UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Gas Transmission Northwest Corporation) Docket Nos. RP06- -000

Prepared Direct Testimony of Kenneth W. Nichols

Q: What is your name and business address?

A: My name is Kenneth W. Nichols. My business address is 1400 SW Fifth Avenue, Suite 900, Portland, Oregon 97201.

Q: What is your occupation?

A: I am Director of Credit and Risk Management for Gas Transmission Northwest Corporation and other U.S. subsidiaries of TransCanada. I have held this position since 2002.

Q: Please describe your educational background and your occupational experiences as they are related to your testimony in this proceeding.

A: I received a B.A. in Physics and Computer Science from Willamette University in 1986 and an M.S. in Management Sciences and Engineering from Stanford University in 1992. I have consulted and worked in the energy and utility industry since graduating from Stanford. Relevant positions I have held include Energy Trader at KN Energy 1995 to 1997, Vice President and General Manager of Hafslund Energy Trading 1997 to 2001, and President of NexClear Inc., an electronic clearinghouse for energy transactions, from 2001 to 2002.

Q: What is the purpose of your testimony?

A: My testimony describes GTN's proposed tariff modifications related to creditworthiness tariff provisions and provides analysis and evidence demonstrating the importance of these changes.

Q: Why are you proposing these tariff modifications?

A: GTN is proposing these tariff modifications in order to reduce the risk and cost to GTN and its existing shippers of future defaults. As of June 1, 2006, 48 percent of the net present value of long term firm contracts, or $530 million, was held by non-creditworthy shippers, with credit ratings below BBB that have not provided a guarantee from a creditworthy entity. (*See* Exhibit No. GTN-16.) This represents an unsecured risk to future revenues that is only secured by $20 million of collateral, or 3 months of reservation charges from existing non-creditworthy shippers. Moreover, GTN's credit risk is relatively high compared to other natural gas pipelines. Exhibit No. GTN-17 compares the credit quality of the top 10 shippers at several U.S. natural gas pipelines,[1] and demonstrates that GTN has one of the highest percentages of capacity held by non-investment grade shippers among a proxy group of pipelines,[2] including Tennessee Gas Pipeline Company, Northwest Pipeline Corporation, Gulfstream, Transcontinental Gas Pipeline Corporation, Questar Pipeline Company, ANR Pipeline Company, Southern Natural Gas Company, National Fuel Gas Supply Company, Questar Southern Trails, Equitrans, LP, El Paso Natural Gas Company, and Natural Gas Pipeline Company of America.[3] These tariff modifications will allow GTN to attract and retain higher creditworthy customers and provide GTN with the tools necessary to protect the financial

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1 Data on capacity and shippers listed are from FERC website Form 549B - Index of Customers, which is updated every quarter, based on April 2006 FERC data. Subsidiary companies are assumed to be supported by parent company credit ratings.

2 A non-investment grade credit rating is anything below a Standard & Poor's rating of BBB-.

3 Proxy group companies discussed in the testimony of GTN Witness Paul R. Moul.

stability of the pipeline.

Q: What Tariff changes is GTN proposing?

A: GTN is proposing four changes to its tariff related to credit. First, GTN is changing section 18.1(e) to allow GTN to consider a shipper's credit status when awarding capacity in an open season. Second, GTN is modifying sections 18.3(A)(2)(b) and 18.3(D)(3) to allow GTN nondiscriminatory discretion when a shipper wishes to replace its original credit assurance with an alternative assurance. Third, GTN is clarifying sections 18.3(A)(2)(b)(i) and 18.3(D)(3)(a) such that when a shipper provides GTN with a guarantee and the guarantor has become non-creditworthy or has an insufficient credit limit, GTN has the right to request additional assurances. Fourth, GTN is changing its tariff to eliminate the strict "10 percent of tangible net worth test" currently used to establish credit limits for shippers in favor of a more flexible approach that will allow GTN to take a shipper's specific circumstances into account.

