CHAIR: Please be seated. Good morning. I'd like to call the meeting of the New Hampshire Site Evaluation Committee to order. The first item on our agenda is review of proposed correspondence to Public Service Company of New Hampshire concerning the rebuild of the R187 transmission line. Mike, do you want to quickly summarize that?

ATTORNEY IACOPINO: For the record, my name is Mike Iacopino, counsel for the Committee. What's before the Committee is a correspondence from an attorney for Public Service Company of New Hampshire, Christopher Allwarden, dated August 29, 2000, as well as a proposed response to Mr. Allwarden regarding the intent of Public Service Company of New Hampshire to upgrade the R187 line. They have taken the position that that line, because it is a transmission line, is exempt from, not is exempt but, is not within the jurisdiction of the Site Evaluation Committee but still subject to local governance through local authorities, which would include the Department of Environmental Services as well as the various towns through which the transmission line runs. I have provided a memo, confidential memo, to the Committee laying out our review of the legal issues which are involved in there.

And to summarize that, we believe that the company is correct with their interpretation that any absence of the petition process, which is laid out in RSA 162-H, this proposed upgrade is not subject to the jurisdiction of the Committee to issue a Certificate of Site and Facility.

CHAIR: And Mike Walls from the Attorney General's Office, who also was involved in this review and drafting of the letter, any comments?

ATTORNEY WALLS: No, I have no additional comments.

CHAIR: Thanks Mike. Do we have a motion to approve the letter?

MS. BROCKWAY: So moved.

CHAIR: Second?

MR. CANNATA: Second.

CHAIR: Any further comments or questions? All those in favor say "Aye."

GROUP: Aye.

CHAIR: Item number two is review of correspondence dated September 15, 2000 from Committee member Mike Cannata, chief engineer PUC, concerning the progress report of compliance with conditions under Certificate of Site and Facility for

AES Londonderry, Docket No. 99-02. Michael?

MR. CANNATA: Yes. I sent you this letter, Mr. Chairman, because when the Applicant sent in some compliance documents that they were required to send to the PUC, I went to Attachment B on the Certificate and it appeared to be mis-worded and it appears that it was the same as the Newington Project, which we sited and approved, I think, within a couple of weeks of that time. And I've made a couple of small, suggested changes to Attachment B which would take out the reference to 345 KV, and that's what drew my attention to it because this project does not have 345 KV. It was clear it was going to be a combination of 230 and 115 KV interconnections. And another item was that it referred to a single line which, again, we knew right out front that there was going to be at least two lines that were going to emanate from the project out to the transmission system. So that's what I called Condition 1 and Condition 2, to make appropriate changes there. And I also stated that the condition in the permit was satisfied as far as we could do at this time because the other conditions were ongoing, such as operation and maintenance requirements which you can't do until the project is actually in service.

And I wanted to reaffirm that the system impact studies, which we required, are not yet complete through the appeal process at NEPOOL. And I wanted to affirm in writing that the Applicant could not connect to the system until those studies were, in fact, completed and approved by NEPOOL, and that's all outlined in my letter. And that would be the proposed response that I would like to give it.

CHAIR: Thank you. The form of response, should it be in the form of a letter or an order or, any thoughts? Mike?

ATTORNEY IACOPINO: Yes. Obviously the reference to 345 KV instead of 115 is a typographical error, and I think that can be remedied by the issuance of an order of errata, or an errata sheet, just indicating that, in fact, there's a typographical error. There's really little, if any, ramifications of that as a result of Condition 2 and Attachment B to that particular order, and that is because the Applicant is still subjected to the approvals of NEPOOL/ISO. And if the ISO said, "It's 115," it's 115. So there is no real ramification and that's clearly just a typographical error. And they are subject to the set Condition 2 which requires the ISO approvals. So I would suggest

that we simply issue an errata sheet to that particular order indicating that Condition 1 of Attachment B should have referenced a 115 KV transmission line. And, Mr. Cannata, it slipped my mind as to what the other --

MR. CANNATA: Alright --

ATTORNEY IACOPINO: You mention a single --

MR. CANNATA: Condition 1, I think it has to mention both 115 and 230 because it was going to be a combination. And I have suggested words there which would replace "345 KV transmission line connecting" with "ISO approved 115 and/or 230 KV interconnections which connect," just to substitute that. Then in Condition 2 there was a singular word "line" which should be "lines," plural.

ATTORNEY IACOPINO: So we could just make that the errata sheet, that portion of his letter, if the Committee believes that's appropriate?

CHAIR: Does that sound reasonable?

COMMITTEE MEMBER: I'd so move.

CHAIR: So moved. Second?

MS. GEIGER: Second.

CHAIR: Seconded. Any further

comments or discussion? All those in favor of the motion say "Aye."

GROUP: Aye.

CHAIR: Motion's approved. We now have some time before the start of the hearing, and I think probably need some time to meet with counsel.

MR. PATCH: I would move that we recess the hearing so that we can meet in private with legal counsel.

MS. GEIGER: I second.

CHAIR: Any discussion, comments? All those in favor of the motion say "Aye."

GROUP: Aye.

CHAIR: Okay. Thank you. We will now meet alone as a committee and ask that our visitors return at 10 a.m. sharp. Thank you.

(Off the record)

CHAIR: I'd like to call this hearing to order. This is the adjudicatory hearing on the application of Tennessee Gas Pipeline Company, Docket No. 00-01, Application of Tennessee Gas Pipeline Company Londonderry 20-inch replacement project. Application of Tennessee Gas Pipeline Company ("Tennessee",) for a Certificate of Site and Facility to

construct, install and operate 19.3 miles of 20 inch replacement pipe commencing in Dracut, Massachusetts, terminating in Londonderry, New Hampshire, and to construct, install and operate delivery point facilities, including a meter station, to allow Tennessee to provide firm transportation service of natural gas to a new industrial end-use customer, AES Londonderry, LLC or AES. Tennessee Gas Pipeline Company will abandon the existing 19.3 miles of eight inch pipeline segment that comprises part of Tennessee's Concord Lateral.

Good morning. My name is Bob Varney. I'm Commissioner of the New Hampshire Department of Environmental Services and serve as chairperson of the Site Evaluation Committee for the State of New Hampshire. This hearing is held pursuant to RSA 162-H. The Site Evaluation Committee has been requested to grant a Certificate of Site and Facility to the Tennessee Gas Pipeline Company. As I just indicated, the application of Tennessee Gas Pipeline Company, or "Tennessee," is for a Certificate of Site and Facility to construct, install and operate 19.3 miles of 20 inch replacement pipe commencing in Dracut, Massachusetts and terminating in Londonderry, New Hampshire; and (2) to

construct, install and operate delivery point facilities, including a meter station, to allow Tennessee to provide firm gas transportation service of up to 130,000 dekatherms per day of natural gas to a new industrial end-user, AES Londonderry, LLC or AES. Tennessee Gas Pipeline Company will abandon the existing 19.3 miles of eight inch pipeline segment that comprises part of Tennessee's Concord Lateral. Tennessee estimates the total cost for the project at 32.4 million dollars and proposes to place the project in service by October 1, 2001.

The Applicant, Tennessee Gas Pipeline Company, is represented today by Attorney Greg Smith in the law firm of McLane, Graf, Raulerson & Middleton. The public is represented by Public Counsel from the Department of Justice by Attorney Marguerite Wageling. And, Marguerite, you are -- There you are. Welcome. The following parties have formally intervened in this docket and have been granted general appearances: the Town of Londonderry, represented by Bernstein, Cushner & Kimmell, the Londonderry School District also represented by Bernstein, Cushner & Kimmell, and the Londonderry Neighborhood Coalition represented by Gadsby Hannah, LLP.

On February 14, 2000, pursuant to RSA Chapter 162-H, Tennessee Gas Pipeline Company filed an application with the State of New Hampshire Site Evaluation Committee for a Certificate of Site and Facility. On March 23, 2000 the Committee found the application complete and notified the Applicant the application was accepted for consideration by the Committee. Informational hearings were held at the Pelham High School, Pelham, New Hampshire, on April 18, 2000 and at the Londonderry High School, Londonderry, New Hampshire, on April 26, 2000. During said hearings the Applicant presented information pertaining to the requested energy facility. At the informational hearings the public was permitted to address questions to the Applicant's representatives, the Committee and the Public Counsel. The Committee issued a notice of public hearing, pursuant to RSA Chapter 162-H:10(II) and RSA 541-A:31(III), of this adjudicatory hearing which is being held at the offices of the Department of Environmental Services, 6 Hazen Drive, Concord, New Hampshire. The notice scheduled the hearing for 10 a.m. on October 23, 2000, and thereafter as necessary. The Applicant has filed affidavits demonstrating that the notice was published in *The Union Leader* on September 20, 2000 and

in the *Derry News* on September 22, 2000. These newspapers have a general circulation in Rockingham and Hillsborough Counties in which the energy facility is proposed to exist. The Applicant and the parties have been conducting discovery and developing the issues in this matter. In addition, the various state agencies have been reviewing the application and the environmental and other impacts associated with the application. The application is now ready to be presented to the Committee.

The hearing will commence with the Applicant making their presentation to the Committee. This will include the testimony of witnesses and the introduction of exhibits into the record. After the presentation of the witnesses' testimony the other parties to the proceeding will have the opportunity to cross-examine the witnesses. Upon conclusion of the Applicant's presentation the other parties will present their witnesses and such witnesses will be subject to cross-examination. Additionally, certain state agencies have submitted reports or draft conditions for a certificate. The Committee may request the testimony of representatives from those state agencies. The representatives from the state agencies will be

permitted to summarize their report or draft conditions. Thereafter, they'll be subjected to questioning by all parties and the Committee. Members of the public will be given an opportunity at the beginning and at the end of the adversarial hearing to make comments. Members of the public who have a comment or point of interest they would like addressed may notify the Committee Administrator, Cedric Dustin, who will inform the Chairman. Please note that if there appears to be insufficient time for public comment we may permit the public to submit written comments after adjournment of these hearings. The entire proceeding will be transcribed and published. Copies of all transcripts will be filed with the town clerks of the municipalities affected and made available to the public.

Next, I would like to introduce members of the Committee. Leon, could we start with you?

MR. KENISON: Sure. Leon Kenison, Commissioner of Department of Transportation.

MS. SCHACHTER: Deborah Schachter, Director of the Governor's Office of Energy & Community Services.

MR. DUPEE: Brook Dupee, Assistant Director, Office of Community & Public Health.

MR. CANNATA: Mike Cannata, Chief Engineer, Public Utilities Commission.

MR. TAYLOR: Jeff Taylor, the Director of the Office of State Planning.

MS. GEIGER: Susan Geiger, Public Utilities Commission.

MR. PATCH: Doug Patch, Chairman, Public Utilities Commission.

MR. VARNEY: Bob Varney, Commissioner, Department of Environmental Services.

MR. WRIGHT: Craig Wright, Department of Environmental Services, Air Resources Division, sitting in for Director Ken Colburn.

MR. NYLANDER: Russell Nylander, Chief Engineer, Water Division of DES, sitting in for Harry Stewart.

MR. MCLEOD: Rich McLeod, Director of Parks and Recreation.

MR. BALD: George Bald, Commissioner, Department of Resources and Economic Development.

ATTORNEY WALLS: Mike Walls from the Attorney General's Office.

ATTORNEY IACOPINO: Mike Iacopino and to

my left is Vincent Iacopino, counsel to the Committee.

MR. DUSTIN: I'm Cedric Dustin, Administrator for the Site Evaluation Committee.

CHAIR: As a point of information, Russ and Craig are not voting members of the Committee but are here for informational purposes only. Committee, staff have been presented. Applicant's attorneys?

ATTORNEY SMITH: Yes, Mr. Chairman. My name, for the record, is Gregory Smith and I am counsel for the Tennessee Gas Pipeline Company appearing from the McLane Law Firm here in Concord. With me is Ellen Arnold, who's also with the McLane Law Firm, Stuart Richmond, to her left, and I have one other associate, Meredith Hatfield, who is here to assist, as well as Shannon Bolduc who is a paralegal and will try to help us manage the exhibits and the information in this case. To my right is Robert Haas, who is the project developer for Tennessee Gas Pipeline Company, and will be our first witness. We have with us also here today several other witnesses that we will put forward when we get to that point in the testimony, as we understand has been the practice in the past. As the Applicant we have spent a good deal of time trying to organize the formal

record into a list of exhibits, and those would appear in the box here on the corner of the table. We have a revised exhibit list. We sent out a draft as we were working on that last week. And has that been handed out or -- Mr. Dustin has copies of that for you. We assume that other parties may want to use that. They're welcome to use that box if they wish. People should have copies of all of those documents already. Any exhibits that we were proposing to introduce at this hearing, of course, would be different, but we have tried to include all the ones we expected to introduce in this box for administrative ease. And we will expect to leave that here and to try to conform it at the end of the hearing to what happened. Other counsel may have their own exhibits or exhibit lists. I have not represented that this is complete. While it might include some things that other parties wish to have in here, we did not make an effort to include all the things they might want to have in here and I have put them on notice that they should make their own judgments about whether there's something else they'd like to have there.

CHAIR: Thank you. Marguerite, do you have any comments?

ATTORNEY WAGELING: I do not. I have had a chance to look through the exhibit box and I was intending, with the permission of Mr. Smith, to be able to utilize that box and I will reference his exhibit list in my examination of not only their witnesses but my witnesses as well.

CHAIR: Thank you. And could we have an introduction of the Intervener's attorneys? Elizabeth?

ATTORNEY GOODMAN: My name's Elizabeth Goodman. I'm from the law firm of Bernstein, Cushner & Kimmell and we represent the Town of Londonderry and the School District of Londonderry. We have a motion pending which I assume we'll be discussing shortly?

CHAIR: Yes. Thank you.

ATTORNEY ROCHWARG: Good morning Chairman Varney. My name is Leah Rochwarg. I'm with the law firm or Gadsby Hannah and I represent the Londonderry Neighborhood Coalition, and with me this morning is my colleague.

ATTORNEY EDWARDS: Good morning Chairman. My name is Bill Edwards with Gadsby Hannah for the Londonderry Neighborhood Coalition.

ATTORNEY ROCHWARG: And I also have an

oral motion and I would request that it be heard this morning. I discussed it with Attorney Iacopino outside and I haven't had an opportunity to address the Committee with it and would appreciate the opportunity now.

CHAIR: Okay. We will have a few motions to discuss in a few minutes. Thank you. Welcome. The motions that we have to discuss, apparently there are four or five of them total. First is a motion from Gadsby Hannah on behalf of the Londonderry Neighborhood Coalition, and it's a motion of the Londonderry Neighborhood Coalition to supplement its witness list and pre-file direct testimony. Leah, do you want to speak to that briefly?

MS. BROCKWAY: Mr. Chairman?

CHAIR: Yes.

MS. BROCKWAY: Can you find a mic for the attorneys who will be speaking so that this reporter can have it on tape?

CHAIR: Yes. We should try to make one of those seats available. Thank you.

ATTORNEY ROCHWARG: Yes. Good morning again. With regard to the Motion to Supplement, I believe that I would rely upon the basis which I set

forth in the written motion itself. I believe that it was filed within the time periods provided for in Model Rules. And, like I said before, the basis upon which I would ask the Committee to consider allowance of that motion are set forth in the motion itself. Essentially, the witnesses that I have identified, many of whom are present today, their testimony would fall within the general scope of pre-filed testimony which was previously filed in a timely fashion and according to the rules.

CHAIR: Okay. Thank you. And this was circulated to the service list. Any comments from the Applicant?

ATTORNEY SMITH: This is the motion that was filed last week, is that correct?

ATTORNEY ROCHWARG: That is correct. The written motion, I believe, that is with Chairman Varney.

CHAIR: Yes, the written motion that was dated October 16, 2000.

ATTORNEY SMITH: The Applicant does not object, Mr. Chairman.

CHAIR: Any comments from the Town's attorneys?

ATTORNEY GOODMAN: No objection.

CHAIR: Any questions, comments, from Public Counsel?

ATTORNEY WAGELING: No objection.

CHAIR: Any -- I'll move we grant the motion. It's been moved. Is there a second? Second. Any discussion or questions? All those in favor of the motion say "Aye."

GROUP: Aye.

CHAIR: The motion's approved. Thank you. You also indicated that you have a verbal motion this morning?

ATTORNEY ROCHWARG: Yes, I do, Chairman. Just this past Friday, October the 20th, I received two volumes of materials from the Tennessee Gas Pipeline and I'd like to address that, if I may, at this point in time. In accordance with the Model Rules of Practice and Procedure, Section 81103, there's a mandatory pre-hearing disclosure of witnesses and exhibits which must be provided within five days prior to the hearing dates, and the position of the Londonderry Neighborhood Coalition is that was not timely filed. I have an overnight package evidencing that it was not forwarded to me until the 19th of October. I received it on the 20th of October which as the Committee, and Chairman, you

are well aware does not comply with the procedural requirements either of the draft EFSEC rules or the procedural order issued on the 18th of April this year, nor does it comply with the Model Rules. It is the position of the Londonderry Neighborhood Coalition that in receiving this material at such a late date that we were severely prejudiced in our opportunity to prepare and, at this point in time, there were four witnesses who were involved. There were two supplemental filings made for direct pre-file testimony of which I have less of an issue over, albeit it was not timely filed. There were two additional witnesses, who I understand from speaking with counsel from the Attorney General's Office, in fact, they were roughly discussed at the pre-hearing conference, however, they were never identified to myself by name. These witnesses offer a substantive testimony on blasting issues and on endangered species issues. I feel as though the Committee should consider either striking their testimony or, in fact, leaving the hearings open, as the rules provide that once these hearings are completed on Wednesday they are closed to further evidence. Specifically, one of the witnesses identified as Roger Tredell in his direct pre-file testimony that, in fact, NEA, which is the Northern

Ecological Associates for whom he works, anticipates completing surveys of the project areas within Beaver Brook for the end of October and will provide a full report as soon as it is available. I can't possibly be expected to cross-examine this witness on a report that I haven't even seen. So, therefore, I would ask, respectfully, that the Committee either suspend the hearing to allow the Coalition and other interveners and parties sufficient opportunity to cross-examine these witnesses or consider the Londonderry Neighborhood's motion to strike their testimony in its entirety as I do believe that we are severely prejudiced in our inability to properly cross-examine these witnesses on a report that, as I said, does not even exist.

With respect to some additional related issues, on the blasting issue, let me just go back to the witness for that, Paul Kretschmer, excuse me, I'll get his name properly, listed by the Tennessee Gas Pipeline, Paul Kretschmer, he goes into several issues that were raised by the Haley & Aldridge report. And the expert witness hired by the Office of the Attorney General and counsel for the public obviously had concerns about sufficient opportunity and ability to cross-examine that witness as I have had insufficient opportunity, as of this point in

time, to adequately review and consult with an expert of my choice, or even just to review the reports themselves, to be prepared to cross-examine that witness. As I stated previously, as to that witness, as well, I would request sufficient opportunity as leave of the Committee not to close the hearings but rather consider perhaps a half day of hearings or even just a few hours of hearings to give us sufficient opportunity to cross-examine at least those two witnesses.

In addition, I would point out to the Committee that Tennessee Gas Pipeline hasn't even asked this Committee for permission to file that supplemental testimony in the form of a motion. Perhaps one exists, but I haven't seen it. In addition, I would point out that counsel for the Town of Londonderry has filed a motion which is pending before this Committee. And I understand that it hasn't been addressed as of this point in time but it is my understanding, after having spoken with counsel this morning, that, in fact, Attorney Smith would like a sufficient opportunity to respond to whatever filings counsel for the Town of Londonderry makes and, obviously, I would request a sufficient opportunity to respond to that as well. And I would just respectfully request that the Committee,

and also you Commissioner Varney, consider these requests as I do believe that the Londonderry Neighborhood Coalition and the interests of the citizens of the Town of Londonderry have been adversely affected and we are severely prejudiced by the late filing.

CHAIR: Thank you. A response from the Applicant?

ATTORNEY SMITH: Yes, Mr. Chairman. I don't think there's any prejudice at all by this filing. The documents that were included in this filing all fall within the scope of the issues which were raised by other parties during the discovery process by either data requests or communications with us. Now, under the process in this hearing, we could come back and present all of that testimony at the time of rebuttal, and we'd have every right to do that. What we said at the meeting of counsel, some time ago, was that if anyone identified additional witnesses they would try to make that known to others as soon as they had that information and let them know what the testimony would be about, and that's what we did. We mentioned at that meeting that because issues have been raised about blasting or about safety issues or about the water issues, we would try to address those as early as we

could develop that information and get it to others. There's no surprise about these issues. They're the very same issues. What they now have in front of them is the testimony that might come tomorrow or the next day as to what our witnesses think about those issues that have been raised, so it actually allows them to preview what we could have presented at this hearing.

With respect to the kind of overlegalistic argument that the standard rules at the AG's Office present that, I think that's simply a mistaken view of the law. Those rules do not prevent that. Those rules can be applied when there is specific notice to the parties that they apply in this proceeding. All parties have been notified that your procedural order which follows the draft guidelines of this Committee, are mindful that they're not adopted guidelines but they became an order of this Committee. Those are the rules that apply to this proceeding. And even if these Model Rules adopted by the Attorney General's Office applied here, that statute and those rules provide that they will be waived in all cases where strict application would somehow frustrate the purposes of the proceeding.

Finally I would say, having had the privilege of being at these proceedings before, I think what we

should all keep in mind is that this is a process of trying to build a project in which the proponent has to put forward all of the conceptual plans and then refine those to the level of detail they're able to do that. But the proponent always has the burden of proof. The proponent always has to show what it is they're going to do. We put forward a project we felt was approvable at every step of the proceedings but, as this inclusive process unfolds, people represented by counsel may continue to serve data requests or raise questions about how we're proposing to do things. And what we do is try to understand what those concerns are and then, as promptly as possible, file additional information about those so everyone can have that and then they can be properly addressed. There are a couple of permits in this submittal. The request for variance -- I should say there's one, I think, the request for variance. That's actually already in the application. We filed it again because, arguably, a different form might be used by this department. But substantively, it's exactly the same thing that's already there. The Condition No. 6, the turbidity standard has been present in this case all the way along. We simply filed our proposal for that condition, I suppose we could have filed that after the

hearing, so everyone could see what our testimony will be about the turbidity standard and how that condition, that has been circulated among counsel, might be modified. We have added witnesses, as we said we would at the meeting of counsel, such as Mr. Kretschmer because he is providing additional depth within the scope of the same issues that were already joined in our original pre-file testimony. We have not gone outside the envelope of that. What we've done is put in the pre-file testimony before you and bring here behind me people who, as we like to say these days, "you can drill down with." If you want to ask more questions about the science of blast measurements, or more questions about any of these technical issues, we're trying to bring the people either to this table, into these filings, or make sure that they're in this room behind us so that the Committee can ask questions of them and get to the bottom of those issues.

Finally, I would say that all those people will be here and be questioned about these issues. This is not a broadening of the scope of the issues. And if there's anything more that counsel would like to comment on with respect to those issues we are all mindful there's already requests to keep the record open for two more

weeks for additional filings. We do not intend to object to that. We intend to ask that we have two weeks after that to file any additional comments that we have so that you end up with a most complete record to make the best decision possible.

CHAIR: Thank you. Do we have any comments from counsel for the Town of Londonderry and the Londonderry School Board? If so, feel free to step up to the microphone.

ATTORNEY GOODMAN: Thank you, Mr. Chairman. First of all, I'm wondering if there could be two seats at this table for the interveners during the proceeding of the hearing? I think that would be helpful to us.

CHAIR: Yes, we'll take care of that.

ATTORNEY GOODMAN: And also, a seat available for my engineering consult behind me, if that's possible, so I can confer with my consultant. Thank you. We have filed a motion to extend the record for two weeks to file additional comments. But since I came here I was handed -- In addition to the supplemental filing which I personally received on Friday, which, by the way, includes 21 applications for

trench cut permits before the Town of Londonderry, I have not had the opportunity to review that permit request or the permit request filed today which is a building permit and Site Plan Review. I don't see how I can review those with my clients and get responses to the Committee.

I think the issue before the Committee is one of due process and really not a legalistic determination of which set of rules you're going to apply. I would like now to orally amend my motion and ask that after the hearing we reserve the right to request additional hearing time. We don't have the report, for example, from Tennessee Gas. In the Beaver Brook there's a report coming on the Brook Floater Mussel, which isn't done, and in order to ask questions about that we need to look at the methodology, we need to look at the analysis and we need to look at the results. And so, I'm afraid that given the extent of local permits that are pending, and now these additional witnesses that are testifying or are available at this hearing for which cross might be appropriate, I'd like to reserve, also, the right certainly to file written material for up to two weeks. And we did try to limit that so that there would be adequate time for the Committee to receive our

comments. And then I'd like to, with that written material, make a determination as to whether the Town would like to request additional time for a hearing. I'd like to review that with my client. And then maybe your Committee can rule at that time whether a further hearing date would be necessary. I'm just posing that as another alternative. But certainly, at a minimum, we've got to have two weeks to file some additional material.

