BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission's Own Motion to Adopt New Safety and Reliability Regulations for Natural Gas Transmission and Distribution Pipelines and Related Ratemaking Mechanisms R.11-02-019 (Filed February 24, 2011)

PACIFIC GAS AND ELECTRIC COMPANY'S SUPPORTING INFORMATION FOR LIFTING OPERATING PRESSURE RESTRICTIONS ON LINE 300B

STEPHEN L. GARBER CHARLES R. LEWIS, IV Pacific Gas and Electric Company Law Department 77 Beale Street, B30A San Francisco, CA 94105 Telephone: (415) 973-6610 Facsimile: (415) 973-0516 E-Mail: CRL2@pge.com JOSEPH M. MALKIN Orrick, Herrington & Sutcliffe LLP The Orrick Building 405 Howard Street San Francisco, CA 94105 Telephone: (415) 773-5505 Facsimile: (415) 773-5759 E-Mail: jmalkin@orrick.com

Attorneys for PACIFIC GAS AND ELECTRIC COMPANY

Dated: September 20, 2012

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission's Own Motion to Adopt New Safety and Reliability Regulations for Natural Gas Transmission and Distribution Pipelines and Related Ratemaking Mechanisms

R.11-02-019 (Filed February 24, 2011)

PACIFIC GAS AND ELECTRIC COMPANY'S SUPPORTING INFORMATION FOR LIFTING OPERATING PRESSURE RESTRICTIONS ON LINE 300B

Pursuant to Ordering Paragraph (OP) 4 of Decision (D.)11-09-006 and OP 3 – 5 of D.11-10-010, Pacific Gas and Electric Company (PG&E) submits its Supporting Information for restoration of operating pressure on Line 300B between the California and Arizona border (Mile Point 0.0) and Topock Compressor Station (Mile Point 0.45) in San Bernardino County. PG&E will supplement this information with Consumer Protection and Safety Division's (CPSD's) review once it is completed, however, PG&E is filing now in order to give all parties the full opportunity to review the Supporting Information in the interim consistent with notification sent to the service list on September 6, 2012.

I. BACKGROUND

This application seeks authority to restore pressure on Line 300B on the upstream (suction) side of PG&E's Topock Compressure Station between the station and the Colorado River. The Topock Compressor Station receives gas across the Colorado River from three Arizona pipelines, El Paso Natural Gas (El Paso) on Transmission Lines 300A and 300B, and the Transwestern Gas Transmission Line (Transwestern). Attachment 1 is an aerial photograph showing the suction section of Line 300B between the Colorado River and PG&E's Topock Compressor Station. The Topock Station and this section of Line 300B normally operate at a maximum allowable operating pressure (MAOP) of 660 pounds per square inch gage (psig).

1

On February 1, 2011, gas pressure on the Transwestern pipeline increased, causing pressure on the suction side of the Topock Compressor Station to increase to a recorded pressure of 727 psig – one pound over the 10% above the 660 psig MAOP set in 49 CFR 192.201. Pursuant to 49 CFR 191, PG&E timely reported this incident to the Pipeline and Hazardous Materials Safety Administration (PHMSA) and the California Public Utilities Commission (CPUC). On February 2, 2011, CPUC Executive Director Paul Clanon directed PG&E to reduce operating pressure on any transmission line with segments in high consequence areas (HCAs) that experienced pressure of 10% or more above MAOP and to "maintain these pressure reductions until such time as the Commission allows PG&E to return the lines to their normal operating pressures." As the Topock Station itself and a portion of Line 300B lie within an HCA, PG&E reduced pressure on the suction side of the Topock Compressor Station, including this section of Line 300B, to 528 psig – a 20% reduction.

On September 12, 2011, pursuant to Decision (D.) 11-09-006, PG&E filed and served information in support of its request to restore normal operating pressure on the suction side of its Topock Compressor Station. The Commission granted PG&E's request in D. 11-10-010 issued October 6, 2011.

PG&E's 2011 Topock pressure restoration application, noted that "PG&E does not plan to restore pressure on the upstream portion of Line 300B at this time. We will provide the Supporting Information for restoring pressure on that line in a later filing." This is that "later filing" in which PG&E seeks authority to return Line 300B and its branching pipelines to normal operation so we can maintain reliability during extreme cold high demand days.

As stated above, Line 300B connects PG&E's Topock Compressor Station (Topock) to the El Paso interstate gas pipeline and gas producers in the Southwest. Gas coming into Topock is compressed and leaves through Lines 300A and 300B, which is part of PG&E's gas backbone system known as the "Baja Path" that supplies natural gas to PG&E's Northern California customers through the Milpitas Terminal. If Line 300B must be maintained at its current reduced operating pressure, PG&E's customers face potentially significant economic and

2

operational impacts under certain system demand conditions. In the event of a failure on the parallel Line 300A, it is likely that flows from the El Paso interconnect could drop to zero. In this filing, PG&E seeks to restore pressure in Line 300B by October 31, 2012 in order to assure reliable gas supplies to the Milpitas Terminal before potential cold storms can cause critical curtailments.

II. SUPPORTING INFORMATION

PG&E hereby submits the following Supporting Information called for by Ordering Paragraph (OP) 4 of Decision (D.)11-09-006 and OP 3–5 of D.11-10-010.

