says may provide space heating in fact for 20 unvented vent free products the emphasis that's 21 presented in this definition is exactly the opposite. 22 Those are heating products that may simulate a flame

Page 79 1 pattern but they primarily are developed, sold in the 2 market as heating products. 3 The fact that people may want to pick that 4 particular type because it looks like a fire is a 5 secondary issue but you take a vent free gas log, install it, even though it's not vented that room 6 7 will be heated and it will be heated quickly and 8 hotly if you will and so there's no may about it. 9 And so as we read that definition we could 10 not understand how that definition leads to a 11 conclusion that vent free gas logs wherever they are 12 installed are somehow included as a hearth product. 13 It's inconsistent. 14 MR. BROOKMAN: Let's hear additional 15 comments on the definition. I am going to turn to 16 you in a moment Barton. Other comments before? Okay 17 keep going Barton. 18 The other puzzling thing about MR. DAY: 19 the definition is just you know we have got a rule 20 that's directed at pilot lights and the definition 21 covers and is apparently intended to cover and that's 22 why I wanted to go on to the examples, we have got

	Page 80
1	the radiant patio heaters, well they don't present
2	the kind of product they don't present the kind of
3	issue that DOE is concerned about, the possibility of
4	pilot lights being left on indefinitely.
5	The other thing I would say about that
6	type of product is they are not in any normal English
7	sense a hearth product so I don't two things to
8	conclude either the word hearth doesn't mean anything
9	either well I guess that's the only answer if those
10	products are in and then it does lead to the question
11	if they are in what else don't we know about because
12	again we wouldn't have guessed that they would be
13	involved in this.
14	I guess one of the points I wanted to
15	emphasis is why do we have products included in this
16	that don't have pilot lights? I mean there are whole
17	categories of products, match lit log sets, whole
18	categories of outdoor products. I mean there's a
19	vast you know, herd of products that operate on small
20	propane tanks. They can't possibly have their pilot
21	lights be left on indefinitely and produce the kind
22	of gas usage that you are concerned about.

	Page 81
1	Are they intended to be covered or not? I
2	guess with patio heaters the answer has got to be
3	yes. So we are stumped and it is an issue that we
4	literally particularly with the apparent inclusion of
5	patio heaters that are so different from anything
6	else, what else is covered? What else is intended to
7	be covered? I mean the whole language would cover
8	anything.
9	MR. BROOKMAN: Ashley Armstrong?
10	MS. ARMSTRONG: This is Ashley from DOE.
11	I think what you see so I can appreciate the fact
12	that there is some confusion in the room. I think
13	what would be most helpful to the Department at this
14	point is suggestions. So what you see on the slide
15	examples of products currently on the market that we
16	feel meet our definition, our proposed definition of
17	hearth product.
18	Obviously this is not an exhaustive list,
19	it was not meant to be an exhaustive list of
20	pictures. Any product out there that would generally
21	speaking meet that definition on the last slide would
22	ultimately if we end up going forward with this and

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1	finalizing be covered under the rule. So at this
2	point I think it's you know, Barton you listed some
3	examples of certain products you felt should or
4	shouldn't be on it and so I think what would be
5	helpful to us is how would you suggest that the
6	definition be changed and that's open to everyone.
7	But I think that's going to be and why,
8	that's more helpful to us than saying we don't
9	understand your definition. So I think that would
10	help us better understand your position and how it
11	compares to our definition going forward.
12	MR. DAY: We did put in, this is Barton
13	Day again, we did put in some suggestions on that and
14	I would you know I will go back just to the point
15	that we don't think it's legal to approach it this
16	way but let's put that aside because at least let's
17	figure out which products we are arguing about so
18	that we can have an intelligent conversation.
19	And for that purpose you know we have made
20	some suggestions. You have got a number of products
21	illustrated up there that are fireplaces. Fireplace
22	is a good plain English word, I think everybody knows

Page 83 1 what a fireplace is so I would say if you want to 2 cover fireplaces say fireplaces. 3 You have got stoves, free standing gas 4 stoves up there, again good plain English, everybody 5 knows what that is. You have got an outdoor gas 6 fireplace presented there and plain English works 7 pretty well on that. You have got log sets -- I 8 think you have to identify the products because if 9 you use these general terms about presenting a flame 10 then you have the question of well why wouldn't that 11 cover gas lights? Why wouldn't that cover barbeque 12 grills? Why wouldn't it cover kitchen stoves? 13 And so I think you really you have to tell 14 us what products you are interested in rather than 15 having a broad definition that includes all kinds of 16 other things. And the other suggestions that we 17 have made are -- don't include products that aren't 18 relevant to what's animating this rule and I put 19 patio heaters in that category. They don't have 20 standing pilot lights that can be left on 21 indefinitely. They are just not relevant to this 22 discussion.

	Page 84
1	Most outdoor products, like fire tables
2	like that if you put a standing pilot light on that
3	it blows out I mean those products don't have
4	standing pilot lights, they are just not designed
5	that way.
6	MR. BROOKMAN: So that's another criterion
7	standing pilot lights?
8	MR. DAY: Well you know you are asking me
9	to guess. The comments that we put in limit the
10	scope of the definition to the scope of the problem
11	that you are trying to address. That would in my
12	view leave out essentially all outdoor products, it
13	would leave out propane products, it would leave out
14	products like mass log sets that by definition don't
15	have standing pilot lights. There is just no reason
16	to have them included in a rule where there's no
17	potential for energy conservation benefits because of
18	the inherent nature of the product.
19	MR. BROOKMAN: I saw Jack first.
20	MS. ARMSTRONG: Hang on one second and
21	this is actually for Jack so perhaps he could answer
22	this as he also makes his comments. Your association

<sup>1</sup> broadly is HPBA hearth patio and barbeque so what <sup>2</sup> does hearth mean in your world? <sup>3</sup> MR. GOLDMAN: Well I would like to first <sup>4</sup> start by saying that we are being put in the positio <sup>5</sup> of telling you what we think should be regulated whe <sup>6</sup> it is your job to define what is being regulated. <sup>7</sup> You know, so we don't understand what you want to <sup>8</sup> cover and you are saying well we are not telling you <sup>9</sup> well so why don't you tell us? Why don't you do our <sup>10</sup> job for us? Okay	n
3 MR. GOLDMAN: Well I would like to first 4 start by saying that we are being put in the positio 5 of telling you what we think should be regulated whe 6 it is your job to define what is being regulated. 7 You know, so we don't understand what you want to 8 cover and you are saying well we are not telling you 9 well so why don't you tell us? Why don't you do our	n
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6 it is your job to define what is being regulated. 7 You know, so we don't understand what you want to 8 cover and you are saying well we are not telling you 9 well so why don't you tell us? Why don't you do our	
You know, so we don't understand what you want to know, so we don't understand what you want to cover and you are saying well we are not telling you well so why don't you tell us? Why don't you do our	
<sup>8</sup> cover and you are saying well we are not telling you <sup>9</sup> well so why don't you tell us? Why don't you do our	
<sup>9</sup> well so why don't you tell us? Why don't you do our	
<sup>10</sup> job for us? Okay	
Hearth product excuse me, hearth	
$^{12}$ product is defined as the base, the bottom of a	
$^{13}$ fireplace. It's the stone or masonry bottom of a	
<sup>14</sup> fireplace only.	
MR. STAS: Eric Stas, DOE I would just	
$^{16}$ point out that this is not a rule the purpose of	
$^{17}$ the product is not to ban standing pilot lights to I	
<sup>18</sup> think you are looking at it from a wrong perspective	
$^{19}$ in terms of what the products are generally, the	
$^{20}$ standing pilot light is a technology that we are	
<sup>21</sup> looking at here.	
22 MR. GOLDMAN: I'm not sure I understand	

Page 86 1 that one. 2 MR. BROOKMAN: I'm going to keep up with 3 the que, Rett you are next. 4 MR. RASMUSSEN: Rett Rasmussen. Mr. 5 Suspect please tell me all of your transgressions so 6 I can properly charge you with all the crimes that 7 you should be charged with, that's what this is. And 8 I know this isn't a judicial proceeding but you know 9 this is the United States of America and you are just 10 you know saying hey tell us everything and with the 11 regard Mr. Stas to the standing pilot, this is your 12 gateway drug into regulating all of the industry here 13 and make sure you tell us everything you want to have 14 regulated. 15 Anything with a flame pattern well it 16 either has a decorative pattern or it doesn't have a 17 decorative pattern but that's a pattern if you do 18 that. It's such a broad definition the way you have 19 it there its kitchen sink. It's a fishing 20 expedition, it's ridiculous, it's a waste of time, it's a waste of everybody's efforts, you folks need 21 22 to get down to business and you figure out what it is

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1	that the issues are that you need to regulate on. I
2	mean I distribute radiant patio heaters, they are all
3	electronic ignition, they are the most efficient type
4	of burner systems you can get with infrared where
5	is the need for regulation?
6	Where is the you know, I'm just blown away
7	at what I consider to be just a lack of any type of
8	reasonableness in this and how things are done in
9	this country. I don't know about Canada but at least
10	in the United States that's how things are done here.
11	MR. BROOKMAN: Barton do you want in here?
12	MR. DAY: Yeah, again I think the key here
13	and Ashley I think one of the things that you said
14	that is most troubling for us is well anything that
15	meets the definition will be covered and I can tell
16	you that I think by statute the only thing that's
17	covered is what you analyze and justify a standard
18	for.
19	And the problem is that you in the
20	analysis there's so many assumptions that everything
21	is the same and that all of these products have these
22	homogenized characteristics I mean yeah you put

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	rage oo
1	outdoor and you average an outdoor fireplace with a
2	patio heater which is like averaging a ping pong ball
3	with a light pickup. They are completely different
4	and the average tells you absolutely nothing and
5	again I think it's informative that from looking at
6	everything that was in the proposed rule in the NOPR
7	itself, we never would have guessed that radiant
8	patio heaters are in there if they hadn't been named
9	by name in the TSD and shipment numbers put together.
10	And so we wouldn't have even known to
11	comment, excuse me they don't have standing pilots.
12	Those products don't have standing pilots you
13	couldn't leave them on indefinitely if you wanted to
14	and they would be subject to this rule, they would be
15	subject to the paperwork requirements and everything
16	else and there's no way there is no way you can
17	justify the proposed standards for those products.
18	There's no way the standard could be
19	justified for match lit log sets and I understand
20	your point Eric that you are sort of viewing the
21	coverage determination as something separate but the
22	coverage determination can't be made without a

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1	rational explanation as to why you think the product
2	is worthy of regulating and what you are focused on
3	is regulating pilot light use.
4	And I don't see how you can rationally
5	include in the definition products that by definition
6	don't have pilot lights. Do you see what I am
7	saying? And again you know if we can't agree on what
8	it is that you think you should be regulating let's
9	at least agree on what you think you should be
10	regulating so that we can understand what products we
11	have to focus on and provide an explanation about.
12	MR. BROOKMAN: Leslie you are next, use
13	the microphone.
14	MR. BORTZ: I'm sorry Eric I think you
15	mentioned that this isn't only about pilot kits?
16	MR. STAS: Eric Stas DOE I think the point
17	is when you are looking at the covered products it's
18	what do you see out in the market, in the real world,
19	that would be types of units that are out there.
20	It's the standing pilot is a technology that we are
21	looking as an option of improving energy savings.
22	MR. BORTZ: Right.

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1	MR. STAS: So I think you're it doesn't
2	seem to fit this argument that you are sort of like
3	saying the product class is something with a standing
4	pilot light and that is sort of putting the cart
5	before the horse or what have you.
6	MR. BORTZ: I think that's what you are
7	doing, however let me ask you does that mean that a
8	barbeque is included in this?
9	MR. CYMBALSKY: So you would see the
10	definition so if it meets that definition.
11	MR. MOROZ: Does it? Does it? You are
12	the guy who makes the definition? Does it?
13	MR. CYMBALSKY: We will take your comment
14	on that, thanks.
15	MR. STANONIK: Frank Stanonik, AHRI
16	specific to that point and barbeque I assume we are
17	talking about a gas grill. I'm not aware that any
18	gas grills are designed to provide any type of
19	specific flame pattern. It's in no way shape or
20	form, there's a flame but nobody spends time
21	designing it to make a flame pattern.
22	MR. RASMUSSEN: It depends on your

Page 91 1 definition of pattern. 2 MR. STANONIK: Well pattern in fact 3 suggests design and attempt to me but the point is 4 there is no way this definition should be inferred or 5 intended to cover a gas grill. 6 MR. BORTZ: Does it? 7 MR. BROOKMAN: Leslie back to you keep 8 qoing. 9 MR. BORTZ: Well I asked the question does 10 it. 11 MR. BROOKMAN: I saw Ryan first, Ryan you 12 want in here? 13 MR. CARROLL: Yeah I was just going to say 14 the first part of this comment box DOE seeks comment 15 on the proposed definition and here we are asking 16 does this fit and we are being told well tell us 17 whether or not it fits. I mean when I hear -- what I 18 hear now is that definition sounds like it is set in 19 stone and I thought there was an opportunity to 20 comment which everybody here has about the way we did 21 in January at the end of the comment period as well. 22 MS. ARMSTRONG: It's definitely still over

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1	definition you are welcome to comment but
2	MR. CARROLL: Then how can we tell you
3	what fits when that's so influx, if it is still
4	influx?
5	MR. BROOKMAN: Wait.
6	MR. STAS: You have seen the slide with
7	the photos of the general types of products that were
8	used as examples so perhaps you could help us craft a
9	better definition to capture that type of products,
10	maybe you think there's a better way to narrow it.
11	So I mean I think the people in this room can sort of
12	understand what we are trying to get at here I mean
13	without taking things to extremes.
14	MR. MOROZ: What are you trying to get at?
15	MR. BROOKMAN: Hang on, that was Eric Stas
16	now Steve.
17	MR. ROSENSTOCK: Steve Rosenstock, Edison
18	Electric Institute. You know I used to do stuff at
19	ASHRAE and ICC where we talk about definitions and
20	that's because it makes such a difference for those
21	codes. The way that it is written right now because
22	of the words or other purpose I am afraid to say that

	Page 93
1	yes, barbeques would be covered because that is an
2	"other purpose" so would gas lights, they are "other
3	purpose" to provide illumination.
4	Again just the way the definition reads
5	right now because it says other purpose it could be
6	any gas product that is not covered, stoves and
7	ovens, residential are covered in other DOE
8	rulemakings but the way it is written right now it
9	could cover barbeques it could cover gas lights and
10	I'm sure there are other products that I am thinking
11	about.
12	MR. BROOKMAN: So I'm hoping as several
13	commenters have suggested that we can continue to
14	provide useful comment on what this definition might
15	be Barton you are next.
16	MR. DAY: The last comment is absolutely
17	correct. I mean as I parched the language you know
18	at the beginning of this discussion that definition
19	covers every gas appliance that produces a gas flame
20	for every purpose. Any purpose at all, so it covers
21	water heaters, it covers central furnaces it covers
22	every gas product that you have already regulated,

Page 94 1 every gas product that you ever might regulate. Ιt 2 is not a useable definition. 3 You can't make any kind of regulatory 4 determination without having an intended target. 5 Tell us what the intended targets are so that we at 6 least know what we have to comment on and you know 7 again you have given us examples okay, we can comment 8 on fireplaces we know you want to talk about 9 fireplaces, great, let's talk about fireplaces but we 10 can't talk about you know shipment numbers. 11 For some category if you are secretly 12 including gas lights in there and we have no idea. Ι 13 mean I would presume that you are not intending to 14 include central furnaces but you have never said so 15 so I assume you are not covering kitchen cooking 16 stoves. But the words of the definition include them 17 and that's the problem is that you know we need to 18 understand what and you need to tell us you know the 19 various places that you know you raise the question 20 of well what's you know -- how do we address the 21 intended products? 22 What are the intended products? We are

	Page 95
1	not intending you are intending and you need to tell
2	us what you are intending so that we have an
3	opportunity to comment.
4	MR. BROOKMAN: Rett
5	MR. RASMUSSEN: Rett Rasmussen yes we
6	commented on this a year ago during the coverage
7	proposal and now it's the same question again without
8	any feedback, without any determination, without
9	anything from DOE so it's kind of all we can look at
10	it as is well you didn't give us the right answers we
11	are looking for so give us other answers. So that's
12	the frustration and we would like to see something
13	back from DOE other than thank you for your comments,
14	let's have a dialogue please.
15	MR. BROOKMAN: Frank.
16	MR. STANONIK: Frank Stanonik, AHRI. As
17	far as recommending a different or improved or
18	alternative definition I will indicate that in the
19	rulemaking that was conducted and mostly completed on
20	revising the standards for direct heating equipment
21	we at that time were on record indicating that DOE
22	should rely on and use the definition for various

	Page 96
1	types of vented, I'll use the word advisedly hearth
2	products that are presented in the Z21 series of
3	standards. Now we are here today because in fact DOE
4	is intending to address a different set of products
5	that are not included as direct heating equipment
6	that is what that proposed determination is about and
7	that's what this rulemaking is about.
8	And if that is the case okay, to me it
9	further emphasizes that they should rely on the long
10	established recognized industry definitions for
11	various types of I'm going to use the word decorative
12	gas fired products that are in the Z21 series of
13	safety standards. The reason back in the other
14	rulemaking the direct heating rulemaking where at
15	least one of the reasons were the suggestion was not
16	accepted was some concern that by if you will, gaming
17	the definitions one might avoid regulation from
18	federal standards.
19	But if in fact this all goes through that
20	issue avoiding regulation will go away because they
21	will either be regulated as a vented heating or

Page 97 1 which already exists or they will be regulated as 2 this new category of a new covered product whatever 3 it is going to be called. 4 So to me that really eliminates one of the 5 reasons not to use the industry definitions and if 6 you use the industry definitions we can get past this 7 point of -- well I will rephrase that. I believe it 8 will be much clearer as to what will be covered or 9 what is intended to be covered as opposed to as we 10 are getting back into discussing the same 11 conversation we had at the rulemaking on the proposed 12 determination rule. 13 MR. BROOKMAN: Yes Leslie? 14 MR. BORTZ: I believe right now there is 15 no standard or definition to these products. 16 Interestingly and I really don't know the answer to 17 this, I think I know the answer. Over the past few 18 years when there has been no standard I believe that 19 most products in the industry have become more 20 efficient without a standard. 21 More so than your standard would have 22 called for because your standard doesn't start for

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1	several years. I think there are more heater
2	fireplaces than the numbers you gave in 2011 compared
3	to decorative fireplaces. I know our products use
4	less gas wherever we can and have Rett you have
5	products that you are losing less gas. The trend
6	toward making more efficient products has nothing to
7	do with the fact that you don't have a standard.
8	Is there anybody that would possibly like
9	to help me on this because
10	MR. BROOKMAN: I would like to finish out
11	this segment and then we are going to go and take a
12	break so as I see it we are now on the regulatory
13	approach slide 15 and I think we are hearing again
14	from John Cymbalsky.
15	MR. CYMBALSKY: Okay so we are on slide 15
16	as Doug said the regulatory approach so DOE
17	considered two options for energy conservation
18	standards for hearth products and so number one would
19	be a performance based standard so that would be
20	either an efficiency level or a standard for the
21	maximum energy allowed or a design which is a
22	prescriptive standard pursuant to the definition of

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1	energy conservation standard at 42 U.S.C. 6291(6).
2	DOE may establish either a performance
3	standard or a design standard for these products but
4	not both. So to assess these two options DOE
5	reviewed available technology options for performance
6	based standards and design standards, compared
7	options for reducing active and standby mode energy
8	consumption and considered these for all hearth
9	products meeting the proposed definition.
10	DOE concluded that a prescriptive design
11	requirement would be more effective than a
12	performance based requirement for the following
13	reasons. First of all there would be less burden on
14	manufacturers because testing for an efficiency
15	standard would not be required. There would be a
16	single requirement that would apply to all products
17	meeting the hearth product proposed definition and
18	that product classes are unnecessary because standing
19	pilot functionality components and energy use are
20	similar across all hearth products.
21	DOE notes that it did group different
22	product categories of hearth products commonly found
1	

	Page 100
1	in the market for use in this analysis of potential
2	performance standards, Barton?
3	MR. DAY: A couple of times there John you
4	said that you would consider all hearth products.
5	MR. BROOKMAN: Your microphone.
6	MR. DAY: Oh sorry.
7	MR. BROOKMAN: Barton Day.
8	MR. DAY: Yeah Barton Day again, John a
9	couple of times in your comments there you said that
10	DOE considered some fact or another for all products
11	meeting the definition. That presupposes of course
12	that you have some concept of what is covered by the
13	definition. That's what we are asking to hear, we
14	have been around and around on that and we are not
15	getting any kind of clarity as to what you
16	considered. I would suggest and a way to try and
17	make this meeting constructive would it at least be
18	possible to hear from DOE what products it considered
19	in coming up with its justification for the proposed
20	rule.
21	I mean you have shipment data, shipment
22	data for what exactly? You have average efficiency

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1	numbers for what exactly? I mean that's what we need
2	to know we can't comment on anything how do you
3	comment on shipment numbers without knowing shipment
4	of what, energy consumption of what. If we can at
5	least cabin the discussion enough.
6	I want to end up with a constructive
7	discussion here and you can see how we are flapping
8	around. We don't want to just sit here and say well
9	we don't know because you won't tell us what products
10	and that's not going to be very helpful. You've
11	if you can articulate for us what products you looked
12	at in the regulatory analysis then at least we can
13	talk about that.
14	MR. CYMBALSKY: Okay I think this is a
15	good stopping point we will pick up on this but let
16	us take a few minutes to take a break.
17	MR. BROOKMAN: Yeah let's take a break we
18	are due for a break. It's now 5 minutes after 11.
19	We will resume in 15 minutes which means 20 minutes
20	after 11. Please make sure to wear your badge or
21	identification visible as you are walking around the
22	halls, there are restrooms at both ends of the hall.

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1	There's a coffee shop down on the ground floor you
2	can get both water and coffee there at Dunkin Donuts
3	and please don't leave the building or anything you
4	will have to come back through security to get back
5	in so we will resume here in this room at 11:20 and I
6	appreciate everybody being so clear about their
7	wants, needs and expectations. See you back here at
8	11:20.
9	MR. BROOKMAN: Please start taking your
10	seats we are going to resume. All set, okay we are
11	going to pick up where we left off and I guess we are
12	going to hear from Ashley Armstrong. Hey folks let's
13	settle down please.
14	MS. ARMSTRONG: And unfortunately Barton
15	is not here but I was going to go back to start
16	addressing some of the things he raised earlier. So
17	at break what I did was and granted I didn't have a
18	whole lot of time but I did go back and quickly look
19	at a couple of the comments that have been previously
20	received in response to the proposed definition that
21	was in the proposed coverage determination and
22	actually Barton in his comments earlier raised a

	Page 103
1	couple of new points that hadn't previously been
2	provided and they give issue they provide I think
3	what I would call a pretty good foundation for DOE to
4	go back and at least reconsider some of the changes
5	that it would feel need to be made to the DOE to
6	the proposed definition of a hearth product to
7	address maybe some of the concerns.
8	But just to answer some of the questions
9	in terms of scope, what is the analysis based on
10	before we actually go forward and start talking about
11	the analysis. A while back when we kicked off this
12	effort one of the things that we did
13	MR. BROOKMAN: Excuse me Ashley a few
14	individuals have just joined us, we are just getting
15	going here, we are just getting started please Ashley
16	go ahead.
17	MS. ARMSTRONG: So a while back when we
18	first kicked off some of these efforts one of the
19	first things we did was reached out to HPBmA and we
20	asked you guys for shipments information. And so DOE
21	HPBA was kind enough to provide shipments information
22	which subsequently can be found in the docket but it

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1	is for these categories. So it's for vented
2	fireplace, both inserts and stoves. It's for
3	unvented fireplaces, both inserts and stoves, it was
4	for log sets, both unvented and vented log sets and
5	it was for outdoor products with the exception of
6	patio heaters which were subsequently added in
7	shipments data provided.
8	So to answer your question directly Barton
9	we have data, all of these products for which the
10	analysis is based on going forward. So I think you
11	can generally see that DOE believe its definition was
12	encompassing of this scope. You were out of the room
13	when I started this but I think what you seeded
14	earlier was pretty helpful to DOE.
15	I went back at the break and looked at
16	some of the comments that were received on the
17	proposed definition in response to the coverage
18	determination and some of the things that you have
19	said today in pointing out some of the confusion in
20	our definition I think is more detailed than had been
21	previously submitted and it is very helpful so we
22	thank you for that.

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1	And in response to that I think DOE can
2	work with that going forward but this generally
3	speaking on the side is the entire coverage. So we
4	are hopeful that you will take this opportunity since
5	you have been seeking opportunities to work with the
6	Department and if you have specific comments about
7	how we can refine our definition, you will use this
8	as that opportunity to provide suggestions on how we
9	can revise the definition given this scope.
10	MR. BROOKMAN: Please go to a microphone
11	say your name.
12	MS. FEINSTEIN: Hi I'm Rachel Feinstein
13	with the Hearth, Patio and Barbeque Association. I'm
14	looking at the data that we provided to DOE and for
15	outdoor products it was that was specified as factory
16	built outdoor gas fireplaces, not outdoor products in
17	general.
18	MS. ARMSTRONG: Yes.
19	MS. FEINSTEIN: It was specifically that
20	thank you.
21	MR. BROOKMAN: Okay thanks for clarifying,
22	Barton do you want in here?

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1	MR. DAY: Yeah Ashley thanks that's very
2	helpful. The picture still leaves some questions and
3	I think the one that we have had the most difficulty
4	trying to wrap our head around is outdoor products,
5	you know as indicated you know the data that you got
6	was you know related to built-in gas fireplaces. The
7	inclusion of patio heaters came as a real surprise
8	and sort of is a barn door thrown open and we just
9	have no idea you know what else may be what else
10	may be in there and again it's that outdoor category.
11	I mean what you have got shown in the
12	picture there looks like it's a built-in type of fire
13	table product, you know there are a lot of variations
14	on these that don't make any sense in this rule for
15	the same reason that I think the patio heaters don't
16	which is they just don't have pilot lights and so
17	they are not part of the issue that DOE is trying to
18	address.
19	The other categories again we don't agree
20	that they can all be lumped together but at least now
21	we can know what we are talking about so that helps
22	anything else that is not depicted there that we need

1 to worry about.

2 MS. ARMSTRONG: So I think what you will 3 hear when we move forward is that this is generally 4 the types of products that our analysis is based as 5 we step through and talk about the market intact, 6 some of the data we have collected, some of the 7 products that we purchased and we took apart and how 8 our analysis was based from the ground up was based 9 on this subset of products on the slide so generally 10 speaking we believed these were the subsets of 11 products that meet our proposed definition. 12 Obviously you know presents a flame 13 pattern to us that isn't anything that presents a 14 flame pattern, it is something that the consumer 15 would see a flame pattern, it is designed for that 16 flame pattern sorry you know, that's not a furnace, a 17 residential furnace. We will be talking about those 18 later this week. 19 Or that is not a water heater it was not a 20 residential cooking product that is otherwise 21 characterized. Those provide a different function. 22 This really was meant to be presented at least to us

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1	present a clean pattern that that is what it's used
2	for that is what it was designed for so you know,
3	like I said we are open to any further suggestions
4	you may have on the definitions this is defined in
5	the scope and terms of what we analyze going forward
6	which I think will at least help you in concentrating
7	your comments for the rest of the days.
8	Some of the things that you have already
9	said, Barton I think were really helpful to us and
10	made us think a little further at break and go back
11	and look at some of the comments that were already
12	and talk about how we could further craft this to
13	help get rid of some of the ambiguity so we
14	appreciate you bringing those to our attention.
15	And that's the kind of constructive
16	feedback we are looking for throughout this process.
17	So we are hoping that is the way the rest of the day
18	will go.
19	MR. DAY: That's helpful thanks.
20	MR. BROOKMAN: Leslie? Get that
21	microphone close.
22	MR. BORTZ: I came in in the middle so

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1	maybe you answered but she isn't here.
2	MR. BROOKMAN: Go ahead she can hear you.
3	MR. BORTZ: Do you intend to cover outdoor
4	gas lights as hearth products:?
5	MR. CYMBALSKY: No so what you see here in
6	our analysis this is what we contemplated for the
7	definition.
8	MR. BORTZ: Do you intend to cover indoor
9	gas lights? Does that mean that that's what you are
10	going to do or does that mean that is what you
11	contemplate now?
12	MS. ARMSTRONG: That is what at this point
13	this is Ashley from DOE that is what we propose to
14	do. Obviously our proposal is open for comment so if
15	you agree with that you can say you agree. If you
16	believe we should change course and include lights
17	you can also comment that way one way or the other.
18	Right now as you can see lights were not
19	expressly analyzed which means that's not something
20	DOE thought of as being in scope.
21	MR. BORTZ: Okay does that mean that you
22	will not regulate gas lights under this rule?

