

**STATE OF NEW HAMPSHIRE  
SITE EVALUATION COMMITTEE  
SEC Docket No. 00-01**

**Application of Tennessee Gas Pipeline  
Londonderry 20" Replacement Project**

**DECISION**

**Application of Tennessee Gas Pipeline (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 and terminating in Londonderry, New Hampshire; and 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-use customer, AES Londonderry, LLC (AES.)**

**The pipeline will extend from a proposed interconnection with the existing pipeline facilities of the Tennessee Gas Pipeline in Dracut, Massachusetts, continuing parallel and adjacent to the existing 12 inch Concord lateral and terminating in Londonderry, New Hampshire. The Towns traversed include Pelham, Windham and Londonderry, New Hampshire.**

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## I. INTRODUCTION

Tennessee Gas Pipeline (Applicant or Tennessee) submitted an Application for a Certificate of Site and Facility pursuant to RSA 162-H, seeking to construct, install and operate facilities to provide firm transportation service of up to 130,000 dekatherms per day of natural gas to AES Londonderry, LLC, which is preparing to construct, own and operate a new natural gas-fired power plant in Londonderry, New Hampshire.

Since 1951 Tennessee has operated and maintained approximately 95 miles of pipeline in New Hampshire including a line known as the Concord Lateral which originally consisted of an 8-inch natural gas pipeline. In 1981, Tennessee built a 12-inch pipeline parallel and adjacent to their existing 8-inch pipeline from Dracut, Massachusetts to Pelham, New Hampshire. In 1985, a 12-inch loop line was extended from Pelham to Manchester. In 1989 Tennessee received approval to construct 10.5 miles of natural gas pipeline through the City of Manchester and the Towns of Hooksett and Allenstown and to construct new meter stations in the Towns of Londonderry and Windham.

In this application, Tennessee seeks to replace approximately 19.3 miles of 8-inch diameter pipeline that comprises part of the existing Concord Lateral. The project corridor traverses approximately 16.4 miles through Hillsborough and Rockingham counties. A single existing right-of-way presently contains both the 8-inch and 12-inch pipeline. The required Tennessee system modifications in New Hampshire are as follows:

Remove 16.4 miles of the existing 8-inch diameter Concord lateral #1 Lateral (270B-100) from section 103, MP 2.9 to a point near the existing Londonderry Meter Station (Section 104, MP 9.3).

Install 16.4 miles of 20-inch diameter replacement line within the vacant 8-inch diameter alignment.

Install a new 130,000 Dth per day meter site adjacent to the Londonderry Meter Station.

Install one (1) new main line valve.

Replace two (2) existing main line valves.<sup>1</sup>

The existing 8-inch pipeline will be removed and the new pipeline will be installed in its place within the existing right-of-way, with certain minor exceptions.

On December 10, 1999, Tennessee filed an application with the Federal Energy Regulatory Commission (FERC) for abandonment and authorization for a certificate of public convenience and

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<sup>1</sup> The pipeline will include additional automatic closing valves as discussed, *infra*.

necessity to construct, install, own and operate the new facilities for this lateral project. On August 1, 2000, FERC issued a preliminary determination addressing the non- environmental issues. On August 10, 2000, FERC issued an Environmental Assessment for the proposed project. Exhibit A-76. On or about October 25, 2000, FERC issued an Order Issuing Certificate and Granting Abandonment Authorization (FERC Order). The docket number for the FERC application is CPOO-48-000. Exhibit A-91.

Tennessee asserts that this project will provide significant benefits for New Hampshire and the broader region. In addition to replacing an older pipeline with a newer, state-of-the-art pipeline, this project will also more than double the transmission capacity of the existing system without any significant increase in size of the permanent easement or any excessive environmental or land use impacts. Current service will be maintained to the local distribution company (Keyspan, formerly known as Energy North) while at the same time enhancing the platform for Keyspan's future growth. Primarily, the project will provide transportation capacity to serve the proposed AES Londonderry facility. In turn, the AES facility will help meet the State's various objectives under its energy policy while also contributing to a reduction in regional air pollution.

On February 14, 2000, Tennessee filed with the Site Evaluation Committee an application for a Certificate for an Energy Facility, pursuant to RSA Chapter 162-H, for authority to construct, install, operate and maintain a new high pressure natural gas pipeline delivery system, (Pipeline Project) to construct 16.4 miles of pipeline in the State of New Hampshire. The Towns traversed include Pelham, Windham and Londonderry. The pipeline will extend from a proposed interconnection with the existing pipeline facilities of Tennessee in Dracut, Massachusetts, continuing parallel and adjacent to the existing 12-inch Concord lateral and terminating in Londonderry, New Hampshire. Upon receipt of the application the Committee complied with the procedural requirements of RSA 162-H.

## **II. SUMMARY OF CERTIFICATING PROCESS AND PUBLIC PARTICIPATION**

The Legislature recognized that the siting of energy facilities has a significant impact upon the welfare of the population, the economic growth and the environment of the state. The Legislature established a procedure for the review, approval, monitoring and enforcement of compliance in the planning, siting, construction and operation of energy facilities. RSA 162-H:1. The Site Evaluation Committee consists of members who are Commissioners, Directors or key personnel in various state agencies. RSA 162-H:3. RSA 162-H:6 creates time frames which provide for informational hearings, a public adversarial hearing and a final decision not later than nine months after acceptance of the application.

In this case the public was represented throughout the proceeding by Public Counsel, Assistant Attorney General, Marguerite Wageling, appointed by the Attorney General pursuant to RSA 162-H: 9. Public Counsel's obligation is to represent the public "in seeking to protect the quality of the environment and in seeking to assure an adequate supply of energy." RSA 162-H:9,I. In this case Public Counsel fully participated by submitting an opening statement, written witness testimony, exhibits, cross-examining witnesses and making recommendations and argument to the Committee.

Public Counsel was instrumental in obtaining voluntary agreements from the Applicant on many issues raised during the course of these proceedings.

The Application was filed on February 14, 2000. Requests to intervene in the proceedings were subsequently received from the Town of Londonderry, Londonderry Neighborhood Coalition and the Londonderry School District.

The Committee held a public meeting on March 30, 2000. At that meeting the Committee determined that the Application contained sufficient information to satisfy the Committee's requirements and the requirements of each state agency with jurisdiction. See, RSA 162-H:7. In accordance with the vote of the Committee, on March 30, 2000, a written Order on Acceptance of the Application was issued. The Order accepted the Application as complete.

On April 5, 2000, the Committee, pursuant to its authority under RSA 541-A: 33, II, granted a general appearance, and full intervenor<sup>2</sup> status to the Town of Londonderry (TOL)<sup>3</sup>.

Informational Hearings were held on April 18, 2000, in the Town of Londonderry and on April 26, 2000, in the Town of Pelham. The Committee also issued a procedural schedule which allowed ample time for the parties to conduct discovery but also permitted the Committee to complete its proceedings and issue a final Order within the time frame required under RSA 162-H:6, VII.<sup>4</sup>

On August 11, 2000, the Committee granted Londonderry Neighborhood Coalition (LNC) a general appearance with full party status. On September 27, 2000, the Committee granted the Londonderry School District (LSD) a general appearance with full party status.<sup>5</sup>

A public adversarial hearing was held before the Committee beginning on October 23, 2000, and ending on October 25, 2000. Public notice of the hearing was published in the Derry News on September 22, 2000, and in The Union Leader, on September 20, 2000. At the public adjudicatory hearing the Applicant, Public Counsel, and the Intervenors presented witness testimony and exhibits. All parties participated in the cross examination of witnesses and oral argument. At the conclusion of the adversarial hearing the Committee ordered that the record of the proceeding would remain open for ten

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<sup>2</sup> RSA 541-A: 33 (III), the New Hampshire Administrative Procedure Act, permits an agency to limit the scope of participation by an intervenor, however, the scope of intervention was not limited in this docket.

<sup>3</sup> Approximately two weeks prior to the adjudicatory hearings the TOL changed counsel. Counsel for the TOL was not present on the second day of the adjudicatory hearings. At no time did the TOL seek a continuance of the proceeding due to the change in counsel.

<sup>4</sup> Intervention by the Londonderry Neighborhood Coalition and the Londonderry School District was subject to the terms of the procedural schedule. No party moved for amendment of the procedural schedule.

<sup>5</sup> LSD is represented by the same counsel who represents TOL. TOL and LSD took a joint position with respect to each issue raised and this Report and Order shall refer jointly to these two intervenors as TOL/LSD.

days so that the parties could file additional materials.<sup>6</sup> Responses to the additional materials were required to be filed by November 16, 2000.<sup>7</sup> The Committee also issued a number of record requests to the Applicant during the course of the proceedings. The Applicant filed its responses to those requests on November 14, 2000. Thereafter TOL/LSD responded to the Applicant's responses to the record requests.<sup>8</sup>

### III. CRITERIA FOR PROJECT APPROVAL

Pursuant to the Declaration of Purpose set forth in RSA 162-H: 1, the public interest requires the Site Evaluation Committee ("Committee") to maintain a balance between the environment and the need for new energy facilities; to avoid undue delay in construction of any needed facilities; to ensure that operation of energy facilities is consistent with the state's least cost energy policy; and to ensure that the construction and operation of energy facilities is treated as a significant aspect of land-use planning in which all environmental, economic and technical issues are resolved in an integrated fashion.

Pursuant to RSA 162-H:16, IV, the Committee must review Energy Facilities such as the one proposed by Tennessee. In reviewing such applications the Committee must consider available alternatives, fully review the environmental impacts of the proposal, and consider all other factors relevant to the objectives of the statute. In order to issue a Certificate of Site and Facility the Committee must find that the:

- (a) Applicant has adequate financial, technical, and managerial capability to assure construction and operation of the facility in compliance with the terms and conditions of the Certificate.
- (b) Site and facility will not unduly interfere with the orderly development of the region with due consideration having been given to the views of municipal and regional planning commissions and municipal governing bodies.
- (c) Site and facility will not have an unreasonable adverse effect on esthetics, historic sites, air and water quality, the natural environment and public health and safety.
- (d) Operation of the site and facility is consistent with the state energy policy established in RSA 378:37.

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<sup>6</sup>TOL filed a letter accompanied by an engineering report from SEA Consultants on November 3, 2000.

<sup>7</sup> On November 16, 2000, LNC filed a letter and fourteen (14) documents derived from the Internet and generally concerning various investigations and proceedings regarding pipeline safety conducted by the United States National Transportation Safety Board (NTSB.)

<sup>8</sup> On December 1, 2000, TOL filed a letter, a copy of a press release from the United States Department of Transportation (USDOT) regarding new proposed federal regulations for pipelines transporting hazardous liquids, and a letter from the Town's consultant, SEA Consultants.

RSA 162-H:16.

The relevant inquiry under the statute, regarding environmental and other impacts, is whether the proposed facility will have an unreasonable impact on the natural environment, public health and safety, and the orderly development of the region. Whether the impacts are unreasonable depends on the assessment of the environment in which the facility will be located, an assessment of statutory or regulatory constraints or prohibitions against certain impacts on the environment, and determination as to whether the proposed facility exceeds those constraints or violates those prohibitions. *In Re: New England Electric Transmission Corp*, 67 NHPUC 910, p. 923; *Public Service Company of New Hampshire*, SEC Report Issued Dec. 15, 1992.

The Committee's certificating process subsumes separate permitting procedures under several other state statutes. Ordinarily, the Department of Environmental Services is responsible for excavating and dredging permits, air operating permits, wetlands permits, water quality certification, waste management permits, and a Section 401 water quality certificate, the Public Utilities Commission issues licenses for the crossing of public lands and water bodies, RSA 371:17; the Office of State Planning for a federal certificate of consistency under the Coastal Zone Management Act, the Department of Resources and Development for a natural heritage inventory permit, and the State Historical Preservation Office for a historic resources review; *See*, Application<sup>9</sup>, Section C, Permits. Because of the integrated process under RSA 162-H, such permits, if issued for the project, will be incorporated in the Energy Facility Certificate.

#### **IV. POSITION OF THE PARTIES**

##### **Applicant**

The Applicant filed its Application with attachments and exhibits with the Committee on February 14, 2000 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 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-use customer, AES Londonderry, LLC (AES).<sup>10</sup>

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<sup>9</sup> Reference to Tennessee's Application for a Certificate of Site and Facility shall be referred to as "Application" followed by a section or page number.

<sup>10</sup> 16.4 miles of the proposed pipeline will be in the State of New Hampshire.



In this application, Tennessee seeks to replace approximately 19.3 miles of 8-inch diameter pipeline that comprises part of the existing Concord Lateral. The project corridor traverses approximately 16.4 miles through Hillsborough and Rockingham Counties. A single existing right-of-way presently contains both an 8-inch and a 12-inch pipeline.

The Applicant submits that the facility will not unduly interfere with the orderly development of the region, will not have an unreasonable adverse effect on the environment and public health and safety, and that its operation is consistent with the state energy policy. The facility will fully comply with the applicable environmental standards and other guidelines of the New Hampshire Department of Environmental Services (NHDES) and other reviewing agencies. Based upon the foregoing representations the Applicant submits that the proposed project meets the criteria for the issuance of a Certificate of Site and Facility.

On May 26 2000, the Applicant filed written Pre-filed Direct Testimony of Mark Hamarich, a principal engineer with Tennessee Gas Pipeline Company, Robert Hass, Project Developer for the Londonderry 20" Replacement Project and Manager of Business Development for Tennessee Gas Pipeline Company, John Auriemma, Principal Environmental Engineer for Tennessee Gas Pipeline Company, Eric Kleinhenz, Principal Engineer and Pipeline Design Engineer for Tennessee Gas Pipeline Company, and Ricardo S. Lopez, Contact Property Rights Specialist at Tennessee Gas Pipeline Company. Thereafter the Applicant filed a number of supplemental filings.

### **Public Counsel**

Counsel for the Public engaged the firm of Haley and Aldrich to prepare a report entitled, "Report On Geotechnical Peer Review". The report contained two sections, Section One: Geotechnical Peer Review of Water-body/Wetland Crossings and Section Two: Blasting Issues. Exhibit A-27. In addition Public Counsel presented written pre-filed direct testimony of Richard P. Stulgis, professional engineer employed by the firm of Haley and Aldrich. Exhibit 27. Public Counsel and her experts urged the Committee to require certain conditions to a Certificate primarily dealing with environmental and construction blasting issues. Public Counsel was instrumental in obtaining certain agreements regarding some environmental and blasting issues during the course of the proceedings. *See*, Attachment A.

### **Londonderry Neighborhood Coalition**

The Londonderry Neighborhood Coalition presented pre-filed testimony of Valerie Mazzola, Kenneth Barton, Kelvin Kerns, Mrs Vinnie Samson, Richard Bielinski, Jr., and Denise Southmayd, along with certain exhibits. At the hearing Collette Gabbidon, Jacquie Kyleberg, Kenneth Barton, Valerie Mazzola and Roland Goudreault actually testified. Prefiled testimony from those not testifying was accepted by the Committee as public comments and made part of the record.

The issues raised by the Coalition members were concerns about potential hazards to the students and residents, routing of the new pipeline, the use of automatic valves, requirements for best available construction materials, and wetland impacts. Another concern was the restoration of the area impacted by construction. During the course of the proceedings, the LNC requested that the Applicant designate the area in proximity to the Londonderry schools as a Class IV pipeline location.<sup>11</sup> Additionally the LNC testimony raised issues about communications between the Applicants and the various residents in the vicinity of the pipeline. The LNC also joined in issues raised by TOL/LSD. Ultimately LNC argued that the Certificate should be denied because it unreasonably impacted the public health and safety.

### **Town of Londonderry and Londonderry School District**

The Town of Londonderry and the Londonderry School District did not present any witnesses or pre-filed testimony. After the conclusion of the adjudicatory proceeding TOL/LSD filed an engineer's report and follow up letter authored by its engineering consultant, SEA Consultants. TOL/LSD, joined by the LNC, through its engineering report raised a number of issues primarily concerning public health and safety concerns arising from the design, maintenance and operation of the pipeline. TOL/LSD argued that alternate routes should be designated for the proposed pipeline; that Class IV pipeline materials should be used in the vicinity of the Londonderry schools; that automatic valves should be employed; that the Keyspan lateral off of the proposed pipeline should be reviewed in this docket and that the Committee should require the construction of additional ancillary facilities. TOL/LSD also provided recommendations for integrity management testing and "pigging" of both the proposed pipeline and the existing 12 inch pipeline. A larger blast radius was requested by the TOL/LSD for well water testing. The TOL/LSD also requested conditions concerning summer time construction in school zones; emergency and evacuation planning, and odorant sampling. The TOL/LSD also requested that the Committee condition any certificate upon compliance review and approval of the pipeline construction by local authority and boards within the Town of Londonderry. Ultimately TOL/LSD also took the position that a certificate should not be granted due to unreasonable adverse impacts upon the public health and safety.