Line	Beginning MP	Ending MP	Reference to Exhibits
Line 300B	0.0 – CA/AZ Border	0.45 – Topock	See Exhibit A for the name/number, length of each segment and percent SMYS at MAOP.
		Station	
Line 300B Shorts	0.0 – CA/AZ Border	0.45 – Topock Compressor Station	See Exhibit B for the name/number, length of each segment and percent SMYS at MAOP.

A. Name/Number of Segment, General Description, Location, Length Of Segment, And Percent Specified Minimum Yield Strength (SMYS) At MAOP.

Line 300B is located between the California/Arizona border and the Topock Compressor Station. Attachment 2 is a map of Line 300B. Line 300B includes several numbered taps or small diameter lines that are required for pipeline operations (such as blow-downs and drips). Even though some of these pipeline appurtenances may not be short in an absolute sense, by convention all of the branches from the mainline are referred to as "shorts." With that said, the shorts involved here are:

- BD550, a blow-down located at Mile Point 0.24 along Line 300B.
- DRIP5717, a drip located at Mile Point 0.205 on Line 300B.

Supporting information is provided in two exhibits: L300B Mainline (Exhibit A) and L300B Branchline-Shorts (Exhibit B). The Exhibit A material includes Line 300B itself and those sections on the suction side of the Topock Compressor Station. Much of the Topock Station information is documentation that was already filed with the Commission as part of the Topock pressure restoration request, but it is reformatted here to clearly identify which parts of the station pipine is associated with each station source – Line 300A (Suction A), Line 300B (Suction B) and Transwestern.

B. MAOP For Each Segment And The Entire Line Prior To The Pressure Restoration.

Line	MAOP
Line 300B	660 psig
Line 300B Shorts	660 psig

C. Reason For MAOP Reduction.

In early February 2011, the B-Line side of Topock Compressor Station and Line 300B upstream of Topock were pressurized in excess of 110% of MAOP by a Transwestern system maintenance failure on the Arizona side of that pipeline. On February 2, 2011, CPUC Executive Paul Clanon directed PG&E to reduce the operating pressure to 20% below the Maximum Allowable Operating Pressure for pipelines in HCAs that experienced an overpressure event in excess of 110% of MAOP. PG&E reduced the operating pressure by 20% from 660 psig to 528 psig on Lines 300A and 300B which transport gas from the El Paso Natural Gas system. El Paso Natural Gas supplies gas to both PG&E and Southern California Gas Company (SoCalGas) from a meter station using a common pressure control point. Consequently, the supply pressure to SoCalGas and PG&E's Lines 300A and 300B were reduced.

D. Complete Pressure Test Results For Each Segment In Class 3 And Class 4 Locations Or Class 1 Or Class 2 High Consequence Areas Where A Pressure

Increase Will Occur. Explain The Findings And Any Actions Taken Based On The Results of Pressure Testing.

Line 300A and the Transwestern pipelines upstream of the Topock Compressor Staton were not over-pressurized in excess of 110% of MAOP as a result to the Transwestern maintenance failure (the MAOP of these lines is 700 psig). Only the upstream section of Line 300B and the station itself (660 psig) were overpressurized. To validate its strength and integrity following the over-pressure event, the Topock station was pressure tested in 2011 and pressure to that station was restored pursuant to CPUC D. 11-10-010 issued on October 6, 2011.

To validate the strength and integrity of Line 300B, PG&E completed the following tasks to ensure the pipelines are safe to operate at the proposed pressure of 660 psig:

• Performed hydrostatic testing of the gas transmission pipeline and associated components, including appurtenances ("shorts"), in accordance with 49 CFR 192 Subpart J in Class 3 High Consequence Areas (HCAs) where a pressure test record could not be located. As shown on the pressure test results, each of these hydrostatic pressure tests conducted in 2011 or 2012 included a spike test where appropriate.

• Verified that pressure test records exist for all other pipelines and associated components located in the HCAs, including shorts operating greater than or equal to 20% of Specified Minimum Yield Strength, (SMYS) or shorts that otherwise meet the definition of a transmission pipeline. (There are no distribution feeder mains or customer service pipelines connected to this section of Line 300B.)

• Developed a Pipeline Features List ¹(PFL) and the completed MAOP validation for all HCA and non-HCA pipelines and associated components, including shorts.

PG&E's hydrostatic pressure tests met the requirements of 49 CFR Part 192, Subpart J, or those requirements in effect at the time the pressure test was conducted, as required

 $^{^{1}}$ A PFL is a compilation of all pipeline components and their characteristics.

by OP 4 of D.11-09-006. Complete pressure test results for each test segment are found in Exhibits A and B. The last section of Line 300B was hydrostatic pressure tested on August 24, 2011 and the final pressure test on any appurtenance (blow down BD550 was completed on August 5, 2012.

Aside from the excavations associated with the hydrotesting, there were no excavations performed specifically to verify pipeline specifications. However, PG&E did install a new mainline valve in this section of Line 300B at mile point 0.13. This valve will provide over-pressure protection for Line 300B and the Topock station to prevent any future impact from a similar Transwestern maintenance failure.