Q: Please describe the change related to considering shipper credit quality when awarding capacity.

A: GTN is proposing to modify Section 18.1(e) of its tariff to allow GTN to consider a shipper's credit quality when evaluating bids and awarding capacity in an open season based on specific criteria that will be posted prior to the start of each open season.

Q: Why does GTN wish to integrate credit quality into the evaluation of bids for transportation capacity?

A: The value to GTN of a transportation contract with a given shipper is generally a function of three things: (1) the contract price, (2) the contract term, and (3) the likelihood that the shipper (or any replacement shipper) will have the financial ability to honor its commitment over the length of the contract term. GTN's current methodology for determining the winning bid for capacity is based on a simple net present value ("NPV") formula, which is affected only by the first two of these factors, term and rate,[4] and does not consider the probability that a Shipper may go out of business or be unable to perform its contractual obligations. FERC recognized this problem in its Policy Statement on Creditworthiness Issues for Interstate Natural Gas Pipelines (June 16, 2005), observing that "[a] shipper's credit status may be a relevant factor in assessing the value of its bid as compared with bids by more creditworthy shippers, and in determining the amount of collateral that a non-creditworthy shipper must provide to have its bid considered on an equivalent basis." Including credit quality in the bid evaluation process will help to ensure that GTN chooses the bid with the best long-term valuation.

Allowing pipelines to take creditworthiness into account during the bidding process achieves several important objectives. First, it negates the unfair advantage a non-creditworthy bidder would have in bidding unrealistically long terms for capacity and thereby "outbidding" the legitimate offers of more creditworthy shippers. Second, it encourages shippers to use the highest possible credit quality to support their bids. In other words, the creditworthiness factor would encourage companies to provide creditworthy guarantees rather than collateral, and also discourages creditworthy companies from setting up thinly-capitalized, non-creditworthy shell companies for the sole purpose of bidding for pipeline capacity.

Q: How does GTN plan to include credit quality in bid evaluations?

When evaluating bids, GTN will include the likelihood of a default when calculating expected revenues from long-term contracts (one year or greater). The methodology and

[4] Refer to GTN Tariff, Original Sheet No. 129.

parameters will be specified as part of each open-season posting so that prospective shippers can fully understand how their bids will be evaluated prior to submission. GTN will also specify the maximum contract term length under which each bid will be evaluated.

Q: Can you provide an example?

A: One possible example would be for GTN to specify in its open-season notice that it will discount the net present value of bids using Standard and Poor's ("S&P") Annual Cumulative Average Default Rate table, extrapolated to 20 years, with a 20-year cap on bids for the purposes of evaluation. S&P's current default rate table is shown as Table 1 below. This table shows the average corporate default rates taken from historical evidence dating back 15 years from 1981 to 2005. The values in the table represent the percentage of global firms in a particular rating category which have defaulted in a given time period. The S&P "Annual 2005 Global Corporate Default Study And Rating Transitions" which supports Table 1 is provided in Exhibit No. GTN-18 for the reader's convenience.