CHAIR: Thank you.

MS. BROCKWAY: Mr. Chairman?

CHAIR: Yes Nancy.

MS. BROCKWAY: May I ask a question? Have you been responding directly to the motion, the oral motion, that was just made by the Londonderry Neighborhood Coalition? If not, could you also do that?

ATTORNEY GOODMAN: Sure. I think I was, in part, responding to it but, yes, I would support it if the Committee wants to set it down for two weeks to file additional written materials, two weeks for the Applicant to respond and then a subsequent hearing date. We would support that.

CHAIR: Excuse me. Do we have questions from the Committee, additional questions?

ATTORNEY IACOPINO: How about Public Counsel?

CHAIR: Public Counsel?

ATTORNEY IACOPINO: I don't know if Public Counsel has a position.

CHAIR: I'm sorry. I'm sorry, Marguerite.

ATTORNEY WAGELING: Thank you. Briefly, I think the position of counsel for the public revolves around some assumptions and understanding from the pre-hearing conference that took place. As I explained to counsel for the Town of Londonderry and the Londonderry Neighborhood Coalition, it was my understanding and assumption from that meeting that the panel of experts from the Tennessee Gas Pipeline would be here at this hearing to present not only testimony but answer specific questions relative to their expertise. And so, I came, hopefully, prepared to adequately cross-examine them and raise issues of concern that have been developed by counsel for the public. So I, with all due respect, I don't feel that there is any prejudice, at least there wasn't any on the part of counsel for the public because I was anticipating their presence and the testimony. I'm appreciative of the fact that it was

filed prior to the hearing so that I was able to review it with my experts, but I understand the time constraints that have been placed on everybody and I'm sympathetic to them.

It, additionally, was my understanding from speaking to different personnel that I would be allowed through the testimony of my expert, Haley & Aldridge, who are present for the hearing today, to flesh out some of the subjects that are unresolved. Not only have I provided the pre-filed testimony but it was my understanding that based upon that pre-hearing discussion that we would be able to flesh out some of those issues through their testimony as specifics. And so, that was my intent at this hearing also. I did not file any supplemental pre-filed testimony to accomplish that task because it was my belief that I was going to be allowed to do so. So with that in mind, I guess I certainly don't have any objections, understanding the time guidelines and constraints of this Committee to make a decision on the Certificate, to allow for the motion by the Town of Londonderry to supplement. And also, if the Committee chooses to have a further hearing I certainly would defer to your position on that and be present if one is requested and allowed. Thank you.

ATTORNEY IACOPINO: I just want to make sure the Committee understands your objection. You're objecting not to the supplemental direct pre-filed testimony which was contained in the packet from Friday of Mr. Auriemma and Mark Hamarich, is that correct? You don't object to that?

ATTORNEY WAGELING: That's right.

ATTORNEY IACOPINO: You object to the pre-filed direct testimony of Roger Tredell?

ATTORNEY WAGELING: Correct.

ATTORNEY IACOPINO: With respect to Mr. Tredell, what specifically are you asking from the Committee?

ATTORNEY WAGELING: Specifically what I would ask is the opportunity to actually see the report. As I stated earlier, the NEA anticipates completing surveys of the project areas within the Beaver Brook before the end of October and will provide a full report as soon as possible.

ATTORNEY IACOPINO: That's the second report regarding Brook Floater Mussel?

ATTORNEY WAGELING: That is correct. And essentially what I would ask the Committee is the opportunity to sufficiently respond either in writing

and/or the opportunity to properly cross-examine that witness once I've had an opportunity to see that report.

ATTORNEY IACOPINO: And with respect to the pre-filed direct testimony of Paul Kretschmer, you object to that as well?

ATTORNEY WAGELING: That is correct.

ATTORNEY IACOPINO: And what's the specific relief you're requesting with his testimony?

ATTORNEY WAGELING: The relief requested would be the same, the opportunity to sufficiently cross-examine that witness, have an adequate opportunity to hear his direct testimony on this date, and I would request either the opportunity to present the Londonderry Neighborhood Coalition's responses in writing but I would prefer to do so at a subsequent hearing date if the Committee would consider that, and I think it could be accomplished rather quickly.

ATTORNEY IACOPINO: And did you have specific objections to any other portion of the October 18th supplemental filing?

ATTORNEY WAGELING: Well, as counsel for the Town of Londonderry pointed out as well, there are applications for 21 additional permits as well. I'd like the opportunity to sufficiently respond to and

address the issues raised in the entire filing, including the permits and additional witnesses and their testimony.

MR. PATCH: Mr. Smith, did you wish to respond to some of --

ATTORNEY SMITH: Just to try to clarify this a little bit further, if I take some of them one at a time, the request for PUC approval, the request for the local road cuts, for example, the waiver of Shoreline Protection Act, are all already covered in the application. It's only a formal difference. For example, all the route is laid out. The crossings of the roads are all laid out. None of those things are new. All these are are the technical documents that would go for review at the local level and review here for each of those road cuts, for example, or the review of the water crossings. As you may know, there's some question about jurisdiction there but to be safe we filed the document so there wouldn't be a question about that.

With respect to the endangered species surveys, the reason that is not complete is because it hasn't been possible to do it because of weather conditions. We have been sending people all this season into the field

to try to do that. I'm told that it is complete as we sit here this morning and that testimony will be offered live at this proceeding about concluding that and that the Brook Floater Mussel was not found in this right-of-way. But we were trying to get that done and filed sooner, and it wasn't possible. The visits had to be canceled because of schedules or weather conditions and it wasn't suitable to do the work. If we could have filed any of these things sooner we would have. I don't think there's any prejudice or denial of due process.

Finally, I would say that I think that we're not objecting to these parties asking to be supplied further information after this hearing if we have an opportunity to respond to that and provided it does not delay this proceeding, which is on a statutory clock, because it's important to the project proponents to stay on a schedule or the project could be severely hampered. That really would be prejudice.

MR. PATCH: Unless the Committee feels otherwise, I think it would be best if we heard arguments with regard to the motion by the Town of Londonderry and Londonderry School District to allow the record to remain open for two weeks before we make a decision on this other oral motion since the two, I

think, are tied in together. So, any objection from the Committee? If not than I'd say we receive further arguments on that motion. So the proponent of the motion can go ahead. Is there anything I should ask so that you don't repeat everything, arguments you've already made? Is there anything you want to say to supplement what you put in writing?

ATTORNEY GOODMAN: Just to clarify, we are asking for two weeks to file written comment. We're not saying that Tennessee Gas is dragging its feet. What we're saying is that we do need time to review those technical details which are in the application for the trench cut permits, the site plan review. We do need time to review those and to comment. And there are, in the supplemental filing which was recently done, there are route alternatives that go around the schools of the Town of Londonderry. And that's a very important point to my client, in fact, one of the most important, and we need adequate time to comment on that. And I would, again, urge that you allow us, after we prepare those comments, to reserve the right to ask for additional hearing time if my client feels that there is some other issues that arise as a result of that review for which we need to allow this Committee to hear

testimony.

MR. PATCH: And when you say "comments," I want to make sure I understand, are you talking about testimony by an expert witness or are you talking about just sort of general comments? Now the statute that you've cited, 162-H:10(III), suggests that sort of after the hearings we can allow in informational reports submitted to it by members of the public. But to me, it doesn't say that an expert witness could submit something after the hearings are closed.

ATTORNEY GOODMAN: Right, which is why the Town's motion -- When I came today I was prepared to only file written material, then I was handed a site plan and a building permit application as well. And then counsel for the Londonderry Neighborhood Coalition, who are residents of the Town of Londonderry, has requested that the hearing be extended. So, since that motion is pending before you I'm saying I support that motion as well. I definitely want the two weeks for written material and I want to reserve the right to discuss that with my client and ask for additional hearing time if necessary.

MR. PATCH: So the written material you're talking about is just comments or is it

experts to review what has been submitted? Now I understand that you may be asking for further hearings, which I assume would be testimony from an expert witness.

ATTORNEY GOODMAN: Okay. Okay. It would be a report of our engineering consultant or a summary of that report, yes. It would have some -- That might be one of the problems but that's what we would submit. And if the Committee decides they don't need to have a hearing on that then fine, we'll submit our report.

MS. BROCKWAY: Question. I thought I understood the status of things and now I'm not so sure. My question is going to be, when did you find out that you would need more time? When I read the motions this morning the only thing that appeared to me as far as a reason for needing more time was that the Town had recently changed counsel, not having to do with trying to respond to recently provided information from the Applicant. The oral discussion this morning has revolved almost entirely around a desire to have time to respond to information that just recently came into your possession, so I'm a little bit confused. Are you looking -- Let's say nothing had been filed on Friday and you hadn't received anything this morning, would you

still be looking for two more weeks and, if so, why did you wait until recently to file a motion for that?

ATTORNEY GOODMAN: Yes, the Town of Londonderry would be seeking the two more weeks regardless of the material filed by Tennessee Gas, that's correct. And I'm not attempting to hide that fact. That's why we filed a written motion. We were only retained in a very short time period, and there's nothing I can do to cover for that fact. We were retained, essentially, by the School District on Friday. So, we've done our best to be prepared for this hearing and we've hired an engineering consult and we've been up and seen the site. And you can talk to Tennessee Gas people. We asked them to meet us. We've got the documents as best we can. I don't have the exhibit list. I did make, and Mr. Iacopino can verify, a number of phone calls trying to get the docket, trying to get a copy of what had been filed already in this case, and trying to get all materials from Attorney Radigan's office. And we're certainly prepared to represent our client here today. But in the best interest of our client, yes, we're asking for two additional weeks.

MS. BROCKWAY: Can you share with us any information about why your client came forward so

recently to hire counsel, and I gather that the Town also just changed counsel so? Why this is happening at this point in the proceeding rather than earlier?

ATTORNEY GOODMAN: I wish I could tell you. I can't. I don't know what happened before we were hired.

MR. PATCH: Okay. Responses to --

MR. CANNATA: May I ask a question, Doug? As I read the motion, the motion incorporates the type of information we're looking at into the statement of position. And in reading it, very quickly, it talks about new routes, safety review, construction requirements, review of emergency plan, impact on the community, and I could go on and pick out other few words. That sounds like a complete redo of this process. It was my understanding that's what we're doing here today, and I wonder if you would just comment on that for me please.

ATTORNEY GOODMAN: I think that today Tennessee Gas is presenting all of its project. And I think that the Town has certain specific concerns which we intend to report back on and we're going to limit those to the areas of direct concern to the Town. Local permitting is one of them. The impact of the route

directly adjacent to three schools is a serious concern of the Town, and we've recently hired an engineering consultant. To my knowledge, before this the Town had no engineering consultant. And I did attend the public hearing with our engineer and we did speak with, I think you're from the Public Utility Commission, Mr. Marini, and we reviewed his report. We'd like to prepare a report on that. So, yes, to the extent that there are issues being dealt with today, yes, the Town would like to also file written materials relating to that, things that are going to be considered today, but not to the full breadth of matters. For example, I don't think we'll be submitting comments on the water process, which I think is a big issue here.

MR. CANNATA: Thank you.

MS. SCHACHTER: Mr. Chairman, may I ask a question? If I might direct a question to the Applicant's counsel. If you could help clarify, in my mind, your position relative to this request? I heard you say that you have no objection to two weeks of additional time provided the Applicant also has two weeks thereafter to respond. I didn't hear you address the potential to have another half day or some several hours of hearings, and I wonder if you could address

that as well as whether there's any limit, in your mind, on the scope of issues that might be addressed in writing, issues or the type of material presented, to the extent it's evidentiary, and if you have a position on that?

ATTORNEY SMITH: Thank you. We don't think that further hearings would be necessary and I am not supporting, or not objecting to the motion intending to convey to the Committee the idea that we think further hearings are necessary. We see no reason for that at this point. I guess I'd like to make, if I may, two or three additional points. One was just raised by Attorney Goodman, and I wasn't planning to address it now but I will. First, a fairly simply straightforward matter. There was an allusion to the Applicant filing a recent alternative route analysis. What we have filed is the information which was prepared several months ago and filed with FERC. And, while I'm not counsel at the FERC proceeding, I'm aware of the fact that this Committee is on the service list and so are these other parties participating at FERC, and this parallel proceeding is addressing many of the same issues. So in some cases we have filed FERC documents here so your record would be more complete and you would have that

information in the legal record if it's going to be subject to judicial review, and we may continue to do that. All we have filed is the alternative's information that's in the FERC proceeding that these parties have already seen. Secondly, we are taking the position we believe is the right position to take, that the Applicant should be permitted to put its project forward. And we will get all aspects of it to you as promptly as we reasonably can do that in conformity with the statute, and we appreciate the great care and the knowledge and experience this Committee brings to this process. But with all due respect to counsel for the Town, the Town of Londonderry has participated in these proceedings, as has the LNC for months, and it is not the Applicant, in any true sense, that's late. It's the Town of Londonderry. This is the issue I was not going to raise but, while the Town of Londonderry's recent counsel has told you they couldn't get copies of orders and didn't know what was going on in this case because they came in so late, I learned yesterday morning, at 8 a.m., that on Friday of this past week they did find their way to Londonderry, were in contact with two of the people on my project team and went out to the right-of-way and spent several hours

examining the right-of-way, questioning people on my project team, taking digital photographs, I'm told, complained that they didn't have more information provided in response to their questions, and they have never contacted me or any one of my staff in my law firm to get any of this information. I don't think that's the proper way to do it. It is not the Applicant who is playing hard to get here. The information that we have laid out in this most recent filing is all essentially within the envelope, I'll describe it, of the issues that we have all been joining for some time, and the Town of Londonderry has had counsel. They chose to get new counsel at the last minute but did not come forward and deal with other counsel. That was how they chose to prepare for this hearing. And now they want to come here and say that they need more time to respond to what happened here.

Let me add one other fact which has been alluded to here and I think is relevant to your determination of how to fairly proceed. The Town of Londonderry, with their new counsel, apparently, in attendance, asked for a meeting in the Town. I believe it was on September 27th. It was the 25 , September 25 Counsel that is telling you they're late to this proceeding were at that

meeting. The Town counsel directed inquiries to my client. Tennessee Gas Pipeline Company attended that hearing, at the request of the Town, and answered all the questions that they could at that hearing. I believe it may have been recorded. And counsel was able to sit there and steer, if they wished to, whatever questions the Town was going to ask. So, we have gone to public hearings. We've gone to informal meetings in the town. We have been available and I'm in the telephone book. If these people wanted to know what was going on in preparation for this hearing they could have called. They have been preparing. And so, to address your point about what would really be the scope then of what they should file, I believe it should stay within the parameters of what's happened up to this point, and I believe that Public Counsel and counsel for the Applicant have done that. Where issues have been joined, we have refined our analysis on those issues. We have not raised brand new issues late. And if that's what's coming in this package in the next two weeks is a whole set of new issues, say alternative routes that are very different from the ones that have been discussed at FERC or have been discussed in this proceeding, we may find ourselves objecting to that

saying that it is too late to bring those things up. But I am trying to make sure, as I know you are, that all parties get a fair hearing here. I do not think anybody ought to surprise someone else, take advantage of that, and I don't think it's the Applicant that's doing that, with all due respect.

MR. PATCH: Mr. Smith, can I just ask one question to clarify? I think you said before that you didn't object to leaving the record open for two weeks, but for what purpose? I just want to make sure that I understand that the purpose that you are taking the position it ought to stay open for.

ATTORNEY SMITH: I think if the Town wishes to file an engineering report, and if it remains in a way that we can all appreciate is essentially consistent with the parameters of the issues that have been joined through this orderly process to this point in time and in this hearing, in a proper way, that we don't object to their filing follow-up documentation on those issues. If it injects completely different issues, things that could have been raised at this hearing and aren't, then we will object to that. And we are not objecting provided it does not delay these proceedings which, as you know, are very important to

the survival of this project, that they stay on time, and that the Applicant have an opportunity to respond to whatever it is they intend to file.

MR. PATCH: Questions? Public Counsel?

ATTORNEY WAGELING: I only had one other comment I'd like to make because I don't believe I made comment. Insofar as the Applicant has requested an additional two weeks to respond to any filings made on the part of Londonderry, I too would ask for that. I failed to mention that earlier on in my comments.

MR. PATCH: Could you expand on that a bit?

ATTORNEY WAGELING: Surely. As I understand it, Londonderry, through their written motion, has asked for two weeks to file further comments after today's hearing. And the Applicant has indicated to you, as I have, that I have no objection, nor did the Applicant. However, the Applicant went further and asked for two weeks past that two week deadline to file any response to the Londonderry filing. And I failed to ask for that additional two weeks also, and I would just like to ask for that same consideration.

ATTORNEY ROCHWARG: If I may, Chairman

Varney? On behalf of the Londonderry Neighborhood Coalition I would request the same opportunity in the event that this Committee allows the motion.

ATTORNEY SMITH: I'd object to that, Mr. Chairman, if that's a request that the LNC can respond in the second two week period.

ATTORNEY ROCHWARG: I simply want permission, like my sister counsel, my brother counsel, to have an adequate opportunity to respond, and it's obviously up to the Committee as to what the time frame would be. And certainly as to the Town's motion, I would just request an opportunity to respond like counsel for the public and counsel for Tennessee Gas.

ATTORNEY GOODMAN: If I may comment, Mr. Chairman? I think the issue here, or one of the questions I've been hearing, is scope of the Town's additional filings, what the Town is allowed to file. And I think we're pretty clear on the engineering issues. We have an engineering consultant. I think everyone's in what the Town thinks as to the safety of the pipe to be proposed to be installed. I think Mr. Smith is trying to limit the Town in commenting on alternative routes, and I would strongly request that that be part of this scope. There's not a big

difference in the routing. If you look at the Town of Londonderry on the map and the current easements and the housing developments, it's not like we're going to suggest that you put it through a lot of houses. I don't think there's a large area of alternative routes but I do see, initially, an area where route alternatives around the schools might be possible. And I apologize for not being prepared to present that today but for my client I have to ask for the right to present that to this Committee. And I add that there is no prejudice to the Applicant. We're not asking for a delay of the decision date. We're asking for the right to make an informed request. I don't want to wing it. I don't want to suggest something that isn't useful to my client, the School District or the Town. But I want to reserve the right, if possible, to comment on an alternative route. And if you want to say "alternative routes in location to schools," "around the school area," that would be fine with us. I would like to comment on the safety aspects of the pipeline and construction and monitoring, and on the emergency plan. That would be the scope of the written comments we'd like to reserve the right to file on.

CHAIR: Could you tell me when

this application was filed with this Committee?

ATTORNEY GOODMAN: When the application by Tennessee Gas was filed? It was before March. I think it was February.

CHAIR: And so, that's how many, several months?

ATTORNEY GOODMAN: That's correct.

CHAIR: Quite a few months. And the hearings that were held at Londonderry High School and Pelham High School were back in April?

ATTORNEY GOODMAN: There were some initial hearings in April. I believe that there were changes --

CHAIR: Informational hearings in April?

ATTORNEY GOODMAN: That's correct.

CHAIR: And were issues of the route of concern back then?

ATTORNEY GOODMAN: I assume they were. I assume that issues of route have been a concern throughout the process, that's correct.

CHAIR: And why is it that you need additional time to evaluate alternative routes if this proceeding has been, a filing was back in February

and in March was found to be complete and accepted for consideration by the Committee? Why are we, in October, now having to deal with this issue?

ATTORNEY GOODMAN: I think one of the genesis for the concern here is the tragic accident in Carlsbad in August. I think that that is an issue and a lot of public response has turned around the position of the Town. And I think when faced with concerns about their schools there's been an impetus that has been generating over the course of this process. And as Tennessee has gone into the Town and made its presentations, people and the School District ward have become increasingly informed and they have, only recently, carried out that concern. And we're just asking for two weeks. We're not asking for a delay in the hearing time. He's accepted the two week period, and it's a question of scope. And I think that that's the best I can answer for my client. I don't think we'll be prejudicial. And certainly, today I was handed additional permits, which I understand are to be included in the scope of this, and I'm asking for the right to comment on all of those local permits as well.

MS. SCHACHTER: May I ask a question to clarify further? Is it the intention of the Town and

your intention to cross-examine witnesses on those same issues in this proceeding? As a member of the Committee I'll share that however the Committee comes out in terms of post-hearing procedure, I'm certainly invested in having this proceeding be developed as fully and thoroughly as possible on these issues that are of concern to the Town.

ATTORNEY GOODMAN: Yes. We were speaking with Public Counsel about whether Mr. Marini would be present, and I'm still trying to ascertain whether his -- So it depends, in part, I think, on the other witnesses. But yes, I have Mr. Hamarich's pre-filed testimony. He's the one most focused, I believe, on the safety issues and I would like to cross.

MS. SCHACHTER: I just was responding to your comment that you're not prepared on some aspect of this and I wanted to understand more fully whether you're prepared to conduct as full cross-examination as possible in the context of this proceeding so that the Committee can have the benefit of those questions and answers?

ATTORNEY GOODMAN: Yes, I'm doing the best I can to do so. Yes.

ATTORNEY VINCENT IACOPINO: I guess --

The question that disturbs me, a little bit, is whether or not we're going to conclude the evidentiary part of the hearing when these adversarial hearings are over? And that's an important question. And I take it that you'll hedge on me if I ask you that question. Will you?

ATTORNEY GOODMAN: Well, I think what I would propose for the Committee is two alternatives. One is to just allow the Town two weeks, at a minimum, allow the Town two weeks to file any comment that you file.

ATTORNEY VINCENT IACOPINO: And that would be it?

ATTORNEY GOODMAN: That's one alternative. Another alternative would be to allow the Town to request, at the time they file in two weeks, the opportunity for additional hearing if my client thinks it's worthwhile. I haven't even consulted with my client about whether there should be an additional hearing, so I'm at a loss. I'm not sure that an additional hearing is warranted but I think it might be given the review. I don't know how the safety aspects will be, what the report of our consultant will be on the safety issue, how concerned he'll be about the

project as proposed.

MS. SCHACHTER: May I ask a follow-up question? Given that at this time, before those issues have developed in the course of these hearings, you're not, perhaps, in a position yet to make a recommendation to your client about the need for a request for an additional half day hearing. Would you consider withdrawing that portion of the request and framing it again to the Committee at the conclusion of these hearings if you deem that you still need to leave that option open, with the hearings, perhaps, further informing your decision and your advice to your client in that regard?

ATTORNEY GOODMAN: Right, and maybe if the Committee can tell me whether we actually do have two weeks to file additional documentation. That would assist me in advising my client.

ATTORNEY M. IACOPINO: I have just a couple of questions for right now. When you say "the possibility of an additional hearing," are you talking about where you would present your engineer or are you talking about calling the witnesses back that the Applicant or other parties have already put on for further cross-examination?

ATTORNEY GOODMAN: It would be either one, obviously. I think if you're requesting additional hearing time you'd want to do either one.

ATTORNEY M. IACOPINO: And you're aware that, at least initially, that the procedural schedule in this case required parties who are not the Applicant file pre-filed testimony by August 18th?

ATTORNEY GOODMAN: I am aware of that. And that's why, originally, we didn't ask for any additional hearing time. We just asked for the written material.

ATTORNEY M. IACOPINO: And that was -- To this point the Town has not presented any pre-filed testimony of any witnesses which -- It hasn't filed any pre-filed testimony, period.

ATTORNEY GOODMAN: That's correct.

ATTORNEY M. IACOPINO: So as an attorney, are you really asking to change the procedural schedule?

ATTORNEY GOODMAN: Well, yes, I am asking for an amendment of your procedure. And I think it's warranted in the circumstances that the Town has recently gotten some additional material, right here, plus the interest in informing the Committee, as much as possible, about the Town's concerns. We only want to

try and give the Committee as much information as we can about the Town's issues. And if the Committee wants that to be in written format only, than that's what we'll do.

MS. GEIGER: Mr. Chairman?

CHAIR: Yes Susan?

MS. GEIGER: Ms. Goodman, did you intend to have any of your experts present with you to assist you in developing questions for your cross-examination during this hearing?

ATTORNEY GOODMAN: I have an engineering consultant but he has only recently been retained and he has not had the opportunity to review all the documentation. Will he be present to hear whatever --

MS. GEIGER: Yes.

ATTORNEY GOODMAN: He's present now.

MS. GEIGER: Thank you.

ATTORNEY GOODMAN: And he will continue to be present to hear the Applicant's witnesses and any other testimony that's presented concerning issues which he is concerned with.

CHAIR: Any other questions? Would you like to take this under advisement, as well, and discuss a little bit later?

MR. PATCH: I think it would be wise for the Committee to consult with legal counsel before arriving at a decision on these motions. I think there is one other motion, as I understand it, that was filed with the Committee that I think we need to hear argument on.