E. MAOP Validation Records For Non-High Consequence Areas Segments Where MAOP Will Be Restored.

The MAOP validation records, including PFLs and Strength Test Pressure Reports, for the entirety of Line 300B, including shorts, where pressure will be restored, are as follows:

Line	Reference to Exhibits
Line 300B	Exhibit A
Line 300B Shorts	Exhibit B

F. Proposed MAOP For Each Segment And The Entire Line And Proposed Effective Date.

Line	MAOP	Proposed Effective Date
Line 300B	660 psig	October 31, 2012
Line 300B Shorts	660 psig	October 31, 2012

G. Safety Certification.

Provided with this filing as Attachment 3 is the certification of Kirk Johnson, Vice President of Gas Transmission Maintenance and Construction, confirming that PG&E has validated pipeline engineering and construction of Line 300B, reviewed pressure test results and can confirm that a strength test was performed in accord with 49 CFR 192, Subpart J or regulations in effect at the time and that, in his professional judgment, Line 300B is safe to operate at the proposed maximum allowable operating pressure of 660 psig.

H. Concurrence Of The Commission's Consumer Protection And Safety Division

The CPSD review is not yet completed. PG&E is filing now, without the subject documentation, in order to allow ample for review of the PG&E Supporting Information by all parties in the interim. Documentation from CPSD to be provided in a supplementary filing once available.

Per CPSD's request, PG&E has included a complete Operator Qualification table for the work completed on L300B as Attachment 4. PG&E has also conducted an encroachment and overbuild review on L300B and confirms that there are no right-of-way encroachments or overbuilds along this section of the pipeline.

I. Summary Table (D.11-10-010, OP 4).

In accordance with D.11-10-010, OP 4, Attachment 5 contains summary tables showing the following information for each segment tested: requested maximum operating pressure, minimum indicated test pressure at test point, spike test results, ratio of highest test pressure to maximum operating pressure, percent SMYS at minimum indicated test pressure, percent SMYS at maximum operating pressure.

J. Identification Of Any Segments Tested To An MAOP Higher Than The Previous MAOP.

The tables in Attachment 5 identify those segments that were tested to pressures higher than 990 (1.5 times the MAOP of 660 psig). While these tests would support a higher MAOP, PG&E has no present intention to seek to increase the MAOP of any segment of Line 300B above 660 psig.

III. PROPOSED SCHEDULE

To provide all parties greater clarity and understanding of the steps in this proceeding,

PG&E proposes the following schedule:

Filing with Notice of Availability	September 20, 2012
First Confidential Document Viewing	September 25, 2012
Second Confidential Document Viewing	October 2, 2012
CPSD Letter (estimated date)	October 8, 2012
PG&E Supplemental Filing to include CPSD Letter	October 10, 2012
Assigned Commissioner Ruling Setting Hearing Request	October 12, 2012
Comment Period	
Ten-day Comment Period Closed	October 22, 2012
Administrative Law Judge's Ruling with Draft Executive	October 25, 2012
Director Decision & Comment Period	
Five-day Comment Period Closed	October 30, 2012
Executive Director Decision	October 31, 2012

This Proposed Schedule assumes that CPSD will complete its review of PG&E Supporting Information and issue the Letter of Adequacy on October 8, 2012. The Schedule also assumes that no party proposes hearings during the comment period following the Assigned Commissioner's Ruling.

IV. CONFIDENTIALITY

Certain detailed maps and drawings included in the Supporting Information contain sensitive information concerning the location of critical infrastructure, the disclosure of which could pose a public safety risk. Consequently, PG&E is providing such portions of the supporting documentation to CPSD pursuant to Public Utilities Code section 583, and serving parties with redacted versions of the documents. PG&E will make a complete set of Supporting Information available for viewing (but not copying) by interested parties at the following times and locations:

- Tuesday, September 25, 9 a.m. to 12 noon, PG&E headquarters, 77 Beale Street, Conference Room 968
- Tuesday, October 2, 9 a.m. to 12 noon, PG&E headquarters, 77 Beale Street, Conference Room 968

Parties planning to review the confidential material should provide email notice to Rosa

Duenas at <u>R1DJ@pge.com</u> one full business day prior to the above viewing dates. If there are no advance notices from parties interested in the public viewing, PG&E will cancel the applicable viewing date/time.

Respectfully Submitted,

STEPHEN L. GARBER CHARLES R. LEWIS, IV JOSEPH M. MALKIN

By: /s/ Charles R. Lewis, IV CHARLES R. LEWIS, IV

PACIFIC GAS AND ELECTRIC COMPANY 77 Beale Street San Francisco, CA 94105 Telephone: (415) 973-6610 Facsimile: (415) 973-5520 E-Mail: <u>CRL2@pge.com</u> jmalkin@orrick.com

Attorneys for PACIFIC GAS AND ELECTRIC COMPANY

Dated: September 20, 2012

Topock Compressor Station and Pipeline River Crossings

(View from California side, approximately 2005)







Copyright 2005 Pacific Gas & Electric Corp.

Topock Station Line 300B Pressure restoration



DECLARATION OF M. KIRK JOHNSON SUBMITTED IN SUPPORT OF PG&E'S REQUEST TO LIFT OPERATING PRESSURE RESTRICTIONS ON LINE 300B

I, M. Kirk Johnson, state as follows:

1. I am currently Vice President, Gas Transmission Maintenance and Construction for Pacific Gas and Electric Company (PG&E).

2. I received a BS in Mechanical Engineering from the University of California at Davis and an MBA from California State University, Hayward.

3. As the PG&E officer responsible for gas system engineering, I am providing this declaration in support of PG&E's submission of its Supporting Information for the restoration of operating pressure on Line 300B.