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1	MS. ARMSTRONG: I cannot say will not
2	until we finalize something that's the determination
3	of will and won't. At this time they are not
4	proposed to be in scope. It's still a proposal it's
5	still out for comment. Nothing is final until we
6	finish the proceeding.
7	MR. BROOMAN: Rett?
8	MR. RASMUSSEN: Rett Rasmussen. In
9	looking at the intent of your coverage as depicted by
10	those photos one of these things is not like the
11	other and that's the patio heater. That's commonly
12	referred to as a mushroom type heater of which that
13	is one variety. The other variety is an infrared
14	type installed heater and those do not have they
15	have more heating function than they have aesthetic
16	appeal with regard to any flame pattern.
17	Their flame pattern is one of nondescript
18	pattern if you wanted to describe any type of pattern
19	it is not the same aesthetic appeal that simulates a
20	wood fire and so I would recommend that patio heaters
21	be taken out of this intent of coverage, thank you.
22	MR. CYMBALSKY: Thank you Rett, I just

	Page 111
1	want to point out that is exactly the feedback we are
2	looking for stated in that way, very helpful, well
3	addressed it's constructive so we can work with that
4	type of comment and you know go forward with that.
5	And if you say you agree with DOE not to analyze
6	lights,that's a constructive comment as well.
7	MR. BROOKMAN: Okay Barton?
8	MR. DAY: Yeah just a quick definitional
9	point. It is the patio heaters that threw us because
10	we couldn't see how they could fit in under a
11	definition that said flame pattern.
12	MR. BROOKMAN: I thought there were many
13	different things
14	MR. DAY: I thought flame pattern meant
15	what you explained a minute ago until we saw patio
16	heaters.
17	MR. BROOKMAN: Are there many different
18	kinds of patio heaters?
19	MR. DAY: They are fairly generic they are
20	really suited to general types.
21	MR. RASMUSSEN: Actually you could put
22	there is at least three different types, there is

	Page 112
1	also one that doesn't put as much heat but it is the
2	spinning tube type one where it has a flame effect
3	but people expect to have heat off, this is Rett.
4	MR. BROOKMAN: Okay thank you were you
5	finished Barton? Okay you were. I really appreciate
6	this last series of comments and the exchange that
7	was there. Do we have additional comments based on
8	these photographs about products and definitions,
9	Leslie?
10	MR. BORTZ: It looks like you are
11	intending to cover outdoor fireplaces.
12	MS. ARMSTRONG: This is Ashley that is
13	correct.
14	MR. BORTZ: That is correct. How do you
15	intend what do you intend to consider? What's
16	going to be how are you going to I mean despite
17	what you say in your analysis that there are
18	extremely few outdoor fireplaces that have standing
19	pilots.
20	MS. ARMSTRONG: Okay so first I do want to
21	this is Ashley from DOE. So the definition of
22	as Eric pointed out earlier the definition and then

	Page 113
1	the proposed standards are really two separate things
2	for us. The presence of a standing pilot has nothing
3	to do with DOE's definition of scope. DOE was
4	defining the scope based on these characteristics of
5	products in a more broad term.
6	Obviously we have had a lot of discussion,
7	a very fruitful discussion and some suggestions about
8	how DOE could further potentially change that
9	definition to make it more clear. You know the
10	presence or absence of a pilot though has nothing to
11	do with whether products will or won't meet that
12	definition. The pilot is nowhere in that definition.
13	That isn't the coverage determination,
14	purely for defining what types of products are in in
15	terms of regulatory coverage for DOE to finalize its
16	coverage determination.
17	The second part of this and I think gets
18	to your question which I am going to say partially I
19	am going to answer throughout the day in terms of the
20	proposed standards you know the analysis we did for
21	standards is going to be presented through the rest
22	of the day. It starts all the way from the market

	Page 114
1	assessment we did, what types of products we chose
2	from the market. We took apart how we costed those
3	and then downstream of that the economic analysis fed
4	into lifecycle and national benefits and costs.
5	So I am going to hold your question in
6	terms of what exactly we considered in terms of
7	certain attributes and how we did that for the rest
8	of the day but obviously if you see something
9	throughout the day for any certain product that you
10	have data or you feel is different you should comment
11	on it, that's what this is all about.
12	MR. BROOKMAN: Leslie keep going.
13	MR. BORTZ: That outdoor fireplaces have
14	you have in your statistics that 26% of outdoor
15	fireplaces have a standing pilot. That's just not
16	true.
17	MR. BROOKMAN: Okay.
18	MR. CYMBALSKY: We would look forward to
19	the number that you think it is so data definitely
20	will help .
21	MR. BROOKMAN: Barton?
22	MR. DAY: Just one quick one before we get

	Tage 115
1	off the definitional point and that is that I
2	understand what you are saying about coverage but
3	there is going there's a separate definitional
4	issue as to the scope of the standard because you are
5	basically saying well we want the coverage
6	determination to cover products whether they have got
7	standing pilots or not but the standard really can't
8	be justified for products that don't have standing
9	pilot lights to begin with so we will just need to
10	pick that up later.
11	MS. ARMSTRONG: So this is Ashley from
12	DOE. So you are absolutely right and our analysis
13	and all of our analysis there will be some fraction
14	of the market that is not impacted by our standards
15	and that usually means that they are at or above they
16	already meet our standards so our standard has no
17	impact on that percentage of the market and as we
18	march through today and we talk about shipments and
19	we talk about the distribution there will be some
20	fraction of the market that we are going to
21	acknowledge in these different categories that are
22	already shipped without a pilot thus would comply.

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1	MR. DAY: Just to clarify and I agree with
2	what you just said I mean there are products that
3	some have pilot lights some don't. There are some
4	categories of products that don't have standing pilot
5	lights at all and so there is no you know, there is
6	no justification for having them subject to the
7	standard.
8	MS. ARMSTRONG: Right so this is Ashley
9	from DOE so if there are certain products as we march
10	through today that could never have a standing pilot
11	you know we welcome that feedback and we believe they
12	shouldn't be subject to at least a pilot light, the
13	consideration of a pilot that's something that you
14	are more than welcome to provide comment on.
15	MR. BROOKMAN: Are we ready to move on
16	now, I think we are ready to move to the market and
17	technology assessment yes.
18	MR. CYMBALSKY: So this slide just shows
19	you what we are all going to cover here in the next
20	few hours so.
21	MR. ELSZASZ: Good morning, I think it is
22	still morning. My name is Justin Elszasz. I'm a

1	managing consultant with Navigant Consulting and I
2	will be presenting the market assessment as well as
3	our engineering analysis. So to start off the
4	purpose of the market assessment is to both
5	qualitatively and quantitatively you know give really
6	the big picture of the hearth market, the hearth
7	product market and again this is using the proposed
8	definition of hearth products.
9	So when we say we are characterizing the
10	hearth industry we are talking about gas fired
11	products. We used a couple of different resources in
12	order to tackle the market assessment. One is
13	through product literature review you know this is
14	product literature that is generally available on
15	line. Another is through confidential manufacturer
16	interviews and another key resource was trade
17	association data in this case from Hearth Patio and
18	Barbeque Association.
19	As mentioned by John earlier additional
20	technology options were considered by given the focus
21	of the rule on a prescriptive standby you know
22	standard the technology that is relevant to this

	Page 118
1	assessment is obviously electronic ignition.
2	If I can change slides, okay. So the next
3	few slides are going to be the groups of products
4	that were analyzed as part of the hearth product
5	analysis going forward. So the first of these groups
6	again we saw these groups earlier on an earlier slide
7	during what John and Ashley were talking about.
8	The first of these groups was vented
9	fireplaces, inserts and stoves and that of course
10	includes both b-vent and direct vent styles. The
11	next in these groups is of course the unvented
12	variety so similar style products, fireplaces,
13	inserts and stoves but without the means for venting
14	byproducts of combustion outside of the building.
15	Unvented products both in this category as
16	well as unvented gas logs which we will see in a
17	moment of course include the oxygen depletion sensor.
18	The next group, these are the next two groups, vented
19	gas logs and unvented gas log oh I think Frank has a
20	
21	MR. BROOKMAN: Frank Stanonik.
22	MR. STANONIK: Frank Stanonik AHRI. Since

Page 119 take the

1 you have identified it here I am going to take the 2 opportunity to point out you do show that unvented 3 products do require an oxygen depletion sensor which 4 is in fact built-in to the pilot system and in the 5 previous slide DOE explained or it was explained that 6 product classes are necessary because standing pilot 7 functionality is similar across all hearth products 8 and again I'm only dealing with the definition as 9 proposed but in fact the pilot on an unvented product 10 has a very unique functionality that is not found in 11 any other types of vented I'm sorry, any other types 12 of hearth products as defined here and you have 13 identified it it's the ODS which is part of the pilot 14 system so I think that has been overlooked in terms 15 of how DOE has been approaching this requirement. 16 MR. ELSZASZ: I actually have a follow up 17 question to that. Is there a specific difference 18 between the standing safety pilot and an electronic 19 ignition in terms of functionality or safety? So in 20 other words would you know you mentioned that the 21 oxygen depletion sensor has a safety component to it, 22 you know we would look for feedback as to whether the

	Page 120
1	electronic ignition system could sufficiently you
2	know supplant those functions I guess.
3	MR. STANONIK: Frank Stanonik AHRI okay
4	I'm not sure I understood the question because when
5	you say electronic ignition system to me are you
6	talking about a system that would light a pilot and
7	then the pilot would be there operating as opposed to
8	electronic ignition systems which just will directly
9	ignite the main gas.
10	MR. ELSZASZ: Yes so primarily we are
11	concerned with intermittent pilot ignitions as I will
12	mention later we found that that was the predominant
13	style of electronic emission in the hearth product
14	market so I guess the question here is whether or not
15	an IPI system could satisfy the safety and
16	functionality that a standing pilot would for
17	unvented products.
18	MR. STANONIK: Okay I understand the
19	question we will try and get you an answer.
20	MR. ELSZASZ: Okay, thank you.
21	MR. BROOKMAN: Leslie?
22	MR. BORTZ: I don't I believe in

	Page 121
1	today's world that yes it could but it couldn't do so
2	as reliably and of course reliability is critical.
3	MR. ELSZASZ: Okay thank you.
4	MR. BROOKMAN: Thank you Leslie.
5	MR. ELSZASZ: I will go ahead and move on.
6	So again the next two groups here that we have
7	identified are vented gas log sets and unvented gas
8	log sets. Of course as was mentioned earlier I think
9	we have kind of discussed some of the key features of
10	gas log sets earlier in opening statements but gas
11	log sets are typically installed and existing masonry
12	fireplaces. Of course a distinguishing feature
13	between these groups as well that are vented or
14	unvented or not and these products also, you know
15	what was mentioned before don't include an enclosure
16	or heat shielding so I guess on that there. And of
17	course the last product category that we kind of
18	analyzed and we have already discussed this quite a
19	bit are outdoor products.
20	MR. ROSENSTOCK: Steve Rosenstock, Edison
21	Electric Institute. For this particular sub-category
22	wouldn't the majority of a lot of these products

	Page 122
1	I'm just more familiar with these products in
2	commercial settings rather than residential so did
3	you do that sort of break out, whether it is more
4	commercial versus residential because you know it
5	does make a difference in terms of type of product
6	coverage sometimes under DOE?
7	MR. ELSZASZ: Well so when it comes to I
8	guess the differences between how they are used and
9	energy use I guess I would defer to later portions of
10	the analysis specifically the energy use analysis.
11	MS. ARMSTRONG: But Steve to your point
12	for coverage the answer is no.
13	MR. CYMBALSKY: Move on.
14	MR. ELSZASZ: The products covered are not
15	based on if it goes in a commercial building or a
16	residential setting.
17	MR. BROOKMAN: Thank you Ashley and John
18	Cymbalsky both, proceed.
19	MR. ELSZASZ: So based on data that we
20	received from Hearth Patio and Barbeque Association
21	we were able to estimate market shares again of the
22	gas fired hearth product market and so these are the

	Page 123
1	you know estimates that we came up with. Again
2	outdoor product category was adjusted starting with
3	HPBA data as a starting point but was adjusted to
4	include patio heaters and I think we have a question?
5	MR. HOUCK: James Houck.
6	MR. BROOKMAN: Why don't you leave that on
7	James?
8	MR. HOUCK: Okay now can you hear me?
9	MR. BROOKMAN: Yeah.
10	MR. HOUCK: James Houck. Yeah I have a
11	couple points regarding your market assessment
12	slide. One is I'm not questioning the accuracy
13	although I don't have the numbers in front of me but
14	the division of how you categorize these different
15	types of appliances I think may cause considerable
16	confusion and if it was involved in DOE's projection
17	of future markets it's totally inappropriate and the
18	project that this shows in the rule in the technical
19	support document is quite an error.
20	What I'm referring to is you have
21	grouped vented fireplaces, inserts and stoves
22	together and unvented fireplaces, inserts and stoves

	Page 124
1	together and vented gas logs and unvented gas logs
2	off to the side. Inserts and gas logs are for a
3	retrofit market. Fireplaces and stoves are primarily
4	not entirely, but primarily for a new housing market
5	therefore the impact that it will have on the
6	prediction of future markets will be different if
7	they are categorized in this way.
8	For example you would not want to use a
9	new housing development for estimating of the gas log
10	sets or the inserts which appears to be the case.
11	Also what I want to talk about later I hope I have
12	the opportunity is the ramifications that these have
13	on safety and air quality.
14	MR. BROOKMAN: Okay thank you.
15	MR. ELSZASZ: Okay as far as the comments
16	you had regarding shipments those will be
17	particularly useful during the shipments analysis
18	discussion which is a bit later so if you have you
19	know, comments regarding what was used as far as
20	correlations go to predict shipments into the future
21	that I think would be the time to you know state
22	those comments.

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1	MR. BROOKMAN: Dana?
2	MR. MOROZ: Dana Moroz, Wolf Steel. I
3	don't have numbers unfortunately to support it but I
4	am gravely concerned about the 15% of outdoor
5	products that your assessment has identified. I
6	think that's grossly exaggerated certainly based on
7	our production and our sales without having those
8	numbers in front of me to quote to you.
9	MR. ELSZASZ: Okay thank you. If there
10	aren't any more comments I am going to go ahead and
11	move on. So as we stated earlier you know this
12	rulemaking is focused on a prescriptive requirement
13	and so digging into the market assessment a little
14	bit further we are looking at the different types of
15	ignition systems that are in the market and generally
16	these fell into three different categories, match lit
17	which is essentially the lack of the ignition system,
18	the constant burning or standing pilot which we have
19	discussed earlier and the electronic ignition.
20	Again we will discuss this a little bit
21	further later but we found that as far as electronic
22	ignitions go intermittent pilot ignition systems are

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1	the primary form found in the hearth product market
2	and so based on several resources including comments
3	we have gotten during confidential manufacturer
4	interviews these are the estimates that we came up
5	with for each of the hearth product groups, split out
6	by their ignition type.
7	So I think I'll pause here and leave this
8	up for a second if anyone has comments on these
9	estimate shares.
10	MR. BROOKMAN: Barton?
11	MR. DAY: Yeah one of the major issues is
12	that you missed a technology completely. The
13	industry developed a technology that was developed
14	solely to achieve greenhouse gas emission reductions
15	and its now being standardized under ANSI under the
16	name On Demand. Be careful with that terminology
17	because some people in the industry have used that
18	for other types of devices but it is a device that
19	was designed specifically to eliminate unnecessary
20	pilot use.
21	It's been in use in the industry for the
22	last several years. Its use is expanding and so you

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1	know it is an important it's a very important
2	change in terms of the innovation that has gone on
3	and in the industry of which there has been quite a
4	bit. I would also point out that match lit
5	technology isn't legal for vented indoor products so
6	there is no such thing as a match lit indoor product
7	except for
8	MR. ELSZASZ: Sorry was that vented or
9	unvented?
10	MR. DAY: Vented. The sole exception to
11	that is unvented I'm sorry vented gas log sets only
12	natural gas, only in some jurisdictions and for
13	outdoor it is the predominant, it's the predominant
14	approach in your standing pilot numbers for outdoor
15	products or probably or to magnitude high at least.
16	MR. ELSZASZ: Thank you.
17	MR. BROOKMAN: Frank Stanonik?
18	MR. STANONIK: Frank Stanonik AHRI. With
19	regard to your numbers here on unvented products
20	whether it is a gas log set or otherwise at least
21	from the perspective of the manufacturers we
22	represent the electronic ignition percentage is so

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1	small it is practically zero so we think you have
2	certainly overestimated what percentage of these
3	products have electronic ignition as you have defined
4	it here.
5	MR. ELSZASZ: Thank you.
6	MR. STANONIK: We will try to get you a
7	more precise number but it is going to be small.
8	MR. ELSZASZ: Thanks.
9	MR. BROOKMAN: Yes please Barton?
10	MR. DAY: The other key point is that
11	these numbers if you had looked at these numbers five
12	years ago they would be totally different. If you
13	look at them five years from now without any DOE
14	activity they would be completely different. This is
15	an area where innovation in the industry has been a
16	major factor and these numbers are changing very
17	rapidly.
18	MR. ELSZASZ: Just to follow up when it
19	comes to the additional ignition type that you have
20	mentioned I think what would specifically help us
21	would be again shipments data so that we could
22	accurately reflect market shares here.

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1	MR. DAY: Well you can't because the
2	picture is changing very rapidly.
3	MR. ELSZASZ: I see okay, thank you.
4	MR. CYMBALSKY: So this is John from DOE
5	could Barton or somebody else comment on what it
6	actually does in terms of the On Demand and how many
7	hours of non-active mode does it shut itself off
8	with? The way I understood it earlier that is what
9	it means to be On Demand. Is there a common out grid
10	on the set up of these things or?
11	MR. BROOKMAN: Ryan.
12	MR. CARROLL: Yeah Ryan Carroll with HPBA.
13	It's programmable so it could be as few as a handful
14	of hours that might be set by the controls
15	manufacturer I believe.
16	MR. CYMBALSKY: Factory set at some level?
17	MR. CARROLL: Maybe.
18	MR. CYBALSKY: But is it shipped by the
19	manufacturer at some level of hours?
20	MR. SCHLACHTER: In our case yes.
21	MR. BROOKMAN: Is it John?
22	MR. SCHLACHTER: I'm sorry John

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1	Schlachter, Maxitrol, yes the manufacturer determines
2	the length of time per the main burner not to be
3	active. After that time period times out it
4	extinguishes the pilot.
5	MR. CYMBALSKY: Can you tell us the hours?
6	MR. DAY: This is Barton Day again the key
7	point about it is that it is designed to eliminate
8	all pilot light gas consumption except during
9	relatively heavy periods of product use and so the
10	prospect of standing pilot lights being left on
11	outside the heating season or outside the intensive
12	use season it completely eliminates that.
13	MR. CYMBALSKY: Right so I guess what
14	would help us in our analysis is just two fold right
15	so we would like to make a more accurate depiction of
16	how the market is moving in terms of the shipments
17	and then at the same time be able to know how to
18	adjust our hourly our annual hours of non-use just
19	to get the energy correct to so that would both of
20	those things would be helpful.
21	MR. BROOKMAN: Okay John?
22	MR. SCHLACHTER: I just wanted to comment

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1	that yeah it's programmed and shipped to the
2	manufacturer that way. It's not a user programmable
3	function so the consumer can't change that timing.
4	MR. BROOKMAN: Okay thank you, comment
5	from someone who is joining us online, Martin Thomas
6	says there is also a remote operated pilot which
7	makes it easy to turn the pilot on and off, Dana you
8	are next.
9	MR. MOROZ: I just wanted to comment that
10	this we are talking about new technology that is
11	evolving and these numbers as Barton has pointed out
12	shows a trend that the industry is working towards
13	developing new technology so I have asked for a
14	definitive timeline that these controls shut down is
15	it practical? There are new systems being developed
16	every day. We are going to our suppliers and we are
17	saying here's what we are looking at and what's
18	practical what works best and achieves the desired
19	effect which is a satisfied customer.
20	So to come up with a timeline and say this
21	specifically is what they are going to do today is
22	not practical, we haven't got there yet with our

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1	technology. We have one on the market today the
2	standards for pilot controls are just being revised
3	by a technical committee to address this new type of
4	technology and so it would be premature for us to
5	come up with a definitive time line for them.
6	MR. BROOKMAN: Frank Stanonik?
7	MR. STANONIK: Frank Stanonik AHRI. Just
8	one other point in terms of what this particular NOPR
9	I can't help but note that although you presented in
10	a slide I'll say at least a pseudo-definition of
11	constant burning standing pilot no such definition
12	was provided in the regulation so I think for all of
13	us it might be helpful to at least see what DOE
14	proposed or what they believe is the definition of
15	constant burning pilot.
16	In the absence of that I am assuming it is
17	the common industry definition which is fairly
18	similar to what we see on the slide that being the
19	case the On Demand pilot shuts off the pilot not with
20	any additional user interaction, is not by definition
21	a constant burning standing pilot.
22	MS. ARMSTRONG: Right and this is Ashley.

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1	So that brings up a good point and to both of yours
2	would you suggest that DOE analyze that as a design
3	option in this rule?
4	MR. STANONIK: Of course.
5	MR. DAY: I think I would suggest
6	MR. BROOKMAN: Barton Day?
7	MR. DAY: Yes sorry I apologize. I think
8	I would suggest that the issue that you are trying to
9	address probably won't be around in five years.
10	MR. BROOKMAN: Yes Rett?
11	MR. RASMUSSEN: Rett Rasmussen. Just
12	since the last time we were here three and a half
13	years ago our gas logs sales were about 3 to 5%
14	electronic ignition systems. Last year it was up to
15	about 14% so we are working on it ourselves but as I
16	said in my comments with our types of products we
17	have a very hard limit with current technology or
18	even expected technology because of the extreme cost
19	to develop by the control manufacturers products with
20	electronic ignition that will accomplish what you
21	want for larger fireplaces that just isn't available
22	and I would be out of business in that segment if

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1	this went through.
2	MR. BROOKMAN: Okay well thanks for that
3	specificity that is helpful and please hand that
4	microphone to Leslie.
5	MR. BORTZ: I don't mean to question you
6	Rett but I think there's a big difference between the
7	amount of electronic ignition systems on LP as
8	compared to natural. Do you see that?
9	MR. RASMUSSEN: Rett Rasmussen we sell
10	more natural gas sets than we do propane for vented
11	products, for vent free it's still a little bit more
12	skewed to the natural than propane but as far as the
13	electronic ignition system usage I haven't analyzed
14	it between the two gas types. I think it's still
15	skewed a little more towards natural just because it
16	is the larger proportion of our sales.
17	MR. BORTZ: Excuse me Leslie Bortz. I
18	believe that proportionately there is more sold to
19	the LP market because the LP market has a pilot that
20	costs more money to run.
21	MR. BROOKMAN: Okay.
22	MR. ELSZASZ: Thank you that's helpful.

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1	MR. BROOKMAN: So we are going to keep
2	moving on with the market assessment.
3	MR. ELSZASZ: Actually we are moving on to
4	the engineering analysis. So the purpose of the
5	engineering analysis is basically you start to put
6	some numbers to this. So the idea here is to
7	determine what the cost difference is for the
8	proposed prescriptive requirement disallowing
9	standard pilots. So the methodologies used here,
10	it's kind of a combination of two approaches. One is
11	a design option approach which seeks to determine the
12	incremental cost of adding on a new technology or
13	design and the second methodology is reverse
14	engineering or in other words tearing down the
15	physical product, determining its bill of materials
16	and then assigning costs based on that bill of
17	materials.
18	Again focused on the prescriptive the
19	potential prescriptive standard here we have assumed
20	that a standing pilot model would need to convert to
21	an intermittent pilot ignition again. We found that

<sup>22</sup> IPI or intermittent pilot ignitions are more

	Page 136
1	predominant in a hearth market. And also I will just
2	mention going forward that as it was mentioned
3	previously match lit systems you know, of course
4	don't have a standing pilot and so you know when it
5	comes to discussing the effects of the proposed
6	standard the match lit systems aren't really
7	considered.
8	So graphically and this could be sorry
9	MR. BROOKMAN: Leslie?
10	MR. BORTZ: When we started talking to
11	Navigant you had four categories. You had match lit,
12	you had piezo you had standing pilot and you had
13	electronic ignition. We explained to you much to our
14	dis-benefit I think that piezo isn't a type of
15	ignition it is a part of an ignition system. If a
16	person buys which they do buys a piezo on a
17	standing pilot system it is because they want to be
18	able to turn it on and off so I think that I made a
19	mistake in not in the reality of the systems but I
20	made a mistake by telling you that's not a system
21	because certainly there's no reason to have a piezo
22	if you are not going to turn the unit on and off.

	Page 137
1	MR. BROOKMAN: Rett please?
2	MR. RASMUSSEN: Rett Rasmussen. Yeah a
3	piezo just replaces a match or an aim in flame.
4	That's all it does. It's just an easy means of
5	igniting the gas. It has nothing to do with the main
6	function of these control systems which is for safety
7	shutdown in the event of an interruption in the gas
8	supply or a flame out. You want to be able to shut
9	down that gas flow absolutely required on propane
10	because propane is heavier than air and sinks to the
11	ground, pools and lights off of the first spark.
12	Natural gas is lighter than air and vents
13	up the chimney so.
14	MR. BORTZ: So the point is we sell a
15	fairly significant amount of what you would call
16	standing pilot but with piezos and I don't know if
17	you take that into consideration when you say how
18	much energy wasted energy, there is because there is
19	no reason to buy the piezo accept it makes it an
20	awful lot easier than sticking your hand in the
21	fireplace with a match.
22	MR. BROOKMAN: Yeah okay thank you, Dana?

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1	MR. MOROZ: Dana Moroz, Wolf Steel. In
2	your methodology and your reverse engineering
3	approach I am a little concerned about how you would
4	have identified your costs. There's a fundamental
5	difference between electronic ignition and standing
6	pilots. One uses a generator system and one uses a
7	flame as part of an electrical circuit. The problem
8	that arises is when it is applied inside of an
9	appliance is it becomes much more sensitive to air
10	movement and that air movement is governed by the
11	different applications of the installation whether it
12	be a fireplace or an insert or a stove.
13	Electronic ignition additionally will
14	suffer a microsecond of disconnect between the flame
15	and that sensor to shut off the gas. A standing
16	pilot system on the other hand that uses the
17	generator will operate up to 30 seconds without any
18	flame before it will shut off the gas. That makes it
19	much more tolerant of the many varying conditions and
20	each appliance and your tear down method of assessing
21	cost doesn't look at that development of each
22	individual product and how it interacts within that

1 environment.

It's like looking at simply taking this component out and putting this component in and there's a lot more detail and design that goes in behind the scenes to make it function in each and every application.

7 MR. BROOKMAN: Okay thank you.

8 MR. ELSZASZ: So again drilling down into 9 this engineering analysis a little further you know 10 I've mentioned this a couple of times already we 11 found intermittent pilot ignitions to be the 12 predominant form of electronic ignition systems in 13 the hearth market and so when comparing a standing 14 pilot unit and this applies to any of the groups that 15 we looked at, you know what we are trying to assess 16 is what the differences between a standing pilot and 17 having to convert it to an electronic ignition and so 18 in the case of the electronic ignition the general 19 assumption was that these would be converting to an 20 intermittent pilot.

As far as the standing pilot units are
 concerned the baseline assumption varied by products

	Page 140
1	so in the case of vented and unvented fireplaces,
2	inserts and stoves we found that the millivolt gas
3	valve was more predominant for several reasons, not
4	the least of which being space constraints.
5	So fireplaces, inserts and stoves already
6	have an enclosure and heat shielding and make it more
7	readily available for the larger millivolt gas valve
8	whereas for vented and unvented gas log sets, outdoor
9	you know there are I guess additional space
10	constraints imposed as well as cost considerations
11	and we found that manual gas valves were more
12	predominant for those product groups.
13	MR. BROOKMAN: Leslie?
14	MR. BORTZ: I'll wait, yes sorry.
15	MR. ELSZASZ: You can go ahead.
16	MR. BORTZ: No I'm sorry I'm a talker so.
17	MR. ELSZASZ: This is the last slide of
18	the engineering analysis so you can go ahead and
19	comment anyways but so these are the results of that
20	engineering analysis. What you will find presented
21	here are you know each of the groups, for each of the
22	groups what is driving the cost are predominantly two

Page 141 1 things, of course the components and labor that went 2 into the assembly but also the representative 3 shipment volumes. 4 So based on shipments data that we have 5 gotten from HPBA as well as a listing of 6 manufacturers we have assumed a certain shipment 7 volume for each of these product groups which you 8 know tend to scale the manufacturer production costs 9 and so I quess I will pause here as well for comments 10 on the manufacturer --11 MR. KUPSH: Can I make a quick comment 12 going back? 13 MR. BROOKMAN: Jim please? 14 MR. KUPSH: Based on slide 30 if you take 15 a look at your information on slide 26 shouldn't IPI 16 be your representative baseline because it is the 17 system that has the highest percentage for the first 18 two categories? 19 MR. ELSZASZ: Right so I should have 20 explained here is what is meant by baseline is --21 MR. KUPSH: Cost wise. 22 MR. ELSZASZ: What's that?