CHAIR: That's the protective order? Okay, why don't we take this item under advisement and move onto the next which is a letter to me dated October 20th and received this morning. And it's a request by Tennessee Gas Pipeline Company, and it's a Motion for a Protective Order for Tennessee's Emergency Operating Procedures Manual. Would Tennessee Gas like to present this order, which I do not believe was shared with any of the parties? Is that correct?

ATTORNEY SMITH: I don't believe that is correct. I believe that the second page of the letter, at least my copy -- Do you have a second page to the letter?

CHAIR: Yes, cc's?

ATTORNEY SMITH: Yes. This is a special motion that was addressed to the Chairman of the Committee with copies to all legal counsel in this proceeding, and the copy of the document for which we

seek protection was only included with the copy that was sent to the Chairman of the Committee. The document for which we seek a special arrangement is an Emergency Operating Procedures Manual. It's not an emergency plan that we use during construction but instead it is a document that governs emergency procedures after operations begin. I am told that this document is proprietary information. It is not available, generally, otherwise. And we are concerned not only that it is proprietary information but that the very purpose of this kind of procedural manual could be frustrated if it were generally available, if people knew exactly what our emergency procedures would be in the event of any kind of an incident. If an overflight helicopter went down, or there was a slow leak or a major problem, this plan, tailored to this project, would specify who would be called and how those things would be dealt with. So we believe that this should not be generally available to the public. And what we proposed is a kind of combination procedure, a ruling from the Committee that it is not a public document in the public record in this case. And we would ask that if counsel for parties wish to see this document, and I would think they would, that they would represent that

they will not copy this document and distribute it further, that it will not be copied and delivered to their clients or generally be distributed any further. And they may review it, and they may comment on it for purposes of participating in this proceeding, but it's otherwise subject to this protective order. And the reason, finally, is simply that we believe the purpose of such a plan will become frustrated if this becomes generally available.

CHAIR: Leo?

MR. KENISON: Counselor, could you distinguish that from a normal or an emergency operating procedure you might establish with the community and other surrounding emergency responders?

ATTORNEY SMITH: There are procedures, and I think as this project goes forward there will be meetings between fire departments, police departments and the people that work in the various contracting teams. There are up to 400 people who will be involved in this project. So there will be meetings, and arrangements, and telephone numbers planned, exchanged and so forth, so that if there's a need to address emergency planning during the construction those people will all become completely current in being familiar

with the project and each other. This plan is a different one. This is the one which, when tailored finally for operation of this facility, will identify how a response will be undertaken across the board. In other words, if you wanted to know what the plan would be in Londonderry in calling the police department or triggering an emergency mutual aid pact, you could probably find the Londonderry part by going down to Londonderry and asking the chief what he does. The problem with this is the whole cookbook. It's how you're going to deal with everything for 19 months. We do not think that document ought to be public.

MR. CANNATA: In your FERC application, is that material supplied to FERC --

ATTORNEY SMITH: I --

MR. CANNATA: And if so, is it public?

ATTORNEY SMITH: It's my understanding it is not and it is not public at the federal level. They may look at such documents but they are not public documents.

CHAIR: Yes. I thought you had your hand up. Sorry. Start with Public Counsel.

ATTORNEY WAGELING: Thank you. I think

insofar as I would need to have that document available for me to consult with not only other state agencies but possibly other experts, I would think that it would have to be available for that purpose. I understand their concerns, but I am certainly not the person that can review a document and determine whether or not it is as complete and thorough and addressing all issues. I don't have that expertise. So understanding their constraints, or the constraints that they're asking to be placed on the document, I would object. I would need to consult with other people in reviewing the document.

ATTORNEY SMITH: Mr. Chairman, --

CHAIR: Yes.

ATTORNEY SMITH: Can I make clear what I may not have made clear? We're not proposing that counsel can't show it to their clients. We're asking them not to let it leave their offices or be reproduced. So their clients can come and review it with them and they can look over the document and make a meaningful review of the document. We're concerned about it being reproduced and distributed from the offices of counsel. They may show it to their clients but they shouldn't reproduce it or release it, in our view.

ATTORNEY WAGELING: And I guess my

response or my comment is, what does "client" mean? And I don't mean to be getting into a minutia legal discussion here but. As counsel for the public, I do not have a client that I would be showing it to. It would be experts or other agencies. And so, with that exception, I would have no objection as long as we're all on the same page.

ATTORNEY SMITH: I agree with that.

CHAIR: Elizabeth?

ATTORNEY GOODMAN: Just questioning when our comments on this emergency plan would be submitted if the hearing is closed today or if the record is closed at the end of this hearing? I would like to have the opportunity to show this to my client. I think he said the Londonderry portion would be public if it were in the police, fire department. I'd like to be able to show that to my town officials and experts and get comments.

ATTORNEY SMITH: Just a point of clarification. I don't believe that that part of this document would be there. Some corresponding planning documents would probably be available at Londonderry and they would match, but parts of this document are not broken and put in various public agencies' hands.

ATTORNEY GOODMAN: I guess it's hard to comment because we haven't had the opportunity to review the document.

ATTORNEY SMITH: May I say, Mr. Chairman, that as we prepared for this hearing, and being mindful of how this process has worked in other cases, there are many planning documents. Some have been exchanged among counsel, or during data request exchanges, and they've become increasingly refined, just as our experience has been in other projects. What we've tried to do is to move those things up to this point in time if we could. The standard procedure is that we'd say, "We would accept conditions," which is, "We will develop an emergency plan. It'll be available 60 days before we go in operation," for example. We're raising this now because we're trying to get it to people, making copies of it, let them look at it and ask questions today, if they want to, about that. We could have simply, I think, maintained that we would have this available and file it in our, it would be in the requisite places to make sure this operated. The PUC could look it over under a condition in their certificate, and it wouldn't be at this hearing at all. We are trying to move these things back so people have

a meaningful opportunity to look at them now.

ATTORNEY GOODMAN: Could I just ask a follow-up question to that? I guess I'm not understanding the use of the documents being filed here today. Are you saying that because they're here, at this hearing, that we shouldn't subsequently be able to comment or are you saying that you're giving it to us now and you would also accept a condition that you would develop a plan and that it would be subject to local review and comment?

ATTORNEY SMITH: Any plan of this type that we developed would not be any more public than what we're proposing here today. It would be in the hands of the company. It would not be filed with localities. If FERC wanted to look at it I assume they might be able to do that, and if the PUC wanted to look at it I believe they could do that, but we would ask that it not be made a part of the public record. That's how these are handled, as I understand it. There are emergency plans, local emergency plans, now for the existing pipeline, and I believe those are referenced in our application. This is a plan that would be developed after we installed the new pipeline. And we wanted to make it available to counsel so that they could ask questions

about this now if they want to, but it would be during the course of these hearings. If they wanted to look at it with their consultants, they already can look at emergency plans that exist and have been in this case for some time. And, as I said, we could have taken the position that we would file this six or eight months from now in compliance with a condition, the fact that we have one, not the document itself. We didn't do that.

ATTORNEY GOODMAN: I'm still unclear on what this means to the Town. Does this mean that the Town's comments are limited to this hearing or are you saying that you would file this now and make it subject to local review and comment?

ATTORNEY SMITH: What I've said before, on the other motion upon which the Committee has not ruled, is that we don't object to comments being filed. It is our understanding that people can file comments in this process for the benefit of the Committee after this hearing is over. So, comments could be filed on this document in that two week period. I'm told that the plans we have at the Town are essentially the plans we're going to have at the Town after the new facility is up and operating. Those are not going to change.

What this does is it identifies telephone numbers of people when it's finally in place. It would allow someone who had a copy of this, if they got the final document, to know exactly who's going to be called and how the plan is implemented across the project. We are not going to release that to any of the municipalities now or later.

ATTORNEY ROCHWARG: Yes, if I may? Obviously, I think, as that many of you are aware at this point, that one of the, or several of the primary concerns of the Coalition, and I think the Town has previously stated, are for that of health and public safety. And I would join Attorney Goodman in stating that having not had an opportunity to see it it's difficult to respond to it at this point in time. And, based on my past experience, I'd be surprised if the document contained all confidential and proprietary information. Frequently what I've seen done is portions that are confidential and proprietary in nature are redacted. I don't know if that's a feasible option in this particular instance because I haven't seen the emergency procedure. But I know that I would like the opportunity to at least have adequate time to review the emergency plan with my client to see what concerns they

might have. And if the Committee, I think, and I don't want to put words in Attorney Goodman's mouth but, if the Committee is considering the introduction of the plan as part of the hearing process that it just leave open an opportunity for counsel to comment on that particular proposed emergency plan rather than have the automatic closure date at the end of the adversarial hearings. That would be my comments.

ATTORNEY M. IACOPINO: I understand the Applicant's got some concern with security regarding the plan. Would any of the parties object to the condition that, regardless of whether comments are permitted or not, object to the condition that plan not be reproduced and go out of, basically, counsels' office? That's one portion, part of what I think they're asking for. Is there really an objection to that if you can have your experts look at it at your office, and whatnot, and not reproduce it and disseminate it?

ATTORNEY GOODMAN: I guess, for the Town, I don't know whether one copy in the Town Administrator's office would be acceptable to Tennessee or --

ATTORNEY SMITH: No. I'm proposing that it remain in the hands of legal counsel who

represent that they will not release it from their custody. And so, they can have people look at it. They will take the responsibility for keeping control of these documents. It will not be placed in the hands of other people or left at the Town offices.

ATTORNEY GOODMAN: I'd have to look at it, and I'd like the opportunity to call my client and see whether there's an objection. I don't know.

CHAIR: Nancy?

MS. BROCKWAY: I will confess that I can only speculate as to why there is the security concern that the Applicant has raised. However, with that speculation, I can see that there is going to be a need for security and it strikes me that we've had an offer from the counsel for the two interveners to review the material and consult with their advisors and then, perhaps, have all the three counsels sit down together. There may be things that people would rather not discuss, but once we're out of adversarial context everyone can agree that it's just common sense and it's not prejudicing anybody's position.

ATTORNEY SMITH: If I may? I think I essentially agree with that but what I'm suggesting is that the rules of handling this document are that they

will not release it further. So, that's really what I'm suggesting is getting it into their hands so they can decide how they'd like to comment on it but they agree that when we turn it over to them they are not going to release it further. And then we can decide what they want to do in terms of this hearing or comments after.

CHAIR: Brook?

MR. DUPEE: Thank you, Mr. Chairman. Attorney Smith, could you tell us a little bit more about why you want to keep this document confidential? Elaborate on that please.

ATTORNEY SMITH: Well, it's difficult, I guess, to -- I think we all know that there's information, parts of which may be public in various places. For example, for 25 years we've dealt with criminal history records. And because of important public policy considerations, even though you could go to various courts and try to find those records where they're compiled in a computer database, where someone can find them all in one document, they're not available, and that's to protect people's privacy. Here I'm concerned about the potential to frustrate these emergency plans. You've asked me the question. I'll tell you that it has been suggested to me by

representatives of some of the people who appear in these proceedings that they will do whatever it takes to stop the development of this project. And I know, from work I've done on these issues over the years, that these kinds of plans, if someone has them generally available and the public at large, falling into the wrong hands can be frustrated. It's always a concern of people who have them that that might happen. I don't know that someone's actually going to do that but I think it's an unwarranted risk, really, to take a plan which covers the entire, allow someone to see the entire game plan, to know exactly who's going to be called and how it's going to work, and then sit down and try to figure out how they might frustrate that. We live in an age in which, regrettably, that's become an increasing concern. We're not trying to make this at all difficult. We really brought it up in time now rather than simply having it later. But the other approach would have been to have it later in our hands and to say if the PUC, like FERC, wishes to review it they may do so on a condition in the certificate, but it won't be filed at the PUC either. And they can determine and comment on it and tell us what they'd like us to do, but it will be retained by the company as the company's

operating game plan to deal with all of these. This particular document is not refined for this project yet, but it's the template for how that plan would work. I hope that's sufficiently helpful.

MR. DUPEE: Thank you.

CHAIR: Deborah and then Doug.

MS. SCHACHTER: I was going to ask, following up on Commissioner Brockway's question, if it might be appropriate at a break to have counsel for the Applicant share the document while retaining control of the document, if you so wish, with counsel for the other parties so that perhaps they can, with that additional information, form their views and seek to reach agreement on terms for sharing the document? And if all the counsel think that might work if you could also discuss, at that time, any restrictions on portions of the hearing that might address the document, should there be questions about it, or are we to grab a protective order of any sort? How would that, if at all, affect our handling of questions?

ATTORNEY SMITH: Thank you. We would do that.

ATTORNEY V. IACOPINO: Can I ask a question Mr. Smith? Is this document required by any agency or

government, federal or state?

ATTORNEY SMITH: The answer -- Would you speak up louder?

UNKNOWN SPEAKER: 615, 192. 192.615.

ATTORNEY V. IACOPINO: And does the DOT regs or statute give you any protection under that?

MR. RICHARDSON: No, it does not. It says that we must have it. It does not say that it must be publicly available or known. It does require that it must be available to OPS inspectors to look at and examine it to make sure it's adequate.

ATTORNEY M. IACOPINO: Is that a separate regulation than 605 which requires a procedural manual for operation, maintenance and emergencies? Are we talking about the same manual?

MR. RICHARDSON: 605, let me tell you, I may have misspoke. It may be 605 instead of 615.

ATTORNEY M. IACOPINO: Does it include all three of those areas, operation, maintenance and emergencies?

MR. RICHARDSON: Emergencies, yeah. And the operations, in my view, of course, is the whole --

ATTORNEY SMITH: For the record, that's

Mr. Alan Richardson who was speaking, if that was being picked up, who will be available during these hearings to assist in some of these issues.

CHAIR: Thank you. Doug?

MR. PATCH: Well, I just wanted to make sure I understood whether counsel for the Town and counsel for the Neighborhood Coalition, if they were to meet as Ms. Schachter has suggested, would agree to keep the information confidential pending the Committee's review?

MR. KENISON: Public Counsel also.

MR. PATCH: Pardon?

MR. KENISON: Public counsel also.

MR. PATCH: Public Counsel also, yeah. I just wanted to know if that was the case, if I could get an answer on that?

ATTORNEY WAGELING: That's fine with Public Counsel.

MR. PATCH: Okay.

ATTORNEY GOODMAN: Mr. Chairman?

CHAIR: Yes.

ATTORNEY GOODMAN: I think the requirement we're talking about is 49 CFR 192.615. It's the Federal Energy Regulatory Commission's regulation

requiring emergency plans. I believe that's what this plan is filed --

UNKNOWN SPEAKER: That's FERC or DOT?

ATTORNEY GOODMAN: It's FERC. I'm sorry, it's DOT. And again, I would have to look at the plan. I would like the right to look at the plan, say during the break here, contact my client and see. But I think that the best way for the Town to provide comments on this, at the appropriate time, would be to have one copy available in the Town Administrator's office and that could be subject to no duplication. I think the Town Administrator could be charged with, because it requires review by police and fire and other local officials. And to come to counsel's office to do that may not be as feasible as to have one copy in the Town. But I'll try and reach agreement with Mr. Smith.

MR. PATCH: Mine's really a very narrow question. During that break, are you willing to keep that information confidential so that you can review it during the break and come back and comment to the Committee about whether it ought to grant the motion?

ATTORNEY GOODMAN: Yes, absolutely.

MR. PATCH: Okay, that's all I'm

asking.

MR. KENISON: And just --

MR. PATCH: Well, wait a minute, if I could just get an answer from counsel for the Neighborhood Coalition?

ATTORNEY ROCHWARG: Yes, in response to your question, Mr. Patch.

MR. PATCH: Thank you.

ATTORNEY ROCHWARG: Briefly, if I may, I don't anticipate any problems whatsoever in keeping that material confidential, and the information contained therein confidential, at this point in time. What I would like is for the Committee not to just give the Coalition the opportunity to respond today, I'd like to look at the regulation itself. I've seen it just now and I've reviewed it very quickly. But I'd also like to contact the Department of Transportation to find out what the protocol is on other projects of this nature to find out whether those documents are made public by redaction or if, in fact, the entire document remains confidential. And I'd just like the opportunity to find out what the DOT's position is with respect to that, whether it is generally made public in a redacted form. Obviously, I don't think it would be necessary to

publish all of the telephone numbers and have them disseminated for obvious safety concerns that someone might impede an emergency response reaction by Tennessee Gas or any other federal, local or state agency. However, I do think that the public has a right and an opportunity to at least know what is the emergency procedure and what is the protocol that's required to be followed. And I think that, perhaps, I haven't heard a response from Attorney Smith with respect to, is it a document that can be redacted? And again, that might be cleared up, Mr. Patch, by having the opportunity to look at it briefly outside.

MR. PATCH: If the Committee would agree to take this issue up say like tomorrow morning or something, would that give you enough time to do what you asked to do?

ATTORNEY ROCHWARG: I can certainly make efforts to make those calls and have someone in my office makes those calls this afternoon. To the extent that that's not feasible then I would bring it before the Committee's attention tomorrow morning and seek additional time, but I'll certainly try to have a response by tomorrow morning.

MR. KENISON: Mr. Chairman, I think

this may fall, a little bit, in the area of responsibility of administering transportation of radioactive material, particularly high level, where the public is not granted all the insight to plans for such movement and so forth. But the second thing that I would make is if this is placed in the Town Administrator's hands, I guess I would be bewildered as how the public could not have it under the right to know law. So, I like the idea of postponing this, letting them look at it and see what they can agree to. If not, maybe the Applicant wishes to just withdraw it.

CHAIR: Public Counsel?

ATTORNEY WAGELING: The only other comment I'd like to make is that, at least in my previous experience, when there was concern about confidentiality the court would often not grant the motion as proposed by the applicant but granted in its first instance and allow other counsel, if they choose to vary from it, to file a motion before the committee for leave to disseminate it to other individuals, and they'd have an opportunity to file the motion and present their position on that request and allow the applicant to object and have a full and fair hearing on that issue. And I don't see any reason why that couldn't take place

under this circumstance, that in the first instance it's to be held confidential and if anybody, in the weeks that follow, chooses to disseminate it for any reason that they have to file a motion with this Committee allowing the Applicant to object and present positions and then the Committee can issue an order.

ATTORNEY SMITH: May I say something, Mr. Chairman? We've kind of come full circle on this. I want to be very clear about something that may not be clear to everyone and that is that there are plans in existence and they're on file, available to these towns, so Londonderry is aware of the plans. When they say they want to look at the rest of this plan they mean they want to comment on what's going on in other towns along the pipeline because they already are involved in their own planning for an existing facility, and that planning will be advanced as this facility is upgraded. What we had in mind in filing this was that there have been questions raised about the overall emergency planning for this project. Like the other filings that we've made, we are trying to respond to the issues that people have raised and give them a full opportunity to be heard at these hearings on those issues. When I framed this request in the letter I said that we'd like

to know whether counsel would agree to these conditions, that they will not reproduce it, photocopy it, hand it out to anyone else. They will represent, as members of the Bar, that they will keep a copy of this document in their own custody. They may review it with people in their office at their conference table to prepare, or here in this Committee room, but they will not give it to anyone else. I will take the word of members of the Bar that they will keep custody of this document for that purpose. But when I suggested that we would offer it with that commitment they would make, what I had in mind was if they won't make that commitment we'll withdraw it. I don't think there's any obligation to have this document at this time. We were trying to facilitate a meaningful review by these counsel because they raised questions about it. I'm happy to show it to them and keep custody of it over a break, and they can decide what position they want to take, but we'll simply withdraw the document and ask that it be returned to us. It's not a public document. It shouldn't be a public document. And I'm afraid we may be going off on a sidetrack here when there's more important things to address.

CHAIR: Thank you. Michael?

MR. CANNATA: One follow-up question, Mr. Chairman. When I was asking earlier whether this document was public at FERC and the answer was that it was not, I take it Tennessee has more than one pipeline that it operates so it has many emergency plans. Are any of the emergency plans public on any other pipelines that you operate throughout the United States, to your knowledge?

ATTORNEY SMITH: It's our understanding that what you would find is the same elsewhere as what you would find here. You will find plans that if you saw this document and you saw the plans, say, at the Town of Londonderry, you would realize that they have a common genesis. There's similar patterns. So emergency response teams, and people who have to have these things, are going to be aware of the plans that they need to have. What they do not have is all the plans. Now, I suppose they could go up and down a facility and try to find them all and piece them altogether and create a document that would allow them to see more clearly what the entire operational emergency plan is. It's our understanding, Mark Hamarich was consulting with me, that an overall plan like this is not made available. Federal authorities, for the reasons we've

articulated here today, do not require them to be filed publicly. They look at them and they comment on them. And you could go around and find pieces of these documents in municipalities. You wouldn't find an overall document like this, to the best of our knowledge.

MR. CANNATA: Thank you.

CHAIR: Thank you. I think it's the will of the Committee to have the lawyers meet at some point today to discuss this issue. I think that the meeting will bring clarity to the issue and hopefully a consensus, and would urge the counsels to reach a consensus at this meeting, if at all possible, or subsequent to that meeting if additional calls are necessary, but would expect that a consensus can be reached on this issue once you have better knowledge of the content of that material. I have the option of having it so it's more obvious to me but it may become more obvious as you review it. It's now five of 12. We have been set back on our schedule a bit here. We're hoping to have the opening presentation of the Applicant. I'm told that lunch is across the way in the anteroom, so we have our choice of either breaking now for lunch, we need to decide how long a time period we

want for lunch, or we could have the opening presentation and then break for lunch after that. What makes the most sense to members of the Committee? How long do you think the opening presentation will be?

ATTORNEY SMITH: I think it might be ten or 15 minutes, but I'm not sure Mr. Chairman.

MR. PATCH: Mr. Chairman, I kind of think it would be wise if the Committee met with legal counsel over lunch to discuss some of the motions this morning. So I almost think it would be a good idea to wait until this afternoon and then do the opening. I could go either way but that's --

CHAIR: Yes?

ATTORNEY ROCHWARG: Yes, Chairman, may I just address one housekeeping matter? Counsel for the Committee, Michael Iacopino, had asked me, prior to the commencement of these hearings, whether the Coalition would object to testifying as a panel. That may assist the Committee in decision making and also move things along. The Committee [sic] does not have an objection to testifying as a panel or in two smaller panels.

CHAIR: Great. Thank you. I heard some suggesting we break now. I've heard others suggest we have the 15 minute presentation and then

break. Which would you --

ATTORNEY SMITH: Mr. Chairman?

CHAIR: Yes.

ATTORNEY SMITH: If it's pretty much either way, in your view, I think we'd prefer to start our case with the opening and move right into our first overall witness. I think it fits together pretty well.

CHAIR: Okay. Does a one hour break sound reasonable? Do we want to take a half hour and then meet with our counsel for the second half hour, make sense, have a working lunch, so to speak? Lunch is across the hall and there's also, just so you know, a cafeteria --

(Off the record for break)

CHAIR: Everyone? As you may recall from my opening statements, we indicated that we would have an opportunity for public comment and we intend to provide that opportunity later today as well as tomorrow. But there is a member of the public who indicated, due to scheduling, that she would not be available later this afternoon so I would like to provide an opportunity for Valerie to address the Committee.

MS. MAZZOLA: Good afternoon. My

name is Valerie Mazzola and I am a member of the Londonderry Neighborhood Coalition and I'm also a resident of the Town of Londonderry. And I have to tell you that public speaking has never been something I have enjoyed. In fact, in college and in graduate school it was always something I dreaded. However, I felt compelled to come here today to speak at these meetings. I was not present at the last EFSEC hearings for the siting of the AES Power Plant, but I am aware of the important content of the testimony that was presented during those hearings. I fear that nothing that is said during these pipeline hearings will produce anything but another unanimous decision by this Committee to give Tennessee Gas permission to build their pipeline. It's a shame that we all have to spend so much time and money when I feel the ultimate outcome is inevitable. However, I would still like to exercise my right to speak.

When I began working with LNC I never knew how much it would change my life. I have never considered myself a naive person but I did believe that politicians were elected by the people, for the people. I believed that big business would follow the rules and regulations set forth for them. I believed that regulatory agencies

would make sure those rules and regulations were followed. I also believed that people who sit on committees, like the people sitting in this room today, were supposed to protect the health and well being of their fellow citizens. I now feel, or I now believe, none of this to be true. There's a story here that should be told, and will be told, on a national level. It is important that other people in our nation know what has happened in the Town of Londonderry in the State of New Hampshire. The story is about how two rich and powerful companies descended upon a small town and devastated a community. It's about how the residents of Londonderry voted and how that vote was ignored by the Londonderry Town Council, by the Committee sitting in this room, by the New Hampshire Supreme Court and, most of all, by the governor of this state. It's about how a group of Londonderry residents formed a coalition to fight for their rights and to fight for the health and well being of their families. It's about the high price they have paid for their efforts. On several occasions members of the Londonderry Neighborhood Coalition have been forced to file police reports because of threats of violence, incidents of trespass on their private property, and members being run off the road in their

cars. Sadly, we have always wondered whether one of us, or one of our family members, would have a lethal accident during this process.

