BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

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In the Matter of the Application of Duke Energy Ohio, Inc. for an Increase in Gas Rates.	Case No. 07-589-GA-AIR
In the Matter of the Application of Duke Energy Ohio, Inc. for Approval of an Alternative Rate Plan for its Gas Distribution Service.	Case No. 07-590-GA-ALT
In the Matter of the Application of Duke Energy Ohio, Inc. for Approval to Change Accounting Methods.	Case No. 07-591-GA-AAM

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DEPOSITION OF ANTHONY J. YANKEL

THURSDAY, FEBRUARY 21, 2008

1:17 O'CLOCK P.M.

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Deposition of Anthony J. Yankel, a witness herein, called by Duke Energy Ohio, Inc. for cross-examination under the statute, taken before us, Deborah J. Holmberg, Registered Merit Reporter, Valerie J. Grubaugh, Registered Merit Reporter, Certified Realtime Reporter, and Notaries Public in and for the State of Ohio, pursuant to notice and stipulations of counsel hereinafter set forth, at the offices of The Office of The Ohio Consumers' Counsel, 10 West Broad Street, 18th Floor, Columbus, Ohio, on Thursday, February 21, 2008, beginning at 1:17 o'clock p.m. and concluding on the same day.

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ALSO PRESENT:

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S T I P U L A T I O N S

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It is stipulated by and among counsel for the respective parties herein that the deposition of Anthony J. Yankel, a witness herein, called by Duke Energy Ohio, Inc. for cross-examination under the statute, may be taken at this time and reduced to writing in stenotype by the Notary, whose notes may thereafter be transcribed out of the presence of the witness; that proof of the official character and qualification of the Notaries is waived; that the witness may sign the transcript of his deposition before a Notary other than the Notaries taking his deposition; said deposition to have the same force and effect as though the witness had signed the transcript of his deposition before the Notaries taking it.

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ANTHONY J. YANKEL

of lawful age, being first duly placed under oath, as prescribed by law, was examined and testified as follows:

CROSS-EXAMINATION

BY MR. FINNIGAN:

Q. Good afternoon, Mr. Gonzalez (sic). Wait. Mr. Yankel. I knew that.

Mr. Yankel, good afternoon.

A. Good afternoon.

Q. I wanted to ask you about your testimony relating to the Company's cost of service study.

One of the things that you criticized was the use of a March 2007 peak for the cost of service study; is that correct?

A. That's correct.

Q. And the Company used a coincident peak method to develop the cost of service study; correct?

A. I wouldn't call it a method. They used coincident peak data within their methodology, yes.

Q. Okay. And this involves developing load factors from load research data and then applying it to normal or forecasted weather.

A. That is how the Company did it, yes. That's not necessarily -- The two aren't necessarily related, but yes, that's how the Company did it.

Q. And this technique would be appropriate to use only if the actual data that's used in that method is consistent with normal weather; right? I mean, isn't that your -- one of your criticisms?

A. Yes, that is a criticism, basically, the fact that the load factors that were utilized by the Company were based upon actuals and not normalized, and then they were combining those load factor numbers with normalized sales data.

Q. Okay. So you would say, you know, you can't use March load factors for the cost of service because March is not normally your coldest month. Isn't that the essence of what you're saying here?

A. Yes.

Q. Okay. You recommend that January load data should be used for developing the system peak for the cost of service study.

A. I recommended that as probably a surrogate for doing a better job, but January being typically the coldest month of the year, I

recommended using the January data.

I didn't totally like the choices I had, but it was the only choice I had as far as the data that was available. Again, the January data was actual data. Again, we're still comparing actual with normalized, but yes, I chose January.

Q. Now, you said you didn't like the data that you had. What data would you have preferred to have to make a recommendation on the system peak for the cost of service study?

A. Possibly something that's more normalized on the basis of peak. And, again, if one looks at -- As I demonstrated in my testimony, if one looks at the peak day temperatures for the 30th of January, which is the day that the Company had picked as the peak for January, if one looked at that and got a ratio of that compared to the overall temperatures for January, that's still off from what is considered normal in 30-year normals from NOAA, something that would be more reflective of a more normal load factor. I've not done any calculation.

Q. Would it be appropriate to consider the system peak as one indicator of when the proper peak load would be for developing this load factor

data?

A. Depending on what you mean by "system peak". I just have a minor problem with that as to whether or not you have interruptible in there and whatnot. But, yes, essentially system throughput would be a major driving force.

Q. That would be an acceptable proxy to use for peak load for developing the cost of service, assuming no interruptions for interruptible customers.

A. Well, in this case we're not looking at interruptible customers.

Let me rephrase that.

In the methodology that we're dealing with right now on the peak portion as opposed to the average portion, interruptible customers are not a part of the equation. So it's more of a throughput on a firm basis is probably the appropriate thing to be looking at.

Q. Okay. So the day of total peak send-out would be an acceptable proxy for a peak load for developing the cost of service?

A. Again, given the Company's method, if the peak day send-out is -- quote -- normal -- Again, the Company is comparing actual data from, you

know, a specific month, January, February, March, and is comparing that to normalized data, and you have a mismatch between normalized and actual, if your actual is very far off from normal, you're going to get an inappropriate result.

Q. But I'm just talking about the data to use for the peak data for the load research part, and I'm suggesting that the input for the peak data could be the system peak. Well, strike that. That was a bad question. Let me start over again.

I'm simply suggesting that as one of the inputs to the cost of service study using this coincident peak method that the date whenever the total maximum send-out occurred, as measured by the Company's meters during the winter season, would be an acceptable proxy for the peak day for developing the cost of service.

A. Well, it certainly would be the peak day. I mean, I would call it the peak day for the year. Putting it into the cost of service study requires another leap of faith, which is a bit of a problem, and that is, you're comparing actuals with normalized, so you still would have to take that peak day, whatever it may have been, and essentially normalize that --

Q. Okay.

A. -- before you stuck it into the equation.

Q. Okay. I understand what you're saying, but I'm just saying in terms of your starting input, that would be an acceptable starting input, and then you would normalize it with an acceptable weather normalization methodology.

A. For the peak day, yes, and for the month, actually, as well.

Q. Okay. So your recommendation of January 30th was based on NOAA data in that January was the coldest month of the year and January -- January 30th was the coldest day? Wait. Strike that.

Your input or your recommendation to use January 30th of the -- for the system peak was based on what?

A. Was based on my belief that the normal peak occurs in January. It doesn't always occur in January, but normally, you know, they would indicate it's in January, so I focused on January as the month, and the only day that I was given, which apparently is the coincident peak day calculated by the Company, is January 30th. If you look through the workpapers, there's one peak

day listed for each month throughout, and January 30th is the -- is the day listed.

