

PENDING PETITION MEMO

Date: 10/10/2007

TO : OE&E
 G&W
 OGC

FROM: CENTRAL OPERATIONS

UTILITY: FORTUNA ENERGY INC.

SUBJECT: 07-T-1230

Notice of Intent Filed by Fortuna Energy Inc. to Construct a Natural Gas Gathering Pipeline, Approximately 3,780 Feet of 4" Steel Coated Pipeline, Located in Town of Van Ettan, Chemung County and the Towns of Spencer and Barton, Tioga County.

Fortuna Energy Inc.

07-T-1230
MAPS Removed

203 Colonial Dr
Horseheads, NY 14845
Phn: 607-795-2700
Fax: 607-795-2701

October 9, 2007

2007 OCT 10 AM 10:25

NOTED
FURTHER
ACTION
OCT 15 2007
ALBANY

Jaclyn A. Brilling, Secretary
New York State Public Service Commission
Empire State Plaza, Agency Building 3
Albany, NY 12223-1350

In the Matter of Notification of Intention
For Construction of a Natural Gas Gathering
Pipeline to Operate at 1,440 PSIG or More

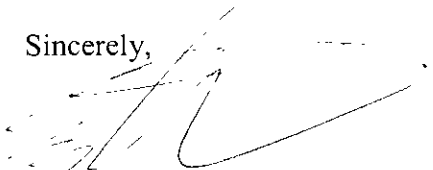
Cotton-Hanlon # 2 to Columbia A-5 Pipeline
API # 31-015-23987-00

Town of Van Etten, Chemung County,
State of New York and the Towns of Barton
and Spencer, Tioga County, New York

Dear Secretary Brilling:

Enclosed herewith and submitted pursuant to Article 7; Section 121-a.2 of the Public Service Law and 16 NYCRR; Subpart 85-1.2 is an original and four (4) copies of Fortuna Energy Inc.'s submittal of the Notice of Intention to Construct a Natural Gas Gathering Pipeline, to operate at 1,440 PSIG or more, for the Cotton-Hanlon # 2 to Columbia A-5 Well.

Sincerely,



Eric Haskins
Surface Land Team Lead

Via Federal Express

**APPLICATION
FOR
CERTIFICATION OF ENVIRONMENTAL COMPATIBILITY
AND
PUBLIC NEED TO CONSTRUCT
A
NATURAL GAS GATHERING PIPELINE**

PROPOSED 4" PIPELINE

4" COTTON-HANLON # 2 TO COLUMBIA A-5 12" PIPELINE

**COTTON-HANLON #2 WELL
API # 31-015-23987-00
TOWN OF VAN ETEN
COUNTY OF CHEMUNG
&
TOWNS OF BARTON & SPENCER
COUNTY OF TIOGA
STATE OF NEW YORK**

**FORTUNA ENERGY INC.
203 COLONIAL DRIVE SUITE 101
HORSEHEADS, NEW YORK 14845
PHONE (607) 795-2700
FAX (607) 795-2701**

1.0 NOTICE OF INTENTION TO CONSTRUCT A NATURAL GAS GATHERING PIPELINE

Pursuant to Article VII, Section 121-(a) of the New York Public Service Law, Fortuna Energy Inc. (FEI) hereby is transmitting this submittal to the New York State Public Service Commission (NY PSC) to request a Certification of Environmental Capability and Public Need under Section 85-1.2 of 16 NYCRR, by serving its notice to the Town of Van Etten in Chemung County and the Towns of Spencer and Barton in Tioga County, New York.

The pipeline will serve as a gathering line for natural gas from the already completed Cotton-Hanlon #2 Well (API # 31-015-23987-00), and potentially any others not yet drilled, which will feed into the proposed Cotton-Hanlon metersite which will connect to the Columbia A-5 12" gas transmission line existing 6" riser. The pipeline will consist of approximately 3,780 feet of 4" steel coated pipeline. There are no alternate lines into which to produce the gas.

FEI requests the New York Public Service Commission (NY PSC) Water Quality Certifications Article 15, Title 5, Section 401, if deemed necessary, be incorporated in the requested Certificate.

