

ILLINOIS POLLUTION CONTROL BOARD

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IN THE MATTER OF:)
)
PROPOSAL OF CLIFFORD-JACOBS)
FORGING COMPANY FOR AN)
AMENDMENT TO THE) R14-22
SITE-SPECIFIC RULE AT 35) (Rulemaking-Noise)
ILL. ADM. CODE 901-119.)

STATE OF ILLINOIS
Pollution Control Board

HEARING BEFORE
THE ILLINOIS POLLUTION CONTROL BOARD
SEPTEMBER 23, 2014

BROOKENS ADMINISTRATIVE CENTER
Lyle Shields Meeting Room
1776 East Washington Street
Urbana, Illinois

Janet E. Frederick, CSR, License No. 084-003526

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A P P E A R A N C E S:

HEARING OFFICER:

Mr. J. Mark Powell
Illinois Pollution Control Board
100 West Randolph Street
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Chicago, Illinois 60601
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BOARD MEMBERS:

Ms. Deanna Glosser, Chairman
Mr. Jerome O'Leary
Ms. Carrie Zalewski
Ms. Jennifer A. Burke

ALSO PRESENT:

Mr. Tom Johnson, executive director
Ms. Marie Tipsord, assistant to the chairman
Mr. Anand Rao, board technical staff
Ms. Alisa Liu, board technical staff

ATTORNEY FOR CLIFFORD-JACOBS:

Mr. Phillip R. Van Ness
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CLIFFORD-JACOBS WITNESSES:

Mr. Craig Rost
Mr. Jason Ray
Mr. George Martz
Ms. Laura Weis

1 (Hearing commenced at 11:02 a.m.)
2 HEARING OFFICER POWELL: Good morning
3 and welcome to this Illinois Pollution Control Board
4 hearing. My name is Mark Powell and I am the hearing
5 officer for this rule-making proceeding entitled
6 Proposal of Clifford-Jacobs Forging Company for
7 Amendment to the Site-Specific Rule at 35 Illinois
Administrative Code 901.119.

8 Also present today are, to my immediate
9 left, Board Chairman Deanna Glosser, who is the lead
10 Board member for this proceeding, this rule making.
11 To my immediate right, Board Member Jerry O'Leary.
12 To my further right, Board Member Carrie Zalewski,
13 and to my far right Board Member Jennifer Burke.
14 Also present are Tom Johnson, the Board's executive
15 director, Marie Tipsord, assistant to the chairman,
16 and Anand Rao and Alisa Liu, the Board's technical
17 staff.

18 The Board Docket number for this rule
19 making is R14-22. Clifford-Jacobs Forging Company
20 filed a rule-making proposal on June 2nd, 2014. In
21 an order dated June 19th, 2014, the Board accepted
22 the proposal for hearing and granted Clifford-Jacobs
23 request for waiver of the 200 signature requirement.

24 The hearing officer order dated July 8th,

1 2014, scheduled this hearing, the one now scheduled
2 on this docket. That order also set a deadline of
3 August 19th, 2014, to pre-file testimony for the
4 hearing. The Board on August 19th, 2014, received
5 pre-filed testimony on behalf of Clifford-Jacobs by
6 Mr. Jason Ray, Mr. George Martz, Ms. Laura Weis, and
7 Mr. Craig Rost.

8 Clifford-Jacobs also stated that the noise
9 assessment and feasibility report previously filed as
10 Exhibit D to the rule-making proposal would serve as
11 the pretrial testimony of Dr. Paul Schomer on behalf
12 of Clifford-Jacobs. No other participant has
13 pre-filed testimony for this hearing. I do want to
14 note for the record that there's a sheet inside the
15 door, by the back door there, on which anyone who did
16 not pre-file testimony can indicate they would like
17 to testify today.

18 Also next to that sheet is another sheet,
19 sign-up sheet, for anyone who would like to offer
20 public comment today, and note that that is separate
21 from the sign-up sheet for testimony.

22 This proceeding is governed by the Board's
23 procedural rules. All information that is relevant
24 and is not repetitious or privileged will be admitted

1 into the record. Please note that any questions
2 posed today by the Board members or staff are
3 intended solely to assist in developing a clear and
4 complete record for the Board's decision and do not
5 reflect any prejudgment of the proposal.

6 For the court reporter transcribing today's
7 proceedings, please speak clearly and avoid speaking
8 at the same time as another person so that we can
9 help produce a clear transcript. Are there any
10 questions at this point about our procedures?

11 Hearing none, would the court reporter
12 please swear in Clifford-Jacobs witnesses
13 collectively as a group.

14 (Clifford-Jacobs witnesses sworn: Craig
15 Rost, Jason Ray, George Martz, Paul Schomer.)

16 HEARING OFFICER POWELL: Thank you.
17 We'll move first to the testimony, pre-filed
18 testimony, of Ms. Laura Weis.

19 MR. VAN NESS: That's a problem. Ms.
20 Weis is not here yet. I can't imagine what might
21 have detained her, but in case she comes late we can
22 ask our witnesses to step forward out of order. So
23 unless she shows up in two minutes, I'll just ask
24 Mr. Rost to proceed and we'll wait and see if she

1 shows up.

2 HEARING OFFICER POWELL: Okay. Let's
3 move to the testimony, then, of Mr. Rost, the
4 pre-filed testimony. And that pre-filed testimony
5 will be entered into the record as if read, but I
6 understand you'd like to make that a hearing exhibit
7 as well so I'll allow a motion to that effect if
8 you'd like.

9 MR. VAN NESS: Thank you. I do so
10 move, and again we'll reserve the other pre-filed
11 testimony as they come up. So for the time being,
12 I'll move the admission into evidence of Mr. Rost's
13 pre-filed testimony.

14 HEARING OFFICER POWELL: Okay. Are
15 there any objections? Hearing none, Mr. Rost's
16 pre-filed testimony will be admitted and be marked as
17 Exhibit No. 1, Hearing Exhibit No. 1.

18 Mr. Van Ness, at this time could you
19 introduce the witnesses, please?

20 MR. VAN NESS: I'd be happy to, your
21 Honor. I have with me today, as I said, Mr. Rost.
22 Also the gentlemen who are working at my client's
23 facility, Mr. George Martz and Mr. Jason Ray, and of
24 course Dr. Paul Schomer. If you're prepared, I will

1 simply ask Mr. Rost to step up and start giving
2 testimony.

3 HEARING OFFICER POWELL: Please do,
4 yes.

5 CRAIG ROST,
6 called as a witness, after having been first duly
7 sworn, was examined and testified as follows:

8 EXAMINATION

9 BY MR. VAN NESS:

10 Q. All right. Thank you. I'm going to ask
11 him to take the hot seat in the middle over here.
12 So, Mr. Rost, you've been sworn in. For the record,
13 would you spell out your name and your business
14 address, please.

15 A. My name is Craig Rost, C-R-A-I-G, R-O-S-T.
16 I'm employed by the Economic Development Corporation
17 of Champaign County at 1218 South Neil Street. Was
18 that all you asked me?

19 Q. That's fine. Thank you. And you can
20 confirm for the record that you authored the
21 pre-filed testimony that's been just entered into
22 evidence?

23 A. That's correct.

24 Q. Again, not going to ask you to read your

1 **pre-filed testimony, but would you mind elaborating**
2 **on what the Champaign County Economic Development**
3 **Corporation is?**

4 A. The Economic Development Corporation is
5 countywide. We have on our Board members of the
6 political units in Champaign County, cities, and the
7 county board members themselves, as well as private
8 industry and other economic development organizations
9 are represented on a Board of thirty and we promote
10 economic development, manage projects countywide.

11 Q. Now, in your pre-filed testimony, you noted
12 the dwindling number of die forgers like Clifford-
13 Jacobs in this country. You suggested manufacturing
14 jobs of this quality can be lost to other states and
15 other countries if local and state regulations make
16 it impossible to meet demands.

17 Can you elaborate on that from the perspective
18 of Champaign County and the surrounding counties of
19 East Central Illinois?

20 A. Well, in general it's become increasingly
21 difficulty to site industrial plants, particularly
22 heavy industrial plants. Even more specifically, we
23 gain most of our employment in the county from the
24 expansion of existing industry rather than the siting

1 of new facilities.

2 The number is in the neighborhood of 70 percent
3 more employment growth in expansion of existing firms
4 than new ones. So the combination of those two makes
5 it important to us to retain existing industrial
6 employers.

7 **Q. Now, in your pre-filed testimony, you also**
8 **mentioned the number of current and potential workers**
9 **that Clifford-Jacobs employed and could employ if the**
10 **Board were to approve the request. Can you elaborate**
11 **a little bit on how important it is to Champaign**
12 **County to keep Clifford-Jacobs in operation at the**
13 **site?**

14 A. Well, we look for industrial diversity. We
15 want a broad range of job types in our county. It's
16 important that people have a place for that
17 employment, and heavy industry is not represented as
18 well in Champaign County as other light industry and
19 other types of manufacturing. So it's very important
20 to the county. We employ residents of ten different
21 counties in many of the employers in our location, so
22 it's really important. We are a regional employment
23 center.

24 **Q. When most people think about Champaign**

1 **County, they think about the University of Illinois**
2 **and the rather large medical complex we have here.**
3 **From the perspective of a unit of local government,**
4 **what's the difference between those institutions and**
5 **a private business like Clifford-Jacobs?**

6 A. Well, I think that comes back to the -- the
7 difference is the employment type, essentially, and
8 that comes back to the need for a diverse employment
9 base in our county to attract people to the economic
10 centers of the county, and that diverse base requires
11 some industry along with the higher paying and more
12 technical jobs at the university or the academic jobs
13 at the university. So we think it's an important
14 part of our economic base to be able to have
15 industrial employers.

16 **Q. What about the property tax consideration?**

17 A. Well, many -- we have many non-tax paying
18 entities in our county. Very important for our
19 economy, but it's particularly important that we have
20 property tax paying entities in addition to other
21 taxes. The real estate taxes is important support
22 for the county and for education, for that matter.

23 **Q. Now, in your pre-filed testimony you stated**
24 **that the location of Clifford-Jacobs was, quote,**

1 **ideal to Champaign County. Can you elaborate on**
2 **that?**

3 A. Yes. From an urban planning point of view,
4 it's important to have room to grow and expand and
5 also not interfere with other land uses. There's not
6 a significant land zone for residential growth around
7 Clifford-Jacobs or significant residential existing
8 involvement around Clifford-Jacobs. It's located on
9 the rail line, has excellent access to the interstate
10 highways, and in that respect provides a very good
11 industrial location.

12 It's also adjacent to and in an area that has
13 most of Champaign County's industry located in the
14 Apollo subdivision. All of those add up to an ideal
15 location.

16 **Q. One last question. Have you or anyone else**
17 **at the Economic Development Corporation, to your**
18 **knowledge, ever heard any complaints about noise**
19 **coming from Clifford-Jacobs?**

20 A. No, we haven't.

21 **Q. Any other noise sources out there that**
22 **you're aware of?**

23 A. Once in a while someone doesn't know how to
24 complain or whom to complain to about railroads. We

1 hear some complaints about trains and diesels in the
2 middle of the night. But, you know, we always say
3 that's the railroad. Give them a call. We can't
4 control that.

5 MR. VAN NESS: That's all the
6 questions I have, Mr. Hearing Officer.

7 HEARING OFFICER POWELL: Okay. We'll
8 now move on to questions for this witness, first from
9 any participants here today who may have questions.
10 Signal to me that you'd like to ask something.

11 Seeing or hearing none, move on to any
12 questions from the Board chairman for this witness.

13 CHAIRMAN GLOSSER: I have no
14 questions.

15 HEARING OFFICER POWELL: And any of
16 the other Board members have questions of this
17 witness?

18 Okay. I think as for the pretrial
19 questions addressed to Clifford-Jacobs witnesses, why
20 don't we do those as the witnesses answer as a panel
21 if that's --

22 MR. VAN NESS: That's fine. Sure.

23 HEARING OFFICER POWELL: Okay.

24 MR. ROST: I just wanted to clarify.

1 I think I may have said the address of our suite
2 wrong. It's 1817 South Neil Street, the Economic
3 Development Corporation, just for the record.

4 HEARING OFFICER POWELL: Thank you. I
5 will now move on to the next witness, Mr. Ray, as I
6 understand.

7 JASON RAY,
8 after having been first duly sworn, was examined and
9 testified as follows:

10 EXAMINATION

11 BY MR. VAN NESS:

12 Q. Thank you, Mr. Hearing Officer. Ms. Weis
13 is still not here, so we will turn to Mr. Jason Ray.
14 Mr. Ray, raise your hand so we can figure out who you
15 are. And please spell out your name and your
16 business address.

17 A. Jason Ray, J-A-S-O-N, R-A-Y. Business
18 address is 2410 North Fifth Street, Champaign,
19 Illinois.

20 Q. Can you confirm for the record that you
21 authored pre-filed testimony on file in this case on
22 behalf of the petitioner?

23 A. Yes, I can.

24 Q. And that was in your capacity as general

1 **manager of the Clifford-Jacobs facility on Market**
2 **Street?**

3 A. Correct.

4 MR. VAN NESS: At this point I will
5 move admission into the record of Mr. Ray's pre-filed
6 testimony. I believe that will be Exhibit 2.

7 HEARING OFFICER POWELL: Yes,
8 Exhibit 2. For the record, any objections?

9 Hearing none, motion is granted that the
10 exhibit will be entered as Exhibit No. 2.

11 MR. VAN NESS: Thank you.

12 HEARING OFFICER POWELL: Please
13 proceed.

14 Q. (by Mr. Van Ness) Thank you. Now,
15 Mr. Ray, without repeating your pre-filed testimony,
16 can you describe who Clifford-Jacobs is and what its
17 Market Street facility does?

18 A. Clifford-Jacobs is a closed die hammer
19 forging shop. Clifford-Jacobs started or began
20 operation in 1919 in Urbana, had a fire in 1923, and
21 has been at their current location in Champaign since
22 1923. The company was privately owned by the
23 Cliffords and the Jacobs until 2007. The Cliffords
24 and the Jacobs primarily forged product for the

1 automotive industry, military, and some mining
2 applications.

3 In the 1930s or so, Clifford-Jacobs had the
4 largest steam powered hammer in North America, which
5 was essential to our success as a forging company, as
6 well as many occupations for the military. Clifford-
7 Jacobs today is a diversified company, still
8 privately held. We do much forging work for the
9 aerospace industry, mining industry, oil and gas.

10 We have approximately 200 active customers at
11 this point in time, and we offer forging capabilities
12 from small 2-pound parts up to 800-pound parts that
13 we sell mostly in the United States, some North
14 America and some worldwide, but our product ends up
15 going throughout the world.

16 **Q. Now, you've been working at the North**
17 **Market Street plant for some time; isn't that**
18 **correct?**

19 A. Correct. It'll be ten years on
20 November 1st.

21 **Q. And I assume you're familiar with the**
22 **general plant layout?**

23 A. Yes.

24 **Q. As I mentioned before the hearing,**

1 Mr. Hearing Officer, with your permission, with the
2 Board's permission, I'm planning at this point to use
3 a number of blowups of exhibits and figures that you
4 have already in the materials that were provided to
5 you, but it struck me that it might be easier for you
6 to understand where we're coming from if you had an
7 idea of what the lay of the land was, if you will.
8 It would be easier if we're all looking at the same
9 thing. I even brought my handy dandy pointer with
10 me, and I'm going to hand it to the witness so that
11 he can testify for us with respect to some of the
12 issues I'll be putting to him.

13 So I'm going to show you what has been
14 marked as Exhibit A, and again Exhibit A in the
15 original petition. Can you please take a moment to
16 identify for the Board members where the actual
17 forging hammers are located?