Table 1: S&P's 2005 Annual Cumulative Average Default Rate Table

Table 15 Cumulative Average Default Rates By Rating Modifier, 1981 - 2005 (%)															
	--Time Horizon (Year)--														
Rating	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
AAA	0.00	0.00	0.03	0.06	0.10	0.17	0.24	0.36	0.40	0.44	0.44	0.44	0.44	0.51	0.58
AA+	0.00	0.00	0.00	0.07	0.15	0.24	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
AA	0.00	0.00	0.00	0.07	0.15	0.22	0.34	0.48	0.61	0.74	0.85	0.92	1.08	1.17	1.22
AA-	0.02	0.10	0.23	0.36	0.51	0.67	0.81	0.89	0.97	1.07	1.17	1.36	1.43	1.59	1.69
A+	0.05	0.11	0.26	0.47	0.63	0.80	0.98	1.16	1.38	1.60	1.83	2.11	2.36	2.64	2.89
A	0.04	0.12	0.17	0.25	0.42	0.63	0.84	1.09	1.36	1.72	2.02	2.18	2.36	2.46	2.74
A-	0.04	0.15	0.30	0.50	0.80	1.11	1.50	1.73	2.03	2.25	2.35	2.51	2.63	2.77	2.92
BBB+	0.20	0.58	1.11	1.57	2.08	2.63	3.07	3.46	3.90	4.25	4.59	4.85	5.28	5.92	6.64
BBB	0.28	0.60	0.91	1.56	2.24	2.87	3.43	4.11	4.67	5.33	6.06	6.54	7.08	7.26	7.65
BBB-	0.36	1.19	2.11	3.34	4.52	5.60	6.42	7.18	7.73	8.36	8.87	9.44	9.90	10.73	11.33
BB+	0.59	1.62	3.35	4.94	6.29	7.62	8.88	9.41	10.43	11.20	11.75	12.24	12.67	13.14	14.02
BB	0.87	2.78	5.14	7.32	9.43	11.56	13.20	14.69	15.86	16.81	17.87	18.71	19.08	19.18	19.29
BB-	1.62	4.77	8.14	11.39	14.16	16.71	18.68	20.61	22.31	23.57	24.66	25.42	26.42	27.11	27.77
B+	2.86	7.99	12.85	16.96	19.93	22.19	24.26	26.00	27.46	28.97	30.24	31.31	32.44	33.57	34.51
B	7.78	15.61	21.24	25.20	27.91	30.26	31.79	32.98	33.95	34.93	35.92	36.91	37.99	38.72	39.62
B-	11.22	20.45	27.46	31.92	35.14	37.59	39.66	40.97	41.76	42.27	42.83	43.24	43.46	43.70	43.95
CCC/C	27.02	35.63	40.93	44.39	47.56	48.78	49.98	50.64	52.17	53.05	53.79	54.57	55.19	55.90	55.90
Investment grade	0.11	0.31	0.54	0.85	1.18	1.51	1.81	2.10	2.37	2.65	2.91	3.12	3.34	3.55	3.81
Speculative grade	4.65	9.22	13.28	16.59	19.18	21.33	23.11	24.55	25.86	26.99	28.01	28.86	29.69	30.38	31.04
All rated	1.61	3.21	4.66	5.90	6.92	7.80	8.52	9.14	9.70	10.22	10.69	11.08	11.47	11.83	12.20
Sources: Standard & Poor's Global Fixed Income Research and Standard & Poor's CreditPro® 7.02.															

For instance, during a 15-year period, 11.33 percent of corporations with a BBB- S&P rating defaulted on their obligations. While GTN recognizes that not all non-creditworthy shippers will default on their contracts, pipelines do not possess the ability to predict -- with certainty -- which entities will seek bankruptcy protection, will default on their obligations, or will, rather, improve their respective credit qualities.

Q: How would GTN use probability of default to evaluate bids?

Using the senior unsecured debt ("SUD") rating for a shipper or equivalent rating,[5] the pipeline would choose the default rate based on the shipper's rating and the proposed maximum contract term and apply this rate as a discount factor to the shipper's present value bid. The Default Risk NPV would be defined as the following:

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[5] *See* Gas Transmission Northwest Corporation FERC Gas Tariff, Third Revised Volume No. 1-A, Original Sheet No. 133A, General Terms and Conditions 18.3 (A)(1)(a)(i): "If Shipper's debt is not rated by a recognized debt rating service, Shipper may request an equivalent rating as determined by GTN, based on the financial rating methodology, criteria and ratios for the industry of the Shipper as published by the above rating agencies from time to time. In general, such equivalent rating will be based on the audited financial statements for the Shipper's two (2) most recent fiscal years, all interim reports, and any other relevant information."