Pursuant to 16NYCRR subpart 85-1.2 (2) FEI has contacted all applicable Municipal, County, and State entities which would have jurisdiction over any portion of the project, should it not be pursued under Article VII, and there are no applicable laws which FEI finds unreasonably restrictive.

The Town of Van Etten in Chemung County does not have any ordinances, law resolution or other action, or any other regulations issued there under, or any local standard or requirement which applies to this project. The town was contacted on October 9, 2007 by FEI.

The Town of Barton in Tioga County does not have any ordinances, law resolution or other action, or any other regulations issued there under, or any local standard or requirement which applies to this project. The town was contacted on October 9, 2007 by FEI.

The Town of Spencer in Tioga County does not have any ordinances, law resolution or other action, or any other regulations issued there under, or any local standard or requirement which applies to this project. The town was contacted on October 5, 2007 by FEI.

The NY DEC's Law for the Use & Protection of Waters (Part 608) is not considered to be unreasonably restrictive by FEI.

The anticipated start date for construction of this pipeline is November 19, 2007, or within 10 days of receipt of a certificate from the NY PSC, whichever is earlier. The line should be completed within 30 working days of commencement.

The NY PSC will be notified prior to the commencement of operations.

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Further details and information required for the purposes of this Article VII filing are provided by the following sections, attachments, and drawings of this submittal.

2

Project Description

2.0 Project Description

Fortuna Energy Inc. (FEI) is proposing to construct a pipeline in the Town of Van Etten, Chemung County and the Towns of Spencer and Barton, Tioga County, New York. The pipeline will serve as a gathering line for natural gas from the already completed Cotton-Hanlon #2 Well (API# API # 31-015-23987-00), and potentially any other wells not yet drilled, which will feed into the proposed Cotton-Hanlon metersite which will connect to the Columbia A-5 12" gas transmission line existing 6" riser. This pipeline is proposed, as there are not alternate lines into which to produce the gas. The Maximum Allowable Operating Pressure (MAOP) of the line will be 1440 psig.

2.1 Pipeline location, Route, and approximate Length

The description for the proposed Cotton-Hanlon #2 Pipeline to the existing Columbia A-5 12" Pipeline is as follows:

Commencing at Fortuna's Cotton-Hanlon # 2 gas well (API #API # 31-015-23987-00) located on the Cotton-Hanlon property, tax map number 65-1-3 containing 667.7 acres \pm in the town of Van Etten, Chemung County, New York, and proceeding with a 4" pipeline in an easterly direction paralleling the existing Cotton-Hanlon # 2 well access road on the south side 2,525' \pm ; thence turning due south paralleling the existing Cotton-Hanlon # 2 well access road on the west side 1,100' \pm ; thence turning southeast 155' \pm ; into the proposed Cotton-Hanlon metersite which will connect to the Columbia A-5 12" gas transmission line existing 6" riser. This represents 3,780' \pm of 4" Pipeline.

2.2 Pipeline Installation, Access, Rights-of Way, Clearing Widths, Minimum Cover

The pipeline will be installed per right-of-way agreements and/or rights granted under oil and gas leases. FEI rights-of-way are generally 70' in width during construction, except where noted on Exhibit "D". The width to be cleared along rights-of-way will be 40' leaving 10' in addition if needed by the contractor, except as noted on Exhibit "D". The width to be cleared where the pipeline parallels the existing access road will be 25' leaving 10' in addition if needed by the contractor. The pipeline right-of-way will be cleared to a width of 50' for a distance of approximately 100' on both sides of streams, creeks, and roads if necessary.

Access to the pipeline will be along existing access roads, existing landowner access roads and along pipeline rights-of-way as noted on Exhibit "D".

The pipeline will be buried with a minimum of 36 inches of cover, unless solid rock is encountered. In this event, special precautions will be undertaken. These precautions may include lessening the depth of the cover and protecting the pipe and pipe coating from potential damage due to the rocky nature of the ditch line.