18 A. The forging hammers are located in this
19 area here.

20 Q. And that's what we refer to as building 4;
21 is that correct?

22 A. Correct.

23 Q. Now, I see building 4 appears to be in
24 three segments. It has a large kind of L-shaped

1 **segment at one end towards the north and then two**
2 **smaller retained or segments at the other end; is**
3 **that correct?**

4 A. Yes.

5 **Q. And where specifically are the forging**
6 **hammers located?**

7 A. They're in this section here, this L-shaped
8 section.

9 **Q. Let the record show that the witness is**
10 **pointing out the L-shaped segment at the northern**
11 **portion of building 4. And so what's located in the**
12 **smaller rectangle to the south?**

13 A. This area here is two levels. It would
14 be -- we have a machine shop downstairs and office
15 areas upstairs, and the first building here would be
16 more office.

17 **Q. So your offices, your personal offices, are**
18 **located in that first segment south; is that correct?**

19 A. My office is located right here.

20 **Q. Okay. Now, to be clear, looking at Exhibit**
21 **A again, where are the remaining residences that**
22 **exist in the vicinity?**

23 A. The residences are in this area and to the
24 west.

1 **Q. Okay. And I'm going to place this exhibit**
2 **with -- now, this is Exhibit B. Do you recognize**
3 **that?**

4 A. Yes. That's an aerial view of the
5 location.

6 **Q. And so I assume because you've been working**
7 **there for quite some time you're familiar with the**
8 **areas in the vicinity around the Clifford-Jacobs**
9 **plant; is that correct?**

10 A. Yes.

11 **Q. Why don't you give us a brief tour,**
12 **starting at the north. What's at the north end of**
13 **the photo you see there?**

14 A. The north area here is still Clifford-
15 Jacobs property. There's two retention ponds here,
16 and north of that area, I believe, is the Apollo
17 industrial area.

18 **Q. Okay. And to the -- let's go to the east.**
19 **What's that on the east side there?**

20 A. This would all be the Canadian National
21 Railway. I guess switchyard you would call it.

22 **Q. And are there any residences in that area**
23 **that you know of?**

24 A. Not that I'm aware of, no.

1 **Q. Now, moving further south, what can you**
2 **tell me about that area where you're pointing now?**

3 A. This area is the parking lot for Clifford-
4 Jacobs, and I believe there is a concrete
5 manufacturing facility at the far end.

6 **Q. Okay. And again no residences in that**
7 **direction you're aware of?**

8 A. No.

9 **Q. And so moving around the clock to the west,**
10 **what have we got over there?**

11 A. Right here we have a recycling center. I
12 believe there is also a port-a-potty rental place,
13 some other industrial manufacturing, a fire --

14 **Q. A fire station there, right?**

15 A. Fire station. Thank you very much. And I
16 believe there's some excavating companies throughout
17 here as well.

18 **Q. Now, in addition where it appears to be**
19 **trees on that southwest corner, there's some**
20 **residences; is that correct?**

21 A. That is correct.

22 **Q. And when we refer to the Wilber Heights**
23 **neighborhood, we're referring to that area; is that**
24 **correct?**

1 A. That is correct.

2 Q. And what's that immediately to the
3 immediate west of the plant? What is that?

4 A. This section here is a cornfield owned by
5 Clifford-Jacobs, and here is another cornfield, I
6 believe, that goes all the way out to Market Street.

7 Q. Thank you for that. Now let's talk a
8 moment about the business of forging. In your
9 pre-filed testimony you mentioned there were three
10 kinds of forging business models. One I think you
11 said was a captive forging, another is catalog
12 forging, and the third is made-to-order forging. Can
13 you explain what those are and which you do at
14 Clifford-Jacobs?

15 A. Yes. The captive forging shop is a shop
16 that a company -- I'll use maybe an example.
17 Caterpillar, for example, they are an internal
18 process to that business and they supply forgings for
19 their own product. There is also the -- the catalog
20 would be the next one. That would be where someone
21 would offer a catalog of parts to anybody who would
22 want them, and they develop those parts and then sell
23 externally to any customer that would like that
24 product.

1 And the final would be what Clifford-Jacobs
2 does. It's more of a made-to-order forging, kind of
3 a job shop type forging company, and that's --
4 Clifford only makes product when a customer has given
5 us a purchase order.

6 **Q. So in your role as executive of Clifford-**
7 **Jacobs, are you familiar with other forging**
8 **operations out there that you're competing with?**

9 A. Yes.

10 **Q. And is there anyone else in Champaign**
11 **County who can make all the things that you can make**
12 **at Clifford-Jacobs?**

13 A. No.

14 **Q. Is there anyone else in Illinois who can**
15 **make all the things that Clifford-Jacobs does?**

16 A. Not everything that we make, no.

17 **Q. And how about outside Illinois?**

18 A. There are a few shops. I believe Texas,
19 Ohio, a couple others. Maybe up to five, I believe,
20 in the United States. There's a few -- of course a
21 few more overseas.

22 **Q. How many forgers overall, if you know, are**
23 **still in operation in the United States?**

24 A. I believe the number is around 150, 160, I

1 believe.

2 **Q. And out of those, how many can make what**
3 **you make at Clifford-Jacobs?**

4 A. The full product line of what Clifford can
5 make? To my knowledge, at least the only ones that
6 we compete with that aren't maybe a captive shop or a
7 catalog shop would maybe be about five. A handful.

8 **Q. Is that number going up or is that number**
9 **going down as a general proposition?**

10 A. That is shrinking.

11 **Q. Now, you mentioned in your pre-filed**
12 **testimony that Clifford-Jacobs had made a significant**
13 **investment in the North Market Street facility over**
14 **the last few years. Can you elaborate on that?**

15 A. Yes. We've put a lot of money back into
16 our people, our processes, and our equipment. And
17 that is basically so we can continue to grow the
18 business when the market swings our way, if you will.

19 We have trained our people much more than they
20 have been in the past. We have put a multi -- well
21 over a million dollars into a new ERP, a computer
22 system, that runs our production, our scheduling
23 portion of our business. We have put in large
24 investments in new machines that allow us to machine

1 dies for our forging process that we typically did
2 not have in the past.

3 We've put in really state of the art equipment,
4 3D scanning capabilities for our forgings, simulation
5 software that helps us design our forgings better, as
6 well as just millions of dollars in hammer rebuilds,
7 furnace rebuilds, and overall improvements to our
8 area. The forging process is a very destructive
9 process, and we use the same equipment that we used,
10 in most cases, in the 1920s and '30s.

11 **Q. When you say the -- you're referring to the**
12 **violence of the process by which the dies come**
13 **together to form whatever product is?**

14 A. That is correct. It's destructive on the
15 dies, the equipment itself. So there's a lot of
16 capital reinvestment maintenance as well.

17 **Q. Now, we've asked the Board to grant**
18 **Clifford-Jacobs an additional seven hours per**
19 **workday, the six days a week that you operate the**
20 **facility. You asked for up to an additional seven**
21 **hours of operation; isn't that correct?**

22 A. That is correct.

23 **Q. And why do you feel that the Clifford-**
24 **Jacobs operation needs that kind of relief?**

1 A. There's three reasons. The main reason
2 would be flexibility. We noticed when we do get
3 busy, and we have ran into this in the past, 2010,
4 '11 and '12, we're unable to meet our customer
5 demands by not having the flexibility to run more
6 hammers at different times.

7 There's also the workers' safety. It would be
8 much easier, much easier on the workers, to be able
9 to start the shifts a little earlier on those hot
10 summer days. The plant is very hot. The steel we
11 forge is typically above 2,000 degrees when it comes
12 out of the hammers, and if we can operate in times
13 when the ambient temperature is a little bit less,
14 it's definitely better and more safe for our
15 employees.

16 And growth. We would like -- we'd like not to
17 be capped with growth. We have to take advantage of
18 the market when the market shows itself, and to have
19 the ability to run those hammers would not limit us
20 in that aspect.

21 **Q. In fact, one of your customers is the**
22 **United States Army, isn't it?**

23 A. That is correct.

24 **Q. And they have a particular interest that**

1 **you're aware of in this?**

2 A. They do. Clifford-Jacobs provides many of
3 the forgings for the Apache helicopters in their
4 transmission, the Chinook helicopter. And in times,
5 especially I want to say 2011, when demand was up for
6 everyone, it was difficult to meet demands of all of
7 our customers and they would be very happy to have
8 more capacity.

9 Q. Last two questions from me. In all the
10 years you've worked at Clifford-Jacobs, have you ever
11 received or heard about complaints against Clifford-
12 Jacobs due to noise?

13 A. No.

14 Q. Now, you're not saying that forging
15 operations don't make noise, are you?

16 A. No.

17 Q. But it's also true that there's other noise
18 sources in the neighborhood, aren't there?

19 A. That is correct, yes.

20 Q. We already heard one witness mention the
21 railroad. I assume you've been there long enough to
22 hear the railroad?

23 A. Yes. There's a significant amount of
24 noise.

1 **Q. Now, the next few questions are questions**
2 **that were placed by the Board and the staff to**
3 **Clifford-Jacobs in its pre-filed questions of, I**
4 **believe, the 19th. And so I've asked Mr. Ray to**
5 **address some of these questions, and I'll identify**
6 **them for the record as we go forward.**

7 **The first question, which was actually Board**
8 **staff question 1(a) and (b), Clifford-Jacobs facility**
9 **presently only operates ten hammers; isn't that**
10 **correct?**

11 **A. Yes.**

12 **Q. There's fourteen that are out there; isn't**
13 **that correct?**

14 **A. Yes.**

15 **Q. And does this reduction in activity come**
16 **before or after the Board adopted its current version**
17 **of the rule in 1985?**

18 **A. That came -- the reduction in hammers came**
19 **before the ruling.**

20 **Q. But those four hammers are still out there,**
21 **aren't they?**

22 **A. Correct. We have -- I don't know the exact**
23 **number. Mr. Martz could testify to the exact number,**
24 **but I believe we have more than fourteen actual**

1 forging hammers in the backyard.

2 **Q. And the question was put to you, do you**
3 **want the Board to limit the new rule to ten hammers?**

4 A. No.

5 **Q. And why not?**

6 A. Flexibility. We have the hammers. The
7 hammers could be put back in if the market was such
8 that it needed those other hammers. Right now our
9 customers are wanting typically a little larger parts
10 on certain hammers, but we need to be flexible and
11 able to meet the demand. If another forge shop was
12 to go out of business, we have the hammers there to
13 possibly take that work and do that here.

14 **Q. Where do you draw a line between**
15 **flexibility and survivability in your business? When**
16 **a customer is told that I can't produce this or I**
17 **can't produce it in time, what's your experience with**
18 **respect to the likelihood of retaining that**
19 **customer's business?**

20 A. It's a good question. In 2011, '10 and '11
21 and end of '12 we had a lot of market increase and we
22 were unable to meet many of our customers' demands.
23 And there are several instances where the customer
24 has either pulled all the business away from us or

1 portions of that business. And one customer in
2 particular, they've pulled over 70 percent of their
3 business away from us.

4 **Q. Do you have any idea where that business**
5 **went?**

6 A. I do. It went to a forge shop in Texas.

7 **Q. The next question I have is from Board**
8 **staff question 2. In the petition on page 4,**
9 **Clifford-Jacobs states that virtually never are all**
10 **hammers operating at once. How many hammers are in**
11 **operation at one time normally and what would be the**
12 **maximum number of hammers in operation at the same**
13 **time during the last three years, if you know?**

14 A. Okay. I'll answer this as best as I can.
15 It's not a simple straight answer. We have the
16 hammers out there. We have ten hammers that we're
17 able to run. However, we only, let's say for 2014,
18 we're only running four crews. Those crews can
19 finish on one hammer and go to another hammer, so
20 it's possible that they run many hammers during a day
21 but not at the same time.

22 So I would say for how many crews that we had
23 running hammers in 2014, it would be four. In 2013
24 it would be three, 2011 and '12 we had six hammers or

1 six crews running on first shift and up to three
2 hammers running on second shift.

3 Again, this isn't an assembly line type
4 operation. These hammers are in cells, and depending
5 on what demand our customers have for what size of
6 product or what shape of product will decide what
7 hammers are running at one time. So we could be
8 running the largest hammer, and that crew could pick
9 up and go to the smallest hammer next.

10 **Q. And that's one of the realities of being a**
11 **job shop, isn't it?**

12 A. Yes.

13 **Q. So if you have a need for 100 widgets over**
14 **here and 200 of a different kind of widget over**
15 **there, you would work until you produced all the**
16 **widgets needed of that sort, and then you'd go to**
17 **another hammer and produce the 200 you needed for the**
18 **other; is that correct?**

19 A. That is correct, yes.

20 **Q. I know that's kind of a simplistic way of**
21 **looking at it, but the limiting factor, then, is the**
22 **number of crews that you have available?**

23 A. The crew size or the amount of crew that's
24 been hammer trained and people we have, yes.

1 **Q. Now, do you think the Board should reflect**
2 **the maximum number of hammers in use in reality over**
3 **the last three years or allow the operation of all**
4 **ten hammers at the same time?**

5 A. Allow all ten is what we'd like to see.
6 Again, that's based upon we want to be flexible, we
7 want to be good partners to our customers. We'd like
8 to be able to grow the business. And as we've seen
9 in the past, if we're unable to do that, the business
10 tends to go to someone else who can.

11 MR. RAO: May I follow up? You just
12 mentioned whether the Board should allow the use of
13 all ten hammers. In answer to the previous question
14 I think Mr. Ray was saying that they want flexibility
15 for all fourteen hammers to be part of the rule. So
16 just wanted to clarify, you want it to be fourteen
17 and not ten?

18 MR. VAN NESS: Well, we haven't asked
19 for fourteen.

20 MR. RAO: Oh, you have not?

21 MR. VAN NESS: No. If you look at the
22 petition, we've only asked for a change in the hours,
23 not for a change in number of hammers, right? I
24 believe that's correct. Doesn't it say ten hammers?

1 MR. RAO: It says fourteen hammers in
2 the existing rule, and that's why we asked the
3 question.

4 MR. VAN NESS: Okay. I stand
5 corrected. I think his explanation is
6 self-explanatory. We would presume that for maximum
7 flexibility we would want to keep as many potential
8 hammers in operation as are currently allowed, but
9 with the understanding that this is a job lot, a job
10 shop.

11 And so depending on the number of crews, you
12 might only have three or four or five or six hammers
13 operating simultaneously, but in the course of a
14 working day you might have all ten or twelve or
15 fourteen hammers ultimately employed at some point in
16 time during the day. Probably rarely would all -- I
17 can't imagine under what circumstances you'd have all
18 fourteen firing away at once, but you need the
19 flexibility to be able to crew what the demand calls
20 for. I guess that's the answer I would give.

21 MR. RAO: All right.

22 MR. VAN NESS: I hope that answers
23 your question.

24 MR. RAO: Yeah. I wanted to clarify

1 to make sure you want flexibility for all fourteen
2 hammers and not ten that you're operating right now.

3 Q. (by Mr. Van Ness) Right. The next
4 question, Mr. Ray, is based on Board staff question
5 3(c). On page 5 of Dr. Schomer's report, he states
6 that, quote, a more realistic worst case scenario is
7 where one of the largest hammers is operating at a
8 hundred percent capacity while the other two are
9 operating at 50 percent capacity. Do you agree with
10 that conclusion?

11 A. Yes.

12 Q. And should the Board's new rule adopt that
13 limited worst case scenario rather than allow
14 Clifford-Jacobs to run all ten or fourteen hammers at
15 the same time during the initial seven hours per day?