4. I have reviewed the information in support of lifting the operating pressure restrictions on Line 300B. I certify that:

- PG&E engineers have validated the engineering and construction through records review and ultrasonic and carbon equivalency testing of station piping and components as documented in the attached exhibits; and
- b. PG&E successfully completed hydrostatic pressure testing of all piping segments and components on Line 300B for which we do not have complete records of a prior pressure test in accordance with the applicable standards at the time they were performed, in accord with Title 49 of the Code of Federal Regulations, Part 192, subpart J, at pressures above those required to confirm the safe operation of Line 300B at the established maximum allowable operating pressure (MAOP) with an additional margin of safety.

5. In my professional judgment, as the gas engineering officer for PG&E, Line 300B is safe to operate at the maximum allowable operating pressure (MAOP) of 660 pounds per square in gage (psig).

I declare under penalty of perjury that the foregoing is true and correct.

Executed at San Francisco, California, this 20th day of September 2012.

/s/ M. Kirk Johnson

M. KIRK JOHNSON, Vice President Gas Transmission Maintenance and Construction PACIFIC GAS AND ELECTRIC COMPANY

Weld Certification Status Report (L-300B, MP 0.1294 - 0.459)

	General Information					We	nation	Welder #2 Information					Visual Inspector Information					
Project Name	Weld Number	Welding Procedure Specification	Date Welded	Passed X-Ray (Pass or Fail)	Welder ID	Welder Name	Re-Qualification Date	Qualified within 6 months for pipelines over 20% SMYS?	PG&E or Contractor	Welder ID	Welder Name	Re-Qualification Date	Qualified within 6 months for pipelines over 20% SMYS7	PG&E or Contractor	Visual Inspector ID	Visual Inspector Name	Visual Inspection Qualification Date	PG&E or Contractor
T-76-11	XR-14	#8W/65-3/M	8/19/2011	Pass	A839 (F)	Mike Mahoney	2/22/2011	Yes	Contractor	A877 (D)	James Rogers	7/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-24	#BW/65-3/M	8/21/2011	Pass	A839 (F)	Mike Mahoney	2/22/2011	Yes	Contractor	A876 (C)	Clint Lavin	8/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
1-76-11	XR-25	#8W/65-3/M	8/21/2011	Pass	A860 (E)	Steve Pellegrini	4/11/2011	Yes	Contractor	A876 (C)	Clint Lavin	8/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-26	#BW/65-3/M	8/21/2011	Pass	A844 (RD)	Ryan Davis	7/18/2011	Yes	Contractor	A	Mike Mikich	3/21/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-36	#8W/65-3/M	8/27/2011	Pass	A839 (F)	Mike Mahoney	8/25/2011	Yes	Contractor	A876(C)	Clint Lavin	8/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-37	#BW/65-3/M	8/28/2011	Pass	A877 (D)	James Rogers	7/6/2011	Yes	Contractor	A876 (C.)	Clint Lavin	8/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-38	#BW/65-3/M	8/28/2011	Pass	A839 (F)	Mike Mahoney	8/25/2011	Yes	Contractor	A860 (E)	Steve Pellegrini	4/11/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-39	#8W/65-3/M	8/29/2011	Pass	A860 (E)	Steve Pellegrini	4/11/2011	Yes	Contractor	A876 (C)	Clint Lavin	8/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
1-75-11	XR-40	#BW/65-3/M	8/29/2011	P355	A877 (D)	James Rogers	7/6/2011	Yes	Contractor	A839 (F)	Mike Mahoney	8/25/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-41	#8W/65-3/M	8/30/2011	Pass	A860 (E)	Steve Pellegrini	4/11/2011	Yes	Contractor	A875 (C)	Clint Lavin	8/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-42	#BW/65-3/M	8/30/2011	Pass	A839 (F)	Mike Mahoney	8/25/2011	Yes	Contractor	A877 (D)	James Rogers	7/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-43	#8W/65-3/M	8/30/2011	Pass	CAA1	Chris Alcorn	8/22/2011	Yes	PG&E	A886	Rob Simmons	7/29/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-44	#8W/65-3/M	8/30/2011	Pass	ЛНК	Josh Henslee	8/22/2011	Yes	PG&E	MCHU	Matt Hawkins	8/9/2011	Yes	PG&E	A583	Dave Yancey	5/9/2011	Contractor
T-122-12	1W	#8W/60-9/M	3/16/2012	Pass	IRF2	fan Fuller	3/21/2012	Yes	PG&E	KDRÐ	Keith Ritter	2/2/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	2W	#BW/60-9/M	3/16/2012	Pass	KDRD	Keith Ritter	2/2/2012	Yes	PG&E	CJSW	Clifford Speck	3/21/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	3W	#8W/60-9/M	3/16/2012	Pass	TIBH	Todd Barker	10/10/2011	Yes	PG&E	IRF2	lan Fuller	3/21/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	4W	#8W/60-9/M	3/16/2012	Pass	TIBH	Todd Barker	10/10/2011	Yes	PG&E	IRF2	lan Fuller	3/21/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	1 TI	#BW/60-9/M	3/19/2012	Pass	TIBH	Todd Barker	10/10/2011	Yes	PG&E	IRF2	lan Fuller	3/21/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	1 TIW	#8W/60-9/M	3/28/2012	Pass	T1BH	Todd Barker	10/10/2011	Yes	PG&E	IRF2	lan Fuller	3/21/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	2 TIW	#8W/60-9/M	3/28/2012	Pass	CJSW	Clifford Speck	3/21/2012	Yes	PG&E	KDRD	Keith Ritter	2/2/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E
1-122-12	3 TIW	#8W/60-9/M	3/28/2012	Pass	SMEO	Steve Evans	3/12/2012	Yes	PG&E	A838	Hugo Robles	10/6/2012	Yes	Contractor	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	4TIW	#8W/60-9/M	3/28/2012	Pass	BXWF	Brian Wolfenberger	3/4/2012	Yes	PG&E	SMEO	Kyle Santos	1/17/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E