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1	MR. KUPSH: You are saying cost wise
2	rather than yeah
3	MR. ELSZASZ: Right.
4	MR. KUPSH: But I makes it seem as that is
5	the predominant system not what is for those two
6	categories the predominant system currently is IPI.
7	MR. ELSZASZ: I see right so back in the
8	market in tech assessment that's where we see it so
9	you are talking about vented fireplaces, inserts and
10	stoves so we do that is factored into the analysis
11	we know that electronic ignitions are more
12	predominant in that group. What we are seeing here
13	is that baseline is normally since there aren't
14	currently any heart product standards what we defined
15	as baseline is a product that consumes the most
16	energy in standby mode and so you know normally with
17	a product that already has an efficiency level
18	established, the baseline would be that unit which
19	just meets the minimum efficiency standard. But
20	since that isn't the case here the baseline is what
21	uses the most energy.
22	MR. CYMBALSKY: This is John from DOE so

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1	just to follow up so when we get later in the
2	analysis the market shares of those technologies are
3	factored in when we do the impacts to consumers,
4	manufacturers, et cetera.
5	MR. ELSZASZ: Right.
6	MR. BROOKMAN: Let me see Rett?
7	MR. RASMUSSEN: Rett Rasmussen on the
8	slide that was just up with the chart what is max
9	tech in quotes is that a type of electronic?
10	MR. ELSZASZ: Maximum technology.
11	MR. RASMUSSEN: What does that mean?
12	MR. ELSZASZ: Or max tech option is the
13	design option that reduces the energy consumption of
14	the mode that you are looking at by the largest
15	amount.
16	MR. RASMUSSEN: Rett Rasmussen so are you
17	saying that the electronic ignition represents the
18	maximum technology for being able to have no gas
19	usage in the standby mode?
20	MR. ELSZASZ: Right, right.
21	MR. RASMUSSEN: Thank you.
22	MR. ELSZASZ: Yep.

Page 144 1 MR. BROOKMAN: Frank and then back to 2 Leslie. 3 MR. STANONIK: Frank Stanonik AHRI. Α 4 question and actually two questions but the first 5 question so your chart on slide 31 of the 6 representative shipment volume is that intended to 7 reflect the market assessment that is shown on slide 8 24? 9 Or based on that? And the reason I ask is because if 10 I look at slide 24 the total estimate of unvented 11 products is I'm going to round it to up 23% which is 12 certainly less than half of 56% which is the vented 13 fireplaces so if I maintain those proportions the 14 total of the two numbers in this slide for unvented 15 should be less than 5,000 and in fact if you actually 16 run the numbers it comes out to be about 4,100 and 17 yet you have got it at 7,000 so why is it -- the 18 question is why is it different? 19 MR. ELSZASZ: Yeah so the portions are 20 different because these take into account the number 21 of manufacturers that are making any one of these 22 types of products so that is why the difference in

Page 145 1 purportions. 2 MR. STANONIK: But I venture --3 MS. ARMSTRONG: No Frank it is purchasing 4 power right so in the cost model the cost of the 5 component will change based on the purchasing power 6 in terms of volume of the manufacturer that's what 7 this slide is trying to depict. It's not going to 8 match the shipments from the other, it is purchasing 9 power. 10 MR. STANONIK: So it is not intended to 11 match? 12 MS. ARMSTRONG: Correct it is not intended 13 to match. 14 MR. STANONIK: All right then I had one 15 more question and I'm going to go back to the 16 previous slide 30 your representative standing pilot 17 type for an unvented fireplace insert stove you have 18 a millivolt gas valve and for an unvented gas log you 19 have a manual gas valve, both of those products use 20 the same ODS pilot system, why the distinction? We 21 couldn't understand why that was there or I will 22 rephrase that. What do you think is different maybe,

Page 146 1 it's the same. 2 MR. ELSZASZ: So the difference between 3 the millivolt and the manual we found was both the 4 space constraints and the cost so in the case of a 5 vented or unvented gas log sets by reviewing product 6 literature we found that manual gas valves were more 7 likely to be used in gas log sets as opposed to an 8 unvented one and it does effect the cost that we see 9 on slide I think 31. 10 MR. STANONIK: Ok excuse me so unvented 11 gas log sets you are including products that don't 12 have ODS systems? 13 MR. ELSZASZ: No. Unvented whether its 14 fireplace, inserts, stove or gas logs would include 15 the oxygen depletion sensor. 16 MR. STANONIK: They have the same control. 17 MS. ARMSTRONG: Perhaps the manufacturers 18 can answer. 19 MR. BROOKMAN: Jim Kupsh? 20 MR. KUPSH: Yes, you have for the unvented 21 systems you have both millivolt and manual 22 applications. Normally the manual application is not

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1	anything but a log set because it is a more cost
2	effective lower price than the fireplace those have a
3	millivolt system on it.
4	MR. ARMSTRONG: So in answer to your
5	question Frank, that would affect our delta which is
6	why we did them more conservative.
7	MR. BROOKMAN: Thank you Ashley, Dana?
8	MR. MOROZ: Just if I can get a little bit
9	more clarity Jim are you saying it's not a millivolt
10	control then?
11	MR. KUPSH: No what I'm saying is that you
12	have for unvented systems you have both a manual
13	valve application and a millivolt valve application
14	but I doubt there are any stoves, fireplaces,
15	inserts, vent free that are being sold with just a
16	manual valve. It only really exists as a baseline
17	for the log set applications and on the more
18	expensive fireplace stoves they are using the
19	millivolt and so that would probably be the only
20	control application both using the ODS sensing pilot.
21	MR. BROOKMAN: Thanks Jim, Dana?
22	MR. MOROZ: This is Dana again just from

Page 148 1 my clogged old mind what you are telling me then is 2 the manual does not employ millivolts? 3 MR. KUPSH: No when you -- a millivolt 4 valve has a separate millivolt operator for the main 5 burner. 6 MR. MOROZ: Right. 7 MR. KUPSH: A manual valve has simply an 8 electromagnet as a safety in the control. 9 MR. MOROZ: And what --10 MR. KUPSH: And a millivolt does too but 11 it also has a second operator. A manual valve is 12 like pilot rotate to on. 13 MR. MOROZ: And what holds the gas flow 14 I'm sorry I'm just trying to get an understanding. 15 MR. KUPSH: The thermal couple on the 16 pilot. 17 MR. MOROZ: So it is millivolt? 18 MR. KUPSH: Correct but that's normally 19 not -- that's normally what's being considered a 20 millivolt valve. 21 MR. MOROZ: By point of definition and 22 that's why I'm trying to when you get down to it it

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1	is a millivolt system then?
2	MR. BROOKMAN: So Rett please?
3	MR. RASMUSSEN: Rett Rasmussen what
4	distinguishes generally between a manual control from
5	a millivolt is the manual control uses a thermocouple
6	a single couple whereas for its heating element it is
7	electrical element and the millivolt uses a
8	multi-couple or thermopile.
9	So you need a lot more electricity, a lot
10	more millivoltage to operate a millivolt control
11	system because it has the dual operation of both
12	safety feature and operating the on and off of the
13	control valve as from what you need for a manual
14	control system where it is merely the safety function
15	that the pilot is being used for.
16	MR. MOROZ: Dana from Wolf Steel again.
17	And I just asked for that clarity Rett because here
18	we are identifying it as a different system. I think
19	traditionally in our industry we identified the one
20	with the thermopile as being a remote control
21	millivolt system and the manual was employing a
22	thermocouple but here we are calling it a manual

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1	which would suggest it is just and on and off shut
2	off which it is not.
3	I think we should distinguish that in fact
4	it is a millivolt system as well.
5	MR. RASMUSSEN: Rett Rasmussen well I
6	distinguish millivolt systems as being really they
7	are operator device agnostic, you can put a wall
8	switch, you can put a remote control, you can put a
9	wall timer you can put any variety of external
10	switching devices on to that type of system that you
11	can't put on to a manual control valve.
12	MR. MOROZ: Agreed but we are defining
13	we are distinguishing between a manual and a
14	millivolt and to Frank's point I think it is
15	misleading, it is a millivolt.
16	MR. RASMUSSEN: Rett Rasmussen what they
17	are actually putting here and correct me if I am
18	wrong, is they looked at all the different types of
19	products within that particular group and within the
20	unvented fireplace, inserts and stoves they found
21	that the predominant usage of valve type is the
22	millivolt gas valve whereas for gas log sets and

Page 151 1 unvented gas log sets it is a manual control. And 2 from that that is where they made their cost 3 calculations that was the baseline they established. 4 I don't make unvented fireplaces, inserts 5 and stoves, perhaps a manufacturer of that would 6 better be suited to comment on what type of control 7 valve is the most predominant type. 8 MR. BROOKMAN: Yes Barton go ahead. 9 MR. DAY: Just a question, we are now 10 talking about which type is predominant. Going back 11 a couple of slides where you had the breakout in 12 market share that you referred to -- my question is 13 where did you get data to come up with the market 14 shares? 15 MR. ELSZASZ: You mean for the ignition 16 types? 17 MR. DAY: Yeah. 18 MR. ELSZASZ: Ignition type, a couple of 19 resources. One was through product literature review 20 so that that was an extensive review that resulted in 21 essentially a data base with model numbers, ignition 22 information and so those proportions for several of

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1	these categories that was used as well as during the
2	confidential manufacturer interviews.
3	We got feedback during that interview
4	process that indicated you know typically what
5	percentage of their shipments you know were for each
6	ignition type I guess.
7	MR. BROOKMAN: Rett go ahead.
8	MR. RASMUSSEN: Yeah I'm a little well
9	I can tell you and I will be happy to divulge it in
10	my Navigant interview that I said that I have no idea
11	what the percentages are there is no you know, valid
12	clearing house for it where everybody in the industry
13	is divulging their sales numbers.
14	I don't know how they come up with these
15	and there is only I'm sorry how many manufacturers
16	did you interview for this assessment?
17	MR. ELSZASZ: I'll have to refer to
18	another member of my team for that.
19	MR. RASMUSSEN: More than 10?
20	MS. ARMSTRONG: No.
21	MR. RASMUSSEN: 5? Okay so just supposing
22	it was 7 take away me because I wouldn't do numbers,

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1	Leslie did you do numbers for the industry?
2	MR. BORTZ: No, we did some numbers but
3	they weren't these. They weren't close to these. On
4	our manufacturer we did some guess on our
5	manufacturer interview and they are just value and
6	MR. BROOKMAN: Okay so back to Barton.
7	Pardon me let's let Leslie follow on please go ahead
8	Leslie.
9	MR. BORTZ: It's a different question.
10	MR. BROOKMAN: Okay then Barton go ahead.
11	MR. DAY: I was just going to point out we
12	have been trying to figure out you know how to get
13	reasonable data on this and one of the issues is that
14	if you simply look at model numbers and so forth
15	without shipment data for the specific models it is
16	useless and the additional problem is that as I
17	mentioned there has been a lot of evolution and I
18	went to one major manufacturer at the show as you
19	probably know. I mean several major manufacturers
20	have completely shifted away from standing pilot
21	lights and others you ask them you know well what is
22	your design been like, what about the newly designed

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1	products over the last few years and they are saying
2	you know we have one product that we have designed
3	that has a standing pilot, everything else doesn't.
4	But trying to get hard data on that I mean
5	we could see the enormous trend, we can see that
6	trend showing up when people are talking about the
7	products that are coming out now as opposed to
8	historical you know products that are still on the
9	market but trailing off. It's just I don't think
10	you can look at product literature review as being
11	informative as to what the percentages are and
12	frankly if you have figured out a way to get any
13	reliable data on that you are ahead of us.
14	MR. BROOKMAN: Leslie?
15	MR. BORTZ: Can I just ask you
16	MR. BROOKMAN: Microphone.
17	MR. BORTZ: Back to page 23 and 24.
18	MS. ARMSTRONG: So this is Ashley from DOE
19	and while is he redoing the slides and getting back
20	to slide 23 I just want to point out that while the
21	distribution of the different types of pilot lights
22	will matter later when we talk about the shipments

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1	and the energy use and the energy savings, it will
2	matter for the national impacts and the costs and
3	benefits yes. It doesn't necessarily matter so much
4	for the engineering.
5	The engineering is looking at what is the
6	cheapest product out there and then what can you do
7	to it to make it more efficient so what you are
8	seeing on the slide at least where Justin was is for
9	those different types of ignition systems, those are
10	the ones that we found that were in product
11	literature predominantly where we took apart products
12	that were the cheapest out there to build right now.
13	In other words so we are starting from the
14	bottom of the ground and working our way up in terms
15	of cost. As I think you would agree that we should
16	be doing. Now in terms of savings and how you accrue
17	savings that's going to depend a lot on your
18	distribution and we are not there yet. We are going
19	to get there but we are not there yet.
20	So I think for this point you know what
21	you are seeing on the slide is actually what you
22	would probably want us to do it is how you make sure

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1	you accumulate costs in the best manner but we are
2	going to get to our distribution of what I would call
3	efficiencies which in this case is distribution of
4	different pilot lights later.
5	MR. BROOKMAN: Leslie?
6	MR. BORTZ: We are at slide 23 and 24.
7	Slide we is discussing market assessments and all the
8	slides before that you specifically I believe you
9	said this is trying to get us to a definition of what
10	we are covering or a definition of what hearth
11	products means, something to that effect. Is that
12	MR. CYMBALSKY: It is the scope to which
13	we analyze the proposed definition yeah. So this is
14	the scope of the products that we included based on
15	the definition.
16	MR. BORTZ: Then you continued on 24 the
17	next one you have still market assessment, this is
18	estimated shares of overall hearth products market
19	but that's divided very differently. That looks like
20	it's divided by pilot kit types or pilot kits, not by
21	any definition that you have except pilot kits or how
22	pilot kits are run.

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1	MR. CYMBALSKY: So what these numbers are
2	essentially these five numbers here add to 100 so
3	these are what were analyzed.
4	MR. BORTZ: Right but you are analyzing
5	them because they have different pilot kit types, you
6	have changed your market assessment from assessing
7	for a definition to assessing for pilot kits right?
8	MS. ARMSTRONG: No.
9	MR. CYMBALSKY: No, so the difference is
10	in the engineering analysis what we are looking at
11	here is the technology option.
12	MR. BORTZ: Vented fireplace, insert and
13	stove don't fit a definition that I know of except it
14	would fit a definition for pilot kits. It's the only
15	way you can do it, it's the only thing it could be
16	for isn't it?
17	MR. ELSZASZ: I guess I don't understand
18	the comment.
19	MS. ARMSTRONG: Yeah I'm not following but
20	I am happy to have a conversation with you at lunch
21	about what is going on here. You know when we go
22	back to the previous slide and the market assessment

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1	that's just showing the breakdown of the different
2	categories of products based on the shipment data we
3	got on the market.
4	MR. RASMUSSEN: What's this breakdown for?
5	MS. ARMSTRONG: What's this? Which one
6	are we talking about?
7	MR. RASMUSSEN: 24.
8	MS. ARMSTRONG: Go back to 24 for me, the
9	percentage of projects?
10	MR. RASMUSSEN: Yeah.
11	MS. ARMSTRONG: We'll get to this but when
12	we talk about downstream analysis when you give us
13	overall shipment number you are going to see that
14	roughly 56% of the market is this category is a
15	vented fireplace.
16	MR. BORTZ: Why? Because of the use?
17	MS. ARMSTRONG: Because the cost and the
18	savings and the distribution of different pilot
19	lights in each of these categories is going to be
20	different.
21	MR. BORTZ: It has to do with pilot
22	lights.

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1	MS. ARMSTRONG: It has to do with hours of
2	use, energy savings, cost benefit analysis and I
3	think we need to do our due diligence and analyze
4	these separately.
5	MR. KUPSH: Jim Kupsh. I'm just curious
6	is this simply the DOE statistics, I mean HPBA
7	statistics or did you account for non-reporting
8	industry sales?
9	MR. ELSZASZ: In the outdoor products we
10	accounted for non-HPBA. We had gotten further
11	information that for outdoor products specifically,
12	non-HPBA manufacturers were much more dominant.
13	MR. KUPSH: You might find that a few
14	other categories such as unvented gas logs is
15	affected by non-reporting sales also.
16	MR. ELSZASZ: Okay thank you.
17	MR. BROOKMAN: Yes please
18	MS. ARMSTRONG: So why don't we go back to
19	the engineering past where we were and keeping going
20	because really what we are talking about here is the
21	cost benefit and until we get to that I don't think
22	it's going to really

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1	MR. BROOKMAN: Okay final question and
2	then we are going to move on, go ahead.
3	MR. DELAQUILA: Dave Delaquila, consultant
4	for Maxitrol Company. In our cost analysis when you
5	look at unvented heaters the market there you are
6	probably talking about for sure 90% plus currently
7	use let's say the continuous pilot ODS system. In
8	your analysis did you look at the certification cost
9	to re-certify every single model with the new
10	ignition device and what was the base cost analysis
11	that you used?
12	MR. ELSZASZ: I think that we will get to
13	later when we get to manufacturer impact analysis.
14	MR. BROOKMAN: Right so we have just
15	another slide or two that we should go through before
16	we break for lunch which will be shortly so let's
17	proceed.
18	MR. ELSZASZ: This is really the end of
19	the engineering analysis. What I am presenting here
20	is a manufacturer markup and what this represents is
21	essentially the amount of profit that a manufacturer
15 16 17 18 19 20	another slide or two that we should go through before we break for lunch which will be shortly so let's proceed. MR. ELSZASZ: This is really the end of the engineering analysis. What I am presenting here is a manufacturer markup and what this represents is

Page 161 1 is a multiplication factor to the manufacturer 2 production costs. 3 So what we are talking about is 4 multiplying this you know, these manufacturer 5 production costs by what we estimated to be 1.45 and 6 this was derived through again through the 7 confidential manufacturer interview process so again 8 we can seek comment here on what the MPC's as well as 9 the markup number that would be there. 10 MR. BROOKMAN: Leslie? 11 MR. BORTZ: Leslie Bortz, can I apologize 12 once. 13 MR. BROOKMAN: Just leave it on. 14 MR. BORTZ: Okay then you will hear what I 15 don't want you to hear. 16 MR. CYMBALSKY: You are catching on. 17 MR. BORTZ: Yeah, let's say something 18 costs me \$10.00 that means I sell it to my 19 distributor for \$14.50. 20 MR. ELSZASZ: Yes. 21 MR. BORTZ: To my distributor for \$14.50. 22 MR. ELSZASZ: Right this is not the end

<ol> <li>line right.</li> <li>MR. BROOKMAN: Yes Dana?</li> <li>MR. MOROZ: Just to confirm this number</li> </ol>	is
	is
3 MR. MOROZ: Just to confirm this number	is
<sup>4</sup> an average markup based on the 7 manufacturers you	
<sup>5</sup> interviewed and was it a cross section of all the	
<sup>6</sup> different types of products as well?	
7 MR. ELSZASZ: Yes.	
8 MR. MOROZ: Thank you.	
9 MR. BROOKMAN: So you see the comment b	ox
$^{10}$ there embedded in this slide on manufacturer marku	р
<sup>11</sup> slide 33 additional comments, questions here. As	
<sup>12</sup> Ashley already said we are going to get into great	er
$^{13}$ detail in a lot of this as we proceed. Let's brea	k
<sup>14</sup> for lunch. It's now 12:30 we have made good progr	ess
$^{15}$ on the day, covered a lot of ground more yet to	
<sup>16</sup> cover. 12:30 let's break for an hour, please make	
$^{17}$ sure to have this badge with you visible as you wa	lk
$^{18}$ around the Forrestal Building. This room will be	
<sup>19</sup> secured so you can leave your stuff here. If you	go
$^{20}$ to the big cafeteria which is down to the ground	
<sup>21</sup> floor and about a hundred yards in that direction	you
<sup>22</sup> will have to pass back through a security portal s	0

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1	you will need an ID at least typically you will.
2	And there is a Dunkin Donuts, pardon me
3	there's a Subway sub shop where the Dunkin Donuts is
4	down on the ground floor. You know where the
5	restrooms are so we will resume in one hour which
6	will be 1:30 and we have a good start on it we will
7	pick up at 1:30 here.
8	MR. BROOKMAN: Okay let's resume please
9	take your seats. All set Linda? We are going to
10	pick up where we left off. Thanks for being back
11	here on time everyone we are going to pick up where
12	we left off, markups analysis.
13	MR. SIAP: Hello I'm David Siap from
14	Lawrence Berkeley National Laboratory. I'm going to
15	be going over the markups analysis, energy use as
16	well as lifecycle costs. Can you guys hear me? As
17	well as lifecycle costs, payback period, shipments,
18	national and regulatory impact analysis.
19	So the purpose of the markups analysis is
20	to determine the consumer price based on the
21	manufacturer selling price or MSP for both baseline
22	and high efficiency products. DOE also characterized

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1	the distribution channels through which our products
2	move from the manufacturer to the consumer. DOE
3	identified two primary distribution channels shown
4	here, replacement and new construction.
5	The replacement has a wholesaler and a
6	mechanical contractor between the manufacturer and
7	the consumer and new construction is similar with a
8	general contractor before the consumer.
9	To Leslie's earlier point there were other
10	distribution channels including retailer analyzed as
11	well however for the retailer market and the
12	retailers function similar to the replacement market
13	except there was a retailer instead of a wholesaler.
14	But for the retailer market DOE wasn't able to
15	didn't have enough data to formulate a markup for
16	that market participant, the retailer so it did not
17	go forward with a separate distribution channel at
18	this time.
19	MR. BORTZ: How did you get at that
20	MR. BROOKMAN: Leslie please turn on the
21	microphone.
22	MR. BORTZ: I'm sorry here I am.

Page 165 1 MR. BROOKMAN: Say your name for the 2 record. 3 MR. BORTZ: The missing Leslie Bortz, 4 Robert H. Peterson Company. How did you get data for 5 mechanical contractors? 6 MR. SIAP: That's coming up later in the 7 slide. It's through the ACCA 2005 report with the 8 census data. 9 MR. BORTZ: Maybe they are the same, you 10 know, you can look at them the same way. 11 MR. BROOKMAN: I didn't get your point 12 there Leslie, I'm sorry. 13 MR. BORTZ: Well if a wholesaler sells to 14 a mechanical contractor then sells to an end user 15 maybe the retailers is like the mechanical 16 contractor. 17 MR. BROOKMAN: Got you, okay. 18 MR. SIAP: Thanks for that. Okay so --19 MR. BROOKMAN: The Department is looking 20 for a kind of patterns of use here, patterns of 21 distribution so if you are able to comment on what 22 would be a typical pattern.

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1	MR. BORTZ: I did, yes what I said was we
2	independently came up with we broke out each of the
3	categories that you had before, in other words you
4	had three categories in vented products, three we
5	broke out each of them we figured out approximately
6	how much it was et cetera and we figured that 56
7	point some odd percent were sold through a
8	distribution channel to a retailer.
9	MR. BROOKMAN: Okay thank you.
10	MR. SIAP: Thanks, so to formulate these
11	markups DOE analyzed financial data from each market
12	participant and it's important to note that although
13	in practice the markups are applied to the entire
14	hearth product they apply to the ignition component,
15	each component as well.
16	The table at the bottom lists the data
17	sources for each market participant. The
18	manufacturer markup we have covered previously
19	because as a result of the input from manufacturers.
20	Wholesaler markup is formulated from the hearth
21	report, the mechanical contractor from the ACCA
22	report, general contractor from the latest 2007

Page 167 1 census bureau data and sales tax from the 2013 sales 2 tax clearing house. 3 MR. BROOKMAN: Yes Rett? 4 MR. RASMUSSEN: The wholesaler markup does 5 the HARDI profit report include fireplace 6 distributors? 7 MR. SIAP: I am not sure on that one. 8 MR. RASMUSSEN: What does it include? 9 MR. BROOKMAN: Greg Rosenquist? 10 MR. ROSENQUIST: Hi this is Greq 11 Rosenquist to help him out. It mostly covers major 12 HVAC contractors and provides some level of detail on 13 their size. It doesn't explicitly call out you know 14 the distributors of the industry. 15 MR. RASMUSSEN: Distributors of these 16 products okay. 17 MR. ROSENQUIST: Specifically yeah. Ι 18 would certainly welcome any data. 19 MR. RASMUSSEN: I was going to say on what 20 basis do you provide equivalency between this and 21 fireplace distributors? 22 MR. ROSENQUIST: We just use the same

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1	data. I mean we use that same data out of that
2	report and make the assumption that it is
3	representative of this industry as well.
4	MR. RASMUSSEN: And you could assume that
5	it's the same for toy distributors and for Twinkie
6	distributors and all of that?
7	MR. ROSESNQUIST: I wouldn't go that far.
8	MR. RASMUSSEN: But not necessarily
9	specific to this.
10	MR. ROSENQUIST: Again absent any data
11	this is what we went with.
12	MR. RASMUSSEN: Thank you.
13	MR. BORTZ: Leslie Bortz again does this
14	mean that what you are saying is that the overall
15	market for or the overall markup for a replacement
16	product is 3.23 and for a new construction is 3.99?
17	Is that what you are saying?
18	MR. BROOKMAN: You are jumping ahead and
19	yes.
20	MR. BORTZ: That's ridiculous.
21	MR. BROOKMAN: Let's let him get to that
22	point and then we will get additional comments.

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1	MR. BORTZ: Okay I just wanted to say it's
2	ridiculous.
3	MR. BROOKMAN: Okay we will capture that
4	in detail. Let's proceed with the presentation.
5	MS. ARMSTRONG: So wait I want to go back
6	to that point. This is Ashley from DOE. I think
7	your point is well taken that we didn't have
8	fireplace specific data but it was generally from
9	heating, ventilation, air conditioning, those types
10	of contractors that distribute the products so are
11	you telling me the distributors of fireplaces are
12	exclusive just to fireplaces they do not distribute
13	any other type of heating, ventilation or air
14	conditioning products or that they are always just
15	fireplaces?
16	MR. BORTZ: Often.
17	MR. RASMUSSEN: Rett Rasmussen yeah that
18	is correct. You have specific fireplace
19	distributors. They don't necessarily sell furnaces
20	or water heaters or things like that. Those are
21	different types of products with different margin
22	structures I would imagine than what our types of

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1	products have in this industry. You know I am
2	jumping ahead but I agree I don't have hard fast
3	numbers, but they just seemed low and they are there
4	for the
5	MR. KUPSH: Jim Kupsh, IT Controls. Yes
6	the HARDI members are normally not your fireplace
7	distributor type people, they are specific to HVAC
8	cell replacement parts and it's I'm trying to
9	think of people, not John Stone, but let's say Larson
10	in the Midwest, CC Dixon in the southeast, RE Michael
11	on the east coast, those are your HARDI type
12	wholesalers.
13	MR. RASMUSSEN: Yeah Rett Rasmussen they
14	are not fireplace distributors.
15	MS. ARMSTRONG: Okay.
16	MR. RASMUSSEN: They are different animals
17	and that's our whole point on definition is it is a
18	different animal.
19	MS. ARMSTRONG: I think that's fine and
20	your point is well taken except for do you have a
21	suggestion then on where we could look for data
22	that's more specific on you know in absence of that

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1	we welcome your feedback, we are happy to revise the
2	analysis to consider a more specific distribution
3	chain but we need your help.
4	MR. RASMUSSEN: Rett Rasmussen. Again we
5	are a small mom and pop industry we don't have these
6	types of you know these types of data that you are
7	looking for in most cases. We just do our little job
8	and sell product and make people happy that's what we
9	do.
10	MS. ARMSTRONG: But you have enough of an
11	inclination to say we are wrong?
12	MR. BORTZ: Yes.
13	MS. ARMSTRONG: So that's where I'm trying
14	to or at least assert that we are wrong. So how do
15	we reconcile that you have the knowledge and the
16	expertise in your industry to assert we are wrong but
17	yet so can you help us connect the dots?
18	MR. BORTZ: Yes, we will try to help you.
19	MS. ARMSTRONG: Thank you.
20	MR. BROOKMAN: Okay thank you Leslie.
21	Dana you have a comment?
22	MR. MOROZ: It's private. I think what we

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1	are not saying is it is the wrong assumption, that
2	doesn't suggest that we have that information. We
3	are saying that it is a different distribution
4	network and that is consistent with our product line
5	as well.
6	MR. BORTZ: What I am saying again Leslie
7	is the replacement market cannot be that much lower
8	than a builder market, it just can't be.
9	MS. ARMSTRONG: And is that specific to
10	log sets or is that specific to all the various
11	categories of fireplaces we are talking about.
12	MR. BORTZ: Fireplaces I believe you will
13	find fireplace people here that can answer that
14	question. I believe it is that if you sell direct to
15	builders there is a different markup than if you sell
16	to the replacement market. Somebody help me, can you
17	help?
18	MR. BROOKMAN: Dana go ahead.
19	MR. MOROZ: Dana Moroz from Wolf Steel. I
20	would agree with that there is a different markup
21	depending on who the customer is.
22	MS. ARMSTRONG: Sure.

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1	MR. RASMUSSEN: Rett Rasmussen and we are
2	a manufacturer. I don't know; you would have to poll
3	the actual distributors and what you have shown is
4	here is just data from a distribution channel that is
5	not of what this proposed rule is about and that's
6	where I just go back to DOE and say shouldn't you
7	have some data specific to this industry that you
8	wish to regulate.
9	MR. BROOKMAN: Jim did you have a comment
10	here? I thought you were trying no okay, yes please
11	Barton?
12	MR. DAY: Yes this is Barton. Just a
13	general comment you know I think sometimes there's
14	a perception that you know that we've got all of this
15	data and information and we are not sharing it and
16	the truth of the matter is we don't have the
17	information. This industry is just as Rett said it's
18	an industry with two manufacturers that are not small
19	businesses and a lot of the issues that are in play
20	here, they are required pieces for the economic
21	analysis for the energy use nobody has ever collected
22	the data. It just doesn't exist.