16 A. Yes.

17 Q. And why is that?

18 A. Again, it goes back to flexibility, what we
19 can run for our customers. The hammers typically --
20 we talked a little bit it's a destructive process.
21 The hammers -- and we're a job shop, so you'll have
22 different maintenance issues on a particular hammer.
23 You'll be changing the dies to go from one job to the
24 next.

1 There will be heat related issues where a hammer
2 or a hammer crew, a crew could be on one hammer all
3 day long but it's possible that they wouldn't be
4 running -- it's most likely they would not be running
5 for six or probably not even up to six hours a day,
6 especially when there are changes in the dies.

7 One job or one hammer could be running, then
8 they could move to the next. And the same with all
9 of the other crews in the facility. So it's a -- but
10 it is possible that all the hammers could be working
11 at one time for periods of time, and we would like
12 that flexibility to meet our customers' demands.

13 **Q. I think you've answered that question. I'm**
14 **going to turn to the last question from Board staff**
15 **question No. 12. I'm sorry. Feel free to jump in.**

16 MR. RAO: I just wanted to make sure,
17 a couple of the questions under question number 3, I
18 think it goes towards the impact of operating all ten
19 hammers at one time, and I'm thinking those questions
20 will be answered by Dr. Schomer.

21 MR. VAN NESS: Dr. Schomer will be
22 addressing A and B. I just asked Mr. Ray to address
23 3C with respect to that.

24 MR. RAO: Okay. Thank you.

1 **Q. (by Mr. Van Ness) Now, the last question**
2 **is from Board staff question 12, and I'm going to**
3 **have both Mr. Martz and Mr. Ray address that question**
4 **but I'll put the question out there to you, Jason,**
5 **and we'll go from there.**

6 **The question is can you provide the number and**
7 **size of Clifford-Jacobs forging hammers, approximate**
8 **number of forgings manufactured during each of the**
9 **three prior calendar years, and the approximate**
10 **number of hammer blows used to manufacture the**
11 **forgings?**

12 **A. Okay. We'll start with the hammer number**
13 **and size. We have the ten hammers. Hammer 16 is a**
14 **20,000 pound hammer. Hammer 15 is an 8,000 pound**
15 **hammer. Hammer 14 is a 25,000 pound hammer. Hammer**
16 **13 is an 8,000 pound hammer. Hammer 12 is a 12,000**
17 **pound hammer. Hammer 10 is a 6,000 pound hammer.**
18 **Hammer 8 is a 3,000 pound hammer. Hammer 6 is a 2500**
19 **pound hammer. Hammer 4 is a 2000 pound hammer, and**
20 **hammer 2 is a 1500 pound hammer.**

21 **Q. And the number of forgings manufactured**
22 **during each of the three prior years, if you can?**

23 **A. This is an approximation. We've tried to**
24 **go back into our records and pull as much data as we**

1 could on the number of forgings per year, and what
2 we've shown is approximately in 2013 we had 120,000
3 forgings produced at the facility. In 2012 we had
4 130,000 forgings produced at the facility, and in
5 2011 we had 260,000 forgings produced.

6 **Q. And the final question on that would be**
7 **approximate number of hammer blows used to produce**
8 **all of these forgings.**

9 A. Again, this is even a much harder number to
10 put on paper. We are, I guess, taking an educated --
11 I don't want to say guess, but an educated
12 approximation. We're going to say 22 blows per
13 forging produced, and the ranges can range from four
14 blows on our smallest hammer to 90 blows on our
15 largest hammer, and that could also be dependent on
16 the size. The largest hammer could have 90 blows or
17 it could have as small as six blows on a hammer. So
18 it really depends on what the customer is ordering,
19 the size, the complexity, the material.

20 **Q. And isn't it true that if you were**
21 **producing the very same product on the very same**
22 **forge, one might take a few more blows than the**
23 **other?**

24 A. That is correct.

1 **Q. And why is that?**

2 A. Differences in maintenance on the hammer.

3 We've just recently seen that -- we've done a
4 complete overhaul on one of our hammers, and one of
5 our jobs was taking approximately -- it was ten less
6 blows, I think that was approximate, maybe 15 percent
7 less, to accomplish the same goal with a hammer that
8 was running a little bit tighter or had just been
9 refurbished. Also how hot the dies are, the size of
10 the run. Different things make changes on how quick,
11 and the hammer weight itself will lend to that factor
12 changing.

13 MR. VAN NESS: That's all the
14 questions I have of this witness. Mr. Hearing
15 Officer, I'm sure there's questions from the Board
16 and perhaps from the audience. Should I move for
17 admission of these items that are already basically
18 on the record, or what's your pleasure on that? We
19 did talk about Exhibit 1 and exhibit -- I'm sorry.
20 Exhibit A and Exhibit B, but of course those were
21 already part of the petition so I leave it to your
22 discretion whether I need to move to have those
23 readmitted.

24 HEARING OFFICER POWELL: Not to bounce

1 it back to you, but actually it is -- it's up to you.
2 They're already in. They're both exhibits to the
3 petition, previously filed. They don't need to be
4 hearing exhibits. You needn't move unless you'd like
5 to.

6 MR. VAN NESS: Thank you. Any
7 questions?

8 HEARING OFFICER POWELL: Yes.
9 Dr. Glosser?

10 CHAIRMAN GLOSSER: I have one quick
11 question. What's the maximum number of crews that
12 operate on a given shift?

13 MR. RAY: The maximum number that
14 could possibly run on a given shift would be ten as
15 of today.

16 CHAIRMAN GLOSSER: Is that the number
17 that you use regularly, or what's your experience in
18 the last three or four years?

19 MR. RAY: Three to four years, this
20 year, right at this moment, we are up to four crews.
21 Last year was typically three crews. That would be
22 '13. Twelve we had six crews on one shift and three
23 crews on our second shift.

24 CHAIRMAN GLOSSER: Thank you.

1 HEARING OFFICER POWELL: Any other
2 Board member have any questions for Mr. Ray? Yes,
3 Board's technical staff, Ms. Liu.

4 MS. LIU: I'm not sitting next to the
5 microphone. Can you hear me all right?

6 MR. RAY: I can hear you fine.

7 MS. LIU: Good morning, Mr. Ray. In
8 the current rule, the way it's written now, you're
9 allowed up to fourteen hammers. That would
10 correspond to fourteen crews operating simultaneously
11 if it ever went to that capacity, correct?

12 MR. RAY: Correct.

13 MS. LIU: And you're asking for that
14 same amount to be allowed for those additional seven
15 hours here?

16 MR. RAY: That is correct.

17 MS. LIU: From what I understand of
18 Dr. Schomer's report, the worst case scenario wasn't
19 based on the simultaneous operation of either ten or
20 fourteen hammers during that period of time. Would
21 there be a way that you could manage operations
22 during a day so that you would stay within that
23 realistic worst case scenario that was represented in
24 the noise study and, if so, what kind of impact would

1 that have on your business operations?

2 MR. RAY: There is a way to do it, but
3 it would cap our capacity if we were not able to run
4 our hammers and use our largest three hammers,
5 because that's where the bulk of our crews are
6 working right now and that is where our niche is, if
7 you will, in our market.

8 If we were unable to run those three hammers at
9 one time, we would be unable to meet the market
10 demand of our customers, and again I believe the same
11 would happen as they would go to other forging shops.
12 They would pull the business away. Did that answer
13 your question?

14 MS. LIU: I guess specifically
15 speaking to those additional seven hours, do you
16 still need the flexibility for all fourteen hammers
17 when it seems like the primary ones are these three?

18 MR. RAY: We are asking for that
19 flexibility because the market changes. The market
20 changes, and we'd like the ability to change with it
21 and, for example, there are a lot of forging shops
22 that are going out of business and we've had the
23 opportunity to take some of that work and to have the
24 flexibility to operate all of those hammers is what

1 we would like to have.

2 MR. RAO: Well, clarification. When
3 you say you need the flexibility to operate all
4 fourteen hammers, are you saying that you need
5 flexibility to operate all fourteen hammers at the
6 same time or all fourteen hammers during a shift at
7 different times?

8 MR. RAY: We are asking for at the
9 same time, but we understand the chance of them
10 actually running all at the same time is extremely
11 little.

12 MS. LIU: Do you think you could maybe
13 work with your attorney to give some thought to kind
14 of incorporating the idea of what you need in terms
15 of actual flexibility and what we could provide in
16 the rule based on environmental impact that has been
17 represented?

18 MR. RAY: Yes.

19 MR. RAO: Because the justification
20 that we have right now in front of us is based on a
21 worst case scenario of operating three hammers. We
22 don't know what kind of sound levels are going to
23 emanate when you have all fourteen hammers operating
24 at the same time, so that's what we are trying to get

1 at here in the question number 3.

2 MR. VAN NESS: We will have some
3 additional testimony relevant to that, both from
4 Mr. Martz and from Dr. Schomer. Of course if the
5 Board continues to have questions after the hearing,
6 you know where to find us and we will do our level
7 best to respond.

8 I appreciate where you're coming from. I think
9 it is a challenging issue because the problem with
10 flexibility is it seems kind of amorphous. But the
11 reality of it is if you're a businessman, that
12 flexibility is your bread and butter, the ability to
13 hop from one machine to the next, and that is
14 expressed in regulatory language as the ability to
15 operate whatever whenever.

16 The practicality of it, and Dr. Schomer
17 will testify to that in a few moments, the
18 practicality of it is that that's a pretty rare event
19 when you're going to have, you know, ten, let alone
20 fourteen hammers pounding away at exactly the same
21 time. But again if you're going to be in the
22 business of forging, you have to have the ability to
23 do that. But we'll address that more, and if we
24 haven't answered your questions to your satisfaction

1 let us know and we'll try our level best to be
2 responsive.

3 MS. LIU: To the extent that you
4 mentioned that it is rare that that happens, is there
5 some way that you could schedule your operations
6 during the daytime hours where you already have that
7 maximum flexibility in the existing rule?

8 MR. RAY: I'm not sure I understand
9 the question.

10 MR. VAN NESS: I think she's asking if
11 you could address your workload such that you would
12 be running the larger number during the daytime hours
13 rather than the extended seven hours.

14 MR. RAY: Again, the same answer would
15 apply. It would cap our growth. We are asking for
16 flexibility on those hammers, and the larger hammers,
17 which I believe Dr. Schomer will speak to, that
18 produce much of the noise is where the market is
19 demanding that we go. Those are the hammers that
20 they want to run, that they need to run. Those are
21 the parts that they need.

22 HEARING OFFICER POWELL: Member
23 O'Leary has a question.

24 MR. O'LEARY: In Dr. Schomer's report

1 here, you mentioned the worst case scenario, that one
2 of the three largest hammers will be operating a
3 hundred percent and the other 2 would be operating 50
4 percent.

5 DR. SCHOMER: That's the scenario I
6 put together.

7 MR. O'LEARY: But in reality we're
8 saying fourteen.

9 DR. SCHOMER: I hear them. When I put
10 the scenario together, I was going from the
11 experience we had in monitoring. These hammers
12 are -- I don't claim to be an expert on forging, but
13 the 25,000 pound hammer means it's capable of banging
14 25,000 pounds each time it strikes. And when you hit
15 things at 25,000 pounds with a hundred year old
16 technology, they break over time. And I just didn't
17 see them operating all of the hammers all of the time
18 hour after hour, day after day, from my experience.

19 I think out of fourteen hours of
20 measurement we had one, if I remember right, where
21 they were at 50 percent. Every other time every
22 hammer was lower than that. So that's the experience
23 I was going by to say that a hundred percent just
24 didn't seem likely to me.

1 MS. LIU: I'm assuming that the
2 smaller hammers make less impact noise.

3 MR. RAY: Right.

4 MS. LIU: If you were to add those
5 smaller hammers to your realistic worst case
6 scenario, how much would it impact your sound levels?

7 DR. SCHOMER: When I looked at this,
8 there was room for like a hundred pieces an hour of
9 the 6,000 pounds and a couple hundred pieces an hour
10 of a smaller one and it wouldn't affect the number.
11 So I looked at some number of smaller pieces in
12 there, something like 300.

13 MS. LIU: Is that in your report as
14 well?

15 DR. SCHOMER: I don't think that all
16 those details are in there, but that's what's
17 included in the 65 number.

18 MS. LIU: Is there a way that you
19 could describe it?

20 DR. SCHOMER: Three hundred smaller
21 pieces. At least 6 and 3. I didn't have the 8
22 number in my number, so I didn't have that. But I
23 did try to leave room for some reasonable number of
24 smaller pieces. Sounds like a pretty reasonable

1 number.

2 MS. LIU: Is there any way you could
3 provide something written describing --

4 DR. SCHOMER: I'm sorry?

5 MS. LIU: Is there a way that you
6 could provide something in writing describing what
7 pieces you did consider at what pounds, what hammers
8 in addition?

9 MR. VAN NESS: Sure, we can try. I
10 will give you a preview of Dr. Schomer's testimony in
11 a few moments. He will address to some extent the
12 relative impact in terms of decibel levels from the
13 operation of the smaller hammers. I'm not going to
14 put words into his mouth so I'll let him do that, but
15 I think we are understanding of the science is that
16 it's -- the smaller hammers are a significantly less
17 likely source of noise impedance than are the larger
18 hammers, and specifically the three largest hammers
19 about which Mr. Ray testified a few moments ago.

20 These big hammers are the ones that are
21 producing the product that are their niche product
22 and which obviously, because they are so much larger,
23 account for the lion's share of the noise.

24 MS. LIU: Mr. Ray, when you were

1 listing the hammers by number and by pounds, I was
2 following along in Mr. Martz's testimony and it
3 didn't quite match up. I didn't know if I missed
4 something or if you could perhaps go through them
5 again. I thought you mentioned a hammer number 4,
6 and I didn't see number 4 on Mr. Martz's list.

7 MR. RAY: That hammer, there is a base
8 for that hammer in the ground but the columns are not
9 up at this point in time. Maybe that's why Mr. Martz
10 did not list that one.

11 MR. VAN NESS: We'll have Mr. Martz
12 testify next and he can address that, I think. He's
13 not on the floor.

14 MS. LIU: All right. I just noticed
15 that that one wasn't on his list, so thank you.

16 HEARING OFFICER POWELL: Ms. Tipsord
17 has a question.

18 MS. TIPSORD: Yeah. I just wondered,
19 we're hearing a lot of talk about the desire for the
20 flexibility to have the fourteen hammers to run 24/7,
21 basically, or the additional seven hours. And my
22 question is, you've been with the company for quite
23 some time. How often has it happened since you've
24 been with the company that you've had even the ten

1 hammers or fourteen hammers running for the two
2 shifts you currently run?

3 MR. RAY: It has not happened. The
4 highest load was the six hammers on the first shift
5 in 2011 and '12 and the three hammers on the second
6 shift. But there was the need to run a third shift
7 at that time but not to fill all of those hammers.

8 MS. TIPSORD: Thank you.

9 **Q. (by Mr. Van Ness) A little follow-up on**
10 **that. And that was a function of the kinds of jobs**
11 **that you were being asked to do; is that correct?**

12 A. Correct.

13 MR. VAN NESS: So -- okay. Wanted to
14 make it clear.

15 MS. LIU: Mr. Ray, you had a couple of
16 exhibits, Exhibit A and Exhibit B, on the Board and
17 you were describing specific things about those maps
18 and other facilities that were located and where your
19 hammers were. I tried writing it down, but I'm not
20 sure that I got everything completely accurate.
21 Could you provide another version of Exhibit A and
22 Exhibit B with the labels from what you described in
23 your testimony later on?