I mean, it could have been January 3rd. I have no idea, you know, what the throughputs were. I'm just saying the data provided by the Company was January 30th, so I used that.

Q. There were workpapers that had the peak day of every month, and the peak day you were given from the Company's workpapers was January 30th.

A. Yes.

Q. Okay. And you concluded that January was the coldest month from NOAA temperature data?

A. That, and I guess sort of personal knowledge. On a normal basis, January seems to be the coldest month.

Q. Okay. Is it your recommendation that January should always be used as the system peak for all cost of service studies for utilities in the north part of the country that have major heating loads?

A. That would probably be appropriate. There may be obvious instances where some companies differ for one reason or another. But, generally speaking, again, looking at the NOAA

data, if January is the coldest month of the year, and if space heating is a primary driving force for the utility, then January should probably be the month picked.

Q. What would be the considerations for using -- What would be the considerations for using some time other than January for a company that has a large space heating load?

A. If there were cases where, for one reason or another, there was a peak that occurred -- the annual peak would have occurred in February or March, if it was 60 percent of the time in February, 70 percent of the time in February for a given utility, again, I don't know the circumstances, but if that was the primary time when the peak occurred, then for that particular utility you'd probably be looking at a different month.

But, again, for this utility, at least it's my understanding, that normally, predominantly, most frequently, the peak occurs in January. So January seems to be the appropriate month.

Q. Is it appropriate to use the month when the peak occurs in the test year for the cost of

service study?

A. Not by itself, I don't believe. And, again, the reason is we're looking at normalized data, and if you're looking at normalized data, you should look at the normalized peak, not an oddball peak.

Q. But I thought you said you were taking the actual peak and you were normalizing it and then comparing it to forecasted or normal weather?

A. I don't believe I said that. I said I was looking at January's the month that normally has the peak in it.

Q. Right.

A. I took the data, which was all that was available to me, which was the January 30th data, and applied that January 30th data. Again, I still had problems with the January 30th data, because it was not normalized.

Q. But your starting point for developing the coincident peak is to start with some peak day; right? You have to pick the peak day to begin with.

A. I don't know if you have to pick a specific peak day, but you do have to pick a day that's considered a peak.

Q. Okay. And what are you saying would be the -- the methodology a company should follow for selecting that peak? Are you saying that it should always be January for companies in the northern part of the U.S. because that's the coldest temperature?

A. It would be one methodology. Another methodolgy -- And, again, I've not gone into the methodologies. But one methodology would be to develop equations that would show the daily relationship between temperature and send-out, and then combine those relationships with normal temperature data for January, February, December, and essentially pick a more normalized peak day.

Q. Okay. And I take it you did not apply that methodology in this case?

A. Right. I did not.

Q. Okay. And you're saying that the measured send-out during the winter season is one factor that can be considered in choosing the correct peak day for the cost of service study.

A. It's a start. But, again, the actual send-out for a given winter day, or for any day, for that matter, is not a normalized, so you still have the problem of normalization, but yes.

Q. I understand that. But I'm just saying the starting point for the input into the cost of service and the coincident peak, that would be one starting input to use.

I understand that no matter what your input is or your beginning point, you're always going to have to perform some normalization, but in terms of the input or starting point, are you saying that the measured send-out would be one acceptable starting point to use for developing the coincident peak approach?

A. It would be the starting point for then developing some kind of a normalization for the peak day send-out, yes. But peak day send-out is an appropriate value to be, you know, putting into this, the problem being is it needs to be a normalized peak day send-out.

Q. Okay. Now, what is it that is going to affect a utility's peak day, is it only going to be temperature, or are there going to be other factors that can affect it?

A. Temperature is probably an extremely strong factor, but day of the week is certainly a factor as well.

Sometimes -- And, again, depending on the

utility and the research that's been done, there may be a prior day temperature that's been looked at. The second, third day of a cold spell, you know, may require more heating load than, say, the day prior to it. So there are some other factors that can be reviewed and gone into it and looked at.

Q. How about cloudiness, is that a factor that can affect peak load?

A. It can. Again, it depends on the amount of data the company has and how it puts that data together. Cloudiness. Wind is certainly a factor.

Q. Humidity?

A. I'm a chemical engineer, but I still don't know whether humidity makes a difference inside of a house or not. I know outside it certainly does, but inside I'm not sure.

Q. You don't know if that can be a factor affecting the system?

A. That, I do not.

Q. Why is the day of the week a factor that affects the system peak?

A. There's -- Certainly, commercial load is reduced. Commercial industrial load is reduced.

Not necessarily interruptible load is reduced on the weekend, holidays, that type of thing.

Q. So we can't make a general rule that says the coldest month of the year is always when the system peak occurs. That would not be a true statement, would it?

A. No. Excuse me. It would not be a true statement. I was getting caught up in the double negative there.

But the coldest day or the coldest period would be a very good indication of probably where the peak day occurs. And, again, you can check that by just measurement of throughput.

Q. Okay. Or just looking at the temperature gauge, right, when the coldest day of the year occurred?

A. No. You look at the temperature to see what the coldest day was and then check the throughput around that time frame because, again, it may have been on a Sunday that the coldest temperatures would have occurred and that type of thing. So, I mean, you still need to go back to throughput ultimately.

Q. Okay. So if you measure the throughput on the coldest day of the year, and that's a

weekday, that would be a good indication of the system peak; is that what you're saying?

A. Probably. Again, I think, depending on how you want to do it. You know, one of the simplest things available to the Company would be that they should have daily send-outs and just look at those daily send-out records for 150 days and see where your peak send-out day was, and you can correlate that then to temperature in each one of those 150 days, you know, for the last several years, and you correlate those with the temperature on each one of those days --

Q. Okay.

A. -- and do your -- put in wind calculations, as far as that goes. Again, it's just a regression analysis. As many variables as you want to put in.

Q. Okay. Do you know what the coldest day of the year was in Duke Energy Ohio's service area in 2007?

A. I have not checked on that. I've heard from a couple of your witnesses, and it supports something for more of central Ohio, which is again about the 4th or 5th of February of this year.

Q. Which witnesses did you hear that from?

Are you referring to in written testimony filed in the case?

A. No. Storck and Gribler, I heard that from.

Q. Where did you hear it or when did you hear it from Storck and Gribler?

A. Depositions two days ago. One said 4th or 5th, and one said the 5th. And that's in keeping with what I know for central Ohio as far as some of the work that I've done.