Bid Value = PV(discount rate, reservation rate, term) * (1-probability of default)

As can be seen from the default rate table shown in Table 1, the longer the bid term, the higher the probability of default. Example 1 below shows the different results from using a simple PV analysis versus the PV analysis with the credit discount in comparing a bid from a creditworthy shipper against a bid from a non-creditworthy shipper.

Example 1

Creditworthy		Shipper 1	Shipper 2
rate	$/Dth	$0.50	$0.50
capacity	Dth	100,000	100,000
duration	years	10	14
discount rate	9.66%		
Shipper Rating		A	BB
probability of default		1.7%	19.18%
Normal PV		$113,795,136	$136,970,428
credit discount		$111,837,860	$110,699,500

In Example 1, if GTN does not consider credit quality, then the less creditworthy party, Shipper 2, with the longer term would win the bid. However, if GTN discounts the NPV of the bids with the likelihood of default, the shipper with the better credit wins.

Q: What could the less creditworthy shipper do to win the bid?

A: If Shipper 2 wanted to win the bid, then it could increase the bid rate or provide additional collateral to increase its chance of winning. Example 2 demonstrates that Shipper 2, with the same rate and contract term, could win the bid by providing 2 years worth of collateral.

Example 2

Extra Collateral		Shipper 1	Shipper 2
rate	$/Dth	$0.50	$0.50
capacity	Dth	100,000	100,000
duration	years	10	14
collateral	years	0	3
discount rate	9.66%		
Shipper Rating		A	BB
probability of default		1.72%	17.87%
Normal PV		$113,795,136	$136,970,428
credit discount		$111,837,860	$112,493,812

By providing three years of collateral, Shipper 2 reduces its uncollateralized term of the contract from 14 to 11 years, thus reducing its discount factor from 19.18 percent to 17.87 percent and therefore is able to win the capacity under the credit discounted NPV analysis. Alternatively, Shipper 2 could win the bid by increasing the rate or term of its bid up to the maximum defined in the open season. If Shipper 1 bid the maximum rate and maximum term, then Shipper 2 would have to increase the collateral provided in order to win the bid.

Q: Please explain your proposal to specify the maximum contract term length under which bids will be evaluated?

A: In order to address the difficulty in evaluating bids with extremely long terms, GTN proposes to specify, for each open season, a maximum contract length to be used for evaluating bids from shippers. Maximum contract length that will be evaluated will vary with a shipper’s credit rating. The stronger a shipper’s credit rating, the longer the maximum contract length that may be bid. In other words, a shipper could not simply increase the value of its bid by bidding unrealistic contract terms, such as 50 years. To be clear, this cap on bids is for evaluation purposes only, and is not a limit on the length of the contract itself.

Q: Has contract length been an issue for GTN in the past?

A: Yes. For example, as described in further detail in the testimony of GTN Witness John Roscher, the winning bidder in GTN's 2002 Expansion open season was a non-creditworthy shipper without any significant assets, Newport Northwest, that won the capacity on the strength of a 52-year contract term. Under GTN's existing tariff, GTN was required to accept this 52-year bid ahead of long-term contracts from more creditworthy customers.

Q: What are the limitations of this particular methodology?

A: This model has several limitations. First, the S&P default table, which is updated every year, uses historic statistical analysis amongst all corporate issuances to assign a probability that a given customer will default. Data used for this analysis will be continuously refined; however, no model can predict the future with certainty. For example, due to historical data limitations presented by S&P's 15-year default statistics, GTN will be required to extrapolate default rates to analyze terms beyond that period. Second, not all shippers are rated by S&P or Moody's. For unrated shippers, GTN will perform an equivalent rating as specified in the GTN Tariff.

Q: Would GTN propose to use this approach for Short-Term Firm contracts less than one year?

A: No. GTN would use this approach only for open-season capacity bids with proposed contract terms of one year or more in length.

Q: Would GTN propose to use this credit evaluation methodology as part of the ROFR process?