## **V. PRELIMINARY MATTERS**

Over the course of the proceeding, a number of preliminary issues were raised which must be addressed by the Committee. These matters stem, primarily, from post-hearing filings of various parties. During the course of the adjudicatory hearings, the intervenors, TOL/LSD and LNC made motions to extend the record in this case for a period of two weeks after the adjournment of the adjudicatory hearings. The motions, in part,<sup>12</sup> were based upon the fact that on October 18, 2000, the Applicant filed documents entitled "Tennessee Gas Pipeline Co., Supplemental Filing II." *See*, Exhibit A-72. This

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<sup>11</sup> *See*, discussion regarding 49 CFR §192 and pipeline class locations, *infra*.

<sup>12</sup> TOL/LSD also acknowledged that its late change of counsel contributed to its request for additional time.

filing included a document entitled "Petition for License and Approval to Construct and Maintain a Natural Gas Pipeline Under and Across Public Waters of the State of New Hampshire"; Supplemental Direct Pre-filed Testimony of John Auriemma; a document entitled "Shoreland Protection Act Request for Variance"; a document entitled "DES Draft Proposed Condition 6 and Tennessee's Response"; the Supplemental Direct Pre-filed Testimony of Mark Hamarich; a document entitled "Tennessee's Response to PUC Safety Report and Draft Conditions, 10/13/00"; the Pre-filed Direct Testimony of Roger Trettel with various attachments including a letter dated September 22, 2000, from John Cantor, New Hampshire Fish and Game Department regarding the brook floater mussel; the Pre-filed Direct Testimony of Paul Kretchmer with various attachments relating to blasting; and a document entitled "Tennessee's Response to Federal Energy Regulatory Commission Data Requests (Alternative Analysis)." Additionally, the Applicant submitted, in its supplemental filing, Municipal Roadway Open Cut Applications prepared on forms used by the Town of Londonderry. The filing was marked as Exhibit A-72.

The Intervenors sought to extend the record so that they could respond to this filing. The Applicant did not object to the motion to extend the record but did point out that all of the information contained in the supplemental filing, with the exception of the additional pre-filed direct testimony, was contained in other portions of the application and was simply provided in a different format in the supplemental filing. The Applicant also advised that the additional pre-filed testimony was developed as the Applicant determined what issues were in dispute and was filed for the purposes of allowing the Committee to "drill down" with the technical staff working for the Applicant. Transcript, Day 1, p. 24.

In response to the motion to extend the record, the Committee approved a motion that the record be expanded so that all parties would have ten days in which to file written responses to the information that was filed by the Applicant and that any responses to that information be filed within ten days thereafter. Transcript, Day 1, p. 84 - 85.<sup>13</sup>

Subsequent to the adjournment of the adjudicatory hearings, the Town of Londonderry filed the report of its engineering consultant, SEA Consultants, dated November 3, 2000, along with various attachments. On December 1, 2000, the Town of Londonderry also filed further comments from counsel and from their engineering consultant, SEA Consultants, Inc., regarding the Applicant's response to Record Requests from the Committee. On November 16, 2000, LNC filed responses including a letter from counsel as well as a number of exhibits. On or about November 14, 2000, the Applicant filed its response to record requests and exhibits from the EFSEC proceedings. Despite the flurry of post-adjudicatory hearing filings, no party has requested any additional hearings as a result of the filings. Thus, some of the materials received were received without the benefit of cross examination. The Applicant did not object to this process.

LNC and the Town of Londonderry/Londonderry School District have asserted that they have been denied due process and that the application should be deemed withdrawn because of the failure of

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<sup>13</sup> References to the transcript shall be by daily volume and page number.

the Applicant to file its responses to the record requests within 10 days. Additionally, the TOL/LSD and the LNC have moved to strike the testimony of Mark Hamarich concerning the lack of internal corrosion in the existing twelve inch pipeline. The basis of that motion is that Mr. Hamarich, as part of the answers to record requests, filed an Affidavit stating that there is “no record of internal inspection” of the existing twelve inch gas pipeline.

**1. Post-hearing filings.** The Committee finds that no party has been prejudiced by the filings which have occurred after the adjournment of the adjudicatory proceeding. LNC filed a lengthy letter from counsel on November 16, 2000 and attached numerous documents. It is clear from the record that the Town of Londonderry’s consultant, SEA Consultants, Inc., has had adequate opportunity to review the record requests and to file its comments on the answers to those requests. The comments of SEA Consultants are accepted and are considered part of the record by the Committee. Likewise, the exhibits filed by the LNC have been fully considered by the Committee. Additionally, the Committee notes that subsequent to all of the post-filing motions, no party deemed it necessary to request additional hearing time for cross-examination or additional presentation of evidence. Therefore, the Committee finds that all parties have had an adequate opportunity to review the application, present evidence, cross-examine the evidence of other parties, and provide argument and comments with respect to the application.

**2. The testimony of Mark Hamarich.** TOL/LSD and the LNC have requested that the Committee “strike from the record all statements of the Applicant that the twelve inch line has no internal corrosion”. The intervenors claim that there has been no proof of this conclusory statement. They rely upon the affidavit filed by Mr. Hamarich dated November 6, 2000, in which he indicates that he has reviewed the records of the company and that the existing twelve inch pipeline (Concord Lateral #2 Line #273C-100) “has no record of internal inspection.” The Committee denies the motion to strike the testimony.

The record reveals that, at no point in Mr. Hamarich’s testimony, did he ever indicate that any internal inspection had occurred on the existing twelve inch pipeline. Indeed, Mr. Hamarich indicated:

“every time we maintain or inspect the eight inch pipeline, over the 50 year history, there’s several times that the pipeline has 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.” Transcript Day 1, p. 161.

Subsequently, Mr. Hamarich did testify that there was no evidence of corrosion in either of the pipelines. That portion of the testimony reads as follows:

Q: So its 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.

Transcript, Day 1, p. 202. Mr. Hamarich further addressed the issue of internal corrosion during his cross-examination. When asked specifically if he could tell the Committee how many times the pipe had actually been cut and examined for internal corrosion, Mr. Hamarich testified, "I can't tell you exactly, no. But I can tell you that the gas stream is extremely dry and there is no indication of any liquids in this system." Transcript Day 1, p. 209. In short, the record does not reveal that Mr. Hamarich testified that the existing twelve inch pipeline had been internally inspected. There is no inconsistency between Mr. Hamarich's statements made during his testimony on October 23, 2000, and his affidavit of November 6, 2000. There is no reason to strike his testimony. The motion to strike testimony is therefore denied.

**3. Conditions requiring local control.** In post hearing filings TOL/LSD has asked the Committee to condition any Certificate that may be issued upon the Applicant's compliance with local regulations pertaining to such things as building permits and site plan review. *See*, Correspondence from Elisabeth C. Goodman, Esq., December 1, 2000. TOL/LSD advises the Committee that it need not determine whether RSA 162-H preempts local authority over the siting of energy facilities as a matter of law. TOL/LSD suggests that the Committee has the discretion to subject a certificate to local control. Nonetheless, TOL/LSD reserves its right "to contest the extent of EFSEC preemption of local permits." *Id.* at p. 4. The Applicant argues that RSA 162-H completely preempts local authority over the siting of energy facilities generally and natural gas pipelines specifically.

The legal argument presented by TOL/LSD has been presented previously. The New Hampshire Supreme Court addressed this very issue during the construction of the Seabrook Nuclear Power Plant. In *Public Service Company v. Town of Hampton*, 120 NH 68 (1982), the Court analyzed the former enabling legislation for this Committee, RSA 162-F . The language contained in the original RSA 162-F virtually mirrors the language of RSA 162-H as it presently exists. In *Public Service Company* the Court held:

Local regulation is repugnant to State law when it expressly contradicts a statute or is contrary to the legislative intent that underlies a statutory scheme. *State v. Driscoll*, 118 N.H. 222, 385 A.2d 218 (1978); *State v. Boisvert*, 117 N.H. 291, 371 A.2d 1182 (1977). The action by the defendant towns in this case is repugnant to RSA ch. 162-F because it is contrary to the legislative intent that all matters regarding the construction of bulk power plants and transmission lines covered by the statute be determined in one integrated and coordinated procedure

by the site evaluation committee whose findings are conclusive. See *State v. Boisvert*, supra at 292, 371 A.2d at 1183. By enacting RSA ch. 162-F, the legislature has preempted any power that the defendant towns might have had with respect to transmission lines embraced by the statute, and the actions by the defendant towns with regard to transmission lines is of no effect. *Id.*; See *State v. Hutchins*, 117 N.H. 924, 380 A.2d 257 (1977).

*Public Service Co. v. Town of Hampton*, 120 NH 71. RSA 162-H as it currently exists is no different, in any significant respect, than its predecessor, RSA 162-F. It embodies the Legislature's prerogative to preempt, completely, local control over the siting of energy facilities and more specifically natural gas transmission pipelines. Although the Committee must give due consideration to the views of municipal and regional planning commissions and municipal governing bodies, pursuant to RSA 162-H:16, IV (b), the siting of such facilities as well as the conditions which may govern a certificate are, as a matter of established law, solely within the province of this Committee.

The Committee does agree with TOL/LSD that, in some cases, the Committee may condition a certificate upon compliance with a local regulation. However, conditioning a certificate upon local building permit review or site plan review, *see, generally* RSA 674, would amount to an improper delegation of the Committee's authority and an abdication of its responsibilities. Even if such conditions were permissible the Committee would decline to require them in this case. Neither TOL nor LSD has presented any persuasive reason for the Committee to require that the certificate be conditioned upon local site plan or building permit review. The purpose of RSA 162-H is to provide a centralized and expedited process for consideration of applications to construct energy facilities (including natural gas pipelines) in a manner so that the facilities are "treated as a significant aspect of land use planning in which all environmental, economic and technical issues are resolved in an integrated fashion." RSA 162-H:1, I. To delegate any of the Committee's authority to the Town simply because the Town wishes to exercise such authority, *see*, Correspondence from Elisabeth C. Goodman, Esq., December 1, 2000, p. 5, would frustrate the very objectives which RSA 162-H seeks to serve. The request of TOL/LSD that any Certificate issued be conditioned upon compliance with local regulations is therefore denied.

## **VI. ANALYSIS AND FINDINGS**

In this application, Tennessee seeks to replace approximately 19.3 miles of 8-inch diameter pipeline that comprises part of the existing Concord Lateral. The project corridor traverses approximately 16.4 miles through Hillsborough and Rockingham counties. A single existing right-of-way presently contains both an 8-inch and a 12-inch pipeline. Consideration of this projects involves detailed analysis of the site-specific impacts as well as thorough consideration of the overarching questions of public safety, the natural environment, and orderly development of the region. RSA 162-H:16. The Committee has fully considered all of the issues raised by the Application and the evidence. In this Order the Committee will discuss, in detail, only those issues which require expanded analysis. For uncontested and less complex matters, the Committee will adopt by reference filings and conditions suggested or agreed to by the various parties. Pursuant to RSA 162-H:16,I, the Certificate of Site and

Facility will incorporate, without significant discussion, the certificate conditions recommended by the individual agencies that would, in the absence of RSA 162-H, have had jurisdiction over various portions of the application.

### **A. Requirements for an Energy Certificate**

At the outset the Site Evaluation Committee must determine whether the facility proposed by the Application requires a Certificate of Site and Facility. RSA 162-H:2, VII, defines “energy facility” as follows:

“Energy facility” means any industrial structure, other than bulk power supply facilities, as defined in paragraph II, that may be used substantially to extract, produce, manufacture, transport or refine sources of energy, including ancillary facilities as may be used or useful in transporting, storing or otherwise providing for the raw materials or products of any such industrial structure. This shall include but not be limited to industrial structures such as oil refineries, gas plants, equipment and associated facilities designed to use any, or a combination of, natural gas, propane gas and liquefied natural gas, which store on a site a quantity to provide 7 days of continuous operation at a rate equivalent to the energy requirements of a 30 megawatt electric generation station and its associated facilities, plants for coal conversion and onshore and offshore loading and unloading facilities for energy sources. Energy facility shall also include energy transmission pipelines, storage tanks, or any other facility which the Applicant or 2 or more petition categories as defined in RSA 162-H:2, XI request and the Committee agrees, or which the Committee determines requires a certificate, consistent with the findings and purposes set forth in RSA 162-H:1. Energy facility shall include electric generating station equipment and associated facilities only if they are designed for, or capable of, operation at a capacity of greater than 30 megawatts.”

The proposed facility will traverse 16.4 miles through the State of New Hampshire and will require the excavation and disturbance of the existing right of way and its impacts on the natural environment. The Committee finds that the scope of this project brings this application within the requirements of RSA 162-H requiring a Certificate of Site and Facility.

### **B. Available Alternatives**

RSA 162-H:16, IV, imposes on the Committee the obligation to consider available alternatives in addition to a full review of the environmental impact of the site, and other relevant factors bearing on whether the objectives of the statute would best be served by the issuance of the certificate.

Robert Haas, project manager for Tennessee, presented written testimony, that, as a general matter, when construction follows an existing pipeline right-of-way and the land is already disturbed, environmental and other impacts will be less severe than if the construction occurred in an area where a completely new route has to be established. Exhibit 12, Pre-filed Testimony of Robert Haas, p.10. Consequently, any alternative would have to present clear environmental advantages in order to be considered as a better option than using the existing right-of-way.

Mr. Haas testified that Tennessee evaluated 5 alternative options for the Project. These alternatives included: (1) a no build alternative; (2) increased compression on the existing Concord Lateral; (3) looping the pipeline; (4) constructing a new pipeline in a new location; (5) upgrading the existing pipeline (the preferred alternative). The preferred alternative was found by the Applicant to be the most feasible because the total area of disturbance would be far less than all other alternatives and because it is economically viable, employs the same right of way, and allows Tennessee to meet the Project's purpose and need. Exhibit 12, Pre-filed Direct Testimony of Robert Haas, p. 10; Transcript Day 1, p. 105-108.

Members of the Londonderry Neighborhood Coalition requested the applicant to move the pipeline a distance of 200 hundred feet from any school premises. The Applicant did not agree with the request, but voluntarily agreed to increase the area of Class III pipeline to include all areas within a 300 foot radius of all school property lines and Muldoon Park.

The Committee acknowledges that the Federal Energy Regulatory Commission has approved the proposed route. Exhibit A-91. FERC examined the alternative school routes suggested by LNC and that analysis of alternative locations adequately notes the advantages and disadvantages of several route modifications. Given the fact that the 12 inch pipeline will not be moved, FERC found it to be inappropriate to incur the increased environmental impacts associated with any of the alternatives.

During the course of the proceedings, SEA Consultants, the engineering consultants for TOL/LSD, proposed an alternate route for the pipeline right of way. This route is entitled "Alternate Route - West Londonderry" and is contained in Attachment 3 to the SEA Report dated November 3, 2000. Additionally, SEA has recommended a re-routing of the pipeline to the west of the Londonderry school complex. *See*, SEA Report (Tab 4), November 3, 2000. Similarly, during the course of the adjudicatory proceedings, the Committee requested that the Applicant conduct an additional alternative analysis concerning the Londonderry schools. That record request was complied with and the analysis was provided in the Applicant's filing of November 14, 2000, Response to Record Requests No. 18.