We are here today to discuss building a large gas pipeline that will feed gas to the AES Power Plant in Londonderry. This power plant has not even been built yet but we have already felt the negative impact on our community. We have asked AES and Tennessee Gas for peace, but it doesn't appear that will come anytime soon. That gives us no choice but to carry on in our pursuit of justice. I know and I feel this process is about politics and money. I also understand this project will produce much income for AES, Tennessee Gas, and some select businesses in Londonderry and surrounding communities. However, for the average citizen in Londonderry the benefits are few. Tennessee Gas says this pipeline replacement is a routine process, but the safety and health concerns have to be addressed by this Committee. I think the families of the people who were killed in the New Mexico pipeline explosion might agree that when a pipeline does explode the results are catastrophic and irreversible. I'm sure those people who lost loved ones in that explosion will never be the same.

My children attend the Londonderry school system and I'm sure this Committee is well aware of how close its pipeline will be to our school buildings. If you're going to put my children in danger in order for two large companies to make a profit then I hope you will require Tennessee Gas to take extra precautions. I know that a pipeline explosion is unlikely, but all it takes is one accident to devastate the lives of many.

I am a native of Massachusetts but during my childhood I spent a lot of time in New Hampshire. Since I was a kid I always wanted to live in the State of New Hampshire. I always admired the "Live Free or Die" state. After spending many years in the southwest, I was finally able to move to New Hampshire. When I moved to Londonderry five years ago, I couldn't have been happier. When this whole process started with the power plant, I had faith this state would back up the people in Londonderry, that we would be free to vote and to be heard. People in our country have fought and died for our right to be free to vote and to be heard. This country is based on a democracy. However, something has gone terribly wrong with this process. To the governor of our state, to the people on this Committee, to the New Hampshire Supreme Court and, lastly, to the Town

Councilor of Londonderry, this is the United States of America and shame on you for not listening to the vote of the people. Thank you.

CHAIR: Thank you.

ATTORNEY SMITH: May I ask a question, Mr. Chairman?

CHAIR: Yes.

ATTORNEY SMITH: You're Valerie --

MS. MAZZOLA: Mazzola, yes.

ATTORNEY SMITH: Mazzola? So you delivered direct, pre-filed, testimony, did you, at this proceeding?

MS. MAZZOLA: Yes.

ATTORNEY SMITH: On behalf of the Londonderry Neighborhood Coalition?

MS. MAZZOLA: Yes.

CHAIR: Thank you. I wasn't aware that she was on the list. Thanks. Okay. We have some motions presented to us this morning. Doug, would you like to --

MR. PATCH: Mr. Chairman, I'd like to make a motion with regard to the motions. And these are the motions of the Neighborhood Coalition, it was a verbal motion, or oral motion, that was offered this

morning, and a written motion from the Town of Londonderry, both of which concern keeping the proceedings open. I would move that we grant the motions subject to the following time frames: That all parties will have ten days in which to file written responses to the information that was filed by the Applicant on Friday and today, and that responses to that first round would need to be filed within ten days after that.

MR. KENISON: Second.

MR. CANNATA: Discussion for clarity? All parties would have an ability to respond to the first round?

MR. PATCH: Yes, yes.

CHAIR: Any comments or questions from the Committee on the motion? It's been moved and seconded. All those in favor say "Aye."

GROUP: Aye.

CHAIR: Motion's approved. We're now ready for the presentation by the Applicant. Attorney Smith?

ATTORNEY SMITH: Thank you, Mr. Chairman. I'm Gregory Smith, legal counsel for the Applicant, Tennessee Gas Pipeline Company. And I

thought if we outlined, in the way it often is done in a case, the issues that we intend to focus on during our testimony, that might be helpful. And so, I intend to sketch out for you the issues that we think might be the focus of discussion at his hearing. I think it's important to recognize that this company, Tennessee Gas Pipeline Company, has been in business since 1943. And that the facility that is the subject of this hearing, that is the 19 mile facility, or approximately 16 miles from the New Hampshire border northward, it was originally, the first part of it, was installed about 50 years ago. That the second pipeline was installed in phases in the 1980's. And that this, therefore, is an existing route containing, as I'm sure you have in mind, an eight inch and a 12 inch interstate gas transmission pipeline. That pipeline is sited and the route is determined by federal law and the Federal Energy Regulatory Commission. That facility, it's now being proposed, would be upgraded. All of those who live along that pipeline or whose communities are developed around that facility have known about the existence of that facility since 1951, and they have known about the expansion of it in the last 20 years. They receive annual reports of the operation of the facility, and

there are public meetings that are held, I understand, at least every two years. So anyone who says that they didn't realize the facility was there would be mistaken because if they are owners, including the Town of Londonderry and the Londonderry School District, they get annual reports about the operation of this facility.

I think it's very important, and again, I am previewing what will be our testimony before you today, to realize that if you approve this upgrade there will be no increase in risk to the public health, safety and the environment whatsoever. What is being proposed is the replacement of an approximately 50 year old pipeline with a new facility which has current, state-of-the-art technology. The existing facility has manual valves. You will hear testimony that this facility is proposed to have automatic closing valves. Those are not on the system, the current loop system, at the present time, so that the facility, again, will not present any greater risk. For those who wish to join the issue about whether there's an incompatibility between the location by Londonderry of its school facilities, including the expansion of the middle school, as I understand it, and the proposal just this past month to proceed with

breaking ground on a kindergarten, they have chosen to move their schools to the pipeline knowing the pipeline was there. I don't believe there's any occasion presented for the Town to make a case that the pipeline should be moved. They have expressed their concerns about it. The facility is a safe facility and, in any event, they have made choices about developing the area near it. And that is also true, I understand, for most of the residences which may have moved closer to the pipeline. Those residences were not there when the pipeline was first installed. This right-of-way was dedicated for this interstate purpose a long time ago and people have known that it was there and they have moved closer to it.

We do appreciate that people would be unsettled by the recent events that were in the news in the Southwest. You will hear testimony, however, that those events should not change any analysis that you would make about whether this pipeline facility has been properly installed. The new modification will be properly installed and will be properly operated in a way that is safe to human health, the community, and the environment. We are participating in this process, again, as I believe you appreciate, with a full

recognition that there is a very broad preemptive effect of national law.

I know this Committee is completely familiar with the idea that New Hampshire state law, in a similar way, preempts local land use planning decisions. And therefore, those important public bodies come before you and they may make proposals that they otherwise might have been able to impose upon a facility if you adopt them. And we join those issues and try to address them thoroughly. Similarly, our United States Congress has chosen to make the design, installation and operation, as well as safety factors that are such a concern, I think, of those who have joined in this case a matter of national law. And we believe that it's clear that state law is essentially preempted on all of those matters, save some developing body of law that a 401 Water Quality Certificate allows states to impose conditions, not too broadly but conditions, under that certificate. I didn't come here to argue that point. We simply want the record to be clear that that's how we understand the framework that we are operating in. And I do that, in part, because we have taken the time to look at former proceedings of this Committee and noticed that when these issues arose later there were arguments by other

parties that they have been raised too late. So the only reason that I'm making them clear now is so no one will say that they were raised too late.

But more importantly, I think everyone appreciates that the Applicant is participating in this process, attempting to cooperate in every way it can, to make the review that the legislature designed in 162-H be as inclusive as possible, to allow all members of the public to be heard, to allow you to receive all information that would come to you so that you will either make decisions here, which the company will comply with, or, as I understand it, you will make your views known at the federal level so that these things can be given effect in an appropriate way. And if we look, then, to the particular issues that may be joined in the next day or two, they fall into certain broad categories, in my view, and you'll be hearing testimony about so-called safety and blasting issues. We want to point out, at the outset, that there are many recommendations that have been made by the state dealing with safety issues, blasting issues, and water crossing issues, environmental concerns of that type. And for the great majority of them the Applicant has made it a matter of record in this case that it will comply with

them, the overwhelming majority of them. There are a few where it believes that its proposal is superior, and I'd like to identify those. And you'll be hearing testimony from these witnesses and then they'll be available for your questions or questions of other parties on them.

One, begin with the safety issues, is what's referred to as the class of pipe in certain locations. It's my understanding that as we filed our proposal that we coincide with the recommendations at the Public Utilities Commission. I believe, as the application sits before you, that our application concurs with those recommendations from the PUC. With respect to the types of valves that will be on this loop system, as I mentioned, there are manual valves, or gas operated valves, and those are what are in place at the present time. The Applicant believes that the automatic closing valves that it proposed are superior to those which have been proposed in the draft permit conditions by the PUC, and they will give their explanations for why they believe that they will react more rapidly. They are superior technology. And the remote control valves, which are also discussed in the industry, require human intervention to make them work. They require some on-

site reconnaissance to determine whether they should be triggered, whereas an automatically closing valve closes automatically. The most important distinction perhaps, and there are others here who know more about this than I, is that the damage that will be caused, if there were a tragic incident, will be caused in the very near few seconds or minutes after that occurs. And whatever happens after that is probably not significant, additional hazard per damage. A remote control valve won't take effect, you'll hear testimony, until long after the period of initial damage, whereas an automatic closing valve, when there's a pressure drop, will be sudden and almost instantaneous in the way in which it will react.

We have also presented testimony that we do not think there's any value to using a so-called "intelligent pig," an instrument that would pass through the pipe and is intended to measure deviations in that pipe. It actually detects deviations from a consistent pattern. Now we have proposed, as you may have in mind, to use a so-called "calliper pig" or instrument. And the pipe will be fitted so that either type of instrument could be run through it. But the important point that the witness will address is that an

intelligent pig actually is counterproductive in the way in which the pipeline is operated because it's been suggested that running an intelligent pig at the beginning of the operation would create a so-called baseline report. And then if sometime, five, ten or 12 years later, another run was made, one would compare the two. And if you saw deviations, that is, where there are joints or different kinds of structures, this instrument will detect those differences in thickness of the pipe. The suggestion would then be that if you looked at that baseline report you would say, "Oh, when we ran it, when we originally installed it, we found the same deviation, so we understand that that was there when we first installed it." The point the company will make is that if they run the intelligent pig at some time later, they will not accept any deviations as recorded in the baseline report and not warranting an investigation. Any deviations -- There'll be a zero tolerance run, and any deviation whatsoever will cause them to investigate why it looks different at that point. So their point is that a baseline report either does nothing to enhance safety, or teach us more about the pipeline, or used the way it's proposed it actually would be less protective. They will be more aggressive

later in simply identifying any supposed abnormalities. You will hear testimony about that and why they believe that that's the appropriate way to proceed.

With respect to water crossings, there are, I believe, 37 proposed water crossings, and these are addressed in the application and the permit conditions. And for 30 of them, we have agreed that those will be done in so-called "dry conditions." But for seven of them the Applicant believes that a so-called "wet crossing" is appropriate. You will hear testimony about that, and they'll respond to your questions, but essentially it comes to the practical lessons we've had in trying to do this. We understand the Department's view, from a regulatory perspective, on how they want to try to maintain the most stringent standards at all times. We also understand that in the most recent pipeline case there were experiences, in Exeter, for example, where if you tried to cross a body of water that's too long a path to cross you run a great risk of staying in the water body longer and actually causing more turbidity problems than if you had simply crossed it wet in the first place. If the flumes and the barricades fail than you have more of a problem than if you had just done it in the first place as a wet

crossing. That's, as I understand it, why the national standard is wet crossings if the crossing is more than ten feet. They will discuss that and answer questions about that.

There is also a concern about the turbidity standard that New Hampshire has in its regulations and conditions, which were reflected in the filings, for how to establish a mixing zone and to monitor turbidity. The point that will be made by the witness here is that while we have proposed a slightly altered condition from the one that the Committee has used in the past, the type of monitoring we have learned from the experience in the recent pipeline case shows us that what we get is redundant results by having someone go into the stream and keep sampling all during the time that we're in the stream. And that they're also counter-veiling safety concerns, that while you're not getting any useful additional data there's a very real concern that we're asking people to go into wet conditions next to large machinery and running the risk that someone will be hurt or killed while we are doing that. So they're making a public safety, a safety concern, rather, for the employees and the people working in this project that, therefore, we should modify that condition somewhat

because you're not going to get something that warrants taking that sort of a risk. Questions have been raised by Public Counsel with respect to the blasting operations where that might become necessary. Remember we are operating in a trench, if you will, and in some cases we know that the existing eight inch pipeline probably went through rock. The pipeline's not resting on the rock. It's, no doubt, resting on sandbags and sand and it's got a bed under it properly installed. The Applicant has, I believe, come almost entirely into compliance with the recommendations of the expert from Public Counsel, and that will be the testimony, and has agreed that the peak particle velocity as is expressed, of the use of this technique, will not exceed four inches per second. Now what's very important to understand about that, and the witness will testify about this, is that we believe that the pipeline materials and the way in which it's constructed, that the existing operating pipeline, it will be about ten feet away from the trench activity to replace the eight inch line, is able to stand two to three times that kind of peak particle velocity. "Elastic vibration" is how they describe it, which means that if you have an impulse for a very short period of time and you have a

wave effect, or if it were a particle that could move, it would move and move back during that very short impulse. And four inches per second is a measure which actually makes it sound like much more movement is going on than there is because the event that sets in motion that kind of a wave, or a vibration, is very, very short. It's far less than a second. So we're talking about, if we were to translate the distance of four inches per second by the corresponding very brief impulse, we're talking about eight one thousand's of a second in movement. It's been described, it will be by the witness, as at 100 to 200 feet out it would be no more than the vibration of someone walking on a floor. It is a minimal kind of vibration. I think Public Counsel's expert will agree that four inches per second is very conservative, that this pipeline could withstand ten to 12 inches per second as a vibration. And so, we will, I think, have agreement there that the standards for blasting have carefully taken into account the existence of the operating pipeline adjacent to this operation. Tennessee knows that pipeline, it is their pipeline, and they believe that they are well positioned to take very good care of that during this operation. Any effects on the other side of the pipeline are out

toward wells and properties of course will be minimized because of the low level of use of this kind of force in the vicinity of the existing pipeline. That was what distinguishes this from any type of blasting that might be going on. This will be very carefully managed because of where we're conducting it.

Finally, I would like to call your attention to this aspect of the testimony we'll offer and then we'll move into our witnesses. As we prepared this, and spent a great deal of time doing this, I think it became clearer and clearer to all of us that there are standards, of course, that are set down by various regulatory bodies. And we spent a lot of time evaluating how they are applied, or should be applied, to real world operations. The witnesses who will testify from the company for you have years and years and years of experience of actually building and operating pipelines. They know a great deal about how these work in the real world. And so, when they make suggestions about how we ought to do water body crossings or how the blasting operation will occur, I believe that the witnesses you'll have here have a great deal of knowledge about how these things really work. And so, the task for all of us would be to make a

reasoned application of these standards and shape conditions and requirements that fit those practical considerations. We will, and have in our filings, I think, made a showing that we will meet all the requirements for approval in the statute, and we believe that at the end of these hearings that Tennessee would warrant the granting of a certificate with appropriate conditions.

Our case will proceed in approximately the following fashion. I've asked Robert Haas, who's the project developer, to be the first witness, who's immediately to my right, and to begin with a kind of overview of this project as to assist in framing everyone's sense of where we're going, to be followed by a panel led by Mark Hamarich, who's the project engineer, and has really been running the team of people who have been putting this application together. And he'll be responsible for running the installation of this pipeline, the actual construction job itself. So he will be the man who will be responsible to run a team that will expand to about 400 people to build this pipeline and put it in place properly. And he will have people assisting him, Eric Kleinhenz as provided in our pre-filed testimony and Paul Kretschmer who is in the

business of monitoring blasting operations, so when that panel is all here you can ask questions about safety and blasting of any one of the three of them. After that panel it's our plan to present witnesses who will deal with water-related issues separately.

So, if I can repeat, what we plan to do when we get to the first technical panel is I'll work our way through general safety issues, if we may, and then move toward the blasting issues. If it doesn't unfold that way we understand that, but we're trying to do this in an orderly fashion so everyone will know to whom they should direct questions. That concludes our opening remarks, Mr. Chairman.

CHAIR: Thank you.

ROBERT HAAS

having been duly sworn by Attorney V. Iacopino

was examined and testified as follows:

ATTORNEY VINCENT IACOPINO: State your name, address, for this Committee.

A Name and address? Robert Haas, 68 Stewart Street, Franklin, Massachusetts.

DIRECT EXAMINATION BY ATTORNEY SMITH:

Q Rob, I'm going to begin your testimony by handing you what has been marked as Exhibit 12 for identification.

And if you would turn to one part of it which begins with a caption "Direct Pre-filed Testimony of Robert Haas dated May 26, 2000." Do you recognize that?

A Yes, I do.

Q And have you had an opportunity to review it?

A Yes, I have.

Q And was that testimony prepared under your direction?

A It was.

Q And at the time it was prepared, was it true and accurate to the best of your knowledge and belief?

A Yes, it was.

Q And is it today?

A Yes, it is.

Q And do you adopt that testimony as your own here today?

A Yes, I do.

Q Do you have some additional testimony you would like to offer the Committee today?

A Yes, I do.

Q Could you very briefly describe for everyone your responsibilities with respect to this project?

A Yes. I'm the project developer for the Londonderry pipe replacement, which means I'm responsible for all commercial aspects related to this and also participate on the project team that's developing the construction

and operation.

Q And briefly, what is your background experience as it might relate to this project?

A I have a Bachelor of Science in accounting from Central State University in Oklahoma. And I've spent 11 years with El Paso Energy, the last five of those years I've been in marketing and business development for the company focusing on the New England markets.

Q And the Tennessee Gas Pipeline Company, which is the Applicant here, is related in what way to the El Paso Energy Companies, if you can describe that briefly?

A El Paso Energy is a multi-national corporation involved in virtually all phases of the energy business including production, gathering, processing, treating, transmission of natural gas, transmission of some liquids. We're also involved in power generation in some areas of the country and some areas of the world. Tennessee Gas Pipeline represents one segment of that business, which is natural gas transmission. The pipeline originates in south Texas at the Mexican border and terminates in Concord which is our furthermost northern point.

Q And operates mainly in the eastern United States?

A Correct.

Q If you'd like to refer to the maps which we have marked as exhibits, actually, would you just, again, briefly describe for the Committee an overall perspective of this project and its route?

A Yes. Just stepping back slightly -- As Greg mentioned earlier, this corridor was established in the early 1950's. The pipeline, the original eight inch, was actually placed in service in 1952 serving a local distribution company now known as EnergyNorth. So the pipeline, when it was established, ran about seven miles through the Town of Pelham, one mile through the Town of Windham, and roughly nine miles through the Town of Londonderry. It continues on past Londonderry to Concord, but those 16 or 17 miles are the project distance that we're talking about in relation to this project. That system has been reliably and safely operating since 1952. We've had no major incidents in the State of New Hampshire.

Additionally, since that pipeline was first laid, there has been a considerable amount of development along that project corridor which is consistent with what we see all across the country. A pipeline, we try and find a route and then development occurs. As communities expand, they move closer and closer to the

pipeline. And that's the same as what we've seen in this case. In 1997 we became aware of NEPOOL's movement toward restructuring the way that power is sold in New England. And as a pipeline company, it was quickly recognized that gas fired generation would be the leading method used to fire this new form of energy. And as part of the marketing and business development team, it was our responsibility to pursue potential customers and take contact from potential customers that might be interested in siting new gas fired generation along our system throughout New England specifically. In my role, in this project, that communication was with the AES Company that was developing AES Londonderry. Through the course of about 18 months we were in discussions with more than 20 power developers representing roughly 30 to 40 different projects in New England all competing for the same set of power generation opportunities, so we've had a lot of experience in dealing with different sites. And during that same course of time we have connected at least three power plants, to date, in different parts of New England with additional connections, such as this one that we're developing, adding a significant amount of load to the system.

In 1998 we began detailed discussions with AES for the development of this project and pursued an opportunity giving them proposals that they would consider allowing Tennessee to connect to the plant. In doing so, we looked at a variety of alternatives in what is the best way to serve the plant. Through the course of doing business development for a natural gas pipeline, one of the first things we do is look at what route alternatives do we have to serve the load that's required. And typically, the first place we start is "Where's the closest interstate natural gas pipeline?" In this case, we had a pipeline that was roughly two miles from the site and felt that that was a good place to start. And once we determine where the closest pipeline is we determine how much capacity does the pipeline have and what would it take to expand it, if necessary, to the requirements of the new load? And in this case, in looking at that, we determined that utilizing the existing corridor was the best course of action and again, consistent with what we've done in the past.

So what this project does is it replaces the eight inch line that originates in Concord, Massachusetts, I mean, in Dracut, Massachusetts, all the way to

Londonderry where we have an existing meter station. We're going to take the eight inch out, and for virtually the entire route we will be replacing the eight with the 20 in the same ditch. There's a few deviations for road crossings where it makes more sense to deviate rather than try to remove the old pipe, and maybe a few other locations, but primarily it's the same ditch replacement. So we don't have to expand the right-of-way corridor significantly, in any event, and really only in minor locations.

Q The alternatives that you referred to, analyzing whether there is some other way to do this than to use the existing right-of-way, that was the subject of analysis that you performed at the request of the Federal Energy Regulatory Commission? And when I say "you" I mean Tennessee.

A Correct, and there's two levels of it. When we submit an application we're required to discuss alternatives. And, as I said before, replacement of an existing line is a very good and preferred alternative in most instances, and that's where we started from. We looked at five different scenarios in total when we made the application. One was a no-build scenario. Obviously that one was discarded because it did not provide the

quantity of gas on a firm basis that the power plant needs to generate electricity reliably. The second alternative would have been looping the entire 16 mile corridor in New Hampshire which would mean we would have the eight inch, we would leave the 12 inch in place, and we would add a third line next to it that would carry the quantity of gas that AES required. We discarded that because we felt that replacement of the line was a better option than expanding the width of the corridor. The third option that we looked at was a compression option. It's also very common in the natural gas business to attempt to add compression to the system to create more capacity so that you don't have to add pipeline. The problem that we ran into with this project was that a compression option would create a new compressive station in the State of New Hampshire which would be roughly 20 acres in size, and instead of having 19 miles of total replacement we would have about 14 or 15 miles of total replacement all on the northern end. So we would have avoided construction in Massachusetts and the southern part of Pelham. We would have added a compressor somewhere in Pelham, most likely, and then replace the line the rest of the way up. We didn't feel that the tradeoff of a brand new compressor station for

four miles of replacement on the southern end of the system was a good, sound decision to make. Again, we opted for the replacement of the line. A final alternative would have been to find a completely new route from Dracut to the plant site. And obviously one of our objectives is to minimize any type of environmental impact we have, which means clearing trees and creating a new project corridor. And, once again, we felt we had an existing corridor that had been there since the early 1950's. We felt very comfortable that we could do in-ditch replacement of the pipe and wouldn't have to widen the permanent easement, and felt that that was the best all around alternative given those criteria.

And then, Greg, you also referred to, once we submitted that, FERC asked us for some additional analysis on minor route deviations in specific locations. And that was a data request, and we responded to that data request, and that was what was discussed this morning.

Q I'll show you this. Do you recognize it?

A Yes.

Q The document I've handed you is marked Exhibit A59. And what is it?

A This is the supplemental responses to the data requests where we looked at those route deviations I was discussing.

Q And are some of the people who helped prepare that here today?

A Yes, they are.

Q Can you say who that is?

A Eric Kleinhenz, who's an engineer for us in Houston, was the primary responsible engineer for that analysis.

ATTORNEY V. IACOPINO: Excuse me, Mr. Smith, what was that number?

ATTORNEY SMITH: Fifty-nine.

ATTORNEY GOODMAN: Excuse me. Could you tell me the person to whom the supplemental responses was addressed and the date of the response? Thank you. So these are FERC?

A Correct.

ATTORNEY SMITH: For the record, Mr. Chairman, this same document appears, or should appear, at Tab G in Supplemental Filing No. 2 which was filed on October 18. I can just say, parenthetically, it has come to my attention that in some of those notebooks things are out of order. I have brought extra notebooks if someone wants to simply replace it. I have also

brought inserts where it's come to our attention that there might be a document missing from an individual copy. But Exhibit 59 also appears in Supplemental Filing No. 2, which is -- What's the number on that? It's also Exhibit 71.

Q Has this document we've been discussing been made available to parties in the FERC proceeding?

A Yes. We filed it as a data response and all interveners on that list would have been mailed a copy. And that was June 30th when we filed that.

Q Alright. I'm going to show you an exhibit marked A76 and ask you if you recognize it?

A Yes, I do.

Q What is it?

A That's the Draft Environmental Assessment published by FERC, August 11th.

Q Can you explain how that would relate to the testimony you've just given?

A Yes. FERC would have taken into account our initial application, any data requests regarding environmental assessment, including route alternatives and our responses, and also any comments from other interveners who chose to comment on the environmental aspects of the project up to that point.