24 MR. RAY: Absolutely. Yes, ma'am.

1 MR. VAN NESS: Sure.

2 MS. LIU: Thank you.

3 HEARING OFFICER POWELL: Are there any
4 additional questions for Mr. Ray? Seeing none, let's
5 move on to Mr. Martz.

6 GEORGE MARTZ,
7 called as a witness, after having been first duly
8 sworn, was examined and testified as follows:

9 EXAMINATION

10 BY MR. VAN NESS:

11 Q. Thank you. Mr. Martz, for the record,
12 please spell out your name and your business address.

13 A. George Martz. G-E-O-R-G-E, M-A-R-T-Z.
14 Business address is 2410 North Fifth Street,
15 Champaign, Illinois.

16 Q. And you can confirm for the record that you
17 authored the pre-filed testimony on file in this case
18 on behalf of Clifford-Jacobs?

19 A. Yes, I did.

20 Q. And that was in your capacity as facilities
21 manager?

22 A. Yes, it is.

23 MR. VAN NESS: Okay. Again, I will
24 move admission of Mr. Martz's pre-filed testimony. I

1 believe that would be hearing Exhibit 3.

2 HEARING OFFICER POWELL: Correct. Any
3 objections to that motion? Hearing none, it will be
4 entered into the record.

5 Q. (by Mr. Van Ness) Now, without repeating
6 your pre-filed testimony, Mr. Martz, can you describe
7 what it is you do at Clifford-Jacobs?

8 A. I'm the facility manager at this point in
9 time. I've held quite a few positions over the
10 years. I've been there for 37 years, so I'm very
11 familiar with the facility and the process, the
12 equipment, competitors, and everything else combined.

13 Q. I take it you have extensive knowledge of
14 the forging operation at Clifford-Jacobs and other
15 places?

16 A. Yes. You know, with that length of time, I
17 have stuck my nose into a lot of different things at
18 the plant and held a lot of different positions. I
19 have an engineering background and managing the
20 engineering department, onto plant engineering
21 projects and the facility improvements and the
22 equipment rebuilding. So I'm very, very
23 knowledgeable about that process and the equipment
24 and everything else combined with the business.

1 **Q. So let's talk about forging generally.**
2 **Pre-filed testimony mentioned that, in layman's**
3 **terms, forging at Clifford-Jacobs is cutting steel**
4 **bars to size, heating the steel billets to around**
5 **2350 degrees, and then hammering it to shape with a**
6 **steam-driven hammer. Do I have that right?**

7 A. That's pretty fair to say.

8 **Q. Let's take each of those steps one at a**
9 **time. When you say steel bars, can you describe them**
10 **because I'm thinking of a tube.**

11 A. Yeah. No, it's a solid steel bar.
12 Typically we order those from different suppliers
13 around the country. Timken is our biggest supplier,
14 Timken Steel out of Ohio, a couple of their locations
15 there. But they range in size from anything from,
16 say, inch and a half, two inches in diameter or
17 square, up to 12 or 13 inches in diameter or square.
18 And then those are cut to specific lengths with the
19 specific grade for each individual job to make that
20 particular design.

21 **Q. And why do you heat them up to 2,350**
22 **degrees? What's so magic about that?**

23 A. Well, that lends the material to be easily
24 changed into a different shape. You know, it's

1 typical to -- I don't know if you've seen the old
2 blacksmith operations where they get the steel red
3 hot, then they hit it with a hammer.

4 Well, the only way to move the steel is to get
5 it hot, and it takes a lot of force. The hotter you
6 get the material up to a point, to metallurgically
7 keep it in good shape and according to the
8 requirements of the customer, but, you know, you have
9 to heat it up hot to get it to move into a different
10 shape.

11 **Q. And, in fact, you have several furnaces in**
12 **operation there at the facility, don't you?**

13 A. Uh-huh, yes.

14 **Q. And several inside building 4 we were**
15 **talking about?**

16 A. Correct.

17 **Q. And some outside?**

18 A. Right.

19 **Q. I'm going to show you what we're calling**
20 **photo number one and ask you if you can tell us what**
21 **that represents?**

22 A. Well, this is one of our heat treat
23 furnaces. This was in an adjacent building, and as
24 you can see the internal temperature on that furnace

1 is red hot. It's not as hot as our forging furnaces,
2 but this furnace is typically at -- at that
3 temperature, that represents about 1600 degrees.
4 They just opened up the door and the forklift driver
5 is coming in to remove the product out of the heat
6 treat furnace. So those baskets contain product and
7 they've been normalized or needled in this specific
8 furnace.

9 **Q. Now, within building 4 you have furnaces**
10 **that look pretty much like that as well, don't you?**

11 A. Well, they're similar. They're a little
12 bit different design. They go up to higher
13 temperatures. They go up to 2300 degrees. This
14 furnace is limited to approximately 1900 degrees just
15 due to the design of it and materials that we use to
16 withstand that temperature.

17 **Q. Only 1900 degrees?**

18 A. Right.

19 **Q. What does a hammer look like?**

20 A. A hammer is a unique piece of equipment
21 that was developed back in the late 1800s. You know,
22 if you didn't know the specifics of it, you may not
23 know the differences in what we have today versus
24 what they developed back at that time. But they were

1 refined over maybe a 30 or 40 year process, and the
2 equipment that we have today is typically from as
3 early as the 1920s through the 1940s.

4 Since the 1940s and the 1950s, there really
5 hasn't been any major improvements to the overall
6 equipment other than there is some new equipment that
7 is hydraulic driven, which would be more energy
8 efficient, but it still possesses the same properties
9 of, you know, large impact producing equipment and by
10 nature it's a very loud process.

11 You know, it's a fast process. The ram comes
12 down at over 300 inches per second speed, and that
13 develops the impact force and then that is driven.
14 You drive the steel outwards into the confines of the
15 die, and that makes a product that's unique in shape
16 and customer driven.

17 **Q. Now, I'm going to ask you to look at the**
18 **next photo, and I'm going to give you all a handy**
19 **eight and a half by eleven version of this so you**
20 **don't have to burden yourself with that. What am I**
21 **looking at here? This is what we've been calling**
22 **photo number three.**

23 A. Right. This is looking through the back of
24 a hammer into the operator's side, and you can see

1 the product that we're making. You can see the dies.
2 There's the bottom die. Here's the top die. So that
3 represents the closed die impression forgings that we
4 make. That's what we machine.

5 And then, you know, the material is heated in
6 these furnaces. They're in the background behind the
7 operators. You can see the flues over the furnaces
8 which go up through the roof, and we improved the
9 facility with adding flues to the newer furnaces that
10 we installed back in -- late 1990s and early 2000s
11 into several units.

12 Several of our bigger hammers we upgraded the
13 furnaces. But, you know, it's such a heat-producing
14 atmosphere inside the furnaces. Originally they were
15 flued inside the building, and during the summertime
16 ambient temperatures just added to the huge burden of
17 the workers. And for the safety of the workers and
18 to, you know, basically try to provide a better work
19 space, you know, more productive work space, you
20 know, we flued all of those products out through the
21 roof.

22 So anyway, the furnaces are back here. You
23 heat the material in there and then you bring it out
24 and put it in the die. The forging hammer, the

1 operators impact the material and they have the
2 opportunity to stop whenever the process is complete.
3 And they make that decision, but they could, as we
4 discussed earlier, they could take up to maybe the
5 most of 90 blows on a specific target. It's a real
6 large diameter, maybe a thin web, that's really hard
7 to move the material out to a big diameter and a thin
8 web. The material cools so, you know, there's a lot
9 of factors.

10 We're a job shop and quote on a lot of different
11 product, a lot of different parts through the country
12 with different customers, different materials that
13 are, you know, that take a lot of energy to move that
14 material. Some of the newer materials that they use
15 in the chinook helicopter, transmission parts that we
16 make are tougher to make. They're ultra clean steel
17 so they're tough, you know, refining it. It takes
18 more blows to make these parts, and we're limited by
19 the temperature that we can heat it up to for
20 metallurgical reasons.

21 **Q. There was a question asked earlier about**
22 **the sizes of the hammers. Can you clarify that? In**
23 **your pre-filed testimony you identified the ten**
24 **hammers and the numbers.**

1 A. Right, right. There may have been a typo
2 here. I'm not sure. But anyway, hammer number 16 is
3 a 20,000 pound hammer. Number 15 is 8,000. Number
4 14 is a 25. Number 13 is an 8. Number 12 is a
5 12,000. Number 10 is a 6,000. Eight is a 3,000.
6 Six is 2500, and 2 is a 1500.

7 Four, it was there in the past, but it's no
8 longer there. So we do have another hammer that's in
9 the ground that's similar to that. It has a base but
10 no columns. It's hammer number 11.

11 MS. LIU: You mentioned there are
12 fourteen. Did you want to put those on the record or
13 are they not --

14 MR. MARTZ: Well, there were fourteen.
15 We took four out of the ground. We have the
16 equipment out in the back lot in our boneyard. But,
17 anyway, they could be put back in if we're lucky
18 enough to gain that much more business from our
19 customers. We wouldn't expect it, but you never
20 know. It could happen.

21 MS. LIU: Well, in the event that you
22 do have that much business, could you provide the
23 details on those other hammers as well?

24 MR. MARTZ: Sure. Absolutely.

1 **Q.** **(by Mr. Van Ness)** **Now, you mentioned in**
2 **your pre-filed testimony -- oh, by the way, before I**
3 **go any further, shall we just -- may I just ask that**
4 **the Board accept photos 1, 2, and 3 into evidence in**
5 **the form that you have in your hands as opposed to**
6 **the large easel size display?**

7 **HEARING OFFICER POWELL:** **Yes. I think**
8 **we -- any objections to the motion? Hearing none,**
9 **these will be admitted as Hearing Exhibits 4, 5, and**
10 **6.**

11 **Q.** **(by Mr. Van Ness)** **Thank you. Excuse me.**
12 **I didn't want to forget to take care of a little**
13 **business here, Mr. Martz. In your pre-filed**
14 **testimony you stated that forging plants are not air**
15 **conditioned?**

16 **A.** **No.**

17 **Q.** **You've been around and seen other**
18 **operations, other forging operations around the**
19 **country, haven't you?**

20 **A.** **Yes, I have.**

21 **Q.** **Have you seen any of them ever air**
22 **conditioned?**

23 **A.** **No. Virtually that would be unfeasible**
24 **economically to air condition a forge shop. To close**

1 it completely up, you know, there's a huge amount of
2 BTUs developed in this process of heating the steel.
3 You know, it's like millions and millions of BTUs if
4 we were to run all the furnaces together. So it
5 would be totally impractical to air condition a forge
6 shop.

7 The whole design of forge shops and casting
8 facilities where there's a lot of heat in those
9 facilities, too, it's kind of like a chimney. You
10 have a tall building that has a cupola or a monitor
11 at the top, and you have a lot of openings at the
12 bottom and then you develop kind of a chimney effect
13 and let the heat raise and exit out the building at
14 the top. So that's why we have an open building.

15 **Q. So the heat issue is directly related to**
16 **the noise issue?**

17 A. That's right.

18 **Q. So now let's talk about forging at**
19 **Clifford-Jacobs. You mentioned in your pre-filed**
20 **testimony that you currently use ten of fourteen**
21 **hammers and they range in size from 1500 to**
22 **25,000 pounds. That's a big range. Why do you need**
23 **that?**

24 A. Well, there's a lot of different size of

1 products, and again materials and requirements to
2 economically produce a forging to be competitive with
3 our competitors who, you know, our competitors range
4 all over. Some have smaller hammers. We compete
5 against them on the smaller hammers that we have.
6 Other forgers have bigger hammers that we have, and
7 we compete on the bigger product that we make on our
8 big hammers.

9 So, you know, there's an individual hammer size
10 that can economically produce any size or grade of
11 material. And the bigger the hammer, the more energy
12 that is required to run that hammer because you got a
13 bigger cylinder. It takes more steam or air,
14 whatever you're using to drive these hammers with it.
15 That all goes into the burn rates and the overhead of
16 the equipment which we use to try to achieve new work
17 and that's the basic reason. There's a certain size
18 of hammer that's perfect for each product that we
19 make.

20 **Q. I'm going to direct your attention to what**
21 **is Exhibit C, which is a map of the forging area that**
22 **is in the original petition. I'm going to turn it**
23 **right side up so that everyone can get oriented the**
24 **way it was shown on the page. And again if you'd use**

1 **your pointer, point out where the furnaces are.**

2 **Let's start with those.**

3 A. Okay. The furnaces are typically along the
4 outside wall here on the west side of the building.
5 They are here on the east side of the building. All
6 these little rectangles, each one of those are an
7 individual furnace. There's two furnaces here that
8 service this hammer. There's one that services this
9 hammer. There's another that services this hammer,
10 and the smallest hammer is right here.

11 **Q. And where are the three big hammers?**

12 A. The three big hammers? This is the 20,000.
13 It was put in in late 1990s. This is our 25,000
14 pound hammer that was put in in 1930s, and this is a
15 12,000 pound hammer and that was probably put in in
16 the 1920s. That's one of the original old hammers.

17 MS. TIPSORD: Mr. Martz, could you
18 tell us what hammers -- well, you pointed them out on
19 here and I notice that on my copy there's also a
20 hammer number with each of those. Could you tell us
21 which hammer number you were referring to?

22 MR. MARTZ: Sure. This is number 16.
23 This is number 15. This is number 14. This is
24 number 13. This is number 11. This is number 10.

1 Number 11, it's just got anvil in the ground. This
2 is number 10. This is number 8, number 6, and number
3 2.

4 MS. TIPSORD: I'm sorry. I don't
5 think I was clear. You were giving by thousand
6 pounds.

7 MR. MARTZ: Oh, okay.

8 MS. TIPSORD: Could you tell me which
9 one is which? Like I know you said that you
10 pre-filed this, but for purposes of the record now.

11 MR. MARTZ: Okay. Number 16 is a
12 20,000 pound hammer. Number 15 is 8,000. Number 14
13 is 25,000. Number 13 is 8,000. Number 12 is 12,000.
14 Number 11 is 6,000. Number 10 is 6,000. Number 8 is
15 3,000. Number 6 is a 2500. And number 2 is a 1500
16 pound hammer.

17 MS. TIPSORD: Thank you.

18 MR. RAO: And the ones that you
19 identified reflect the ten hammers that you have
20 right now?

21 MR. MARTZ: Yes.

22 MR. RAO: Are there locations for the
23 other four in here?

24 MR. MARTZ: Yeah. The other four were

1 located over here on this side. There was three
2 hammers. There was a 4,000. If I remember right,
3 another 3,000, maybe a 2500 pound, and then there was
4 a 2,000 that's here. The number 4 I got on the list
5 here, it was over here on the side.

6 **Q. (by Mr. Van Ness) For the record, let the**
7 **record show that the missing hammers are identified**
8 **as being in the lower right side of the small neck of**
9 **the diagram in Exhibit C, if that'll help the casual**
10 **reader. So it would appear that heat is a big issue**
11 **with --**

12 A. Yes, it is. It's one of our biggest issues
13 we have to deal with in the summertime. When we made
14 the improvements to the furnaces with the flues
15 taking the heat outside, actually it was a negative
16 in the wintertime because the guys, you know, it's
17 cold in the shop, too, with it being open. So they
18 complain about it. During wintertime it's a
19 negative. During the summertime, it's definitely a
20 net positive.