The Committee has considered the analysis of alternatives put forth by Tennessee; the route realignments with respect to the Londonderry and Pelham schools contained in the FERC data requests; the recommendations of SEA Consultants; and the additional alternatives analysis requested by the Committee. Based upon its review, the Committee finds that the pipeline as proposed in the Application is the alternative which best serves the objectives set forth in RSA 162-H. The Committee notes that each of the alternatives proposed over the course of the proceeding require new right of way acquisition and development. This would include additional analysis regarding the impact of each of the



alternatives on wetlands, wildlife and forests. The Committee finds that the impacts to water quality, the natural environment, and aesthetics supports the construction and installation of the replacement pipeline within the existing right of way as provided for in the Application. The Committee notes the existing right of way has been in use for many years as a corridor for two natural gas pipelines. The right of way will continue to house the existing twelve inch pipeline. The Committee sees no advantage to creating two rights of way containing natural gas pipelines within the affected towns. Additionally, the Committee does note that the siting of the 12 inch pipeline is not an issue which is presently before the Committee.

The Committee believes that the analysis used by FERC is instructive in this docket as well. Whenever possible the Committee believes that coordination between the federal and state permitting process is appropriate and contributes to a better analysis of siting alternatives. Thus, as part of this Certificate the Committee adopts the conditions set forth by FERC in its Order. Exhibit 91, p.18. *See*, Attachment D.

In summary, the route proposed by the Applicant will best serve the objectives of RSA 162-H and each of the state agencies represented on this Committee. Subject to the conditions discussed within this Decision and Order, the Committee will approve the route as proposed in the Application.

## **C. Statutory Criteria**

### **1. Applicant's Capability**

The first statutory factor the Committee must consider is whether the Applicant has adequate financial, technical, and managerial capability to assure construction and operation of the facility in compliance with the terms and conditions of the Certificate. RSA 162-H: 16, IV(a).

Tennessee has been in business since 1943. Through the operation of 14,700 miles of pipelines in the United States, the company has developed substantial experience and expertise in designing, constructing, operating and maintaining natural gas transmission facilities. Tennessee is a division of El Paso Energy Company. The Tennessee segment results for 1998 and 1997 earnings before interest expense and income taxes were \$358 million and \$318 million respectively. Operating revenues for the Tennessee segment in 1998 and 1997 were \$766 million and \$798 million respectively. Total property plant and equipment for the Tennessee segment at the end of 1998 exceeded \$2.4 billion. Tennessee has operated successfully in New Hampshire for nearly 50 years, first installing the 8" pipeline in 1951 and upgrading its facilities in 1981, 1985 and 1989. Exhibit A-12, Pre-filed Direct Testimony of Mark Hamarich, p. 4-5. At the Committee's request, the applicant also produced El Paso's 10 K annual report forms for the last two years which clearly demonstrate the financial capability of the Applicant. Exhibit A-85.

After review of the testimony and information submitted by the applicant, the Committee finds that the applicant has adequate financial, technical, and managerial capability to assure construction and operation of the facility in compliance with the terms and conditions of the Certificate. RSA 162-H: 16, IV(a).

## **2. Orderly Development**

RSA 162-H: 16, IV (b) requires the Committee to consider whether the proposed project will "unduly interfere with the orderly development of the region with due consideration having been given to the views of municipal and regional planning commissions and municipal governing bodies."

The proposed project involves the replacement of an existing 8 inch diameter gas pipeline (the Concord lateral) with a 20 inch diameter pipeline for the purpose of providing fuel to accommodate the AES facility as well as potential future growth to the region. The additional natural gas transmission capacity resulting from the proposed project is designed to meet growing demand for this cleaner fuel. The additional gas supply will result in benefits to the region including increased competition among energy suppliers, and anticipated air emissions and cost savings benefits to New Hampshire consumers.

The construction of the proposed project is consistent with local and regional zoning and development planning, will accomplish these benefits with minimal environmental impact and without imposing any significant burden upon municipal support services. The pipeline route which was established nearly 50 years ago, will not be significantly altered. The project will not unduly interfere with the orderly development of the region. In fact, the applicant asserts the project is consistent with and actually furthers the orderly development of the region. Exhibit 12, Pre-filed Testimony of Robert Haas, p. 11. The Committee agrees construction and installation of the replacement pipeline within the existing corridor will promote orderly development of the region.

The Applicant provided notice of its Application to Town Officials in each of the affected Towns: Windham, Pelham and Londonderry. The Applicant attended a number of meetings with various groups and officials from the affected region. *See*, Exhibit A 57. Transcript Day 1, p. 117. Additionally the Applicant offered a joint conservation commission workshop to each of the three affected Towns. *Id.* The Applicant also met with the Southern New Hampshire Regional Planning Commission, the Rockingham County Regional Planning Commission, and the Nashua Regional Planning Commission. Transcript, Day 1, p. 137 -140. A copy of the Application was filed in the Town Office of each of the affected Towns.

Neither the Towns of Pelham and Windham, nor the regional planning commissions objected to the Application or sought to intervene for any purpose in the siting proceedings before this Committee.

The Committee notes that the Applicant has indicated a willingness to issue and publish a traffic management plan. In order to ensure that construction of the project has a minimal adverse effect on traffic patterns, the Committee will require the Applicant to issue its traffic management plan at least 60 days prior to the commencement of construction. Additionally the Applicant shall comply with all

regulations and manuals published by the state Department of Transportation concerning construction in the area of state and/or public roads and highways.

During the adversary hearings the Committee took evidence from a number of Londonderry residents who were concerned that the Applicant has not adequately communicated with the community about the project. For instance, a complaint was heard that the FERC notice of proceedings was not published in local newspapers. Transcript Day 3, p. 290. The Committee finds that an open line of communication between the citizenry and the Applicant is necessary to ensure that the granting of the Certificate does not adversely impact the orderly development of the region. Therefore the Committee will issue two conditions concerning public notice of the status of the project. First, the Applicant shall periodically publish, in the Manchester Union Leader and the Derry News, display advertisements listing the Landowner 800 telephone number; the important features of the construction schedule; and, the traffic management plan. Second, the Applicant, Public Counsel, and Counsel for the Intervenors shall consult with each other for the purpose of selecting a Community Ombudsman (CO) and to publish guidelines for the CO. The CO shall be responsible for assisting individual members of the public from any of the affected communities in communicating with the Applicant over the course of the construction project. The CO shall also assist the Applicant in communicating with individuals who have raised complaints or concerns or have not otherwise been responsive to Applicant communications. In the event of disputes, the CO shall act as a neutral facilitator and shall not be required to adjudicate disputes but shall serve as a facilitator between the individual and the Applicant. The establishment of the CO position shall not, in any fashion, be interpreted to waive any claim, right, title, or process available to any individual or to the Applicant under statutory or common law. The Applicant shall bear all costs associated with the Community Ombudsman.

The Committee finds after considering the views of municipal and regional planning committees and governing bodies that the project as proposed in the Application and subject to the conditions contained in this Decision and Order is consistent with the orderly development of the region.

### **3. No Unreasonable Adverse Effect**

Before it may issue a Certificate pursuant to RSA 162-H:16, IV ( c ) the Committee must find that the site and facility will not have an unreasonable adverse effect on 1) aesthetics, 2) historic sites, 3) air and water quality, 4) the natural environment, and 5) public health and safety.

In a previous case involving this Applicant, the Committee has recognized that “there are few, if any human endeavors, which can be undertaken without some impact to the environment.” *Re: Tennessee Gas Pipeline, SEC 89-01, p. 8.* The statutory mandate of the Committee and the siting process as a whole is to “maintain a balance between the environment and the possible need for new energy facilities in New Hampshire.” RSA 162-H:1. Impacts upon the environment must be assessed and the Committee must then determine whether the likely impact is “unreasonably adverse.” This determination is informed by state and federal statutes and regulations as well as the technical expertise of the members of the Committee, each of whom represent a state agency with responsibilities which must be considered in the siting of energy facilities.

The Legislature has identified each of the areas where the Committee must assess impacts and determine whether the impacts are unreasonably adverse. The five categories set forth in RSA 162-H:16, IV(c) are discussed as follows:

**a. Impact on Aesthetics**

The construction of the proposed project will be in an existing right-of-way originally laid out over 50 years ago that has been used for a natural gas pipeline for the past 50 years. The proposed pipeline right of way, when completed, will look substantially as it did before the construction of the new pipeline. Due to its underground nature, the project will not have an unreasonable adverse effect on aesthetics. The few areas where the Applicant proposed to install above ground facilities will be located adjacent to existing natural gas facilities or where natural vegetative cover will provide screening. In Section 4.4 of the Application the Applicant presents a detailed discussion of potential impacts on aesthetics and existing land use, and how those impacts will be mitigated or eliminated.

No competing evidence was offered by any party concerning the impact of the project on aesthetics except for possible concerns expressed by an abutter regarding back yard trees; the Committee feels the concerns are best addressed in individual landowner negotiations regarding restoration measures.

The Committee finds the presence of the proposed energy facilities conforms to the visual and aesthetic characteristics of the area and does not impose any unreasonable impact to aesthetics.

**b. Impact On Historic Sites**

The Applicant's consultant, TRC Garrow Associates (TRC), consulted with Dr. Gary Hume of the New Hampshire Division of Historic Resources (NHDHR). Dr. Hume advised that the corridor crossed sensitive archaeological areas. He recommended that a field survey be conducted to identify undisturbed areas and to search for previously unidentified archaeological sites, and provided additional recommendations concerning field protocols. Application, Section 4.5, p. 4-65. TRC's archaeologists surveyed the area for cultural and historic resources found on or near the facility site. Tennessee's consultants identified 6 prehistoric archaeological resources. Four of the six prehistoric resources proved to be isolated finds, while the other two were identified as sites. Of the two sites identified, only one was considered eligible for the National Register of Historic Places (NRHP). Tennessee shall avoid that site.

Nine historic architectural resources were identified. Three of the resources are recommended as eligible for the NRHP, but the proposed project will have no adverse effect on these three resources. The remaining resources are considered ineligible for the NRHP. Exhibit 12, Pre-filed Testimony of John Auriemma, p. 20 - 21.

The Committee finds that there are no known archeological or historic resources that are

substantially impacted and the project will have no unreasonable effect on historic sites

**c. Impacts on Air and Water Quality:**

**i) Air Quality**

Because the project is an underground installation, it will not require the installation of any permanent air emission source. Air emissions will increase temporarily during the construction phase due to truck and other construction equipment activities. Such temporary emissions are not likely to increase air pollutant levels above existing ambient levels. In order to prevent fugitive dust emissions resulting from construction activities, the Applicant will wet road and construction areas in accordance with NH Code of Administrative Rules Env-A 1002, *Fugitive Dust*.

If, during the removal of the 8 inch pipe, Asbestos Containing Materials (ACM) are encountered the applicant shall handle such ACM in accordance with NH Code of Administrative Rules Env-A 1800, *Asbestos Management and Control*.

**ii) Water Quality**

Applicant's witness, John Auriemma in his pre-filed testimony, states, "because the project will be located within an existing natural gas pipeline right of way, the project will have only temporary impacts of the natural environment and water quality." Section 4.3 of the Application contains detailed discussions of those potential impacts and how they will be mitigated or eliminated. Tennessee claims to recognize that the highest potential for environmental impacts will occur during the construction phase of the project. Tennessee will draw on its substantial experience to ensure that impacts to sensitive resources, such as wetlands and wildlife habitat are reduced or eliminated to the greatest extent practicable. Tennessee has developed an Environmental Construction Plan (ECP) that describes the basic environmental construction techniques that Tennessee and its contractors will implement to protect the environment. Tennessee will minimize impacts to groundwater resources by using specific construction techniques concerning blasting, trench breakers, trench de-watering, equipment refueling, and hazardous material storage. *See*, Application Sections 4.2.7 & 4.3.1.1.2. In addition to standard water-body construction practices, the Applicant proposes to take specific steps to avoid or mitigate impacts to sensitive waters. Erosion and sedimentation controls will be installed to reduce downstream sedimentation during construction. Additionally, construction will be timed during low-flow periods (typically late summer/early fall in the project area) when aquatic organisms are not spawning. Standard construction techniques employed at water-body crossings are described in the Application, Section 4.2.7.12.

The Applicant also represents that hydrostatic test water will be withdrawn from Beaver Brook and will be returned to that source. The necessary quantity of hydrostatic test water will be identified and proper approvals will be requested prior to testing. The withdrawal and discharge of water will be conducted in such a manner as to minimize, if not negate, impacts to Beaver Brook and the adjacent area. Exhibit 12, Pre-filed Testimony of John Auriemma, p. 15 - 17.

Public Counsel's witness, Richard Stulgis, stated in his pre-filed testimony, Exhibit 27, that Tennessee's proposed method for constructing water-body crossings, with minor modification, reflect the current state of the practice. Exhibit 27, Pre-filed Testimony of Richard Stulgis, Question No. 6. He recommended that the following actions be taken by the Applicant:

A minimum of two test borings at the edge of intermediate water-body crossings, where open-cut construction is being considered as a crossing method.

Similar test (borings) and probing be completed in areas where crossings are proposed.

Examine prior records to identify expected subsurface conditions at wetland crossings in wetland areas.

Proper trenching excavation across water-body in the wet should be employed to minimize the duration of turbidity.

Applicant should use clean back run gravel to backfill trenches to facilitate back filling operations and to reduce the potential for siltation of the water body.

Erosion control measures be implemented which include silt curtains downstream of the crossing, sediment mats on the river bottom, hay bales and siltation fences.

The Department of Environmental Services, Water Division, reviewed those portions of Tennessee's application, dealing with the environment and accepted the Environmental Construction Plan except in the following areas where they have made specific recommendations: TGPsoil requirements, trench water discharge, pipe cleaning water discharge, timing of water crossings, construction of water bars, use of timber mats, timber harvesting practices, erosion and sediment practices, in-stream drilling and blasting practices, re-vegetation and soil restoration practices. In the exercise of its responsibilities the DES also issued Final Site Specific Conditions, Standard Dredge and Fill Permit Conditions, Section 401 Water Quality Certification Conditions and Shoreland Protection Conditions.<sup>14</sup>

It should be noted that the Applicant has agreed to comply with the vast majority of the Conditions suggested by the DES and Public Counsel. The Committee commends DES, Public Counsel and the Applicant<sup>15</sup> for their ability to professionally and sensibly address the issues. Nonetheless, there are certain areas where the parties remain in disagreement. The Committee will address those areas.

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<sup>14</sup> The Final DES Conditions also impact the Committee's consideration of impacts on the natural environment as set forth below.

<sup>15</sup> The intervenors did not take active positions with respect to water quality issues with the exception of the effect of construction blasting on water wells which is addressed *infra*.

## **1. Trench Water Treatment and Disposal.**

The Department of Environmental Services proposed a final condition which would require the Applicant to develop and submit to DES methods and procedures for discharging trench water in a manner that will not result in violations of state surface water quality standards. The Applicant, in its response and in the testimony of John Auriemma, Transcript Day 3, p. 22 - 25, has indicated that for the most part, it will use the methods prescribed in its environmental construction plan and those methods and practices will not violate the state surface water quality standards. However, the Applicant did indicate that there are some instances in which it would not be able to meet this requirement. At the hearing, Mr. Auriemma testified that sediment "cannot be removed in full from the trench water," Transcript Day 3, p. 26, 214, but that the use of the proposals contained within the environmental construction plan will minimize the impact. In response to the testimony and to the filings of the Applicant, DES revised its initial condition, indicating that the preservation of the state surface water quality standards should be accomplished through use of "engineered features such as settling basins or filter bags which are located in upland areas with a minimum of fifty feet of undisturbed vegetative buffer to wetlands and surface waters." *See*, Attachment B, DES Condition 12.

The Committee finds the final DES condition to be reasonable. This Committee will not condone violations of state surface water quality standards and finds that the methods suggested by DES in its final condition will best preserve the state's surface water quality along the right of way. Issues which arise at site specific locations may be adequately addressed through the DES Environmental Inspector (DES EI) provided for in DES Conditions 8 and 9 and through the compliance issue procedures set forth in the list of duties and responsibilities of the DES EI which is attached hereto.

## **2. Geotextile Diapers.**

Condition 17 of the Final DES Conditions requires that all timber mat bridges over perennial or intermittent streams shall have a geotextile diaper and be constructed over a flume (culvert). *See*, Attachment B. During the course of the adjudicatory proceedings, the Applicant objected to this condition. The Applicant alleges that geotextile fabric becomes a maintenance nuisance and increases the expense of the project.

The purpose of geotextile diapers, as required by the DES condition, is to protect the underlying stream from sediment and other materials dropping into the stream as equipment passes over the timber mat bridges. The Committee finds that the use of such diapers does protect perennial and intermittent streams from additional impacts and therefore approves Condition 17.