Q. Does that sound like a reasonable time period for the system peak?

A. It was a very cold time frame that occurred late in winter, basically, in February.

Q. Does that sound like that would have been an acceptable choice to use that date, February 5th, as the system peak?

A. Again, I was going after the -- quote -- more normal peak, so again, I picked January.

Q. Okay. But is the coldest day of the year when the maximum send-out occurred? Assuming that it happened on February 5th, would that be an acceptable date to use for the coincident peak approach?

A. It would have been a different approach.

Probably -- Let's put it this way: It would have been a lot better than the March approach. So, you know, January or February, assuming that that day was in there. I'm not sure if that date for February was actually in the Company's workpapers.

Q. It was not in the original filing, no.

A. Okay. I'm not sure if it was even in the workpaper.

Q. I don't know.

A. The listing of months, I'm not even sure if that date was in there.

Q. I'm not sure either.

A. I don't even have it. But again, I don't know.

Q. Okay. Well, why don't we go ahead and move on, though.

But is there anything you would object to about that approach of using the February 5th date for the system peak as one acceptable alternative?

A. No objections other than the one that I have for the January date that I picked myself. In fact, it's still not normalized. It was just something better than March.

Q. Okay. I'm just looking at the date you used for the starting point.

So in terms of the starting point, that would be an acceptable starting point as long as you normalized it?

A. Yes.

Q. Okay. Now, let's go ahead and talk about the customer component of mains. That's another issue that you raise in your testimony. Do you recall that?

A. Yes.

Q. DE-Ohio used an allocation factor for the mains cost where four percent was charged to the customer component and 96 percent was charged to the demand component; is that correct?

A. No.

Q. Okay. What is your understanding of the allocation factor that was used for the gas mains cost?

A. Ninety percent and 10 percent.

Q. Okay. And that was based on a regression analysis that the Company performed?

A. Yes.

Q. The regression analysis that the Company performed showed a customer cost of how much per foot of main?

A. I believe it was $1.89 per foot of main.

Q. You did your own regression analysis and came up with a customer cost of zero per foot of main; is that correct?

A. I came up with a negative amount. It may have been a minus $9. I'm not sure what it was, but I set it at zero.

Q. Okay. And what does that mean, the customer cost per foot of main that both you and the Company were trying to calculate through these regression analyses?

A. In some ways it doesn't mean anything. It's a proxy, shall we say. It's not an absolute number that when the Company's putting mains in the ground it knows that it's $1.89 per foot that they're putting in.

It's essentially an estimate based upon a regression analysis and the theory that where this regression analysis crosses the X axis at zero -- or, it crosses the Y axis, basically, and X equals zero, would be called the customer component of mains.

Q. But what is it intending to show?

A. It's intending to show -- It shows a lot of things. I mean, it partially shows economies of scale, because as the pipe gets larger that's

being put in the ground, the price goes up.

But, you know, there is a basic component to, for example, digging a ditch. I mean, you dig a ditch a foot deep, or two feet, or however deep you're digging it, and it doesn't make a whole lot of difference if you're putting in a one-inch main or a six-inch main. So it's showing those types of costs and impacts.

Q. Okay. And I guess the way I think of it is that what the regression analysis shows is that it shows how much it would cost per customer if the load were zero.

A. That's the theory and conversation behind it, yes. That analysis, yes.

Q. Okay. So you're saying that if the Company installed all of its mains and didn't serve any load, the Company could actually make money because its costs would be negative.

A. I'm sorry. Try that again.

Q. Well, I'm just trying to understand your regression analysis, and I guess, you know, number one, I don't understand how it could show a negative cost to the Company, because if what you're trying to represent is the Company's cost to install a main at zero load, it seems like it

would necessarily need to be a positive number because the Company's going to incur some cost for that main, but you said it was negative.

So I'm just trying to understand how the Company could install any main at a negative cost, because this sounds like a good deal for the Company. It sounds like we could make a lot of money doing that. I want to go back and tell my bosses and, you know, win a prize because we came up with this great cost-saving measure.

A. This regression analysis is very similar to the other ones that the Company has introduced in this case, at least the witnesses that I've been looking at.

There's a number of regressions that are developed to show trends in the data. So this shows trends in the data. What this effectively is showing is that the larger the main is proportionally costing more and more to install.

I'm not an expert on plastic pipe, but what the regression is showing is that if you double the size of the pipe from, say, two-inch to four-inch it costs so much, and that amount that it's costing is increasing by more than double the size of the two-inch main. And then, again, same

from four to eight, it's costing more than double, although you've got a four-inch pipe and an eight-inch pipe, it's costing more than double. So the line of regression -- And, again, the methodology used by the Company, the line of regression is actually crossing the Y intercept where X is zero at a negative spot.

Q. I understand, you know, trends and, you know, economies of scale, but that's not what I'm asking.

What I'm asking is: Do you know of any way Duke Energy Ohio or any gas utility could install any main and serve zero load at a cost of zero dollars?

A. Not off the top of my head.

Q. Doesn't that make your regression analysis a little bit suspect?

A. No. Again, it's a regression analysis. It's the method chosen by the Company to define a certain component of cost.

What this is showing is that there is no component -- there is no customer component of that cost. It's not that there's no cost, but there's no customer component.

Q. Okay. But the customer component is what

relates to the customer -- the Company's cost to serve the customer at zero load. So my question to you is: How can the Company install a main and serve zero load at zero cost? Is there any way in the world that could happen?

A. First of all, the Company -- the smallest main I'm aware of is a one-inch plastic main they're sticking in. Again, it's a theoretical conversation we're having, because the Company never puts in a zero size main or maybe even a half-inch or quarter-inch main. The Company stops at one inch.

Q. Is there any -- Is there any way the Company could install any diameter of main and serve no load at zero cost to the Company?

A. If you're serving zero load and you have a $30 customer charge, you can make money. It doesn't matter the size of the load.

Q. That's not what I'm asking you is what the Company's charges are. That's not my question. I'm asking you about the Company's costs, and I'm asking you: Is there any way the Company can install a main of any diameter and serve no load at zero cost to the Company? Is there any way that could happen?

A. Well, by the fact that they've installed the main there's a cost to the Company. So I'm having a difficult time following the question. I'm sorry.

Q. Okay. So is your answer then that there would always be some cost to the Company for installed main per foot, some cost above zero?

A. For a pipe diameter someplace above zero, yes.

Q. Okay. For any pipe diameter above zero, there's going to be some cost to the Company for installing that main.

A. Yes.

Q. Okay. On your regression analysis, you left out certain diameters of pipe; 1.25 inches, 2.75 inches and 12 inches.

How many feet of pipe did you exclude from your regression study as compared to the total amount or total length of pipe that was kept in the regression study?