21 **Q. And that's related to the noise issue**
22 **because you have to keep the doors and windows open?**

23 A. That's right, that's right.

24 **Q. Now, our petition already provided the**

1 general dimensions of the forging building. For
2 everybody, it's building 4 on that. Also Exhibit A
3 that's been introduced by Mr. Ray earlier. It also
4 mentioned the building had large roll open doors at
5 either end, as well as numerous openings in the wall.
6 **Why do you have open doors at the ends?**

7 A. Well, we have to have large doors at the
8 ends to support the forklift traffic that brings the
9 dies, the material, the billets in to be loaded into
10 the furnaces, the hot forgings as we take them out of
11 the facility. So there's a lot of traffic that goes
12 in and out of the building all day long. A lot of
13 traffic.

14 **Q. And those doors are normally left open?**

15 A. They're normally left open, other than
16 during the wintertime when it's subzero temperatures.
17 They try to close them as best they can, but they
18 still have to keep it open to some degree to let the
19 forklifts in and out.

20 MS. LIU: Mr. Martz, could you show us
21 on your diagram where those large open doors are?

22 MR. MARTZ: Yes. Be happy to. Right
23 here in this area there's one large door at the north
24 end. Of course it has to be on the north end where

1 the wind blows in. And then we have multiple smaller
2 openings several places. There's an opening here on
3 the west side. There's doors here that you can open,
4 that you can go in with forklift traffic. There's an
5 opening here that's a main entrance for dies coming
6 in from the die, the shop where they put together the
7 tooling. There's a door over here on the east side
8 that you can come in. There's maybe a couple of
9 doors in this area that you can enter the facility.
10 So there's like five or six different doors.

11 MS. LIU: Mr. Martz, could you provide
12 us another copy of this marking the locations of the
13 doors for the record later on?

14 MR. MARTZ: Sure. Absolutely.

15 MS. LIU: Thank you.

16 HEARING OFFICER POWELL: Mr. Van Ness,
17 just wondering if you're coming to a logical breaking
18 point in questions for Mr. Martz so that we could
19 take a break for the court reporter and others.

20 MR. VAN NESS: If you'll allow me, I
21 can be done with Mr. Martz in about five or ten
22 minutes and that would be an excellent place to break
23 off.

24 HEARING OFFICER POWELL: Sounds good.

1 Thank you.

2 Q. (by Mr. Van Ness) You already --
3 Mr. Martz, you've already provided the general
4 dimensions, but you mentioned some time ago that you
5 investigated some alternatives to lessen noise
6 levels; isn't that correct?

7 A. Yes.

8 Q. Do you recall whether you did that on your
9 own initiative or was asked to do that?

10 A. This goes way back. I started in 1978 at
11 Clifford-Jacobs. Before I arrived there was some
12 activity for silencers or vents that were put up on
13 steam lines. And, you know, there was -- it was in
14 disrepair when I got there at Clifford-Jacobs and one
15 of the projects that I had to work on way back then
16 was trying to come up with some silencers for the
17 vents.

18 And with the previous attempts it didn't work
19 out real well, so I located a company and we
20 purchased some vents and we tried to install them,
21 you know, trying to beef up the integrity of the
22 flanges, and it just wouldn't hold up. It was really
23 maintenance intensive, and we just couldn't get them
24 to last.

1 **Q. When you're talking about vents, what are**
2 **you referring to?**

3 A. Those are -- you know, they call them
4 silencers or --

5 **Q. No, I'm asking about the vents, not about**
6 **silencers.**

7 A. Oh, okay.

8 **Q. We haven't introduced the Board yet to the**
9 **concept of vents.**

10 A. Okay. Well, the vents are openings in the
11 roof. Is that --

12 **Q. And what comes out of the -- what are the**
13 **vents there for?**

14 A. Well, the heat. You know, to get rid of
15 the heat. Obviously you have to have a vent in the
16 roof like monitors that I talked about previously.
17 Those have to be open, and when you do that then you
18 get a combination of the heat and the noise that
19 comes out of the vent.

20 **Q. What comes out of the vents besides heat**
21 **and noise? What creates the noise?**

22 A. Well, the hammers, the impact.

23 **Q. I thought it was something other than an**
24 **impact sound that came out of --**

1 A. Oh, well, now we're talking about the steam
2 lines.

3 **Q. Oh, okay.**

4 A. Yes, you do get a whooshing. I think
5 Dr. Schomer talked about the whooshing sound, and
6 that's what comes out of the steam line, call them
7 vents. And when you take a blow, the steam that's in
8 the cylinder drives the hammer down. There's also
9 steam that was in below the piston, and it has to
10 escape out so you can drive the piston and rod and
11 ram down to make a blow. So that steam exits the
12 exhaust, and in the process of exiting then you hear
13 this whoosh.

14 **Q. So there's two kinds of vents we're talking**
15 **about, then, the air vents and steam vents; do I**
16 **understand that correctly?**

17 A. Right, right.

18 **Q. It was confusing to me, and probably was**
19 **confusing to the Board as well.**

20 A. Sure.

21 **Q. Thank you. Why do you -- to what do you**
22 **attribute the fact that these steam vents were**
23 **breaking, were not --**

24 A. Well, these mufflers or sound reduction

1 devices are made for typical industrial applications
2 or heavy duty built, but they're not built for
3 hammers. They're mainly built for equipment like
4 boilers or whatever they need to muffle the sound for
5 certain applications, but they're really not designed
6 for impact producing equipment like a hammer.

7 In all of that, in that process of, you know,
8 impacting the product, it's dissipated through the
9 equipment down into the ground and then up through
10 different elements, which the steam piping is
11 attached to this equipment so, you know, that
12 vibration and shock is going to be transmitted up
13 through that piping. And we could just never get any
14 commercially available equipment that could hold up
15 to the pounding and impact, that we were doing damage
16 to it.

17 **Q. Now, you've acknowledged in your pre-filed**
18 **testimony that the forging operations generate noise.**
19 **I guess you would agree with that?**

20 A. Yes.

21 **Q. I am going to ask you what I've asked a**
22 **previous witness, and that is there are other noise**
23 **sources in the neighborhood, aren't there?**

24 A. Yes.

1 **Q. And can you describe what those are?**

2 A. Well, they've been talked about previously,
3 but the Canadian National rail yard with all the
4 trains. Moving their trains around the yard, there's
5 a lot of impact going on there, a lot of noise, a lot
6 of locomotive noise. There's the light industrial or
7 industrial businesses around us. The cement company
8 is making noise. There's a lot of heavy equipment
9 coming and going from the cement trucks and the other
10 contractors that are in the area that have heavy
11 equipment.

12 **Q. And in all the years you've worked at**
13 **Clifford-Jacobs, have you ever received or heard of a**
14 **complaint about the noise level at Clifford-Jacobs?**

15 A. No, I haven't, not from anybody in the
16 neighborhood.

17 MR. VAN NESS: That's all the
18 questions I have.

19 HEARING OFFICER POWELL: Okay. I
20 think at this point let's -- would you like to go
21 ahead, Ms. Liu?

22 MS. LIU: To follow up on your
23 testimony regarding the mufflers, you mentioned that
24 they just couldn't hold up to the impact of the

1 hammers. Did they fall apart, or were they just
2 ineffective in muffling that type of noise?

3 MR. MARTZ: No, they fell apart. And
4 we tried repeatedly welding and beefing up the
5 assembly, too, with more gussets, trying to make them
6 stronger, and that ultimately didn't work either.

7 MS. LIU: Thank you. That's all I
8 have.

9 MR. O'LEARY: On the muffler
10 situation, the silencers, when was the last time you
11 had any design inquiries as far as trying to resolve
12 the problem?

13 MR. MARTZ: We haven't.

14 MR. O'LEARY: I know I looked from the
15 testimony here, it goes back, what, like 1984 when
16 all this breakage happened.

17 MR. MARTZ: Right.

18 MR. O'LEARY: You've never done
19 anything since then?

20 MR. MARTZ: No, no. You know, at that
21 point in time, you know, I pretty much extinguished
22 any commercially available equipment that was
23 available and just kind of gave up on it.

24 MR. O'LEARY: Commercially or

1 industrially?

2 MR. MARTZ: Well, yeah, for industrial
3 applications, sure.

4 MR. O'LEARY: If you was to separate
5 the noise level of the hammers versus the steam blow,
6 what are we talking about here that has more of an
7 impact?

8 MR. MARTZ: Well, you know, I believe
9 that Dr. Schomer found that the biggest impact is the
10 steam sound; is that correct?

11 DR. SCHOMER: The steam is higher
12 frequency. So when you A-weight it, it counts for
13 more than maybe it should. But when you A-weight it,
14 I think the steam is a little bit more than the
15 hammer but they're almost equal. I have the feeling
16 that you might be getting -- when we get rid of the
17 steam on the interior of the place, I have the
18 feeling we're getting in excess 34 dB. So they're
19 about equal. Maybe a little bit more on the steam.

20 MR. O'LEARY: Ever any consideration
21 to recycle the steam?

22 MR. MARTZ: That economically would be
23 a good solution, but there is some oil that's put
24 into the steam for lubrication that's required.

1 Otherwise the hammer would lock up and wouldn't run
2 right. And so when you recycle that back to a
3 boiler, the oil is a huge detriment. If you let oil
4 back into your boiler at all, any source of oil at
5 all, it'll start foaming and then you'll get more
6 carryover to the shops.

7 That's one of our big problems is water and
8 steam, the outputters don't like it. So we're very
9 sensitive to that. Economically we'd love to do it
10 because we would save some money on energy, but it's
11 a real problem trying to get rid of the oil out of
12 the water. There's not a lot of it, but any little
13 trace element of it at all will cause a problem.

14 MR. O'LEARY: You purchased Donaldson
15 silencers but never installed them, right?

16 MR. MARTZ: Yeah. Well, does it say
17 that in the report?

18 MR. O'LEARY: I didn't come up with
19 that name out of the sky.

20 MR. MARTZ: Because I went back
21 through the records, and Donaldson may have been a
22 distributor but Riley Baird was the company that we
23 bought back in the eighties and we did install those.

24 MR. O'LEARY: In Dr. Schomer's report

1 on page 3.

2 DR. SCHOMER: I think, if I remember
3 right, it said that there was so much problems with
4 the first two or three, they didn't use the rest of
5 them.

6 MR. O'LEARY: Well, it says they were
7 purchased but they ultimately were not installed.

8 MR. MARTZ: Well, there was some. We
9 bought them for a number of different hammers. Like
10 we bought them for like five or six different
11 hammers. We did install one of them and used that as
12 a trial, and we were unsuccessful with that. So
13 that's why the rest of them weren't installed.

14 MR. O'LEARY: Okay. Thank you.

15 MR. RAO: Mr. Martz, regarding
16 controlling sound levels from these hammers, what you
17 do is typical in the industry or are you aware of
18 other forggers employing mechanisms to reduce noise
19 levels? Are you aware of any that you have not tried
20 or used?

21 MR. MARTZ: Sure. There is some other
22 technologies that you can use to produce forgings.
23 Each one has its own advantages/disadvantages. You
24 can use mechanical presses. There's a company over

1 in Danville, ThyssenKrupp, that makes crank shafts
2 and they use mechanical presses. They're huge, huge
3 mechanical presses. But they're more automated.
4 They have automated lines, and they produce crank
5 shafts by billions, if you will, for Class A trucks.

6 And, you know, that doesn't fit us. It's a
7 huge piece of equipment. You know, it's not as
8 flexible as a hammer. Nobody makes a piece of
9 equipment like a hammer that's as flexible. So we
10 can do like a lot of different, a lot of different
11 types of products, small quantities that is not --
12 you're not competitive on a press, a mechanical
13 press. You can use hydraulic presses, but they're
14 real slow.

15 Therefore, heat resistant materials,
16 aluminums, titanium, you use hydraulic press for that
17 type of material. So there are other ways to go, but
18 that would limit you in what we can provide our
19 customers. We have a niche, you know, we have
20 certain equipment. We fit that niche real, real
21 well, and there's nothing else that really can take
22 the place of our impact producing hammer.

23 MR. RAO: Thank you.

24 HEARING OFFICER POWELL: At this

1 point, let's take a break for fifteen minutes and
2 return at 12:50. Thank you.

3 (Whereupon a break was taken.)

4 HEARING OFFICER POWELL: Let's go back
5 on the record. I understand that one of the
6 witnesses is going to be changed. Is Ms. Weis going
7 to be next before we call Mr. Martz back?

8 MR. VAN NESS: That's correct. Laura
9 Weis has shown up. And she has not been sworn, so
10 let's have her sworn and then we can take her
11 testimony.

12 LAURA WEIS,
13 called as a witness, after having been first duly
14 sworn, was examined and testified as follows:

15 EXAMINATION

16 BY MR. VAN NESS:

17 **Q. Mrs. Weis, for the record, please spell out**
18 **your name and business address.**

19 A. It's Laura Weis, L-A-U-R-A, W-E-I-S.
20 Business address is 303 West Kirby Avenue, Champaign,
21 Illinois.

22 **Q. And can you confirm for the record that you**
23 **authored the pre-filed testimony in this case on**
24 **behalf of the Chamber of Commerce?**

1 A. I did.

2 MR. VAN NESS: At this point,
3 Mr. Hearing Officer, I'd like to ask that the
4 pre-filed testimony of Ms. Weis be entered as, I
5 believe, Hearing Exhibit No. 4.

6 HEARING OFFICER POWELL: No. 7, I
7 believe.

8 MR. VAN NESS: No. 7. Okay. We're
9 adding the photos?

10 HEARING OFFICER POWELL: Correct. Is
11 there any objection to the motion? Hearing none,
12 Ms. Weis' pre-filed testimony will be admitted into
13 the record.

14 **Q. (by Mr. Van Ness) Thank you. I'm not**
15 **going to ask you to read your pre-filed testimony**
16 **into the record, but I would appreciate it if you**
17 **wouldn't mind elaborating on it a little bit.**

18 **Specifically, in your pre-filed testimony you**
19 **mentioned that the Clifford-Jacobs plant is in an**
20 **area that was rezoned by the county back in 1973. Do**
21 **you remember that?**

22 A. Yes.

23 **Q. And you indicated that the intention of the**
24 **ordinance was, quote, to slowly move the area to be**

1 **completely industrial, end quote?**

2 A. Correct.

3 **Q. Do you believe that is still the intent of**
4 **the county?**

5 A. To my knowledge, that's still the intent.
6 In my research I could not find anything that
7 indicated that they had intended to make any changes
8 to that or to amend that in any way.

9 **Q. Put another way, would you agree that the**
10 **area is, in fact, ideally suited for industrial**
11 **purposes generally?**

12 A. I don't know what else it could be suited
13 for. When you look at how that area is developing,
14 in particular to the north and to the west,
15 everything is commercial. In particular with the
16 community's commitment to completing Olympian Drive
17 in that area, the Apollo subdivision to the north of
18 that, and that area is already very industrialized,
19 especially with proximity to the railroad, it really
20 is not suited for residential property.

21 **Q. Now, most people think of Champaign County**
22 **as the home of the University of Illinois and a**
23 **rather large regional medical community. How**
24 **important is the manufacturing base to the county in**

1 **the overall economic mix of things?**

2 A. Manufacturing is critical to this
3 community. Given that the University of Illinois and
4 health care are our largest employers, it means we
5 have a lot of property that's been taken off the tax
6 rolls so manufacturing really assists the local
7 economy in terms of helping to further our fire
8 protection, our street repairs, our police protection
9 as well.

10 In addition to that, while we're a community
11 that likes to think everybody is going to go to
12 college, not everybody in our community is going to
13 go to college and so it's really important that we
14 have alternative job opportunities for those that are
15 coming out of school.