### **3. Mixing Zone and Monitoring Requirements.**

DES has proposed Condition 58 which creates a mixing zone for turbidity of surface waters along with certain turbidity monitoring requirements imposed upon the Applicant. *See*, Attachment B. The Applicant agrees with the need for a mixing zone in order to comply with the state's surface water quality requirements. However, the Applicant objects to the size of the mixing zone and the monitoring requirements. The Applicant suggests that the sampling/monitoring requirements are unnecessary and redundant, thereby causing an inefficient use of resources and logistical complexity. The Applicant also claims that such requirements compromise construction worker safety because of increased activity and personnel which are necessary to undertake the monitoring requirements.

The Committee finds that the mixing zone and monitoring requirements set forth at DES Condition 58 are, in fact, reasonable. The impact of increased turbidity on water quality and wildlife habitat can adversely affect the biological community of a water body. Increased turbidity could exterminate bottom dwelling organisms which serve as a source of food to fish in the stream. At least 3 of the affected water bodies are cold water fisheries which require a great degree of protection. Therefore, the Committee approves Condition 58 as written by DES.

The Committee has reviewed the testimony, evidence and comments, including the recommendations of the jurisdictional state agencies, and finds that if the project is constructed in the manner set forth in the ECP subject to the Final Conditions issued by DES and the conditions set forth in the Stipulation between the Applicant and Public Counsel it will not cause an unreasonable adverse impact on air or water quality. The Department of Environmental Services shall be responsible for monitoring the impacts of the project on air and water quality and reporting any unexpected adverse impacts or violation of any of the conditions contained within this Decision and Order or the Certificate of Site and Facility. *See*, RSA 162-H: 4, III. It is specifically noted that each of the environmental conditions pertain to the entire project, including the abandonment and removal of the 8 inch pipe.

#### **d. Impact on the Natural Environment**

Tennessee's witness, John Auriemma, an environmental scientist, stated that the construction and operation of the project will not have an unreasonable adverse effect on the natural environment, including water quality, because the project will be located in an existing right-of-way. There will only be temporary impacts. Section 4.3 of the Application contains discussion of those potential impacts and how they will be mitigated or eliminated. Exhibit 12, Pre-filed Testimony of John Auriemma, p. 15. Tennessee has developed an Environmental Construction Plan that describes the basic environmental construction techniques that Tennessee and its contractors will implement to protect the environment. Tennessee has based the specifications in the ECP on both its substantial experience and on guidelines and recommendations from the U.S. Army Corps of Engineers ("ACOE"), and the U.S. Department of Agriculture, The Natural Resources Conservation Service and the Federal Energy Regulatory Commission. Additionally, the Application meets or exceeds all conditions outlined in FERC's Erosion Control, Revegetation and Maintenance Plan and Wetland and Waterbody Construction and Mitigation



Procedures, except in areas where Tennessee requests a waiver from FERC conditions. Exhibit 12, Pre-filed Testimony of John Auriemma, p. 16.

The Department of Environmental Services scrutinized the application, written testimony and exhibits filed in this proceeding. The DES examination concluded that it should approve the activities within its (DES) regulatory jurisdiction subject to numerous terms and conditions which are included in its Final General Conditions, Site-Specific Permit Conditions, Standard Dredge and Fill Permit Conditions, Section 401 Water Quality Certification, and Shoreland Protection Conditions. DES also recommended a list of duties and responsibilities of NHDES Environmental Inspector.

The Committee has determined that all of the DES Final Conditions should be adopted as part of the Order and Certificate of Site and Facility in this matter. Nonetheless, we will address, individually, those specific impacts upon the natural environment which were in contest during the course of this proceedings.

### **1. TGP Soil Segregation.**

In its progress report and draft conditions dated August 29, 2000 and filed with the Committee, the Department of Environmental Services recommended that the Committee require the Applicant, during the course of construction of the pipeline, to segregate TGP soil in all areas. On October 13, 2000, the Applicant responded to this proposed condition offering to segregate TGP soil in all agricultural and wetlands areas as identified in the ECP, Application § 4. At the adjudicatory hearings, John Auriemma testified regarding the company's position with respect to TGP soil segregation. Mr. Auriemma is an employee of the Applicant and is the principal environmental coordinator for this project. Mr. Auriemma explained that segregating the TGP soil along the entire right of way would be inefficient, require extra work room and may cause safety problems for construction workers. As a result of Mr. Auriemma's testimony, DES, in its final terms and conditions submitted on November 29, 2000, proposed a compromise condition stating as follows:

11. TGP soil shall be stripped and stockpiled in all areas where grading and/or ditching is required. In addition to the requirements for the handling of TGP soil in agricultural and wetland areas as specified in the ECP and elsewhere in these conditions, Tennessee and its contractor shall make every reasonable effort to handle all soils so as to minimize the mixing of TGP soil with underlying soil and to replace soils with the TGP soil at or near the surface upon completion of final grading.

DES believes that its compromise condition will protect the environmental state of the right of way. The Committee agrees with the Department of Environmental Services and approves the compromise condition which is contained in the attached DES Conditions at Condition 11. The Committee recognizes that it is important to keep TGP soil segregated to the maximum extent possible so as to

preserve the seed bed, vegetation and natural state of the right of way.

## **2. Wet Crossings at 7 Water Bodies.**

The pipeline construction right of way requires the crossing of 37 water bodies. The Applicant proposes to construct the pipe and cross all but 7 of the water bodies “in the dry”. The benefits of a dry crossing include the prevention of excessive turbidity and sedimentation to in-stream habitats. Excessive turbidity and sedimentation have been determined to have a serious adverse effect on in-stream organisms. *See*, DES Response to Tennessee’s Comments, p. 3.

The Applicant wishes to pursue wet crossings at 7 locations. The Applicant suggests that wet crossings at these locations can be accomplished in less time and allow the use of back pressure from the stream waters to hold the trench intact during excavation. Transcript Day 3, p. 34-38. However, the Applicant does not appear to deny that wet crossings do cause sedimentation and turbidity in the stream. The Committee also notes that Condition 40 specifically provided that wet crossings may be authorized by DES at its discretion, pursuant to a site specific crossing plan submitted by the Applicant.<sup>16</sup>

The Committee finds that the case by case approach contained within the Final Conditions of DES is appropriate. Such an approach memorializes a preference for dry crossings, which will reduce the likelihood of increased sedimentation and turbidity, but also permit the Applicant some latitude to perform wet crossings if site specific conditions so require. The Committee finds this to be an adequate balance between the concerns raised by the Applicant and the need to keep sedimentation and turbidity impacts to a minimum.

## **3. Timber Mats and Geotextile Fabric.**

In Proposed Final Condition 35, DES has indicated that timber or natural fiber mats or timber corduroy shall be used to stabilize the working side of the right of way and wetlands with poorly drained soils or soils that are saturated. The condition also requires the Applicant to use mats and geotextile fabric where necessary to prevent excessive soil disturbances as determined by the DES EI. The Applicant, again, generally objects to the need to use geotextile fabrics. However, the Committee notes that Condition 35 only requires the use of such fabric where necessary to prevent excessive soil disturbance. Therefore, the Committee approves Condition 35.

The Committee has reviewed the recommendations of DES concerning environmental impacts and accepts them. It further finds that project as modified by the DES Final Conditions and the conditions contained in the Stipulation between the Applicant and Public Counsel will not have an

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<sup>16</sup>In fact, after inspecting each of the 7 sites, the DES has indicated that at 3 sites located at the Dunlop wetland and the Little Cohas Creek, the DES would approve wet crossings. *See* DES comments on Tennessee’s submittal dated October 13, 2000, p. 5.

unreasonable adverse impact on the natural environment. It is specifically noted that each of the environmental conditions pertain to the entire project including the abandonment and removal of the 8 inch pipe.

#### **4. Public Water Body Crossing License Pursuant to RSA 371:17.**

The pipeline corridor for the installation of the new 20 inch pipe crosses thirty seven (37) water bodies. RSA 371:17 requires a pipeline crossing the public waters or land of the state to be licensed by the Public Utilities Commission. A license is granted if the crossing may be exercised without substantially affecting the public rights in said waters or lands. RSA 371:20. Pursuant to RSA 162-H:7,VII, the Applicant in its Second Supplemental Filing before the Committee has submitted a request for the issuance of such licenses by the Committee. The Committee has reviewed the request and the proposed methods of crossing the water bodies, *supra*, and finds that the proposed crossings, if conducted in accordance with the environmental conditions contained in the Certificate, will not substantially affect public rights in the waters crossed. Therefore the Committee grants the licenses for each water body crossing.

#### **e. Impact on Public Health and Safety**

The Committee took extensive evidence from the Applicant, Public Counsel, and the Intervenor regarding the public health and safety aspects of the construction, operation, and maintenance of the proposed twenty inch replacement pipeline and the existing pipeline. At the outset, it should be noted that the federal government, through the United States Department of Transportation (USDOT), Office of Pipeline Safety (OPS), regulates pipeline safety and that the USDOT regulations are codified at 49 C.F.R. Part 192. The Application identifies the regulations and characterizes them as “minimum standards.” The Committee appreciates that Tennessee has agreed to exceed these minimum standards in several areas. The Committee will memorialize those agreements as conditions of the Certificate of Site and Facility. *See*, Attachment A and C. Of special note, the Applicant has agreed to extend the installation of Class III pipe over a three hundred foot radius beyond the property lines of Muldoon Park and the schools in Londonderry and Pelham (hereinafter referred to as the “Extended Class III Locations”). *See*, Attachment A. Additionally, the Committee recognizes that the company’s agreement to x-ray one hundred percent of the welds along the replacement pipeline exceeds the requirements of the DOT regulations. 49 CFR § 192.

As can be expected, a number of safety issues arise in the consideration of the construction and installation of a natural gas pipeline. The New Hampshire Public Utilities Commission, Safety Division (NHPUC-SD), submitted a report and proposed draft conditions for the Certificate. At the request of the Committee, the Administrator of NHPUC-SD, Richard Marini, testified regarding his report and proposed draft conditions. The Applicant, in response to the report and draft conditions agreed to the vast majority of the suggested conditions and they will become conditions of the Certificate of Site and Facility. However, the record does reveal differences among the parties with respect to certain safety conditions.

## **1. Pipeline Class Locations.**

The Intervenors have advocated for the use of Class IV pipeline materials in the vicinity of the Londonderry schools that are along the pipeline route. The Applicant objects to such a requirement. 49 C.F.R. Part 192.5(b)(4) defines a Class IV location as a location “where buildings with 4 or more stories above ground are prevalent”. The Committee finds that there are no Class IV locations along the pipeline route right of way. Additionally, there is no evidence in the record that the elevation of the school area to a Class IV location will provide any appropriate and necessary incremental increases in safety. Further, the Committee is reluctant to impose additional requirements upon the Applicant where the Applicant has already agreed to exceed the federal requirements by extending the Class III location around the schools for a distance of three hundred feet from the property lines.<sup>17</sup>

However, the evidence at the hearing demonstrated that third party negligence causes the largest risk to pipeline integrity. Transcript Day 2, p. 83. To reduce that risk, the Applicant shall install Class III pipe with a one inch concrete coating for structural protection from third party damage within all public roads and railroad rights of way. Exhibit A-62, Applicant's Response to NHPUC Safety Report and Draft Conditions, Tab B, ¶ 2; Transcript, Day 3, p. 59. Concrete coating adds an additional measure of protection from third party damage. In addition, the Applicant shall comply with all Department of Transportation regulations and manuals pertaining to construction in the area of state highways and roads.

The Committee notes that the presence of the existing pipeline has not caused the school districts along the pipeline route to refrain from construction near the corridor. Transcript Day 1, p. 135. In fact, the testimony indicated that TOL/LSD had recently approved and broken ground for the construction of a public kindergarten facility in proximity to the existing pipeline corridor. The Committee was also advised that at present there is no master plan for the use of the balance of the school district property in the Town of Londonderry. Exhibit A-90. Therefore, in an effort to minimize the potential for third party damage in the vicinity of all schools and Muldoon Park, the Committee will require the Applicant to install a one inch concrete coating to the pipeline throughout the Extended Class III Locations.

Additionally, to protect the pipeline from the possibility of third party damage in the area of the schools and Muldoon Park, the Committee will require, as a condition of the Certificate, that the Applicant install permanent markers delineating the area of both pipelines in each of the Extended Class III Locations. These markers shall be installed so that they are in the line of sight with each other. The Applicant shall consult with the appropriate Town and/or School officials regarding the placement of the markers so as to insure that they do not conflict with the present uses of the properties.

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<sup>17</sup> 49 C.F.R. §192.5(c)(2), requires that a Class II or III location “ends 220 yards (200 meters) from the nearest building in the cluster”. In the vicinity of the schools in Londonderry and Pelham, the Applicant has agreed to extend the Class III location to a three hundred foot radius from the property line of the schools. Thus, the Applicant is actually extending its Class III pipeline to areas which are not required under the federal regulations.

The Applicant shall fully participate in the Dig Safe program sponsored by the New Hampshire Public Utilities Commission. Likewise, the Commission urges both the Town of Londonderry and the Londonderry School District to require all employees and contractors to familiarize themselves with the Dig Safe Program and to comply with its requirements.

## **2. School Area Construction.**

The Intervenors have raised a concern that construction and replacement of the pipeline will necessarily take place in proximity to, if not on, school property. The construction schedule contained within the Application forecasts actual construction to commence in May, 2001 with the project being in service by October 1, 2001. Application § 4.7. Much of the construction will occur during the summer months when school use is traditionally minimized. However, the Committee recognizes that the school property and Muldoon Park are used to varying degrees over the course of the summer months. Therefore, the Applicant, as a condition of the Certificate, shall consult with officials from the towns and the school districts involved to determine the time period when the school and park facilities will be least used and when construction in these areas will cause the least disturbance to the use of school and park facilities. The Applicant shall perform its construction operations in those areas during this time period as long as it is consistent with the overall requirements of the project including the environmental and safety conditions contained herein.

## **3. Internal Inspection.**

The NHPUC-S D has proposed a condition requiring the Applicant to run a caliper pig before the pipeline is put in service and to perform a base line internal inspection by instrumented devices (i.e., smart pigs) within three years of completion of construction. Although the Applicant has agreed to run a caliper pig prior to putting the line in service, the Applicant has objected to any condition requiring internal inspection by instrumented devices. Comprehensive internal inspection of gas pipelines is generally accomplished through the use of instrumented devices known as "smart pigs". A smart pig "crawls" through the pipeline and can determine the condition of the pipeline, including the existence of internal corrosion, dents, gouges, and other imperfections within the pipe. Additionally, early intelligent pigging of the pipeline can establish a base line or thumb print for the pipeline. Such a base line or thumb print can be useful at the time of future inspections to determine if slight imperfections have evolved into actual defects in the pipeline. Transcript Day 3, p. 74; Report of SEA Consultants, p. 6.

The Applicant disagrees with this viewpoint and indicates that a base line picture of the pipeline is not necessary because the Applicant assumes that there will be no imperfections at the time of installation of the pipe. Transcript Day 2, p. 13.

Although the Committee acknowledges that Tennessee intends to subject the pipe to rigorous inspections at the mill and in the field, the Committee finds that the running of a caliper pig prior to putting the pipeline in service and to perform base line internal inspection by instrumented devices within three years is necessary to insure the integrity of the pipeline and public safety and to provide a base line

for future inspections of the pipeline. Therefore, the Committee adopts the condition suggested by the NHPUC-SD requiring the Applicant to run a caliper pig before the line is put in service and to perform a base line internal inspection by instrumented devices within three years of the completion of construction of the pipeline.

#### **4. Insuring the Integrity of the Existing Pipeline after Construction.**

Construction of the new replacement pipeline will involve the use of heavy machinery and blasting measures. These operations will occur in proximity to the existing 12 inch pipeline. Maintaining the integrity of the existing pipeline is necessary to ensure that the construction of the new pipeline does not have an adverse impact on the public health and safety. The Committee finds, that as a condition of the Certificate, the Applicant must be required to verify the integrity of the existing 12 inch pipeline. Therefore, the Applicant shall verify the integrity of the existing 12 inch pipeline within ninety days after the completion of construction of the replacement pipeline. It should be noted that the Committee understands that the most accurate method to verify the integrity of the existing line would be to employ an intelligent pigging device.<sup>18</sup>

In ordering the Applicant to verify the integrity of the existing line after the construction of the replacement pipeline, the Committee intends for the Applicant to insure that the existing pipeline was not adversely affected by the construction operations and that the existing line continues to comply with all applicable federal regulations.