Weld Certification Status Report (L-300B, MP 0.1294 - 0.459)

	General Information					We	nation	Weider #2 Information					Visual Inspector Information					
Project Name	Weld Number	Welding Procedure Specification	Date Welded	Passed X-Ray (Pass or Fail)	Welder ID	Weider Name	Re-Qualification Date	Qualified within 6 months for pipelieus over 20% SMYS?	PG&E or Contractor	Welder 1D	Welder Name	Re-Qualification Date	Qualified within 6 months for pipelines over 20% SMYS?	PG&E or Contractor	Visual Inspector ID	Visual Inspector Name	Visual inspection Qualification Data	PG&E or Contractor
T-76-11	XR-14	#BW/65-3/M	8/19/2011	Pass	A839 (F)	Mike Mahoney	2/22/2011	Yes	Contractor	A877 (D)	James Rogers	7/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-24	#BW/65-3/M	8/21/2011	Pass	A839 (F)	Mike Mahoney	2/22/2011	Yes	Contractor	A875 (C)	Clint Lavin	8/6/2011	Yes	Contractor	A583	Dave Yancoy	5/9/2011	Contractor
T-76-11	XR-25	#8W/65-3/M	8/21/2011	Pass	A860 (£)	Steve Pellegrini	4/11/2011	Yes	Contractor	A876 (C)	Clint Lavin	8/6/2011	Yes	Contractor	A583	Dave Yancoy	5/9/2011	Contractor
T-76-11	XR-26	#BW/65-3/M	8/21/2011	Pass	A844 (RD)	Ryan Davis	7/18/2011	Yes	Contractor	A	Mike Mikich	3/21/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-36	#8W/65-3/M	8/27/2011	Pass	A839 (F)	Mike Mahoney	8/25/2011	Yes	Contractor	A876 (C)	Clint Lavin	8/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-37	#BW/65-3/M	8/28/2011	Pass	A877 (D)	James Rogers	7/6/2011	Yes	Contractor	A876 (C)	Clint Lavin	8/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-38	#BW/65-3/M	8/28/2011	Pass	A839 (F)	Mike Mahoney	8/25/2011	Yes	Contractor	A860 (E)	Steve Pellegrini	4/11/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-39	#BW/65-3/M	8/29/2011	Pass	A860 (E)	Steve Pellogrini	4/11/2011	Yes	Contractor	A876 (C)	Clint Lavin	8/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-40	#BW/65-3/M	8/29/2011	Pass	A877 (D)	James Rogers	7/6/2011	Yes	Contractor	A839 (F)	Mike Mahoney	8/25/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
7-76-11	XR-41	#BW/65-3/M	8/30/2011	Pass	A860 (E)	Steve Pellegrini	4/11/2011	Yes	Contractor	A876 (C)	Clint Lavin	8/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	X8-42	#8W/65-3/M	8/30/2011	Pass	A839 (F)	Mike Mahoney	8/25/2011	Yes	Contractor	A877 (D)	James Rogers	7/6/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-43	#8W/65-3/M	8/30/2011	Pass	CAA1	Chris Alcorn	8/22/2011	Yes	PG&E	A886	Rob Simmons	7/29/2011	Yes	Contractor	A583	Dave Yancey	5/9/2011	Contractor
T-76-11	XR-44	#8W/65-3/M	8/30/2011	Pass	лнк	Josh Henslee	8/22/2011	Yes	PG&E	MCHU	Matt Hawkins	8/9/2011	Yes	PG&E	A583	Dave Yancey	5/9/2011	Contractor
7-122-12	1W	#BW/60-9/M	3/16/2012	Pass	IRF2	lan Fuller	3/21/2012	Yes	PG&E	KDRD	Keith Ritter	2/2/2012	Yes	PGSE	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	2W	#BW/60-9/M	3/16/2012	Pass	KDRD	Keith Ritter	2/2/2012	Yes	PG&E	CISW	Clifford Speck	3/21/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	3W	#BW/60-9/M	3/15/2012	Pass	T18H	Todd Barker	10/10/2011	Yes	PG&E	IRF2	tan Fuller	3/21/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	4W	#BW/60-9/M	3/15/2012	Pass	тівн	Todd Barker	10/10/2011	Yes	PG&E	IRF2	lan Fußer	3/21/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	171	#BW/60-9/M	3/19/2012	Pass	Tibh	Todd Barker	10/10/2011	Yes	PG&E	IRF2	lan Fuller	3/21/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	1.ŤIW	#BW/60-9/M	3/28/2012	Pass	T1BH	Todd Barker	10/10/2011	Yes	PG&E	IRF2	lan Fuller	3/21/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	pg&e
T-122-12	2 TIW	#BW/60-9/M	3/28/2012	Pass	CISW	Clifford Speck	3/21/2012	Yes	PG&E	KDRD	Keith Ritter	2/2/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	3 TIW	#BW/60-9/M	3/28/2012	Pass	SMEO	Steve Evans	3/12/2012	Yes	PG&E	A838	Hugo Robles	10/6/2012	Yes	Contractor	SGSA	Steve Smith	9/18/2011	PG&E
T-122-12	4TIW	#BW/50-9/M	3/28/2012	Pass	BXWF	Brian Wolfenberger	3/4/2012	Yes	PG&E	SMEO	Kyle Santos	1/17/2012	Yes	PG&E	SGSA	Steve Smith	9/18/2011	PG&E

.