2.3 Agency Field Verification

The proposed pipeline route has been reviewed and was walked by Mr. John Strub of the New York State Public Service Commission (NY PSC) along with Eric Haskins and Charlie Murphy as employees of FEI, on October 4, 2007.

The findings of this field review are incorporated into the following discussions of the various aspects pertinent to this project.

2.4 Ecosystem, Visual, and Cultural Resources

2.4.1 Ecosystem Resources

Streams – There is one un-named stream to be crossed by this pipeline as labeled on the Exhibit “D” map. This stream will be open cut per Environmental Management and Construction Standards and Practices Plan (EM&CS&P) specifications.

Wetlands – Per the U.S. Fish & Wildlife Service’s National Wetlands Inventory and the New York State Freshwater Wetlands Maps and per preliminary screening by the NY DEC, there are no mapped wetlands within or adjacent to the project area. Further, no wetland areas were identified during the field review of October 4, 2007 with the NY PSC. If any wetlands are found during construction, the lateral extent of the wetland boundaries and their respective “buffer zones” will be established by field delineation prior to the start of the pipeline construction. Wetland and identified wet areas may be constructed using the open-cut dry crossing methods, Horizontally Directionally Drilled (“HDD”) or be conventionally bored per Environmental Management and Construction Standards and Practices Plan (EM&CS&P) specifications.

Floodplains – The Tioga County Planning Department (TCPD) was contacted on July 14, 2005, and the proposed pipeline route is located outside of the 100-year floodplain (360841-B Zone C, Effective May 15, 1985).

Agricultural Lands/Districts – The planned route of the pipeline does not cross any agricultural lands as determined during the field review on October 4, 2007 and the proposed pipeline will not be going through any agriculture districts.

Rare, Threatened and Endangered Species – To FEI’s knowledge, there are no known habitats of endangered plant or animal species associated with this project.

Protected Vegetation – No “Old Growth Forest” or Sugar Bush areas were identified during the field review on October 4, 2007.

2.4.2 Visual Resources and Planned Uses/Areas

The proposed pipeline area is not designated as a Visual Resource including scenic areas, roads, vistas, and overlooks. To FEI’s knowledge there are no existing and/or officially approved planned residential, commercial, industrial, institutional, recreational uses within or immediately adjacent to the planned pipeline right-of-way.

2.4.3 Cultural Resources

FEI conducted a review of the internet website of the New York State Office of Parks, Recreation, & Historic Preservation (OPRHP) on September 25, 2007 for the presence of cultural resources/archaeologically sensitive areas within and/or adjacent to the proposed project area. Per this review, no cultural resources or archaeologically sensitive areas were identified.

All lands within the pipeline project area are privately owned. Landowners were not aware of any Officially Designated Cultural Resources located on their property.

2.4.4 Summary of Agency Field Review Determinations with Respect to Resources

With the exception of erodible soils, which will be addressed in a Stormwater Management Plan to be filed at a later date, none of the items listed in 85-1.2(2)(ii) [Ecosystem Resources] were found to exist in the area of the pipeline project.

2.5 Stream and Road Crossing

2.5.1 Stream Crossing

There is one un-named stream crossing on this project as labeled on the Exhibit "D" map. This stream will be open cut per EM&CS&P specifications.

2.5.2 Road Crossing

There were no public road crossings identified on the October 4, 2007 field review.

2.6 Additional Issues

A Notice of Intent and its associated Short Environmental Assessment Form and Storm Water Pollution Prevention Plan are being filed to the NY DEC in order to obtain a State Pollution Discharge Elimination System) SPDES permit for the planned construction activities.

FEI will file these documents within the next 10 days from the date of this application if deemed necessary.

2.6.1 Kickouts/Extra Spaces

The Exhibit "D" map shows the location and size of the log landing allowed per John Strub of the NY PSC during this field review of October 4, 2007. This location is being utilized under the terms of the space provided in the right-of-way agreements.

2.6.2 Timber

Timber, stumps, tops, and brush may be stacked along the outer edge in the right-of-way or in the stacking areas for use by the landowners on whose property it was cut; tops and brush however, may be chipped and/or buried within the right-of-way.