Q Is this document made available to all interveners in the FERC proceeding?

A Yes.

Q And why do you call it a draft document?

A FERC submits that to all the interveners and other interested parties and gives them an opportunity to comment on it, roughly a 30 day comment period. And, like I said, it was issued approximately August 11th.

Q And then FERC will issue a final determination when it concludes its decision making?

A That's correct.

Q Rob, do you believe that this project as proposed by Tennessee is consistent with orderly regional development and, if you do, would you explain why?

A Yes, I do, and it goes back to the comments I made before. If you look at the route and the corridor that exists, as I said, it was established in the early 1950's, and the amount of development that has occurred along that corridor since that time, there's been a significant amount, and it's a variety of types of development that have occurred. You have everything from homes and neighborhoods to schools and other businesses that are along the line. For example, just this year two schools broke ground in close proximity to

the pipeline, one in Pelham and one in the Town of Londonderry. Both of those broke ground in the third quarter. And, as I said, in addition, there's been numerous residential neighborhoods that have been developed.

It's also interesting to note that we have two lines in the ground. One has been there since the 50's, one that was added in the 80's. And there's been a significant amount of development even since the line was put in in the 80's.

Q Referring to an exhibit marked A75, can you describe, for the record, what this is?

A Yes. This is a map that shows the street level detail, approximately, of the corridor starting in Dracut where we have an interconnection with Maritimes Northeast Pipeline. In addition, our pipeline that comes from the south arrives at that point. Also Portland Natural Gas transmission at that point, and runs through to Londonderry, Sanborn Road, where we have an existing meter station. So the red line represents the route of replacement. It's the existing line where we'll be replacing.

Q And does this map show where the schools are to which you were just referring in your testimony?

A It gives approximations. As I said, there are schools in the Town of Pelham that abut the project corridor and there's also some in Londonderry that are next to the corridor.

Q And do you know where the schools in Londonderry are in relation to the town municipal offices?

A They're close. I don't know exactly where they are.

Q And again, there are how many, if you know, in Pelham? How many schools located near the pipeline? Two?

A One existing and one that's under construction.

Q And in Londonderry there are how many?

A There's three existing and one under construction.

Q And did you also provide other maps that are detailed maps in each of these towns covering the same route?

A Yes, we blew up each town to provide more information.

Q And those are here available for use?

ATTORNEY V. IACOPINO: Has that map been distributed in any form?

ATTORNEY SMITH: I think it's a part of the original application in small form, as well as -- The original application includes this notebook for the record itself. But you may recall we didn't reproduce for everyone a copy of the FERC application because we assumed it's copied all over, but it was given to the

PUC and the DES, so that's in the record, and alignment drawings which show the pipeline from a top/down perspective, the entire route, detail of alignment drawings that are rolled up, so you can actually see it in much greater detail than this map in the application.

Q Rob, have you evaluated this project and do you believe it's consistent with the state's energy policy?

A Yes, I have, and I do believe that it's consistent. And I say that by reviewing what the objective of the state energy policy is. The first is that it meets the needs of citizens and businesses. And I feel that this project is accomplishing that goal because, first off, we are ensuring that through this replacement we will be able to maintain the existing level of service that we have to current customers of EnergyNorth and DistraGas (ph), and it also is meeting the needs of the business, i.e., AES Londonderry. We're designing it so that it can meet the needs that they've determined, 20 year firm contract, 130,000 dekatherms a day.

Second, a low cost alternative. We have designed this system by following the existing route to be an economical and a financially viable project and believe that this is the best way to get gas to the AES

Londonderry plant. It also is designed to provide for reliability and diversity. And, as I pointed out, the interconnection of this lateral with the Maritimes and Northeast pipelines in Portland actually gives the project developer, the power plant, the option of getting gas from three sources: Western Canadian Supply that would come down the Portland Natural Gas transmission system, the New Eastern Canadian supply offshore Nova Scotia, Sable Island, that is flowing on the Maritime system, and also anything upstream on Tennessee which includes Gulf Coast Gas, gas in Chicago that comes from western Canada, Western Canadian Gas that enters our system in Niagra and Iroquois and also liquified natural gas that enters our system in Everett that is vaporized at that location.

So there's a broad diversity of supply that is achieved by going back to that physical location. It's also supposed to provide for safety and health. And as you'll hear from testimony that some of my colleagues are going to present, we have designed this system to meet or exceed all applicable regulations. We've operated a safe system for 50 years and we continue to maintain operating a safe system throughout New Hampshire. It also needs to protect the physical

environment, and we've spent a lot of time making sure that our proposal, and the conditions that we've discussed, will allow us to ensure protection of the environment and also to provide for the future supply of non-renewable sources. And that kind of falls back to the reliability and diversity of supply. There's a wide choice of fuel, natural gas origination points by going back to Dracut, and that gives the project owner the opportunity to get a lot of different types of natural gas supply to the plant.

I would also like to add that it's not coincidental that the power plant has been deemed by this same council as being along the lines of the state energy policy, and we're merely supplying fuel to that power plant.

Q Can you briefly summarize the efforts that you have made to explain the project to governing officials and other officials, and the general public, in Pelham, Windham, and Londonderry, as well as the regional planning commissions, and also what efforts you have made to take into account concerns that they have expressed to you or your colleagues today?

A Yes. We initiated this process on a formal basis at the beginning of the year prior to our submitting the

application. That going back to as early as June of 1999, we had consultations and we started including the towns. For example, we had a walk-through with a reporter and couple of town councilors from Londonderry chose to go along with that to see the project corridor. Again, June of '99, which was roughly eight months before we filed the application with EFSEC. Starting in about December, I guess, of 1999, we began meeting with, November, we began meeting with different agencies, the Board of Selectmen in Pelham, for example, in November of 1999, also with the Board of Selectmen in Windham, and town council in Londonderry, on November 15th of '99, again, well in advance of filing the application. And we've continued to be responsive to those different governing bodies to make sure that they knew where we were in the process, provide them an opportunity to give us any concerns or issues that they may have, and respond to any questions that they may have. And as late as September 25th, as Greg mentioned earlier, we participated in a town council meeting to try and answer questions related to pipeline safety and operations, and that was with the Town of Londonderry.

Q I show you an exhibit marked A57 and ask you if you can identify that?

A Yes, I can.

Q What is it?

A This is a summary of the different meetings with municipalities that the project team has participated in.

Q And I'm passing around a copy of this exhibit but there'll be one in the original exhibit list. Now, this lists the meetings that you've described with these representatives of these various towns and, of course, the record reflects public meetings as well. Do you have anything further you can provide to the Committee in terms of efforts that you have made to take into account any concerns that have been raised or do you feel that you have been adequately addressing those in accordance with this process?

A Yeah. One thing that we did, which was relatively new, was we offered all three towns an opportunity to participate in a Conversation Commission workshop where we would discuss, in detail, the impacts for the areas that they were concerned with. And although not all towns chose to participate in that, it was successful for the one that did. And, as I said, we have continued to answer questions even as late as September 25th. And along the way we have tried to understand the concerns

that were raised and make sure that, to the extent practical, our proposal addresses those concerns, or at least we are able to answer the questions that they have related to those concerns.

Q And you believe you have been adequately addressing those concerns up to this point in time?

A Yes, I do.

Q Do you have any further testimony that you would like to offer at this time?

A No.

ATTORNEY SMITH: I have no further questions, Mr. Chairman.

CHAIR: Cross-examination by Public Counsel?

ATTORNEY WAGELING: Mr. Chairman, I have questions for the more specific members of the panel as compared with Mr. Haas, and I'd like to reserve my right to ask questions of a more specific nature. Thank you.

CHAIR: The Town of Londonderry?

CROSS-EXAMINATION BY ATTORNEY GOODMAN:

Q Yes, Mr. Haas, just a few questions. Isn't it correct that this pipeline proposal is entirely dependent on the demand for power presented to Tennessee Gas by AES?

A Let me clarify. AES requested a 20 year contract and this pipeline is specifically designed to meet that. And that's correct.

Q And you referenced the FERC filing with some discussion of route alternatives and you referenced the draft environmental assessment filed with FERC. Are you aware that the Town of Londonderry and the Londonderry School District filed comments in relation to the environmental assessment indicating that they had serious concerns with the proposed pipeline impact due to the proximity of the schools?

A Yes, I'm aware of that.

CHAIR: L o n d o n d e r r y Neighborhood Coalition?

ATTORNEY ROCHWARG: Good afternoon, Mr. Haas.

CROSS-EXAMINATION BY ATTORNEY ROCHWARG:

Q I'd like to bring your attention, if I could, to page 4 of your direct pre-filed testimony and just ask you a question regarding that, paragraph 4, excuse me, of your direct pre-filed testimony. You testified that there will be environmental and other impacts less severe than if the construction occurred in an area where a completely new route had been established, and I think

you briefly addressed them on your direct examination. Can you explain, more specifically, how the environmental and other impacts would be less severe and also if you could tell the Committee what that opinion is based upon?

A Yes, I can give a general sense. In order to drill down on the detail I'd have to defer to one of my colleagues but. In order to do pipeline construction you have to have a significant width of space to be able to get the equipment in, construct the pipeline, and then restore. And typically that can be 75 or as much 90 feet in width. And what I was testifying to the fact was that we have an existing corridor that, for a great extent of it, we already have a lot of that width. If we chose a new route that there wasn't already an existing 75 to 90 foot swath of cleared land, that we would have to clear that in order to build the pipeline.

Q And how does that minimize the impact on human and physical environment as you testified in your direct pre-filed testimony and I believe earlier today?

A My testimony is that it reduces the number of acres of land that we would have to clear. And we, as a company, believe that we would prefer to leave that, to the extent practical, leave the trees, not disturb and not

create a brand new corridor. There's also additional impacts. You've got road crossings in new locations. You've got additional easements that you have to acquire from existing landowners that, today, you've got easements in place, things like that.

Q Are there aspects of the physical environment along the corridor that will be impacted by the construction?

A I'm not sure I understand exactly what you're asking.

Q Well, your testimony is that limiting construction activities to the pipeline corridor will minimize impacts to human and physical environment. My question for you was, are there aspects of the human and physical environment along the corridor that exist today that will be impacted by the construction?

A Certainly. Certainly.

Q I believe your testimony previously was that the development and replacement of the eight inch diameter gas pipeline with the 20 inch pipeline, specifically stated in your direct pre-filed testimony, is for the purpose of providing fuel for the proposed AES Londonderry co-generation facility, correct?

A That's correct.

Q You also testified that it would also be for the purpose of accommodating anticipated future growth in the

region, is that correct?

A What I said was that it may be available, there may be opportunities for it to be used that way, but the design, the pipeline design, the diameter of the pipe that was chosen is specifically designed to meet existing needs and the increment that's added by AES.

Q And there has been no environmental impact statement for the pipeline and power plant combined, is that correct?

A That's correct.

Q The reason for my prior question concerning the purpose of the facility, rather for the pipeline, accommodating anticipated future growth in the region, you're not referring to existing need, correct, in the Town of Londonderry?

A Let me answer it this way and see if this answers your question. What we did was we took the existing capacity of the system and the existing demand of that system that we have contracts for and we determined how much of an increment we would have to add. And that's the new total design of the system, which is the two pipelines combined, the 12 inch and the 20 inch.

Q What's the total need, though, outside of the proposed AES Londonderry co-generation facility?

A The existing need, the existing contracts we have?

Q Correct.
A It's approximately 65,000 dekatherms a day.
Q Which is what percentage of the possible dekatherms --
A For the new design?
Q Potentially, correct?
A Oh, that's roughly a third.
Q You testified on direct examination that, I believe you were referring to Exhibit A75, that you will be building the pipeline up to the meter station at Sanborn, is that correct?
A That's correct.
Q What happens at Sanborn?
A We will be constructing a new meter station to be able to handle the quantity of gas that will be delivered to AES. So at that location the 20 inch will enter our meter station. The meter station will transfer the gas to the EnergyNorth lateral that's proposed.
Q So EnergyNorth will construct a pipeline from the meter station to the AES facility?
A That's correct.
Q And what's the level of coordination that's been taking place between Tennessee Gas and AES?
A We have our project engineer dealing with their project engineer to make sure that they're in sync in terms of

material acquisition, project design, meter station design, quality specs on all of the equipment that will be located in that area. In addition, we've discussed ways that we can work together in order to complete construction, combining the projects, for example, from a contractor's standpoint, things like that. There's a very high level of coordination and that level will continue to increase as the project gets closer to and particularly during construction.

Q And what is the status of permitting requirements, if you know, in connection with EnergyNorth's work?

A I'm not following that specifically.

Q Do you know whether EnergyNorth has had conversations or dealings with residents concerning easements and use of property for storage and things of that nature?

A I can't speak to EnergyNorth's process.

Q So you don't consider it to be important to Tennessee Gas' work on the pipeline up to the meter station, what the status is with respect to EnergyNorth's progress there?

A I get updates from time to time from the commercial arm of EnergyNorth, and they assure me that they're making progress adequate to meet the needs of the power plant. My contract, though, is a commitment to AES that says I

will be in service October 1, 2001, and that's what our company focuses on. We're not involved in the development of or the construction or the permitting of the lateral line up to the plant.

Q Are you aware of the existence of whether there's an evacuation plan with regard to the schools or townspeople who are located within close proximity of the pipeline?

A I'm not familiar with that.

Q Do you know whether there are any considerations for sensitive users, whether it would be elderly or handicapped persons?

A I'm not familiar with that.

Q Could you tell us whether someone from Tennessee Gas might be able to testify to that today, if you know?

A Yeah, they're here.

ATTORNEY ROCHWARG: What witness would that be, Greg?

ATTORNEY SMITH: That would be Mr. Hamarich.

ATTORNEY ROCHWARG: That's fine. I can know who to address the questions to. Thank you.

Q You testified previously that the design standards actually exceed some of the federal standards?

A That's correct.
Q Could you be more specific? Can you tell the Committee every instance that your design standards exceed federal standards?
A I'm the project developer and in my role I'm not familiar with the specifics of every design standard the DOT puts forth, but we do have people here who can answer those questions.
Q Fair enough. And who might that witness be?
A Mr. Hamarich.
Q You previously testified that you were merely supplying fuel to the power plant, correct?
A That's correct.
Q In fact, the power plant couldn't operate without the pipeline, correct?
A I can't say that they couldn't operate without this pipeline. They can't operate without a fuel source, I'll agree with that.
Q And your pipeline construction is an integral part of the power plant's operation, is it not?
A I would say that a fuel source is an integral part of it. This is one option that they considered.
ATTORNEY ROCHWARG: I don't have any further questions at this time.

CHAIR: Thank you. Members of the Committee? Nancy?

EXAMINATION BY COMMISSIONER BROCKWAY:

Q Good afternoon. I just had one question and it's probably evident from the written material. You were talking about four or five options and one of them was looping. And I wasn't sure I heard exactly what you said, but this is what I thought I heard. You can let me know whether I got it right. If you did this looping, that would involve adding a third pipeline and it would also involve expanding the right-of-way? Did I have that right?

A That's correct.

Q Okay. Thank you.

A And just to be specific, expanding the permanent easement that the pipeline traverses.

CHAIR: Michael?

EXAMINATION BY COMMISSIONER CANNATA:

Q In reading the material it was my understanding that the company proposes to header this pipeline with the existing 12 inch pipeline along the way, is that correct?

A That's correct. The existing lines are connected in multiple locations and the new lines propose to be

connected also.

Q So it will provide support to the existing system?

A That's right. It will have the capability of being operated in calm.

CHAIR: Leo?

EXAMINATION BY COMMISSIONER KENISON:

Q Mr. Haas, you were asked this question before in a different way but let me pose it to try to get what I think is important. Does or would this line serve other than just the AES plant?

A The line has to accommodate the customers who are currently served for the existing eight inch line, so the capacity is more than just AES' on that one line.

Q And if I understood you correctly, roughly a third of the capacity goes to other customers?

A That's a third on the system which is the 12 plus the eight today.

Q Okay. And that would be roughly how many customers?

A There's two customers that take service, EnergyNorth and District Gas.

Q So that they, when they get down to the retail level, however, expand to numerous other customers?

A That's correct. Any resident that takes gas from EnergyNorth is a downstream customer of ours.

Q And that could be as far north as Concord?

A That's correct. Or beyond, because EnergyNorth has a system that connects at Concord and takes the gas home.

CHAIR: Michael?

EXAMINATION BY COMMISSIONER CANNATA:

Q Just to expand on that point a little bit. The existing system, you said that it was reinforced in phases during the 1980's and my understanding was three phases?

A Four.

Q Four phases, okay. And the existing system currently, potentially, has supply problems north of Concord where it drops down to six or four inch pipe?

A North of Concord is EnergyNorth's system. That's not Tennessee's system.

Q Your system ends in Concord?

A I'm sorry?

Q Your system ends in Concord?

A Yes, yes. It's an eight inch line to Manchester and then a 12 and a six north of that to Concord.

Q At what point in time would the existing system today start to meet new phases developed? And I would think one of the expansion possibilities north of Concord would be to extend the Tennessee line rather than the distribution system. So I'm trying to get a feel on you

may be building this in conjunction with the power plant now but it appears that, from my knowledge of the system, that at some point in time you would have to do something to reinforce it for existing customers. I want to get a comment on that.

A Depending upon where growth occurs on the system. And if you're talking the northern end of the system, a couple of different things would have to happen for us to expand the capabilities. One is we would have to take the 20 inch line and the 12 and increase the pressure so that we could create capacity for the segment that goes from Dracut to Londonderry. And then from that point forward we would have to look at the facilities that exist --

Q Let me be a little bit more specific.

A Sure. Certainly.

Q I don't mean to interrupt you. I meant prior to the expansion of the 20 inch, would the existing system today, the 12 and the eight or the six? That's what I would like you to comment on, what you would have to do to maintain the integrity to today's customers, excluding AES from your equation for the moment?

A If -- Okay, rephrase it one more time because today it serves all the existing needs. You're talking about if

we weren't doing AES, what would it take to serve more load on the north end of the system?

Q As the load grows either in Nashua, Manchester, or Concord, or even further north, what would you see happening with that pipeline system in order to continue to serve customers?

A Basically we'd go through the same analysis that we did for AES, although on a much smaller scale, more than likely, which means we'd look at the capacity of the system. We'd determine how much additional capacity was required for the customer. For example, if EnergyNorth needed additional capability they'd tell us, "We need another 10,000 dekatherms a day." We'd go and evaluate that using the GREG model and the AGA formula to determine how much capacity do we have to add, or at what size diameters will we have to add, to make that work. And we could do it either through compression, looping, replacement, or a combination of the three, just depending upon where the load occurs, how great a load is, and what's the best option from a cost and environmental standpoint. Does that get direct enough to your question?

Q And see if I summarize this correctly now. That at some point in time you would be looking to expand the

pipeline? Maybe it wouldn't be a 20 inch pipeline, but you might be replacing the eight with another 12 to serve existing customers if AES was not in the picture?

A Yes. To the extent EnergyNorth required additional, or a customer required additional, capacity, we would have to expand the system through compression, replacement, or looping.

CHAIR: Leo?

EXAMINATION BY COMMISSIONER KENISON:

Q Just a rebound question on that. If there is a power plant in the vicinity north of Manchester and they wanted to use gas, is your system adequately sized to provide that volume?

ATTORNEY SMITH: Just one moment please, Mr. Chairman.

CHAIR: Sure.

A In answer to your question, the capability would exist with the system. We didn't specifically design it that way, it's just one of the benefits of replacing with the 20 inch and then having the capability later of adding compression to the system. Basically what we looked at was a scenario where a 467 megawatt plant in Merrimack, what would it take to supply that at today's heat rates, and determine whether or not we would have sufficient

capacity by adding a compressor somewhere in the southern part of the system. And, I'm just looking for the number here, basically where we ended up is in the area of Manchester we could add, through compression, 170,000 dekatherms a day of capability, which is sufficient to fire a much larger plant than exists in Merrimack today if it were required.

Q The Merrimack --

A Merrimack Station?

Q Station in Bow, is that what you mean?

A Yes.

ATTORNEY SMITH: For the record, the witness is referring to Exhibit A45. And the numbers and the information were contained in a record request response because this was an inquiry earlier on from the EFSEC itself.

EXAMINATION BY COMMISSIONER BROCKWAY:

Q Mr. Haas, would you be the correct person to whom to direct questions concerning the route of the project and the choice of routes? The question has been raised about the routes near the schools.

A That would best be directed to Eric Kleinhenz who did the analysis for the FERC data request where we looked at some minor route deviations, one of which was a

deviation near the schools.

Q And he'll be testifying?

A Yes.

EXAMINATION BY CHAIR:

Q For clarity, did you say that there are two schools under construction near the existing pipeline?

A That's correct. This fall, in the third quarter, a school broke ground in Pelham and a kindergarten broke ground in Londonderry, both adjacent to the pipeline.

Q And are there existing buildings there now and they're adding on or --

A It's my understanding these are both new construction. There have been additions to the existing schools in the past but this is two new schools, one in each location.

Q And how close to the pipeline are they building those schools?

A I think the one in Londonderry is a couple of hundred feet away. I'm not sure about the one in Pelham. Both of them are a couple of hundred feet away from the pipeline.

Q So in both instances they knew about the existing pipeline and they knew about the proposal for a replacement?

A That's correct.

Q Okay. Thank you.

A Prior to initiating construction.

Q Right.

CHAIR: Any other questions from the Committee? Michael?

EXAMINATION BY COMMISSIONER CANNATA:

Q In follow-up to your line of questioning, Mr. Chairman, what about the remaining schools? Do we have, and maybe perhaps you aren't the right person, maybe the Town of Londonderry and others might be able to fill it in, but do you have a chronology of the dates of the pipeline construction and the dates of school construction for the various schools? That's something that can be supplied?

A Yeah. Yeah, I have it. I have what I believe to be the answer to that question. In 1949, the Matthew Elementary -- This is just for Londonderry. I don't have it for the other towns but. The Matthew Elementary School was constructed in 1949. Our pipeline was built, as I said, in '51 and put in service in '52. And that was the only school in Londonderry adjacent to the pipeline. That school had additions in 1963, 1967 and 1986. '86 would have been after the 12 inch line was installed. There's also a middle school adjacent to the

pipeline. That one was built in 1981 and there was an addition to that school in 1997. And then the third existing school in Londonderry was built in 1971 and additions to it were made in 1974, 1976, 1978 and 1996. Again, that last addition would have been after the 12 inch line was installed. And then, of course, the kindergarten that has just recently initiated construction.

CHAIR: Susan?

A And, just for reference, the 12 inch line was constructed in ‘85 through that area, 1985.

EXAMINATION BY COMMISSIONER GEIGER:

Q If this permit is granted, will construction on those phases of the pipeline that are in close proximity to the schools occur during the summer months when school is not in session or do you anticipate that there will be any construction during the months when school is in session?

A We’ve stated before it’s our position that we would like to construct near the schools through the summer months to minimize the number of people and the amount of traffic near the construction activity. One of the things we have to caveat with that, though, is we’re going to have to take the eight inch line out of service

and it will be out of service for the entire time we're under construction. We have to make sure that we can get the 20 inch line back and in service before the winter heating season hits so that we can take care of heating loads. So we're going to design our construction plan to meet a summer construction, but we will work with the schools to make sure that they understand where we are in the process and coordinate activities with them to the extent possible.

CHAIR: Michael?

EXAMINATION BY ATTORNEY M. IACOPINO:

Q I just have a couple of questions. First of all, in the beginning of your direct testimony here today, you indicated that Tennessee Gas Pipeline Company had a responsibility to seek out customers and to provide gas for those customers. What's the authority for that response?

A No, that's my responsibility as a business developer for Tennessee Gas Pipeline.

Q And it wasn't your intention to convey, then, that that was an obligation placed on Tennessee Gas Company?

A That's correct. The obligation that Tennessee Gas has, under open access, is to the extent a customer comes to us and requests service, and we have capacity and

they're willing to pay tariff rates for it, maximum tariff rates, we have to provide that service.

Q And where does that responsibility come from?

A That's FERC.

Q So, the federal level?

A That's correct.

Q You mentioned in your direct testimony that when you provided an exhibit which is marked as Exhibit A57 for identification, which is a list of meetings with municipalities in the planning of the upgrade to this pipeline, in that planning, did you also have occasion to meet with representatives from the Rockingham County Regional Planning Commission and the Hillsborough County Regional Planning Commission which would have jurisdiction over the proposed route?

A Yes, we did.

Q And I noted that they're not contained on your exhibit here, A57. Can you tell us, generally, what type of contact that you had with them regarding this project?

A We had a meeting with each one. Oh, that's right. I'm sorry. It was a joint meeting with all three where we discussed the project and checked to see if they had any concerns or issues with the project.

Q And as a result of that meeting were you provided with

any concerns or other objections or documents supporting your proposal to them?

A No.

