BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Aquila Network - MPS and L&P Purchased Gas Adjustment (PGA) Factors to be Reviewed in its Actual Cost Adjustment.	)))	Case No. GR-2005-0271

STAFF RECOMMENDATION IN THIS CASE

COMES NOW the Staff of the Missouri Public Service Commission ("Staff") and for its Recommendation in this case states:

1. On February 14, 2005, Aquila, Inc., d/b/a Aquila Networks – MPS and L&P of Kansas City, Missouri, filed a tariff sheet proposed to become effective March 2, 2005. The tariff sheet was filed to reflect scheduled changes in MPS and L&P's Purchased Gas Adjustment (PGA) factors as the result of estimated changes in the cost of natural gas for the remaining winter heating season.

2. Attached is Staff's recommendation in both Non Proprietary and Highly Confidential versions.

3. In its report Staff makes several recommendations and requests that the Commission order the Company to respond within thirty (30) days.

WHEREFORE the Staff requests the Commission accept Staff's report and order the Company to respond to staff's recommendations within thirty (30) days.

NP

Respectfully submitted,

/s/ Lera L. Shemwell______________
Lera L. Shemwell
Deputy General Counsel
Missouri Bar No. 43792

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Missouri Public Service Commission
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Certificate of Service

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronic mail to all counsel of record on this 6th day of December, 2006.

/s/ Lera Shemwell______

NP

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Aquila Networks – MPS & L&P's	)	
Purchased Gas Adjustment Factors to be Reviewed	)	Case No. GR-2005-0271
in Its Actual Cost Adjustment.	)	

AFFIDAVIT OF DAVID M. SOMMERER

STATE OF MISSOURI	)	
	)	ss.
COUNTY OF COLE	)	

David M. Sommerer, being of lawful age, on his oath states: that as Manager of the Procurement Analysis Department of the Utility Services Division he has participated in the preparation of the foregoing report, consisting of 10 pages to be presented in the above case, that he has verified that the following Staff Memorandum was prepared by Staff of the Procurement Analysis Department that have knowledge of the matters set forth as described below; that he has verified with each of the Staff members listed below that the matters set forth in the Staff Memorandum are true and correct to the best of his/her knowledge and belief,

Phil Lock:	Storage, Refunds, AD Valorem Refunds, Line Losses, Daily Balancing
Lesa Jenkins:	Reliability Analysis, Gas Plan
Kwang Choe:	Hedging
Greg Macias:	Reliability Analysis

that he has knowledge of the matters set forth in such report and that such matters are true to the best of his knowledge and belief.

David M. Sommerer

David M. Sommerer

Subscribed and sworn to before me this 6th day of December 2006.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

ASHLEY M. HARRISON
My Commission Expires
August 31, 2010
Cole County
Commission #06898978

Ashley M Harrison

Notary Public

MEMORANDUM

TO: Missouri Public Service Commission Official Case File
Case No. GR-2005-0271, Aquila-MPS/L&P

FROM: Dave Sommerer, Manager - Procurement Analysis Department
Phil Lock, Regulatory Auditor - Procurement Analysis Department
Lesa Jenkins, P.E., Regulatory Engineer - Procurement Analysis Department
Kwang Choe, Ph.D., Regulatory Economist - Procurement Analysis Department
Greg Macias, Engineering Specialist, Engineering & Management Services Dept.

/s/ Dave Sommerer 12/06/06	/s/ Lera Shemwell 12/06/06
Project Coordinator / Date	General Counsel's Office / Date

SUBJECT: Staff Recommendation in Aquila-MPS/L&P 2004/2005 Actual Cost Adjustment Filing.