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1	We don't have it and I guess part of what
2	I think you hear people reacting to is just the ready
3	application okay there's a blank in our regulatory
4	analysis we have to have a number to put in the blank
5	so we will just find a number and in the absence of
6	data we will just make an assumption whether there is
7	a basis for the assumption or not and I think that is
8	the perception and I think that's what people are
9	responding to and really the point I wanted to make
10	is we don't have we are not sitting on a pile of
11	data.
12	We can't give you all the answers, we
13	don't know the answers, a lot of these issues just
14	have not been studied and that's the problem is that
15	you are going into a rulemaking where the basic data
16	is just not there.
17	MR. BROOKMAN: Press on.
18	MR. SIAP: So DOE developed two markups
19	for each product market participant, the baseline and
20	incremental market. We are on slide 36. The
21	replacement markup relates the MSP of the baseline
22	products to the consumer purchase price and the

Page 175 1 baseline markup is applied to the baseline MSP only 2 to determine the baseline consumer purchase price. 3 Incremental markups relate to change in 4 the MSP of higher efficiency products to the change 5 in the consumer purchase price. This covers only 6 expenses that ferry with MSP such as operating 7 expenses and profit. Fixed costs such as overhead 8 and labor we do not scale with increased efficiency. 9 To clarify the incremental markup is 10 applied to the MSP difference only of higher 11 efficiency and baseline products. 12 MR. BORTZ: Leslie Bortz, if I have a 13 product that costs me a dollar can you explain what 14 this says? 15 MR. SIAP: Sure so if you had well if you 16 had one product that cost a dollar and another that 17 cost two dollars and so the base and the dollar is 18 the baseline product and the baseline markup applies 19 only to the baseline that first dollar. 20 MR. BORTZ: Okay. 21 MR. SIAP: For the higher efficiency 22 product, the two dollar product it would be the first

Page 176 1 dollar is the baseline markup is applied to the first 2 dollar and the incremental markup is applied to the 3 second dollar and the sum is then your total consumer 4 price. 5 MR. BORTZ: So if I have a product that is 6 better or more efficient or whatever it costs me two 7 dollars I will get five dollars, my price will be 8 \$5.33? 9 MR. SIAP: That's correct. 10 MR. BORTZ: What's the use of making 11 things better? 12 MR. DAY: I have a really simple question 13 and that is as you were looking at these issues did 14 you look at the individual types of product 15 differently or did you just look at everything as 16 though they were the same? 17 MR. SIAP: There was consideration by type 18 but primarily just the hearth product was viewed as 19 the class so primarily the same. 20 MR. DAY: So one analysis for everything? 21 MR. SIAP: Yes. 22 MR. DAY: Yes, okay thank you.

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1	MR. BROOKMAN: Leslie go ahead.
2	MR. BORTZ: I would like to say that we
3	need I'm not sure that we need because I don't
4	we are not through this and I don't know how it is
5	being used but we need a two-step distribution markup
6	system. All of our products are sold that way and I
7	believe all of your products, no?
8	MR. BROOKMAN: When you say two step
9	Leslie you mean?
10	MR. BORTZ: Distributor to retailer.
11	MR. BROOKMAN: Gotcha, Rett?
12	MR. RASMUSSEN: Leslie, Rett Rasmussen
13	this brings up a good point. Is there are many
14	different ways that manufacturers get their products
15	to market. One company tends to do the two-step
16	distribution model. Some people go strictly to the
17	mass merchants, to your Lowe's and Home Depot and
18	people like that. Others go to internet retailers,
19	some go not as many in this industry consumer
20	direct, but some and some go dealer direct, some go
21	builder direct, a combination of all of these and
22	just as you have so many different small companies
1	

Page 178 1 they all find their little niche in the marketplace 2 that allows them to make payroll every week and 3 remain in business year after year and some of them 4 not. 5 So you know a one size fits all is very 6 difficult because there is not a one size fits all 7 company in this industry. 8 MR. BROOKMAN: Okay. 9 MR. RASMUSSEN: Thank you. 10 MR. SIAP: Okay so here we have the 11 results as I have already touched on a little bit. 12 The top table gives the results per market 13 participant for both replacement and new construction 14 distribution channel and baseline and incremental 15 markup. The manufacturer markup is the same as 16 discussed previously at 1.45 and the bottom table 17 gives the aggregated markup for both the baseline and 18 incremental case. 19 MR. BROOKMAN: Leslie? 20 MR. BORTZ: The bottom indicates that 21 there is like a ratio of like 3 to 1 more replacement 22 something like that?

Page 179 1 MR. SIAP: Yes. 2 MR. BORTZ: What's that based on? 3 MR. SIAP: The ratio of replacement to new 4 construction was based on the ratio of the current 5 stock as listed in the residential energy consumption 6 survey, most recent data justified against the latest 7 shipment data. 8 MR. BORTZ: Okay. 9 MR. SIAP: For that same year. 10 MR. BORTZ: What does that have to do with 11 our industry? 12 MR. SIAP: Well the survey lists the year 13 the house was built and whether the so the ratio 14 there gives you the ratio of new construction to non. 15 MR. BORTZ: But if it is a furnace or 16 something like that or what products HVAC is that 17 what you said? 18 MR. SIAP: Sorry? 19 MR. BORTZ: Did you say that the products 20 that this is based on? 21 MR. SIAP: The residential energy 22 consumption, the REC survey gives hearth product --

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1	lists hearth products exclusively for fireplaces.
2	MR. BORTZ: I'm just at a loss.
3	MR. ROSENQUIST: I agree are you getting
4	at the shipments to the replacement market versus the
5	new construction market?
6	MR.SIAP: Yes.
7	MR. ROSENQUIST: So generally speaking in
8	most products I'm either going to use round about
9	figures, 75 to 80% of shipments generally go into the
10	replacement market just because the sheer volume of
11	the unit that is in the stock
12	MR. BORTZ: A refrigerator?
13	MR. ROSENQUIST: Yeah.
14	MR. BORTZ: Yeah okay.
15	MR. ROSENQUIST: If you have 10 million
16	refrigerators shipped each year, 8 million are going
17	into the existing stock, the rest going into new
18	construction, so he is getting at a 3 to 1 ratio
19	here.
20	MR. BORTZ: Yes, those are really also
21	done through a retailer, the replacement market.
22	It's not a contractor I don't understand when you say

Page 181 1 mechanical contractor, that's just the guy who puts 2 it in. You buy it at Sears. I don't understand the 3 terminology. 4 MR. ROSENQUIST: Yeah if you look back at 5 the distribution channels again the assumption in 6 this analysis is that every party in that 7 distribution channel is marking up the equipment 8 until it finally gets to the consumer. 9 MR. BORTZ: Right. 10 MR. ROSENQUIST: And you are talking about 11 distribution channel where there is manufacturer to 12 retailer. 13 MR. BORTZ: I'm talking about manufacturer 14 to distributor to retailer. 15 MR. ROSENQUIST: To retailer and then to 16 consumer right? 17 MR. BORTZ: Right. 18 MR. ROSENQUIST: And in that distribution 19 channel we still say that there is going to be a 20 general contractor because someone has to install it. 21 We are not saying that the consumer is doing it 22 themselves.

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1	MR. BORTZ: You are right.
2	MS. ARMSTRONG: So if you look on
3	MR. ROSENQUIST: But the main thing is
4	here is this is what we use in the analysis, these
5	two distribution channels and what you are saying is
6	that something else, there is other distribution
7	channels that exist.
8	MR. BORTZ: Right and it seems like there
9	are other distribution channels than what you are
10	using.
11	MS. ARMSTRONG: So these are the two we
12	are using right, look at those channels, the flow
13	diagrams. So is there is a missing entity, so the
14	left is replacement and the right is new
15	construction, so are we missing an entity?
16	MR. BORTZ: Yes.
17	MS. ARMSTRONG: And what that entity is
18	called?
19	MR. BORTZ: The retailer.
20	MS. ARMSTRONG: So you think there should
21	be a retailer in between the wholesaler and the
22	contractor or between the contractor and the the

Page 183 1 contractor you are saying is just the installer? 2 MR. BORTZ: Right. 3 MS. ARMSTRONG: So you are saying instead 4 of the contractor we should have a retailer there and 5 that after the consumer purchases it from a retailer 6 they will then get a contractor to install it did I 7 get it? 8 MR. BORTZ: No well close. 9 MS. ARMSTRONG: Okay. 10 MR. BORTZ: And that can happen but 11 normally what happens is the retailer also either 12 does himself or has contractors to do it. 13 MS. ARMSTRONG: Okay so what we are 14 calling --15 MR. BORTZ: And mechanical contractor and 16 the contractor just makes a fee he doesn't mark up. 17 MS. ARMSTRONG: Okay so and generally 18 speaking do you all agree that these two change if 19 you change mechanical contractor to retailer are 20 generally the two chains that would govern you know 21 all the different categories of hearths we are 22 talking about here.

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MR. DIRCKS: This is Peter Dircks from
HHT. I think what you are hearing from the group
here is it is very different based on what company
you are.
MS. ARMSTRONG: Yep.
MR. DIRCKS: What market you are serving,
what end consumer you are serving and how you go to
market, that's really what these two gentlemen are
saying. Some companies may use a two-step
distribution some of us used direct through retail it
also differentiates by replacement of new
construction. I think what you have probably done
there Greg is looked at the HVAC market based on what
your comments were earlier and assumed that there is
this two or three-step process. The hearth industry
is different, it's a specialty hearth channel because
of the distribution there's key skillsets required
in order to distribute and install.
So I think for us to give you some
guidance here today in order to clarify this is
probably quite difficult because there is a lot of
different paths to market. I think what you are

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1	saying or I think what you are hearing is that is not
2	correct. And so we would need to come back to you
3	with other guidance at the appropriate time to figure
4	out exactly what was the arithmetic that you guys
5	used for this.
6	MS. ARMSTRONG: I think we would welcome
7	that guidance and we would be happy to incorporate it
8	if you would be willing to put it together.
9	MR. BROOKMAN: Leslie go ahead. Leslie on
10	the record go ahead.
11	MR. BORTZ: I think what you said is more
12	attuned to what we do and we are us we are not him
13	and him.
14	MR. BROOKMAN: Ashley's
15	re-characterization, yes okay thank you.
16	MR. BORTZ: Thanks.
17	MR. BROOKMAN: Okay now we are moving on.
18	MR. SAIP: The next section is the energy
19	use analysis slide 38. The purpose is to determine
20	annual energy consumption of the hearth product
21	technician system. Resulting energy costs are inputs
22	to the lifecycle costs and payback period analysis.

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1	So here we have a brief summary of the energy's
2	methodology and I will be going over walking through
3	each point later on.
4	The energy use is determined through the
5	equation in the box there. The Qp is either the
6	standing pilot or intermittent pilot ignition system
7	power as determined in the engineering analysis.
8	This is a fuel input for standing pilot and
9	electrical power for intermittent pilot. OHP is the
10	operating hours of the pilot the on-time of the
11	standing pilot or intermittent pilot ignition system.
12	For a standing pilot it is determined
13	through field studies and RECs 2009 household data
14	and for intermittent pilot based on the hearth
15	product main burner operation. The final term
16	secondary effects are the impact of ignition
17	operation on households space condition system energy
18	use. In the heating season the standing pilot is
19	counted as beneficial heat and reduces furnace
20	operating hours and in the non-heating season it is
21	counted as an additional cooling load and increases
22	cooling.

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1	MR. BROOKMAN: Steve Rosenstock?
2	MR. ROSENSTOCK: Steve Rosenstock, Edison
3	Electric Institute. For the non-heating season I was
4	looking at the technical support document and I was
5	wondering what kind of diversity factor did you use
6	for pilot lights. In other words what percentage did
7	you assume were turned off during the cooling season?
8	MR. SIAP: That is coming up on slide 40
9	or 39 for the steady pilot operating hours. You will
10	see a distribution there.
11	MR. BROOKMAN: We are going to get to that
12	in a little bit.
13	Frank Stanonik?
14	MR. STANONIK: Frank Stanonik AHRI. I
15	think your equation at least as you have explained it
16	here is incorrect so you are defining ignition system
17	power as standing pilot or intermittent pilot
18	ignition system power and then you define the
19	intermittent pilot ignition system power only as the
20	electrical power okay, but if I have an intermittent
21	pilot ignition system okay what happens is I use
22	electrical power to ignite the pilot and then the

Page 188 1 pilot is consuming gas during at least the burner 2 operating cycle. 3 So in that situation the overall energy 4 use of the pilot would be both the electrical power I 5 used to light it and whatever gas was burned during 6 the period it was on and yes your explanation says 7 the IPI I'm only going to count my electrical power. 8 MR. SIAP: This is the concern with the 9 standby use so that would be active mode energies. 10 So I tried to characterize the standby mode energy 11 use as opposed to --12 MR. STANONIK: Wow Frank Stanonik AHRI I 13 mean I have this bad habit of just reading words. It 14 says is determined annual energy consumption of the 15 hearth product ignition system. Well I didn't see 16 standby in there at all. That tells me just how much 17 energy the pilot is going to use. If that's the case 18 you really need to rewrite this and be a little 19 clearer. 20 MR. BROOKMAN: Okay thank you Frank. Yes 21 Rett? 22 MR. RASMUSSEN: Rett Rasmussen. I assume

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1	you are just for your electrical power consumed. You
2	are just taking into account 120 volt or your house
3	current electricity. Do you also have some allowance
4	for battery consumption and the cost from the
5	replacement of batteries?
6	MR. SIAP: For as far as cost that's kind
7	of more on the LCC analysis section we don't have a
8	cost for replacement of batteries.
9	MR. RASMUSSEN: So there's nothing within
10	this equation here that takes into account batteries,
11	you are just assuming it's line electricity?
12	MR. SIAP: We don't assume a different
13	power requirement for those two cases.
14	MR. RASMUSSEN: Rett Rasmussen so when we
15	get into the actual costing of it then we will see
16	that you are either doing it just with electricity or
17	also including batteries.
18	MR. BROOKMAN: Okay Barton?
19	MR. DAY: I wanted to comment on
20	MR. BROOKMAN: Your mic.
21	MR. DAY: I was going to comment on the
22	use of the RECs data but we might be better to hold

Page 190 1 that to the next one. You can either turn to me 2 later. 3 MR. BROOKMAN: Yes. Comments here before 4 we move on. 5 MR. CYMBALSKY: This is John from Doe. Ι 6 want to just go back to Leslie's point about how 7 these things are purchased so at least in this area 8 it's very common for the contractor to sell directly. 9 I mean they have huge I mean www.gaslogs.com takes 10 you to Cypress Air which is a very major contractor 11 here that does HVAC and fireplaces. They are also a 12 contractor. 13 MR. BORTZ: They are a retailer. 14 MR. CYMBALSKY: So I think we might be 15 talking about the same thing. 16 MR. BORTZ: We might be but I don't think 17 you are they are a retailer buying from a 18 distributor. 19 MR. CYMBALSKY: So will there be two steps 20 or one step if we go back to that chain, that's what 21 we are trying to --22 MR. BORTZ: There will be the same

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1	two-steps that there always are, excuse me, Leslie
2	Bortz, the retailer sells the product and then the
3	contractor, whether it is the same guy or not,
4	charges a fee to install it.
5	MR. CYMBALSKY: So if I go to gaslogs.com
6	they are having their big sale and I call them up.
7	They have actually been at my house before so I know
8	these guys but Cypress Air the guy comes in, he sold
9	me whatever it is he sold and he is installing it.
10	So is that two people or one person, in your mind?
11	MR. BORTZ: It is two people that can be
12	one, but it is two separate functions.
13	MR. CYMBALSKY: Two fees so.
14	MR. BORTZ: There are two fees there.
15	There is the markup he gets for selling the product
16	and the fee he gets for installing it.
17	MR. CYMBALSKY: Just to go back again to
18	re-emphasize Ashley's point so the mechanical
19	contractor should be a retailer before in the same
20	box or a different box?
21	MR. BORTZ: I don't know.
22	MR. BROOKMAN: Several people wish to

Page 192 1 speak. Go ahead Mike Rivest? 2 MR. RIVEST: This is Mike Rivest. These 3 are intended to be an ownership flow as well so in 4 this case the contractor and his markup would be part 5 of an installation cost and not necessarily part of 6 the this distribution chain. 7 8 MR. RIVEST: In that case in that 9 situation, you know his retailer/contractor but it is 10 one step. 11 MR. BORTZ: Well not necessarily because 12 13 MR. RIVEST: What I mean by step is an 14 ownership step. 15 MR. BROOKMAN: Let's hear from this person behind you. 16 17 MS. FEINSTEIN: Rachel Feinstsein, Hearth, 18 Patio, Barbeque Association. I have been -- I have 19 come into this issue of retailer/contractor licensing 20 in the last six months or so as it has become a 21 growing issue for our retailers. In some states 22 retailers who sell these products and then they want

Page 193 1 to go out and install the products for their 2 customers they have to be a licensed contractor of 3 some kind within their state. 4 In Virginia right now the license is I 5 think it is alternative energy contractor and also 6 HVAC licensed contractors or mechanical contractors 7 can also install but they are usually contracted by a 8 retailer, so a retailer pays them an annual fee 9 almost an annual salary to be the contractor for 10 their location. 11 MR. BROOKMAN: Do they work for the 12 retailer? 13 MS. FEINSTEIN: In some cases yes. 14 MR. BROOKMAN: So from the consumer's 15 point of view they just see the one thing though 16 right? 17 MR. FEINSTEIN: The retailers, they see 18 the retailer the contractor who is hired by the 19 retailer to go out and install. 20 MR. BROOKMAN: So when the consumer gets 21 the bill let's say it's \$1,000.00 they don't know 22 that a cut went somewhere and one cut went somewhere

Page 194 1 else. 2 MR. BORTZ: You can buy it and take it 3 home. 4 MR. BROOKMAN: You can, you can but. 5 MR. BORTZ: You won't follow our 6 instructions because you need to be a qualified 7 scholar to do it, but people do it they buy it and 8 take it home and they install it themselves or they 9 hire a plumber or a qualified installer. 10 MR. BROOKMAN: Okay. 11 MR. CYMBALSKY: So I guess obviously it 12 has been done differently in different places but I 13 guess what we are interested in is to try to get that 14 final price correct. I mean frankly if there is five 15 steps or three steps is the beginning to the end. 16 MR. BORTZ: Right it doesn't matter there 17 is a markup to the person who is selling it and there 18 is a cost to installing it. 19 MR. BROOKMAN: Okay, Rett final comment? 20 MR. RASMUSSEN: Rett Rasmussen. Right, 21 some of what you are saying John when you look at the 22 Cypress Air that's marketing but the functions within

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1	that are multiple you have got the dealer
2	function, you have got the contractor function. Some
3	areas of the country require the mechanical
4	contractors Rachel said, some do not.
5	The whole United States is as varied in
6	their requirements for installation as there are
7	different manufacturers and different means of going
8	to market, further complicating the issue, so, yes.
9	MR. BORTZ: Matchless ones, easier ones to
10	install and harder ones to install.
11	MR. BROOKMAN: Okay are we ready to move
12	on now, I think so.
13	MR. SIAP: There's a question in the back.
14	MR. HOUCK: James Houck, I had a question
15	on your slide 38. How did you calculate the benefit
16	of the heating season?
17	MR. SIAP: That's going to be coming up in
18	about 3-4 slides.
19	MR. HOUCK: Okay I'll ask the question
20	then.
21	MR. SIAP: The secondary yeah.
22	MR. BROOKMAN: Yes Jack?

Page 196 1 MR. GOLDMAN: Jack Goldman just a quick 2 question. If you were to put parenthesis around the 3 first step --4 MR. SIAP: Yes. 5 MR. GOLDMAN: In that equation would it be 6 QP times OHP or QP times OHP plus secondary because 7 they could have different results depending on that. 8 MR. SIAP: It's yeah so you do the 9 multiplication first in this case, yes. 10 MR. BROOKMAN: Okay keep going. 11 MR. SIAP: So the buildings -- first I am 12 going to talk about the building sample before going 13 back into the depths of the energy use. The building 14 sample is how DOE characterizes the households which 15 have hearth products. Starting from the latest RECs 16 data which is the residential energy consumption 17 survey -- we first decided to get those which have a 18 fireplace and those which use either natural gas or 19 propane. 20 Finally if it has a flue we added to the 21 vented hearth product sample and if it is flue-less 22 we add it to the vent-less hearth product sample.

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1	The vented sample was 541 households representative
2	of 4.67 million households nationally. When the
3	vent-less sample was 171 households representative of
4	1.83 households nationally, yes question?
5	MR. BROOKMAN: Barton?
6	MR. DAY: The issue with the RECs data as
7	near as I can tell the only gas hearth products that
8	are covered by the RECs data at all are fireplaces
9	that are used for secondary heating and there's no
10	data on inputs, there's no data on the presence or
11	absence of pilot lights. There is no information on
12	pilot light use patterns, there is some limited data
13	on product use patterns, product use frequency but to
14	me the issue that
15	leaps out is that fireplaces that are used for
16	secondary heating are a very small fraction of
17	fireplaces so the data is not even representative of
18	fireplaces and I can tell you that if there's any
19	resemblance between that and data for patio heaters
20	it's random.
21	I mean there is absolutely nothing to link
22	you know this data for any other product and I don't

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1	understand, maybe I'm missing something in the RECs
2	data and there is all this information about other
3	products I don't know, there's nothing I can find and
4	my perception from looking at it is that you are
5	taking data set for an extremely narrow range of
6	products and just applying it to everything because
7	there is no other numbers, am I missing data?
8	MR. SIAP: Well RECs does include the
9	fireplace only but we use it to establish the house,
10	the characteristics of the households themselves, we
11	don't use it for studying pilot market share or
12	behavior, any of that so.
13	MR. BROOKMAN: Leslie?
14	MR. BORTZ: Leslie Bortz, Barton if you
15	are right Barton, if you are right doesn't that
16	mean this stops at the first diamond?
17	MR. DAY: Yeah.
18	MR. BORTZ: That's it.
19	MR. DAY: Yeah by definition well it's the
20	first diamond is yes.
21	MR. BORTZ: It's everything that there is.
22	MR. DAY: It's just that all the other

	Page 199
1	products drop out there.
2	MR. BORTZ: Everything's out then.
3	MR. DAY: Every category drops out because
4	fireplaces used for space heating is
5	MR. BORTZ: Is the only thing they have.
6	MR. BROOKS: Can you restate how what the
7	specifics are in RECs?
8	MR. SIAP: So um although that's what's
9	the diamond says and that's strictly how the question
10	is asked the RECs provides a measurement of the fuel
11	consumed as well and if we look at the number of
12	units identified in RECs it's not a small portion of
13	all hearth product shipments, it's a large portion
14	relative to the shipment so maybe this document could
15	be labeled better.
16	MR. DAY: I looked at the questionnaire
17	and the questionnaire on residential energy use, the
18	only question that addresses any of the products we
19	are talking about is fireplaces used for heating.
20	The data summaries at the website that you linked us
21	to in the notice are just fireplaces used for
22	secondary heating.
1	

Page 200 1 If there's some data on any other product 2 3 MR. CYMBALSKY: That would probably be the 4 majority of what we are talking about here, I mean 5 it's houses that have a gas for example -- have a gas 6 furnace and they have a fireplace, a gas fireplace of 7 whatever type we sell out there. 8 RECs would consider that secondary heating 9 because their primary heater is their gas furnace. 10 MR. DAY: Well it actually doesn't you can 11 look at the total of single family homes --12 MR. CYMBALSKY: Right. 13 MR. DAY: That are accounted for and 14 fireplaces used for secondary heating and you can add 15 up wood and gas and propane and you can add up all 16 the categories of fireplaces and I forget the total 17 single family households, like 78 million is what 18 the RECs data assumes and there's like 4 million 19 fireplaces total. 20 And for the last 30 years or more about 21 right at 50% of all newly constructed single family 22 homes have fireplaces so the 35 plus million

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1	fireplaces all but like 4 and I don't remember the
2	numbers off the top of my head. I think that's right
3	all but 4 are missing from the data side.
4	Well they are not missing from the data
5	side because there is a category for products that
6	are used for secondary heating which is where the
7	vast majority of all the products that we are talking
8	about would fall.
9	MR. BROOKMAN: James go ahead with your
10	comment?
11	MR. HOUCK: This is James Houck. Yes
12	there is a couple of issues with the data set. One
13	is it's based on the consumer's response they are
14	asked if they use their fireplace for secondary heat.
15	The rule of thumb, working with fireplaces in
16	residential homes is about a third aren't used, about
17	a third are used for aesthetics and a third are truly
18	used for a secondary heat source. But very few
19	people use a fireplace for a cooling effect.
20	When you ask a person that uses it
21	primarily for aesthetics they say oh yes secondary
22	heat so that puts an incredible uncertainty in this

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number because it is not really people that are using
the secondary heat. When someone asks you do you use
your fireplace for secondary heat source I say yes.
The other issue is it doesn't distinguish between
fireplaces that have an insert in them or not. Of
course a fireplace insert is more designed for
heating than I guess what you would call a true
fireplace so there is a pre-disposition for this
number to include fireplace inserts, not just the
whole universe of fireplaces.
MR. BROOKMAN: Okay thank you.
MR. ROSENQUIST: You have to remember,
this is Greg Rosenquist form LBNL is that we are
using RECs to create a building sample for all vented
hearth products and all unvented hearth products and
so we are using that same building sample for vented
gas logs and vented gas fireplaces as a basis for our
analysis when we do the lifecycle cost analysis.
Where we get that weighting correctly in
terms of the market share of each product is when we
go back into the shipments and national impact
analysis. Here with the lifecycle cost analysis we

	Page 203
1	are trying to determine what percentage of consumers
2	would benefit or burden from replacing their standing
3	pilot with intermittent pilot ignition device.
4	So I hope that's clear again we are just
5	trying to create what is a representative building
6	sample with sort of sparse information that we have
7	from RECs. So we can perform our lifecycle cost and
8	payback period.
9	MR. BROOKMAN: Leslie get close to that
10	microphone.
11	` MR. BORTZ: You said you
12	are trying to figure out the percentage that would be
13	helped by going to an intermittent pilot system,
14	isn't that 100%?
15	MR. ROSENQUIST: I say benefit what I mean
16	is on a cost basis right. If the benefits of the
17	energy savings outweigh the increased cost of the
18	product.
19	MR. BORTZ: Okay.
20	MR. ROSENQUIST: That's what I mean.
21	MR. SIAP: Okay so moving on. In our
22	energy use determination the next term is the

	Page 204
1	ignition system representative power. This is
2	determined in the engineering analysis, we have a
3	table here listing the representative power used for
4	each hearth product type by standing pilot,
5	intermittent pilot and also for the hearth product
6	main burner, yes?
7	MR. ROSENSTOCK: Question Steve
8	Rosenstock, Edison Electric Institute. You are
9	showing an ignition wattage of 50 watts that's across
10	every single product, there is no variation, is that
11	like an average value. The reason I am asking is I
12	was over a neighbor's house and they had a huge
13	propane grill, gas grill, sorry don't want to get
14	anyone mad at me it was a gas grill and they were
15	having trouble with the ignition so they changed out
16	a AA battery as I recall so I see 50 watts, is that
17	the nameplate rating or is the actual wattage on
18	there when they are putting in the ignition when the
19	actual ignition is on?
20	MR. SIAP: That's an average it may be a
21	conservatively high average but yes it is meant to be
22	an average.

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1	MR. ROSENSTOCK: Again Steve Rosenstock,
2	again was that based on nameplate or actually like a
3	watt meter?
4	MR. SIAP: I would have to defer to the
5	engineering analysis team to
6	MR. ROSENSTOCK: Steve Rosenstock EEI. I
7	looked in the technical support document and I wasn't
8	finding anything, thanks.
9	MR. BROOKMAN: Jim?
10	MR. KUPSH: I think the actual opposite,
11	if you look at your unvented fireplace, inserts,
12	stoves, standing pilot and unvented gas log sets the
13	gas consumed by both of those applications is
14	effectively the same, more of the same pilot, they
15	cannot be different they use the same amount of gas.
16	And so the fact that you are off by 50% on
17	the unvented fireplace insert stove makes me believe
18	that there was not any true testing done because it
19	is unrealistic, those should be very, very close to
20	each other. It's effectively the same pilot, one has
21	an extra device attached to it but the burning is all
22	the same. So I have a hard time with the accuracy
1	

	Page 206
1	there.
2	MR. SIAP: Okay.
3	MR. BROOKMAN: Yes Barton?
4	MR. DAY: Yes where did the main burner
5	BTU numbers come from and why do they matter? I'm
6	having a hard time understanding what the relevance
7	on this is?
8	MR. SIAP: Well the relevance of them is
9	coming up there is very important in determining the
10	intermittent pilot operating hours, it will come in a
11	couple of slides. As far as the magnitude how they
12	are determined I would defer to the engineering
13	analysis team.
14	MR. BROOKMAN: Microphone, Justin?
15	MR. ELSZASZ: Justin Elszasz, Navigant
16	Consulting. The main burner numbers are again
17	averages and there are two primary sources to that.
18	One was again the product data base that I mentioned
19	earlier that included the model name information as
20	well as ignition type and you know the number that
21	you see there, the main burner fuel input.
22	And the other was they were asking through

	Page 207
1	a confidential manufacturer of these.
2	MR. DAY: When you say I'm sorry this is
3	Barton Day, and you said data based are you referring
4	to just information you collected from literature?
5	MR. ELSZASZ: Yes.
6	MR. DAY: So no adjustment well obviously
7	no adjustment for product shipments and so forth it's
8	just how many products have this and how many have
9	that?
10	MR. ELSZASZ: Right and again it was also
11	refined during the interview process so manufacturers
12	were allowed the opportunity to comment on that
13	number.
14	MR. BROOKMAN: Leslie?
15	MR. BORTZ: Leslie, you have 50,000 I
16	don't know if it matters yet but you have 50,000 for
17	outdoor fireplaces I think somewhere else you had 25.
18	If you can find it back it's a different number.
19	MR. BROOKMAN: Are you following him?
20	MR. SIAP: I'm not sure what you are
21	referring to it might have been
22	MR. BORTZ: An outdoor I'm sorry, Leslie.