A. My understanding is that I took out less than one percent of all the pipe that's in the ground. Clarify that. Of the plastic pipe that we're talking about in the Company's model, less than one percent.

Q. Did you do a regression analysis leaving those three diameters of pipe in your study?

A. No.

Q. You don't know what impact that would have on the calculated customer component?

A. No. I'm struggling to kind of give you an answer here, because I assume it would be not a whole lot different than what the Company had, because what I did was, I took out the Company's -- I took out three numbers that the Company had utilized and added one.

So it probably wouldn't be a whole lot different than what the Company came up with. All I did was remove three numbers that the Company had in its equation.

Q. Okay. And you're saying, though, that you don't know what the impact would have been on a regression analysis if you would have kept those three values in?

A. Again, similar to what the Company had is what I'm assuming.

Q. Those three diameters of pipe you excluded, are they part of the Company's costs?

A. Yes.

Q. Okay. Why do you believe it's acceptable

to exclude some elements of the Company's costs in doing this regression analysis?

A. Well, whenever this Company or any company does anything, especially in the area of, say, distribution, and gas utilities is probably most like this, you run into different costs in different areas, things don't cost the same per foot.

It costs a lot more to install in a metropolitan area than it would in a very rural area, as far as the cost per foot. Right-of-ways cost different, what have you. It costs more to cross over a highway than it just does through a farmer's field.

So the installation of pipe can be -- the cost of the installation of pipe can vary from place to place. Some of these pipe, as I recall, one of them was only 400 feet of pipe for the entire system. I don't know if that's several different locations, but it's a good chance that may have been just one location that was 400 feet of certain pipe at a certain cost. It would effectively be an outlier.

Again, if you look at the data, those seem to be outliers, those three pipes. The small

length of pipe that's there, they seem to be specialty pipe for one reason or another that was stuck in.

Q. If the Company has to incur costs for that specialty pipe, why wouldn't you include those in your regression analysis? It's all part of the Company's cost, isn't it?

A. Part of the Company's cost, but it's -- you know, when you take less than one percent of the Company's cost and try to make a universal declaration of that one percent, that's inappropriate.

Again, trying to get back into normal, what's more their normal costs and how they normally do things.

Q. You mentioned that one reason that you determined that the customer component of main costs should be zero or negative was that there are different characteristics of plastic pipe versus steel pipe; is that correct?

A. I wouldn't characterize it that way. I said that the reason there was a difference between this study and the last study that the Staff had done was because there was a difference in the pipe that was being utilized. This case,

it was plastic; last time, it was steel.

Q. What are the different cost characteristics of plastic pipe versus steel pipe that would cause a different outcome in terms of the customer component of mains?

A. I did not look into that.

Q. Are there different characteristics of plastic pipe versus steel pipe that you would expect to cause a different outcome in calculating the customer components of mains?

A. None that I would expect, basically because I have not reviewed it. So I've got no expectation on that. All I did was make an observation that there were two different sets of numbers, two different sets of material being utilized.

Q. Okay. So you're saying in the last rate case in 2001 there was more steel pipe, now there's more plastic pipe, and you calculated a different customer component of mains, so you attribute the difference in the customer component to be the result of more plastic pipe at the time of this study.

A. Slightly different characterization. There was -- In the last case, the study was done

on 100 percent steel pipe; and in this case, it was done on 100 percent plastic pipe. But it's because, again, the difference that the Company was looking at between the two. The Company chose as its database plastic versus steel.

They used steel last time. There was, obviously, plastic in the ground last time, but they did not do, you know, a factor or whatever of steel to plastic. It was just a 100 percent look at steel in the last case and a 100 percent look at plastic in this case.

Q. Let me change the topic a little bit. Now I want to shift the topic to talk about Rider AMRP, the Accelerated Main Replacement Program, and the revenue requirement for the AMRP and how that should be allocated.

Now, at Page 44 of your testimony, you talk about how when mains go in the rate base they are allocated using a demand allocator, K415. Do you recall that?

A. Yes.

Q. Lines 19 and 20.

A. Yes.

Q. Yet, in the AMRP, you say that the allocator to be used should be a combination of a

demand and a throughput allocator; is that correct?

A. Yes.

Q. And why is it appropriate to use a different allocator for the mains in the AMRP as opposed to a base rate proceeding?

A. It's my understanding that the AMRP is developed for a number of reasons, safety being one, but as a side impact of that, it's certainly losses, lost and unaccounted for gas, and it is because of that there's a benefit in replacing these old mains because it gets rid of the lost and unaccounted for problem, it reduces lost and unaccounted for, which is shared by all customers equally on the basis of throughput.

Q. Isn't that statement also true for the mains that are placed into service through a base rate case?

A. No. Mains are allocated, as we discussed very early in this deposition, regarding --

Q. Not how they're allocated, how they affect your lost and unaccounted for gas.

The mains that you put into the ground through the AMRP affect the lost and unaccounted gas the same way as the mains that are placed into

service and the costs are recovered through a base rate case; isn't that correct?

A. Could I have it reread?

Q. I'll just reask it.

You said that the AMRP revenue requirement should be allocated based on demand and throughput because there's a component of the AMRP program that reduces lost and unaccounted for gas; is that correct?

A. That's correct.

Q. Okay. Aren't new mains that are placed into the Company's plant in service through a base rate proceeding also going to improve the Company's lost and unaccounted for gas statistics?

A. They will, but they're not allocated that way.

Q. Okay. Will they have any different impact on loss and unaccounted for gas than the impact that the mains put into the ground through the AMRP and recovered through the AMRP will have?

A. When you're just looking at new mains, once a new main is put in the ground, it -- it will have a step change, shall we say, and the amount of lost and unaccounted for for that stretch of pipe, and going forward that's not

looked at anymore. I mean, lost and unaccounted for, if it goes down 50 percent, it went down 50 percent, we're no longer paying for it, and nobody worries about it, unfortunately.

(recess taken.)

MR. FINNIGAN: Let's go back on the record.

BY MR. FINNIGAN:

Q. Mr. Yankel, we were talking about the impact that mains have on reducing lost and unaccounted for gas, and my question is: If the company puts in a new main and recovers the cost in a base rate case the next year, and it also puts in a new main as part of the AMRP program and recovers the cost through Rider AMRP, in both cases that new main would still reduce the same amount of gas, wouldn't it?

A. It would, but the treatments are different, obviously, because again, you said -- if we have a rate case the next year versus the AMRP program, so we have two different programs.

But yes, if you stick in one main under one scenario or one main under a different scenario, you're still sticking in the main, they are both going to reduce losses.

Q. If they both have the same impact on reducing losses, why should they be allocated with different allocators, one a demand allocator and the other with a demand plus throughput allocator?