16 **Q. Now, do you have any information as**
17 **relating to the effect of Clifford-Jacobs on other**
18 **local businesses?**

19 A. It was actually one of the questions -- we
20 toured the plant a couple of months ago as part of a
21 program through the chamber, and it was one of the
22 questions we asked. To my knowledge, Clifford-Jacobs
23 actually spends a couple million dollars a year back
24 with local vendors in the community from business-to-

1 business purchasing. That is really critical to the
2 overall economy for Champaign County.

3 **Q. Now, in your pre-filed testimony, you**
4 **mentioned a recent newspaper article that appeared in**
5 **The News-Gazette. Do you remember that?**

6 A. Yes.

7 **Q. And in your remarks you noted that several**
8 **area residents publicly acknowledge that the noise**
9 **from Clifford-Jacobs doesn't bother them; isn't that**
10 **right?**

11 A. Correct. According to the article, they
12 cited several residents that were in the area and
13 they said the noise, it's background noise for them.
14 It does not impact them one way or another.

15 **Q. I'll ask you what I've asked other**
16 **witnesses. Have you or anyone else at the chamber,**
17 **to your knowledge, ever heard of any complaints about**
18 **noise emanating from Clifford-Jacobs?**

19 A. I've been with the chamber for fifteen
20 years, and in the fifteen years I've been there I
21 cannot recall one phone call from any consumer, from
22 any business, making any sort of complaint about
23 Clifford-Jacobs.

24 MR. VAN NESS: That's all the

1 questions I have of this witness. Leave it to the
2 Board members.

3 HEARING OFFICER POWELL: Are there any
4 questions for this witness from the chairman or other
5 Board members? Okay. From staff, Ms. Liu.

6 MS. LIU: Good afternoon, Ms. Weis.
7 You mentioned the 2010 News-Gazette article?

8 MS. WEIS: Uh-huh.

9 MS. LIU: Would you happen to be able
10 to produce that or provide it later?

11 MR. VAN NESS: I actually can do that.
12 I did finally locate it, and I can produce that and
13 send it to the Board.

14 MS. LIU: Thank you.

15 HEARING OFFICER POWELL: Any further
16 questions? Okay. Thank you, Ms. Weis, for your
17 testimony.

18 MS. WEIS: Thank you.

19 MR. VAN NESS: Okay. I think we'll
20 turn our attention now to Dr. Paul Schomer. Again,
21 Mr. Hearing Officer, copies of Dr. Schomer's report,
22 as well as the petition, are on the table in the
23 back. Dr. Schomer has been sworn, so I guess we'll
24 get to it. Dr. Schomer, for the record would you

1 please spell out your name and your business address?

2 A. Paul Schomer, S-C-H-O-M-E-R. I live at
3 2117 Robert Drive, Champaign.

4 **Q. And can you confirm for the record that you**
5 **authored the noise assessment and feasibility report**
6 **that was filed as Exhibit D?**

7 A. Yes.

8 MR. VAN NESS: And again, Mr. Hearing
9 Officer, I assume it's already in the record. So if
10 you think we should move or have it admitted again,
11 I'd be happy to do so.

12 HEARING OFFICER POWELL: Let's do that
13 just for consistency.

14 MR. VAN NESS: Okay. I so move.

15 HEARING OFFICER POWELL: Any
16 objections? Hearing none, that would be admitted
17 into evidence as Exhibit 8.

18 **Q. (by Mr. Van Ness) And again without asking**
19 **you to repeat your report verbatim, Dr. Schomer, I**
20 **thought it best for you to summarize your findings**
21 **and allow you to entertain any questions from the**
22 **Board. So let's start by describing the general**
23 **locale which the Clifford-Jacobs facility is located.**

24 A. Well, we've seen on the charts where it's

1 located. It's in an industrial area. There's lots
2 of other noise sources and other problems in the area
3 that would make it not desirable for me to want to
4 live there, in addition to any reason for noise.
5 It's an industrial area except for this enclave of
6 houses. It's not even an enclave. It's a mixture of
7 houses and industrial.

8 **Q. And when you're talking about the enclave,**
9 **you're talking about what we refer to as the Wilber**
10 **Heights neighborhood?**

11 A. Yes.

12 **Q. Okay. Now, when you were first contacted**
13 **by counsel for Clifford-Jacobs, what did you**
14 **understand to be your task?**

15 A. To assess what the present noise is, assess
16 what the future noise is, and assess what mitigation
17 could be done, if any.

18 **Q. And what was your first step in conducting**
19 **your analysis?**

20 A. Went out to visit Clifford-Jacobs to
21 understand what they're doing and what makes the
22 noise and how it's made.

23 **Q. We've covered it somewhat with other**
24 **witnesses, but in your report on page 2 you mentioned**

1 that the building has, quote, been designed to
2 utilize the stack effect for natural ventilation.

3 What did you mean by that?

4 A. Well, that's basically the heat rises and
5 you want to get the air flowing by the heat rising
6 and pulling cold air into the building at ground
7 level. It's pretty much the same as a vent fan on
8 your roof that turns by itself and sucks more air in.

9 Q. And how is this relevant to the noise
10 issue?

11 A. It's relevant to the noise issue because
12 the building is open in so many places instead of
13 being closed. So it doesn't contain the sound
14 indoors, which it might if it were closed up.

15 Q. Now, your report details at length your
16 efforts to measure the sounds coming from the
17 Clifford-Jacobs forging operation onto the Wilber
18 Height neighborhood?

19 A. Uh-huh.

20 Q. I'm going to show you a blowup of what has
21 been labeled figure A, and that is figure A of your
22 report that's on file, if it weren't already. And
23 that's found on page 8 of the report. Can you
24 describe for the Board what figure A is and what it

1 **shows us?**

2 A. What we did is we wanted to get, first of
3 all, good clean measurements of what the attenuation
4 would be in an open area, if we could, with distance,
5 and we did that by the hammers up in this area. And
6 you essentially have this field, which is a nice flat
7 field to have the propagation over so you can see
8 really what's going on in the open.

9 And we add what we called our control position,
10 which was an area just inside the Clifford-Jacobs --
11 well, not quite inside. It was on one side of the
12 fence in one place. Because we didn't want to have
13 to climb the fence to get to our meter, we have it
14 two feet further over. But it was right at the
15 corner of the Clifford-Jacobs facility. And that
16 kind of was a reference point.

17 And then we just made measurements out four
18 distances, actually. I think, if I remember right.
19 But these are roughly equally spaced distances, each
20 corner. So this gave us kind of the open field sound
21 attenuation.

22 Then there was three more places that we
23 looked at that are kind of on a line with radius of
24 the street distance. If you went around, you see

1 that that's the radius coming from Clifford-Jacobs.
2 And there was two sites in here, a trucking site that
3 was internal to the --

4 **Q. This one, the site 4, is that what I'm**
5 **looking at here?**

6 A. Yeah. And then site --

7 **Q. Site 5? This is site 5.**

8 A. Five.

9 **Q. And then site 6 is over here?**

10 A. Yeah. I didn't get to that one yet. I was
11 getting to these two. This one is a trucking
12 facility. This is the lawn of a church. There's a
13 small church there. And then the other one was in
14 line with this distance, and it was in here and it
15 was located at Cook, C-O-O-K, a garbage hauler.
16 Essentially a garbage collector, big garbage trucks.

17 And since we had been using them for about
18 thirty years at our house, I prevailed on them to
19 make measurements on their property, which was
20 interesting because I found out that two or three of
21 the houses around Cook was owned by Cook and members
22 of his family live there, his mother and son and
23 brother or something like that.

24 **Q. And, for the record, Mr. Hearing Officer,**

1 Dr. Schomer had alluded to the location of the
2 control site, and that, of course, was one of the
3 questions that was asked pursuant to Board staff
4 question number 6. I wanted to make sure that we
5 were being responsive to that particular item.

6 A. Well, one more point to make, I think. By
7 measuring at these locations here, I found all of
8 them on the order of 6 dB or so lower at the same
9 distance than in the field. And that 6 dB is
10 roughly -- that's what's caused locally by a row of
11 houses shielding the next row of houses.

12 So anything that was interior to these houses,
13 interior by a row of houses, to the exterior, was
14 about 6 dB lower. And that was just the shielding
15 because you had to compare it side by side of the two
16 distances. We did measurements at both the outside
17 and inside even at the same time.

18 MR. RAO: I just wanted to clarify for
19 the record, when you meant dB, you're talking about
20 decibel?

21 DR. SCHOMER: Yes.

22 MR. RAO: That's for the record.

23 Q. (by Mr. Van Ness) You want to describe
24 what a decibel is and what Leq and A-weighted refers

1 **to?**

2 A. Okay. A-weighted refers to a filter that
3 is commonly used. It's somewhat like the human ear
4 is hearing at low levels, relatively low levels, and
5 it gets rid of much of the low frequencies and much
6 of the high frequencies and leaves just the middle
7 frequencies.

8 The decibel is a unit I think that was dreamed
9 up to confuse people, but nevertheless it's used.
10 And it's a algorithmic measure, which confuses people
11 to begin with, but it's a unit of relative power or
12 relative energy. And it all makes sense when you
13 understand it, but it's not easy to explain.

14 **Q. In layman's terms, the higher the decibel**
15 **level, the more energy that you're --**

16 A. Yeah. The higher the decibel, the more
17 energy there is, which means also the louder it is.
18 And that's probably -- that's saying enough.

19 **Q. Now, on page 3 of your report, you**
20 **indicated that there were two distinctive kinds of**
21 **noise emanating from the forging operation. Do you**
22 **remember that?**

23 A. Yeah. The sound was, I think I indicated
24 earlier, the hammer striking the metal, the metal

1 pieces striking, and then there's a sound of the
2 steam venting off the hammer. And those are two
3 distinct sounds when you're on the perimeter of the
4 area. But when you get internal to the houses with
5 attenuation, it was my sense that most of the
6 attenuation was the higher frequency steam being
7 attenuated and not the lower frequency hammer sounds.

8 **Q. Specifically you mentioned there was a very**
9 **clear "boom-shis" sound that can be heard and**
10 **measured at locations along Wallace Avenue. Do you**
11 **remember saying that?**

12 A. Yes.

13 **Q. And the boom I presume you're referring to**
14 **is the impact?**

15 A. Yes.

16 **Q. And the "shis" sound is --**

17 A. The steam.

18 **Q. From the steam vents. Where physically are**
19 **the steam vents relative to where the hammers are?**

20 A. I'm sorry?

21 **Q. Where physically are the steam vents**
22 **located relative to where the hammers are?**

23 A. Steam vents are up on the roof, certainly
24 near the roof. You can see on a clear day the cloud

1 of steam coming off each bang. And the hammers are
2 located down near the floor, much lower certainly
3 than the steam vents.

4 **Q. If I'm standing in the neighborhood of the**
5 **Heights, could I see the steam vents from my rooftop?**

6 A. Yeah.

7 **Q. But I couldn't see where the hammers were**
8 **located, I couldn't see that?**

9 A. No, I don't think you'd be able to see the
10 hammers.

11 **Q. And why is that?**

12 A. There's some buildings in between. There's
13 a shed building or something you have that's west of
14 the hammers.

15 **Q. Would it be fair to say that from the**
16 **Wilber Heights area perspective that the boom sounds**
17 **are somewhat mitigated by the buildings that lie**
18 **between?**

19 A. There's going to be some attenuation.

20 **Q. Okay. And it's also true, is it not, then,**
21 **that the "shis" sound coming from the roof are major**
22 **contributors to the high decibel levels in the Wilber**
23 **Heights neighborhood?**

24 A. Well, the "shis" sound is there on the

1 perimeter. It gets attenuated as it moves in.

2 **Q. Your report also indicated that you**
3 **attempted to investigate the potential for mitigation**
4 **of the "shis" sound. Do you remember that?**

5 A. Yeah.

6 **Q. You were attempting to investigate what**
7 **would happen if Clifford-Jacobs moved its steam vents**
8 **from the west side to the east side of the building;**
9 **is that correct?**

10 A. Yeah. Let me make clear what we're talking
11 about here. We're talking about considering the roof
12 line to be a barrier if the vents are located on the
13 opposite side of the roof from where they are now.
14 The big hammers are all on the, unfortunately, the
15 west side of the building, and so the vents come
16 through the west side of the roof.

17 And we were trying to see what would happen,
18 what might happen if you had the vents moved to the
19 other side of the roof. So that was what we were
20 trying to find out. And we tried by taking two
21 surrogate distances from Clifford-Jacobs. I think it
22 was the -- pretty certain it was the control distance
23 and the further distance, what would have been
24 position one, and getting a control position and

1 position one to the east of the plant instead of to
2 the west and try to measure the sound on the east
3 side where it's coming over the roof, coming to the
4 east instead of the west, but we weren't able to get
5 good measurements because the Illinois Central made
6 too much continuous noise. There just wasn't hardly
7 a ten second period without noise.

8 **Q. In your report on page 3, again you said**
9 **within the uncertainty of these measurements, it was**
10 **not possible to conclude that the forge would be**
11 **benefitted in any way by relocating the vent pipes?**

12 A. Yeah. We just couldn't say anything from
13 the measurements.

14 **Q. And that was because of the railroad noise**
15 **mainly?**

16 A. Mainly the railroad noise, yeah.

17 **Q. Well, if I understand you correctly,**
18 **theoretically one might conduct further such tests if**
19 **we could find ideal weather conditions and work**
20 **around the railroad noises somehow. Is that a fair**
21 **statement?**

22 A. Either that or see if we could go further
23 away somehow, but the further you get the more other
24 problems you have.

1 **Q. Would you recommend doing additional tests**
2 **on that scale?**

3 A. Only if they wanted to give me lots of
4 money, but I wouldn't recommend it.

5 **Q. And that's because the testing itself would**
6 **be expensive?**

7 A. It would be expensive to do, and I don't
8 think that's the way to go.

9 **Q. Okay. Turning now to your sound**
10 **measurement activities, I'm going to ask you to look**
11 **at what's been labeled figure F of your report. That**
12 **appears on page 13 of the report, and I guess we'll**
13 **ask the hearing officer to enter that into the**
14 **record. So I so move.**

15 HEARING OFFICER POWELL: Excuse me.
16 Figure F?

17 MR. VAN NESS: That would be figure F,
18 as in Frank.

19 HEARING OFFICER POWELL: I guess it's
20 already in the record because it's part of the
21 report.

22 MR. VAN NESS: Right, right. Okay.
23 So you don't need the --

24 HEARING OFFICER POWELL: I don't think

1 so.

2 MR. VAN NESS: All right. I wasn't
3 sure if we were consistently following that path.

4 HEARING OFFICER POWELL: Thank you.

5 Q. (by Mr. Van Ness) Can you describe for the
6 Board now looking at figure F what that is and what
7 it shows us?

8 A. This is the area we've been talking about,
9 and there's three contours on here. The first
10 contour that's of interest is the 58.5, that's the
11 middle one, and that also corresponds to daytime
12 limits that the Board currently has. So this shows
13 what were the current -- contour 58.5. The lower
14 contour, the 53.5, is this next one here. That shows
15 the nighttime criteria that the Board has. And then
16 the third contour is the 63.5, which is the 5 dB
17 increment, and the Board had wanted the contours at 5
18 dB increments. And that shows the other contours of
19 interest, essentially. So this exhibit provides the
20 houses that are within the different contours that
21 the Board has set.

22 Q. I'm going to take the liberty of walking up
23 here. You've got two structures that are indicated
24 in green on the chart. Can you relate to the Board

1 **what the significance of those two structures is?**

2 A. The green houses just touch the 63.5
3 contour, so I included anything that touched a
4 contour on any part of the house as inside the
5 contour.