2.6.3 Blasting

There is a possibility that blasting might be needed on this pipeline project. FEI has adopted the blasting requirements from the EM&CS & P Plan. A contractor that has a Class A License and is bonded will be provided if it is necessary to blast in this region.

2.6.4 One Call Summary

FEI is a member of Dig Safely New York (16NYCRR Part 753 [Code Rule 53]). The contractor prior to construction of the Pipeline will make all requisite calls. FEI has conducted its own inspection for verification purposes and the proposed Cotton-Hanlon # 2 pipeline will be traveling under and tapping into the underground Columbia A-5 12" pipeline as shown on the Exhibit "D" map. This was observed on the October 4, 2007 field review with the NY PSC.

2.6.5 EM&CS&P

FEI will construct, operate and maintain the Pipeline in accordance with the PSC's Revised Environmental Management and Construction Standards and Practices Plan, effective 12/07/06 as adopted under PSC Case # 06-T-1383 (EM&CS&P). FEI's letter certifying same is enclosed with this NOI. The EM&CS&P check-off list of the specific standards and practices to be used in relation to the Pipeline is also enclosed with this NOI. Due to the anticipated construction date, a Winter Construction Restoration and Remediation Plan may be implemented.

2.7 Supervision

A trained supervisor with **"Stop Work"** authority will be present at all times during construction and at all times during testing. The following parties are responsible for the phases of this operation, as indicated below.

Overall Supervision, Design and Installation:

Ryan DeFoe

Qualifications:

Colt Engineering Corp.
Pipeline Engineering/Construction Experience
Cell Phone: (607) 425-5793

Supplemental Supervision:

Charlie Murphy

Qualifications:

Chief Inspector
Fortuna Energy Inc.
Cell Phone: (607) 425-5795

Additional Supervision & Inspection:

FORTUNA ENERGY INC. 203 Colonial Drive, Suite 101 Horseheads, NY, 14845 Ph: 607 795-2700 Fax: 607 795-2701			
NAME	Contact Number		POSITION
David Whedbee	Office: 607 795-2713 Cell: 607 725-1913	SUPERVISOR/ ACCESS & REGULATIONS	
Steve Dunk	Office: 607 795-2724 Cell: 607-857-5169	SUPERVISOR/ FACILITIES & CONSTRUCTION	
INSPECTORS			
Paul McCormick	Cell: 607 382-4257	AG/ENV./CRAFT	
William Scott	Cell: 570 243-3835	ROW/DITCH/ENV./CRAFT	
Dave Mulligan	Cell: 570 760-6279	WELDING	
Frank Pierce	Cell: 607 857-2978	WELDING	

Submitted by Fortuna Energy Inc.

By: 

ATTACHMENTS

The following have been attached as exhibits to this NOI:

Exhibit "A": Topographic map at 1" = 2000' scale indicating the route of the Pipeline and well relevant to the Pipeline.

Exhibit "B": Field Summary indicating well tie-in points, approximate Pipeline footage, road and/or stream crossings, and a brief description of the land under which the Pipeline will be installed.

Exhibit "C": Service List and Certificate of Service indicating to whom copies of this NOI are being sent.

Exhibit "D": Topographic map at 1" = 500' scale indicating the route of the Pipeline, Pipeline markers, and wells relevant to the Pipeline. The location of the Pipeline markers may deviate slightly from the locations indicated on the map in that they will be placed in such a manner so as to minimize interference with landowners' use of the properties. In any event, they will be placed so that each immediate adjacent marker will be visible from the other. Furthermore, pipeline markers will be placed at all road and stream crossings.