.

	Line 300B Pressure Tost Segmente													
Segment	Test Segment Description	Test Data	Teat Number	Test Duration (hrs)	Requested Maximum Operating Pressure ¹ (psig)	Minimum Req'd Test Prossure at Test Point to Establish Requested MOP (psig)	Minlmum Indicated Test Pressure at Test Point (psig)	Maximum Indicated Test Pressure at Test Point (psig)	Spike Test Porformed (Yes./No)	Ratio of Minimum Indicated Yest Pressure At Test Point to Requested MOP	Ratio of Maximum Indicated Test Pressure At Test Point to Requested MOP	% Specified Minimum Yield Strongth at Minimum Indicated Test Pressure ²	% Specified Minimum Yield Strength at Requested MOP ³	
100.P	Mainline Pipeline and associated components between stations 0+00.0 and 5+40.0		No Tost		660								43.15%	
101	Mainline Pipeline and associated components between stations 5+40.0 and 8+31.2		No Test		660								54.11%	
101,05	Mainline Pipeline and associated components between stations 8+31.2 and 8+35.5		No Tost		660								43.15%	
101.07	Mainline Pipeline and associated components between stations 8+35,5 and 8+40,5	8/24/2011	41497332-3	8.3	660	990	925	1008	Yos	1,40	1,53	0.48	34,52%	
101.09	Mainline Pipeline and associated components between stations 8+40.5 and 12+28.5	8/28/2011	41497332-4	8.4	660	990	687	900	No	1.34	1.36	0.70	51,99%	
101.095	Mainline Pipeline and associated components batween stations 12+26.5 and 12+36.4	8/24/2011	41497332-3	8.3	660	960	925	1008	Yes	1.40	1.53	0.48	34,52%	
101,097	Mainline Pipeline and associated components between stations 12+36.4 and 13+03.5	8/24/2011	41407332-3	8,3	6 60	090	925	1008	Yos	1.40	1,53	0,60	43,15%	
101.1	Mainline Pipoline and associated components between stations 13+03.5 and 13+71.9	8/24/2011	41497332-3	8.3	660	990	925	1008	Yos	1.40	1,53	0.48	34,62%	
101,105	Mainline Pipelino and associated components botween stations 13+71.9 and 24+44.0	8/24/2011	41497332-3	8.3	660	990	925	1008	Yos	1.40	1.53	0.60	43.15%	
101,11	Mainline Pipeline and associated components between stations 24+44.0 and 24+53.0	8/24/2011	41497332-3	8,3	660	990	925	1008	Yes	1.40	1.53	0.48	34,52%	
101.115	Mainline Pipeline and associated components between stations 24+53.0 and 24+58.5	8/26/2011	41497332-2	8.3	680	990	1123	1180	No	1.70	1,79	0.73	43,15%	
101.12	Mainline Pipeline and ossociated components between stations 24+56.5 and 24+84.7	8/20/2011	41497332-2	8,3	560	990	1123	1150	No	1.70	1.79	0,77	45,54%	

' MOP

 2 Maximum value for the respective $\underline{\text{pipe}}$ segment with the test boundaries

•

Page 1 Of 5

						1104	ours reacoryme							
Short Name	Segment	Test Segment Description	- Test Date	Test Number	Test Duration (hrs)	Requested Maximum Operating Pressure ¹ (psig)	Minimum Req'd Test Pressure at Test Point to Establish Requested MOP (psig)	Minimum Indicated Test Pressure at Test Point (psig)	Maximum Indicated Test Pressure at Test Point (psig)	Spike Test Performed (Yes / No)	Ratio of Minimum Indicated Test Pressure At Test Point to Requested MOP	Ratio of Maximum Indicated Test Pressure At Test Point to Requested MOP	% Specified Minimum Yield Strength at Minimum Indicated Test Pressure ²	% Specified Minimum Yield Strength at Requested MOP ²
300B_Topock_ Transwestern	Station	Mainline Pipeline and associated components between stations 0+00.0 and 0+02.7	1/27/1992	1960574	8.3	900	1350	1,708	1,820	No	2.00	2.02	92,20%	46.15%
300B_Topock_ Transwostern	Station	Mainline Pipeline and associated components between stations 0+02.7 and 1+00.5	10/18/1999	7027046	B.O	900	1350	1,740	1,740	No	1,93	1.93	69,22%	46.15%
300B_Topock_ Transwestern	Station	Mainline Pipeline and associated components between stations 1+00,5 and 1+80,9	1/27/1992	1960674	8,3	900	1350	1,798	1,820	No	2.00	2.02	92,20%	46.15%
300B_Topock_ Transwestern	Station	Mainline Pipelino and associated components between stations 1+80,8 and 1+85,8	8/4/2011	41474238	8,0	900	1350	1,180	1,280	No	1.31	1,42	53.94%	41.14%
3008_Tepock_ Transwestern	Station	Mainline Pipaline and associated components between stations 1+85,8 and 1+98,6	10/18/1999	7027046	8.0	900	1350	1,740	1,740	No	1.93	1.93	89,22%	46.15%
3008_Topock_ Transwestern	Station	Mainline Pipoline and associated components between stations 1+98,6 and 5+04,9	1/27/1992	1960574	8.3	900	1350	1,798	1,820	No	2,00	2.02	92,20%	46.15%
3008_Topock_ Tronewestern	Station	Mainline Pipeline and associated compenents between stations 5+04.9 and 5+09.9	7/12/2011	41474238	B,0	900	1350	1,153	1,154	No	1.28	1.28	52.70%	41,14%
¹ MOP		· · · · · · · · · · · · · · · · · · ·												
² Maximum value for the respective <u>pipe</u> segment with the test boundaries														