6 **Q. And then there's a number of structures**
7 **that are indicated with yellow outlining. Can you**
8 **explain to the Board what that --**

9 A. The yellow ones are the ones that at least
10 touch the 58.5 and are less than the 63.5.

11 **Q. And finally -- well, not finally. There's**
12 **another cluster of homes, a number of them right**
13 **along Wallace Avenue, that are outlined in blue. Can**
14 **you identify that?**

15 A. In blue are the houses that at least touch
16 the 53.5 but are less than the 58.5.

17 **Q. And finally, of course, there's a number of**
18 **structures that are identified in orange outline.**

19 A. And those are clearly the houses that are
20 below 53.5.

21 **Q. So they would be unaffected in any event?**

22 A. That's right.

23 **Q. I notice that there's a number of**
24 **structures that aren't colored, shown basically as**

1 **white roofs for the most part. What can you tell us**
2 **about those?**

3 A. Those are all commercial or industrial.

4 **Q. Some of them are noise sources in their own**
5 **right; is that correct?**

6 A. Oh, yeah. There's a number of noise
7 producers, mainly trucks and there's the railroad, of
8 course. But there's some shops and things, though,
9 too.

10 **Q. Now, Dr. Schomer, you called me on the**
11 **phone yesterday and told me that you'd returned to**
12 **the Wilber Heights neighborhood for a follow-up look**
13 **in preparation for today's hearing, didn't you?**

14 A. Yes.

15 **Q. And did you notice any physical changes to**
16 **the Wilber Heights neighborhood from when you were**
17 **there in the summer of 2012?**

18 A. Well, I noticed a couple of things. One of
19 the things -- well, it got me thinking about I was
20 out there to really check a few of the houses that --
21 the green ones that were green in that, and they
22 were. But I was looking, and there were houses that
23 when we went there the first time we tried to be very
24 conservative and not anything that looked like people

1 could be living in and we counted them.

2 This time I looked a little more closely, and
3 there were houses that had been well kept up but had
4 no shrubbery, no roads, in most cases, out to the
5 street that were connected to industrial areas rather
6 than through the street anymore. And they either had
7 a bunch of pickup trucks parked next to them or
8 nothing parked next to them.

9 And it suggested to me that there were some
10 houses that had become used by businesses and there
11 weren't really people living in these houses. And
12 there was probably nine that I looked at, and I think
13 six of them, six of them that are of interest looked
14 like they're being used but not as houses anymore, or
15 at least not as residences. So I thought that was
16 worth talking about.

17 The other change I saw was not acoustical.
18 Well, it was acoustical slightly, that the streets
19 seemed to have more truck traffic than when we had
20 been there in the past and it was on -- the truck
21 traffic was on Paul Street, which is kind of the dirt
22 road in the middle of the two hard roads, and there
23 was no young families anymore. There had been some
24 young families with little kids when I was there

1 last. There were no little kids out. With the truck
2 traffic you couldn't have your little kids out there.
3 There was tractor trailers. Two of them went by me
4 with loads of gravel or aggregate or something, the
5 big ones, and one of the big garbage trucks came by
6 me. And this was on this third street.

7 **Q. Dr. Schomer, yesterday you sent me a couple**
8 **of items that I think we ought to show to the Board.**
9 **I'm going to ask you to look at this document and**
10 **tell me what it is.**

11 A. This shows the number of people, number of
12 houses we had calculated based upon the contours and
13 the maps and the different zones, and it shows an
14 adjusted number because of the houses that look like
15 they're not houses, at least in terms of residences
16 anymore.

17 MR. VAN NESS: Thank you. Mr. Hearing
18 Officer, I have copies for the Board. I would ask
19 that it be admitted into evidence as exhibit -- well,
20 I'm not sure what that is.

21 HEARING OFFICER POWELL: Nine.

22 MR. VAN NESS: Exhibit 9. Thank you.

23 HEARING OFFICER POWELL: Any
24 objections? Hearing none, this chart will be

1 admitted as Exhibit 9.

2 MR. RAO: Dr. Schomer, are you able to
3 identify which houses these are that you think are no
4 longer being used for residential purposes on figure
5 F, or do you already have one made?

6 Q. (by Mr. Van Ness) Funny you should ask.
7 Dr. Schomer, I'm going to show you another document
8 now. It looks to me a lot like your old exhibit or
9 your old figure F. Am I correct on that?

10 A. That's correct.

11 Q. And what does -- what is different about
12 this one from figure F than what is before the Board
13 right now?

14 A. What this does is it circles -- these are
15 red circles, the houses or the buildings that look
16 like they're no longer being used as houses but
17 they're being used for other purposes. And then
18 there's some dash red lines, and those were the three
19 Cook houses where they're houses that are being used
20 as a residence but the residents own the business at
21 that property.

22 MR. VAN NESS: And, again, I'm going
23 to provide copies. I guess it would be Exhibit 10.

24 HEARING OFFICER POWELL: Yes.

1 MR. VAN NESS: And move its
2 introduction.

3 HEARING OFFICER POWELL: Any
4 objections? Hearing none, this will be admitted as
5 Hearing Exhibit 10.

6 MS. ZALEWSKI: Quick question. Have
7 we looked into the makeup of these houses? Are there
8 any environmental or social implications with the
9 residents of this neighborhood?

10 MR. VAN NESS: I'm sorry. Did you
11 have a question?

12 MS. ZALEWSKI: Has there been any
13 study of the makeup of the residents of this
14 neighborhood for social or environmental issues or
15 implications?

16 MR. VAN NESS: Not to my knowledge.
17 We alluded earlier -- one of the witnesses alluded
18 earlier to a report that appeared in the local
19 newspaper two or three or four years ago. We are
20 aware that there are -- that some of the planning
21 agencies and so forth for the county are taking a
22 look at the whole picture of, I guess you'd say,
23 urban planning for the area, but I'm not aware of any
24 specific information on that.

1 One of the questions that was put to us by the
2 Board in pre-filed materials that were provided to us
3 on the 19th was basically asking if we kind of knew
4 who was where, and I think in general terms we'd have
5 to say no. We have both people on the staff of
6 Clifford-Jacobs and also I know Dr. Schomer. We have
7 had incidental contact with individuals, but we
8 haven't done an organized study. We haven't even
9 really identified, you know, who owns this residence
10 and who owns that residence and so forth.

11 So the question was put to us, I might as well
12 address it now, the question was put to us, like with
13 number 10 or 11 of the pre-filed questions from the
14 Board, would we consider trying to basically provide
15 the kind of information, which I think is where
16 you're headed with this, we can. It will probably
17 take a little bit of spade work because it's not just
18 a matter of knocking on doors.

19 Some of these places may not be occupied or they
20 might not be occupied when you go knock on the door.
21 So probably the most reliable way of finding out who
22 is where is maybe doing a property record search and
23 tracking it down through the property tax records.
24 So it can be done. It takes a little bit of spade

1 work, but it can be done. And if the Board wants it
2 done, I guess we can make an effort to do that.

3 MS. ZALEWSKI: Okay. Thank you.

4 MR. RAO: This is a follow-up with
5 Exhibit 10. The houses that have been circled in
6 red, those are the ones that you are indicating that
7 they are no longer being used for residential
8 purposes?

9 MR. SCHOMER: Yes.

10 MR. RAO: And this is purely based on
11 you driving by and observing?

12 MR. SCHOMER: Yeah. And the specifics
13 of what I've observed is roadways from the house to
14 the industry, a bunch of trucks parked at the house
15 or nothing at the house and pathways to the industry.
16 Not really coming out on the street anymore.

17 MR. RAO: Is it fenced on the street?

18 MR. SCHOMER: No.

19 MR. RAO: There's just no pathways
20 coming to the street?

21 MR. SCHOMER: It's just that, you
22 know, if it's dirt and you don't use it, it gets
23 overgrown with weeds and what you use gets --

24 MR. RAO: Okay.

1 MR. VAN NESS: I can volunteer that we
2 are under the impression that at least one of the
3 buildings that, I'm not even sure if it's one of the
4 buildings circled in red, was in the process of
5 demolition within the last week. So, you know, I
6 guess our understanding is that as time goes by, this
7 area which is zoned industrial will eventually turn
8 industrial.

9 Obviously the residences are grandfathered in,
10 and we're not trying to throw any residents under the
11 bus here. But the fact is in the long view of
12 things, this neighborhood has been for over forty
13 years zoned for industrial/commercial use and it's
14 gradually morphing into industrial/ commercial use.

15 MR. O'LEARY: Has the company ever
16 purchased some of these homes as they've become
17 vacant?

18 MR. SCHOMER: I think that the
19 companies have been purchasing the homes as they've
20 become vacant to have more land for their purposes
21 and storage or offices or what have you. I think
22 it's a good, inexpensive way for the companies to get
23 more space.

24 MS. LIU: Dr. Schomer, some of the

1 circles are indicated with a solid red line and some
2 of them are hash marked. Is there a difference?

3 MR. SCHOMER: The hash mark is where I
4 knew that people were living that were associated
5 with the businesses right there. And the solid red
6 line was houses that looked like they were not houses
7 anymore and not residences.

8 Q. (by Mr. Van Ness) Okay. Now, in your
9 report you discussed various problem means of
10 mitigating noises emanating from the Clifford-Jacobs
11 facility; is that correct?

12 A. I'm sorry?

13 Q. The question was, you discussed various
14 possible means of mitigating the noises emanating
15 from Clifford-Jacobs. Do you recall that?

16 A. Uh-huh.

17 Q. And there was, as I recall, particular
18 emphasis on the benefit to be conferred by noise
19 mitigation efforts?

20 A. Uh-huh.

21 Q. And what was your overall conclusion?

22 A. Well, my conclusion is that if they could
23 somehow get rid of the "shis" sound, do more with
24 "shis," that would have the probably easiest way to

1 get benefit.

2 **Q. And --**

3 A. I don't think there's much that can be done
4 with the boom sound, the hammer sound. That's just
5 going to be there.

6 **Q. Not much you can do about the boom sound,
7 something you can do about the "shis" sound?**

8 A. Well, in theory. They've tried twice with
9 silencers and they didn't work, so that's all I can
10 observe.

11 **Q. Now, it's been noted that some of these
12 silencers -- some of these efforts at silencers were
13 conducted a number of years ago. Are you aware of
14 any intervening technology or technological advances
15 that might affect that or change your response?**

16 A. There might be other companies that are
17 better suited than the ones they we were able to
18 locate. I can't answer that because I don't know.
19 I've never done, tried to silence a drop forge, so I
20 can't say that there is but there could be other
21 companies that are more suited to the heavy
22 industrial application.

23 **Q. Were you able to determine whether there is
24 a correlation between the size of the hammer and the**

1 **energy of the "shis" sound that came from that**
2 **operation?**

3 A. I think they've got to be related one to
4 the other, and the bigger the hammer the more the
5 steam and the more the impact.

6 MR. VAN NESS: Mr. Martz? I saw
7 you --

8 MR. MARTZ: Yeah. I just want to
9 interject something. I've been to a lot of
10 forging -- there's a forging industry association
11 that all of the forgers in the country, you can
12 either belong to it or not. A majority of them
13 belong to this, and every two, three years or on
14 occasion there's conferences set up and all of the
15 conferences I've ever been to and different people
16 that I know and have met and I've never heard of
17 anybody, you know, talking about being successful
18 with sound attenuation devices on the impact
19 producing equipment that we have. So just thought
20 I'd throw that out there, that I haven't heard of any
21 good results from anybody.

22 MR. VAN NESS: And, again, that's
23 because of the impact aspect of it?

24 MR. MARTZ: Right.

1 **Q. (by Mr. Van Ness) Dr. Schomer, the Board's**
2 **staff submitted several pre-filed questions which I'm**
3 **now going to pose to you. The first one is from**
4 **Board staff question 7(a) and (b). Are you aware of**
5 **any other special types of barriers that are**
6 **available that might reduce sound levels from the**
7 **forging building and, if so, are these any more**
8 **economically reasonable and technically feasible?**

9 A. I would unequivocally not recommend
10 barriers for this setting.

11 **Q. And why is that?**

12 A. They're just not going to work. The
13 geometry isn't right. The frequencies aren't right.
14 It's just not going to work.

15 **Q. When you refer to the geometry, can you**
16 **explain that?**

17 A. Well, you want to have a barrier close to
18 the source or close to the receiver to be effective,
19 and you can't get close to the source and you can't
20 get close to the receivers. Neither one is feasible.

21 **Q. Have any idea of what the cost factors**
22 **would be?**

23 A. Well, if you wanted to get tall enough to
24 get to the height of the roof of this facility --

1 what's the height of your roof?

2 MR. MARTZ: Forty-five foot.

3 A. Forty-five feet. So you got to be
4 something like fifty feet in the air, and that wind
5 load would be amazing. And you just couldn't --
6 you couldn't build that. It's not reasonable.

7 Q. Turning to the next question posed by the
8 Board and staff, this would be -- I think it's
9 related to your report, staff question 9(a), (b), and
10 (c). On page 4 of your report you categorically
11 state that, quote, no noise walls at equal height
12 would even break the line of sight from the steam
13 vent pipes to nearby homes. Please verify whether
14 you're referring to a sound wall constructed near the
15 residences or near the forge building.

16 A. I think I'm referring to both, but
17 certainly I'm referring to the forge building. As I
18 just said, you'd have to be up fifty feet in the air
19 and that's -- I don't think anybody's ever built a
20 wall that high. And then by the houses, I mean that
21 the best you would do is be across the street on
22 Wallace, and you're going to have to have an awful
23 lot of wall and it's going to have to be sixteen or
24 twenty feet in the air at least. That would be like

1 building a half mile of freeway wall, and it would be
2 a lot more iffy because of the height of the source
3 than it would be on a freeway. So I just can't
4 recommend it.

5 **Q. Would a sound wall constructed close to the**
6 **noise source that did not break the line of sight**
7 **from the vent pipe be effective against sounds**
8 **emanating from the windows and doorways of the forge**
9 **building?**

10 A. No.

11 **Q. And I think --**

12 MR. RAO: Is that because of the low
13 frequency noise, or what's the reason for it?

14 MR. SCHOMER: The low frequency noise
15 is going to require -- you've got a barrier already
16 for most of the low frequency noise and the buildings
17 that are there. So the only place you could put
18 another barrier is somewhere out along like Wallace.

19 And not all your low frequency sound comes out
20 through the ground because there's upper windows and
21 things that are open. So some of the low frequency
22 sound is going to be coming around there, and low
23 frequencies are harder to attenuate. The
24 wavelengths, as you know, are longer, and I don't

1 have the spectrum of this, at least I don't have one
2 handy, but the hammer sound has got to be in the
3 fifties or hundred range. And fifty hertz is twenty
4 foot wavelength. So the barrier is starting to get
5 small compared to twenty feet if it's only ten or
6 twelve or twenty feet. So you're just not going to
7 get much.

8 I just can't recommend walls for this site.
9 It's just -- the best you could do would be across
10 the street. You can't run a barrier down the street
11 where there's streets and driveways and everything.
12 And when you're across the street, some of those
13 houses are set back a hundred feet and you've got
14 fifty feet across the road. You're not very close to
15 the houses, and that's just the first row. I'm
16 trying to remember a running foot cost of highway
17 walls, but I think it's on the order of a couple
18 hundred dollars a running foot.

19 **Q. And that's for what height?**

20 A. About ten, twelve feet.

21 **Q. You're talking about a height that would be**
22 **from --**

23 A. Yeah. I just haven't looked at the prices
24 recently enough, but you're talking about, I'm going

1 to guess, half a million to a million dollars to
2 build a wall around that, a special wall.