#### **5. Integrity Management Testing Program.**

TOL/LSD in its Engineering Report asks the Committee to require the Applicant to adhere to a four year pigging plan and to propose an integrity management testing program. *See*, Report of SEA Consultants p. 6; Correspondence from SEA Consultants dated December 1, 2000, p. 2 -3. Both TOL/LSD and the LNC in post hearing filings drew the Committee's attention to the possible promulgation of new federal regulations concerning pipeline safety. The Committee notes that TOL/LSD relies primarily on proposed rules for hazardous liquid pipeline operators. The proposed rules do not affect natural gas transmission lines. Maintenance and safety requirements for the operators of interstate natural gas transmission lines are already in existence. The Applicant must comply with any new regulations as a matter of federal law. In the event that the USDOT should amend applicable regulations to require integrity management testing programs or any other maintenance, construction or safety related regulations, the Applicant is required to comply with such regulations. Therefore the Committee will not impose a specific integrity management testing program or four year pigging requirement. The USDOT regulations, in this regard, which the Applicant must follow, assure that adverse impacts to public health and safety will be avoided.

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<sup>18</sup>The Committee also understands that the only other way to verify the integrity of the existing pipe would be to perform hydrostatic testing which would be subject to the environmental conditions attached to this Report and Order and would temporarily take the 12 inch line out of service. The Committee notes, however, that hydrostatic testing will not identify areas of internal corrosion. *See*, Transcript Day 3, p. 72.

## **6. Natural Gas Heater And Ancillary Facilities (Keyspan Lateral).**

TOL/LSD, through its engineering report, suggests that certain ancillary facilities will be required for AES or Keyspan, formerly known as Energy North, to use the natural gas provided by the replacement pipeline which is the subject of this Application. Report of SEA Consultants p. 5. As noted elsewhere in this Decision the proposed pipeline which is the subject of this Application is subject to federal safety regulations in its design, operation and maintenance. There is no evidence in the record which indicates that the federal safety regulations require the Applicant to provide a natural gas heater or any other ancillary facilities as part of the design of the pipeline or for the proper operation or maintenance. Moreover, the Committee notes that the lateral pipeline connecting the AES facility to the proposed 20 inch pipeline was the subject of a prior proceeding before this Committee and is subject to the conditions contained in that Certificate of Site and Facility. *See*, Application of AES Londonderry, SEC No. 99-01.<sup>19</sup> The lateral connection is not before the Committee in this docket.<sup>20</sup> The conclusory statement by SEA Consultants that the lateral and its ancillary facilities should be reviewed as part of this Application is without factual or legal support.

The record does reveal that increased compression along the new pipeline may be required in the future if the Applicant was requested to provide service to a 467 megawatt plant in Bow or for additional service to local distribution companies. Transcript, Day 1, p.130 - 133. To the extent that such service requires sizeable additions to the pipeline the Applicant or its successor would be required to comply with the requirements of RSA 162-H:5, I.

The Committee finds that there is no factual or legal reason to require the approval of additional ancillary facilities as part of the consideration of the pending Application.

## **7. The Requirement to File Additional Specifications and Plans.**

In his report and draft conditions, Mr. Marini identifies the federal regulations at 49 C.F.R. §192 to be performance oriented. In essence, the regulations tell the Applicant what must be done but not how to do it. In order to insure compliance with the regulations, the NHPUC-SD has requested that various site specific plans, manuals, and specifications be submitted to the NHPUC-SD prior to commencement of construction. Specifically, the report of the NHPUC-SD and its draft conditions

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<sup>19</sup>The Committee notes that the Town of Londonderry was a party to the proceedings in the AES Docket and had the opportunity to fully participate in that Docket.

<sup>20</sup>In Docket 99-01, Application of AES Londonderry, the SEC required that the lateral from the Tennessee Gas Pipeline comply with all state and federal safety regulations and be subject to monitoring and approval of construction specifications by the New Hampshire Public Utilities Commission. *See also*, *Appeal of Londonderry Neighborhood Coalition*, 143 NH \_\_\_\_, 761 A.2d 426, 430 (N.H., Aug 18, 2000) (NO. 99-471)

require the following items to be submitted:

1. Comprehensive written specifications to be used in the construction of the facility.
2. Pipe design criteria with sufficient detail to indicate that toughness has been considered in the proposed pipe specifications.
3. Operations, maintenance and emergency plans.
4. An inspection plan.
5. A field change construction protocol.

The Applicant has agreed to provide each of the foregoing items to the NHPUC-SD. In order to facilitate proper review of these various plans, manuals and specifications, the Committee shall require, as a condition of the Certificate, that the Applicant provide the foregoing materials to the Safety Division of the Public Utilities Commission at least sixty days prior to commencement of construction. In addition the Committee requires the Applicant to provide plans for the safe abandonment of the eight inch line to the NHPUC-SD at least sixty (60) days prior to the removal of such line.

### **8. Auto Close Valves.**

The NHPUC-SD, as part of its original report and draft conditions, required the Applicant to employ the use of remote operated valves. Exhibit A-60, NHPUC-SD Report and Draft Conditions. However, through his testimony Mr. Marini clarified that automatic closing valves with appropriate redundancy features would provide the same level of safety. Transcript Day 3, p. 66. Similarly, the TOL/LSD Engineering Report recommended the use of automatic closing valves. Report of SEA Consultants p. 4-5. The Applicant has agreed to employ the use of auto close valves with redundancy features which operate without the use of natural gas along the pipeline. Transcript, Day 2, p. 209 - 210. Applicant's Response to NHPUC Safety Report and Draft Conditions p. 6. Such valves will automatically close sections of the pipeline upon detecting a change in conditions. The Applicant submitted a schematic drawing showing the location of the valves along the pipeline. *See*, Applicant's Response to Record Request No. 8. No evidence was offered by any party to dispute the location of the valves as proposed by the Applicant. The Committee finds that the use of automatic closing valves, as specified in the testimony of Mr. Marini and as designated in the response to Record Request No. 8, is necessary to avoid adverse impacts to the health and safety of the public and will require such valves as a condition of the Certificate.

### **9. Right of Way Crossings.**

The Committee has also noted that the pipeline in some areas crosses the rights of way of other



energy facilities such as electrical transmission lines. As part of the technical expertise brought to the Committee, it is aware that mechanical vegetation control is often used to maintain such rights of way. Therefore, as a condition of the Certificate the Applicant shall be required to notify the owners of all other rights of way along the pipeline corridor of the position of both the existing and the new pipeline and to coordinate with such other companies to ensure that the use of mechanical vegetation control measures does not cause a risk of third party damage to the natural gas pipeline.

### **10. Blasting Issues.**

Construction and installation of the pipeline may require blasting in some areas along the right of way, such as those with rock outcrops. Application, p. 4-19. In its Application, Tennessee has provided a comprehensive blasting plan. During the course of the proceedings, public counsel retained the consulting firm of Haley & Aldrich to conduct a geo-technical peer review of the project. The geo-technical peer review recommended a number of revisions to Tennessee's blasting plan. During the course of the adjudicatory proceeding, the Committee heard the testimony of Paul Kretchmer of Preiseis Company, an independent contractor for the Applicant, as well as the testimony of Andrew McKown of the Haley & Aldrich consulting firm. During the proceedings, Mr. McKown, Mr. Kretchmer, Public Counsel and the Applicant were able to agree to a series of stipulations regarding the conduct of blasting operations within the right of way during the construction and installation of the replacement pipeline. The highlights of those stipulations require Tennessee to conduct pre-blast and post-blast surveys for water quality and well yield of all water wells located within two hundred feet of the blasting operations. The site specific blasting plans must be submitted to the New Hampshire Department of Safety and the Public Utilities Commission Safety Division for review and comment. Additionally, the Applicant must provide updates of blasting progress and all field measurements to these agencies. The Applicant also agreed to maintain a four second peak particle velocity standard during blasting operations at the adjacent twelve inch pipeline. Despite these apparent agreements between Messrs. Kretchmer, McKown, and Public Counsel, the consulting company for TOL/LSD, SEA Consultants, continues to believe that a three hundred foot radius blast survey is appropriate. SEA Consultants indicate that a three hundred foot requirement is appropriate because the Applicant has indicated its intent to survey its own facilities within a three hundred foot radius of the proposed blasting sites.

The Committee accepts the testimony of Andrew McKown indicating that:

“since the company has agreed to implement a peak particle velocity limit of four inches per second at the pipeline, we agree with the expert, Mr. Kretchmer, that given that they hold that four inches per second limit at the pipeline, which is only ten or fifteen feet away, the vibration at any homes at a distance of two hundred feet would be extremely low”.

Transcript Day 3, p. 7. Thus, the Committee finds that the stipulation requiring pre and post- blast surveys within two hundred feet of the proposed blasting sites will adequately protect the public health and safety. Therefore, the stipulations contained in Attachment A shall be incorporated as part of the Certificate of Site and Facility.

After review and consideration of the testimony, evidence, comments, reports and other filings bearing upon the issues of public health and safety, the Committee finds that the Application subject to the Conditions specified by the NHPUC-SD and those conditions contained in the Stipulation between the Applicant and Public Counsel reasonably assures that there will be no adverse impact upon the public health and safety.

#### **f. Consistency with State Energy Policy**

RSA 378:37 provides in relevant part that it is the energy policy of the state "to meet the energy needs of the citizens and businesses of the state at the lowest reasonable cost while providing for the reliability and diversity of energy sources; the protection of the safety and health of the citizens, the physical environment of the state, and the future supplies of nonrenewable resources....."

This Committee has previously determined that construction of the AES Londonderry energy facility is consistent with the state energy policy because that project would "meet the need for new power in a fashion that fosters reliability, source diversity, environmental improvement, and lower costs for New Hampshire customers." Application of AES Londonderry, SEC 99-02. The primary purpose of the Londonderry Twenty inch Replacement Project is to provide firm gas transportation to the new AES facility. Thus, this project is also consistent with the state energy policy, unless the Committee finds that safety, health, environmental or other factors outweigh the energy benefits of the project. The Committee finds that, with the conditions set forth herein, the project is consistent with the state's energy policy.

The project submitted by the Applicant for a certificate of site and facility is consistent with the state's endeavor to provide a workably competitive wholesale electricity market, which in turn will serve to support retail electric competition at reasonable prices. The replacement of the 8" pipeline with a 20" pipeline will provide the needed natural gas capacity for a new and efficient electric generating plant, as well as creating infrastructure that would permit future additional capacity to meet future energy needs. The pipeline proposed in this Application will enable operation of the AES facility, which will help to ensure sufficient capacity in the region to meet growing electricity demand while fostering electric system reliability. In addition, growing natural gas demand in the future will call for increased transportation capacity, in which regard this pipeline may, in the future, play a part.

#### **CONCLUSION**

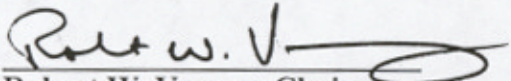
The Decision, Order and Certificate of Site and Facility address the vast majority of issues raised by the parties to this docket. The Committee has found that a Certificate of Site and Facility subject to the conditions contained herein and in the attachments shall issue. The Committee notes that no party to this docket filed requests for findings. To the extent that Public Counsel or any Intervenor has filed any motion or requested any relief which is not addressed in the Decision, Order or Certificate, such motion and/or relief is hereby denied. The Committee finds that the issuance of the Certificate serves the purposes of RSA 162-H and satisfies the statutory criteria.

The Site Evaluation Committee having reviewed the Application, the written and oral testimony, the exhibits, the post-hearing materials filed by the parties, as well as the comments from members of the public, finds that the granting of a Certificate of Site and Facility will have no unreasonable adverse effect on the environment or public health and safety. The Committee further finds that:

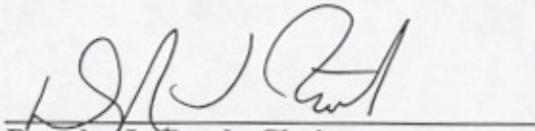
- (a) Applicant has adequate financial, technical, and managerial capability to assure construction and operation of the facility in compliance with the terms and conditions of the Certificate.
- (b) The facility will not unduly interfere with the orderly development of the region with due consideration having been given to the views of municipal and regional planning commissions and municipal governing bodies.
- (c) The facility will not have an unreasonable adverse effect on esthetics, historic sites, air and water quality, the natural environment and public health and safety.
- (d) Operation of the facility is consistent with the state energy policy established in RSA 378:37.

SO ORDERED:

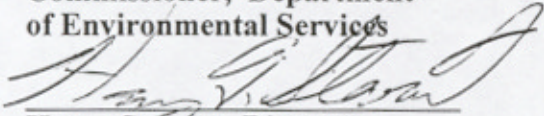
Dated: December 28, 2000



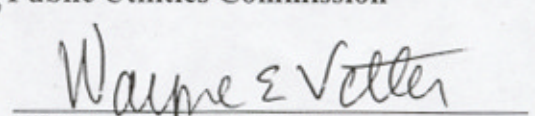
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Commissioner, Department  
of Environmental Services



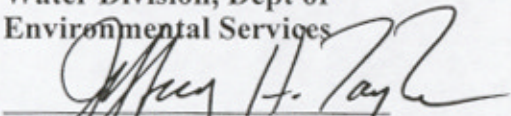
Douglas L. Patch, Chairman  
Public Utilities Commission



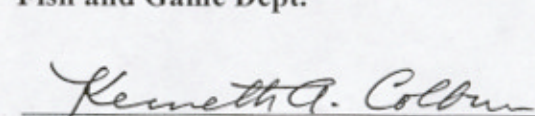
Harry Stewart, Director  
Water Division, Dept of  
Environmental Services



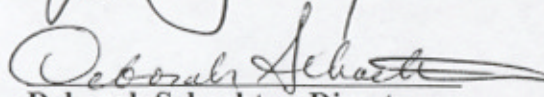
Wayne Vetter, Director  
Fish and Game Dept.



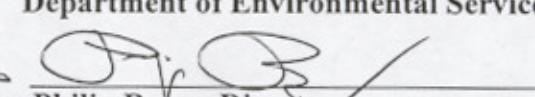
Jeffrey H. Taylor, Director  
Office of State Planning



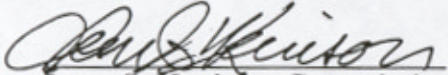
Kenneth A. Colburn, Director  
Air Resources Division,  
Department of Environmental Services



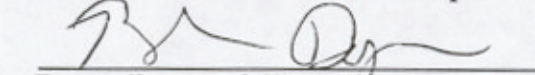
Deborah Schachter, Director  
Governor's Office of Energy &  
Community Services



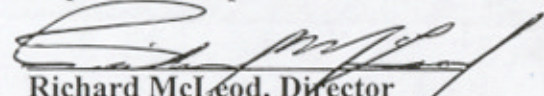
Philip Bryce, Director  
Division of Forest & Lands, Dept. of  
Resources & Economic Development



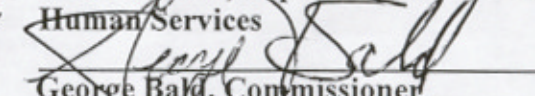
Leon S. Kenison, Commissioner  
Dept. of Transportation



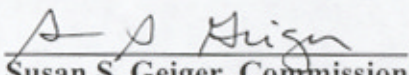
Brook Dupree, Office of Community &  
Public Health, Dept of Public Health &  
Human Services



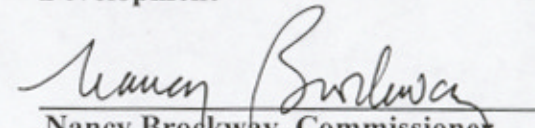
Richard McLeod, Director  
Division of Parks,  
Dept. of Resources & Economic  
Development



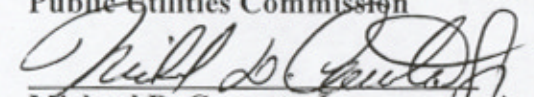
George Bald, Commissioner  
Dept. of Resources & Economic  
Development



Susan S. Geiger, Commissioner  
Public Utilities Commission



Nancy Brockway, Commissioner  
Public Utilities Commission



Michael D. Cannata Jr.  
Chief Engineer  
Public Utilities Commission

**ATTACHMENT A**  
**STIPULATION AGREED UPON BY PUBLIC**  
**COUNSEL AND THE APPLICANT**

**The State of New Hampshire  
Energy Facility Site Evaluation Committee**

**TENNESSEE GAS PIPELINE COMPANY**

**Application  
to the  
New Hampshire  
Energy Facility Site Evaluation Committee  
for a  
Certificate of Site and Facility**

**Docket No.00-01**

**STIPULATIONS BETWEEN PUBLIC COUNSEL AND THE APPLICANT  
WITH RESPECT TO CERTAIN CERTIFICATE CONDITIONS**

Tennessee Gas Pipeline Company (“TGP”) and Counsel for the Public stipulate to the following conditions regarding TGP's blasting and construction operations for the Londonderry 20" Replacement Project:

1. TGP will offer landowners, who own water wells located within 200' of the blasting operations, the opportunity to have pre-blasting and post-blasting surveys of water quality and well yield of their water wells conducted by agents of TGP.