Line 300B_Topock_Transwestern Pressure Test Segments

Page 2 of 5

Line U_300A_TopockCompressor_SuctionA Pressure Test Segments

Short Name	Sogment	PFL Station Begin	PFL Station End	Test Segment Description	Tost Date	Test Number	Test Duration (hrs)	Requested Maximum Operating Pressure ¹ (psig)	Minimum Rogʻd Test Pressure at Test Point to Establish Requested MOP (psig)	Minimum Indicated Test Pressure at Test Point (psig)	Maximum Indicated Test Pressure at Test Point (psig)	Spiko Test Porformed (Yas / No)	Ratio of Minimum Indicated Test Pressure At Test Point to Requested MOP	Ratio of Maximum Indicated Test Pressure At Test Point to Requested MOP	% Specified Minimum Yield Strength at Minimum Indicated Test Pressure ¹	% Specified Minimum Yield Strength at Requested MOP ²
U_300A_TopockCompressor _SuctionA	103,2	0+00.0	0+00,0	Mainline Pipeline and associated components between stations 0+00.0 and 0+05.1	10/24/1067	W04448-E	24,0	700	1050	1,050		No	1,50		40,32%	26,88%
U_300A_TopockCompressor _SuctionA	Station	0+00,0	0+00,1	Mainlino Pipeline and associated components batween stations 0+05.1 and 5+02.4	7/9/2011	41474238	8.0	700	1050	1,182	1,188	No	1.69	1.70	84.84%	38.40%
U_300A_TopockCompressor SuctionA	Station	0+00,1	0+00,1	Meinline Pipeline and associated components between stations 5+02.4 and 6+14.8	7/12/2011	41474238	8,0	700	1050	1,153	1,154	No	1,65	1,65	52.71%	32.00%
U_300A_TepockCompressor _SuctionA	Station	0+00,1	0+00.2	Mainline Pipeline and associated components botween stations 6+14,8 and 9+47,0	7/12/2011	41474238	8,0	700	1050	1,152	1,154	No	1,65	1,65	52,66%	32.00%
U_300A_TopockCompressor _SuctionA	Station	0+00,2	0+00,2	Mainline Pipeline and associated components between stations 9+47,0 and 11+67,0	7/12/2011	41474238	8.0	700	1050	1,153	1,154	No	1,65	1,65	52,71%	32.00%
U_300A_TopockCompressor _SuctionA	Station	0+00,2	0+00.3	Mainline Pipeline and associated components between stations 11+67.0 and 15+14.2	7/13/2011	41474238	8,0	700	1050	1,401	1,405	No	2,00	2.01	72.83%	36,39%
U_300A_TepsckCompressor _SuctionA	Station	0+00,3	0+00,4	Mainline Pipeline and associated components between stations 15+56,3 and 19+48,8	7/13/2011	41474238	8,0	700	1050	1,401	1,405	No	2,00	2,01	72,83%	36,39%

1 MOP

4

2 Maximum value for the respective pipe segment with the test boundaries

.