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1	The main burner in the outdoor fireplaces uses 50,000
2	BTU's. I think somewhere else you said it used 25.
3	MR. BROOKMAN: Oh I see, okay.
4	MR. CYMBALSKY: I've gone back in the
5	whole slide deck this is the first time I have seen
6	this number.
7	MR. BORTZ: It may have been in your TSD
8	or somewhere. I don't know if it matters.
9	MR. BROOKMAN: Okay let's move on.
10	MR. SIAP: Okay next here is the operating
11	hours of the pilot. First we are going to go over
12	the standing pilot operating hours. DOE identified
13	three modes for gas fired hearth products in the
14	field study. 40% of users left their standing pilot
15	on all year, 20% turned their pilot off daily when in
16	use and the remaining 40% mode three had higher
17	variation with many turning their standing pilot off
18	at the end of the heating season. Question Barton?
19	MR. DAY: Barton Day. The I mean the
20	obvious question is where did the data come from for
21	this. You site a study and I guess my first question
22	is do you actually have the study and if so can it be
1	

	Page 209
1	made available for review and comment? The magazine
2	article just suggests that there are just suggests
3	numbers for fireplaces you know for what was on the
4	market, actually what was installed or in use 20
5	years ago.
6	MR. SIAP: So we have the numbers in
7	that article are what we have. We also found more
8	recent survey data, not field data 2007 housing
9	environment study shows that 44% of users turned
10	their standing pilot off at the end of the heating
11	season but
12	MR. DAY: I'm sorry what's the additional
13	information I couldn't quite hear you.
14	MR. SIAP: The housing and environment
15	study in 2007.
16	MR. BORTZ: Leslie Bortz. It said in 2007
17	that 44% of people turned their pilots off at the end
18	of the season?
19	MR. SIAP: Yes.
20	MR. BORTZ: And you are going to say in
21	2021 that number is going to be 40%?
22	MR. SIAP: Well I bring that up as it is

Page 210 1 consistent with the 1997 number but if you have 2 different data we would be happy to take it into 3 consideration. 4 MR. BROOKMAN: Barton? 5 MR. DAY: This is Barton Day and that's 6 the issue is there is no data. There is not a single 7 data point that I am aware of as to you know used 8 patterns of pilot lights on. Any products other than 9 this very limited data on fireplaces with an old 10 design. If there is a more recent study that 11 addresses any of these products it would be good to 12 see that but again you know a point we made early on 13 is these products, they are all different and a 14 pattern of consumer behavior with respect to one type 15 of product is not necessarily going to have anything 16 to do with a pattern of behavior as to other 17 products. 18 And one of the key issues here that looks 19 like was not considered at all is that the -- one of 20 the key factors influencing consumer behavior is ease 21 of pilot light control and you know it's obvious that 22 if you have to crawl on your hands and knees with a

	Page 211
1	screwdriver and a flashlight to operate a pilot
2	light, one could imagine that that's not going to
3	happen all the time.
4	If it takes the flip of a switch on a
5	handheld remote like turning off the light as you
6	leave a room, a whole different ballgame and those
7	controls are out there they exist, they are
8	increasingly prevalent and for some styles of product
9	you know the controls are so easy that the
10	presumption that pilots are going to be left on
11	indefinitely is just incredible.
12	And without having any data on any
13	products without any information on the configuration
14	of the pilot light controls I would say there is
15	absolutely no evidence to permit any analysis based
16	on pilot light use patterns and I understand in your
17	analysis you have got blanks to fill in but you can't
18	fill in blanks without data and there's not data.
19	MR. SIAP: So there is data and we are
20	presenting it here and so this is an ask of whoever
21	to provide more recent data. So you have asserted
22	that this new product is becoming more prevalent.

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1	MR. DAY: This industry has no data.
2	MR. SIAP: Okay so to back up your
3	assertion there must be something.
4	MR. DAY: The assertion is there is no
5	data.
6	MR. SIAP: No but he asserted that this
7	new On Demand technology is running you know
8	penetrating into the market.
9	MR. CYMBALSKY: Why would people pay for
10	it if they weren't going to use it.
11	MR. BROOKMAN: Yeah, this gentleman here
12	please say your name. Do you want to get in here?
13	MR. REOTT: Raymond Reott. The slide that
14	is up on the board right now has the wrong numbers
15	according to the TSD. According to the TSD table 7
16	3.1 page 7-6 only 20% of the people leave their
17	standing pilot on all year and 40% turn them off
18	daily so those first two figures on the chart on the
19	wall there are reversed actually.
20	MR. BROOKMAN: Thank you, yes James?
21	MR. HOUCK: James Houck. I would like to
22	comment what Barton just talked about. I want to

	Page 213
1	point out that that study was done in Canada in 1997
2	and I don't have it in front of me but I believe
3	there was only 14 homes that did not turn their pilot
4	light off. Now the statistics on that
5	MR. BROOKMAN: Was that the end of the
6	season?
7	MR. HOUCK: Yes, I believe that is how it
8	was in the study I would have to look at it again to
9	be sure on that. Something like that, the statistics
10	are staggering when you consider there is probably
11	around 14 million plus or minus gas fireplaces in the
12	United States so that's .0001 percent of the total
13	population that you are basing this assumption on.
14	In Canada in 1997 so I would say that means nothing.
15	MR. BROOKMAN: Thank you yes Dana?
16	MR. MOROZ: Dana Moroz, Wolf Steel. I
17	would also like to make the comment that based on
18	this information or the date this information was
19	accrued is like going back to caveman days. We live
20	in the information world. As a manufacturer I can
21	tell you we do a great deal to educate consumers
22	today of both the use of the pilot and how to turn it

	Page 214
1	off that wasn't available back then. You can go on
2	YouTube and find information on how to turn off
3	almost any pilot, that didn't exist in 1997 so to
4	just draw those numbers out and say they are still
5	valid today lacks credibility.
6	MR. BROOKMAN: Jim?
7	MR. KUPSH: Jim Kupsh. To add to what
8	Dana is saying is if you take a look at and as a
9	control manufacturer, the percentage of non-standing
10	pilot IPI appliances in 1997 I doubt it reach 1 or
11	2%. It is significantly higher today and all of
12	those appliances turn off the pilot on every single
13	cycle or have the ability to do that.
14	And so to in any way suggest that this
15	data from 1997 can be even considered as a framework
16	to what's occurring today is unrealistic.
17	MR. BROOKMAN: Okay yes
18	Peter?
19	` MR. DIRCKS: Yes Peter HHT. You mentioned
20	that the study from 2007 is the housing and
21	environment study who was the actual source, I mean
22	what's the company that put it out?

Page 215 1 MR. SIAP: StatCan distributed the report 2 citing that study. 3 MR. DIRCKS: I'm sorry I couldn't hear 4 you. 5 MR. SIAP: StatCan provided the source, provided the report, the source. 6 7 MR. DIRCKS: All right and I have a 8 followed comment. I think what you are hearing from 9 most of the people in the room here not only on this 10 issue but even the one earlier on distribution and 11 even just based on the energy used by the consumers 12 is it really does go back to this definitional issue 13 of what is the definition of the products and what is 14 the intended scope of my opinion because consumers 15 are buying all of these products for different 16 reasons and that was articulated earlier. 17 There's a different between what a 18 consumer is looking for in a gas fireplace versus an 19 insert versus a gas log so I think there is actually 20 a theme here in the last three topics that we have 21 covered by lumping all of this together, over 22 simplifying and using data that's you know, 15, 18

	Page 216
1	years old is what's really giving us a lot of
2	questions with the integrity of the information as
3	well as how we can best respond.
4	MR. BROOKMAN: Okay James?
5	MR. HOUCK: Yes James Houck. Regarding
6	that Canadian data in 2007 again I don't have it in
7	front of me so my number is off a little bit but they
8	had three categories of responses in that survey they
9	turned their pilot light off in the summer, or they
10	didn't turn their pilot light off in the summer and
11	no response.
12	And there were more no responses I believe
13	or at least in the same magnitude of the other two so
14	again that data is very questionable.
15	MR. BROOKMAN: Frank Stanonik.
16	MR. STANONIK: One little comment, I'm
17	hearing a lot of references to Canadian studies. I
18	just want to make sure everyone is aware that when it
19	comes to vent-free gas fired products, those products
20	in fact are not allowed, or I will say they are not
21	allowed in Canada so any of the Canadian studies that
22	look at fireplace pilot use have no relevance to

Page 217 1 vent-free products because in fact they are not a 2 Canadian product. 3 MR. BROOKMAN: Thanks Frank. Bart? 4 MR. DAY: Yeah I just wanted to make a 5 general comment about anecdotal evidence because you 6 know as we looked at this issue and tried to get some 7 sense of what is realistic we have concluded that we 8 -- that it's an incredible challenge because there is 9 substantial evidence that when you look at fireplaces 10 as a group that as many as half of all fireplaces are 11 used not at all or rarely. 12 Again we are talking about a product that 13 performs its primary function just by sitting there. 14 And that's what fireplaces are. They are an 15 architectural feature and the data on fireplaces in 16 general is right around 50%. 5-0 are not used 17 regularly at all. Either are used not at all or are 18 used rarely and the problem you have with anecdotal 19 evidence when we talk internally what any particular 20 manufacturer sees is experience with people that are 21 using the product, so they are only seeing half the 22 data set to start with so whatever impression they

<sup>1</sup> get is going to overstate the issues with respect to <sup>2</sup> anything related to product use because they are not <sup>3</sup> seeing the substantial population of products that <sup>4</sup> aren't used.

5 Survey data is subject to the same 6 problem. Characteristically when you do survey data 7 the people who are actually using products are much 8 more likely to respond than the people who don't and 9 so everything is skewed in the direction of inflating 10 anecdotal or survey data and so you know reliable 11 data about issues like pilot light use is frankly 12 just wanting and I think the other significant issue 13 is that two of the major factors that control the 14 outcome there are consumer attitudes which have been 15 changing rapidly and continue to change.

And product design which has evolved rapidly and continues to change and so to -- if we had reliable data from you know a year ago it wouldn't be reliable data for two years from now let alone five years from now because we see the trends. It's a very difficult issue to get at and the sentiment of the industry is that you know

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	Page 219
1	concerns based on this model of you know the pilot
2	lights that nobody changes is just it's not an
3	applicable model to products that are coming on the
4	market today or that will be on the market five years
5	from now and so there's a real question as to whether
6	there is any issue to address through regulation at
7	all.
8	MR. BROOKMAN: Okay moving on.
9	MR. SIAP: Still in the operating hours
10	now we move on to the intermittent pilot operating
11	hours covered by these two equations here. The
12	intermittent pilot hours are determined using the
13	main burner operating hours and the IPI on time per
14	main burner operating hours. This is determined by
15	the main burner cycles per hour and the operation per
16	main burner cycle.
17	The average main burner cycle time is
18	determined is assumed to be similar to similar
19	equipment, direct heating equipment where we assume
20	an average main burner cycle time of 20 minutes which
21	leads to three main burner cycles per hour. DOE
22	assumes that an IPI operation per cycle of 30 seconds

Page 220 1 and this results in an average IPI operating hours of 2 3.9 hours per year. 3 MR. BROOKMAN: Barton? 4 MR. DAY: Yes these assumptions come out 5 of the test procedure for direct heating equipment. 6 Several years ago we submitted a submission and a 7 test procedure proceeding and we have submitted it to 8 DOE several times since then. This has absolutely no 9 relevance to hearth products. This is a strictly 10 utilitarian heating appliance operating on a 11 thermostat. This is absolutely has got nothing to do 12 with any hearth product, they just don't operate like 13 that. 14 MR. BROOKMAN: Dana? 15 MR. MOROZ: Dana from Wolf Steel. I would 16 agree with Barton on that point the fact is that most 17 homeowners use these as decorative appliances, they 18 don't turn it on to cycle the heat, they turn it on 19 because they want to enjoy the ambience, the cold 20 temperature outside allows them to do so and they 21 don't want to watch it come on and off for 20 minutes 22 every hour, they want to have it on for several hours

Page 221 1 while they are sitting there enjoying it and that's 2 how fireplaces are used. 3 InterCan went through this recently in 4 Canada trying to evaluate the same usage and was 5 unable to define it. When they looked to themselves 6 and surveyed within their own organization they found 7 that was consistent with the proposed usage. That 8 most users leave it on for an extended period of time 9 to enjoy the ambience, not to heat. 10 MR. SIAP: Right so just briefly the we 11 realize that the hearth product and burner cycle may 12 be longer. Here we choose to kind of potentially 13 overstate the energy use of the IPI to be 14 conservative in our estimates. 15 MR. BROOKMAN: Frank? 16 MR. STANONIK: Frank Stanonik, AHRI. So 17 the slide says that the average main burner cycle 18 time is 20 minutes and I understand it to be the 19 burner on time? 20 MR. SIAP: Yes. 21 MR. STANONIK: Well by the fact you are 22 calling it a cycle that suggests that there is a

	Page 222
1	burner off time which there is if it is
2	thermostatically controlled and if that is the case
3	then you do not have the only way you get three
4	main burner cycles in an hour is in fact if you have
5	three consecutive burner cycles of 20 minutes which
6	is basically one burner operating of one hour.
7	So you have got a little flaw here in how
8	you have analyzed this because what you haven't
9	mentioned is okay if it is operating this way what is
10	the off cycle and if in fact and then one other point
11	that has just been brought up here okay. In the
12	discussion of how people use decorative equipment it
13	is totally appropriate. They just want to watch the
14	flame okay.
15	But if this is a vent-free product okay
16	they can't let it run forever because the room will
17	just get too hot. They will either open the window
18	and then I guess heat the outdoors or they in fact
19	will cycle the equipment or turn it down or whatever
20	because again there is no way around it, a vent-free
21	product will heat the room and it doesn't take very
22	long for going from comfortable hot to too hot and so

	Page 223
1	it's a whole different situation of how that main
2	burner is going to operate.
3	MR. BROOKMAN: Sue?
4	MS. WALKER: All I was just going to say
5	on the vent-free products overwhelmingly they are
6	thermostatically controlled and cycle automatically.
7	MR. BROOKMAN: Okay yes Rett?
8	MR. RASMUSSEN: Rett Rasmussen. The ANSI
9	standards for vented decorative appliances they do
10	not permit the use of thermostats so you will not
11	have this type of cycling with decorative products.
12	MR. BROOKMAN: Sue is that correct? Yeah
13	okay, Barton nothing there okay.
14	MR. SIAP: Next I have how we determine
15	the main burner operating hours. Now that the
16	previously stated cycles per hour is for main burner
17	operating hours not hours in general so the main
18	burner operating hours are determined using the
19	overall hearth product energy use as listed in RECs
20	2009. The main burner input capacity as determined
21	in the engineering analysis and several adjustment
22	factors where we adjust the heating and cooling load

	Page 224
1	to project to account for 2021 of rejected
2	building shell efficiency as well as 2021 average
3	climate conditions. Yes?
4	MR. ROSENSTOCK: Steve Rosenstock, EEI.
5	When you are saying building shell you are saying
6	residential or commercial or a combination of both?
7	MR. SIAP: Residential.
8	MR. DAY: This is Barton Day again the
9	whole issue of burner operating hours the appendix of
10	testimony that we are talking about a minute ago has
11	assumptions that are completely out of whack for
12	hearth products again I completely looking at a
13	different type of product. But these numbers you are
14	starting with the RECs data again so you are starting
15	with the small fraction of fireplaces that are used
16	for secondary heating you know for most of the
17	products we are talking about the pattern is going to
18	be different.
19	For fireplaces in general the pattern is
20	going to be different and so you know we don't
21	this is not producing data that is going to be
22	representative of any of the products that we are

	Page 225
1	talking about and that's really the problem is that
2	the operational use data is way off and it doesn't
3	connect with pilot light use data anyway. It seems
4	like we are assuming some use pattern of pilot lights
5	without any evidence on the basis of product use
6	information for which we have no evidence.
7	MR. SIAP: The final term is the secondary
8	effects or the impact of the pilot heat on the base
9	heating or cooling. Secondary effects are determined
10	in these equations listed here the first term is the
11	energy use of the pilot, this is just the energy
12	consumed by the pilot as the product of the power
13	consumption and the operating hours.
14	Next is the fraction of useful heat from
15	the pilot which is the distribution based on another
16	field study and it's assumed to be more for unvented
17	units and less for decorative units and finally DOE
18	takes into account the efficiency of the main space
19	heating or cooling appliance depending on season.
20	MR. BROOKMAN: Steve Rosenstock?
21	MR. ROSENSTOCK: Steve Rosenstock, Edison
22	Electric Institute. When I looked in the technical
1	

	Page 226
1	support document table 7.3.6 it talks about the
2	fraction of the heat of useful heat. I'm seeing
3	ranges depending on the product of 1 to 47% or 0 to
4	23% or for the unvented products 2 to 94% so you were
5	talking about a distribution based on a field study.
6	It's based on a Canadian field study and as Frank
7	said the unvented products aren't even allowed right
8	so in terms of the distributions how did you
9	determine or I'll ask what is the shape of the
10	distributions and how did you do it for unvented
11	products?
12	MR. SIAP: So I will start with vented and
13	then go to unvented. Vented products is a triangular
14	distribution where the upper bound is established as
15	the number determined in that study as that was one
16	household that had the furnace thermostat coincident
17	in the same room and basically right next to the
18	fireplace.
19	So we assumed that that is one of the most
20	impactful scenarios for a furnace and a hearth
21	product interacting. For the unvented units we
22	recognize that there is a potential for higher, much

	Page 227
1	higher impact on furnace use so we assumed double.
2	If that number should be something else we welcome
3	comment on that.
4	MR. ROSENSTOCK: Steve Rosenstock EEI. So
5	you said the unvented was you also assumed a
6	triangular distribution?
7	MR. SIAP: Also triangular yes.
8	MR. ROSENSTOCK: So where was the peak of
9	the triangle just out of curiosity within that?
10	MR. SIAP: It's symmetric so
11	MR. ROSENSTOCK: By 23 and so in the first
12	case it would be Steve Rosenstock, EEI so it would
13	be 23 in the case of 1 to 47 and for the zero to 23
14	it might be 11
15	MR. SIAP: Right.
16	MR. ROSENSTOCK: And then 2 to 94 it might
17	be 48 or something like that, 48.
18	MR. SIAP: Right in that range.
19	MR. BROOKMAN: Go ahead Frank?
20	MR. STANONIK: Frank Stanonik with AHRI.
21	In the case specific case of unvented vent-free
22	products I would strongly urge you to essentially

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1	scrap this analysis and just start by what I would
2	call first principals and the first principal is that
3	on a vent-free heater all of the pilot energy during
4	the heating season is going into the space. That is
5	installed in a room or wherever and it is intended to
6	provide heat to that area so in fact all of the pilot
7	energy because it can go nowhere else is going into
8	the space so it is all useful heat.
9	Now if you want to get into an analysis
10	and figure out what is going on with infiltration and
11	some other things you can do that but to suggest that
12	there is a range for a pilot on a vent-free heater is
13	to borrow a phrase from Leslie, ridiculous. There's
14	no place else for the heat to go but into the space.
15	It is 100% putting BTU's into that space.
16	Now during the heating season you could
17	you know, you could do some analysis that might look
18	at bins and say okay how many hours are in the
19	heating season, am I really wanting heat as opposed
20	to not wanting all those things but to take this
21	study that you have done in Canada and then make some
22	assumptions and look at some distributions just

Page 229 1 doesn't fit. 2 MR. BROOKMAN: Barton? Okay, yes James 3 please. 4 MR. HOUCK: Yes I would like to expand on 5 that a little bit. First of all I think it would be 6 fair in your equation to have a plus or minus in the 7 secondary effects because I believe you would 8 probably have more benefits in the winter and losses 9 in the summer. A couple of other things about that, 10 one is I would be surprised and sometimes I am 11 surprised that you have taken into account the 12 magnitude of the heating benefit in the winter. 13 The standard in the industry used by the 14 U.S. weather service is heating degree days and 15 that's any day that has an average temperature below 16 65 degrees Fahrenheit that is deemed that heating is 17 needed. So I would argue anywhere a fireplace is 18 located and the number of days that are below 65 19 degrees the energy is not wasted, in fact it is used 20 to heat the dwelling. 21 The other component on that, is again it 22 was alluded to a little earlier, it is not a linear

	Page 230
1	fashion, in other words if there is a hundred million
2	BTU's of energy put out, used by the pilot light the
3	benefit to the home can be much greater than that.
4	Fireplaces to have open chimneys for example a gas
5	log set put in an old masonry fireplace if the
6	draft is lost and becomes negative and which you have
7	air infiltrating into the home that air can be very
8	cold and causing your main heating source such as a
9	forced air furnace to work a lot harder.
10	So I would argue that probably the
11	secondary benefits of a pilot light are not
12	adequately taken into consideration.
13	MR. BROOKMAN: Okay.
14	MR. SIAP: So finally we have the results
15	of the energy use analysis. The top table lists the
16	standing pilot fuel use by product type. The bottom
17	table lists the energy use by the intermittent pilot.
18	The first column is the energy use direct electricity
19	use directly by the intermittent pilot.
20	The third column is the space heating fuel
21	impact this is the increased energy use by the
22	furnace or the fuel used in heating appliance due to

	Page 231
1	the lack of useful heat from the standing pilot.
2	Similarly for those households which have an electric
3	resistant heat pump space heating appliance the
4	fourth column takes those electrical impacts into
5	account.
6	And finally the last column takes into
7	account, lists the benefits of the lack of the
8	additional cooling load from the standing pilot which
9	results in reduced air conditioning or other cooling
10	operating hours, yes?
11	MR. BROOKMAN: Yes Steve Rosenstock?
12	MR. ROSENSTOCK: Steve Rosenstock, Edison
13	Electric Institute. Again thank you for that, that
14	kind of the breakout. I guess my thought is again
15	just looking at table 731 it says that in your in a
16	technical support document it says year round
17	standing pilot is 20% of the population. So for
18	these numbers in the table these numbers are just
19	for, well I'll just start with the cooling, for the
20	space cooling that's only for the 20% of homes that
21	are actually running the pilot in the summer time.
22	Am I correct in that assumption?

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1	MR. SIAP: For that part yes.
2	MR. ROSENSTOCK: Okay the next question I
3	was going to have is you know especially for a lot of
4	these products where you know the pilot is going to
5	be inside the fireplace and in many cases it is
6	behind a glass door as well I know you said the
7	fraction if like only 20% of the heat is actually
8	getting into the space and it starts out like I'll
9	say 700 to 1000 BTU's you are talking about you know
10	a couple hundred BTU's where the cooling load of the
11	house might be 36,000 BTU's per hour at a peak time
12	on a peak July day. That's kind of within the noise,
13	are you saying that the thermostat has to go on and
14	off just because of that extra couple of hundred
15	BTU's?
16	MR. SIAP: We acknowledge that it is a
17	really small portion of the cooling load but we
18	account for the analysis for the heat input into
19	this space the same as the cooling and the heating
20	season.
21	MR. KUPSH: Jim Kupsh. The 20% that
22	20% is it calculated off of 100% of the fireplaces or

	Page 233
1	is that 20% calculated off of 20% of the fireplaces
2	that have a standing pilot system? In other words
3	are you subtracting out all of the existing
4	fireplaces that currently have an IPI system?
5	MR. SIAP: So these results are presented
6	separately so this is for only the standing pilot or
7	intermittent pilot so that 20% is only standing
8	pilot.
9	MR. KUPSH: But the calculation was based
10	on 1997 when the entire market was standing pilot,
11	how 40% of the installations and it's growing as we
12	get to 2020 are not standing pilot, is that taken
13	into consideration?
14	MR. SIAP: So we used the 1997 report to
15	provide some kind of data point for the behavior with
16	standing pilot only. So we applied those modes to
17	MR. KUPSH: I understand but my statement
18	or question is if you use 1997 as the 20% then you
19	have to use it only the appliances that are now
20	standing pilot. If you use it as a if you take
21	into account for all of them now you then have to
22	take into account that 40% of the appliances no
1	

Page 234 1 longer have standing pilot. 2 MR. CYMBALSKY: What he is saying is the 3 behavior is constant not the stock of standing 4 pilots. 5 MR. KAPSH: How can you say the behavior 6 is --7 MR. CYMBALSKY: 40% of the lower number is 8 standing pilot. 9 MR. KAPSH: You have no data to say the 10 behavior is constant you are basing it on 1997 data 11 in which there was no IPI applications. 12 MR. CYMBALSKY: And that's fine no, no, 13 no. Let's just think about standing pilots. So in 14 2007 or '97 you had a population of people with 15 standing pilots. 40% of them said we don't turn it 16 off. Fast forward to now the number of people with 17 standing pilots is a lot lower but of that lower 18 number you still have 40% of them that keep the 19 standing pilot on. 20 Behavior is the same of people with 21 standing pilot unless --22 MR. KAPSH: So are you saying the 20% is

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1	only standing pilot applications?
2	MR. CYMBALSKY: Right.
3	MR. KAPSH: And you subtracted out form
4	the whole population.
5	MR. CYMBALSKY: Yes.
6	MR. KAPSH: Okay thank you.
7	MR. BROOKMAN: Yes?
8	MR. RASMUSSEN: Rett Rasmussen. I would
9	like to point out that since that is a Canadian study
10	Canada is north of the United States of America. If
11	you recall in my comments opening comments I had a
12	dealer from Michigan which is just south of Canada
13	but still in the northern part of the United States
14	that suggested that standing pilot usage is going to
15	be greater in the northern climates and what it would
16	be in the southern part of the United States so I
17	would like to just point out that this is what I
18	consider to be a discrepancy in the use of these
19	Canadian numbers for making policy for the United
20	States.
21	MR. BROOKMAN: Barton?
22	MR. DAY: Yeah I just want to go back to

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1	the point John when you were commenting a moment ago
2	you said but the behavior is the same and there's no
3	reason to believe that is the case and the reason for
4	that is in the article itself and again if you guys
5	have the study we would love to see the study, all we
6	had access to was the article that you linked to in
7	the notice.
8	And the notice states as one of its
9	principal conclusions that the ease of pilot light
10	control has a significant effect on consumer behavior
11	and they picture a product as part of the art for the
12	article and say well if you have easy controls like
13	this product it has a significant effect on pilot use
14	guess what, that product is now the norm.
15	MR. CYMBALSKY: And it's not a standing
16	pilot light in your mind.
17	MR. DAY: No it is a standing pilot light.
18	I'm saying of standing pilot light products now and
19	this is why it would have been great if you guys
20	could have come to the expo because if you had walked
21	around the expo you would have seen you know you flip
22	open a panel there's a dial, there's a button it's

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1	as easy as a barbeque grill and this is the bulk of
2	the product now. It's not it's not crawling
3	around on your hands and knees with a screwdriver and
4	a flashlight anymore so behavior is going to be
5	completely different.
6	MR. CYMBALSKY: We are happy to take the
7	data, the bulk of the product is different so tell us
8	what the bulk is and we will implement it.
9	MR. DAY: There is no data, that's the
10	problem.
11	MR. CYMBALSKY: Well there's a showroom
12	full of it.
13	MR. DAY: You mean in terms of model.
14	MR. CYMBALSKY: I mean before you
15	criticized and I don't mean in a negative way you
16	know the product offerings and models available was a
17	bad way of gathering data but you are also saying if
18	we went to the HPBA show which we tried to the
19	weather actually screwed it up.
20	MR. DAY: I didn't mean anything
21	MR. CYMBALSKY: But if we walked around
22	the floor and just took a survey of the product there

Page 238 1 to use your point would that be okay to do, you know 2 we collect data --3 MR. DAY: It would at least have given you 4 a flavor. 5 MR. CYMBALSKY: I mean we use product 6 literature, everything that we can get our hands on. 7 MR. BROOKMAN: Leslie please? 8 MR. BORTZ: I have mentioned to you 9 several times that we have piezos on some of our 10 pilot systems and the only reason people would buy 11 them and spend the extra money would be to turn the 12 pilot on and off, you haven't considered that at all 13 and we didn't have that in 1997 and we had started in 14 2007. 15 MR. BROOKMAN: Let's go to the comment 16 boxes. Here you see two comment boxes I think 17 perhaps we have covered both of these. 18 MS. ARMSTRONG: So we kind of have to move 19 a little bit quicker, some of us because I know there 20 are certain areas especially when we get to the 21 shipments analysis that some people have already 22 commented that they wanted to highlight so we are

1	going to go pretty quick through some of these, just
2	highlight major points. If there are certain things
3	you want please stop us but we are all of our
4	information is documented in the notice and in the
5	technical support documents.
6	We will always welcome your data. We are
7	happy to revise our analysis and/or our assumptions
8	that were explained in response to new data that
9	becomes available or any data that you are willing to
10	submit whether it be on the record or confidentially
11	through a contractor we have ways of doing that. And
12	since many of you have pointed out today that you
13	know you don't necessarily agree with some of the
14	data sources that have been used or some of the
15	assumptions however you can't just state disagreement
16	you actually have to explain why and perhaps you may
17	have data to back that up.
18	So if you don't might proceed but
19	highlight the high points, thanks.
20	MR. SIAP: Okay thanks. Okay so the next
21	section is a lifecycle cost and payback period
22	analysis. The purpose is to provide an economic

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1	evaluation from the consumer's perspective.
2	Lifecycle costs or LCC's are the total consumer cost
3	over the life of the product. Payback period or PBP
4	is the time required to recover the increased
5	purchase price through reduced operating costs. The
6	LCC's determined using the equations and the
7	methodology the LCC and the PBP are determined on
8	those equations. The LCC's the sum of the total
9	installed cost and the lifetime operating cost.
10	The LCC savings is the difference of the
11	LCC and the standard in the base case and the payback
12	period is the portion of the change of the total
13	installed cost and the first year operating cost.
14	The same consumer sample is developed in
15	the building sample a few slides ago were used for
16	this LCC analysis.
17	So the graphic to walk you through the
18	lifecycle cost, the top bracket here kind of shows
19	how the total cost installed cost is developed, it is
20	the sum of the consumer price and the installation
21	costs and the lifetime operating cost is developed on
22	the lower half as the sum of the annual operating

Page 241 1 expenses over the lifetime discounted to the 2 appropriate rate and with the appropriate energy 3 prices. 4 The consumer price is determined using the 5 manufacturer cost and the markup. The manufacturing 6 and markup were discussed manufacturing costs and the 7 markup were discussed earlier and the results for the 8 average price are listed in the table below for both 9 standing pilot and intermittent pilot. 10 MR. BROOKMAN: Leslie? 11 MR. BORTZ: Leslie Bortz, can I assume 12 from page --13 MR. BROOKMAN: Is your microphone on? 14 Leave it on Leslie. 15 MR. BORTZ: I can't I'm swearing. Can I 16 assume from this bottom of that chart that the cost 17 at some point -- that the consumer price that you 18 have here is \$82.08? 19 MR. SIAP: So the consumer price is broken 20 up there for each ignition type so for a standing 21 pilot the consumer price is \$165.00 and for 22 intermittent pilot it's \$247.00.