A. Well, because again, it's an accelerated main replacement program we're talking about. We're not just talking about your normal main replacement program.

And the allocation factor I'm proposing is only for the duration of the AMRP charges themselves. It would be normal treatment -- ratemaking treatment after that, which would be the allocation K415.

Q. What is it about the accelerated nature of the AMRP that justifies using a throughput allocator for the mains?

A. In trying to develop any methodology for allocating the AMRP costs, one has to try to look at it fresh. This isn't something that's been around for 50 years and here is how we have been doing it forever.

In the last case, my understanding, it was a stipulated number, there was no look at allocations. I wasn't involved, but that's at least my understanding from the stipulation.

So I took a look -- a fresh look at what I would consider almost a new program, something close to a new program, and this is how I felt the benefits were of the program. And as opposed to just the benefits of the mains themselves. And I felt that 50/50 split, you know, could have been 80/20, what have you, but I felt that there was a couple of components to this.

Q. Well, the benefits of the program come from the mains themselves; right? The reduction on lost and unaccounted for gas, that's the benefit we're talking about here; right?

A. Right.

Q. That doesn't come from the program, it comes from the main; right?

A. Well, the fact that we're accelerating it certainly is coming from the program. I mean, the program is accelerating these costs. It's a separate program. It's not going through base rates. It's a rider. It's different than a normal ratemaking treatment.

Q. I understand it is an accelerated program, but what I'm having trouble understanding is why is it that the accelerated nature of the program would justify a different allocator for

the mains depending on whether you're in a base rate case or in AMRP proceeding?

A. I don't know what you mean by AMRP proceeding. I mean, we have essentially AMRP costs with a cap every year.

Q. That's what I mean by AMRP proceeding.

A. Okay. I'm assuming that we have some sort of a cap, and that we -- we -- the Company exceeds that cap every year. It's a question of how do you divide up those costs? What should you consider? I feel that you should consider the impact on lost and unaccounted for.

Q. And why wouldn't you consider that as the allocator in a base rate case?

A. I have no problem with that. I think that may not be a bad idea.

Q. Okay. Do you know of any other utilities that allocate their mains cost based on throughput?

A. Not specifically. I certainly have seen strictly throughput advocated in the past. Actually, I just don't recall what other companies are using. I know the -- essentially what I consider an average nexus method, you know, the K415 used by the Company is often used.

Q. And you're not aware of anybody that uses a demand and throughput method for allocating mains cost?

A. Not specifically.

Q. And in the annual Rider AMRP proceeding since 2002 through 2007, the K415 allocator was used to allocate the mains cost during those proceedings; isn't that correct?

A. Not that I'm aware of. My understanding is it was strictly allocated on the basis of price caps that were agreed to in the stipulation.

Q. How were the costs allocated to the different customer classes under those price caps, or to know whether you hit the price caps for the different customer classes?

A. I don't know. I did not participate in those proceedings.

Q. It would have to be some allocation method, wouldn't it?

A. I do not know that.

Q. Okay. Well, you'd have to come up with some method for allocating the cost to the different class; right? You'd need something.

A. At this moment, I don't know how that was done in those proceedings.

Q. I understand you don't know how it was done, but there had to be some method in place to allocate costs of main in the annual AMRP proceedings. Do you accept that?

A. I have a problem accepting whether or not there was even an allocation. I don't know. That's what I'm saying, I don't know.

If there was an allocation, then yes, there had to be a method. I don't even know -- I'm not at Step 1 yet, that's all, because I just don't know. I'm not arguing that it didn't take place, I just don't know.

Q. So in the annual AMRP proceedings from 2002 through 2007, you do not know if any cost allocation method was used for allocating mains cost to the different customer classes; would that be correct?

A. Right. Or if there was an allocation, I do not know what that was.

Q. Okay. Now, let me ask you about the Company's Riser Replacement program. Are you familiar with that?

A. Yes.

Q. How should the costs of the Riser Replacement program be allocated?

A. I don't know if I address that in my testimony. At this point I actually do not recall addressing it at all.

Q. Do you have any opinion on how those costs should be allocated?

A. No, I do not at this point.

Q. Let me ask you to address another topic in your testimony, and this is the Company's Sales Decoupling Rider proposal. Are you familiar with that?

A. Yes.

Q. And one of the statements in your testimony at Page 49 is that the Company's declining revenues due to -- are not due to declining use per customer. You state that that's a fallacy; is that correct?

A. Could you give me a line reference?

Q. Sure. Please direct your attention to Page 47, Lines 11 through 13. You state there that, "Probably the largest fallacy is that somehow a decline in the usage per customer figure results in a decrease in the Company's revenues and thus the need for a rate case".

I would suggest to you that a major reason for this rate case is declining usage per

customer, and I understand you do say that you disagree with that statement; is that fair?

A. I would say that's fair. My belief is that the reason for the rate case is pretty much the Company's belief that its expenses are higher than its revenues given the rate of return that it desires.

Q. And isn't a major reason that the revenues have declined over time due to declining customer usage?

A. I don't believe on a normalized basis revenues have declined. If one looks at especially the projections in the Company's filing for the next five years, the usage itself should be increasing, the overall usage.

Q. Do you agree or disagree that on a per customer basis there has been steadily declining usage over the last few years?

A. I disagree with the word "steadily", but there has been declining usage over the last several years; for the last, say, ten years.

Q. And if you say that it hasn't been steady, are you saying there have been years of increase in usage per customer and use of decrease usage per customer?

A. Yes.

Q. Okay. And what is the average over the last ten years, on average? Has there been declining usage per customer?

A. On average, on a normalized basis, it's my understanding there has been decreases in usage per customer.

Q. And how much have those decreases been?

A. I do not recall. I may have a number in my testimony, I just can't think of it off the top of my head.

Q. Let me direct your attention to your statement on Page 50, Lines 11 through 13. You state that, "An obvious explanation for some of the decrease in usage per customer is the possibility that more customers are taking service in smaller dwellings or condominiums".

Do you have any data to support that statement?

A. No.

Q. And what's the basis for the statement?

A. Personal observations, and again, northern Ohio, but I'm assuming Cincinnati is no different. There just seems to be a lot of smaller dwellings going in, a lot more condos

going in, people moving into them.

Certainly some very large homes going in, but I look at the numbers of those as I go up and down the street. Just a whole lot of condos. People seem to be moving into smaller dwellings.

Q. And when you say, "personal observation", you haven't done any kind of formal study of this, this is just casual observation that you make, as you say, driving down the street?

A. Driving down the street.

Q. Okay. Are you aware of any data that would be available to determine whether on balance average home sizes have been increasing or decreasing over time, like data from the U.S. Department of Energy, or National Homeowners Association, or National Realtors Association, or other type of similar data?