DATE: December 6, 2006

The Procurement Analysis Department (Staff) has reviewed the 2004/2005 Actual Cost Adjustment (ACA) filing of Aquila, Inc. d/b/a Aquila Networks (Company). The Purchased Gas Adjustment (PGA) rates are separated into three systems. The Northern and Southern systems are associated with the "MPS" name, while the St. Joseph system is designated "L & P." The 2004/2005 PGA factors for Aquila Networks-L&P and MPS are docketed as Case No. GR-2005-0271. The 2004/2005 ACA filing was made on November 5, 2004, and was therefore docketed as Case No. GR-2005-0271. The review consisted of an analysis of the billed revenues and actual gas costs for the period of September 2004 to August 2005. An examination of the Company's gas purchasing practices was performed to determine the prudence of the Company's purchasing decisions. The Company's recovery balances include the ACA, Take-or-Pay (TOP), Transition Cost (TC), and Refund balances. TOP and TC costs reflect Federal Energy Regulatory Commission (FERC) approved costs that resulted from restructuring of the interstate pipeline industry through various FERC orders. Staff conducted a reliability analysis including a review of estimated peak day requirements and the capacity levels needed to meet those requirements. Staff also conducted a hedging review to determine the reasonableness of the Company's hedging policy for the 2004/2005 ACA.

The Company separates its gas operations into a Southern System, a Northern System, and an L & P system. The larger communities served on the Southern System include Marshall, Higginsville, Lexington and Richmond in west-central Missouri and Platte City near Kansas City. On the Northern System the larger communities include Chillicothe, Marceline and Trenton in north-central Missouri. The L & P System includes Maryville which is located in the northwest part of the state. Southern Star Central Pipeline (SSCP), formerly Williams Gas Pipeline Central, serves customers on the Southern System. Panhandle Eastern Pipeline Company (PEPL) serves customers on the Northern System while ANR Pipeline (ANR) serves customers on the L & P System. For the 2004/2005 ACA review period, the number of customers was approximately

32,000 on the Southern System, 10,600 on the Northern System, and 6,200 on the L & P System.

The Commission issued an Order in Case No. GO-2006-0205 on April 18, 2006, with an effective date of May 1, 2006, in which the Empire District Gas Company (EDG or Empire) was granted a certificate of convenience and necessity to provide natural gas service as a gas corporation and public utility, subject to the jurisdiction of the Commission, in the service areas then served by Aquila, Inc. On June 1, 2006, EDG announced it had completed its purchase of the Missouri natural gas operations of Aquila. Although the Empire purchase of Aquila is outside of the 2004/2005 ACA period, the Staff recommendations in the 2004/2005 ACA are being made after Empire began operation of this service area. Thus, any recommendations in this 2004/2005 ACA case, applicable to Aquila may also impact Empire.

STORAGE

On the L&P system, Staff included storage injection costs (included on the ANR pipeline statements) in its storage calculations during the months of September 2004 to November 2004 and from April 2005 to August 2005. This is consistent with the methodology used by the Company in the 2003-2004 ACA. These commodity costs were not included by the Company in its ACA filing. This increases the storage injection costs by $3,708, thereby reducing the cost of gas by that amount. In addition, a decrease in the cost of storage withdrawals resulted, reducing the cost of gas by $2,400. Staff believes the total cost of gas on the L&P system should be reduced by $6,108 ($3,708 + $2,400). Staff also believes the cumulative storage balance for the month ending August 2005 should be $1,856,440. No storage adjustments are proposed for the Northern and Southern systems.

REFUNDS

All refunds received by the Company are currently included in a refund account. Interest associated with the refunds is also included in the account. However, two different methods for calculating the associated interest were inadvertently included in tariff sheet 57 IV. In one instance, a refund factor, including interest, is determined for each of the Company's systems and rate classifications, based on total refunds received divided by sales volumes. In the other instance, the tariff sheet provides that refunds shall be included in the ACA account in the month received and shall receive interest as part of the overall ACA interest calculation (tariff sheet 57 IV). As a result, Staff believes that the Company's PGA tariff language should be modified to include only one method agreeable to the parties.

AD VALOREM REFUNDS

It has come to Staff's attention that two Ad Valorem refunds from Southern Star Central Pipeline (SSCP) were recently discovered as part of the closing process between Aquila and Empire. One refund of $71,698 was received by Aquila in September 2001 as part of FERC Docket RP98-52-042. The other refund of $617,888 was received by Aquila in August 2004 as part of FERC Docket RP98-52-051. By a miscommunication between Aquila's Accounting group and

Aquila's PGA group, these refunds were not incorporated in the waiver filing that addressed similar refunds in Case No. GE-2004-0528. The outstanding amount of the refunds plus interest (from the date of receipt to the date of disbursement) will need to be refunded to customers by Empire, which acquired Aquila on June 1, 2006. The Staff and Empire have had discussions regarding the disposition of these refunds. Staff anticipates a separate filing will be made by Empire to refund those dollars back to its customers. As a result, it is anticipated that these Ad Valorem refunds will be made during the period of December 1, 2006, through November 30, 2007. Staff will review the disposition of these refunds in the 2006-2007 ACA. The 2004-2005 ACA case should be left open, pending Commission approval of Empire's refund plan related to these Ad Valorem refunds.