2. Prior to conducting the Project's blasting operations, TGP will submit its site specific blasting plans to an inspector from the New Hampshire Department of Safety and the Public Utility Commission, Safety Division for review and comment. TGP will provide updates of blasting progress and all measurements obtained in the field.

3. During the Project's blasting operations, TGP will monitor, measure, and record results of ground heave of the 12" pipeline, which by agreement should not exceed 1 ". This information will be provided to the State inspector .

4. TGP agrees to backfill the trench with clean bank run gravel or crushed

stone compatible with waterbody areas at four (4) wet crossings (the three (3) Beaver Brook crossings and the pond at M.P. 103+6.98). TGP agrees to use the clean bank run gravel or crushed stone in any trench created during an open cut wet crossing.

5. TGP agrees to conduct two (2) test borings on each side and adjacent to any intermediate waterbody/wetland crossing where open cut construction is being considered as a crossing method.

6. TGP agrees to install stakes identifying the location of the 12" pipeline.

The stakes shall be placed five (5) feet away from the 12" pipeline toward the 20" pipeline trench.

7. TGP agrees to maintain a 4 "/second peak particle velocity standard during blasting operations at the adjacent 12" pipeline (or at a distance often (10) feet if blasting .is occurring away from the 12" pipeline) during all blasting. TGP agrees to monitor and record their compliance with this standard and provide this information to the State inspector.

8. TGP agrees to maintain ground vibration limits and air blast overpressure limits for adjacent structures consistent with the guidelines established by the U.S. Bureau of Mines. (R18507 with appendix B and R18485)

9. TGP agrees to notify NHDES EI and any other inspector required per the ECP at least one day prior to the initiation of in-stream blasting.

10. TGP agrees to utilize Class III pipe where the 20" pipeline is within 300 feet or less of school property (as it currently exists).

11. TGP will provide an evaluation of the environmental advantages/disadvantages of the removal/abandonment of the 8" pipe in New Hampshire to NHDES for those water or wetland areas where abandonment is proposed.

12. TGP will agree to include all stipulations outlined herein as specific conditions to the EFSEC Certificate.

13. To the extent there may be any conflict between the terms of these stipulations and the list of Agreements During the Course of the proceedings, filed October 30,2000, and revised November 14, 2000, this document controls.

Respectfully submitted,

TENNESSEE GAS PIPELINE

By Its Attorneys,

McLANE, GRAF, RAULERSON  
& MIDDLETON  
PROFESSIONAL ASSOCIATION

Date: November 16, 2000

By: /s/ \_\_\_\_\_  
Gregory H. Smith, Esquire  
15 North Main Street  
Concord, NH 03301  
(603) 226-0400

THE PUBLIC

By Its Attorneys,

OFFICE OF A TTORNEY GENERAL

Date: November 16, 2000

By: /s/ \_\_\_\_\_  
Marguerite L. Wageling, Esquire  
Capitol Street  
Concord, NH 03301  
(603) 271-3658



**ATTACHMENT B**  
**NH DES CONDITIONS**

**THE STATE OF NEW HAMPSHIRE  
ENERGY FACILITY SITE EVALUATION COMMITTEE  
(hereinafter "SEC")**

*In the Application of Tennessee Gas Pipeline Company,  
SEC Docket No. SEC 00-01*

**Final Terms and Conditions submitted by the  
New Hampshire Department of Environmental Services, Water Division  
November 29, 2000**

The New Hampshire Department of Environmental Services (hereinafter "DES"), pursuant to RSA 162-H:16, and subject to the determination of the SEC to issue a certificate of site and facility in this proceeding, hereby approves the activities within its regulatory jurisdiction described in the application for certificate filed by Tennessee Gas Pipeline Company (hereinafter "Tennessee") subject to the following terms and conditions:

**A. General Conditions**

1. For the purposes of these terms and conditions, Tennessee shall construct this pipeline in accordance with plans by Tennessee entitled "Londonderry 20" Replacement, Line No. 270B-100, FERC Submittal" dated 5/00 and received by DES on October 13, 2000 ("the approved plans"). The approved plans shall not be amended without the written approval of DES.
2. Tennessee shall comply with the provisions of the final Environmental Construction Plan ("ECP") dated August 18, 2000, except where the ECP conflicts with the conditions specified below, in which case these conditions shall control. The ECP shall not be amended or modified without the written approval of DES. The provisions of this ECP are hereby incorporated by reference as conditions subject to enforcement action under RSA 482-A, RSA 485-A, RSA 483-B, or RSA 162-H.
3. This approval is based upon a construction season of April 1 to November 1. Tennessee shall obtain the prior approval of DES for any construction activity outside of this timeframe.
4. DES shall be notified in writing within ten days of a change in ownership.
5. DES shall be notified in writing at least two weeks prior to the start of construction.

6. Unless specifically addressed within the terms and conditions below, all terms and conditions are to be interpreted to apply to removal of the existing 8-inch pipeline as well as installation of the proposed 20-inch pipeline.
7. Final "as-built" construction plans of the pipeline shall be submitted to DES no later than July 1, 2002. Any impacts to wetlands and uplands not currently reflected in the construction plans shall be subject to additional fees.
8. Tennessee shall pay all costs associated with performance of work by an independent environmental inspector ("DES EI") selected by and under contract to DES in connection with the construction of the pipeline authorized by the certificate. Such costs shall include without limitation all costs incurred by the inspector related to oversight of the wetlands, site specific, and surface water impacts from construction, evaluation of wetlands, site specific, and surface water conditions prior to, during, and following construction, preparation and presentation of any reports, including written reports, to DES. Additionally, such costs shall not exceed the equivalent of the customary and usual charges of one professional environmental engineer or similarly qualified person for the full-time oversight of the pre-construction, construction and post-construction phases of this project. The period of work for the DES EI shall be from one (1) month prior to pre-construction activities through completion of restoration activities. DES shall have the unilateral un-reviewable right to designate any employee, contractor or group of contractors as its EI. The duties of the DES EI are enumerated in the attached document entitled "List of Duties and Responsibilities of the DES Environmental Inspector."
9. Tennessee's environmental inspector for each construction spread shall maintain daily field notes of pipeline construction activities, including but not limited to, the following:
  - a. erosion control inspections;
  - b. inventory of all rare, threatened and endangered species ("RTE") not previously found within the work area prior to construction;
  - c. inventory of the size, nature, and location of all areas where communities of nuisance species are found within the proposed pipeline right-of-way prior to construction; and
  - d. results of turbidity monitoring.

These records shall be available at all times for inspection by the DES EI. Every two weeks the Tennessee EI for each construction spread shall file a summary report with DES and the DES EI. For purposes of this condition, copies of any FERC required summary reports shall suffice.

## **B. Site-Specific Permit Conditions**

10. Water quality degradation shall not occur as a result of the project.
11. TGPsoil shall be stripped and stockpiled in all areas where grading and/or ditching is required. In addition to the requirements for handling of TGPsoil in agricultural and wetland areas as specified in the ECP and elsewhere in these conditions, Tennessee and its contractors shall make every reasonable effort to handle all soils so as to minimize mixing of TGPsoil with underlying soils and to replace soils with the TGPsoil at or near the surface upon completion of final grading.
12. Tennessee shall develop and submit to DES methods and procedures for discharging of “trench water” in a manner that will not result in violations of state surface water quality standards. Discharge from dewatering of work areas shall be to engineered features such as settling basins or filter bags which are located in upland areas with a minimum of 50 feet of undisturbed vegetated buffer to wetlands and surface waters.
13. Water used to clean the inside of the pipeline, including that used to clean soil material from the pipeline, shall not be discharged in such a manner as to result in violations of state surface water quality standards.
14. Any access roads (temporary or permanent), additional workspace and/or pipe yards not shown on the plans submitted with the application shall be submitted to DES for approval prior to being altered and/or put into service.
15. All crossings of state surface water bodies shall be conducted at such times and seasons as approved by the NH Department of Fish and Game.
16. Water bars (slope breakers) shall discharge to well-vegetated or other area of stabilized soils.
17. Timber mat bridges over perennial or intermittent streams shall have a geotextile diaper and be constructed over a flume (culvert).
18. Timber harvesting shall be conducted in accordance with the ECP for the project. If the DES EI determines, after consultation with Tennessee's EI, that field conditions warrant implementation of additional timber harvesting practices not specified in the ECP, the DES EI may specify such practices provided they do not conflict with applicable FERC requirements and are timber harvesting practices specified in the guidance document "Best Management Practices for Erosion Control on Timber Harvesting Operations in New Hampshire" dated April 1996, as published by the New Hampshire Department of Resources and Economic Development.

19. Erosion and sediment control practices shall be as specified in the ECP for the project. To the extent that the DES EI determines, after consultation with Tennessee's EI that field conditions warrant implementation of additional erosion and/or sediment control practices not specified in the ECP, the DES EI may specify such practices provided they do not conflict with applicable FERC requirements and are specified in the guidance document, "Stormwater Management and Erosion and Sediment Control Handbook for Developing Areas in New Hampshire" dated August 22, 1992 as published by the Rockingham County Conservation District ("the Green Book"), or any later revisions to the Green book.
20. In-stream drilling and blasting shall be conducted in the dry. The DES EI shall be notified at least one (1) hour prior to the initiation of in-stream blasting.
21. The DES EI shall be notified no less than forty-eight (48) hours prior to initiating any crossings of Beaver Brook or its riparian wetlands.
22. Upland areas disturbed during construction shall be considered finally stabilized when all soil-disturbing activities have been completed and a uniform perennial vegetative cover with a density of 70% or more for unpaved areas has been established, except where DES approves an equivalent permanent stabilization.
23. A storm event as referenced in the ECP shall be one half inch of rainfall in any twenty-four (24) hour period.
24. All disturbed areas where pipeline installation has been completed, but which have not been finally stabilized, and which are not needed for access to areas where pipeline installation remains ongoing, shall be seeded and matted or hay/straw mulched not later than September 30 of the same year. All other disturbed and unstabilized areas existing or created on or after September 30 because of ongoing pipeline installation shall be stabilized in accordance with the ECP.

### **C. Standard Dredge and Fill Permit Conditions**

25. Payment of the balance due shall be made to the Department of Environmental Services ("DES") Wetlands Bureau on application fees for wetland review prior to construction. Based upon a total wetland impact of 38.38 acres, the total wetland fee to be assessed is \$66,873. Of this amount, \$63,473 has been paid to date, leaving a balance of \$3400.
26. Construction workspace in wetlands shall be limited to a 75-ft wide construction right-of-way, unless further authorization is received pursuant to Condition #27 below.

27. With the exception of additional temporary workspace (“ATWS”) depicted on the approved plans, all temporary workspace beyond the approved construction right-of-way shall be located at least 50 ft from the boundary of all wetlands and surface waters unless further written approval is obtained prior to use of the workspace from the DES Wetlands Bureau or, if during construction, the DES EI.
28. All wetlands within or adjacent to the right-of-way shall be re-flagged during pre-construction preparation in accordance with the United States Army Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1.
29. Impacts to wetlands for access roads are not permitted, unless specifically approved in writing by DES. In order to obtain consideration for improved access roads, Tennessee shall submit concurrently to the DES EI and DES a site-specific sketch of the proposed road improvement.
30. There shall be no above-ground facilities, new access roads, or pipe storage yards located in any wetland.
31. Tennessee shall notify the DES EI and DES in writing within twelve (12) hours of an erosion event resulting in sediment entering a wetland or surface water.
32. Appropriate siltation, erosion, and turbidity controls shall be installed where exposed soils are created by construction activities, particularly in areas adjacent to wetlands and surface waterbodies. Said controls shall be installed immediately following construction disturbance, shall be regularly inspected and maintained during construction, and shall remain until the area is stabilized. Temporary erosion controls shall be removed upon final stabilization of the right-of-way.
33. Clearing shall be in accordance with the "Best Management Practices for Erosion Control on Timber Harvesting Operations in New Hampshire." Timber, slash and/or chips shall be removed from wetland areas and shall not be buried in wetlands.
34. Wetlands shall be restored to their pre-construction conditions within the right-of-way, including restoration of original grades, within 30 days of grading, or if grading is not required within a particular wetland, then within 30 days of trenching. Equipment access may be left in place beyond this construction window if authorized in writing by the DES EI.
35. Timber or natural fiber mats or timber corduroy shall be used to stabilize the working side of the right-of-way in wetlands with very poorly drained soils or where soils are saturated to the surface during construction. Where necessary to prevent excessive soil disturbance as determined by the DES EI, mats and geotextile fabric shall underlie corduroy. Other methods to stabilize the right-of-way may be used with the approval of the DES EI. All materials shall be entirely removed from wetlands during restoration.

36. TGPsoil in wetlands shall be stripped and segregated from subsoil during ditchline excavation. Wetland TGPsoils shall be stockpiled separately from subsoils and shall be restored following backfill.
37. Stumping in wetlands or on the banks adjacent to water bodies shall be limited to the pipe trench line. Stumps outside the trench line that the DES EI, in consultation with the Tennessee EI, determines pose a hazard to the safe passage of equipment shall be ground down, or, if determined by DES EI and Tennessee's EI to be necessary, removed.
38. Blast rock from trench excavation shall be disposed of in the trench or shall be removed from the wetland. Blast rock shall not otherwise be buried or distributed on the surface of wetlands.
39. Stream crossings shall be conducted during low flow conditions typically experienced during June 1 through October 1. Crossings shall also be conducted in such a manner as to maintain flow in accordance with the US Department of Fish and Wildlife 1981 Interim Regional Policy for New England Stream Flow Recommendations on Aquatic Base Flows.
40. All crossings of streams flowing at the time of construction shall be completed in the dry ("Method 2") unless authorized in writing by DES pursuant to a site-specific crossing plan submitted by Tennessee.
41. Method 2 crossings shall be conducted in a manner so as to prevent interruption of stream flows. For perennial streams, flume pipes shall not be removed at any point during construction without the authorization of the DES EI.
42. All crossings of streams less than 10 feet wide shall be completed within 24 continuous hours, unless written authorization by the DES EI is granted (including removal of the existing pipeline, trenching, lowering-in, backfilling and restoration).
43. All crossings of streams greater than 10 feet wide will be completed within 48 continuous hours unless written authorization by the DES EI is granted or unless a site-specific plan is authorized by DES (including removal of the existing pipeline, trenching, lowering-in, backfilling and restoration).
44. Within 48 hours of the installation of the pipe, stream banks shall be fully restored to pre-construction contours and stabilized to the satisfaction of the DES EI. Stream banks may be stabilized using jute netting or other appropriate erosion control blanket, timber cribbing, and/or rock placed in a manner that replicates natural stream conditions. Stream banks shall be temporarily stabilized during construction using methods contained in the approved ECP.