EXHIBIT "B"

Attached to and by reference made a part of that certain Notice of Intent dated
October 9, 2007 submitted by
Fortuna Energy Inc. for pipeline in the Town of Van Etten, Chemung County and the Towns of Barton & Spencer, Tioga County, New
York

General Description	Nominal Line Diameter	Length	Roads or Streams to be Crossed or Bored	Underground Utilities to be Crossed or Paralleled	Land Description
1) Commencing at Fortuna's Cotton-Hanlon # 2 gas well API # (31-015- 23987-00) which will feed into the proposed Cotton- Hanlon metersite which will connect to the Columbia A-5 12" gas transmission line existing 6" riser.	4 inch	3,780'±	1 Un-named Stream Private access road	Columbia A-5 12" Pipeline	Wooded (paralleling access) – 3,580'± Wooded – 200'±

Service List and Certificate of Service

EXHIBIT "C"

Cotton-Hanlon # 2 Pipeline

I, the undersigned, do hereby certify that copies of this Notice of Intent are sent, via Certified U. S. Mail / Return Receipt Requested, to the following at the addresses indicated:

New York State Department of Environmental Conservation
Attn: Peter Lent
Division of Environmental Permits
6274 East Avon/Lima Road
Avon, NY 14414

New York State Office of Parks, Recreation & Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island State Park, P.O. Box 189
Waterford, NY 12188-0189

New York State Office of Botany	(Service against NYSPSC)
Education Department – State Museum	(Per Letter of Notice, dated May 7, 1984)
Albany, NY 12230	

U.S. Department of the Interior's Fish and Wildlife Service
3817 Luker Road
Cortland, NY 13045

Tioga County Public Works
Attn: Ken Delbianco
477 State Route 96
Owego, NY 13827

Tioga County Soil and Water
Attn: Wendy Walsh
56 Main Street Suite 8
Owego, NY 13827

Tioga County Legislature
Martin Borko: Chairman
56 Main Street Suite 8
Owego, NY 13827

Town of Barton Supervisor
Attn: Leon Cary
304 Route 17 C
Waverly, NY 14892

Town of Spencer Supervisor
Attn: Arvo Rautine
79 East Tioga Street
Spencer, NY 14883

Chemung County Economic Development Agency
Attn: John Flory, Chairman
400 E Church St.
Elmira, NY 14901

Chemung County Soil and Water Conservation District
Attn: Mark Watts
851 Chemung Street
Horseheads, NY 14845


Chemung County Legislature
Attn: Cornelius Milliken, Chairman
PO Box 588
Elmira, NY 14902

Town of Van Etten Supervisor
Attn: George Keturi
108 Kies Road
Van Etten, NY 14889

Columbia Gas Transmissions
Philo Road
Elmira, NY 14903

Witness:

Fortuna Energy Inc.


Eric Haskins

ACKNOWLEDGEMENT

STATE OF NEW YORK)

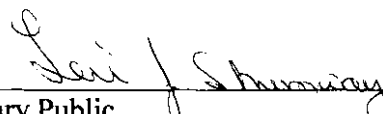
COUNTY OF CHEMUNG) ss:

On the 9 day of October in the year 2007, before me, the undersigned, personally appeared Eric Haskins, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

My Commission Expires:

TERI J. SHUMWAY
Notary Public - State of New York
No. 01SH6135741
Qualified in Steuben County
My Commission Expires

10/24/09


Notary Public

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION
APPENDIX 7-G
NOTIFICATION OF CONSTRUCTION
FOR
GAS GATHERING LINES TO BE
SUBJECTED TO PRESSURE OF 125 PSIG OR MORE
FOR GAS GATHERING LINES TO BE LOCATED IN AN AREA
USED FOR COMMERCIAL FARM PURPOSES

COMPANY Fortuna Energy Inc.

DATE October 9, 2007

DESCRIPTION OF PROJECT

Construct a 4" natural gas gathering pipeline from the Cotton-Hanlon # 2 Gas Well (API # 31-015-23987-00) to the Columbia A-5 12" Pipeline in the Towns of Spencer and Barton; and Town of Van Etten, Counties of Tioga and Chemung.

LOCATION OF PROJECT (file a copy of the map filed with Article VII application)

Towns of Spencer and Barton, Tioga County and Town of Van Etten, Chemung County.