LINE LOSSES

Small line losses occurred on the Company's distribution system that were caused by line breaks (caused by digging into lines) Adjustments were made by the Company during the months of May 2005 through August 2005 on its Northern System and from May 2006 to June 2006 on its Southern System to remove these line losses from its filing. When reviewing the supporting documentation for these line losses, Staff believes that line losses were misallocated between the Northern and L&P Systems during the months of April 2005 and July 2005. During those months, the Company credited the Northern System for line losses of $47.40 + $1,475.28 for a total credit of $1,523. These line losses should have been credited to the L&P System. Staff believes that gas costs should be increased by $1,523 on the Northern System and reduced by $1,523 on the L&P System. Although the adjustments are not material, Staff believes that line losses must be assigned to the appropriate service territory. Per the Company's response to Staff's Data Request No. 119, the Company indicated that it would make this adjustment in April 2006, so no Staff adjustment was made. Staff will review Company's adjustment in the 2005-2006 ACA review.

DAILY BALANCING

The Company's tariff language for daily balancing on the Southern System (tariff sheet 51, effective May 1, 2004) specifies daily tolerance levels but no daily balancing charges when the daily tolerances are exceeded. This is of particular concern to the Staff because the only means of imposing balancing penalties on the Southern System is by an "Operational Flow Order "(OFO)" or by an "Emergency OFO". Because of the absence of daily balancing charges on SSCP, there is concern that transportation customers may use storage for daily balancing, which could result in increased costs of storage for system sales customers. Staff will monitor the Company's actions related to this issue, as well as any impacts on customers in subsequent ACA periods. Additionally, Staff believes that this is an issue that needs to be addressed by EDG (Aquila's successor) in its next general rate case.

HEDGING

Weather was mild during the heating season and thus actual delivered volumes to the customers were less than volumes for normal weather. The Company is composed of three different systems, each having distinctive gas supply portfolios. Staff's comments are provided for each service area.

For the Southern System, the Company hedged 31% of the actual deliveries with storage. Additionally, the Company had financial hedges representing 43% of normal volumes. Combined storage and financial hedges therefore represent 64% of normal volumes. The financial hedges included options and swaps. The Company also included the term "fixed price" hedges in its calculation of hedged volumes. However, the Company's term "fixed price" was based on basis purchases which are not fixed price instruments, since the price varies as the NYMEX futures price changes.

Both the Northern and L & P systems depended heavily on storage utilization in their hedging strategies. The Northern system hedged about 83% of the actual deliveries by using storage withdrawals, while about 69% of the L & P system's delivered gas came from storage withdrawals.

The Company seems to have a consistent hedging strategy in place at its corporate level, and it also appears that the Company monitors market movements fairly closely by reviewing industry reports and publications. The Company's overall hedging strategy was appropriate for the 2004/2005 ACA, although the implementation of hedging utilizing basis purchases always raises concerns that it is adversely affected by upward market movements and subjects the Company to nearly unlimited risk exposure. The Company avoided the market risk in this case simply because the market prices fell for most of the 2004/2005 heating season. The Company should also consider longer term horizons in its hedging strategy, given the increased impact of summer volatility. Staff recommends that the Company continue to keep abreast of the market developments to help its more careful gas procurement decision-making, and that it broaden its hedging evaluation practice to examine hedging opportunities several years in the future. Careful consideration should be given to the amount of real price protection that is in place. For example, "basis" hedges or call options with high strike prices may not result in effective hedging for the entire commodity price risk.