Q And just one thing that I think you testified about at one of the public hearings, but I just want to make sure we understand it because there's been some talk about the ability of this pipeline to service additional customers. Are you permitted under federal regulations to speculate as to future customers on the line?

A FERC has a variety of methods that they use to determine a market test, which is the test you have to pass in terms of deciding what to size, and it's not specifically articulated anyplace "You can do this" or "You can't do that," but you have to demonstrate that there's sufficient market. In some instances they've allowed you to demonstrate, for example, a third of the capacity that you're adding you have market for. It's the pipeline's choice, in this case, to not speculate knowing, however, that if we add compression we can accommodate additional loads in the future. So it's kind of a balance of we're designing the system to meet the needs today and the growth that AES represents and, because of the way it's built, we'll be able to provide for additional capability down the road by adding

compression.

Q If you did undertake that, would that compression require a 20 acre compression station similar to the one which was considered but rejected for this particular proposal?

A Yes, approximately. There is one other way that we could achieve that which would be a commitment from an upstream pipeline like Maritimes, that they would guarantee delivery at a higher pressure. That's a possibility. But the only way I could do it, and control it, would be to add a compressor.

EXAMINATION BY ATTORNEY V. IACOPINO:

Q Could you just give us the date of that joint meeting with those regional planning boards?

ATTORNEY GOODMAN: Excuse me, I object. If he doesn't know, maybe he should say -- I don't like this. Maybe I'm wrong. I thought he was sworn under oath and --

A We have a summary that I have as backup material of all the meetings we had because we had numerous meetings, and it's just to refresh me of where that meeting took place.

ATTORNEY GOODMAN: That's okay. But the conference of non-witnesses is what's making me anxious.

A It was February 9th, 2000.

EXAMINATION BY CHAIR:

Q That would be the Southern New Hampshire Planning Commission and the Rockingham Planning Commission?

A Yes, that's correct, Rockingham, Nashua and Southern.

Q And Nashua Regional Planning Commission as well?

A Yes, yes.

Q Three regional planning commissions that serve the communities in which the project would be located?

A Yes. Correct. February 9th, 2 p.m., in Nashua.

ATTORNEY GOODMAN: May I have one redirect follow-up question?

CHAIR: In a second. Were there any other questions from the Committee? Town of Londonderry?

ATTORNEY GOODMAN: Thank you.

RECROSS-EXAMINATION BY ATTORNEY GOODMAN:

Q There's been a lot of discussion about the additional capacity that this project will provide. I just -- I need clarification, I think. Isn't it true that all of the additional capacity provided by this project will go directly to AES?

A That's correct.

CHAIR: Any other questions?

Thank you.

ATTORNEY SMITH: I just have one or two, if I may?

CHAIR: Yes, I'm sorry.

REDIRECT EXAMINATION BY ATTORNEY SMITH:

Q I want to show you another exhibit marked A79. Can you identify it?

A Yes, I can.

Q What is it?

A That's the Preliminary Determination on Non-Environmental Issues that was issued by FERC August 1, 2000.

Q And if you turn to page 9, I'd like to call your attention to the third paragraph, either read or summarize it. And what is that determination there if you can describe it for the Committee?

A Basically it states that our proposal, the proposal in front of FERC which is the same one that's here, creates an expansion by replacing the pipeline. "It will provide AES with access to competitively priced fuel for its generator and allow it to meet anticipated electric demand requirements consistent with the policy statement," which is footnoted. "Existing shippers will suffer no degradation of service. Indeed, the increased

capacity will allow Tennessee to serve not only AES but also to maintain reliable service to existing shippers and provide an improved level of service. In addition, the project will allow for lower cost expansions in the future to meet demand growth and relieve a capacity constraint market area."

ATTORNEY SMITH: I have no further questions.

CHAIR: Thank you. Ready for the panel?

ATTORNEY SMITH: I'd like to begin, Mr. Chairman, with Mark Hamarich, who needs to be sworn, on my immediate right. Should I swear them all at once?

CHAIR: Yeah, why don't we do --

MARK HAMARICH

ERIC KLEINHENZ

PAUL KRETSCHMER

having been duly sworn by Attorney V. Iacopino:

were examined and testified as follows:

DIRECT EXAMINATION OF MR. HAMARICH BY ATTORNEY SMITH:

Q Mark, would you please state your name and address for the record?

A Yes. My name is Mark Hamarich from -- Personal address

or --

Q Business address.

A Business address? El Paso Energy Building in Houston, Texas.

Q And I'm going to show you a document marked Exhibit A12 for identification, and turn to page 3, and ask you if you recognize that?

A Yes, I do.

Q What is it?

A That's the direct pre-filed testimony that we filed in May of the year 2000.

Q And is it all there? Did you have an opportunity to review that now or before you began testifying?

A Yes, I have.

Q And was that testimony accurate, to the best of your knowledge and belief, at the time you prepared it earlier this year?

A Yes, it was, Greg.

Q And to the best of your knowledge and belief, is it still accurate?

A Yes.

Q And do you wish to adopt it as your testimony therefore here today?

A Yes, I do.

Q I want to show you another document marked Exhibit A69 for identification and ask you if your recognize it?
A Yes, I do.
Q And what is it?
A That's some supplemental direct pre-filed testimony that was prepared later in the project.
Q And do you know how recently, approximately, this was prepared?
A Yes. Last Wednesday, I believe.
Q This testimony was prepared by you or under your direction?
A Yes, it was.
Q And at that time you prepared it, was it true and accurate to the best of your knowledge and belief?
A Yes.
Q And is it still today?
A Yes, it is.
Q Therefore, do you wish to adopt it as your testimony at this hearing?
A Yes, I do.
Q For the record, would you describe, briefly, your responsibilities on this project Mark?
A Yes. I'm assigned as project engineer for the Londonderry 20 inch replacement project. And I'm

basically responsible to coordinate the technical team for the project.

Q And your educational background and experience as it would relate to this project?

A Yes. I've worked 23 years in the industry, all with El Paso Energy. I'm a graduate of Cornell University in civil engineering. I'm a registered professional engineer in Texas. And my experience with El Paso Energy has been on the natural gas transmission side primarily in the engineering, design, construction, and operations of natural gas transmission pipeline systems.

Q And have you been responsible for designing and building projects like this before?

A Yes, several.

Q Can you give us any idea how many, Mark?

A Over the last 20 years I've probably been involved in 50 projects. One or two of them was actually the original phases, not the 1951 project but, the 1981 project and the 1985 project of the 12 inch Londonderry project that we're doing here.

Q What were your responsibilities on that project in the 1980's here in New Hampshire?

A In the first project I was the design engineer, and I was also out on the construction as a construction

engineer of the 1981 project.

Q You mentioned that you will be responsible for managing a project team. Can you tell us, in general terms, who will be on that team and how many will be in different categories of responsibility?

A Yes. Over the past year our team, since we started the process here, once we filed with FERC and started preparing the application for the Evaluation Committee that we're discussing here today, we've had, basically, seven or eight people that have been primary contacts on our team in the areas of environmental, right-of-way, engineering, and most of those people are here and will be providing testimony today or be here to answer questions. We also have a support staff, primarily El Paso Energy employees housed in Houston, and some consultants working in the field, and elsewhere of about 25 to 30 people that have been supporting this process. When we get to construction it will ramp up. We will probably have approximately in the range of say 20 field inspectors and engineers to oversight the construction. We'll have a third party contractor that, as stated in the application, could ramp up to as many as 400 employees to build this project. And then we'll ramp that down once we commission it and place it in service.

We'll turn it over to our operations people.

Q And as you move toward construction, will your team develop more extensive interactions and plans to deal with governmental agencies, particularly police departments and fire departments and so forth, all within the project area?

A Yes. I believe, in fact, one of the commitments in the application was that we will be preparing what we call a "Project Specific Emergency and Contact Plan" so that all the communities know who to contact, who's here, what the chain of command will be, as we construct this project because, like I mentioned, we will have an impact of approximately 400 people on the project at one time. So we'll have a specific plan and work with the communities on that.

Q And was the application that was made to the Federal Energy Regulatory Commission for this same project prepared, if you know, by the same operation of unit that you're assigned at your company?

A Yes, it is. It was prepared -- There's been a few team member changes but it's been the same unit and it's been consistent since the project's inception.

Q And if a FERC certificate is granted and all approvals are granted in due course, when do you plan to actually

begin construction in the field in this project and when do you expect to complete it?

A Yes. As we stated, again, in the application, and it has been our plan from the start of this project, our goal is to have gas service available by October 1st, year 2001. Therefore, our construction schedule, we've backed that up. We're planning on starting construction in May of 2001. So, primarily the construction would take place between May of 2001 and October of 2001. There may be some activities prior to May, such as moving in of pipe and moving in of equipment and contractors and personnel. And then after October 1 there may be some activities for cleanup and then the follow-up monitoring to assure environmental compliance, and things, for a year or two after. But that's the primary schedule, May 1, 2001 to October 1, 2001.

Q And you expect to be the person who will manage that entire team leading up to and through to completion of that construction project?

A Yes. The way it's planned now is our current team, the way our company's structured, we'll take this current team and take it through the permitting phases, oversight, environmental inspections, select contractors, and be responsible for all the compliance

from a design standpoint, construction standpoint, environmental, and whatnot, through the process.

Q I'd like to show you this large notebook, Exhibit A1 for identification purposes. Take a moment to look at it. Can you tell the Committee what that is?

A This is the Application for Certificate of Site and Facility to the New Hampshire Energy Site Facility Evaluation Committee that we submitted on February 11th, year 2000. I believe also, Greg, there were some attachments to this, some alignment drawings and possibly the FERC permit.

Q FERC application?

A FERC application, I'm sorry.

Q And will Tennessee comply with applicable state and federal requirements related to environmental considerations?

A Yes. Tennessee will comply with all the requirements in here from an environmental standpoint. And since then, through filings with and discussions with DES, we have filed, we have modified and updated the environmental construction plan and have submitted that for the record. And there's other issues that will be discussed through these hearings. And John Auriemma, our principal environmental scientist who's here, him and

his team will be here to testify on those things after in more detail.

Q So, what you're telling the Committee is if you wanted to find, in this record, where you're demonstrating that you're going to comply with environmental standards you would want to look in Exhibit A1? I think you just referred to that.

A Exhibit A1.

Q You'd want to look at the FERC application, which was filed as part of A1, the alignment drawings. And then, there are further submittals that have been made in the course of this proceeding including responses to data requests, responses to state agency conditions, is that right?

A That's correct.

Q And John Auriemma, who is going to testify, is the person who has been involved, principally, with environmental issues?

A Yes. John and his team will be able to take direct testimony on that, for the record.

Q For the sake of brevity, if one wanted to know how you're proposing to comply with safety concerns would you look in the same places in the record?

A Yes. The application addresses the safety standards

that we will adhere to in this process, and it outlines both issues of compliance with DOT and federal safety standards. We hear safety a lot, and safety's at several levels. One is the actual safety as it relates to the design of the pipe and from an OPS, Office of Pipeline Safety, DOT federal regulation oversight. And then we've got the level of safety as far as health and human safety. That our company has a health and safety handbook in here that --

Q In the application?

A In the application, that how we protect the health and safety of the employees and the community while we're working. And then there's the level of safety from a contractual standpoint in our contract. So it's at different levels of how we address it. And there's other things in here about how we X-ray, and things like that, how those safety standards are addressed. So it goes into several different levels in the application.

Q Does Mr. Kleinhenz, who's here with you today, have a role with respect to some of these responsibilities you've been describing?

A Yes, he has. As design support Eric and I really have worked closely together on these, and there's some overlap in those issues, and that's one of the reasons

we're up here as a panel today.

Q Mark, based upon your 23 years of experience with Tennessee, do you have an opinion as to whether Tennessee has the managerial and technical capability to design and construct and operate this facility in accordance with all applicable requirements of the law, including any conditions that might be contained in a certificate from this Committee?

A Yes, I do. I'm very proud to say that Tennessee Gas Pipeline has the capabilities to both manage this project and successfully implement all the standards and permit conditions that are agreed to, and to comply with all those in order to construct a pipeline both safely and environmentally sound and then continue to operate that pipeline. We have extensive experience doing that. We're fortunate, as an operator, that we have both the managerial capabilities, our company, and the technical capabilities to manage and implement a project like this, and we use third party consultants to supplement that in the construction area and some of the other expertise. But we're able to both manage it and bring strong technical support as an operator. And as this is our pipeline, it's a pipeline we're building for Tennessee Gas Pipeline, it's a pipeline we have

ownership in.

Q Do you know whether Tennessee received a certificate similar to the one it's seeking here today for the upgrade of the 12 inch line?

A Yes. I believe all the phases, and I could be wrong but, the statutes change so, but according to my records, every phase along the way, even the 1981 project, we had to go through a similar process like this for all the upgrades in New Hampshire.

Q And you've had responsibility before, I think was your testimony, to construct a facility in accordance with those requirements?

A Yes. I have not -- Yes.

Q And you did it?

A Yes, we did.

Q Do you also have an opinion, based upon your 23 years of experience, as to whether the proposed project, a natural gas interstate transmission pipeline, would have an unreasonable adverse effect on public health and safety if it were built as you propose?

A Yes, I do. It is my belief that this project will not have an unreasonable adverse effect on public health and safety. And I say that because, again, Tennessee has a very effective safety program. It's one of the most

effective safety programs in the natural gas transmission industry. We have an excellent safety record in this region of the country, and in New Hampshire, on these systems especially. And we, through our extensive experience in building and designing those, we're certain that we can both design, construct, and operate this pipeline without having any unreasonable adverse effects on public health and safety. And in our testimony today we're here to present proof of that situation.

Q Mark, in the course of your work on this project, have you become aware of an expressed concern that federal standards might be thought of as minimum concerns and the implication, therefore, might be that they're not, somehow, sufficient or adequate to assure protection of health and safety in the environment?

A Yeah, I hear that and I also hear the expression, and the question's come up and going to come up, "meet or exceed federal standards." I just want to make the point that the standards, although they're expressed as minimum standards, these are proven industry standards that are established and have safety factors to protect the public from a safety point of view. They're accepted standards. They're proven standards. They

will provide adequate protection, from a safety standpoint, if you consistently adhere to these standards. And, as Tennessee has done, if you specifically take these standards, these what they call minimum or performance standards, you adapt them and you write strict written standards, strict, whether it be emergency operating procedure manuals, O&M manuals, construction specifications, pipe specifications, you adapt those. You write strict procedures. You adhere to those procedures. And also, one of the programs is as the technology increases, as you find out things, you learn and you expand on those.

So, in a short answer to your question, we want to make sure that when you hear minimum standards, minimum standards, you still have safety factors. For instance, your minimum pipe design still provides you several factors of safety in that pipe, so it's not like this is minimum. So, inherently, all those standards have that built in and we've adapted those, quantified those, and taken the overall comprehensive program to bring those into our practices.

Q In your pre-filed testimony, Mark, Exhibit A69 that you looked at a few moments ago, you describe certain causes for failure of interstate transmission gas pipelines.

A Yes, I did.

Q What are those causes?

A The primary cause, as we discussed, and I don't want to get into the percentages exactly because it depends on the statistics you look at but, the primary cause of failures from natural gas transmission pipelines is due to outside forces or third party damages. That includes both -- The primary is third party excavations, and then outside forces also includes earthquakes, floods, forces of nature. The other is corrosion, both -- And corrosion, we want to look at in two different areas, one is internal corrosion, one is external corrosion. The other is material and construction defects. And what we mean by that, the material, it could be attributed to the material being defective. The other could be attributed to the construction techniques being defective. And the fifth cause, the other cause, is to human nature. And what that is is it's mainly addressed to an operator error where an operator may look at a situation and inadvertently, I'd have to read my testimony, basically make the wrong decision based on those operating conditions at that time that may cause a failure.

Q Alright. Now, perhaps for a moment we could just touch

on each one of those causes for failure. You're aware of the recent news accounts of the tragic incident in Carlsbad, New Mexico?

A Yes.

Q And, have you, if you have, become aware of any preliminary indications of what might, and I emphasize might, have been a contributing cause to that particular accident?

A Well, the data I have, there's been no real determination of what's happened although the press and, I believe, in certain web sites, there's indications that internal corrosion was involved in that failure, but that may not have been the cause or not. But that internal corrosion was involved in that.

Q The National Traffic Safety Board conducts an investigation --

A National Transportation Safety Board, yes.

Q Transportation, I'm sorry, in the same way that they might investigate other transportation accidents like an airplane accident?

A Yes. They're an oversight of another branch of the government than the Department of Transportation and OPS, and their job is to investigate those --.

Q Do you know, typically, whether that is a lengthy

process?

A I believe it is a lengthy process.

Q In any event, it has not concluded yet, with respect to this incident in New Mexico?

A No, it has not.

Q Now you mentioned that there's some preliminary indications, apparently it made its way into the public record, that there might have been internal corrosion in this pipeline. That doesn't necessarily mean that was the determination or the cause. Now what I'd like you to address for the Committee is, assuming for the moment, that internal corrosion was a problem on that pipeline, how is that you're going to assure that's not going to be a problem here, that type of problem?

A Let me separate that. I'm going to just address internal corrosion. I'm not going to relate it to New Mexico or what. But let's look at internal corrosion and let's look at the possibility of internal corrosion in a system in New Hampshire. One thing you have to understand for internal corrosion, there's two or three factors that have to happen. Number one, you need some kind of liquid. Liquids have to be dropping out of the gas stream in the pipeline. And, in addition to those liquids, there has to be some impurity in those liquids

so that if the impurities in the liquid stay in contact with the pipe over time there could be corrosion. Now, there also has to be a pipe configuration and pipe flow where that liquids don't get sweeped [sic] up with the gas because it's a normal process that if the liquid drops out, and the gas is flowing right, it'll just get pushed away. So your flow conditions have to be such that the gas keeps moving. The pipe has to be designed where there's not any dead spots or low spots.

In New Hampshire, number one, on our system, we've had no indication of internal corrosion since the pipeline was installed, either on the eight inch or the 12 inch. And the primary reason for that is the location of this pipeline on our system is such that we have dry gas. And what I mean by that is it's not -- Where's the liquid come from? Well, it either comes from production areas, which Rob talked about earlier -- It used to be our only production area was in the Gulf of Mexico. Now we have production areas coming from Canada, but they're several hundreds and thousands of miles away. And I'll talk about some checks and balances there, but that's where liquids could enter the system. The other thing is it could be storage systems. Our closest storage system is three or 400 miles away

where we withdraw gas from storage. So either one of those could cause liquids. By the time the gas gets here it's pipeline quality dry gas. It has been since 1951. We've seen no indications of that. The way the system's designed we see no change in that system. So -- We also monitor. We've gotten over the years -- We monitor the gas that comes in our system. We monitor it for different things, liquids and some impurities. So we don't have any reason to believe that this system will ever get the liquids or the impurities that could cause internal corrosion.

Also, the way the pipe's designed, we don't have any dead spots. The way it's going to be operated on the flow system it's going to be there. So, let me assure, it's a different system than may be elsewhere where internal corrosion may or may not occur.

Q You mentioned that you had no evidence of internal corrosion on the eight or 12 inch lines here in New Hampshire. On what did you base that statement?

A Well, every time we maintain or inspect the eight inch pipeline, over the 50 year history there's several times that the pipeline's been exposed. There's areas that's been replaced at valve tie-ins. We hydrostatically tested this line in 1982. We had to cut manifolds in.

We had to make changes for different things. So, we've never seen any indication inside the pipe here, or in our whole system in the Hopkinton area near New England where we've seen this, especially here, any evidence of the internal corrosion.

Q Do you have any kind of filtering system in the pipeline that could be relevant to this issue?

A There's no specific filtering on this project, let's say, but at each of our compressor stations there's filters installed at some of our interconnects where we're interconnecting with other companies where there's a risk of picking up liquids. And we have gas quality issues. We've got filters installed there. For instance, the Maritimes project is filtered several times before it gets here but it's also filtered just upstream in Dracut before it enters our system. And the gas is monitored and filtered in several areas as a check and balance to maintain that dry pipeline quality gas.

Q Now there's been some testimony already about certain techniques and methods that are employed in the design of a pipeline, or its operation, to assure adequate protection of public health and safety. Can you describe for the Committee what those various measures

are that you use now and you'll be using on this facility?

A Okay. As far as -- Let me go back. This is a -- And what I want to do is I want to take this in context of the failure types we talked about before. It's really a comprehensive effort for us. We have to tie everything together to assure a safe pipeline. It's not one individual aspect that assures the safety of the pipeline. So if we go back to the third party damage, for instance, what we do is we're members of the Dig-Safe Program and we're big promoters of the Dig-Safe Program. We have to let people know where our pipeline is. They have to know before they excavate that they need to call Dig-Safe. Dig-Safe will notify us. We'll mark our pipeline. We make an effort to make sure our pipelines are marked, that people know where the easement is. Therefore, we can control that third party activity. And on this -- So we're a member of that Dig-Safe. We've been operating that way. We're going to operate that way in the future. Another thing we're doing on this project, at road crossings we're going to put in concrete coated pipe. We're going to bury the pipe five feet deep, which is a little deeper than required by regulations, and we're going to put one

inch of concrete on the pipe. This gives us a little extra safety factor should there be some activity at the road crossings putting in fiber optic cables or sewers, or whatever activities are done in the road. So that's a way we can look at the third party damage.

We also do helicopter overflights. And according to regulations, patrols are only required on a system like this every four to six months. We'll fly this at least monthly, and maybe more, and anybody that's on the pipeline will see that. And that's a way we can monitor activities and encroachments on the right-of-way.

The other thing is we've got a lot of experience building in New Hampshire so we know how to place the pipeline in there to prevent any kind of damages from floods, and whatnot, or earth movements. So we're going to take that technology that we know and we're going to build this pipeline so that we don't have erosion in streams, so if there is a hundred year flood event that the soil washes away and the pipe's left exposed.

The other things, I talked about internal corrosion. We have a system that is not conducive to that. We will have the line pigable should sometime in the future there will ever have to be pigging to remove liquids. So the pipeline will be pigable.

Q What does “pigable” mean, Mark?

A You can pass a pig through the pipeline, whether it be an intelligent pig or a cleaning pig, or whatever, so that you don’t have -- You hear things now that “This line wasn’t pigable.” Well, they used to build pipelines with 20 inch pipeline and the valve would be restricted so you can’t pig because you can’t squeeze through that. This will be full opening all the way. As far as external corrosion, we have what I think is one of the best coatings, fusion bond epoxy coating, one of the best coatings in the industry. Our research lab worked to develop this. We have that mill applied. We put -- When we do the field joints we use the same protective equipment. We don’t cut any corners when we put the welded area, when we coat it in the field. We protect that when we backfill it. We have cathodic protection on the line to protect any wall-offs due to external corrosion, so that will be designed into the system. From a mechanical standpoint, from mechanical failure, I mean, material failure, our pipe mill specs are very stringent. They’re beyond both the -- I think API has, AFI 5L, has two levels of pipe steel now. I think they got L1 -- I forget the two but -- Our specifications in regards to metallurgy and toughness

and mill inspection are even beyond the codes, so all that's controlled.

Q What do you mean by "mill inspection"?

A What mill inspection is, we start our inspection of the pipe, not when it arrives on the site, we start it at the pipe mill. The steel shows up from the steel mill. We do metallurgic tests on the steel to make sure the steel has all the components according to toughness, and whatnot, because toughness is an important thing in third party damage, and how ductile your pipe is and how strong it is. You don't want it brittle.

So there's strict requirements there. So the inspection, we have three or four inspectors in the pipe mill while the pipe's being made and any pipe that doesn't pass gets rejected. So it's not only counting on the mill, it's rejected. The same thing when it goes over to the coating yard. That pipe's inspected there. So we have a strict spec. We inspect it, we transport it here, then we install it correctly. And we believe that process, along with a hydrostatic test at the end, will reduce any kind of possibility from a material defect causing a failure.

Q Is this material inspected while it's still a flat sheet of material before it's, I think you described it as,

"hooped"?

A Yeah, before it's hooped. It's basically coming from the mill and then it's -- I don't believe it's inspected there. All the toughness tests, and everything, and all the metallurgic tests are put on when it's made into pipe, so should the pipe mill receive steel that's defective it has to go back. There may be instances when it goes to roll they may see some lamination, they'll trim it, things like that.

Q Do you do non-destructive testing of wells in the field?

A Yes, all the wells. In fact, I think the requirements are 20 percent. We do non-destructive testing of 100 percent of the wells by means of X-ray.

Q You X-ray the welding on the pipeline after it's in the field?

A Right. And what you're getting into there is what they call "construction defects." Construction defects may be attributed to bad welds, a contractor denting the pipe, or something like that. And by close inspection, by strict construction specifications, by hydrostatically testing the pipeline, by doing 100 percent weld X-ray, by running the caliper pig, those are the processes we put in to assure that any risk from a construction defect is practically down to zero.