A: Yes, GTN would use this same methodology to evaluate bidders in the ROFR process, as well as to evaluate the matching bids of existing shippers. GTN's proposal would honor the ROFR right by allowing an existing shipper to match the best competing bids.

Q: Does GTN's proposal help or harm existing shippers whose contracts are subject to ROFR?

A: It depends. GTN's proposal will help existing shippers with relatively good credit ratings and will not help those with relatively bad credit ratings. GTN's proposal helps existing shippers with a ROFR in instances when the best competing bids come from shippers with probabilities of default higher than that of the existing shipper. In these instances, the existing shipper's NPV would be adjusted down less than the competing bids, allowing the existing shipper to match the bids with a relatively lower rate or shorter term. In general, the NPV evaluation methodology defined in the open season will determine the necessary matching bid criteria for the existing shipper to retain the capacity. GTN's proposal is to treat all bids and matching bids the same.

Q: If the best competing bids were at maximum rate and the existing shipper had a higher probability of default than the best competing bids, how could the existing shipper match the bids and retain the capacity?

A: The existing shipper would need to construct its matching bid so the NPV, as set forth in the open season, equals the competing bids. This means the existing shipper must either 1) increase the term of the contract, or 2) provide enough collateral to reduce the probability of default to less than or equal to the shippers with the best competing bids, or 3) a combination of both.

Q: Could the collateral amount exceed three months of reservation charges?

A: Yes, it could. The existing shipper would have the option to bid extra collateral to place it at the same default risk level as that contained by the shippers submitting the best competing bids, and make GTN financially indifferent as to who ultimately obtains the capacity.

Q: Is there any other way an existing shipper can retain its contract if its default risk is higher than the best competing bids?

A: Yes. If the best competing bids are not at the maximum allowable rate, then the existing shipper may increase its rate up to a point where the Default Risk NPV is equal to that of the best competing bids.

Q: What is your second tariff modification?

A: GTN's second modification allows GTN the discretion to require a shipper to retain its credit assurance when the shipper seeks to replace such assurance with an inferior credit assurance. GTN will, of course, exercise this discretion in a not unduly discriminatory manner.

Q: Why is it important to give GTN discretion when considering a change in a shipper's form of credit assurance?

A: GTN proposes to not unreasonably prevent a shipper from switching from a superior form of assurance to an inferior form of assurance. As GTN's tariff is now written, the shipper may provide a variety of credit assurances including guarantees, cash, and letters of credit. These assurances are not qualitatively equal in protecting GTN from default risks. For instance, GTN would be at increased risk if a shipper, which initially provided a guarantee from a creditworthy guarantor, replaced that guarantee with three months of cash, or with a guarantee from a less creditworthy guarantor. This tariff modification protects GTN from a situation where a shipper has won a bid for capacity or entered into a transportation contract based upon a superior assurance and later requests to replace such assurance with an inferior form of credit assurance.

Q: Would GTN explain to a shipper why it has denied a request to change credit assurances?

A: Yes. GTN would explain why a change in assurance has been denied. GTN would not unreasonably deny a request to change a form of credit assurance and would exercise its discretion in this regard in a not unduly discriminatory manner.

Q: What is your third tariff modification?

A: GTN proposes to add tariff language to make clear that when a shipper provides GTN with a guarantee and the guarantor has become non-creditworthy or has an insufficient credit limit, that GTN has the right to request additional assurances (*e.g.*, cash or a letter of credit). This addition provides clarity with respect to GTN's current practice and reflects industry standards in addressing the credit risk from counterparties who provide parental guarantees.

Q: What is your fourth tariff modification?

A: GTN's fourth modification related to credit issues is to remove from its tariff the strict, bright-line requirement that a shipper's credit limit be limited to 10 percent of its tangible net worth in favor of a more flexible approach that will allow GTN to consider a shipper's specific circumstances.

Q: Why is it appropriate to establish a credit limit for a creditworthy customer?