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1	MS. ARMSTRONG: So this is Ashley from DOE
2	just to clarify when I first saw this slide I was a
3	little and you still may not necessarily agree which
4	we welcome your data and comments on but this is just
5	the ignition system so we have isolated the ignition
6	system. We are not saying this is the cost of your
7	product so take that shock factor away.
8	But there still might be a shock factor
9	associated with the ignitions of some but this is
10	what that is meant to show. This is the ignition
11	system only.
12	MR. BORTZ: Yes ma'am.
13	MS. ARMSTRONG: We welcome comment, like I
14	said we welcome comments and feedback or it's you
15	know and data and if anyone who wants to continue
16	discussions through our manufacturer process or
17	whatever we are welcome to that, we are open to that.
18	MR. BROOKMAN: Dana?
19	MR. MOROZ: I appreciate the invitation
20	Ashley but again it is data that we don't necessarily
21	have why look at oh what have I got right now about
22	60 different gas appliances and applying that product

	Page 243
1	to each and every one of them will require different
2	diligences so I can't capture that cost. I can't
3	give you a nice round figure and say this is what it
4	is going to cost on an average, I'm sorry. I would
5	like to be able to but it is not available.
6	MR. BROOKMAN: Okay thank you moving on.
7	MR. SIAP: Okay so next is the
8	installation cost. The purpose is to represent the
9	labor for material necessary to install the hearth
10	product ignition system.
11	MR. BROOKMAN: Martin Thomas has a comment
12	and his comment is some of the IPI pilots have a
13	switch that converts them to a standing pilot. The
14	product literature recommends leaving the pilot on in
15	cold weather, okay.
16	MR. SIAP: So this installation cost is
17	meant to represent the incremental and installation
18	costs of the ignition system only. For some standing
19	pilot users switching to IPI they may require an
20	electrical connection that is considered for a house
21	build prior to 1990 in addition for grounding for
22	older houses prior to 1960. The labor costs and

Page 244 1 mechanical cost data were sourced from 2013 RS Means. 2 The results by task -- the average cost by task are 3 listed there as well as the percent of households. 4 Yes Barton? 5 MR. BROOKMAN: Yes Barton? 6 I would like to go back to that MR. DAY: 7 point that just blew by so quickly and I apologize if 8 it is out of order but it really is essentially an 9 important point and that is that the proposed 10 standard doesn't do what the NOPR suggests that it 11 would do and one of either two ways and I think the 12 fundamental problem is that in the technical analysis 13 there was not an adequate appreciation of the 14 function that a standing pilot light performs and in 15 particular and this is a broader point, there was not 16 adequate appreciation for the importance of being 17 able to warm up the vent system to get proper draw on 18 a product before main burners are ignited and it's --19 the short answer is that's you can expect a lot of 20 operational problems if you simply put an IPI on a 21 product that's designed to operate with a standing 22 pilot.

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1	And it's a significant issue. The point
2	that was made a moment ago is I believe almost every
3	manufacturer in the industry that offers IPI offers
4	IPI with the ability to put a standing pilot function
5	on and the reason for that is to prevent these
6	operational problems that are typically characterized
7	as cold weather problems but there is a switch or a
8	button setting on the remote control and so the idea
9	that the IPI devices that are used by most of the
10	manufacturers would eliminate all gas consumption
11	except when the main burners are on is incorrect and
12	so the gas savings you are assuming is overstated for
13	that reason.
14	And on the flipside on the cost side the
15	assumption well most of your manufacturers are using
16	products that will satisfy the standards, that's not
17	true either and so you know there's the basic issue

of if you are going to allow a standing pilot function on an IPI unit then your gas savings are high and if you are not then your economic impacts are way, way, way low so it is a very important point and I apologize for taking it out of order but as we

	Page 246
1	got to this point I just realized we hadn't gotten to
2	that yet and it's a critical point.
3	MR. BROOKMAN: Okay.
4	MS. ARMSTRONG: So I have one follow up to
5	that. Do you have an estimated fraction that the
6	manufacturers recommend must leave the standing pilot
7	on?
8	MR. BROOKMAN: Anybody?
9	MS. ARMSTRONG: So his point is that our
10	savings are overstated because there is a fraction of
11	the market that even if you switch to an electronic
12	ignition would still require some type of pilot or
13	some type to remain on.
14	MR. KUPSH: As a control manufacturer I
15	will tell you that every customer we have every
16	fireplace manufacturer who makes a fireplace and uses
17	our IPI system includes a switch to be able to allow
18	the homeowner to deal with issues of cold climate and
19	so every IPI system has this capability, every
20	manufacturer is using it.
21	MS. ARMSTRONG: That's allowance versus
22	I'm wondering what fraction actually recommends, what

	Page 247
1	are the terms for which you recommend because that is
2	what is going to impact our savings.
3	MR. BROOKMAN: Dana?
4	MR. MOROZ: Dana from Wolf Steel. I guess
5	this really demonstrates how this is an evolving
6	technology you know the assumption here that we are
7	talking about today is hey we have got this great new
8	system we could drop it in and save a bunch of gas
9	which is great I love it but the reality is we are
10	trying to make it fit into a system that has a lot of
11	variables that influence it that make it effective or
12	not effective, whereas we are an industry trying to
13	manage and develop that, our suppliers are working
14	with us but there has been no clear answer and this
15	what we call an anti-condensation switch, this
16	accessory really essentially bypass intermittent
17	pilots has become necessary because of the failing of
18	an intermittent system in some applications and so we
19	don't prescribe it, we don't say use it all the time
20	but we need to have it available so when our
21	customers experience the failing of our product using
22	an IPI system there had to be a solution.

	Page 248
1	Our market is very delicate, you know we
2	talk about is it a heater is it not a heater, is it
3	decorative? We have cultivated a market that
4	appreciates the product we have, we can damage it
5	severely if we force technology on to it that isn't
6	effective yet and so this is a step for us, this ACS
7	switch helps us get to that next level but that
8	technology is not here today.
9	MR. BROOKMAN: Okay, we are going to move
10	on.
11	MR. SIAP: So next we have energy prices
12	I'll go over this briefly. The purpose is to develop
13	the average marginal monthly prices by geographic
14	area. DOE calculates these prices by multiplying the
15	current average annual energy prices by the monthly
16	price factors and the marginal price factors. The
17	annual energy prices are listed the sources are
18	listed there for the electricity, natural gas and oil
19	as well as the monthly energy price factors and the
20	marginal energy price factors.
21	MR. BROOKMAN: Steve Rosenstock?
22	MR. ROSENSTOCK: Steve Rosenstock, EEI.

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1	I'm looking at this slide and I needed to double
2	check what about the marginal prices for the propane
3	products, what are those based on?
4	MR. SIAP: The monthly energy price
5	factors for propane LPG is listed there EIA 2009
6	short term outlook.
7	MR. ROSENSTOCK: Steve Rosenstock EEI, you
8	don't have any more recent data to use?
9	MR. SIAP: I believe that's the most
10	recent data, 2012? 2009?
11	MR. CYMBALSKY: We will update it as the
12	EIA puts it out but we use by rule we will use the
13	most recent EIA data so it's not like we are ignoring
14	a more recent year when it comes out we will use it.
15	MR. BROOKMAN: It takes a while for them
16	to assemble it all.
17	UNIDENTIFIED: I've worked there for 20
18	years so I can tell you it's not an overnight thing.
19	MR. DAY: Did we accidentally skip slide
20	51 on installation costs or did I just miss it.
21	MR. BROOKMAN: We didn't skip it but we
22	went quickly through it.

	Page 250
1	MR. DAY: Okay I was just wondering if
2	anybody had to say about it.
3	MR. BROOKMAN: Do you wish to say
4	something about installation costs?
5	MR. DAY: My understanding anecdotally is
6	that the installation costs are and obviously it
7	depends on the product but for fireplace inserts, for
8	gas log sets yeah the installation costs are
9	significant, a significant concern.
10	MR. BROOKMAN: Okay, yes Leslie?
11	MR. BORTZ: Leslie, we provide that to you
12	in our we will provide it to you in our I'll
13	give it to you today but I will provide it to you in
14	the written comments.
15	MR. BROOKMAN: Thank you that's helpful.
16	Thank you Dana?
17	MR. MOROZ: I don't have that information
18	but I can say that in most states and certainly in
19	Canada you require a qualified technician to put any
20	electrical in which now brings a whole other factor
21	another contractor into the installation. I also
22	think in some applications such as inserts or even

	Page 251
1	logs, in some states there might be some conflict as
2	to putting an electrical component in that cavity
3	with the fireplace.
4	MR. BROOKMAN: Okay.
5	MR. SIAP: Thanks, the next slide is the
6	energy price trends. These are the average monthly
7	marginal these are how we determine the average
8	monthly marginal energy prices by geographical area.
9	These price trends come from EIA's AEO 2014 by Census
10	division. After 2040 they are extrapolated according
11	to fed guidelines.
12	The projected energy prices are shown in there for
13	both electricity, natural gas and propane are listed
14	there.
15	MR. BROOKMAN: Steve Rosenstock?
16	MR. ROSENSTOCK: Steve Rosenstock, EEI.
17	Again just for clarification the value shown these
18	are nominal prices not inflation adjusted these are
19	the nominal projections?
20	MR. CYMBALSKY: No they are real prices.
21	MR. ROSENSTOCK: Okay thank you Steve
22	Rosenstock, EEI. Again at least on the electricity

	Page 252
1	side if you look at the EIA data over the last 50
2	years the price for electricity has not increased, it
3	has flat lined or gone down, again if you look at the
4	basically 1960 through 2012 EIA when you look at some
5	of those tables this history has shown at least for
6	electricity that the real prices over time does not
7	increase.
8	So again if it is showing it as real
9	prices increasing again at least on the electricity
10	side it is going to overstate the actual dollar
11	impacts on the electricity side, thank you.
12	MR. BROOKMAN: Yes Leslie?
13	MR. BORTZ: Leslie from RHP. What's your
14	start for residential LP or residential natural gas
15	price? Where do you start from? What's a number, a
16	real dollar number?
17	MR. SIAP: Well the number listed on the
18	slide there at the beginning so for natural gas it's
19	around \$10.00.
20	MR. BORTZ: \$10.00 for what?
21	MR. CYMBALSKY: Per million BTU, straight
22	from EIA. This is not a standards program.

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1	MR. BORTZ: It will be in a couple of
2	months but it is not now.
3	MR. CYMBALSKY: We are not in the gas
4	price forecasting business here in our shop.
5	MR. SIAP: Okay next is the repair and
6	maintenance.
7	MR. BROOKMAN: Let's linger on the price
8	trends just for a moment and see if there are any
9	additional comments there? Okay let's go.
10	MR. SIAP: These are the labor and
11	material required to ensure hearth products
12	operation. DOE did not identify specific maintenance
13	requirements for either hearth product ignition
14	system and we assumed no maintenance cost. The
15	repair costs were equal to the cost of replacing or
16	repairing the failed component because the ignition
17	system is a component of the hearth product. DOE
18	assumed that the repair and the replaced cost are the
19	same so the frequency for this was determined based
20	on warranty information and product lifetime and the
21	cost was equal to the component cost of the module.
22	The results are shown there.

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1	MR. BROOKMAN: Barton?
2	MR. DAY: This is Barton Day a quick
3	question. Did you assume a different repair
4	frequency for electronic ignition versus standing
5	pilot?
6	MR. SIAP: In our research we saw similar
7	warranty information and so we have the same ignition
8	repair year so we have the same failure rate, we
9	welcome comment data on that.
10	MR. DAY: Did you not receive comment
11	indicating that there's a significantly different
12	rate of repair?
13	MR. SIAP: Not yet.
14	MR. BROOKMAN: The comment period is open
15	so go for it. Rett?
16	MR. RASMUSSEN: Rett Rasmussen. I'd like
17	to point out that warranties are more of a marketing
18	tool than an indication of failure of the product.
19	MR. BROOKMAN: Okay Leslie?
20	MR. BORTZ: Our experience with
21	intermittent pilot repair cost is that it didn't take
22	a month. It wasn't 9.6 years and our experience with

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1	safety pilot kits they just about never fail.
2	MR. BROOKMAN: Yeah interesting, we have a
3	comment from Martin Thomas who is joining us online
4	and Martin's comment is when there is a switch on an
5	IPI system it is no longer an IPI and the energy
6	losses will be higher. End users may forget that
7	their fireplace has the permitted pilot set. Okay.
8	MR. KUPSH: Jim Kupsh just a quick
9	question, your intermittent pilot repair costs
10	includes both components, both the valve and the
11	ignition control?
12	MR. SIAP: This is for the entire
13	intermittent pilot that was costed out in the
14	engineering analysis.
15	MR. KUPSH: Because you basically have a
16	valve that is similar in cost in both plus the
17	ignition module and
18	MR. BORTZ: These costs are just
19	MR. SIAP: Thanks. Next is the lifetime
20	which is the age when the hearth product is retired
21	from service. This information was again based on
22	warranty information, manufacturer literature,

	Page 256
1	published studies from lifetime distributions for
2	residential appliances and similar products for the
3	average lifetime. The result is a median lifetime of
4	15 years.
5	Moving on discount rates are used to
6	determine the present value of lifetime operating
7	expenses when a product is retired from service. DOE
8	used data based on interest to return rates for
9	various types of debt and equity to calculate a real
10	effective discount rate for each household. DOE
11	sampled a discount rate that accounts for
12	distribution of 6 income groups.
13	DOE used as its data source the survey of
14	consumer finances from 1995 to 2010 which resulted in
15	an average discount rate of 4.2%. The overall
16	distribution of discount rates as shown there on the
17	bottom by income group and discount rate.
18	MR. BROOKMAN: Steve Rosenstock?
19	MR. ROSENSTOCK: Steve Rosenstock, Edison
20	Electric Institute. Again that discount rate it's
21	nominal or real?
22	MR. SIAP: That one is real.

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1	MR. ROSENSTOCK: Okay.
2	MR. SIAP: Not inflation.
3	MR. ROSENSTOCK: I appreciate that so and
4	again just looking at this chart I know from the
5	technical support document. Because you have such
6	widely scattered data do you know what the median
7	value was?
8	MR. SIAP: I only have the average at this
9	point I don't have it off the top of my head the
10	median.
11	MR. ROSENSTOCK: Thank you.
12	MR. SIAP: Okay finally we have the base
13	case efficiency distribution which reflects the
14	projected market share of the products at the
15	different efficiency levels, standing pilot or
16	intermittent pilot in the base case in 2021. This
17	reflects that not all consumers purchase products at
18	the minimum standards standing pilot and consumers
19	already purchasing intermittent pilot are not
20	impacted by this standard so this used primarily
21	historical model data as well as the data from the
22	engineering analysis.

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1	So the second column there gives the
2	market share for each hearth product type and for
3	each hearth product type the third and fourth column
4	gives the fraction of standing pilot and intermittent
5	pilot.
6	MR. BORTZ: What is this?
7	MR. BROOKMAN: Leslie go ahead.
8	MR. CYMBALSKY: So what this chart
9	explains is that when the standard comes into effect
10	in 2021 we project the market to be already at 42%
11	IPI so the standard effects 58% of the market
12	starting in 2021 of the units being sold.
13	MR. BORTZ: Do you take into consideration
14	that 90% of the outdoor and 50% of the vented are
15	match lit?
16	MR. SIAP: Match lit yes we take both of
17	these adjusted numbers here as well as shipping
18	studies you will see later have match lit just
19	aggregated from them so we don't take into account
20	match lit.
21	MR. BORTZ: Okay because these are the
22	exact same numbers that you have now they are just

	Page 259
1	doubled, you know.
2	MR. DAY: Just quickly the point that I
3	have made previously is that I question whether these
4	numbers are representative now but the main point is
5	that there is a very significant trend line that you
6	are ignoring and I think that certainly for a number
7	of those categories those assumptions just based on
8	the trends on the market are reasonable and you will
9	see far fewer
10	MS. ARMSTRONG: And that's great and we
11	welcome the data you manufacturers have their
12	shipment data and their shipment weighted sales by
13	the different ignition types, we would welcome that
14	type of data and obviously we would use that if we
15	were to do any reanalysis in the absence of providing
16	the data to back-up your claims it's hard to tell one
17	way or the other.
18	MR. DAY: The issue is fairly obvious in
19	some respects as I have indicated. There are major
20	manufacturers who have completely eliminated their
21	use of standing pilot lights already. You know the
22	question is and one of the questions we will come

	Page 260
1	back to this at the end but we are going to need
2	additional time to comment if you want us to pull
3	together data. I mean we have been working on it but
4	the data is not there and it needs to be assembled.
5	MR. BROOKMAN: Leslie?
6	MR. BORTZ: You have seemed to indicate
7	that there is a trend toward IPIs which you are
8	trying to notice in this the trend is there but then
9	you say in all your documentation you saw no trends
10	of anything at all, none. Should I get
11	MR. CYMBALSKY: So provide us with
12	supporting data we will include it in the analysis.
13	MR. BROOKMAN: Next slide.
14	MR. SIAP: Yeah here we have just talked
15	about all of these already so I am going to go to
16	yeah, so okay, here they are. The results are
17	presented here you can see this aggregated the
18	installed cost, future operating costs, and the LCC
19	as well as the payback period for an IPI system and
20	here's the bottom table there shows the results of
21	TSL1 which means the entire standing pilot market is
22	switched over to intermittent pilot.

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1	This takes into account all of the
2	consumers which currently have intermittent pilot and
3	it also takes into account those consumers which
4	would have a net cost.
5	MR. BROOKMAN: Comments on the table, two
6	tables yes Barton?
7	MR. DAY: Barton. Sorry just to clarify
8	what did you assume as the lifetime number?
9	MR. SIAP: So the lifetime was that
10	distribution shown on slide 53 which had a median
11	value of roughly 15 years, 55 sorry.
12	MR. DAY: For all products?
13	MR. SIAP: Yes.
14	MR. CYMBALSKY: John from DOE you can see
15	that the distribution takes us out to 30 years.
16	MR. DAY: For all products, thank you.
17	MR. BROOKMAN: Let's take a break, we have
18	been going almost 2 hours, 10 minutes only so go grab
19	a break to wherever you need to go and get back here
20	okay, which means we will resume at 3:35 by that
21	clock up there.
22	MR. BROOKMAN: Okay we are going to resume

Page 262 1 where we left off. 2 MR. SIAP: Okay so now we are starting 3 with the shipments. 4 Shipments here we go. MR. BROOKMAN: 5 MR. SIAP: Shipment analysis. So the 6 purpose of the shipments is to forecast the hearth 7 products that would be expected to be shipped between 8 2021 and 2050 both with and without energy 9 conservation standard. DOE formulates both the 10 shipment projections and price elasticity. The 11 shipment projections estimate the number of hearth 12 products shipped. 13 DOE has found that historical hearth 14 product shipments are highly correlated with housing 15 starts. DOE uses housing starts as opposed to 16 housing completions because that is the number that 17 AEO provides. DOE does not have housing completions 18 projections. 19 MR. BROOKMAN: Barton? 20 MR. DAY: Just the point that the only 21 product that actually is tied to new housing starts 22 is fireplaces. You know some of the products like

Page 263 1 inserts and log sets, they have to have an existing 2 house to go into and so the you know, the correlation 3 to new home starts for most of these products is 4 pretty random. 5 Okay, yes James? MR. BROOKMAN: 6 MR. HOUCK: Yes I would like to talk about 7 that a little bit. When I read in the federal 8 register the proposed rule that says because DOE 9 observed a strong correlation between housing starts 10 and product shipments you use a 10 year average of 11 the ratio of hearth product shipments to housing 12 starts, along with the forecasted housing starts from 13 AEO 2014 to project future hearth product shipments, 14 I was astounded. That can't be, something is wrong 15 here and I don't know what it is but for a couple of 16 reasons. 17 One is as Barton just pointed out I looked 18 at shipment records from 2009 to 2013 of hearth 19 products and almost half, 48.5% were either inserts 20

21 housing starts.

Another 9% fireplaces and gas stoves,

22

or gas log sets, they have nothing to do with new

	Page 264
1	freestanding fireplaces and gas stoves, typical
2	fireplaces, one normally assumes you know things of
3	as a fireplace. Now I am going to remodeling so
4	there is 57.5% of the products that have nothing to
5	do with new housing starts, that's the first thing.
6	The second thing even ignoring even
7	ignoring that fraction that doesn't seem to be
8	correlatable to new housing starts or at least only
9	in the very general sense, perhaps as the economy
10	gets better I'll just read this paragraph even
11	ignoring retrofitting and remodeling there is a very
12	large uncertainty and inherent in using housing
13	starts to predict new gas heart products, number one.
14	I beg your pardon?
15	MR. BROOKMAN: What is the paragraph from?
16	MR. HOUCK: From me.
17	MR. BROOKMAN: Okay this is from you?
18	MR. HOUCK: Yes.
19	MR. BROOKMAN: Okay.
20	MR. HOUCK: Number one the fraction of
21	fireplaces shipped that are wood fueled, gas fueled
22	or electric which is a reflection of consumer

	Page 265
1	preferences influenced in turn by many economic and
2	social issues historically has changed and most
3	certainly will change in the future. It has changed
4	significantly over the years and one would need a
5	crystal ball to figure out how that would change in
6	the future.
7	Number two the fraction of new homes
8	that have a new fireplace has historically changed
9	and again almost certainly will change in the future.
10	It's over the last decade, a couple of decades, it
11	has gone up and down 10 to 20% I believe it is a slow
12	trend down right now. Again one would have
13	difficulty predicting that in the future.
14	Number three the volatility seen since
15	2005 in new housing starts is yet a prediction of
16	future housing starts is fundamentally uncertain. I
17	don't probably need to dwell on what happened in 2005
18	and 2006 time period.
19	Number four the number of fireplaces
20	installed in multi-family units. Completed in 2013
21	represents only about 1% of the total installed in
22	new housing in that year. A future shift in

	Page 266
1	proportion to single family as opposed to the
2	multi-housing starts will add complexity to a
3	prediction based on new housing starts.
4	MR. BROOKMAN: Okay.
5	MR. SIAP: In addition to shipment
6	projections DOE uses price elasticity to account for
7	the impacts of increased prices due to a standard on
8	shipments. So we will go to housing hearth
9	product shipments prediction method as I stated
10	previously DOE has seen a high correlation in housing
11	starts and shipment projections, correlation
12	coefficient of 0.98. Core 1 is a perfect
13	correlation.
14	DOE then takes AEO's 2014 housing start
15	projections through 2050 and applies the historical
16	ratio seen in the historical data to the shipment
17	projections that allows us to make the hearth product
18	shipment projections and finally the DOE uses price
19	list to account for decreased shipments due to the
20	increase in price in the standard year.
21	MR. BROOKMAN: Barton?
22	MR. DAY: Yeah, Barton Day I was

	Page 267
1	surprised to see that your assumption in terms of
2	price elasticity is that hearth products are like
3	water heaters and other standard home appliances that
4	are present in virtually every home. None of the
5	products we are talking about are present in even
6	half of homes and products like gas log sets and
7	inserts the consumer is sitting there with a
8	fireplace already, you know.
9	It is a highly discretionary purchasing
10	decision and to think that price elasticity I think
11	that that hit on these products from increased costs
12	is going to be a little blip like it would be for
13	products pretty much everyone has to have is
14	completely unrealistic and it reflects a
15	misunderstanding of the market.
16	The presumption at the beginning as well
17	as all of these products are part of one market, no
18	they are not. There's a fireplace market in which
19	gas competes with wood and electric and it is right
20	on down the line for every one of these products. So
21	the cost impact in terms of what that will do to
22	sales I think is seriously out of whack.

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1	MR. BROOKMAN: Steve Rosenstock?
2	MR. ROSENSTOCK: Steve Rosenstock, EEI.
3	And again if you go back to slide 65 where it shows
4	the AEO projection, thank you. As I recall doesn't
5	AEO project a higher percentage of multi-family going
6	to it's going back to 1.4 million, you know a huge
7	increase but isn't the part most of that bump in the
8	increase is really for multi-family building rather
9	than single family building?
10	Because I think that the trend over the
11	last few years has been a rise but the rise has been
12	because of multi-family rather than single family.
13	MR. CYMBALSKY: This is John from DOE. My
14	understanding is the correlation coefficient still
15	holds over the historical time period.
16	MR. ROSENSTOCK: Steve Rosenstock, EEI.
17	Well but the thing is though if it is going to be
18	more multi-family following up with what Mr. Houck
19	said there is a lower likelihood of products going
20	in, that's just the new ones, that is just the
21	fireplaces again.
22	MR. CYMBALSKY: If they had created the

Page 269 1 correlation coefficient on just single family but 2 then applied multi-family starts to it then I would 3 see your point and I don't believe they did that 4 here. 5 MR. ROSENSTOCK: Steve, I was wondering 6 about what they did the correlation to? 7 MR. SIAP: The statistical analysis is 8 pretty clean there but we will take comment if you 9 think there is a better way to correlate it. 10 MR. DIRCKS: This is Peter from HHT. Ι 11 would concur with both of the gentlemen's comments. 12 I mean look at the U.S. Census Bureau data that is 13 where you are looking for some input. They have been 14 tracking incident rates of fireplaces for about the 15 past four years. It's about 50% the last 40 years 16 just on fireplaces, so I think just to kind of to 17 combine all the comments here just to straight line 18 that across all the products I think is an issue I 19 think that Barton raised but in terms of your --20 Steve's comments on single-family versus multi-family 21 that is typically broken on the Census Bureau and it 22 would still be lower than what you are showing here

	Page 270
1	at 50% or less so thank you.
2	MR. BROOKMAN: Thank you. Yes?
3	MR. RASMUSSEN: Rett Rasmussen, nice to
4	see the business cycle has been eliminated and also
5	you know the NOPR talks about a disproportionate
6	impact on gas log manufacturers due to increased
7	price of the product, that there is price elasticity
8	or at least there's consumer demand elasticity based
9	on the higher price that gas log sets would be if
10	they had to go to all electronic ignition systems so
11	I can't see how you can have straight line growth or
12	straight line projected shipments at infinitum.
13	MS. ARMSTRONG: Go to the next slide.
14	MR. BROOKMAN: There's the bump down.
15	MR. SIAP: Okay, the next section
16	(CABLE ON COMPUTER WITH THE POWER POINT'S
17	DISCONNECTED).
18	MR. RASMUSSEN: Rett Rasmussen just for
19	the record my last comment was sarcastic with regard
20	to the business cycle.
21	MR. BROOKMAN: Thanks for clarifying.
22	MR. RASMUSSEN: I just want to clarify for

	Page 271
1	the record.
2	MR. BROOKMAN: Leslie?
3	MR. BORTZ: You say that you haven't seen
4	any difference in trend in multi-family compared to
5	single-family I've got numbers here that show a
6	trend. I will send them.
7	MR. BROOKMAN: Please submit those yeah.
8	MR. BORTZ: Here from the Census Bureau.
9	MR. BROOKMAN: Yes submit them thank you.
10	MR. BORTZ: They are the numbers that you
11	have.
12	MR. CYMBALSKY: All I said is the analysis
13	was done and the correlation coefficient applies. If
14	there is a better method you think we could use feel
15	free to suggest it.
16	MR. BROOKMAN: Barton?
17	MR. DAY: I'm sorry it's not a
18	correlation, there's no causal connection okay it's
19	like predicting the stock market based on skirt
20	length, okay.
21	MR. BORTZ: It works.
22	MR. DAY: It's exactly what it is if you

	Page 272
1	crunch the numbers and get the lines to go together
2	it doesn't mean that there is a correlation.
3	MR. BROOKMAN: We need to move on.
4	MR. DAY: For fireplaces yes, okay but you
5	have to look at each product.
6	MR. BROOKMAN: We have to keep going here.
7	MR. SIAP: So the purpose of the national
8	impact analysis or NIA is to estimate the impacts of
9	an energy conservation standard over the lifetime of
10	the hearth product shipped between 2021 and 2050
11	essentially this takes the LCC and the shipments
12	analysis and provides a national impact analysis.
13	The national energy savings or the NES is
14	the difference in the lifetime energy consumption of
15	hearth products for the base case compared to the
16	standards case and the net present value is the
17	difference in the present value of installed cost and
18	the present value of the operating costs over the
19	analysis period. In the interest of time I will skip
20	to the graphics showing these as opposed to the text.
21	From the shipments here we calculate the
22	energy use in both the base case and the standards

	Page 273
1	case, applying a full fuel of cycles and taking the
2	difference gives the national energy savings.
3	The net present value is formulated
4	similarly, we calculate the operating costs savings
5	in the base case and the standards case, take the
6	difference and that is the cumulative operating cost
7	savings, the difference in the product costs of the
8	base case and standards case gives the cumulative
9	total consumer cost increase.
10	The difference of that discounted to the
11	present value gives the net present value.
12	Okay so the summary of the NIA impact
13	inputs. We went over all of these before except for
14	the full fuel cycle of energy factors which
15	essentially accounts this converts the site of
16	electricity to primary power plant energy
17	consumption, accounting for resource extraction,
18	distribution losses, et cetera.
19	Here are the actual input values for the
20	NIA. Again we went over most of these discount
21	factors 3 and 7% and the base case is 58% standing
22	pilot, 42% intermittent pilot and the standards case

	Page 274
1	distribution will be all intermittent pilot. Just to
2	go over briefly the base case and the standard level
3	how that interacts.
4	The products that are below the standard
5	in this case, standing pilot will roll up to comply
6	with the standard means that they will switch to
7	intermittent pilot. Products and or above the
8	standard will not be affected.
9	Okay so this is the results of the NIA
10	primary national energy savings of .62 quads69
11	quads is the full fuel cycle energy savings. The net
12	present value, discounted at 3% is 3.12 billion
13	dollars in 2013 dollars and the net present value of
14	consumer benefit discount at net 7% is 1.03 billion
15	dollars.
16	MR. ROSENSTOCK: Steve Rosenstock real
17	quick sorry. That's until 2040 or 2050 what's the
18	time?
19	MR. SIAP: Well so that's in the lifetime
20	of products shipped during that year so that's from
21	2021 until the end of life of the last product
22	shipped in 2050.