A. I believe there's data out there. I'm not familiar with specifically what it is, but I think possibly HUD -- I believe there are agencies that collect data similar to that, but I do not recall looking at something like that. I may have, but I don't recall.

Q. And if that data showed that for new housing stock, home sizes are bigger over time,

then that would refute this statement that you made here, wouldn't it?

A. Yes, it would, if it was -- included such things as condominiums. Depending on if they are talking about single-family homes or talking about living units.

Q. Let me ask you to direct your attention to the customer charge that the Company proposes in this case, and also the customer charge proposed by the Staff Report. Are you familiar with those proposals?

A. Generally, yes.

Q. What percent of the customer bill would be recovered through the fixed customer charge under the Company's proposal?

A. I don't believe I've calculated that. Do you have an estimate? I could kind of --

Q. Just asking you if you know.

A. I'm going to guess 40, 45 percent.

Q. Okay. And -- Okay. Now, what percentage of the total customer bill would be recovered through the fixed monthly customer charge under the Staff's proposal?

A. I believe I calculated possibly 79 percent in my testimony.

Q. Okay. Now, you mentioned that the customer charge should be smaller to promote conservation. That's your recommendation; correct?

A. Yes.

Q. Doesn't the fact that natural gas prices have increased so much over the past few years by itself provide a strong incentive for customers to conserve their usage?

A. In complete isolation, yes. I mean, higher prices would tend to push for more conservation, depending on where those prices are coming from, either the base rates, or the GCR, or the marketer's rates. The higher those rates go in total or separately, you know, the more conservation we push for.

Q. Let me ask you to direct your attention to the topic of weather normalization. You criticized two aspects of the Company's weather normalization method; one was the use of 59 degrees Fahrenheit for the base for determining heating degree days; correct?

A. Yes.

Q. And another criticism was the use of a ten-year weather normal as opposed to a 30-year

weather normal; correct?

A. Yes.

Q. Now, in terms of the first criticism, the temperature at which to calculate heating degree days, what is it that is trying to be calculated here? What is it that you're trying to show? Isn't it trying to show the temperature at which the heating load begins?

A. I don't view it that way.

Q. How do you view it?

A. And let me explain that. There is no temperature at which the heating load begins on a universal basis. Every household is different.

I've got an aunt that is similar to other aunts and other old ladies, but if it's 80 degrees outside, she's got a sweater on because her blood is just not working well. So there's some people that have their heating degree load start at 75 degrees.

Q. Well, I'm not asking you about an individual customer, I'm asking you about the Company's total system.

Well, let me ask you, what is it that you understand a heating degree is supposed to represent?

A. It's supposed to represent a difference between a base point, and effectively when one would expect heating load to begin. One would normally, on an average basis, expect heating load to begin, I believe, closer to 65 than 59 degrees.

Q. And what is your basis for concluding that heating load begins at 65 degrees instead of 59 degrees?

A. The general assumption there is that there's a comfort level in the house at 70 degrees, and if that general comfort level starts getting colder than that, people turn on their heat.

And, again, that's the average daily temperature, let's say 70, at night it might cool down to, say, 55 or something. So there's a period of time when they are going to be using something, it's not just the average.

The 70 degree number is the comfort level for most people. That comfort level is somewhat adjusted by appliances in the home, lighting, cooking, television, whatnot. They are actually generating heat inside the home, so therefore, there is not as much -- the comfort level is adjusted by action of internal heating, it's

unrelated to the space heating in the house.

Q. How should a company go about determining what is the proper base temperature for calculating heating degree days?

A. I'm not sure what you mean. I mean, they are certainly calculated by NOAA, so I'm not sure, companies come up with its own system, its own basis of 59 degrees.

Q. All right. And what's your understanding of how the Company did that?

A. From the depositions I heard the other day, it sounded like it was a regression analysis done on several different temperatures, and whatever turned out to be the highest R-squared factor that came out of those regressions was the number the Company picked.

Q. Why is that not a proper method to use to determine the base temperature for heating degree days?

A. Well, other than the fact that it doesn't seem to make sense if their heating degrees days is at 59 degrees and cooling degree days is at 65 degrees, I mean, they are going two different directions there.

I've not seen the data, so I have no idea

whether the Company even has a strong R-squared value to look at. I have no idea.

Q. Why would you expect the base temperature for heating degree days and cooling degree days to be the same?

A. Again, there's that comfort level. That comfort level starts at the same place; people either start getting too hot or too cold. There's not this large band -- Again, one has to understand this is an average daily temperature.

Whether we're looking at 65, or 59, or whatever the number is, it's the average temperature for the day. And there is going to be hours when it's going to be a lot colder than that or a lot warmer than that. Just because I'm warm and happy at noon on a given day doesn't mean I'm not going to be freezing to death at 4:00 in the morning.

Q. So you're saying that heating load and cooling load should begin at the same temperature?

A. It is pretty much the national standard, that's how they have been doing it, same temperature -- I mean, you either have a heating degree day or cooling degree day.

Q. That's NOAA's approach, they use 65

degrees for both?

A. Yes.

Q. Aren't you aware from personal observation that there's a range of temperatures somewhere between 60 and 70 degrees where people don't want to switch on their heat or their air conditioning, either because they are comfortable without it, they might open their windows and let the air in, or they might want to conserve on their energy usage, which could lead to a different base temperature for determining heating degree days and cooling degree days?

A. Yeah, but you didn't want to talk about my aunt. But yes, there are people that have different temperature ranges and they react differently. And as each person reacts differently, they are going to start heating or cooling on the average.

There's a continuum there. There is not a dead zone, because there's a continuum of people that vary. I mean, each person, each individual household is operated differently.

Q. And what would be the right way for determining the proper base temperature, would it be to study the amount of heating load and cooling

load on your system at various temperatures and then do a regression analysis to determine when the heating load and when the cooling load begins, or would a better way to be just always use 65 degrees as your base temperature for HDD and CDD just because that's what NOAA uses?

A. Your best way of doing things would be to develop an equation based upon the individual data of the utility in mind and go from there.

So that's essentially what the Company's told me they are doing, but it's so far off from what NOAA has done, I've not seen any -- it's so far off from what the Company did in the last rate case. The last rate case they used 65 degrees.

Q. So you haven't seen the Company's data, you just have seen the result and you object to the result because it's so much lower than the 65 degrees used by NOAA as the base temperature?

A. They provided no justification in this case for it. If I look at some of the equations used by the company, I see that there are other gaps in the numbers.