(see attached map)

ESTIMATED STARTING DATE On or about November 19, 2007

ESTIMATED COMPLETION DATE 30 days

PERSON TO BE CONTACTED REGARDING PROJECT Ryan DeFoe & Eric Haskins

ADDRESS Fortuna Energy Inc., 203 Colonial Dr., Suite 101, Horseheads, NY 14845

TELEPHONE (607) 795-2700

MAXIMUM ALLOWABLE OPERATING PRESSURE: 1,440 psig

LOCATION CLASS: Class 1

PIPE COATING DESCRIPTION

- a. **NOMINAL DIAMETER** 4.5"
- b. **NOMINAL WALL THICKNESS** 0.188"
- c. **PIPE SPECIFICATION** API 5L
- d. **GRADE** X52
- e. **COATING TYPE** Dual Layer FBE
- f. **METHOD OF APPLICATION** Continuous Bond
- g. **LONGITUDINAL JOINT TYPE** ERW

TEST DATA:

- A. **TEST MEDIUM** - Water
- B. **DURATION** - 12 Hr. electronic dead-weight test
- C. **TEST PRESSURE** - 2160 psig + Static Head

NAMES OF MAILING ADDRESSES OF AFFECTED FARMLAND OPERATIONS

NAME

ADDRESS

MINIMUM COVER

For each area used for commercial farm purposes complete Appendix 7-G(a) including the statement of the farmland operator and a copy of a map showing each farmland border, nearest public road and the proposed route of the gathering line. Indicate the proposed depth of cover for all segments of the line and respective length of each such segment.

If minimum cover prescribed cannot be maintained, indicate location, nature of problem, and special precautions to be observed.

I hereby certify that this gathering line will be constructed to the requirements of Appendix 14-K of 16 NYCRR 255.

(signed)



Eric Haskins
Surface Land Team Lead



Ryan DeFoe
Project Manager

If the line is to be constructed within 150 feet of an existing structure used for a residence (of) or place of business that portion of the line must be constructed to transmission line standards. Under these circumstances contact the Albany office of the Gas Division prior to construction (518) 474-5453.

ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION

STANDARDS AND PRACTICES

CHECK-OFF LIST: PART III

COTTON-HANLON # 2 4" PIPELINE TO COLUMBIA A-5 12" PIPELINE

III. General Planning Objectives and Procedures	3	
1. Planning Objectives	3	X
1.1 Supervision and Inspection	5	X
1.1.1 Environmental Inspection	5	X
1.1.2 Responsibilities of Environmental Inspector	5	X
2. Procedures for the Identification and Protection of Sensitive Resources	6	
2.1 Rare and Endangered Species & Their Habitats	7	X
2.2 Cultural Resources	8	X
2.3 Streams, Wetlands & Other Water Resources	9	X
2.4 Active Agricultural Lands	9	
2.5 Alternative/Conflicting Land Uses	10	
2.6 Steep Slopes, Highly Erodible Soils & Flood Plains	10	X
2.7 Timber Resources, Commercial Sugarbushes & Unique/Old Growth Forests	11	
2.8 Officially Designated Visual Resources	11	
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3.1 Objectives	12	X
3.2 Pipeline Routing	12	X
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3.3.1 Permanent ROW	13	X
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3.3.4 Associated/Appurtenant Facilities: Meter Site	14	X
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7.1 Objectives	29	X
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7.2.2.1 Waterbars	31	X
7.2.2.2 Swales and Berms	32	X
7.2.2.3 Side Ditches	32	X
7.2.2.4 French Drains	32	X
7.2.2.5 Culverts	33	X
7.2.2.6 Sediment Retention Ponds and Filtration Devices	33	X
7.2.2.7 Catchment Basins	33	X
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7.2.2.9 Driveable Berms	34	X
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8.3 Ditch Width and Cover Requirements	35	X
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9. Pipelaying	39	
9.1 Objectives	39	X
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9.3 Fabrication	40	X
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APPENDIX 7- D

FORM A

STATE OF NEW YORK PUBLIC SERVICE COMMISSION

REPORT OF SPECIFICATIONS OF PROPOSED CONSTRUCTION OF GAS PIPELINE TO BE SUBJECTED TO PRESSURE OF 125 PSIG OR MORE 255.302 (Submitted in Triplicate)