	Page 275
1	MR. BROOKMAN: Yes Barton?
2	MR. DAY: So it's the 30 years of
3	shipments and then in the 30th year you are going to
4	make up a number, a million of these things and then
5	that 30 year distribution for all of them to die out
6	so roughly you add 30 years to the end, so the last
7	bit of savings after you discount is probably a very
8	small number when you discount over 60 years.
9	MR. SIAP: Yeah it's very small.
10	MR. DAY: This is Barton, I think I feel
11	compelled to point out that you are assuming products
12	absent to rule. The technology for pilot lights and
13	pilot light operation would be exactly the same in
14	2040 as it is today, correct? I mean that's how you
15	are crunching your numbers?
16	MR. SIAP: Yes our distributions are
17	constant with time in the absence of data.
18	MR. DAY: Well I would just point out that
19	if technology were that static I would be preparing
20	comments on a typewriter and sending them in by snail
21	mail.
22	MR. BROOKMAN: Okay thank you, additional

Page 276 1 comments here? 2 MS. ARMSTRONG: So I guess would you like 3 us to -- perhaps the manufacturers can give us 4 information on historical model availability, how 5 their model offerings have changed over time because 6 seeing as you have said over and over at this forum 7 that shipment data is sparse at least for your 8 industry and not actually collected. 9 Certainly they know how their model 10 offerings have changed over time and maybe that's a 11 good proxy of the shift of how potentially models 12 have evolved with technology changes over time. We 13 would welcome that type of data and we would welcome 14 using it in our analysis for the industry. 15 BORTZ: We gave it to you, you don't MR. 16 even have it, we handed it to you. 17 MR. BROOKMAN: Okay we are moving on. 18 MR. SIAP: Okay the last slide in this 19 section is the regulatory impact analysis or RIA 20 slide 76. The purpose is to investigate national impacts of non-regulatory alternatives to the 21 22 mandatory amended energy conservation standard. DOE

	Page 277
1	used a modified NIA spreadsheet to calculate to
2	evaluate several non-regulatory alternatives to the
3	proposed standard listed here including no action,
4	consumer rebates, consumer tax rebates, manufacturer
5	tax credits, voluntary energy efficiency targets and
6	government purchases.
7	DOE calculated the resulting NES and NPV
8	for each non-regulatory alternative and no
9	alternative was found to be as beneficial as the
10	proposed standard.
11	MR. DAY: This is Barton. Since the whole
12	issue here is consumer behavior you know I would
13	suggest that you consider you know public education
14	and information. Consumers have a direct financial
15	interest, they don't have to buy more expensive
16	products, they don't have to have inconvenience or a
17	lack of performance in their products.
18	Pilot lights can be turned on and off.
19	Today many products can have their pilots turned on
20	and off literally with the flip of a switch. The
21	failure to consider the non-regulatory options for
22	dealing with this I think really needs to be

Page 278 1 rethought. 2 MR. BROOKMAN: Thank you. 3 MR. RASMUSSESN: Rett Rasmussen, also with 4 these other regulatory alternatives or non-regulatory 5 alternatives, perhaps there is some of these that 6 would not have the impact on production workers in 7 the gas hearth industry as shown on page 7115 of the 8 NOPR that could lead to up to 58% decrease in the 9 number of production workers and the impacts that 10 that has on employment of the economy and the impact 11 on people's lives. 12 MR. BROOKMAN: Thank you, moving on to 13 manufacture impact analysis. 14 MS. LEWIS: Hi my name is Jessica Lewis 15 from Navigant Consulting and I will be discussing the 16 manufacturer impact analysis or MIA that was 17 conducted in this part of the NOPR. The main purpose 18 of the MIA is to assess the impacts of a proposed 19 standard on manufacturers. A second purpose is to 20 identify sub-groups of manufacturers that may be 21 differently impacted by a standard and to evaluate 22 potential impacts on those manufacturers. In the

Page 279 1 slides that follow I will discuss impacts on two 2 sub-groups, small businesses and manufacturers of gas 3 log sets. 4 And finally the MIA looks at the effects 5 of a standard on factors like domestic direct 6 employment, manufacturing capacity and the cumulative 7 regulatory burden facing the industry. The primary 8 tool DOE uses to conduct the manufacturer impact 9 analysis is a discounted cash flow model known as the 10 government regulatory impact model, also fondly 11 referred to as the GRIM. 12 The major output of the model is the 13 industry net present value or INPV which is a metric 14 used to quantify financial impacts on the industry. 15 As part of the MIA we also conducted interviews with 16 manufacturers which helped us to refine inputs to the 17 cash flow model and to better understand the 18 qualitative effects of the proposed standard. 19 In general the MIA process takes place in 20 three phases. In the first phase we develop an 21 industry profile using publicly available information 22 such as SEC filings and manufacturers' annual

Page 280 1 In the second phase we developed an reports. 2 interview guide to gather targeted information from 3 manufacturers and we also prepare the cash flow 4 spreadsheets used to estimate financial impacts on 5 the industry. 6 In the final phase we conduct interviews 7 with manufacturers and use feedback to further 8 develop and refine the analysis, finalize inputs to 9 the cash flow model and examine the potential 10 qualitative impacts of a standard. 11 To build the cash flow model for the 12 industry we relied on content from several of the 13 analyses that have been discussed earlier today. 14 These inputs include financial and product 15 information from the market and technology 16 assessment, manufacturer production costs from the 17 engineering analysis and annual shipment projections 18 from the shipments analysis. 19 In addition to that we developed two key 20 pieces of information as part of the MIA. The first 21 is a set of multiple manufacturer markup scenarios 22 which allows us to model a range of potential

	Page 281
1	financial impacts on the industry and the second is a
2	set of conversion costs that enable us to account for
3	various one-time costs manufacturers might incur in
4	order to comply with the requirements of the
5	standard.
6	On the qualitative side one of the primary
7	outputs of the MIA is a set of key issues
8	manufacturers raised during the course of interviews.
9	We have touched on most of this today but to walk
10	through quickly. First manufacturers raised concerns
11	regarding impacts on profitability. They indicated
12	that units with electronic ignitions systems tend to
13	be more expensive to manufacture than units with
14	standing pilot lights and expressed concern that a
15	rise in prices can lead to a drop in sales.
16	Second manufacturers indicated that the
17	proposed standard could potentially impact the
18	competitive dynamics of the market. On this front
19	small manufacturers specifically expressed concern
20	about their ability to compete with larger
21	manufacturers who may see advantages when sourcing
22	components for electronic ignition systems at higher

	Page 282
1	volumes and we will discuss that more later.
2	And finally several manufacturers
3	indicated that electronic ignition systems represent
4	a more complicated technology and may be less
5	reliable. On that point several manufacturers
6	indicated that units with electronic ignition systems
7	tend to require more servicing and repair than some
8	of the units with standing pilot lights. Others
9	mentioned factors like we have heard today about how
10	units with standing pilot lights may in some cases be
11	better suited to colder climates and also are able to
12	operate during power outages.
13	Moving on to the next few slides, we will
14	walk through the quantitative analysis in more
15	detail. First as I mentioned one of the key inputs
16	to the cash flow model is a set of markup scenarios.
17	The markup is a multiplier applied to the
18	manufacturing production costs to capture all
19	non-production costs so this includes things like
20	R&D, selling general and administrative expenses,
21	interest expenses and also profit.

22

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1	able analyze a range of potential impact on the
2	industry. In the NOPR we modeled two markup
3	scenarios, the preservation of gross margin
4	percentage markup scenario and the preservation of
5	pre-unit operating profit markup scenario.
6	And the preservation of gross margin
7	percentage scenario represents an upper bound, or
8	less severe set of impacts. It assumes that
9	manufacturers maintain the same markup after
10	standards take effect as they had beforehand which
11	implies that as production costs increase
12	manufacturers are able to raise their prices and
13	increase their operating profit in absolute dollars
14	on a per unit basis.
15	In contrast the preservation of operating
16	profits scenario assumes manufacturers cannot
17	maintain the same markup after standards take effect.
18	Instead they maintain the same operating profit but
19	must reduce their markup in order to do so and by
20	lowering the markup after standards take effect this
21	scenario estimates a more severe set of impacts on
22	manufacturer profitability.

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1	In addition to markups the other key input
2	we developed as part of the MIA is a set of
3	conversion cost estimates to account for any one-time
4	costs manufacturers face in order to comply with the
5	standard. We typically break these costs down into
6	two primary categories, product conversion costs and
7	capital conversion costs and in bottom three rows of
8	this table you can see that we have estimated total
9	industry conversion costs under the proposed standard
10	to be 8.7 million dollars and this consists of
11	\$900,000.00 in capital conversion costs and 7.8
12	million dollars in product conversion costs.
13	Earlier someone raised a question about
14	how we accounted for testing and certification of
15	redesigned models and things of that nature and for
16	many products the requirements the conversion cost
17	requirements of the standard may be heavily focused
18	on new tooling and equipment to fulfill the new
19	requirements for compliant products.
20	In this case as we have all discussed
21	today the proposed standard largely entails a
22	component swap. So the capital conversion costs,

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1	which are one time investments in equipment, tooling
2	and other physical assets are relatively low. We
3	assigned a nominal conversion cost of \$10,000 per
4	manufacturer for any adjustments to their production
5	lines or facilities that they might undertake.
6	And then for the product conversion costs
7	which are one-time investments in things like R&D
8	testing, certification and related costs we reviewed
9	product literature and came up with an estimate of
10	total models available in the industry as well as the
11	percentage of those models currently offered only
12	with standing pilot lights. So many models out there
13	may have an option of electronic ignition or a
14	standing pilot light and we focused specifically on
15	those models only offered with standing pilot lights
16	under the assumption that models offered with an
17	option would not require any further investment in
18	R&D or testing and certification, the standing pilot
19	option would simply no longer be available.
20	So we identified 781 models that we
21	thought would require potential conversion and
22	assigned a \$10,000 per model fee to account for

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1	additional R&D and testing and certification costs.
2	We developed those numbers based on manufacture
3	feedback but certainly we would be very open to
4	further feedback and comment if folks feel that you
5	know there's additional data to share there.
6	MR. BROOKMAN: Yes Dana?
7	MR. MOROZ: Dana Moroz from Wolf Steel. I
8	would like to sideline a moment if I could. I have a
9	plane to catch so unfortunately I'm not going to be
10	able to stay for the rest of this. I wanted to first
11	of all thank the DOE for allowing me to participate
12	today and be part of this. It has been very
13	informative. And I certainly appreciate going
14	through the whole process being a foreign national.
15	You know I think we have all voiced in
16	different ways, I think we all agree with the concept
17	of what is trying to be achieved here and to quote
18	Barton we are not trying to be difficult. There's a
19	lot of data we don't have, our customers don't know
20	what they have and what they don't so it's hard to
21	ask them questions sometimes too.
22	I guess my biggest concern is that we move

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1	forward cautiously. You know this is one of the few
2	domestic industries that is still here. You know we
3	still manufacture in the United States and in Canada
4	but we manufacture here and as much as there is great
5	value in conserving our resources I think it is
6	important to consider the jobs and the impact on the
7	actions that we have.
8	` You know the reliability of
9	the technology I don't think is what everyone expects
10	it to be. Certainly as a manufacturer I can attest
11	to that, that doesn't mean we have given up on it, we
12	have worked diligently because we see the value and
13	we have raised our market share with IPI systems as a
14	result. We hear about new technologies that are
15	being developed to answer those needs.
16	So again thank you and please consider
17	that.
18	MR. BROOKMAN: Okay thank you.
19	MS. WALKER: Excuse me I'm also going to
20	have to leave with Dana. I also express appreciation
21	for being able to participate and look forward to the
22	forward steps.

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1	MR. BROOKMAN: Don't forget your detailed
2	written comments.
3	MS. WALKER: Thank you.
4	MR. BROOKMAN: Gotcha.
5	MS. ARMSTRONG: Sorry I am going to ask
6	one question. For those that have to go please feel
7	free to go and perhaps you can follow up later but
8	over the course of the day we have heard a variety of
9	things that you know this industry is evolving, its
10	moving to a more energy efficiency options. DOE over
11	the analysis period you need to take into account the
12	trends that this industry is voluntarily, there is a
13	good percentage of the market that already is
14	offering EI systems safely and reliably so I guess
15	as a broader, bigger picture question you know
16	what prevents the rest of that industry or that
17	particular are there particular products or
18	categories of products where there are technology
19	issues or I mean in other words.
20	You say it is evolving anyway, you say it
21	is going to get there in time. You say DOE should
22	acknowledge that over time in its analysis period but

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1	yet we are also hearing that DOE, you can't set a
2	standard that adopts it because the technology is not
3	there but yet there are products out there, there's a
4	good percentage of the market doing it so are there
5	certain categories where it is limited?
6	Is there certain categories where it is
7	right for moving to and there are no technology issue
8	I'm just asking you, you know what are those lines?
9	MR. BROOKMAN: Go ahead Rett.
10	MR. RASMUSSEN: Rett Rasmussen. While I
11	spoke in my opening comments about the limitations of
12	electronic ignition systems with gas log sets and I
13	don't see that in five years' time that the issue of
14	having acceptable electronic ignition systems like
15	are used on smaller sets to be able to use on larger
16	sets is going to come on to the marketplace.
17	It's an economic issue that the gas valve
18	manufacturers will not overcome because the volume
19	isn't there to make it economically feasible and
20	rewarding to them to do so so if you were to push
21	this through for larger gas log sets I'm out of
22	business essentially in that and I am not willing to

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1	give up on that easy. I view that I am in the
2	happiness business, I tell my staff that that's
3	what we do, we are in the happiness business so we
4	try to make the best products we can for the market,
5	what they want, deliver it consistently and this is
6	not a happy process so gas logs are definitely there
7	are bright lines there that we just cannot accomplish
8	with what you want to accomplish here.
9	The other side of it too is there isn't a
10	whole lot of fireplaces that are in that large area,
11	but by the same token the folks that put them in they
12	want what they want. They want to be able to enjoy
13	the gas log set like the guy in the lesser house you
14	know in the other neighborhood can do in his house.
15	But you know, so we try to accommodate
16	that because we are in the happiness business and
17	that is how we stay in business is providing products
18	that will with the best available technology for what
19	there is, there are just fewer options as we get
20	bigger.
21	MR. BROOKMAN: Leslie do you want in here?
22	MS. ARMSTRONG: So I think that's really

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1	helpful so thank you for that.
2	MR. BROOKMAN: No, okay Peter.
3	MR. DIRCKS: I also have to leave so I
4	will make a couple of quick closing comments so
5	first of all thank you, this was a step in the right
6	direction to get the dialogue going on the issues so
7	I think this was very productive today and good back
8	and forth.
9	So basically I just want to kind of
10	reiterate my opening comments. You know from our
11	view one of the big things that we came here today is
12	really seeking further clarification on the scope of
13	the proposed rule, delineating the definition of a
14	hearth product to a reasonable range. I think you
15	gave us some insights much more so than we have had
16	before.
17	You have asked for further opportunity by
18	us and the industry to respond and we will do that
19	and I think so of the comments that we have already
20	provided, both written and verbal today has
21	accomplished that and we can do more on that ground.
22	I know a number of us have already given you some

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feedback into some of the specific products that we
would recommend that you eliminate entirely and the
reasons for that so that's fairly logical.
I think in closing you know as I mentioned
before as a manufacturer that has moved to IPI in the
fast majority of our fireplaces we have done that, my
comment earlier this morning was we just simply
object to the proposed standard calling for the
prescription design requirement that would completely
disallow the use of standing pilots for a lot of the
reasons we have already talked about today.
Because we do feel that affects lessening
competition especially by reducing consumer choice
for those use and installation conditions like we
have talked about like "climate" situations that are
real. And then secondly because we are very proud at
HHT of our history of innovation both in safety and
performance and we say that with pride and
humbleness.

And so because of that we really would
 recommend that you be very careful considering
 eliminating future designs and applications where the

1 use of the pilot in a standby mode would still be 2 essential to those designs or applications but we 3 could still design to achieve substantially all of 4 the purported energy savings that you are looking to 5 do because there are companies, large and small, that 6 can still get to that without formal regulation. 7 So with all that in mind thank you and I 8 will just reiterate really kind of the final comment 9 today because this was a step in the right direction 10 that's really why we are you know, asking you to look 11 at the NOPR and treating it as a request for 12 information. You guys have been very helpful in 13 saying that we can provide more information that 14 might aid you in your efforts and I think that's why 15 at the outset this morning I request that the April 16 10th deadline be extended so that we could possibly 17 do that. 18 Help you in how you want to shape this for 19 the betterment of all, so thanks very much. 20 MR. BROOKMAN: Frank Stanonik. I don't 21 think we are quite ready to close yet but Frank keep

going.

22

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1	MR. STANONIK: I was assuming everyone had
2	to leave and giving their closing remarks. Just
3	something that I wanted to point out on this question
4	of the industry net present value.
5	MR. BROOKMAN: Thank you for bringing us
6	back.
7	MR. STANONIK: And although the analysis
8	here seems relatively mild I can't help but notice,
9	and I would hope the DOE notices that in this
10	particular case in the shipment information you have
11	been given, this industry in the last 8 years is
12	still in an extremely rough ride. I just looked at
13	the numbers and it almost bottomed out where the
14	shipments were about almost one fifth of what they
15	were at the peak in '05 or whatever year you started
16	with.
17	And so my point of that is I started with
18	this because I was trying to see what you are
19	projecting for future shipments but my point is that
20	in this particular case I think it is worth noting
21	that again the shipments for this product have in the
22	last 8 years have decreased significantly and so for

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1	the people, especially most of them being small
2	businesses to even suggest any kind of change where
3	there is a negative impact on a net present value is
4	a lot worse than let's say where they have been
5	having average shipments for the last 7 or 8 years or
6	maybe even a couple of high years, they are in a very
7	different situation that I think warranted special
8	consideration.
9	MR. BROOKMAN: Thank you, Leslie?
10	MR. BORTZ: I would just like to make sure
11	that we get to the environmental
12	MR. BROOKMAN: Right I was going to
13	suggest that we press on here, okay just to get
14	through the rest of these slides.
15	MS. LEWIS: Okay so just quickly as the
16	results demonstrate we estimated a range of impacts
17	on INPV between negative 2.6 and 0.4 percent for the
18	industry.
19	MR. SKOLNICK: You can sit at the table.
20	MR. RIVEST: This is Mike Rivest, Navigant
21	Consulting. I'm always a little concerned when I see
22	that the magnitude of the impacts is not consistent

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1	with the magnitude of the reaction of the
2	manufacturers. So there are three drivers to the
3	manufacturing impacts. There's the magnitude of the
4	investments that are needed to comply to the
5	regulations so that's the capital costs, the figure
6	of 8.7 million dollars that Jessica mentioned.
7	It would be really important that we get
8	that number right so the figures that were mentioned
9	earlier about the \$10,000.00 of product R&D and
10	certification, you know, that is something that we
11	would definitely like to have comment on. The other
12	big driver is shipments. I saw some reactions
13	earlier to price elasticity and you know to the
14	extent that we can have comments on your expected
15	change in shipments due to the price changes that we
16	are anticipating and the rationale for those changes,
17	that would be very useful because that's a key driver
18	to the manufacturing impacts on the log sets in
19	particular if the prices are going to go up, your
20	comments?
21	All right but
22	MR. BORTZ: But you got it.

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1	MR. RIVEST: Navigant got it from you.
2	MR. BORTZ: Yeah.
3	MR. RIVEST: But I think what we need is
4	to have something to the docket from a broader
5	spectrum of the industry and then have Lawrence
6	Berkeley National Lab you know prepare their
7	shipments analysis okay. Really the other well
8	you guys have been repeating stuff all day I can
9	repeat a little bit too.
10	MR. BORTZ: Just as long as get to Jim's
11	comments because he has got some important stuff to
12	say.
13	MR. RIVEST: All right I have nothing more
14	to say, thank you.
15	MR. BROOKMAN: Okay we are going to return
16	to Jessica who will press on and take comments as we
17	go along and we will make sure we get to Jim's
18	comments on emissions Jessica?
19	MS. LEWIS: Thank you. Another thing to
20	note about these results is that they are intended to
21	capture impacts on the industry as a whole and don't
22	necessarily reflect differential impacts on different

Page 298 1 subgroups of manufacturers or individual 2 manufacturers. 3 MR. BROOKMAN: Before you move on Mike 4 made a special plea for comments on conversion costs 5 and also anything additional in shipments, so let's 6 see if there is anything additional at this time on 7 those subjects before we move on. Yes, Rett? 8 MR. RASMUSSEN: Rett Rasmussen. My 9 company has never been faced with having to make such 10 a drastic change in a relatively short period of 11 time. I don't know what it is going to cost and I'm 12 one of the more sophisticated, more experienced guys 13 in the industry with regard to design of product. 14 There's a whole host of other guys that are newer to 15 the industry or not very good at what they do already 16 without having to go to something as sophisticated as 17 electronic ignition systems. 18 You know, I don't know and here's the gas 19 There's a whole lot of other folks out log guys. 20 there, we are the ones that are here. I welcome you 21 to try to get the data out of them. As far as 22 shipments go the same thing I you know, who knows

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1	what it is going to be, it's a crap shoot, we have
2	never been down this path before and as far as data
3	goes it's not what our companies do, that's what you
4	guys do, you guys are in the numbers business on
5	that, our numbers are sales of product, shipping
6	product, manufacturing product, but it is based on
7	consumer demand and not you know, as far as
8	projecting out, it is making sure we have enough to
9	go for the next couple of months of raw materials,
10	not necessarily way down in for what you are doing, I
11	don't know, the data doesn't exist, that's the
12	problem.
13	MR. BROOKMAN: Yeah go ahead Leslie?
14	MR. BORTZ: I'm sorry I can't get all
15	three things together at one time. Cost, you
16	mentioned \$10,000 as a cost number that was
17	discussed. We have mentioned that the cost of
18	certification alone is 12 to 15 thousand dollars for
19	each product and we have an ANSI certified lab which
20	costs us a lot of money and Rett doesn't.
21	Most gas log guys don't so the cost is
22	going to be a heck of a lot more than \$10,000.00.

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1	MR. BROOKMAN: Thank you
2	MR. BORTZ: \$16,312.00.
3	MR. BROOKMAN: Jessica?
4	MS. LEWIS: Thank you so to jump ahead and
5	look at some of the impacts on subgroups of
6	manufacturers DOE first looked at the impacts on
7	small businesses. Out of 90 total hearth
8	manufacturers identified, DOE identified 66 as
9	domestic small businesses. This classification is
10	based on the Small Business Administration's small
11	business size standards which set a cap of 500
12	employees or fewer for a manufacturer in the hearth
13	industry to be considered a small business.
14	We use publicly available information to
15	research small business, contacted small businesses
16	directly and also asked other manufacturers for
17	information about small business during the course of
18	interviews. As mentioned repeatedly over the course
19	of the day manufacturers have expressed concern that
20	a standard eliminating standard pilot lights would
21	impact their ability to compete with large
22	manufacturers.

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1	This concern stems largely from a
2	difference in purchasing power between small and
3	large manufacturers and the idea that because large
4	manufacturers produce at higher volumes they would be
5	able to source components at a lower per unit price.
6	To evaluate these concerns we modeled the
7	difference in cost that small manufacturers might
8	face when sourcing electronic ignition system
9	components at lower volumes. The regulatory
10	flexibility analysis included in section 6B of the
11	NOPR and also discussed in chapter 12 of the TSD
12	presents the results of that analysis and in short it
13	suggests that a standard eliminating standing pilot
14	lights could lead to a higher increase in per unit
15	MPC's for manufacturers producing at lower volumes
16	relative to manufacturers producing at higher
17	volumes.
18	Would anyone like to comment on that
19	before I move on to the discussion of gas log set
20	manufacturers, yes?
21	MR. GOLDMAN: Yes this is Jack Goldman of
22	HPBA. I guess this comment was made earlier but I

Page 302 1 guess we would like to know who the other large 2 manufacturers are, we count one or two and I'm the 3 trade association president, I know my members, I 4 know the players in the industry I just don't know 5 who those other companies are and I think if a third 6 of the companies are considered large and they are 7 really just one or two I think it really changes the 8 results of this analysis so I would like to know who 9 they are. 10 MR. BORTZ: Who are of the --11 MR. GOLDMAN: The 22 large companies. 12 They actually have a list and MR. BORTZ: 13 some of the 90 that they had at the beginning were 14 foreign owned companies. 15 MS. LEWIS: That does include foreign 16 manufacturers. 17 MR. GOLDMAN: Even with that I don't see 18 the numbers. 19 MR. BORTZ: Well I said that the number is 20 more like 3,000 entities affected by it and I changed 21 my mind now I think it's more like 4,000 and I am 22 being honest, Leslie Bortz again. By 90 is a

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1	specific number that you have, I went through it and
2	there were so many that were large, and there are so
3	many that were foreign and you came up with 66 out of
4	90, that part is right, the 90 isn't right.
5	MR. BROOKMAN: Okay thank you Leslie,
6	yeah?
7	MS. LEWIS: Thank you.
8	MR. GOLDMAN: Where is the list?
9	MS. LEWIS: The list is published in I
10	believe chapter 3 of the technical support document
11	and to clarify how we determine the number of
12	manufacturers, we are focused on manufacturers of the
13	final product that would be tested and sort of
14	certified to comply with this standard so we are
15	looking at manufacturers of a gas fireplace or a gas
16	log set as opposed to the components.
17	We also don't count multiple subsidiaries
18	of the same parent company, some manufacturers may
19	have a wide variety of brands but we would only count
20	those based on the one parent company.
21	MR. GOLDMAN: If a large company in Europe
22	sells a little bit in this country are they

Page 304 1 considered a large manufacturer for this analysis? 2 MS. LEWIS: They would be. 3 That's just absolutely MR. GOLDMAN: 4 wrong. 5 MS. LEWIS: Well I would definitely invite 6 you to look at the list included in chapter 3 of the 7 TSD and please come back to us with comments you know 8 if you feel we have mischaracterized anything. 9 MR. GOLDMAN: There are two major European 10 companies that sell in the U.S. through U.S. 11 subsidiaries and they aren't major and their U.S. 12 operations are small. And that's it, after that 13 there might be a company that sells a handful of 14 stoves and if they are considered large and not 15 affected then the effect you are having is to have 16 more foreign ownership and production of stoves at 17 the cost of U.S. operations. I just think if that is 18 your assumption you are absolutely false. 19 MS. ARMSTRONG: So I don't think anyone 20 this is Ashley, I think you mischaracterized that 21 because I don't think we are saying they are not 22 going to be affected, I don't think that's fair to

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1	say that the Department's analysis at all suggests
2	that, it is just that we are required to look
3	specifically at small businesses and the small
4	businesses are set up by definition and the
5	definition is not something that DOE creates of
6	itself, it is something that is a size standard that
7	is created by SBA and includes subsidiaries and all
8	that kind of stuff, it has nothing to do with sales.
9	So I'm not here to argue with you.
10	MR. GOLDMAN: I've resisted saying this
11	MS. ARMSTRONG: Please let me finish
12	because I sat here and let you finish all day.
13	MR. GOLDMAN: I've spoken twice.
14	MS. ARMSTRONG: Well you don't have to be
15	rude.
16	MR. GOLDMAN: Oh so I'm rude, you have
17	never been rude today?
18	MR. BROOKMAN: Let's let Ashley finish,
19	let's let Ashley finish, go ahead.
20	MS. ARMSTRONG: My point was that we have
21	our list, its publicly available we would welcome
22	your input on it but it has nothing to do with sales

Page 306 1 so that is all I was trying to say and clarify. 2 MR. BROOKMAN: Jack do you wish to 3 continue? 4 MR. GOLDMAN: I think if you had talked 5 with us at our offer to talk with you years ago we 6 wouldn't be having this discussion now. 7 MR. BROOKMAN: Okay I'm going to take 8 final comments here because we have to get through 9 the rest of these slides, Rett? 10 MR. RASMUSSEN: Yes on the list that is in 11 chapter 3 you have either got a single asterisk, two 12 asterisks or no asterisk. It shows that all the 13 foreign manufacturers therefore would be -- or you 14 didn't classify them by size or they are all large 15 manufacturers according to your asterisk chart here, 16 the way that you have applied the asterisk, so I 17 would find that that is probably hard to believe that 18 every foreign manufacturer is greater than 500 19 employees. 20 MS. LEWIS: I believe most of them were 21 large, I don' t know the number off the top of my 22 head and I think often it has to do with a parent

Page 307 1 company so you have a smaller subsidiary that might 2 in itself appear to be a small company but it is 3 owned by some multi-national firm. 4 MR. BROOKMAN: I think we are gaining 5 ground on this --6 MR. RIVEST: Mike Rivest isn't the issue 7 -- excuse me. 8 MR. BORTZ: Take a look at my list of 9 3,000 and you will decide how many there are but 10 there are more than 66 names that are going to be 11 seriously affected by this rule. 12 MS. LEWIS: And the last point to that is 13 that 66 also does exclude distributors and retailers 14 and that may account for part of the difference in 15 the numbers we are discussing. 16 MR. BORTZ: That causes a big jump of 17 making up the difference there are still entities 18 that will be affected by this rule, whatever you call 19 them they are still businesses, small businesses in 20 the United States. 21 Thank you, moving on to the MS. LEWIS: 22 subgroup analysis for manufacturers of gas log sets.