For example, there's gaps in -- I think when it's heating degree days for the month exceeds 500, there's different equations being

applied, and if it's under 500, I'm not sure if you're aware of that -- we haven't talked about that, it's not in my testimony, but there are different parts of those equations where the Company's factoring things differently.

Q. Did you review the Company's data for its regression analysis for calculating 59 degrees to be the proper base temperature for HDD?

A. No, I was not provided that. The first time I heard that was two days ago during a deposition.

Q. Did you ask for it?

A. There was a lot of information we asked for with respect to that. I'd have to go back through and see what answers we got. I can't say we specifically asked for that.

Q. Okay. Now, with regard to cooling degree days, the Company uses 65 degrees as the base temperature for calculating a cooling degree day; isn't that correct?

A. Yes.

Q. And that's consistent with NOAA; correct?

A. That one is consistent with NOAA, yes.

Q. Are you aware of any other utilities that calculate a heating degree day with a base

temperature other than 65 degrees?

A. No.

Q. Is it your recommendation that all companies should use 65 degrees as the base temperature for calculating heating degree days and cooling degree days?

A. Unless there's some strong justification put forth to the contrary, yes.

Q. What would be the strong justification you could put forth to the contrary?

A. To show that the Company's load has a marked difference at 65 versus 59 degrees, for example. And there was basically no heating load that took place between 65 and 59 degrees.

Q. What kind of analysis would you need to perform to show that kind of variation in load at different temperatures?

A. I believe probably a -- It's very simplistic. I can't think what it is. But basically a scatter diagram, just listing every day what the heating degree load is and what your throughput is for, say, residential.

Again, you have to do it for residential, commercially. You wouldn't want to do it for your total system throughput because you have

industrial in there and other factors taking place, but if you're just looking at the residential load off your research load data, for example.

Q. What kind of mathematical formulas would you apply to the scatter diagram to analyze the data?

A. Ultimately, you'd probably put -- do a regression analysis with it, but that's more to come up with an equation.

Q. Okay.

A. And again, that equation you could still put in with a regression analysis. Oftentimes, you can specify your zero point, so you specify 65. You could specify 59, as far as that goes.

But you look at that regression analysis, and that's part of what bothers me about the way the Company has done this. The Company has put in a -- kind of like a dogleg, like 500 heating degree days for a month, and indicated that usage level is different above that level for a month average, a month total.

And then there is -- First of all, it's different for the month for that portion that's

500 or below than it is for above. And on some months, say October, whenever it gets past the 500, it's certainly just one block -- they are going to be looking at different segments of the usage level. It seems they should have a segment there that reflects what is going on between 65 and 59 degrees.

Q. Is what you're talking about a scatter diagram and regression analysis to determine the proper base temperature for calculating heating degree days?

A. That's how I would do it.

Q. And I understand you haven't seen the Company's data, so you don't know whether they used an acceptable methodology or not.

I think we have already discussed that you were just concerned with the ultimate result, 59 degrees Fahrenheit as the base temperature, and that was so far off the NOAA 65 degree base temperature.

A. Standard.

Q. Right.

A. Yes.

Q. And I'm not sure if we discussed this, but are you aware of any companies that use a base

temperature other than 65 degrees for calculating heating degree days?

A. Off the top of my head, I can say no. I mean, that doesn't -- Again, I looked at the Columbia stuff, I looked at East Ohio stuff. I don't recall them being anything other than 65 degrees. I've done work elsewhere, and I just don't recall anything other than 65 degrees.

Q. Let's -- Let me ask you about the concept of ten-year weather normals versus 30-year weather normals.

Do you have an opinion as to whether 30-year weather normals should be used by all utilities for developing a weather normalization?

A. I think 30 years, or possibly longer, should be used.

Q. Is that the industry standard?

A. Thirty years seems to be the industry standard.

Q. Are there any indications that that standard is changing to a shorter time period?

A. The Company certainly has indicated that it believes it's moving down. I have not seen much indication.

My understanding is Dominion East Ohio is

using a shorter time frame. The reason being, again, more of a regression analysis. It wasn't that they had -- Maybe they did, I don't know what their intent was, but through regression analysis they seemed to think that a 17-year average works better for them, or has worked better for them in the past.

There's a question on whether in a lot of areas other than heating degree day type load, precipitation being one of them I can think of, and most people seem to think that the longer the database, the more reflective of normal, the better chance you have of predicting, quote, normal.

Q. Are you aware of any utilities other than Dominion East Ohio and Duke Energy Ohio that use a time period other than 30 years to develop weather normals?

A. Out west, people use 80, 90, 100 years for looking at as far as precipitation values go, that I'm involved with. So that's weather. It's just, you know, what is standard.

Out west there is much more interest in hydro power, and if much water gets into the dams to fill up the dams, so, therefore, the

precipitation values, river flows.

Q. I'm talking about weather normals to estimate customer usage. What are you talking about?

A. I'm talking about what's normal weather, meaning temperature, precipitation, whatnot.

Q. Okay. I don't really care about precipitation. This is a gas rate case. You're aware that precipitation is not an issue in this case, is it?

A. Right. You asked me about weather, and I told you about weather.

Q. Okay. Well, I want to ask about it in the context of this case, I'm not really too interested about how much precipitation affects hydro power in the west. If you think that's relevant to this case, let me know. Do you think it's relevant?

A. I think it's relevant, the fact that they are looking at long-term weather averages as opposed to short-term weather averages.

There's been moves on the hydro end to pick different time frames to reflect, quote, more recent weather, and that's sort of what we're looking at here, you know, if we use a ten-year

average to predict more recent weather, or do we use a 30-year average to get a longer time frame.

Q. Are you aware of any gas utilities other than Dominion, East Ohio and Duke Energy Ohio that use a time period for determining normal weather other than 30 years?

A. No, I do not.

Q. Okay. Are you aware of any discussions within the industry to move towards a shorter time period for determining customer usage for gas utilities?

A. I'm not specifically aware. It would not surprise me if somebody was talking about that. If Duke is trying to do it, there are probably other utilities trying to do it as well.

Q. How should a utility determine what the proper time is for developing weather normals?

A. I think it's more up to the Commission, and I think the Commission has to decide for itself what is an appropriate time frame to reflect anticipated weather, and anticipated weather is not something that's easily predicted by last year or the last five years. It's, again, long-term average.

Q. How should the Commission make that

determination as to what is the appropriate time period to use for developing weather normals?

A. I believe it should use at least a 30-year average. I mean, I'm not sure if I answered your question.

Q. How -- You said that -- I first asked you how should a utility determine what's the right time period to use for developing weather normals, and doesn't every utility have to make that decision, because they have to do their own budgeting and forecasting?