Gas Corporation Fortuna Energy, Inc. Date: October 9, 2007

Route: From: Cotton-Hanlon # 2 Well To: Columbia A-5 12" Pipeline

New Construction : Yes Reconstruction : No

Counties traversed: Tioga and Chemung

Towns traversed: Towns of Spencer and Barton; Van Etten

Cities traversed: none

Incorporated villages traversed: none

Estimated date: Start of construction: November 19, 2007

Completion of construction: 30 days after start of construction

Identity of line (gas corporation name or number): Cotton-Hanlon # 2 Pipeline

Required filing: The following maps, sketches, and drawings shall be filed with, and as part of, this report:

- (a) Three sets of current U.S. Geological Survey maps (7 ½ or 15-minute) sufficient to show the entire route of the proposed construction or reconstruction and an area of one mile on either side of the route. The route of the construction or reconstruction shall be clearly indicated thereon, and
- (b) Three sets of strip maps and design drawings showing details of the proposed construction or reconstruction.

NOTE: Where more than one construction design factor is used, the specifications relative to each shall be separately listed. Where necessary, supply the requested information on attached sheets identified by the Roman numeral, number, and letter designation of the item on this form.
DETAILED DESIGN DRAWINGS AVAILABLE UPON REQUEST

I. General

- 1. Length: approximately 3,780 feet
- 2. Nominal outside diameter, "D", inches: 4.5"
- 3. Nominal wall thickness, "t", inches: 0.188
- 4. Type and/ or grade of pipe: API 5L X52
- 5. Manufacturer of steel: IPSCO

APPENDIX 7-D (cont.)

6. Manufacturer of pipe: IPSCO
7. Type of longitudinal joint: ERW
8. Specified minimum yield strength, psi.: 52,000 psi
9. Nominal ultimate strength, psi.: approx. 77,000 psi
10. Is pipe new or used: New
11. If used pipe is employed, describe the inspection and reconditioning: N/A
12. Mill test pressure: 3300 psi for 5 secs
13. Maximum certified operating pressure, psi.: 1440 psig
14. Calculated pipe stress (hoop stress)
Where $PD/2t = \text{stress, psi.}$: $(1440 \times 4.5)/(2 \times 0.188) = 17,234 \text{ PSI}$
15. Ratio of pipe stress to yield strength, percent: $(17,234 / 52,000) \times 100 = \underline{33.1\% \text{ SMYS}}$
16. Check of pipe specifications:
 - (a) Are the physical and chemical specifications of pipe to be verified by outside laboratories? No. The "Certificate of Testing" with corresponding heat numbers as provided by IPSCO to McJunkin Appalachian Oil Field Supply, Co. and forwarded to Fortuna Energy Inc. will be sufficient.
 - (b) By whom? N/A
17. (a) By class locations, what percentage of the welds are to be radiographed? In Class I locations, at least 10 percent, in Class II at least 15 percent of each day's field butt welds, selected at random, shall be nondestructively tested over their entire circumference. At the crossings of the major roads, 100 percent of the welds will be nondestructively tested.
 - (b) By whom? The NDT contractor employed is Quality Inspection Services.
 - (c) How will the gas corporation certify the radiograph technician? Fortuna Energy Inc. will request and retain a copy of the technicians certification.

II. Fabrication

What inspection procedures will be followed for detection of gouges, groves, and dents for:

- (a) Factory coated pipe: Visual inspection by Fortuna Energy Inc. will occur when the pipe is received from the shipper, at the time of Welding, and as the pipe is lowered into the ditch. Appropriate instrumentation will be utilized by the inspector to determine the acceptability of any defect found.
- (b) Field coated pipe: It is anticipated that all line pipe will be factory coated. For various fittings that are utilized and not factory coated, the pipe will be visually inspected prior to coating.

III. Railroad, Road, and Water Crossings

1. Railroad crossings

- (a) List, given location: None
- (b) Indicate whether cased or not; if not cased, provide reason: N/A

APPENDIX 7-D (cont.)