And then we -- The other thing, the last thing, is operator. One of the things I mentioned was operator error. This system will inherently have some -- The way it's designed it's not got compression, it's got a point. We've been operating this system for 50 years. The operations hasn't changed that much so the people that are operating this, we're going to have to make some adjustments for the new meter station and service to the power plant as opposed to what we're doing now, but the operations, the people are trained in how they operate the system, which valves to open, which valves to close, gas controls, trained on monitoring the system. So, by working those aspects we reduce any possibility of a human error causing any incident.

Q You said you perform hydrostatic tests. Simply, what is that?

A Hydrostatic testing is where you fill the pipeline after it's constructed, usually, or later on in years, to re-verify the integrity. You fill the pipeline with water and you pressurize it, normally above the operating pressure of the pipeline, to assure the integrity of that pipeline, at that point in time, of its strength. And to make sure if any defects are there, if there is a defect there, that you will find it because you will

be well exceeding any gas pressures in that pipeline.

Q And you're going to be doing that on this pipeline?

A Yes. And it's a controlled environment in how it's done.

Q And you mentioned cathodic protection. Can you briefly describe what that is and why you do it?

A Cathodic protection is you basically put DC current on the pipe and you have an anode, usually you have an anode with metal out here. And what the current does, instead of the electrode leaving the pipe and know where to go it's going to control that and keep the current going within the pipe so that the metal, in reality the metal never leaves the pipe. So you're preventing any kind of corrosion by putting this low electrical current on the pipe and maintaining that over the years, someone quoted, sorry, maintaining that, and then at regular intervals checking to make sure that it's working.

Q Are you proposing to do that on this project?

A Yes. The system now is cathodically protected. We will have to do tests -- Once the eight inch comes out and the 20 inch goes in, we'll have to do tests to see where the optimum place is to place these, what I call, a ground bed, a rectifier, where on the pipeline we want

to put this current. We have some existing ones now but the interaction between the two pipelines, and because of the new pipeline being in there versus the old and different conditions, that'll be designed into the system.

Q And will this -- This is steel pipe?

A Yes, it is, it's steel.

Q Will it be covered with something, with anything?

A As far as coating or as far as --

Q Anything?

A Yeah. The pipe will be coated at the mill, except for the last two inches where there's welding, then it will be coated where the welding is, and then it will be buried to a minimum of three feet along the route and, in some areas, roads, rivers, streams, other areas that may be deeper.

Q And what is that coating that you're describing?

A It's usually bond epoxy coating. It's not -- It's really -- It's not like a tape. It's actually, you heat the pipe to like 450 degrees, I was lucky, I was at the pipe mill about two weeks ago so this is fresh in mind, that pipe to about 450 degrees. Well, you blast it first. You blast all the outer part out. You put a pattern in it. You actually put a pattern in the steel.

You heat that to 450 degrees and that thing's actually bonded. It's a powder that goes on the pipe. And it's not a wrap coat, like you tape something. It actually is embedded in the steel. And we put a minimum of 14 mls on that pipe to coat it. We use the same process in the field after the weld. We don't use a tape coat, or we don' use a shrink sleeve, or we don't use a lesser type coating. So we have a continuously coated pipeline with this thin film coating.

Q What's the purpose of putting that coating on the pipeline?

A The purpose of putting the coating on the pipeline is to protect the pipe from external corrosion. And again, like I said, it's a comprehensive program. You have to get a coating but the coating then is only as good as you install it and backfill it, so you got to go into construction specs. But the primary purpose is to protect the steel from the environment to prevent external corrosion. And along with good backfilling, and realizing you may not have every single point covered no matter how good you do, then the cathodic protection on top of that adds extra integrity to the pipe.

Q Do you think, Mark, it's important to take care in how

you lay the pipe into the ground?

A Yes, I do, and our company does, yes.

Q And what do you do to try to make sure that's done properly?

A Well, I'd say three points. One is a comprehensive written set of specifications so that you know what you're trying to accomplish and what you want to do. The second is you need contractors that have met qualifications. There's probably only six or seven contractors that we use that would qualify on a project like this, okay? So they have to meet qualifications that they can do it in a quality manner, a safe manner, comply with all laws, regulations, in regards to blasting, OSHA, DOT compliance specifications. Third, you need to inspect that. No matter how good your specs are, and no matter how good your contractor is, you need to have an inspection team and a management team from the company that works with the contractor that assures that these specifications are met when it's put in.

Q I think there'd been earlier reference to placing it on some kind of a padding. Can you describe what you put the pipe on when you lay it in the ground?

A Well, if the soil's nice you can put it right on the soil, if it's sandy, nice soil. Areas here, in

wetlands, and in some other areas, we do hit some areas where the soil's nice. You can lay the -- Well, even then -- I'm sorry -- In a wetland you may just lay it in a wetland. There's really -- You don't want to bring any foreign matter in there, or whatever, protect the bottom of the pipe. And in normal cross-country pipeline you'd use like sandbags, or something, to keep the pipe up about, oh, three to six inches. I forget our specs now, we've changed them, but I think they're eight inches off the bottom. And then you would typically -- What you'd do there is -- That's so you have a complete cushion around the pipe of good soil to backfill. You don't want the pipe sitting on that hard bottom, especially if there's rocks in there or anything like that. So, that's pretty standard in the industry to protect that coating when it's in the ditch.

Q And, if I understand your testimony, you wouldn't want to have dents or imperfections in all these measures you've taken so you can avoid external corrosion so you're going to put it in to try to avoid that, is that right?

A Correct, because dents, if you do your calculations, dents is a weaker spot in the pipeline. Should there be corrosion in that dent then it magnifies the magnitude

of that corrosion. Therefore, we specify in our construction specifications, we run a caliper pig. We'd run that after the hydrostatic test because your hydrostatic test is your worst case on the pipeline to get dents because your line's filled with water, and if there's something in there you might have a point source with the water. So you run this caliper pig and it will detect any dent that's out of code and then the contractor would have to go back in, identify it, replace that.

Q Is it said that a caliper pig will detect out of round?

A Out of round basically, yes.

Q What does that mean?

A The pipe's round but there's like a two percent deviation, if you can imagine that somewhere, so it's not so much out of round in a long area. It's more like out of round in an isolated area where it was dented, like that. It'll pick up something like that.

Q So the caliper pig will identify any spot where it's not round --

A Yes.

Q And where there are dents --

A Yes.

Q So you can take appropriate measures?

A Yes.

Q Can you say, Mark, what an intelligent pig is used for or detects?

A A smart pig? Yeah. You hear it in different ways, smart pig, intelligent pig. If we go back, a caliper pig's a semi-intelligent pig. It has some intelligence because it picks up the dent and you can calibrate where it's at. What you hear of intelligent pig and smart pig, unfortunately they're not as smart as some people might think. Because an intelligent pig, when it's run, is basically run to identify any wall loss in the pipe. And the normal thing that causes wall loss in the pipe -- And wall thickness loss meaning if you've got wall thickness, and your pipe's so thick, and you're looking for a deviation in that wall thickness, the intelligent pig will pick up the deviation. And normally the deviation it picks up is corrosion, internal or external corrosion. It's not real good at getting some other pipe defects, laminations, gouges, things like that. Of course gouges, and things like that, when you put them in you can visually inspect them. That's why we have a strict inspection at the mill and whatever. But it's primarily used to detect wall loss within the pipe primarily caused by corrosion.

Q And in this system being proposed and discussed here today, you're also proposing to use automatic valves instead of manual valves, automatic closing valves, is that right?

A Yes, in our -- Normally we would probably not, on a system like this, propose either auto close valves or remote valves. After evaluating the project, after evaluating some of the concerns and some of the comments and the system, our belief is that our commitment was to install auto close valves at our main line fab locations on the 20 inch pipeline on this system.

Q And you believe that that assures public and health safety with an adequate margin of confidence?

A Auto close valves, or remote control valves, don't alone assure the increased safety to the public on that pipeline system.

Q What does?

A This combination of coating, material, cathodic protection, patrols, proper maintenance procedures. That whole combination provides it. Proper emergency response plans. Proper operating people at gas control that understand what the system does. And the reason that I, I don't know if you want to ask me or if I want to say it, why I don't think auto close valves

necessarily increase the public safety at one particular moment should there be a failure, the reason auto closed valves are discussed, the reason valves are placed along the pipeline, according to regulation, is that you want valves at certain locations for a couple of reasons. Should there be a maintenance activity and you want to get in and isolate that pipeline, you want to shut the pipeline off between two valves, vent the gas to atmosphere in a controlled manner, and get in there and work on your pipeline. And so, regulation has it that, dependant on the population center, valves are spaced so far apart. And those valves are also there in an emergency. If you have a release of gas in an emergency situation either due to a rupture or a leak, or whatever, you can go to those areas and you can shut those valves. Our belief is, or a lot of the industry belief and, yet, people going back and forth on that, and our position is that, and it's my pre-filed testimony, or the recent one is that should you have a rupture you have a sudden release of energy from that pipe at that moment, even auto close valves, and I think we talked about it earlier, Greg mentioned it, they close almost instantaneously. But even when the auto close valves close, even if it's two or three minutes,

the initial energy is released from that pipeline at that point. What it does do is it does prevent more gas feeding that ruptured area should there be an ignition or a fire. It also, for a convenience, someone doesn't have to physically go to the location and shut the valves. But it doesn't prevent that rupture. What prevents that rupture is the proper installation, the proper material, the proper maintenance procedures, and the proper patrols, and the Dig-Safe issues, and that type of thing. That is what focuses on the safety that prevents that rupture.

Q Do you have any further testimony you'd like to offer at this time?

A No, not right now. Thank you.

DIRECT EXAMINATION OF MR. KLEINHENZ BY ATTORNEY SMITH:

Q Mr. Kleinhenz, you are already sworn and under oath. Would you state your full name and your business address for the record please?

A Yes. My name is Eric Kleinhenz and I reside in Houston, Texas at the El Paso Energy office.

Q And I'm going to show you an exhibit marked A12 for identification purposes. Actually, I'm going to turn to page 22 and ask you if you recognize that?

A Yes.

Q What is it?
A That is my direct pre-filed testimony of August, I'm sorry, May of 2000.
Q And did you prepare that or was it prepared under your direction?
A Yes.
Q And at the time that you caused it to be prepared, was it true and accurate to the best of your knowledge and belief?
A Yes, it was.
Q And is it still today?
A Yes.
Q Therefore, do you wish to adopt it as your testimony here today?
A Yes, I would.
Q Now, what are your responsibilities, briefly, for the company?
A For this particular project I am the design engineer, so I would be assisting Mark with the design of the pipeline as well as the construction mitigation that would also be included with the project.
Q How long have you worked for Tennessee?
A Fourteen years.
Q And very briefly, what is your educational background

and experience as it would relate to this project?
A I have a B.S. in civil engineering from Texas A&M and I'm also a registered professional engineer in the State of Texas, as well as a registered environmental manager.
Q And are you familiar with the draft permit conditions which were prepared by the Public Utilities Commission staff?
A Yes, I was.
Q And you're familiar with the proposal that your company made in the application for the location of what I refer to as certain classes of pipe along the route of this replacement project?
A That is correct.
Q Can you tell us whether what you've proposed, as the application sits before us here today, conforms to the recommendations of the staff at the Public Utilities Commission with respect to the location of classes of pipe?
A Yes, it does.
Q Completely?
A Completely.
Q And does that mean, therefore, that you have proposed to, in some cases, exceed in any way more typical construction?

A Yes. And, in particular, the three classes of pipe design typically encountered in an area like New Hampshire would be a Class I, Class II and Class III pipe. A Class III would be your most, I guess you could say, your highest level of safety factor applied to it, and then Class I would be, obviously, your lower safety factor. First and foremost, I would say probably 40 to 50 percent of the route actually fell into a Class I criteria. What we had decided to do, one of the recommendations the PUC had in our initial meeting with them, was that we would install all Class II pipe, even in a Class I area. And so, that was the criteria we established.

The other criteria that they requested was that in any locations where the pipeline was within 40 feet of the 20 inch pipeline that we would install Class III pipe. We agreed to that. They also requested that for road crossings and for major streams, and we acknowledged that. They also requested concrete coated pipe at all road crossings, and we agreed to those as well. And those were all criteria that are over and beyond the standards of DOT.

Q And you're aware of the fact that your proposal is to use not manual but automatic closing valves and that the

staff of the Public Utilities Commission has recommended utilization in this project of remote control valves?

A That is correct.

Q And do you believe that your proposal is superior?

A Yes, I do.

Q Could you explain to the Committee why you think so?

A The main point with valves, and the whole issue behind the valves, was the response time to isolate the pipeline, and an auto close valve provides a superior response time than the remote valve. And the main reason for that is the remote valve requires a field verification to which pipe it would actually be that was ruptured, whereas an auto close valve is activated off the pipe itself, the pressure loss. So without any human verification or any call that would be required, the auto close valve, immediately upon detecting the pressure loss, would close the valve.

Q Does the design of this system, that is there are two pipelines now and there'll be two pipelines running north/south when you complete the upgrade, does that have anything to do with the choice of valves as you've proposed it here?

A Yes, it does.

Q What?

A The main reason is the two lines operate in common. And what I mean by that is at a meter station if we had gas delivery, both lines can service that particular customer. And because of that, if there were a failure, the pipe, it would actually show a loss in pressure on both pipes. And because of that -- In a scenario where you're in the dead of winter and there was a rupture and you had remote valves, you would not want to shut the entire northern New Hampshire off of gas supply guessing which pipeline had ruptured. And obviously, the reason we operate in a common system is to provide more reliability to the customers. Any time there is a problem with either one of the pipelines we could obviously continue to service the customers for that time period.

Q And next, you're aware of the fact that there is a recommendation from the staff of the Public Utilities Commission to employ what's referred to sometimes as an intelligent pig on this project at the outset, before it goes in service, I think, or early in the operation of the project, and you do not propose to do that but only to use a caliper pig. Can you explain why you propose to do it the way you do?

A Right. An intelligent pig, again, its primary reason

for its usage is to detect corrosion. And up until the point that the pipe is being installed we have had numerous levels to check the integrity of the pipe, the last of which is the hydrostatic test. So while putting the pipe into service we have established visual inspections of the pipe that would check for any anomalies in the coatings. We've had mill inspections that actually detect the components of the pipe, so there's obviously no opportunity yet to have any corrosion whatsoever. Baseline data, for our use, would be of little or no use. And, as a matter of fact, what you do with the baseline, in most cases, you're establishing a tolerance or tolerable limit to what could be allowed. So if there was an intelligent pig run and you did see a few little blips on the report, and that would show up later as you ran the intelligent pig seven years from now, you could basically say, "Well, that's okay because that was within our tolerable limits."

So what we're actually doing by not having a baseline is we're taking a zero tolerance baseline that, when we ran the intelligent pig at a predetermined time later on, we would be able to assess as we would any other anomaly. And at that time we would determine,

based on the criteria, if it would be deemed to be excavated or just a visual determination from the report.

Q Is there anything further you'd like to offer at this point?

A No, I would not.

DIRECT EXAMINATION OF MR. KRETSCHMER BY ATTORNEY SMITH:

Q And the next witness, Mr. Kretschmer, you have also already been sworn. So, I guess you have that microphone there. You can use that. Would you please state, for the record, your full name and your business address?

A My name is Paul Kretschmer. I work for Pre Seis Incorporated and we're located at 1480 Elm Street in Manchester, New Hampshire.

Q Can you spell the name of your company?

A It's capital P-R-E, capital S-E-I-S.

Q And I'm going to show you a document marked Exhibit A70 for identification purposes and ask you if you recognize it?

A Yes, that's my direct pre-filed testimony.

Q And do you recall, approximately, when you prepared that?

A That was approximately a week, week and a half ago. I

don't have the date.

Q And was it true and accurate to the best of your knowledge and belief at the time that you caused it to be prepared?

A Yes, it was.

Q And is it still today?

A Yes, it is.

Q And therefore, do you wish to adopt it as your testimony at this hearing today?

A Yes, I do.

Q Now, very briefly, what business are you in?

A We are blasting consultants. We do blast vibration analysis, pre-blast surveys and post-blast surveys.

Q And you, personally, perform that work?

A Yes, I do.

Q And how much experience do you have in performing that type of work?

A My basic is 30 years in the construction industry as a housing and commercial building builder, and the last ten years specifically in blasting doing pre-blast surveys and blast analysis for large contractors, two years specifically doing blast consulting.

Q And have you worked on projects which would bear any similarities to this one?

A Yes. We've done work with Delta Gulf which is a contractor for Tennessee Gas and has done some pipelines in this area.

Q And you know that there have been certain recommendations made by the consultant for the Public Counsel, Haley & Aldridge?

A Yes.

Q And I'd like to discuss with you, just briefly, some of the parameters that you think are important in order to assure that the blasting will be conducted properly and safely on this project. One of the parameters that's addressed in that testimony is something referred to as ground vibration limitations?

A Yes.

Q Would you explain for us what that is?

A Well, ground vibration, you want to monitor ground vibration outside of the blast area to ensure that there's no damage to structures or utilities outside of the actual blast area.

Q And is a limit proposed in this application for that kind of vibration?

A Tennessee Gas proposes a 4.0 inch per second vibration limitation on the existing pipe in the pipeline.

Q And that's an expression of a particle velocity, is that

right?

A Yes, 4.0 inches per second is a peak particle velocity that's monitored and measured on a seismograph.

Q And do you have any knowledge you can provide to the Committee about what sort of peak particle velocity in this kind of a project, where we're operating about ten feet away from an existing, active pipeline, that pipeline could tolerate safely?

A Pipelines, in general, gas pipelines, and I've seen numerous studies on them, can tolerate blast vibration in the order of ten to 12 inches per second with no perceived damage. There's been numerous times that those levels have been monitored and the pipe checked immediately after with no damage. The four inch per second that Tennessee Gas is suggesting and specifying for their existing pipeline is extremely conservative on the order of two to three times.

Q Now you're talking about particle velocity. What do you mean when you describe it as an elastic kind of effect?

A Well, blasting, obviously, breaks rock. Outside of a certain distance away from that actual perforation of the ground and breaking of the ground there is an energy that is transmitted that's transmitted as an elastic motion in the ground, and four inches per second is the

level that we're going to stay by. That's not to say that the ground is actually moving four inches. It is moving for a very short period of time. During that duration that is the peak velocity during a blast, and that's what we're monitoring. All the blast data and the studies that support the blasting industry levels that have been established are based on peak particle velocity and ground vibration and measured in that way.

Q So if it were a purely elastic vibration, then anything that moved in that way would move and return to where it was before the event?

A Yes. There'll be an actual displacement of the ground, a very minor displacement. I believe, at very high frequencies, four inches per second is about eight thousands of an inch in actual measurement of the ground displacement. But that does return back to status as it was previous.

Q And it's eight thousands of an inch instead of four inches because any particles would have this velocity for a much shorter period of time than one second?

A The four inch per second is how far that particle would move in one second. It is going to be effected for a very short duration, only milliseconds during a shot.

Q And are you proposing, or is the Applicant proposing, to

measure ground vibration limitations to comply with this standard of four inches per second, do you know?

A Yes. In all the previous projects I've been involved with we have measured. If there was an existing pipe, that vibration has been monitored at the pipeline.

Q And how is that done?

A That's done with a seismograph. My company uses a geophone with a very long cord on it, just to put our instrument out of harms way. But that is monitored with a geophone and a seismograph.

Q Now if we stayed within this standard of four inches per second as we've proposed, do you have any way of comparing this vibration at a hundred or 200 feet away to anything we'd all commonly experience?

A Something I use in public demonstrations is basically, four inches per second has been measured on the side of slamming wooden sliding glass door on the wall immediately adjacent to it. So basically if you wanted to suggest something like that, walk in and slam your sliding glass door. That wall immediately adjacent would have a four inch per second reading or stress level on it.

Q This is at the point or origin or nearby?

A That would be at that point, yes.

Q How about a hundred or 200 feet away? Do you have anything you can compare that to?

A Four inch per -- Well, glass vibration degrades the further away that it gets. If your four inch per second on a pipeline is in very close proximity to the blast, as you move away from that that blast vibration will degrade very rapidly. At a hundred to 200 feet out you'd be looking at someone closing a door or walking heavily across the floor.

Q Now, there's mention in this part of the record of ground heave and measuring ground heave. What is that?

A My understanding is measuring ground heave is the actual measurement and displacement of the ground in the vicinity of the existing pipe. If that were to be displaced, you would measure the actual displacement. In the specification Tennessee Gas has, at a four inch per second elastic motion allowable at the pipe, it means that there probably would be no ground heave. It doesn't make sense that if you're measuring elastic ground movement that the ground would be deformed.

Q That's because, as I understand your testimony, if it's elastic it would return to where it was?

A Yes.

Q If it were inelastic it would be displaced, as you put it, and it would stay in a different place than it was when the event was initiated?

A Yes. And that's what I would consider would be to heave the ground or ground heave.

Q And if you were measuring ground heave, how would you do that?

A Personally, I'd take some elevation shots prior to the blast and then immediately afterwards take those shots again and determine if there's been any movement. It can also be done on undisturbed ground in the area of the pipe. Immediately after the blast, if it was determined by looking that there may be some problems, you could step away from the pipe a few feet and get a measurement there and then measure over on the pipe. And you would consider that difference that it may be, in fact, some sort of deformation of the ground underneath.

Q When you say "taking shots," are you referring to locating stakes and then surveying them before and afterwards?

A Basically setting a benchmark, is what we'd call it, and that would be any moveable object and taking an elevation from one point and then comparing that to the

pipeline.

Q Well, do I understand that the blasting, if any is required, is going to be in the ground about ten feet away from the operating pipeline, is that right?

A Yes, that's what I'm told.

Q And so, the vibratory motion we're talking about would tend to move horizontally through the ground toward the operating pipeline, is that right?

A It will move throughout the ground, yes.

Q But when you measure ground heave, just so we're clear, you're talking about putting a stake, or something of that sort, over the top of the existing pipeline and then surveying to see whether the elevation of that stake changes, or marker on that stake?

A Yes. It could be done that way.

Q Alright. And that's what you mean by displacement?

A It could be done that way, yes.

Q Is there any other way that you would think of to do it?

A You could just measure the ground. You wouldn't have to place the stake.

Q Do you think there's any need to measure ground heave on this project if it's conducted the way it's proposed?

A As I've said, I've done some other projects with Tennessee Gas. There's been no reason to monitor it

before. There was blasting in very close proximity to existing pipes and there wasn't an issue with ground heave, so I really don't see that there would be an issue now.

Q Has the topic of air blast over-pressure also come up in the technical reports of the expert for Public Counsel?

A Yes, as measured at the closest structures.

Q And do you know whether the Applicant has proposed a standard for air blast over-pressure?

A The Applicant, at the beginning, did not. The peer review by Haley & Aldridge did come back with air blast over- pressures and vibration levels to be maintained at structures very close to the blast, the closest structures not in control of the blaster. And they had made a suggestion to follow RI 8507 for ground borne vibration and RI 80485, which are reported investigations by United States Bureau of Mines that set those specific limitations. They suggested that we follow those and Tennessee Gas has said that they would.

Q I'd like to show you three documents, just for the record. The first is Exhibit A54 for identification purposes only.

A Yes. That's a Tennessee Gas Line Pipeline engineering standard for blasting their high pressured pipelines.

Q Are you familiar with that standard?
A Yes, I am.
Q And does it conform with your testimony here today?
A Yes, it does.
Q I'll show you an exhibit marked Exhibit 55 for identification purposes. Do you recognize that?
A Yes. That is the construction specification for land pipeline construction. It's classification LP-6.
Q Whose specification is that?
A That's El Paso Energy's specification.
Q And are you familiar with this?
A Yes, I am.
Q And is the proposal that's before the Committee consistent with this standard?
A Yes, it is.
Q And one more document marked Exhibit A56 for identification purposes. Do you recognize that?
A Yes. That is a construction specification for land pipeline construction, typical blasting plan example only, specification LP-7. And I specifically say "example only" because there are a number of items in that that I would not suggest doing in this area.
Q But, as far as you know, this is going to be applied in such a way that it will be consistent with your

testimony here today?

A The example is an example of a blasting plan, and every blaster will need to produce one of those to Tennessee Gas. The specific types of blasting and types of materials that are being used are not necessarily what needs to be there. That is just an example of a plan and a kind of boilerplate to be followed, and that would be consistent. If that boilerplate were to be submitted, I'm sure that Tennessee would review and then approve that.

Q And the plan would then be adapted to this project?

A Adapted to this project, absolutely.

Q Now, another issue that has arisen is the question of whether pre-imposed blast surveys of structures and water wells would be conducted at a distance of more than 150 feet from the blast site. And then two other distances have been suggested, as you may know, 200 or 300 feet. Can you describe what the significance is of those three distances, 150, 200 and 300 feet, for the Committee?