RELIABILITY ANALYSIS AND GAS SUPPLY PLANNING

The Company is responsible for operating its system in a safe and adequate manner. This objective requires the Company to conduct long-range supply planning in a reasonable manner and make prudent decisions using the information generated from this planning activity. A component of the ACA audit process is to examine the reliability of the LDC's gas supply, transportation, and storage capabilities. For this analysis, Staff reviews the LDC's plans and decisions regarding estimated peak-day requirements, the capacity levels needed to meet those requirements, peak-day reserve margin and the underlying rationale for the resultant reserve margin, and natural gas supply plans for various weather conditions.

Staff's review of the status of reliability for the Aquila-MPS Southern system and Northern system and the Aquila L&P system produced the following comments and concerns.

1. Company Methodology for Estimating Peak Day

   a. For this ACA period, Aquila only reviewed one winter's usage for each of the three systems. Based on prior comments from Staff, Aquila began considering data from two winters in its regression analysis beginning with the gas supply planning for the 2006/2007 winter (Aquila Gas Supply Presentation dated 4/19/06).

   b. For each of the three systems, Aquila uses a regression analysis of the winter data to evaluate the usage in the winter months. The results of the regression analysis provide an estimate for the baseload factor (also referred to as the y-intercept, which is a constant) and the heatload factor (usage that varies with the temperature or heating degree days). However, Aquila has chosen to disregard the baseload factor calculated by the linear regression and instead uses the average daily usage for the month of July in its estimate of peak day requirements. Staff is concerned that Aquila's methodology uses a heatload factor from one set of data, and a baseload from another set of data to estimate peak day requirements, and that this will result in skewed estimates of usage. If Aquila is concerned that the smaller baseload factor from the regression analysis of winter data does not properly reflect cold day usage, there are other ways of looking at the data to consider reasonable estimates of usage for cold days.

   c. Aquila initially submitted a regression analysis for the L&P system that was erroneous (Attachment 3 to Company response to Staff DR No. 69). It appears that the Company attempted to update the prior year's analysis with current weather and usage data, but the third party usage data was still from the previous year and a new regression analysis was not run. This resulted in data that indicated negative usage and baseload and heatload factors that were unchanged from the previous ACA. Aquila submitted a revised regression analysis on May 22, 2006, subsequent to Staff's inquiry. It is unclear to Staff exactly how the Company models its peak day requirement, and would appear that the analysis submitted in response to DR No. 69 is not what the Company relied upon for its peak day planning. Further evidence of this is found in the Company's response to DR No. 73, where yet another design day volume was used for the reserve margin calculation. All methodologies reveal a large reserve margin for this system. Because of the nature of the capacity for this system, customers do not pay material costs for these large reserve margins, and thus excess capacity is not an issue. Although the differences in peak day estimates do not impact capacity planning, it could impact the Company's supply planning. In future ACA's the Company should review its estimates to assure that planning is based on correct data and that the documentation is preserved so that it can be provided to Staff in the review of the ACA period.

2. Aquila Supply Plans

In the 2001/2002 ACA recommendation (Case No. GR-2002-392), Staff recommended that Aquila submit a more complete supply plan that considers usage for warmest weather and coldest weather, instead of just planning for normal weather. Staff stated that this plan should include details of the demand variation for warm, normal and cold weather, and supply planning for these very different usage requirements, including an evaluation of how flowing gas (base load, term, swing, and spot/daily) and natural gas from storage will be used to meet customer usage requirements and how cost is considered in this analysis. In its response to the Staff Recommendation, Aquila agreed to provide, effective with the winter plan year 2004/2005, a more detailed plan identifying customer usage requirements and the supply plans for warmer than normal, normal, and colder than normal weather and an explanation of how cost is considered in this analysis.

In March 2004 and in May 2005, Aquila provided a Missouri Gas Supply presentation that included a review of the prior winter hedging activities, gas supply/demand fundamentals, gas pricing fundamentals, peak day comparison, load duration curve, and supply portfolio. Aquila stated that the load duration curves were developed for normal and extremes of 25% warmer and colder than normal. Staff confirmed that Aquila estimates usage that is approximately 25% warmer and colder than the normal estimate (Gas Supply Plan dated March 9, 2004). However, Aquila's supply plan is only for normal weather; it does not consider the supply for the extremes of +/- 25% of normal. Additionally the plan does not address the supply for a peak cold day, other than to state that it would be covered by a combination of flowing gas and storage withdrawals up to the full rights of its firm transportation and storage rights (DR No. 74).