2. Street or road crossings

- (a) List, giving location: N/A
- (b) Indicate whether cased or not; if not cased, provide reason: N/A
- (c) Indicate if heavier wall carrier pipe used: N/A

3. Lake, river, stream, or creek crossings

- (a) List, giving location: One un-named stream crossing.
- (b) Describe any special construction precautions to be followed: Stream may be constructed using the open-cut dry crossing methods, Horizontally Directionally Drilled ("HDD") or be conventionally bored per Environmental Management and Construction Standards and Practices Plan (EM&CS&P) specifications.

4. Pipeline encroachments

- (a) List any encroachments to railroads by location: None
- (b) List any encroachments to roads in which special construction precautions will be employed; identify by location: N/A

IV. Valves

1. Manual valves

- (a) Number of sectionalizing valves: One valve setting located at each end of pipeline.
- (b) Spacing of sectionalizing valves: N/A

2. Type, make, and location of any automatic valves to be used: None

3. Blowdown procedure

- (a) Describe method: Close adjacent valves; install vent stack; open blowdown valve
- (b) Number, size, and location of blowdown valves: 2, 2" Full Port Ball.
- (c) Estimated blowdown time for each section of pipeline: Approx. 15 minutes.

V. Minimum cover

If minimum prescribed cover cannot be maintained, indicate location, nature of problem, and special precautions to be observed. Minimum cover of 36" typical unless consolidated rock is encountered in which a minimum cover of 24" may be allowed in that area.

VI. Exposed piping and self-supported spans other than on gas corporation property

- 1. Number of instances: One
- 2. Location of each: N/A
- 3. Reasons for exposed piping: N/A

APPENDIX 7-D (cont.)

4. Total length in each instance: N/A
5. Length of each self-supported span: N/A
6. Precaution taken (signs, fences, etc.): Pipeline markers shall be installed for all above ground piping.
7. What special precautions taken: Bollards shall be installed to protect the pipeline from vehicular traffic.

VII. Corrosion control

1. Type of field coating: Dual Layered FBE
 - (a) For pipe (if not factory coated): Pipe is factory coated with Dual Layered FBE. Exposed piping at above ground valves will be primed and painted.
 - (b) For girth welds and fittings: Shrink sleeves (Canusa or equal) or Polyken (or equal) tape or two part Epoxy.
2. Type of test of coating before backfill: Conventional Electrical Jeep.
3. Type of test of coating after backfill: Pipe to soil potential reading.
4. Proposed cathodic protection: Sacrificial Mg anodes or Rectifier

VIII. Pressure and leakage tests

1. Test pressure: Minimum 2160 psig
2. Test medium: Water
3. Duration of test: 12 hour
4. Length of test sections: Pipeline length
5. What is the source of water supply used? Water trucked to site/pumped from local creek.
6. How and where is water disposed of after test? Test water will be drained into a sediment retention pond in the water shed of the local stream which the water was taken from with appropriate filtration measures in place.

IX. Purging of pipelines and mains

Description of purging procedure by class location: Purging will be in accordance with the AGA "Purging Principals and Practice", 3rd edition for the entire pipeline.

X. Route of Pipeline

1. Has gas corporation obtained necessary R/W from each party having interest in R/W?: Yes
If not, what is status?: R/W has been obtained.
2. Has gas corporation obtained formal approval and all necessary permits from governmental agencies?: Not as of this date.
If not, what is status?: The Public Service Commission "Order Granting Certificate of Environmental Compatibility and Public Need" along with all other permits and approvals is expected 30 + days from submission.

XI. Class Locations

APPENDIX 7-D (cont.)

Supply full information for entire length of pipeline to indicate basis of determination of class location of each segment thereof in accordance with 16 NYCRR 255.5:

The maximum number of buildings intended for human occupancy located within 220 yards on either side of the centerline of any continuous 1-mile length of the pipeline has been identified as less than 10 on the total pipeline length; utilizing current aerial photography and confirming the housing count by driving along the roads which are crossed by the proposed pipeline. No structures or small, well-defined outside areas have been identified within 100 yards of the proposed pipeline that would be occupied by 20 or more persons during normal use.

X. *Odorizing provisions*

1. Type of equipment to be installed.: None
2. Type of odorant to be added: None
3. Threshold perception to be achieved (percent of L.E.L.) N/A