45. Riprap bank stabilization shall not be installed without the prior, written approval of the DES Wetlands Bureau. Requests for riprap stabilization shall comply with NH Administrative Rule Wt 404, Criteria for Shoreline Stabilization.
46. Turbidity curtains, sediment mats, or other appropriate structural controls shall be installed, in accordance with the manufacturers recommendations, downstream of all "Method 1" (wet/open cut) crossings, except where the DES EI determines that such measures cannot effectively be used based on field conditions at the time of crossing.
47. Tennessee shall submit a plan to DES for review and approval identifying methods and a construction sequence specific to stream crossings where in-stream blasting is required.
48. An area fifty (50) feet wide from the TGP of the bank of all perennial streams larger than 20 feet from bank to bank shall be replanted using native shrub species.
49. The right-of-way shall be monitored for a minimum of three years following completion of construction and a written report documenting its condition shall be submitted to DES by September 30 for each monitoring period. Wetlands monitoring shall be completed in accordance with a plan authorized in writing by DES. The construction report shall include photographic documentation. DES shall require subsequent monitoring and may require corrective measures if the right-of-way is not adequately stabilized and restored.
50. Wetland restoration shall be considered unsuccessful if sites are newly invaded by nuisance species such as common reed or purple loosestrife during the first full growing season following the completion of construction. Tennessee shall work with DES in attempts to eradicate nuisance species newly found along the pipeline right-of-way during this same period.
51. Maintenance of wetlands areas within the pipeline right-of-way shall be conducted during frozen conditions or during the dry season, which normally occurs in late August.
52. There shall be no use of herbicides by Tennessee or its agents for vegetative maintenance in wetlands areas or adjacent to water bodies.
53. There shall be no stumping in wetlands or on the banks of water bodies during routine maintenance of the pipeline right-of-way.
54. There shall be no impacts to areas where state-listed threatened or endangered species or exemplary natural communities occur until such time as a specific mitigation plan is reviewed and approved in writing by DES, the NH Fish and Game Department and/or the NH Natural Heritage Inventory as appropriate.



#### **D. Section 401 Water Quality Certification**

55. Tennessee shall submit to DES, a schedule identifying the timing of all proposed impacts to surface waters of the state, no less than two (2) weeks prior to initiating any construction impacting surface waters greater than 10 feet wide, and no less than one (1) week prior to initiating any construction impacting smaller surface waters.
56. Hydrostatic testing on the pipeline shall be permitted in accordance with the terms and conditions for site specific impact contained herein. Tennessee shall provide no less than one (1) day notice to the DES EI prior to initiating any hydrostatic testing. In no event shall hydrostatic testing be initiated and conducted for a portion of the pipeline for which detailed information on the water discharge rate, velocity reducing devices, and site specific plans for the discharge locations have not been submitted to, reviewed and approved by DES. Tennessee must conduct an analysis to determine the fishery in the stream(s) to be affected by hydrostatic testing prior to DES approval. The New Hampshire Fish & Game Department must approve the methods of fishery analysis.
57. Hydrostatic testing of the pipeline shall be undertaken in compliance with all applicable United States Department of Fish & Wildlife criteria for instream aquatic base flows.
58. Tennessee shall maintain and protect all existing and designated uses of the surface waters impacted by construction of the pipeline during the entire period of construction. New Hampshire water quality standards, including specifically, but not limited to the standards for turbidity provided in New Hampshire Administrative Rules Env-Ws 1700, shall be maintained at all times during construction. For construction of the pipeline and any related activity in a stream or river, Tennessee is hereby granted a mixing zone for turbidity subject to the following conditions:
- a. All BMPs required under any DES or FERC condition shall be installed prior to any in-stream activity (other than the installation of BMPs), and shall remain properly installed and maintained at all times during in-stream activity.
  - b. For each crossing, Tennessee must either complete the crossing within twenty-four continuous hours, or maintain a zone of passage through the construction site for swimming and drifting organisms. The DES EI, in consultation with the Tennessee EI, may specify an appropriate passage mechanism based on field conditions.
  - c. For any water body crossed using a dry method, the mixing zone shall be defined as that volume of water subject to increased turbidity as a result of and immediately following installation and removal of water barriers, so long as increased turbidity levels are consistent with the following requirements.

Specifically, within four hours following water barrier installation and within twelve hours following water barrier removal, turbidity levels at a sampling point in the middle of the stream channel approximately 100 feet downstream of the crossing shall not exceed 10 NTUs above natural background levels. For each dry crossing, Tennessee will sample for turbidity every two hours during water barrier installation, and during trenching, pipe installation and backfilling. Samples for turbidity will also be taken one, two, four, eight and twelve hours following water barrier removal, until such time as turbidity levels equal 10 NTUs or less above background. The downstream passage of a continually decreasing amount of turbidity caused by installation or removal of a water barrier shall be considered part of the dry crossing mixing zone, so long as all other requirements of this paragraph are met.

- d. Prior to commencing any wet crossing, Tennessee shall obtain DES approval for a mixing zone for that crossing on a case-by-case and/or stream-type category basis. As required under Env-Ws 1707.01(b), to obtain such approval Tennessee must provide sufficient scientifically valid documentation to allow DES to independently determine that the proposed mixing zone will meet all criteria in Env-Ws 1707.02 with respect to that particular crossing or crossings.
- e. Tennessee shall monitor for turbidity in the field at each surface water crossed at the following locations: (1) at a point just upstream of all construction activity in order to establish a natural turbidity background level, and (2) at the locations specified in any applicable mixing zone. Monitoring shall occur at the times specified under subsection (c) or as approved under subsection (d), unless these times are modified in writing by DES. Turbidity sampling results shall be provided to DES as part of the periodic reports required under DES Condition 9. The DES EI shall immediately be notified of any results that are inconsistent with the requirements of this condition, or any applicable mixing zone.
- f. Tennessee will be responsible for providing appropriate after-the-fact compensatory mitigation for any impairment to designated beneficial uses of New Hampshire surface waters caused by exceedence of the 10 NTU turbidity standard outside of a designated mixing zone. Tennessee will also be responsible for providing compensatory mitigation for any adverse effects to fisheries within a mixing zone, to the extent that sampling demonstrates predicted effects which exceed a severity level of seven (7) on the scale developed by Charles Newcombe and Jorgen Jensen, North American Journal of Fisheries Management, November 1996, Model 1. Such mitigation shall be subject to the approval of DES and the N.H. Fish

& Game Department. For purposes of calculating harm to fisheries using Newcombe & Jensen's Model, a time weighted average for the duration of the sampling period of TSS will be used in the following equation from Model 1 in Table 3 in Newcombe:  $SEV = 1.0642 + 0.6068 (\log_e \text{ duration in hours}) + 0.7384 (\log_e \text{ sediment concentrations in mg/Litre})$ . Suspended solids may be estimated using total suspended solids (TSS) = 1.6 x NTU, or by directly measuring TSS concentration.

- g. DES will not seek penalties or fines, beyond the cost of mitigation under Condition 58.f, for any exceedence of the 10 NTU turbidity standard outside of a designated mixing zone for which Tennessee demonstrates all of the following to DES's satisfaction within thirty (30) days of the exceedence:
  - i. All requirements of Condition 58, other than the NTU standard, were met. This includes proper use of BMPs, sampling, and prompt notification of the DES EI;
  - ii The exceedence was not caused by the willful or negligent behavior of Tennessee or its agents;
  - ii Tennessee and its agents promptly took all reasonable steps to control, minimize, and correct the exceedence; and
  - iv The exceedence did not result in a severity level exceeding 7 under Newcombe and Jensen's model, or in any other severe impairment of a beneficial use of the affected surface water.

#### **E. Shoreland Protection Act, RSA 483-B**

59. All activity, including right-of-way maintenance, shall be in accordance with the New Hampshire Shoreland Protection Act, RSA 483-B, except where, pursuant to RSA 483-B:9(g), the Commissioner grants a waiver from these requirements.

THE STATE OF NEW HAMPSHIRE  
ENERGY FACILITY SITE EVALUATION COMMITTEE

In the Application of Tennessee Gas Pipeline Company  
SEC Docket No. 00-01

**LIST OF DUTIES AND RESPONSIBILITIES OF  
NHDES ENVIRONMENTAL INSPECTOR**

The New Hampshire Department Environmental Services (“DES”), pursuant to RSA 162-H:16, has approved with conditions the activities within its regulatory jurisdiction described in the application for certificate filed with the Energy Facility Evaluation Committee (“SEC”) by the Tennessee Gas Pipeline Company (“the applicant”). DES Condition 8 requires that the applicant pay all costs associated with the performance of work by an independent environmental inspector (“DES EI”) selected by DES in connection with the construction of the pipeline authorized by the certificate (“the Project”). This document will outline the duties and responsibilities of the DES EI, along with other information relevant to the inspection program.

**OVERALL OBJECTIVES**

The overall objectives of the DES EI program are:

1. To monitor all construction and restoration activities for compliance with DES permit requirements and to request immediate correction of any violations;
2. To keep DES informed of the status of all construction activities;
3. Where the DES conditions allow the use of one of several FERC and SEC approved construction techniques, to specify which technique should be used based on conditions in the field at the time of construction;
4. To coordinate with the applicant’s environmental inspector (“applicant’s EIs”) to ensure a consistent approach to the application of permit conditions and standards and to avoid conflicts between DES and FERC conditions; and
5. To provide interpretation of DES conditions and standards at the request of the applicant’s Chief Inspector (“CI”) and EIs.

## **QUALIFICATIONS**

The DES EI must possess the following capabilities:

- \_\_\_\_ Expertise in environmental science and civil engineering and a working knowledge of wetlands, terrestrial, and aquatic ecosystems, hydrology and basic agronomic principles, and rare, threatened and endangered species;
- \_\_\_\_ Environmental inspection experience in connection with construction of utilities and a working knowledge of utility construction and practical environmental mitigation techniques;
- \_\_\_\_ The ability to clearly understand and articulate state and federal permit conditions and effectively communicate with appropriate pipeline and agency personnel;
- \_\_\_\_ The ability to clearly document activities being inspected; and
- \_\_\_\_ Qualified support staff with appropriate facilities to carry out the duties and responsibilities set forth in this document in a timely manner.

## **DUTIES AND RESPONSIBILITIES OF FIRM**

- Provide one environmental inspector, satisfactory to DES, to work full time, when needed, on the project for the duration of the construction, cleanup, and site restoration. Inspector to work overtime as required to be on-site at all times that construction is ongoing.
- Provide a senior employee to be a point of contact with DES.
- Provide invoices and appropriate documentation of costs for DES approval.

## **DUTIES AND RESPONSIBILITIES OF INSPECTOR**

Prior to construction, become thoroughly familiar with:

- The applicant's Environmental Construction Plan (ECP) and other project documents (right-of-way description, alignment sheets, site-specific drawings, relevant plans, etc.);
- The terms and conditions of the FERC construction approval and certificate, the Army Corps of Engineers permit, the SEC decision, and the DES conditions for the project;
- The physical and geographical features of the project site in New Hampshire.

During construction:

- a. Have expertise in and be responsible for project oversight in the following areas: wetlands identification, protection and mitigation; protection of rare, threatened and endangered species; erosion and sediment control and stormwater management; control and cleanup of oil, gasoline and chemical spills; utility water body crossings; and disposal of construction debris.
- b. Provide continuous inspection of ongoing construction, cleanup and restoration.
- c. Interface with applicant's EIs and project inspectors.
- d. Provide construction reports to DES on a daily basis on DES approved forms.
- e. Determine compliance with DES construction conditions.
- f. Interpret DES construction conditions for specific application in the field.
- g. Consult with applicant's EIs on field decisions concerning stream crossings, based on field conditions at the time, including time of year, flow conditions, bank conditions, substrate, soils, slopes, etc.
- h. Document in writing and photographs and request correction of observed permit violations. In the event of an observed permit violation, DES may direct the applicant to sTGP a particular task for the purpose of bringing the activity into compliance with the applicable condition. See Compliance Issue Procedure below.
- i. Direct implementation of required corrections, maintenance and mitigation.
- j. Verify that all gaps in information existing at the time of certification have been adequately addressed.
- k. During construction, be available on a timely basis to make decisions promptly so as not to delay construction.
- l. Monitor construction activities and restoration compliance with the DES conditions.
- m. Maintain whatever records are necessary for the recording of observations, contacts, events, and possible non-compliance with DES permit conditions.

**PERIOD OF WORK**

The period of work for the DES EI shall be from one (1) month prior to pre-construction activities through completion of restoration activities. Following completion of construction, costs will be billed as they are incurred rather than on a full-time basis.

## **SELECTION PROCESS**

DES shall have the unilateral right to designate any employee, contractor, or group of contractors as the DES EI. DES will select a firm to provide EI services based on a nationally advertised search. Primary emphasis will be placed on the experience and qualifications of the firm responding. In the event the applicant chooses to present the names of up to three (3) qualified nominees for the DES EI no later than 120 days prior to commencement of construction, DES will make a good faith effort to evaluate and consider the applicant's nominees along with any other candidates DES deems to be qualified. DES shall be under no obligation to select one of the applicant's nominees as the DES EI.

## **COMPLIANCE ISSUE PROCEDURE**

DES shall develop a form for use by the DES EI for identifying areas needing particular attention and for reporting non-compliance with permit conditions. The form will be designed to document significant information, including the location, time, and date of the compliance issue, a brief overview of the problem, recommendations for corrective action, and description of any action taken. Provided below is a brief description of the reporting form to be used by the DES EI and the circumstances in which it is to be issued.

Recommended Action Report (RAR) - RARs will be completed to record a recommendation or request made by the DES EI to the applicant's EI regarding compliance issues. Generally, RARs will be issued when a recommendation was made that required a significant response by the applicant to avoid non-compliance or when a minor problem initially made as a verbal request was not addressed promptly. By way of example, situations requiring the issuance of an RAR may include: identification of areas requiring installation of erosion control devices, follow-up maintenance of erosion control devices, and stream and wetland areas requiring additional restoration work.

Before submitting an RAR, the DES EI will attempt to consult with the applicant's EI concerning the circumstance potentially requiring the issuance of the report and provide an opportunity for the applicant to take corrective measures. After applicant's failure to address the problem, the DES EI will complete the RAR and immediately provide copies to the applicant's EI, the CI, and the DES. If the applicant fails to comply with the specified permit condition as soon as practicable after receipt of an RAR, DES will consider the violation to be willful for purposes of any subsequent enforcement action.

## COMMUNICATION AND COORDINATION

The DES EI shall report directly to DES. The DES EI may contact DES staff as necessary regarding clarifications, intent and interpretation of conditions, and to discuss issues of compliance.

Notwithstanding the DES EI's direct reporting obligation to DES, it is expected that the DES EI will maximize communication and coordination with the applicant's EI as a proactive means of avoiding permit compliance problems. The primary point of contact among the applicant's personnel, for the DES EI, will be the applicant's EI. The DES EI will meet and interact with the applicant's EI, typically at the start of each day, to discuss site-specific issues relevant to the day's construction, address concerns or comments on the previous day's construction, prioritize inspection activities, and review and complete any compliance reports or forms. In addition, it is anticipated that the DES EI will interact during the workday, with the DES EI being available for interpretation of permit conditions or other relevant issues. Likewise, the DES EI may contact the applicant's EIs to track construction progress, pass along recommendations, etc.

**Chief Inspector** Communication with the applicant's CI will occur on an as-needed basis, generally to discuss critical problem areas or provide input regarding a particular situation. Whenever possible, the DES EI will coordinate questions and comments to project supervisors through the applicant's EI. In turn, the DES EI may be called upon by the applicant's CI or EI to provide further clarification on RARs and in those instances where rapid response regarding a proposed course of action is required.

**Craft Inspectors** When a potential non-compliance situation is observed at a particular location, and the applicant's EI is not readily available, the DES EI may communicate with the applicant's craft inspectors assigned to the operation. Such discussions should be followed up by a contact with the applicant's EI. Overall, however, the DES EI shall direct comments to the applicant's EI and CI and minimize direct communications with the applicant's craft inspectors.

**Contractor Personnel** Except for emergency situations, the DES EI will not interact directly with contractor personnel. Questions and comments posed the DES EIs by contractor personnel, as well as DES EI comments regarding contractor activities, shall be referred to the applicant's EI or relevant craft inspectors.

## PROGRAM IMPLEMENTATION

### **Pre-construction Activities**

The DES EI shall coordinate with DES and the applicant in the development and preparation of field data forms. The DES EI shall also review and become familiar with the project alignment



sheets, the ECP, and other planning documents. The DES EI and, if possible, DES staff shall attend all major pre-construction meetings for the project.