Aquila's supply planning is a concern for the Southern system because ** ______
____
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____
____ **

Per Aquila's peak day estimate, the Southern system supply plan is sufficient for up to 59 HDD (an average daily temperature of six degrees Fahrenheit). However a peak cold day could be 81 HDD (an average daily temperature of negative sixteen degrees Fahrenheit). ** ____
__________ **

Following is a table that compares estimated customer demands for a peak day of 81 HDD with the Aquila planned firm supplies and the maximum withdrawal from storage.

**

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Staff's 6/12/06 telephone call with Mr. Gillespie, Aquila, confirmed that the gas supply plans for 2004/2005 were based on normal weather. Aquila nominates its natural gas at first-of-month (FOM). If the weather is colder than normal, Aquila generally only brings on additional flowing gas in the daily market if there is a pipeline Operational Flow Order (OFO), to avoid the high cost of OFO penalties.

Increased storage withdrawals are usually relied on for the increased requirements for cold weather. (The Northern system and L&P have a larger percentage of peak day requirements that can be met with storage.) Storage would be managed within the constraints of the storage contract and the Aquila storage guidelines. Aquila explained that it has not used swing gas with a demand charge for the Southern system. (Aquila refers to these as daily peakers.) Aquila states that because of the relatively small volumes for the Southern system, obtaining daily spot gas has not been a problem. In other states with much larger requirements, Aquila will have daily peakers (swing contracts). Although it is rarely in the daily market for the Southern System, Aquila states it has not had a problem finding additional natural gas supplies in the daily market when the weather has been cold. Aquila has been able to contract for daily supplies from marketers with storage on SSCP, such as Tenaska or Oneok. Aquila indicates that these supplies typically have a daily price that is comparable to the SSCP daily index price.

In recent years, the actual coldest day has not been near the historic peak cold day of 81 HDD (an average daily temperature of negative sixteen degrees Fahrenheit). The coldest day in this 2004/2005 ACA was 56 HDD, an average daily temperature of 9 degrees Fahrenheit. The coldest days in 2003/2004, 2002/2003, 2001/2002, and 2000/2001 were respectively 58.5 HDD, 64.5 HDD, 57.5 HDD, and 66.0 HDD.) Staff is concerned with Aquila's supply plans for very cold weather because ** ____________________________
____
______ ** Aquila is assuming that natural gas will always be available for purchase in the daily market, even on very cold days. Staff is not convinced that natural gas will be available in the daily market on very cold days. ** ______________________________
____

________________ **

** ____
____
______ ** Staff recommends that Aquila or Empire conduct a study to research other options to assure firm gas is available for this service area's estimated peak day requirements. Additionally, Staff recommends that Aquila explain why its 2004/2005 gas supply methodology is the more prudent methodology compared to these other options. If cost is a consideration in this explanation, then Staff recommends that Aquila's study compare the cost of these options to the cost of Aquila's gas supply methodology.

3. Southern System Reserve Margin

In the 2003/2004 ACA, Case No. GR-2004-0539, Staff commented on ** __________
____ **. Aquila responded to Staff's comments. Staff continues to have the same concerns for 2005/2006. Staff cannot make an adjustment for ** ____
____
____
________ ** Regardless, the reserve margin is not an issue in the 2004/2005 ACA. No further response is required for this Staff comment.

SUMMARY

The Staff has addressed the following concerns regarding Case No. GR-2005-0271 for Aquila-MPS/L&P:

1. Staff proposes to reduce the cost of storage on the L&P System by $6,108 ($3,708 + $2,400). No storage adjustment is necessary on the Northern and Southern Systems.

2. Because two different methods for computing interest are specified in the Refund provision of the Company's PGA tariffs (sheet 57 IV), Staff believes that the Company's PGA tariff language should be modified to include only one method agreeable to the parties.