A. They do. But again, we're in a rate case at this point in time, so the Company could have its own forecasts, internal forecasting, which could be different than regulatory requirements by the Commission as to how it's going to set rates and what it's going to consider normal.

Q. In terms of the company's budgeting and forecasting process, when a company budgets or -- and forecasts its revenues and expenses, wouldn't you expect that the company would want to use the most accurate method available to it?

A. If I was the company, I would want to use the most appropriate data available.

Q. And the most appropriate data would be

the data that would produce the most accurate forecast; right?

A. I did not say that. I said -- And, again, this is how I would be doing it. I may use different data for different settings.

Q. Okay. But if you're developing a forecast for a company's budget, wouldn't you want to use the information expected to produce the most accurate forecast?

A. I don't know what the Company's internal thought process would be on that as far as their internal forecasting. I can't tell you that.

MR. SAUER: Can we go off the record for a minute?

MR. FINNIGAN: Sure.

(Discussion held off the record.)

BY MR. FINNIGAN:

Q. Mr. Yankel, at one point in your testimony you compared the ten-year weather normal to data from 1977 to 1979, and you used that analysis to reach a conclusion about the lack of predictiveness of the ten-year weather normal. Do you recall that?

A. Yes, I do.

Q. Why did you pick those three years?

A. Well, a couple of different reasons. One of which was the beginning of the 30-year time frame.

Q. I thought 1970 was the beginning of the 30-year time frame.

A. Oh, that's right. It was '96 or -- I'm sorry. Can you --

MR. SAUER: Can you point to a response?

BY MR. FINNIGAN:

Q. 1977 through 1979 you used three years to kind of carve out, and you compared the ten-year weather normal data against those three years, and then reached a conclusion that the ten-year weather normals showed a lack of predictiveness when compared to that actual data. Do you recall that?

A. Yes. I'm sorry. I was thinking what you told me was a different time frame.

Q. Okay. And I'm just asking, why did you pick those three years, 1977 through 1979?

A. Because they were -- some of the years were with the most obvious contradiction to what the Company is doing with its choice of a ten-year time frame, because that particular ten-year time frame showed a very different pattern.

It showed a similar pattern, as I recall, with respect to a ten-year time frame, and then the following three years were way off. And I just wanted to show how far off one can be by choosing a ten-year time frame.

Q. Didn't that time period, 1977 through 1979, include the coldest winter over perhaps the last 50 years?

A. Yes.

Q. Okay. Is that just a coincidence that you used that for your analysis?

A. Next winter we could have the coldest winter of 200 years. I don't know that.

Q. Okay. Did you use the 30-year weather normals to compare against those three years, 1977 and 1979, to see whether the 30-year weather normals fared any better in terms of predictiveness?

A. No, I did not.

Q. What would you expect to find if you did that?

A. Can you show me where it's at, and I can answer the question, I mean, in my testimony?

Q. No, I don't know what page it's at.

A. If I knew what page, I could probably

answer your question.

Q. Well, it's about something that you didn't do, so I don't think it's going to be in your testimony.

So I think my question to you is that if you did that same kind of analysis of predictiveness or lack of predictiveness for 30-year weather normals as you did for the ten-year weather normals and compared that to the 1977 through 1979 data, would you expect that the 30-year weather normals would show any better predictiveness than the ten-year weather normals.

A. As you indicated, I've not done the analysis, I don't know.

Q. Well, if you assert that the 30-year weather normal is a better technique to use, would you assert that would be a better predictor of the weather during those years?

A. I believe that 30 years would be a better predictor. Other than that, I don't know how the 30-year would have lined up against those three specific years.

Q. If it's a better predictor, wouldn't you expect it to show better results when compared to those three years?

A. One would expect that, yes.

MR. FINNIGAN: That's all the questions I have. Thank you, Mr. Yankel.

(Discussion held off the record.)

(Signature not waived.)

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(Thereupon, the deposition was concluded at 2:50 o'clock p.m. on Thursday, February 21, 2008.)

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A F F I D A V I T

- - -

STATE OF _____,)

) SS:

COUNTY OF _____,)

Anthony J. Yankel, having been duly placed under oath, deposes and says that:

I have read the transcript of my deposition taken on Thursday, February 21, 2008, and made all necessary changes and/or corrections as noted on the attached correction sheet, if any.

_____

Anthony J. Yankel

Placed under oath before me and subscribed in my presence this _____ day of _____, _____.

_____

Notary Public

My Commission Expires: _____.

- - -

C E R T I F I C A T E

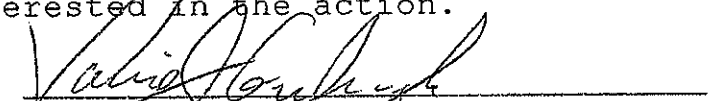
- - -

State of Ohio,)
)
) SS:
County of Fairfield,

- - -

I, Valerie J. Grubaugh, Registered Merit Reporter, Certified Realtime Reporter and Notary Public in and for the State of Ohio, hereby certify that the foregoing is a true and accurate transcript of the deposition testimony, taken under oath on the date hereinbefore set forth, of Anthony J. Yankel.

I further certify that I am neither attorney or counsel for, nor related to or employed by any of the parties to the action in which the deposition was taken, and further that I am not a relative or employee of any attorney or counsel employed in this case, nor am I financially interested in the action.



Valerie J. Grubaugh,
Registered Merit Reporter,
Certified Realtime Reporter and
Notary Public in and for the
State of Ohio.

My Commission Expires:
August 10, 2011.

*** CAUTION ***

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C E R T I F I C A T E

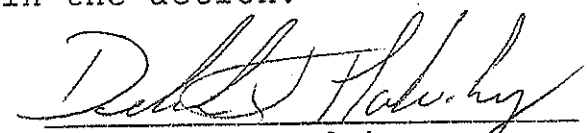
- - -

State of Ohio,)
) SS:
County of Delaware)

- - -

I, Deborah J. Holmberg, Registered Merit Reporter and Notary Public in and for the State of Ohio, hereby certify that the foregoing is a true and accurate transcript of the deposition testimony, taken under oath on the date hereinbefore set forth, of Anthony J. Yankel.

I further certify that I am neither attorney or counsel for, nor related to or employed by any of the parties to the action in which the deposition was taken, and further that I am not a relative or employee of any attorney or counsel employed in this case, nor am I financially interested in the action.



Deborah J. Holmberg,
Registered Merit Reporter
and Notary Public in and
for the State of Ohio

My Commission Expires: October 7, 2011.

*** CAUTION ***

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Summary: Deposition of Anthony Yankel electronically filed by ANITA M SCHAFER on behalf of Finnigan, John J. Mr.