Page 3 of 5

	Line U_300B_Topock Compressor SuctionB Pressure Tost Segments													
Short Name	Segment	Test Segment Description	Test Date	Test Number	Test Duration (hrs)	Requested Maximum Operating Pressure ¹ (psig)	Minimum Regid Test Prossure at Test Point to Establish Requested MOP (psig)	Minimum Indicated Tost Prossure at Test Point (psig)	Maximum Indicated Test Pressure at Test Point (psig)	Spike Test Pertormed (Yes / No)	Ratio of Minimum Indicated Test Pressure At Test Point to Requested MOP	Ratic of Maximum Indicated Test Proseuro At Test Point to Requested MOP	% Specified Minimum Yield Strength at Minimum Indicated Test Pressure ²	% Specified Minimum Yield Strength at Requested MOP ³
Line U_300B_Yopeck Compressor SuctionB	101.12	Mainline Pipeline and associated components between stations 0+00,0 and 0+04.5	8/26/2011	41497332-2	8,3	660	990	1,123	1,180	No	1.70	1.79	35,94%	21.12%
Line U_3008_Topook Compressor Suction8	Station	Mainline Pipeline and associated components between stations 0+04.5 and 8+04.1	8/3/2011	41472438	8,0	660	990	1,200	1,223	No	1.82	1.85	62.38%	34.31%
Line U_300B_Topack Compressor CardiopB	Station	Mainline Pipeline and associated components between stations 8+04,1 and 9+18,9	8/4/2011	41474238	8.0	66D	990	1,180	1,280	No	1.79	1.94	53,94%	30.17%
Line U_309B_Topock Compressor SuctionB	Station	Mainline Pipeline and associated components between stations 9+18.9 and 10+31.5	8/5/2011	41474238	8,0	660	990	1,182	1,232	No	1.79	1.87	54.03%	30,17%
Line U_3008_Topsek Compressor Suction8	Station	Mainline Pipeline and associated components between stations 10+31.5 and 11+44.1	8/4/2011	41474238	8.0	660	990	1,180	1,280	No	1,79	1.94	53,94%	30.17%
Line U_3005_Topook Compressor Duction6	Station	Mainline Pipeline and associated components batween stations 11+44.1 and 12+56.7	8/4/2011	41474238	8.0	660	.890	1,200	1,223	No	1.82	1.85	54,85%	30.17%
Une U_300B_Topock Compressor StuctionB	Station	Mainline Pipeline and associated components between stations 12+56,7 and 13+69,3	8/5/2011	41474238	8,0	660	990	1,182	1,232	No	1,79	1,87	54.03%	30,17%
Line U_300B_Toposk Compressor SuctionB	Station	Mainline Pipeline and associated components between stations 13+69,3 and 14+78,0	8/4/2011	41474238	8.0	660	990	1,200	1,223	No	1.82	1.85	54,85%	30,17%
Line U_3008_Topock Compressor	Station	Mainline Pipeline and associated components between stations 14+78.0 and 20+77.3	8/10/2011	41474238	8.0	660	990	1,360	1,412	No	2.06	2.14	99,60%	48,43%

1 NOP

2 Maximum value for the respective joe segment with the test boundaries

•

Page 4 of 5

	Line 300B Shorts Pressure Test Segments														
Short Name	Segment	Test Segment Description	Test Date	Test Number	Test Duration (hrs)	Requested Maximum Operating Pressure ¹ (psig)	Minimum Reg'd Test Pressure at Test Point to Establish Requested MOP (psig)	Minimum Indicated Test Pressure at Test Point (psig)	Maximum Indicated Test Pressure at Test Point (psig)	Spike Test Performed (Yes / No)	Ratio of Minimum Indicated Test Pressure At Test Point to Requested MOP	Ratio of Maximum Indicated Test Pressure At Test Point to Requested MOP	% Specified Minimum Yield Strength at Minimum Indicated Test Pressure ²	% Specified Minimum Yield Strength at Requested MOP ²	
BD 550	601	Mainline Pipeline and associated components between stations 0+00.0 and 0+22.8	8/24/2011	41497332-3	8.3	660	990	925	1,008	Yes	1.40	1.53	25.09%	17.90%	
BD550	602	Mainline Pipeline and associated components between stations 0+22.8 and 1+78.6	8/5/2012	41717164	1.2	660	990	1,063	1,120	Yes	1.61	1.70	28.83%	17.90%	
DRIP5717	651	Mainline Pipeline and associated components between stations 0+00.0 and 0+02.8	8/28/2011	41497332	8.4	660	990	887	900	No	1.34	1.36	40.86%	30.40%	
DRIP5717	652	Mainline Pipeline and associated components between stations 0+02.8 and 0+50.4	8/28/2011	41497332	8.4	660	990	887	900	No	1.34	1.36	57.99%	43.15%	
DRIP5717	653	Mainline Pipeline and associated components between stations 0+50.4 and 1+09.2	8/28/2011	41497332	B.4	660	990	887	900	No	1.34	1.36	33.41%	24.86%	
U_DRIP_RDRIP5717	652	Mainline Pipeline and associated components between stations 0+00.0 and 0+46.1		No Test		660								14.54%	
U_300B_201206051412 Topock Suction	Station	Mainline Pipeline and associated components between stations 0+00.0 and 0+04.5	8/26/2011	41497332	8.3	660	990	1,123	1,180	No	1.70	1.79	43.12%	25.34%	
U_300B_201206051412 Topock Suction	Station	Mainline Pipeline and associated components between stations 0+04.5 and 0+31.5	8/3/2011	41474238	8.0	660	990	1,200	1,223	No	1.82	1.85	69.76%	38.37%	
U_300B_Topock_Fuel_ Line	Station	Mainline Pipeline and associated components between stations 0+00.0 and 0+09.9	8/25/2011	41474238	8.0	700	1050	1,401	1,405	No	2.00	2.01	38.01%	18.99%	
U_300A_201206061200 Topock Suction	Station	Mainline Pipeline and associated components between stations 0+00.0 and 0+05.7	10/24/1967	4448-E	24.0	700	1050	1,050		No	1.50		40.32%	26.88%	
U_300A_201206061200 Topock_Suction	Station	Mainline Pipeline and associated components between stations 0+05.7 and 0+44.6	7/9/2011	41474238	8.0	700	1050	1,182	1,188	No	1.69	1.70	73.69%	43.64%	
U_300B_Topock_Trans western 2	Station	Mainline Pipeline and associated components between stations 0+00.0 and 0+06.5		No Test		900								14.01%	

1 MOP 2 Maximum value for the respective pipe segment with the test boundaries