3. Two Ad Valorem refunds from Southern Star Central Pipeline (SSCP) were recently discovered in the closing process between Aquila and Empire. One refund of $71,698 was received by Aquila in September 2001 as part of FERC Docket RP98-52-042. The other refund of $617,888 was received by Aquila in August 2004 as part of FERC Docket RP98-52-051. Staff anticipates a separate filing will be made by Empire in December 2006 to refund those dollars back to its customers. The 2004-2005 ACA case should be left open, pending Commission approval of Empire's refund plan related to these Ad Valorem refunds.

4. For the proper allocation of line losses between the Northern and L&P Systems, Staff

believes gas costs should be increased by $1,523 on the Northern System and reduced by $1,523 on the L&P System. The Company indicated that it would make this adjustment in April 2006, so no Staff adjustment was made.

5. Staff has concerns over the daily balancing provisions in the Company's tariffs for Southern System customers. Staff believes this should be addressed by EDG in its next general rate case.

6. Details of Company's hedging activity are described in the "Hedging" section of this recommendation. Staff believes that the Company should continue to pursue other hedging tools available to it and consider longer term horizons. Overall, the Company's hedging strategy appears to be appropriate for the 2004/2005 ACA period.

7. There is no adjustment related to the Aquila – MPS or Aquila L&P reliability analyses. Comments are documented in the Reliability Analysis and Gas Supply Planning section of this recommendation. Staff's primary reliability concern is the supply plan for the Southern system for very cold days. **____
____
____________________________________ ** Staff has recommended that Aquila or Empire conduct a study to research other options to assure firm gas is available for this service area's estimated peak day requirements. Staff recommends that Aquila explain why its 2004/2005 gas supply methodology is the more prudent methodology compared to these other options.

RECOMMENDATIONS

The Staff recommends that the Commission issue an order requiring Empire to:

Adjust the balances in its 2004/2005 ACA filing to reflect the ending (over)/under recovery balances for the ACA, TOP, TC, and Refund accounts per the following table:**Description** **(+) Under-recovery** **(-) Over-recovery**	**8-31-05 Ending Balances Per Filing**	**Commission Approved Adjustments Prior to 2004-2005 ACA**	**Staff Adjustments For 2004-2005 ACA**	**Staff Recommended 8-31-05 Ending Balances**
Southern System: Firm ACA	$1,210,642	($39,727) (A)		$1,170,915
Interruptible ACA	($9,563)	$0		($9,563)

NP

Adjust the balances in its 2004/2005 ACA filing to reflect the ending (over)/under recovery balances for the ACA, TOP, TC, and Refund accounts per the following table:**Description** **(+) Under-recovery** **(-) Over-recovery**	**8-31-05 Ending Balances Per Filing**	**Commission Approved Adjustments Prior to 2004-2005 ACA**	**Staff Adjustments For 2004-2005 ACA**	**Staff Recommended 8-31-05 Ending Balances**
Take-or-Pay (TOP)	$0	$0		$0
Transition Cost (TC)	$0	$0		$0
Refund	($207,288)	$0		($207,288)
Northern System: Firm ACA	$212,531	($9,245) (A)		$203,286
Interruptible ACA	$104,100	$0		$104,100
Take-or-Pay (TOP)	$0	$0		$0
Transition Cost (TC)	$0	$0		$0
Refund	($41,829)	$0		($41,829)
L & P System: Firm ACA	($177,247)	($36,596) (A)	($6,108) (B)	($219,951)
Interruptible ACA	$0	$0		$0
Take-or-Pay (TOP)	$0	$0		$0
Transition Cost (TC)	($2,586)	$0		($2,586)
Refund	$0	$0		$0

A) 8-31-04 beginning balance adjusted to prior year ending balances (See order in GR-2004-0539, filed 1-26-06).
B) Storage

2. Respond to the comments/concerns in item number 2 of the Reliability Analysis and Gas Supply Planning section of this memorandum within 30 days and if the ** ________ ________ **continues into the subsequent ACA (the 2005/2006 ACA), provide the requested study by April 1, 2007.

3. File revised tariff sheet No. 57 IV reflecting the refund modifications recommended in this Memorandum.

4. Secure Commission approval of its Ad Valorem refund plan prior to closing this 2004-2005 ACA case.

5. Respond to recommendations included herein within 30 days.

NP