A A hundred feet for pre-blast surveys is noted in New Hampshire regulation SAFE-16 that specifies that any structure not under control of the blaster will be offered a pre-blast survey. And that is a state

regulation. The 200 foot number that came up is Tennessee Gas' suggestion and their submittal that they would do those pre-blast surveys and necessary post-blast surveys within 200 feet. The 300 feet was a suggestion by Haley & Aldridge prior to Tennessee Gas adopting RI 8507 and RI 80485, and that was suggested by them. My opinion is that the 200 foot pre-blast survey is more than enough, specifically in keeping the blast vibration at four inches per second, in a very close proximity to the blast.

Q Now you mention in your testimony two standards. Could you just define for everyone, just briefly, what those are and why you think that determines the question of 200 feet being an adequate survey range?

A Well, RI 80485 is, both of these are, from the United States Bureau of Mines' Report of Investigations done in the 80's. And 80485 sets limitations on air blast over-pressures at structures. RI 8507 sets limits of vibration at those close structures in relationship to their associated frequencies. These -- If we do basic calculations using the four inch per second at the pipeline, which is ten to 20 feet away, and then do the regressions out to 100 to 200 feet, we're talking about very insignificant vibrations at those distances. In

order to cause threshold damage it's been shown that a minimum of two inches per second above 40 hertz and then regressing down to a half an inch per second at below 10 hertz may cause, may cause, threshold damage, threshold damage being practically invisible, certainly not to the point that you're going to break foundations or cause huge cracks in plaster walls or ceilings. These are based on plaster walls, the weakest component of the building. It's been noted also in 8507, and in some studies that have been done after that, that in order to induce blast damages, four inches per second and above had to be attained before anything was hurt. So these -- By maintaining the four inches per second at the pipeline, doing the analysis, we're going to be well under the requisite 80485 air blast over-pressure and 8507's vibration levels. So that should preclude us going out to that 300 feet.

Q So at up to 200 feet, you don't need to go beyond 200 feet because you'd be well under any standard that could cause any kind of problem?

A At the 200 feet you're basically -- It's public relations and to go out and explain to people that there actually really are cracks within your homes even though they're practically new. Old homes, new homes, every

home has some cracks. I don't know if everybody walks out of the door today in the front and looks down to the right as you go up, some huge cracks in the foundation here. That occurs. That's nothing out of the ordinary. But it's a good idea to go out to people that are going to experience that blast vibration and explain that those things are within the homes, that they're not structurally a problem, that their home isn't going to fall down and is not falling down. So, it is a public relations tool and a good idea to use, and then you can document those items should anybody have a question.

ATTORNEY SMITH: Alright. Thank you. I don't believe we have any further questions of the panel at this point.

CHAIR: Thank you. Public Counsel?

ATTORNEY WAGELING: If I could, I would like to just direct the questions to the panel generally and then whoever chooses to answer it could do so. And I don't know if, for the record, they should identify themselves before doing so. That would be fine.

ATTORNEY SMITH: That would be helpful, and if I could explain what the brief conference here was about. As we've said before is there are other

people here in the audience who may be able to help with a particular issue, so we'll try to direct a question back to them if it seems they could handle it better.

ATTORNEY WAGELING: And I didn't realize we were going to have two separate panels so I apologize if some of my questions go beyond this panel, and I can redirect them if need be.

CROSS-EXAMINATION OF PANEL BY ATTORNEY WAGELING:

Q Mr. Hamarich, specifically, I know that you just reviewed a variety of causes for failure of pipelines and I think that you attempted to direct it away from the New Mexico tragedy, and I understand that. But what I'd like to ask you are questions comparing the various precautions you're going to take with this pipeline as compared with, for instance, the New Mexico pipeline. You did explain that the variety of reasons that you could have a failure would include outside forces such as earthquakes, third party difficulties, corrosion, material, construction defects, and then human error.

I think, for argument sake, let's move past the outside forces, for instance, earthquakes, because obviously we can't predict the future. Third party difficulties, what, if anything, can be done for the Tennessee Gas pipeline that you're proposing to prevent

an interference by a third party that wasn't done in New Mexico?

A (By Mr. Hamarich): First off, I'll address the third party but I don't believe, I don't know if there was any relation to third party in New Mexico, so I want to clarify that. But I will address this. We've got an established corridor here. We've got marker posts. We've got a right-of-way identified. We maintain a right-of-way. We patrol a right-of-way. We're members of the Dig-Safe. We send out notices, as Greg said, on a yearly basis to all landowners, all towns. We meet, at least we try once a year to meet, with the local officials, the emergency response teams, to let them know what our, as we discussed earlier, emergency plans and what's going on there in general. So because we're routing the pipeline in the existing corridor and we're putting the new pipeline in this same corridor, and for 99 percent of part of it in the same alignment as the eight inch line, there'll be a new corridor. It will be cleared. Trees and things will be mowed and some extra trees removed so there'll be a well-defined corridor after the construction.

So if we maintain the current mode of operation as we have in New Hampshire, where we've had no incident

from third party, and keep reinforcing those procedures and that contact with the community, that's how we will maintain the prevention of any third party damage on this corridor.

Q Was that done in New Mexico?

A Those procedures that I'm talking about are procedures that are federally regulated procedures. All natural gas transportation pipelines are subject to those procedures in regards to oversight, patrol, marking the pipeline, one-call systems and whatnot. All natural gas transportation companies are regulated and must comply with that. And specifically in New Hampshire we've been doing that on the eight inch and the 12 inch. We will continue to do that with the eight inch and the 20 inch, and that's one of the beautiful things about putting the 20 inch in the same location. The corridor's established. We've been protecting it for 50 years. We'll continue to protect that corridor.

Q I understand that there are rules and regulations that you are required to comply with but was that done in New Mexico?

A Specifically let's go back to what was what done again? Was the pipeline patrolled? Was the pipeline --

Q All the things you've discussed that you're going to do

in this pipeline as it relates to the third party concerns, Dig-Safe, and you just have reiterated them all.

A Yeah, I can't specify exactly in New Mexico. I can say all natural gas transportation systems are required to comply with that. Remember, patrols are based on, I can say, for instance, patrols are based on population density, so the regularity of patrols are based on population density. If your pipeline's in the desert and it's a Class I location and there's no housing in the area, your patrols are at a less frequent time. Your cathodic protection surveys are at a less frequent time. Your marker posts, you still have to identify the corridor but you don't have as many roads and access to the public to mark it, understanding, in fact, that New Mexico was near a bridge, above ground aerial, so the pipe was marked there. So, in this case, we will comply with that requirement on this project.

Q One of the other issues you discussed was the corrosion, both internally and externally, and I know that you went through a bit of detail in explaining the difference relative to impurities and liquids that might be found within a pipeline, possibly in other locations as compared to New Hampshire. Were those same -- Let me

rephrase it. What's the difference between the gas that's going to be traveling up the pipeline into New Hampshire as compared with the gas that was traveling through the pipeline in New Mexico?

A The gas going through New Hampshire is dry gas. It is not near a production area. The pipeline is not configured in a manner that liquids could possibly collect in the pipeline. As I stated earlier, this pipeline will have a continuous flow during operation. It will be pigable. It has no indications of any wet gas or impurities entering the system.

Q Did those concerns exist in New Mexico, both the design criteria, or configuration, and the impurities?

A My understanding is that there was evidence of internal corrosion. How that was caused? Like I said earlier, usually internal corrosion's attributed to three factors: liquids in the gas, impurities in the gas, and a configuration in the pipeline where the gas is not either pigged out of the line, because the line is not pigable, or the flow of the line, there's a natural low spot and the gas cannot sweep the pipeline.

Q I might have misheard you, and correct me if I'm wrong, you had discussed that there was no evidence of internal corrosion in New Hampshire and I thought you only

specified the eight inch pipe?

A No, I was talking about the eight inch -- When I talk of New Hampshire I'm talking about the eight inch and the 12 inch system.

Q So it's your testimony that, as of today, there isn't any evidence of corrosion in either of the pipelines?

A Yes, based on the information we have and the operating history, yes.

Q And is there any evidence of dead spots in either of the pipes?

A No, not at this -- No.

Q You sound like you're hesitating on this one?

A Well, as far as I know. Dead spots, it's hard to define but, no.

Q I think you just mentioned this again but, again, I apologize if I'm misstating it. Is there a difference between the storage systems involved in the New Hampshire gas that's going to be traveling up from Massachusetts as compared with New Mexico?

A What I stated was that the way liquids can enter the pipeline is either through production or storage areas. And what production areas are are wells, whether they're offshore or on onshore, and production areas where the gas comes out of the ground. There are separation

processes but liquids can enter the stream there. And what storage facilities I'm specifically referring to is underground, let me clarify, that's underground storage facilities where the gas is injected back in the ground and it basically becomes like a production area. The gas comes back out of the ground.

Q And is the receipt of the gas into New Hampshire from a different designed storage system or process than what was used in New Mexico near where the explosion occurred?

A The closest storage that gas could possibly reach New Hampshire, and it's very dependent on how the system works, is in eastern Pennsylvania, sorry, western Pennsylvania. And by the time the gas reaches the points in New Hampshire it goes through several compressor stations and areas where there is filter separation on the gas and there is an ability to drop any liquids out, should there by any liquids. It's also transported on pipelines that are pigable downstream of storage should there be any liquids detected.

Q Is that different from the gas that was received at the location where the explosion occurred in New Mexico?

A I don't know what the gas exactly was. I don't know what the gas was at the location. I can only address

the production facilities and the wells in general.

Q In terms of the, again, just continuing to compare the New Mexico situation with what would be proposed for New Hampshire, the external inspections, the fusion bond coating, the mill, the upfront inspections, the field joint inspections and the coating that would go on there, the cathodic protection along the line, hydrostatic testing, was all of that done in New Mexico?

A The pipeline in New Mexico was built in 1950. The pipeline that will be built here will be in the year 2000. Those specific technologies that you're mentioning, the type of coating, the type of steel, the technology has changed and there is better technology for the project we're using here. Again, my understanding of New Mexico, as I read it on the Internet, is it was published that that line was not hydrostatically tested. And that this line will be hydrostatically tested and all the other things we talked about, the caliper pig and whatnot.

Q If we could talk about the intelligent or smart pig for a minute. I also read that Mr. Marini over at the PUC was suggesting that the smart pig be utilized in this project. I'm somewhat playing devil's advocate here. Why would he be recommending -- Why would he be

recommending something that is of no use to the industry?

A Well, I've never had -- Do you want to answer that? I'd like to know. But I'd like to say, bluntly, is we'd like to know also.

A (By Mr. Kleinhenz): The intelligent pig is a valuable device in detecting corrosion. It's just the time frame when it becomes valuable because again, number one, you have to have the conditions that exist to experience corrosion and then, secondly, you have to have the time frame being able to elapse to establish corrosion. We have pipe in the ground that's been there for 50 years and it shows no sign of corrosion whatsoever. And during this time frame, we've been expanding and getting better and better technology. And with the new coatings that we have, with all the upfront inspections that are done from the mill all the way to the field inspection, we don't have near the concerns with the intelligent pig, especially on the new pipeline. So, when people mention intelligent pigging, the biggest effort is to drive the industry to intelligent pig a lot of the older pipelines. And currently we have a program that is going through and doing the intelligent pigging on the older pipelines.

Q Would it be fair to say that it could be something implemented four years down the road, that is, in terms of the certificate process you're going through, instead of requiring an intelligent pig be used today that you would agree to use it at some appropriate time frame down the road to detect the corrosion?

A Yeah, we would like -- In terms of a specified interval, we wouldn't want to be able to set that because what we would like to be able to do is base it on when we start doing detailed corrosion surveys. We're able to detect the level of cathodic protection that is currently on the pipeline. When we're establishing proper cathodic protection, we're not going to be experiencing the corrosion that we expect to be present. The other thing, the whole time, is we're also monitoring our gas stream in terms of the actual makeup of our gas, in terms of the water quality content, all the parameters in gas. So we have a good feel today for what gas is coming through here. So it would be other factors that we would take into consideration prior to saying, "We want to have an intelligent pig in four years or five years."

Q Understanding all of that, what if those procedures, for whatever reason, are failing and you assume that because

of your test results that there isn't moisture in the path and that cathodic protection testing appears to be going well? Is there any reason to not have another assurance for people of New Hampshire that there isn't any internal corrosion? Based, I think -- Timing is everything based, in part, because of the New Mexico tragedy. Is this a costly thing? Is there some reason that --

A Well, obviously, there are costs involved with intelligent pigging, sure. Again, what you're looking at is the value added. There's many things that people advocate that cost millions of dollars that offer no added value. And what we do is we assess if there's some value added. Obviously that, we don't see any additional value added.

Q You said that it's the primary use of the intelligent pig to determine corrosion. Are there other benefits to using an intelligent pig?

A Not really. They are looking for the big things. An intelligent pig is not good at detecting little things. It will detect the big things, a major corrosion presence. But again, what's the saying, Mark, "It's good at detecting the big things but not so good at detecting the little things." It's not an exact science

that it will spit out the actual wall thickness that we have. The technology is not there yet that gives you the bonafide wall thickness loss here. It's more of an interpretation of what could be there. And a lot of times we dig things up that look to be corrosion and there's no corrosion there at all and it may be something else.

Q While we're on the subject of corrosion and testing -- And I believe that you all made a statement earlier that the pipelines that are in New Hampshire currently do not appear to have any internal corrosion, but we're talking about pipelines that were built in the 1950's and the 1980's. Now I know you're discussing current technology available in terms of testing. What have you done to test those pipelines to be able to make the statements that you've made?

A (By Mr. Hamarich): Well, as far as strength test, the 12 inch pipeline was installed in 1981, '85, '89, and I think the last section might have been '91, or '81, '83. There was four sections in there. The eight inch pipeline that's there was hydrostatically tested in 1982. Now that doesn't prove it didn't have -- It proved the strength of the pipeline at that time. So, it was hydrostatically tested in 1982. Again, there's

no indications of any liquids or any internal corrosion or, for that matter, any major external corrosion on this pipeline at this point.

Q Well, how do you know that?

A Based on surveillance reports, and observations when the pipe was cut in spot locations, we've seen no indication. That's all I can testify to is we've seen no indications of any indications of internal corrosion or major external corrosion on our test reports. Every time the pipe's exposed a report's filled out.

Q But that's external corrosion, is it not?

A That's external corrosion.

Q How do you --

A And every time the pipe's cut or looked at for maintenance purposes it's looked on the internal corrosion.

Q And you can't tell us how often that's been done since it was put into --

A I can't tell you exactly, no. But I can tell you that the gas stream is extremely dry and there's no indications of any liquids on this system. And, in fact, Mr. Marini testified to that same fact in the article that you referenced about the pigging. And I believe I'd like to make a statement about Mr. Marini's

reason for possibly wanting that pigging is that OPS, Office of Pipeline Safety, has been kicking around a rule making, a proposed rule that would require all pipelines to run a baseline intelligent pig, and I believe that's on existing pipelines. Therefore, any existing pipeline that's been there 10, 15, 20, 30 years, you run that pig and then you have the baseline. That's not the situation that we have here on the new line, just for clarification.

Q So you haven't done any intelligent pig test on the New Hampshire pipelines?

A No, there has not. And one of the reasons there has not, based on the operating condition, the operating history, all the reports, it has not been a high priority on our pipeline. We extensively have been intelligent pigging since 1984. I can't quote the exact number of miles but Tennessee Gas Pipeline has had an extensive intelligent pigging program, one of the leaders in the industry for the past 16 years. The pipelines in New Hampshire, because of the manufacturer's type of steel, because of the coating, because of the operating history, has not been intelligently pigged at this time. It has not been a high priority area where there's been indications of

possible failures on the system.

Q And what about dead spots, other than an intelligent pig test?

A Well, let me just clarify, if there's no liquids in there the dead spots really don't mean anything on that. There has to be a combination, again. There has to be areas where the liquids collect. If there's no liquids there's none to collect.

Q The flip argument for that could also exist, couldn't it, if there is no dead spots, even though there's liquid, there possibly wouldn't be a place for it to settle? So, have you tested for dead spots?

A I do know that in compressor stations, and I don't think there's these areas in New Hampshire but in some of our compressor stations there has been and there's an ongoing program to check those areas. But I cannot say that there is no dead spots on this system.

Q So, based upon my understanding, --

A Not that I know of.

Q Based upon my understanding of your testimony as it relates to internal corrosion, in part, ways to measure it or determine if there is any, determine dead spots, determine --

A No, I didn't say that determined if there's dead spots.

Dead spot, let me clarify, dead spots, the liquid has to collect and there has to be impurities in that liquid. And what I'm referring to is that liquid has to be there in order for the internal corrosion to establish. There's been no indication of that on this pipeline system, either the 12 inch or the eight inch, in the 50 years of existence.

Q I think I understand what you're saying but what I'm trying to lay out is that if you have impurities and/or moisture within the gas, if you don't have the dead spots for the, I'm trying to get the technology down here, the wording here, the design configuration might not allow for a dead spot? If you don't have both of those, would you agree with me that you are less likely to have internal corrosion?

A If you don't have wet gas you're not going to have internal corrosion.

Q Right.

A And that's --

Q I understand that. But if you have wet gas and you don't have dead spots are you going to still have internal corrosion?

A If you don't have --

Q I'm sorry. Let me state it again because I think it was

badly worded. If you have impurities in the gas and/or moisture in the gas but you don't have dead spots, will it result in internal corrosion?

A I cannot say that it won't. I can only say that this does not have wet gas. But I cannot say that it won't.

Q And so, my question, in terms of providing a net of safety for the people of New Hampshire, would you agree with me that it would be prudent for this pipeline to have built-in testing of those issues during the now ongoing history of all the pipelines that you're involved with, not only the one that's going in the ground but the ones that are already in?

ATTORNEY SMITH: Can I just say, I'm uncertain what you mean by "built-in testing of all those issues." If you could be -- I don't know what the question's asking.

Q Well, let me rephrase it. Would it be appropriate to have mechanisms put into the ECP or the EFSEC certificate that would require Tennessee to implement testing of impurity, moisture and dead spots within the 20 inch pipeline that you're proposing?

A The gas is tested. There's been no evidence of wet gas. In my opinion it would not be proper to put that into the conditions. I don't really know where you're going

with it. I'm a little lost. I don't know if Al can speak to it. Can you introduce Al and maybe Al can help?

ATTORNEY SMITH: Sure. Sure. Do you think you can be helpful?

MR. RICHARDSON: Well, I hope so.

MR. HAMARICH: Well, maybe you want to introduce him.

ATTORNEY SMITH: This is Mr. Richardson who had come here to assist with these issues.

MR. RICHARDSON: I've been in this business for about 40 years now and --

ATTORNEY V. IACOPINO: Mr. Richardson, can I swear you in before we get any testimony from you?

MR. RICHARDSON: Sure.

ALBERT RICHARDSON

having been duly sworn by Attorney Iacopino

was examined and testified as follows:

DIRECT EXAMINATION BY ATTORNEY SMITH:

Q Mr. Richardson, since we've come to this step, could you just do a couple of steps with us and tell people your name, your background, briefly where you have worked, and your credentials so they understand what you're bringing to this?

A My name is Albert Richardson. I'm a registered professional engineer in the States of Texas and Louisiana. I have a Bachelor of Science degree in engineering from the University of Houston and a master's degree in business from the University of Houston also. I've worked for Tennessee Gas Pipeline and subsequent organizations for the last 37 and a half years, and I've retired recently and do a little consulting from time to time. I was asked to come up and try to help out here. In answer to your question with regard to internal corrosion, one of the primary things that a pipeline company does is try to maintain what they call "pipeline quality gas" in their pipelines. They do this through several means. One of them is monitoring the flow of gas into the pipeline both at locations where gas is produced, in the production area, and where gas may come out of the ground from a storage field. Those are the two sources of impurities and liquids that can cause problems in the pipeline. By monitoring these impurities there are several things that are done. One of them is to monitor the moisture level of the gas itself, and there's a specific set of instruments that are used for that. And it's my remembrance that that gas is maintained at a

moisture level of no more than seven pounds per million cubic feet which is hopefully dry, very, very dry. That's the intent of the pipeline.

There are times when upset conditions occur on producer systems. And when, for one reason or another, an impurity gets into the pipeline, because of that, because of our knowledge of that, we put in what are called "filter separators" at compressor stations. Those filter separators are designed to take out any impurities that get into the pipeline and any liquids that get into the pipeline. The whole idea is to prevent anything in that pipeline from corroding the steel of the pipeline or the compressors, or any of the other facilities that are necessary for the transportation of gas. Those are the two first, the first line of defense. One, making sure, as best you can, that no impurities get into the line. The second one is to take any impurities out that might get into the line. A third one has to do with the design of the pipeline, and that's become a more focused problem in recent years. The concept of preventing low flow areas, that's an area of pipeline where there isn't enough flow in the area to sweep the liquids and impurities on through that area, that's become recognized in recent

years in some compressor stations, particularly the older compressor stations.

This might have played a part in the New Mexico tragedy. Right now no one knows and we're waiting for the NTSB to finish their evaluation. At that point, apparently, there was a header, which is a typical way of constructing pipelines in that they would header. It's a pipeline that goes across and connects the pipelines that are coming into there. There were three crossings of the pipe, one aerial and two subsurface crossings. And you would normally put a header in there so that if something happened to one of the crossings you could use the other two. And it's hard to pig that sort of structure. It was also a low structure in the system, apparently.

And here again, I'm going strictly from the OPS web page that it appears that it was a low place in the system. And I think that in recent years El Paso owned that system and has had diminished flow requirements. And so, maybe the three of them added up to some liquids sitting there for a period of time. In your system up here you're a long ways from supply, you're a long ways from storage areas, and you've gone through a lot of compressor stations and a lot of filters before the gas

gets here. It's been monitored numerous times before it gets here to maintain that low level of moisture in the pipeline. And I think the technology of designing and constructing the pipelines improved. And, besides that, you're all using a heck of a lot of gas up here so that's why we're having to build this larger pipe. That larger pipe will be constructed up here.

And so, I would say that you've got an extremely low probability of having areas where this moisture, if it existed, would settle out and I think you have an even lower possibility of getting moisture here.

CHAIR: Thank you. We're going to need to break for the day, I'm afraid. We're about to lose several members of the Committee. So considering we've now had panel creep and have, not to say anything about you Mr. Richardson but, we have grown here. So I think it's best that we break for the evening and we'll pick it up again in this room at 9:00 a.m. tomorrow morning. Mr. Dustin, if you could secure the room this evening, make sure it's locked up and reopened again by eight or 8:15 in the morning.

ATTORNEY SMITH: Mr. Chairman?

CHAIR: Yes?

ATTORNEY SMITH: I think there's one

so-called “housekeeping matter,” unless I’ve misplaced this. You asked counsel at the break, mid-day, to see if we could work out an arrangement with respect to that plan, and I believe that all of the counsel of the parties have agreed to the request we made that if we give them a copy of that document they will keep it in their possession at all times. And if they want to just so indicate, we’re going to give them a copy to take of that document now.

CHAIR: Okay.

ATTORNEY GOODMAN: I had a little condition on there.

ATTORNEY SMITH: Yes.

ATTORNEY GOODMAN: My understanding is that this plan is an internal Tennessee Gas plan and that the emergency response plans that the Town of Londonderry has to review for the specific Town issues will be available to anybody in the police and the fire, and everybody else who wants to comment on that plan.

ATTORNEY SMITH: Understood.

ATTORNEY GOODMAN: And that this plan also would be, we would be able to show it to our client and show it to anybody who wants to look at it as long as they don’t make copies of it. Those were my two

understandings.

CHAIR: Okay.

ATTORNEY ROCHWARG: Yes, good afternoon. I would just like to adopt the comments of Attorney Goodman rather than reiterate them. I would agree with the comments that she made.

CHAIR: Thank you.

ATTORNEY SMITH: We agree.

MR. CANNATA: Mr. Chairman?

CHAIR: Yes Michael?

MR. CANNATA: Two questions, if I may? One, do we have to approve the motion for confidentiality under those terms and conditions? And --

CHAIR: Go ahead, continue.

MR. CANNATA: And the second question was that, would those copies be returned to the Applicant? Was that part of your agreement, Mr. Smith?

ATTORNEY SMITH: We'd like to have them back. I have not asked to have them returned. At least they would be available as long as folks need them for proceeding. But counsel will keep them in their custody.

MR. PATCH: And I guess I'd make

a motion that we grant the motion that was --

CHAIR: For protective order for the Tennessee's Emergency Operating Procedures Manual as proposed, is that correct?

ATTORNEY SMITH: Yes, and I think the implicit understanding is they'll only be used in connection with this proceeding.

CHAIR: Okay, we have a motion and a second. Any further discussion?

ATTORNEY BROCKWAY: Just a clarification, the "as proposed" is as described by Mr. Smith and agreed to by counsel here this afternoon?

CHAIR: Yes. Yes. All those in favor say "Aye."

GROUP: Aye.

CHAIR: Motion's approved. We'll see you at 9:00 a.m. Thank you.

OFF THE RECORD