### **Pre-construction Field Survey**

Prior to the start of construction activities, the DES EI shall conduct a pre-hearing walkover and inspection of the flagged right-of-way. The purpose of the walkover is to allow the DES EI to become familiar with the field conditions and planned construction methods for a particular feature.

### **Routine Daily Activities**

Depending upon the phase of construction, DES EI routine daily activities will conform to the following general outline. Prior to commencement of construction, the DES EI shall emphasize becoming familiar with the alignment sheets, applicable permits and paperwork, and right-of-way through walkovers. During the first few weeks of the project construction, the DES EI shall place high priority on completing walkover surveys and monitoring sensitive area construction. As the project construction progresses, the majority of each day shall consist of conducting spot inspections and documenting ongoing construction, visiting important features, reviewing upcoming construction, and attending field meetings as requested.

The DES EI shall retain all log books, data forms, photographs, and other records in connection with the project and maintain detailed records such that a full post-construction report can be generated, if requested.

### **COSTS**

The applicant shall be responsible for all costs of the DES EI program as specified in DES condition #8. These costs shall not include any additional costs associated with testimony by the DES EI in administrative or court proceedings. If testimony becomes necessary, the DES EI will make appropriate personnel available to testify on behalf of DES under a separate contract.

**ATTACHMENT C**  
**SAFETY CONDITIONS AS AMENDED**

## **NH PUC-SD SAFETY CONDITIONS**

Condition 1: The Applicant shall submit comprehensive written specifications or standards to be utilized in the construction of each facility at least 60 days prior to the commencement of construction.

Condition 2: The Applicant shall submit data which demonstrates that consideration has been given to external pressures and loads in the enforcement where the pipeline is to be installed. The Applicant should determine the design factor for steel pipe based on the following class locations:

1. Class 3 within all public roads and railroad right-of-ways; Also 1" concrete coating for structural protection from third party damage within all public roads and railroad right-of-ways.
2. Minimum Class 2 across all unimproved roads, wetlands, and minor streams.
3. Class 3 across all rivers and streams that are licensed by the Public Utilities Commission as provided under RSA 371:17

Condition 3: The Applicant shall increase the design (safety) factor of the pipe by utilizing a minimum Class 3 location (or greater, depending on specific areas) where a dwelling is forty (40) feet or less from a pipeline.

Condition 4: The Applicant shall submit pipe design criteria with sufficient detail to indicate that toughness has been considered in the proposed pipe specification. Welding joints should be compatible and meet or exceed the toughness requirements specified for the parent material. 100 % of all welds shall be inspected by x-ray.

Condition 5: The Applicant shall demonstrate that the installation criteria include an analysis of potential areas earth movement and specify what construction techniques will be utilized. to prevent damage to the pipeline (i.e., padding machine, concrete coating, rock jacket, additional support padding, etc.).

Condition 6: The Applicant shall install automatic operated mainline valves with redundancy features in areas that will assure rapid shutdown of failed pipeline segment.

Condition 7: The Applicant shall run a caliper pig before the pipe line is put in service Also, the Applicant should perform a baseline internal inspection by instrumented devices (i.e., smart pigs) within three years of completion of construction.

Condition 8: The Applicant shall demonstrate that Operations, Maintenance, Inspection, Emergency Plans, and the plan for the safe abandonment of the eight inch pipe, have been developed for the proposed facilities and shall provide said plans to the NHPUC-SD at least 60 days prior to the commencement of construction.

Condition 9: The Applicant shall submit an inspection plan which identifies inspector qualifications, and outlines procedures to be employed to attain compliance with Part 192.305 at least 60 days prior to the commencement of construction.

Condition 10: Pipeline construction as it pertains to safety shall be inspected by qualified personnel, and reporting to the applicable State authority. The Committee hereby authorizes this responsibility to the Safety Division of the Public Utilities Commission. The Applicant shall be responsible to pay for the State of New Hampshire's share of the cost of inspection.

Condition 11: The Applicant shall develop a protocol which identifies decision makers, engineering factors, and approval process acceptable to the Committee before commencement of construction. The protocol shall be provided to the Safety Division at least 60 days prior to the commencement of construction.

Condition 12: The Applicant shall increase the design (safety) factor of the pipe by utilizing a minimum Class 3 location at all areas within 300 feet of any school property line and Muldoon Park (Extended Class Three Location). In the Extended Class 3 Locations the Applicant shall also use a one inch concrete coating around the pipe.

Condition 13: The Applicant shall verify the integrity of the existing twelve inch pipeline within ninety (90) days after the completion of construction of the replacement pipeline. The Applicant must insure that the existing 12 inch line was not adversely effected by construction activity and that it continues to comply with all applicable federal regulations.

Condition 14: The Applicant shall install permanent markers delineating the area of the pipeline throughout all of the Extended Class 3 Locations. The markers should be placed in the line of sight from each other. The Applicant shall coordinate the placement of such markers with appropriate Town and School District officials so that the markers do not interfere with the normal use of the school and park facilities.

Condition 15: The Applicant shall comply with all applicable federal and state regulations governing the design, operation and maintenance of the pipeline.

Condition 16: The Applicant shall notify the owners of all other rights of way along the pipeline corridor of the position of both the existing and the new pipeline and to coordinate with

such other companies to ensure that the use of mechanical vegetation control measures does not cause a risk of third party damage

**ATTACHMENT D  
FERC CONDITIONS**

## **Appendix to FERC Order**

### **Environmental Conditions**

1. Tennessee shall follow the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests) and as identified in the environmental assessment (EA), unless modified by this Order. Tennessee must:
  - a. request any modification to these procedures, measures, or conditions in a filing with the Secretary of the Commission (Secretary);
  - b. justify each modification relative to site-specific conditions;
  - c. explain how that modification provides an equal or greater level of environmental protection than the original measure; and
  - d. receive approval in writing from the Director of the Office of Energy Projects (OEP) before using that modification.
2. The Director of OEP has delegated authority to take whatever steps are necessary to ensure the protection of all environmental resources during construction and operation of the replacement pipeline, and activities associated with abandonment of the replaced pipeline. This authority shall allow:
  - a. the modification of conditions of this Order; and
  - b. the design and implementation of any additional measures deemed necessary (including stop work authority) to assure continued compliance with the intent of the environmental conditions as well as the avoidance or mitigation of adverse environmental impact resulting from project construction and operation.
3. Prior to any construction, Tennessee shall file an affirmative statement with the Secretary, certified by a senior company official, that all company personnel, environmental inspectors, and contractor personnel will be informed of the environmental inspector's authority and have been or will be trained on the implementation of the environmental mitigation measures

appropriate to their jobs before becoming involved with construction and restoration activities.

4. The authorized facility location(s) shall be as shown in the EA, as supplemented by filed alignment sheets. As soon as they are available, and before the start of construction, Tennessee shall file with the Secretary any revised detailed survey alignment map/sheets at a scale not smaller than 1:6,000 with station positions for all facilities approved by this Order. All requests for modifications of environmental conditions of this Order or site-specific clearances must be written and must reference locations designated on these alignment map/sheets.
5. Tennessee shall file with the Secretary detailed alignment map/sheets and aerial photographs at a scale not smaller than 1:6,000 identifying all route realignments or facility relocations, and staging areas, pipe storage yards, new access roads, and other areas that would be used or disturbed and have not been previously identified in filings with the Secretary. Approval for each of these areas must be explicitly requested in writing. For each area, the request must include a description of the existing land use/cover type, and documentation of landowner approval, whether any cultural resources or federally listed threatened or endangered species would be affected, and whether any other environmentally sensitive areas are within or abutting the area. All areas shall be clearly identified on the map/sheets/aerial photographs. Each area must be approved in writing by the Director of ORP before construction in or near that area.

This requirement does not apply to minor field realignments per landowner needs and requirements which do not affect other landowners or sensitive environmental areas such as wetlands.

Examples of alterations requiring approval include all route realignments and facility location changes resulting from:

- a. implementation of cultural resources mitigation measures;
- b. implementation of endangered, threatened, or special concern species mitigation measures;
- c. recommendations by state regulatory authorities; and



- d. agreements with individual landowners that affect other landowners or could affect sensitive environmental areas.
6. Within 60 days of the acceptance of this certificate and before construction/abandonment begins, Tennessee shall file an initial Implementation Plan with the Secretary for review and written approval by the Director of OEP describing the Tennessee will implement the mitigation measures required by this Order. Tennessee must file revisions to the plan as schedules change. The plan shall identify:
- a. how Tennessee will incorporate these requirements into the contract bid documents, construction contracts (especially penalty clauses and specifications), and construction drawings so that the mitigation required at each site is clear to onsite construction and inspection personnel;
  - b. the number of environmental inspectors assigned per spread, and how the compar
  - c. company personnel, including environmental inspectors and contractors, who will receive copies of the appropriate material;
  - d. what training and instructions Tennessee will give to all personnel involved with cc
  - e. the company personnel (if known) and specific portion of Tennessee's organization having responsibility for compliance;
  - f. the procedures (including use of contract penalties) Tennessee will follow if noncompliance occurs; and
  - g. for each discrete facility, a Gantt or PERT chart (or similar project scheduling diagram), and dates for:
    - i. the completion of all required surveys and reports;
    - ii. the mitigation training of onsite personnel;
    - iii. the start of construction; and
    - iv. the start and completion of restoration.
7. Tennessee shall file updated status reports prepared by the environmental inspector with the Secretary on a biweekly basis until all construction-related activities, including restoration and initial permanent seeding, are complete. On request, these status reports will also be provided to other federal and state agencies with permitting responsibilities. Status reports

shall include:

- a. the current construction status of the Londonderry 20" Replacement Project, work planned for the following reporting period, and any schedule change
  - b. a listing of all problems encountered and each instance of noncompliance observed by the environmental inspector(s) during the reporting period (both for the conditions imposed by the Commission and any environmental conditions/permit requirements imposed by other Federal, state, or local agencies);
  - c. corrective actions implemented in response to all instances of noncompliance,
  - d. the effectiveness of all corrective actions implemented;
  - e. a description of any landowner/resident complaints which may relate to compliance with the requirements of this Order, and the measures taken to satisfy their concerns; and
  - f. copies of any correspondence received by Tennessee from other Federal, state or local permitting agencies concerning instances of noncompliance and Tennessee' response.
8. Tennessee must receive written authorization from the Director of OEP before commencing service to AES Londonderry, LLC. Such authorization will only be granted following a determination that rehabilitation and restoration of the right-of-way is proceeding satisfactorily.
9. Within 30 days of placing the certificated facilities in service, Tennessee shall file an affirmative statement with the Secretary. certified by a senior company official:
- a. that the facilities have been constructed in compliance with all applicable conditions, and that continuing activities will be consistent with all applicable conditions; or
  - b. identifying which of the certificate conditions Tennessee has complied with or will comply with. This statement shall also identify any areas along the right-of-way where compliance measures were not properly implemented, if not previously identified in filed status reports, and the reason for noncompliance.

10. Tennessee may use the variations recommended for approval in section B.2. of the EA.
11. Before construction, Tennessee shall file with the Secretary the location by milepost of all private wells within 150 feet of pipeline construction activities. Tennessee shall conduct, with the well owner's permission, pre-and post-construction monitoring of well yield and water quality for these wells. Within 30 days of placing the facilities in service, Tennessee shall file a report with the Secretary discussing whether any complaints were received concerning well yield or water quality and how each was resolved.
12. If underwater blasting is required, Tennessee shall coordinate detonation plans with state biologists, to determine if methods (such as using delayed detonation and air bubble curtains) to reduce the total acoustic shockwave intensity to the greatest extent possible, would be appropriate, based on site-specific conditions. Tennessee shall conduct pre- and post-detonation monitoring, and submit fish kill reports to the pertinent state fisheries departments, if kill reports are requested by the state.
13. Tennessee shall coordinate with the Division of Forests and Lands (New Hampshire National Heritage Inventory) and the Pelham Conservation Commission to determine what mitigation measures are needed, if any, to minimize impact on the bird's-foot-violet, swamp azalea, prostrate tick-trefoil, river birch, and fringed gentian and file the results with the Secretary.
14. Tennessee shall coordinate with the New Hampshire Fish and Game Department (Nongame and Endangered Species Program) to determine the need for surveys for the brook floater in the vicinity of the crossing of Beaver Brook at MP 104-0.65 prior to construction. If surveys are conducted and this species is found, Tennessee shall consult with the Fish and Game Department to develop appropriate mitigation to avoid or minimize adverse effects on this species. Tennessee shall file the results with the Secretary.
15. Tennessee shall consult with the Massachusetts Division of Fisheries and Wildlife and the Massachusetts Natural Heritage and Endangered Species Program to evaluate whether potential habitat for the state-listed American bittern, least bittern, or northern harrier could be affected, and how these species could be protected Tennessee shall file the results with the Secretary.
16. Tennessee shall develop and implement an environmental complaint resolution procedure. The procedure shall provide landowners with clear

and simple directions for identifying and resolving their environmental mitigation problems/concerns during construction of the Londonderry 20" Replacement Project and restoration of the ROW. Prior to construction, Tennessee shall mail the complaint procedures to each landowner whose property would be crossed by the project. In its letter to affected landowners, Tennessee shall:

- a. provide a local contact that the landowners should call first with their concerns; the letter should indicate how soon a landowner should expect a response;
- b. instruct the landowners that if they are not satisfied with the response, they should call Tennessee's Hotline, the letter should indicate how soon to expect a response; and
- c. instruct the landowners that, if they are still not satisfied with the response from Tennessee's Hotline, they should contact the Commission's Enforcement Hotline at (877)303-4340.

In addition, Tennessee shall include in its weekly status report a copy of a table that contains the following information for each problem/concern:

- \* the date of the call;
- \* the identification number from the certificated alignment sheets of the affected property;
- \* the description of the problem/concern: and
- \* an explanation of how and when the problem was resolved, will be resolved, or why it has not been resolved.

17. Tennessee shall defer construction of the project in New Hampshire until Tennessee has filed the SHPO's comments, and the Director of OEP has notified Tennessee in writing that it may initiate construction.
18. Tennessee shall provide copies of the appropriate alignment sheets and photographs recording the details of the preconstruction appearance of historic stone walls as part of the implementation plan which is filed before construction begins.
19. Tennessee shall conduct with the landowner's permission, pre- and post-

construction monitoring of residences and other structures within 150 feet of blasting which are used for public occupancy to determine if there has been any significant impact to those structures. Within 30 days of placing the facilities in service, Tennessee shall file a report with the Secretary discussing whether any complaints were received and how each was resolved.

20. Tennessee shall consult with the school district to determine the time period during which there will be the least use of school facilities and the least disturbance to school use. Tennessee will conduct the replacement on school property during this time period as long as it is consistent with the overall requirement of the project.
21. If dusty conditions prevail during the construction period, Tennessee Gas shall use proper dust suppression techniques to minimize fugitive dust from construction work areas.

**ATTACHMENT E  
CONDITIONS CONCERNING  
ORDERLY DEVELOPMENT**

## CONDITIONS CONCERNING ORDERLY DEVELOPMENT

**Condition 1:** The Applicant shall prepare and publish a traffic management plan for the construction of the project. The Traffic management plan shall be filed with the Committee and served upon the service lists at least 60 days prior to the commencement of construction.

**Condition 2:** The Applicant shall comply with all regulations and manuals published by the State of New Hampshire Department of Transportation concerning construction near state and public highways and roads.

**Condition 3:** The Applicant shall periodically publish on a monthly basis, in the Manchester Union Leader and the Derry News, display advertisements, listing the Landowner 800 telephone number; the important features of the construction schedule and traffic management plan.

**Condition 4:** The Applicant, Public Counsel, and Counsel for the Intervenors shall consult with each other for the purpose of selecting a Community Ombudsman (CO) and to publish guidelines for the CO. The CO shall be responsible for assisting individual members of the public from any of the affected communities in communicating with the Applicant over the course of the construction project. The CO shall also assist the Applicant in communicating with individuals who have raised complaints or concerns or have not otherwise been responsive to Applicant communications. The CO shall act as a neutral facilitator and shall not be required to adjudicate disputes but shall serve as a facilitator between the individual and the Applicant. The establishment of the CO position shall not, in any fashion, be interpreted to waive any claim, right, title, or process available to any individual or to the Applicant under statutory or common law. The Applicant shall bear all costs associated with the Community Ombudsman.