3 **Q. This next question, Mr. Hearing Officer, is**
4 **related to the Board's last questions, 3(a), (b), and**
5 **(c). On page 5 of your report you state that a more**
6 **realistic worst case scenario was where one of the**
7 **largest hammers is operating at a hundred percent**
8 **capacity, while the other two are operating at 50**
9 **percent capacity. Why did you reach that conclusion,**
10 **and does that conclusion assume all the other hammers**
11 **are operating at a hundred percent capacity?**

12 A. Well, I reached the conclusion, as I said
13 earlier, that the scenario of a hundred percent on
14 every hammer certainly bounds the problem but I felt
15 was too restrictive because we're talking about
16 equipment that, as I said earlier, it's constant
17 pounding which means that there is repairs that are
18 needed on a regular, if not predictable basis.

19 And we were talking about having -- well,
20 repairs is one dimension of it, and I think they said
21 earlier they might be working on one kind of thing.
22 It depends upon so many things going on at the same
23 time that it's just not reasonable.

24 **Q. Would operation -- continuing with the**

1 questions in this category, would operation of all
2 ten hammers at the same time have a greater impact on
3 Wilber Heights than the realistic worst case
4 operation considered in your report? Want me to
5 restate that?

6 A. Yeah.

7 Q. Okay. Would operation of all ten hammers
8 at the same time have a greater impact on Wilber
9 Heights than the realistic worst case scenario that
10 you portrayed in your report?

11 A. There would be a little bit more noise, but
12 most of the energy is going into these bigger
13 hammers. The little ones have much less
14 contribution, hundreds and hundreds without making
15 much difference.

16 Q. If we had all fourteen of them hammering
17 away, what would be the initial incremental effect of
18 the smaller hammer?

19 A. If we had everything operating at once, it
20 would be 2 dB higher.

21 MS. LIU: Would that be consistent
22 across the -- the 2 dB higher, would that be
23 consistent across each one of the lines?

24 MR. SCHOMER: In other words, at the

1 reference position, it would be 67 instead of 65 dB
2 if you had absolutely everything operating at a
3 hundred percent.

4 Q. (by Mr. Van Ness) So is it fair to assume
5 or conclude from that that the primary sources of the
6 noises that we're alluding to today are the larger
7 hammers?

8 A. Yes.

9 Q. So in effect, if I understand correctly,
10 the mix of the number of hammers -- the number of
11 hammers isn't as relevant as the size of the hammers
12 that are operating?

13 A. Size of the hammers are the primary factor
14 in how much they contribute.

15 Q. Moving to the next question, which is
16 somewhat related, Mr. Hearing Officer, it would be
17 from Board staff question 4. According to your
18 report on page 5, you basically identified the worst
19 property line sound level at 63.5 decibel. Would you
20 favor the Board adopting the 63.5 decibel numeric
21 limitation in the proposed site-specific rule or the
22 extended hours of operation?

23 A. I think that one option of the Board is to
24 limit the 63.5 where the contour is.

1 Q. And moving on to the next question,
2 Mr. Hearing Officer, which is from Board staff
3 questions 5(a), (b), (c), and (d). According to your
4 report, annex A at A5, you state that, quote, all of
5 our predictions of CJF sound levels are based on one
6 hour maximum LEQ of 65 dB, A-weighted, at the control
7 site?

8 A. Yes.

9 Q. First question. Does this reflect your
10 proposed worst case scenario?

11 A. Yes.

12 Q. If so, would the one hour LEQ level be
13 higher if more than three hammers are operating at
14 the same time? I believe you've already answered
15 that question. Please do so again.

16 A. Yeah. If more than the described number
17 are operated, it would be higher.

18 Q. What would be the one hour LEQ level at the
19 control site when four or five or six or seven, eight
20 or nine or ten hammers were operating?

21 A. As I said, I think if you had everything
22 operating, you'd be at 67 dB.

23 Q. So again an increment of 2 dB?

24 A. Yes.

1 Q. In your report, you predicted that
2 twenty-four houses would be impacted above the
3 nighttime standard of 53.5 dB based on your assumed
4 one hour LEQ of 65 dB at the control site?

5 A. Yes.

6 Q. If the presumed sound level were higher
7 than that, would more than twenty-four houses be
8 affected?

9 A. Yeah. I'd have to look at the contours and
10 make an estimate. It looks like it might be four or
11 five houses.

12 Q. And again, as you've already testified,
13 there was actually fewer than twenty-four houses,
14 residences at least, that appear to be affected now?

15 A. Well, the four or five I was counting, two
16 of them have circles.

17 Q. And finally, how many houses in Wilber
18 Heights would be impacted based on sound levels? And
19 I'm thinking again you've answered this question, but
20 we'll do it again. How many houses in Wilber Heights
21 would be impacted based on sound levels corresponding
22 to the number of hammers operating at the same time?
23 Again, you talked about four hammers and you moved up
24 to the ten hammers operating at the same time.

1 A. Yeah. The most we're going to increase
2 this thing is 2 dB. And if somebody wants to use 66
3 instead of 65, that would be okay. Sixty-seven seems
4 unreasonable to me. One dB difference is three or
5 four or five houses.

6 MR. VAN NESS: Thank you. I have no
7 further questions for this witness.

8 HEARING OFFICER POWELL: Does the
9 chairman have any questions for this witness?

10 CHAIRMAN GLOSSER: No.

11 HEARING OFFICER POWELL: Do the Board
12 members have questions for Dr. Schomer? And what
13 about the support staff? Ms. Liu?

14 MS. LIU: May I direct a question to
15 Mr. Ray and Mr. Martz that Dr. Schomer commented on?

16 HEARING OFFICER POWELL: I don't see
17 why not.

18 MS. LIU: Dr. Schomer had asked
19 about -- or excuse me. Mr. Van Ness had asked Dr.
20 Schomer about the possibility of including a decibel
21 limit in the site-specific rule of 63.5. He
22 indicated that that might be all right. From the
23 perspective of Clifford-Jacobs Forging, how would you
24 perceive that?

1 MR. RAY: So putting a site-specific
2 rule that 63.5 decibel would be basically a level for
3 the seven hours of extra operation we're asking for?

4 MS. LIU: Rather than limiting the
5 number of hammers, this was the number that was
6 indicated as the realistic worst case scenario in
7 terms of noise level.

8 DR. SCHOMER: I think she's asking if
9 this would only be at night.

10 MS. LIU: Yes. We're only addressing
11 those hours, correct.

12 MR. RAY: It's 63.5, having again
13 reviewed looking for all fourteen or ten hammers, we
14 would be asking for actually the two decibels higher
15 than that at the 65. That is an option.

16 MS. LIU: Is that something that maybe
17 you'd like to discuss and perhaps propose after the
18 hearing?

19 MR. VAN NESS: I think that would -- I
20 think it's a kind of complicated question, and I
21 think we have to come up with a complicated answer.
22 But I understand the question. I think what we would
23 have to do is go back, look at operational levels,
24 confer with our expert, and see how we would respond

1 to expressing this at a somewhat different way than
2 what the current rule does now and address it in
3 terms of numerical dB limitation.

4 It's something we could certainly look at. I
5 think since you've asked the question especially,
6 it's a fair question that we should consider and
7 respond to. I guess the answer is yes. And I think
8 the time to do it is after we've had a chance to
9 confer with our expert and not try to shoot something
10 off of the hip here. Certainly a fair question for
11 us to look at.

12 MS. LIU: Mr. Van Ness, there was one
13 more question I noticed that I don't believe we
14 touched on today, which was number 11.

15 HEARING OFFICER POWELL: Well, I can
16 ask that one. This one is addressed to the panel, I
17 guess. Question 11 of the pre-filed questions,
18 right?

19 MR. VAN NESS: Yes.

20 HEARING OFFICER POWELL: It's fine,
21 Mr. Van Ness, if you want to answer it, but if you
22 do, please let's have you sworn in first.

23 MR. VAN NESS: Okay. That's fine.

24 PHILLIP VAN NESS,

1 called as a witness, after having been first duly
2 sworn, was examined and testified as follows:

3 MR. VAN NESS: As I've told the
4 hearing officer this morning, there were a couple of
5 questions that kind of fell between the cracks. We
6 weren't sure who should address them, so I guess I'm
7 it. The question that was put to us, the questions
8 that were put to us, actually, with regard to number
9 10, 10(a) and (b), as well as 11. So I'll address
10 those in turn.

11 Number 10A basically asked us if Clifford-Jacobs
12 would consider providing a list to the Board of the
13 owners and addresses of each of the twenty-four
14 houses referred to in petitioner's Exhibit D at 13.
15 As I alluded to earlier, we could do that. We
16 haven't done it yet. Not entirely sure of the value
17 of it because it's possible that we will find that
18 the building at address XYZ is owned by somebody who
19 lives in Florida, but it is not an impossible task.
20 It just takes a little bit of spade work. Sure, we
21 can do that.

22 We had hoped that there was someone else out
23 there that had already done it, but that wasn't the
24 case and so we're not prepared to tell you today who

1 lives where. We just don't know. Individuals that
2 are at the table with me have talked to individuals
3 but not in an organized fashion like that. The rule
4 didn't require it, so we didn't do it and we were
5 kind of not really expecting this. But we can do it
6 and will do it.

7 The second question, which is number 11, states
8 that the -- well, the question is at 11(a). Setting
9 aside the current and local zoning classification,
10 please identify the land classification of each of
11 the surrounding properties reporting to you under 35
12 Illinois Administrative Code 901.

13 That was a little bit more of a difficult
14 question than I thought it would be because I went to
15 the referenced Website and they give you all these
16 color-coded categories of property use. So as best I
17 can tell, almost all of these -- almost all of the
18 structures that you see identified on the map fall
19 within the 1,000 and in a few cases the 3,000 series
20 of -- it's called LBCF activity dimension.

21 And this is proof positive that my mother's work
22 as a kindergarten teacher paid off. I used a
23 color-coded pen, and I believe this accurately
24 reflects the situation. Mr. Hearing Officer, I will

1 show you my original work of art, and this is a Class
2 A, and B and C are indicated by color coding.

3 Again, I'm not sure I can stand on this as a
4 scientific principle, but near as I can tell the
5 proper LBCF activity code for the properties in the
6 neighborhood fall generally within these parameters.
7 You'll see a couple that I haven't colored. I'm just
8 not sure. I suspect that all the white roof ones
9 that you see are probably going to be considered
10 class C. There's a couple of class Bs out there,
11 possibly.

12 But I hope that's responsive to your question,
13 but it's pretty obvious that the lion's share of
14 these are in fact residential, but by no means are
15 all of them. There's a significant percentage of
16 them that are class C which, for the record, are
17 basically industrial type properties. We've already
18 heard references to 18 wheel trucks and garbage
19 trucks and cement company and whatnot, so you can
20 presume that those would fall within the class C
21 designation.

22 HEARING OFFICER POWELL: Would you
23 like to move this?

24 MR. VAN NESS: Yeah, why don't we move

1 it, and I guess it would be Hearing Exhibit 11.

2 HEARING OFFICER POWELL: That's
3 correct. Any objections? Hearing none, this
4 document will be admitted into the record as
5 Exhibit 11.

6 MR. VAN NESS: The second part of
7 staff question number 11, which is 11(b), I think
8 we've probably beaten that dog to death. The
9 question is whether the more realistic worst case
10 scenario identified by the Schomer report would
11 result in the sound emitted to any class B land in
12 exceedance of the allowable sound levels. I would
13 guess that, and my inferences are that the answer is
14 probably no. That's the best I can do.

15 HEARING OFFICER POWELL: Okay. Are
16 there any further questions for any of the witnesses
17 that testified today? Seeing none, is there anyone
18 else who wishes to testify today?

19 MR. KURTZ: Not testify. Just wish to
20 say hello. I'm Al Kurtz, chairman of the Champaign
21 County Board, and I want to welcome you to Champaign
22 County. If there's anything we can do to help with
23 anything you need here in Champaign County, please
24 don't hesitate. My office is just back here.

1 HEARING OFFICER POWELL: Thank you. I
2 don't see anyone else who wants to testify today, so
3 we'll move on to the economic impact study issue.
4 Since 1998, Section 27B of the Environmental
5 Protection Act has required the Board to request that
6 the department, now known as the Department of
7 Commerce and Economic Opportunity, conduct an
8 economic impact study of proposed rules before the
9 Board adopts the rules. The Board must make either
10 an economic impact study or the department's
11 explanation for not conducting one available to the
12 public at least 20 days before a public hearing.

13 In a letter dated July 11th, 2014, Board
14 Chairman Diane Glosser requested that the department
15 of DCEO conduct an economic impact study on this
16 rule-making proposal and asked DCEO to indicate
17 whether it would do so by August 29th, 2014. The
18 Board received no response from DCEO to this request.
19 Is there anyone who would like to testify regarding
20 the request from the Board to DCEO?

21 Seeing none, let's just, for the record, in
22 terms of an opportunity to provide public comments,
23 is there anyone wishing to provide public comments
24 before we conclude? Seeing none, let's go off the

1 record to discuss proposed hearing deadlines. Off
2 the record, please.

3 (Whereupon a discussion was
4 held off the record.)

5 HEARING OFFICER POWELL: In going off
6 the record, participants discussed a procedural issue
7 of filing post hearing comments. Section 102.108(b)
8 of the procedural rules allow persons to file written
9 comments within fourteen days after the Board
10 receives the transcript. However, the Board will
11 allow an additional period in this case for post
12 hearing comments of thirty days. Anticipate
13 receiving the transcript October 3rd, which would
14 make that deadline Monday, November 3rd, 2014.

15 Very soon after the Board receives the
16 transcript, it will be available on the Board's
17 Website at www.ipcb.state.il.us, under this Docket
18 No. R14-22. Anyone may file written public comments
19 on this rule making to the clerk of the Board.
20 Comments may be filed electronically through the
21 Board's clerk's office, online, or COOL. Any
22 questions about electronic filing through COOL should
23 be directed to the clerk's office.

24 Filings with the Board, whether paper or

1 electronic, must also be served on the hearing
2 officer and on those persons on the service list.
3 Before filing, please check with the Board's clerk to
4 ensure that you have the most recent version of the
5 service list. If anyone has any questions about the
6 procedural aspects of this rule making, my contact
7 information is posted on the Board's Website. Are
8 there any other matters that need to be addressed at
9 this time?

10 MR. VAN NESS: Just as a point of
11 privilege, we've been assisted today in putting on
12 our exhibits by a gentleman who is a law intern in
13 our office, Mr. Abishek Sarvaria. I'd like to
14 acknowledge his help on a number of levels.

15 HEARING OFFICER POWELL: With that,
16 I'd like to thank everyone for participating today,
17 and this hearing is adjourned.

18 (Hearing adjourned at 2:03 p.m.)
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24

1 STATE OF ILLINOIS)
)
2 COUNTY OF CHAMPAIGN)

3

4 I, Janet E. Frederick, a Certified
5 Shorthand Reporter, in and for the County of
6 Champaign, State of Illinois, do hereby certify that
7 the above-captioned proceeding was taken at the
8 Brookens Administrative Center, Lyle Shields Meeting
9 Room, 1776 East Washington Street, Urbana, Illinois,
10 on September 23, 2014, and is a true record of the
11 proceedings taken down in stenograph notes and
12 afterwards reduced to typewriting under my
13 instruction.


9 I do hereby certify that I am a
10 disinterested person in this cause of action; that I
11 am not a relative of any party or any attorney of
12 record in this cause, or an attorney for any party
13 herein, or otherwise interested in the event of this
14 action, and am not in the employ of the attorneys for
15 either party.

13 IN WITNESS WHEREOF, I have hereunto set my
14 hand this 6th day of October 2014.

15

16

17



JANET E. FREDERICK
CSR LICENSE NO. 084-003526

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