A: Determining creditworthiness is not simply a yes or no decision. The creditworthiness decision is either yes -- up to a certain amount --, or no. The pipeline decision on credit limits for a shipper is similar to banks setting credit limits on a customer's credit card usage. For example, a bank may have determined that I am creditworthy, but I doubt if the bank would allow me to use the card to buy $200,000 per month worth of merchandise. The same is true for GTN's shippers. Depending on the financial characteristics of the shipper, GTN will determine creditworthiness as an appropriate credit limit.

Q: How does GTN currently establish a shipper's credit limit?

A: GTN currently uses two criteria to determine a shipper's credit limit. First, credit limits are only given to a shipper, or a shipper with a guarantor, who has a Standard & Poor's rating for unenhanced senior unsecured debt of at least BBB for firm service and BB+ for interruptible services, and/or a Moody's rating for unenhanced senior unsecured debt of Baa2 for firm service and Ba1 for interruptible service, or an equivalent rating as determined by GTN. Second, for shippers that pass the rating hurdle, GTN's tariff requires that GTN will set a credit limit at 10 percent of a shipper's Tangible Net Worth (defined as shipper's total assets, less liabilities, less intangible assets, less off-balance sheet items). This credit limit must be sufficient to meet the total contractual obligations of the shipper, which is defined as the present value of all firm contracts, and three months of maximum rate service for all interruptible services.

Q: Why are you proposing to change this methodology?

A: GTN believes that rote application of the 10 percent of tangible net worth test artificially constrains GTN from extending greater credit to shippers that GTN believes are not a credit risk for specific contracts. Moreover, the credit limit test does not consider contract length or long-term shippers' stable monthly cash flows.

Q: What other criteria would you consider in determining credit limits?

A: There are many variables to properly determine a credit limit. Among the criteria to consider are the following:

1. Length of shipper's contracts.

2. Percentage of the pipeline's total capacity held by shipper.

3. The type of company, and its use of the capacity.

4. The shipper's payment history.

5. The shipper's cash flow, and historical cash flow and revenue volatility.

6. The shipper's financial ratios, such as debt to equity ratio, interest coverage ratio, *etc.*

Q: Can you define a single, credit-limit methodology that includes all of these variables?

A: No. Many variables interact, and setting a credit limit requires the judgment of a trained credit analyst. For large commercial loans, banks would not set credit limits, interest rates, or other loan terms through a strict adherence to financial model outputs. In some cases, where a loan is standardized, sufficiently collateralized, relatively small, or the interest rate is high (*e.g.*, credit cards), a bank may rely solely on a formulaic approach. The majority of bank loans, however, are reviewed and assessed by a credit analyst or trained loan officer. They have models to assist in the process, but rarely would they rely solely on model output for defining a credit limit. Setting a shipper credit limit should not be done via formula.

Q: How do other pipelines set shipper credit limits?

A: A review of several pipeline tariffs reveals that shipper credit limits generally are not determined through a formulaic approach. Kern River Gas Transmission's tariff states "Transporter's credit appraisal procedures involve the establishment of dollar credit limits on a standardized nondiscriminatory basis." Many pipelines refer to the NAESB WGQ Creditworthiness Standards 0.3.3 through 0.3.10. These standards discuss the type of information that a shipper provides a pipeline to establish credit, but does not specify a method to determine credit limits. GTN also follows the NAESB WGQ Creditworthiness Standards 0.3.3 through 0.3.10.

Q: How do you propose to modify GTN's Tariff?

A: As described in revised section 18.3(G) of the Tariff, I propose that GTN set dollar credit limits based on a standardized, not unduly discriminatory basis.

Q: How do your proposed tariff modifications affect existing shippers?

A: I believe that all these modifications benefit existing shippers by reducing the risk of shipper defaults and the necessity for GTN to increase rates as a result of defaulted turnback capacity. These modifications allow GTN to attract and retain more creditworthy customers and provide GTN with the tools to protect the financial stability of the pipeline.

Q: Does this complete your testimony?

A: Yes it does.