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1	In researching the market we identified 23 gas log
2	set manufacturers including 17 small businesses
3	during interviews manufacturers stressed that gas log
4	sets represent a distinct market segment.
5	MR. BORTZ: Wait a second I'm sorry.
6	MS. LEWIS: Unlike many other hearth
7	products they are designed for use in existing wood
8	burning fireplaces. They compete with wood and wax
9	logs and unlike some other hearth products as we have
10	discussed today their sales do not follow trends in
11	new housing construction.
12	Manufacturers also noted that electronic
13	ignition systems take up more space than standing
14	pilot lights and cannot be as easily concealed in gas
15	log sets which are not sold as part of packaged units
16	in the same way many other products are.
17	Manufacturers also indicated that electric
18	outlets may not be located in close enough proximity
19	to existing wood-burning fireplaces to easily
20	accommodate installation which could require the use
21	of batteries or extension cords or else drive up
22	installation costs.

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1	Finally manufacturers expressed concern
2	that a transitione to electronic ignition systems
3	could drive up the price of gas log sets and in doing
4	so lead to a decline in consumer demand.
5	To address that concern we looked at the
6	increase in MPC that a switch to electronic ignition
7	systems would likely entail. This table shows the
8	percentage increase in MPC for different types of gas
9	hearth products estimated to result from a switch
10	from standing pilot light units to units with
11	electronic ignition systems and as we can see impacts
12	are most severe for gas log sets, for vented gas log
13	sets we are looking at an increase of 37% of MPC, for
14	unvented gas log sets, 27% of MPC which compares to
15	9% and 11% increases for vented and unvented
16	fireplaces, inserts and stoves respectively.
17	Outdoor hearth products also fall in the
18	same range as the gas log sets however there were a
19	few factors that would likely mitigate impacts on
20	outdoor hearth products including the fact that they
21	would have the option to transition to less expensive
22	matchless systems which unvented gas log sets are not

Page 310 1 allowed under ANSI standards. 2 At this time I would like to request 3 comment and feedback on this analysis or anything 4 else we discussed as part of the manufacturer impact 5 analysis. 6 MR. BROOKMAN: Leslie. 7 MR. BORTZ: Leslie. It says that your 8 vented gas log set price of going up 37% our price is 9 up by 71%, that's our price on our price list, that's 10 what we charge. We are not in business to overcharge 11 for stuff because they we can't sell it. Our price 12 is up 71% for doing that. 13 MR. BROOKMAN: Okay thank you. Additional 14 comments before we move on? 15 MR. BORTZ: Which doesn't include the cost 16 of installation which is probably another 250 bucks 17 or more additionally, the price has more than 18 doubled. 19 MR. BROOKMAN: Yes Rett? 20 MR. RASMUSSEN: Rett Rasmussen. I would 21 like to bring up that the incremental -- when you buy 22 a car they sell you on the base and then they go up

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1	in incremental amount to sell you the sport package
2	or the luxury package or things like that and your
3	incremental cost to go to that additional benefit is
4	a small portion. You have already been sold on the
5	big part.
6	The problem you have with unvented gas log
7	sets is right now they have manual safety controls,
8	millivolt controls with wall switches, go up to
9	remotes and then electronic ignition. This proposal
10	would take then from zero not buying an unvented gas
11	log set to the full enchilada up to with an
12	electronic ignition system.
13	With vented gas log sets some people will
14	be able to continue to buy natural gas, match lighted
15	ones and then make the full leap to electronic
16	ignition systems. For propane vented ones they are
17	in the same boat as the vent free propane ones, it's
18	all or nothing so you don't have that ability to ease
19	somebody into the higher price.
20	That is going to severely impact the
21	consumers buying decisions because they have to
22	swallow the big pill. Some of the other savings that
16 17 18 19 20 21	ones and then make the full leap to electronic ignition systems. For propane vented ones they are in the same boat as the vent free propane ones, it's all or nothing so you don't have that ability to ease somebody into the higher price. That is going to severely impact the consumers buying decisions because they have to

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1	come up as far as you know environmental savings and
2	this and that, that's not money that they can take
3	off of the purchase price that's just vapor savings,
4	that has nothing that influences consumer choice and
5	consumer demand, thank you.
6	MR. BROOKMAN: Leslie, keep that
7	microphone close.
8	MR. BORTZ: We answered a question from
9	Navigant how would energy conservation standards
10	impact the companies' manufacturing capacity in both
11	the short and long term. In the short term we would
12	have a lot of excess capacity and in the long term we
13	would likely be out of business.
14	MR. BROOKMAN: Moving on to emissions
15	analysis and James is this where you want to comment?
16	MR. HOUCK: Yes.
17	MR. BROOKMAN: Get ready.
18	MR. ROSENQUIST: I am Greg Rosenquist
19	stepping in David Siap who had to catch an airplane.
20	Next analysis is the emissions analysis. This is
21	where we take energy savings from the national impact
22	analysis and convert them to emission savings for

	Page 313
1	carbon dioxide, NOx, N20 methane, SO2 and mercury and
2	we do this by DOE does this by looking at the annual
3	energy outlook and deriving emission factors for each
4	one of these emissions that you see there.
5	This is the results of the analysis this
6	is the amount of savings that come as a result of the
7	energy savings that we will calculate from the
8	national impact analysis.
9	And then the next step is to
10	MR. BROOKMAN: James, please.
11	MR. HOUCK: James Houck. The reason that
12	I am sort of slow to start I don't know where to
13	start it is so complex and there is so much
14	information here but I will say this. I would ask
15	you why are we doing this, what is the most important
16	thing here and I say what's paramount is human health
17	and welfare. This has been neglected in this role.
18	Air quality as measured by the standard
19	air quality metrics in the United States has this air
20	pollutants criteria air pollutants, climate change
21	agents will all be impacted negatively by this rule.
22	And going along with this will be the health and
18 19 20	Air quality as measured by the standard air quality metrics in the United States has this air pollutants criteria air pollutants, climate change

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1	safety not really the air quality, but the health and
2	safety of residential occupants and I'll explain why.
3	Really there are two categories of hearth
4	products here. There is a gas log sets and the gas
5	fireplace inserts at least for this analysis on air
6	pollution there is two categories. These are
7	retrofitted in the wood burning fireplaces if you got
8	a gas log set you should put it into a wood
9	fireplace. No longer do you have a wood fire, now
10	you have a gas fire that's one category.
11	The other category are free-standing
12	fireplaces sometimes called gas stoves and also the
13	traditional gas fireplace everything thinks about
14	wall mounted or inserted into the wall. In the
15	future these are in new homes or remodeling. A
16	consumer has a choice, they can choose wood or they
17	can choose gas results in some electric, but
18	primarily the two choices are wood and gas.
19	So if a person does not choose gas the
20	alternative is probably wood. We have all heard
21	today that this is going to cause a significant
22	increase in the cost of particularly gas log sets but

	Page 315
1	other gas hearth appliances as well. Therefore a
2	consumer, like most consumers, are going to be
3	discouraged in purchasing a gas fireplace in a new
4	construction or retro-fitting their existing wood
5	fireplace.
6	Now why is this important? The emissions
7	from solid fuel combustion, solid fuel fireplaces are
8	dramatically, dramatically higher than they are from
9	gas appliances. This is why they are recognized by
10	many state and local air quality regulators, many of
11	them either specifically require, encourage, specify
12	whatever adjective you would like for people to use
13	gas fireplaces rather than wood fireplaces.
14	So when I saw in the federal register in
15	addition the proposed hearth products standards would
16	have significant environmental benefits I kind of
17	went oh my goodness this is not right.
18	Specifically in terms of health impacts is
19	fine particles. Now this has been a big issues in
20	the United States and is often referred to as PM2.5.
21	A number of state and local regulatory agencies are
22	struggling with obtaining national ambient air

Page 316 1 quality standards. 2 A national air quality standards are 3 mandated under the Clean Air Act. U.S. EPA requires 4 state and local air quality jurisdictions to obtain 5 national quality standards. They are required to 6 come up with the state implementation plan if they 7 don't and a maintenance plan if they are marginal. 8 Frequently again frequently state and 9 local air quality agencies say you should you have 10 to, again there are various adjectives as a way to 11 discourage wood burning and encourage gas burning 12 because they all recognize that the air quality 13 issues associated with wood is more serious than gas. 14 So criteria pollutants, okay criteria 15 pollutants are set forth under Section 109 of the 16 Clean Air Act, 40 CFR Part 50 requires the 17 administrator of the EPA to do things about it, I'm 18 simplifying things because I know we are all tired 19 here. There are 6 criteria air pollutants two of 20 which are very important here and one is carbon 21 monoxide and the other as I alluded to is fine 22 particles.

	Page 317
1	I managed to work and there is very little
2	work out there, we actually compared in a realistic
3	fashion air emissions from wood combustion fireplace
4	used in a typical fashion and gas combustion in a
5	typical fireplace, actually several fireplaces and we
6	found that again consistent with pretty much
7	everyone's intuitive understanding that there were
8	148 times more carbon monoxide emitted in a typical
9	fireplace used with wood burning wood than there was
10	with natural gas.
11	And amazingly, amazingly 568 times more
12	particles, fine particles emitted from wood
13	combustion than with natural gas and even more
14	significant particles fine particles less than 2
15	and microns that are produced from combustion are
16	very small particles, they are sub-micron, they call
17	these sub-microns and those are the most health
18	injurious of all particles.
19	So wood combustion in the fireplace turns
20	to criteria pollutants, again regulated in the Clean
21	Air Act, a problem for many state and local air
22	quality jurisdiction, widely recognized as an impact

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1	to human health and welfare are going to be very
2	negatively affected by this proposed rule, simply
3	because people are going to choose less gas
4	appliances because they are going to cost more and I
5	would argue what I am hearing of gas log set with
6	some kind of unattractive box they are going to be
7	less attractive.
8	The criteria pollutants are just one, the
9	other is hazardous air pollutants, known as HAPS, the
10	acronym HAPS that is also defined under the Clean Air
11	Act, actually the Clean Air Act Amendments of 1990,
12	at Section 122 and I'll read this sentence because it
13	is easier to read it:
14	HAPS are also known as toxic air
15	pollutants or air toxins and are those air pollutants
16	that cause or may cause cancer or other serious
17	health effects, such as reproductive effects or birth
18	defects or adverse environmental and ecological
19	effects.
20	Originally the list was 187 that has gone
21	up and down a little bit. Many of them are organic
22	compounds and I know most of you are not organic

	Page 319
1	chemists but when you look at the chemical makeup of
2	wood, cellulose, lignin, hemicellulose, resins you
3	would expect a number of the compounds specifically
4	listed on the HAPS list to be emitted by the
5	incomplete combustion of wood and this includes and
6	you will recognize some of these as bad actors:
7	Cetalaldohyde, benzene, catechol, cresol
8	(o,m and p) dibenzofurans, ethyl benezene,
9	formaldehyde, hexane, methanol which is also known as
10	wood alcohol by the way and there is a reason for
11	that name, naphthalene, phenol, propionaldehyde,
12	styrene, toluene, xylenes (o,m,p) isomers and
13	polyclic organic matter.
14	And that's just a few. EPA selected this
15	list because these are the kinds of things that are
16	common and common industry in North America but I
17	would always say there are more of any compounds than
18	there are stars in the universe so there would
19	probably be many other toxic air pollutants, organic
20	compounds emitted from wood combustion that are not
21	on this list.
22	We specifically measured some of these

Page 320 1 HAPS compounds. Formaldehyde there were 64 times 2 more masses of formaldehyde emitted from wood 3 combustion than there was gas combustion, 13 times 4 more benzene and 107 times more of polyclic organic 5 matter. 6 Again as I noted that there is both --7 there are many organic compounds that are on the list 8 that are toxic and these would be in a particular 9 phase or in the vapor phase and petition between the 10 two. As I noted there was 568 times more particles 11 emitted, particles, wood combustion are 70 to 90% 12 organic compound saw a lot of them are in there and 13 also we measured vapor in this test and there was a 14 parameter called non-methane vault or organic 15 compound MVOC and we found that there were 30 times 16 more mass of MVOC emitted from wood combustion then 17 there was from gas combustion. 18 So the two regulatory metrics of local air 19 quality degradation compound pollutants that are 20 found in the United States unquestionably residential

wood combustion emits a tremendous amount more.

Now climate change, well climate change in

21

22

the past people have said well you know buy a mass combustion the carbon dioxide emitted from that is biomass neutral people plants photosynthesis it and take it back. That may be true there is some argument on that.

6 Also methane is 80% excuse me natural gas 7 is 80% to 90% methane and so people say well there is 8 periods of losses from natural gas, notwithstanding 9 the fact that there might be a credit for the carbon 10 dioxide from biomass combustion and that methane from 11 the leakage of our transmission system of natural gas 12 may contribute to greenhouse gas, still wood 13 combustion in a fireplace produces more of a climate 14 impact than does natural gas combustion.

15 And the reason being recent and I say 16 recent in the last decade recognition that black 17 carbon is a serious greenhouse gas agent and it's a 18 pretty complicated story but I refer anyone who wants 19 to research this EPA's 2012 report to Congress on 20 black carbon which is readily available on the web 21 gives a pretty good description of the whole issue. 22 One thing I want to point out though that

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Page 322 1 may not be apparent in reading this document is there 2 are two reasons that black carbon is considered a bad 3 greenhouse gas actor. One is basically absorption of 4 energy because it is black in the atmosphere. The 5 other is changing to snow, makes snow black and that 6 causes light energy to absorbed rather than to be 7 reflected. This is particularly relevant and bad for 8 residential wood combustion because a smokestack 9 chimney from a fireplace is close to the ground, it's 10 15 to 30 feet off the ground and by the very nature 11 fireplaces are often used where there is ice and snow 12 so you have something that directly impacts the ice 13 and snow and it is there when the ice and snow is 14 there. 15 So I would argue that the black carbon is 16 even a bigger issue than one would thing from 17 residential fireplace combustion, so that's the air

quality issues. But hand in hand with that is there is home safety. And I cite from the notes here the National Fire Protection Association, in their document which again you could find there are many of them on the web you can find.

	Page 323
1	In the time period 2004 to 2008 they cited
2	26 times more structural fires from solid fuel
3	fireplaces than they did from gas fireplaces. The
4	primary reason is creosol accumulation. The very
5	same thing that produces fine particles produces
6	organic vapors that condense on the walls of a
7	chimney when a chimney is cold and I think many of
8	you have heart of chimney fires and that's what
9	causes the structural fires.
10	Now this 26 times more structural fires is
11	real because when you add up the number of using VO
12	numbers, the number of fireplaces that are used for
13	secondary heat that are natural gas and propane it's
14	pretty close the number of wood fireplaces used for
15	secondary heat, so there is 26 times more fires is a
16	pretty good reflection of the bigger risk in terms of
17	safety in the home.
18	That 22,500 fires caused 17 that's what
19	the number is for residential wood combustion, 22,500
20	fires caused 17 civilian deaths, 96 civilian injuries
21	and 172 million dollars in direct property damage as
22	compared to the 860 fires that were caused by natural

Page 324 1 gas fireplaces which was 0 civilian deaths, 13 2 civilian injuries and 30 million dollars in direct 3 property damage. 4 And then there is one more thing and it 5 relates to the air quality. Because residential wood 6 combustion produces much more air pollutants and 7 because you have with a wood fire place an open 8 chimney situation where you have a smoldering fire at 9 the end of the burn the draft lessens as the fire box 10 temperature cools yet you are still producing 11 particulates and carbon monoxide, particularly carbon 12 monoxide. 13 And anecdotally and I can finish this up 14 when you go to a person's home that has a wood 15 fireplace you often smell the wood smoke smell, 16 that's a manifestation of the back spill of 17 pollutants into the home, thank you. 18 MR. BROOKMAN: Okay thank you yes Leslie. 19 MR. BORTZ: Can I ask Jim was some of that 20 work done on our products? 21 MR. HOUCK: Yes this is Jim Houck, yes it 22 I can tell you the brief specifics there were 3 was.

	Page 325
1	different natural gas products and 1 LPG product that
2	was compared against residential fireplaces.
3	MR. BORTZ: I can only say that in our
4	products he didn't use enough wood to compare it to
5	because 11 - 15 pounds or whatever it was a small
6	amount of wood a guy who builds a real fire builds it
7	with 18 to 20 pounds of wood so his number is off by
8	another third there would be much more problem with
9	wood.
10	MR. BROOKMAN: Okay.
11	MR. BORTZ: Because a guy who builds a big
12	fire doesn't build an 11-15 pound.
13	MR. CYMBALSKY: So this is John from DOE
14	and I want to thank you for that that was actually
15	informative to me. Getting back to I think the part
16	of the argument you made that is of most interest to
17	our analysis is the presumption that the wood and the
18	gas are perfect substitutes for one another.
19	So my question to you is you have
20	mentioned how the maybe not so much for log sets, but
21	the industry has been moving towards the ignition and
22	we have gone through some periods lately where

Page 326 1 natural gas prices have had some pretty big ups and 2 volatility to say the least. Some years it was 3 really, really high gas prices in the not too distant 4 past. 5 I was wondering if you can correlate these 6 economic impacts to your consumers with switching 7 from wood to gas over that same time period so that 8 we could potentially build this sort of fuel 9 switching model that you are suggesting by you know 10 making the price of your product a little bit more 11 expensive. The presumption is they will switch to 12 wood but I guess I would like to know how or if you 13 have data or anything like that to support it. 14 MR. BROOKMAN: Leslie? 15 MR. BORTZ: I have data on our sales and 16 there is no correlation at all that I can see. 17 MR. CYMBALSKY: Very helpful. 18 MR. BORTZ: The correlations that I saw 19 were after September 11, 2001 the whole place shut 20 down but after events Sandy whatever where ice 21 storms, whatever we would get a big pickup in sales 22 of both vented and unvented, I think probably more

Page 327 1 unvented logs because of 2 MR. CYMBALSKY: The lack of electricity or 3 4 MR. BORTZ: But I don't see any 5 correlation. 6 MR. CYMBALSKY: And that was my question 7 to press or to build in a fuel switching model would 8 be nice to have some economic behavior that suggests 9 that that actually exists because my thinking with 10 the wood is that it is generally not marketed in the 11 people that are using wood primarily are in areas 12 where they are not actually paying for the fuel, they 13 have wood at their disposal so. 14 MR. BORTZ: Go out and take a look at the 15 people who are selling wood. 16 MR. CYMBALSKY: No there are some but I 17 think there has been a long trend of that declining 18 here in the northeast anyway. 19 MR. BORTZ: Wood burning fireplaces. 20 MR. BROOKMAN: Jim do you want to make an 21 additional comment? 22 MR. HOUCK: Yes in response to that.

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1	MR. CYMBALSKY: Again it's just another
2	data request. I'm not saying what you are saying is
3	incorrect I'm just I would like to see some data
4	that would allow us to actually do an analysis over
5	the fuel switching here because we do it for other
6	products because we see it.
7	MR. BORTZ: You want data that shows.
8	MR. CYMBALSKY: I mean HEA a long time
9	ago, because you know I have been in this business I
10	hate to say it for over 25 years now, they used to do
11	a fuel switching survey that actually included wood
12	and natural gas and they did look at fireplaces as
13	well at one point in time.
14	MR. BORTZ: I think that when gas is
15	plentiful and as you know since the beginning of the
16	1970's gas has been either going to be out of
17	there's going to be no gas in three years or we are
18	going to have 100 years supply or there's no gas, you
19	know it has gone up and down.
20	Obviously when gas is plentiful it is
21	easy, you get more buy because the gas companies want
22	it.

	Page 329
1	MR. CYMBALSKY: And I think for the
2	consumer it's a convenience thing right, the gas
3	product is much easier to use than the wood product.
4	MR. BORTZ: Right now if you compare and I
5	think our log sets would be comparable on this the
6	cost of natural gas compared to the gas of wood, the
7	cost of natural gas is one-quarter per hour in Los
8	Angeles, I didn't do it everywhere but in Los
9	Angeles it has high prices for wood and reasonably
10	high prices for gas but higher for wood.
11	MR. BROOKMAN: Jim a follow up?
12	MR. HOUCK: Yes in response to John's
13	questions, comments there. First of all your thought
14	about the purchase of wood and that's not entirely
15	true there is some fraction of people that do both
16	and actually its very outdated but it is one of your
17	REC studies is back in the days before there were
18	electronic and I can't remember the exact date I
19	think it's like 1993 or something like that.
20	There's actually a question as to why do
21	you buy wood and it's a substantial fraction I think
22	over half that buy their wood so that's one thing.

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1	The other thing is fuel switching. It is very
2	difficult to get a direct correlation, just like my
3	comment was on the correlating thing that's how these
4	are because there are so many things going on.
5	But one only gets by looking at the
6	Department of Energy records you need to look at for
7	example the fraction of people that heat their home
8	with coal. In 1949 over half the people in this
9	country heated with coal as natural gas network
10	because more prevalent and inexpensive that went away
11	with other issues too but now less than a tenth of a
12	percent heat with coal and over 70% heat with natural
13	gas first air furnace.
14	Similarly during the 70's there was a big
15	influx in the number of wood burning excuse me wood
16	burning stoves because of the concern of the
17	availability and cost of fossil fuels so yes there
18	are certainly trends that get an exact one you could
19	use in modeling I'm not sure about that.
20	MR. BROOKMAN: Tim Ballo?
21	MR. BALLO: Tim Ballo with Earth Justice
22	and just to follow along here because I do care about

	Page 331
1	what happens in the air. There's a couple of points
2	though I think we need to get to the bottom of the
3	relative use duty cycles for a fireplace versus gas
4	logs. I mean obviously if I have to flick a switch I
5	am going to you know, and I don't have to stack wood
6	and build a fire it's somewhat easier to use the
7	appliance that might be used more often.
8	The other thing that I just want to
9	encourage the Department to consider if you do want
10	to go down the path of doing this kind of detailed
11	analysis which I think you know would definitely help
12	inform the analysis for the proposal is to consider
13	as you do sort of the full fuel cycle approach to
14	energy throughout the rest of the analysis do so here
15	as well because you know the production and the
16	extraction of natural gas imposes a lot of
17	environmental harms but I don't necessarily that I
18	think are different from the environmental harms
19	created by wood, production of wood for heating
20	including some of the same HAP air toxic issues that
21	were discussed that original from wood burning.
22	A lot of that same nasty stuff is produced

	Page 332
1	when gas is produced.
2	MR. BROOKMAN: Frank Stanonik.
3	MR. STANONIK: I'm just going to because
4	we are getting close to 5 I'm just going to jump here
5	because there's a point I want to make that was kind
6	of alluded to but I think it's important because at
7	the moment DOE's analysis has totally discounted it
8	and that's the fact that the analysis assumes there
9	is no change in the utility of the product by this
10	requirement and I think it needs to be recognized
11	that if these products do have a utility let me
12	rephrase that.
13	Those models of these products that don't
14	require any external electric supply have a very real
15	utility that when those customers, those homeowners
16	lose electric power they have a source of heat and
17	that is for the people who have those products and
18	are in that situation that's a very real and very
19	important utility and I think DOE at the moment the
20	analysis is just discounted that this proposal might
21	have any effect on utility and I think that's
22	incorrect.
1	

	Page 333
1	MS. ARMSTRONG: So I have a question, this
2	is Ashley and Frank can follow up and this is purely
3	from my own experiences but I actually have a
4	fireplace it's vented though that has EI and its
5	fully functional when the power is off so I guess I'm
6	asking you is there a certain part of the market that
7	you know either without electricity would be impacted
8	because mine is fully functional when the hurricane
9	hit my house and I had several days without it, the
10	battery is fine, it worked fine.
11	So is there something with the EI that
12	prevents it in certain situations? I'm just trying
13	to understand that. Mine was made by someone here.
14	MR. STANONIK: Frank Stanonik so actually
15	my point was that okay so if you are going to go down
16	if you are doing this analysis okay and let's say
17	your options no let me rephrase that. The options
18	you should look at would be EI that requires an
19	external power supply okay or EI that doesn't okay.
20	Now obviously the ones that don't still
21	have the utility but I think and again your products
22	are obviously working very well but I think for the

Page 334 1 manufacturers there are significant questions and 2 issues still about reliability and whatever else with 3 those types of systems and then you still have to get 4 to that issue of okay so again I don't know how often 5 do you have to change your battery I don't know, it's 6 another cost, right. 7 MR. RASMUSSEN: Rett Rasmussen, Ashley is 8 your fireplace a wood burning fireplace or a gas 9 fireplace -- it's a gas fireplace unit. There are 10 all different types of electronic ignition systems 11 out there. There are ones that are battery powered 12 only there are some that have their 120 with battery 13 backup --14 MS. ARMSTRONG: They are both. 15 MR. RASMUSSEN: Alone so you know there is 16 all those variety of types. I did want to mention 17 one thing you know in response to Tim. In switching 18 from wood to gas that there is quite a bit of usage 19 due to the convenience of gas -- there is for the 20 first month until they get the first gas bill and 21 then it's pretty self-regulating. People enjoy the 22 convenience of it until they realize that there is a

	Page 335
1	cost of actually having to pay for all of that gas
2	and then they temper themselves back to what their
3	budgets are and what they really the impact they
4	want to feel of their usage of that product so yes,
5	big spike first month tails off after that, okay.
6	MR. BROOKMAN: So as it is almost just a
7	few minutes before five, we should take final remarks
8	briefly for closure here.
9	MR. DAY: I want to make one comment on
10	the battery issue and that is you know there are
11	products that are sold with IPI with battery backup
12	for power outages and so forth and that's great but
13	if you know one of the President's points in his
14	climate plan is that we need to be resilient as a
15	society we are seeing more and more extreme weather
16	events and the studies that have been done on that to
17	really look at what went wrong in Katrina and what
18	could we do better.
19	One of the first things that comes out of
20	that is batteries are almost the first thing to go
21	and it's just that has been the experience
22	whenever there is a problem and you know the short

	Page 336
1	answer I think is that having a system that requires
2	batteries in a major power outage situation can't
3	compete with having a product that requires no
4	external source of electricity, it is not equivalent,
5	thank you.
6	MR. BROOKMAN: So then closing remarks
7	from John Cymbalsky.
8	MR. CYMBALSKY: Thanks everyone for coming
9	I really do appreciate the dialogue that we did, we
10	gained a lot of useful insight from you and we hope
11	we continue to throughout the comment period. We
12	have heard from a few of you about an extension and
13	so obviously we are open to that we just need a
14	letter and a reason why you need an extension and of
15	course DOE will consider that upon receipt. Yes, a
16	PDF letter to me would be perfectly acceptable and
17	then we will consider that comment extension based on
18	the reasons given within.
19	So for those of you traveling get home
20	safe and again we really do appreciate your
21	attendance and your conversation today, bye.
22	(Whereupon at 5:01 p.m. the meeting

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