

**STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION**

<b>Illinois Commerce Commission</b>	)	
<b>On Its Own Motion</b>	)	
	)	
<b>vs.</b>	)	
	)	<b>Docket No. 03-0699</b>
<b>Illinois Power Company</b>	)	
<b>d/b/a AmerenIP</b>	)	
	)	
<b>Reconciliation of revenues collected under</b>	)	
<b>gas adjustment charges with actual costs</b>	)	
<b>prudently incurred.</b>	)	

**REPLY BRIEF OF  
ILLINOIS POWER COMPANY  
d/b/a AMERENIP**

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## TABLE OF CONTENTS

I.	INTRODUCTION .....	1
II.	STAFF WITNESS LOUNSBERRY’S PROPOSED DISALLOWANCE FOR UNAUTHORIZED OVERRUN CHARGES SHOULD BE REJECTED .....	1
	A. Staff Seeks to Hold IP to a Standard of Perfection, Not Prudence .....	1
	B. March 9 Pipeline Day .....	3
	C. April 6 Pipeline Day .....	7
	D. Past Cases.....	10
III.	STAFF WITNESS LOUNSBERRY’S PROPOSED DISALLOWANCES RELATED TO THE HILLSBORO STORAGE FIELD SHOULD BE REJECTED .....	12
	A. Overview.....	12
	B. The Specific Hillsboro Actions Cited by Staff Witness Lounsberry Do Not Show That IP Acted Imprudently .....	14
	1. Hillsboro Metering Review.....	14
	2. Orifice Metering Accuracy .....	17
	3. Withdrawal Volumes .....	21
	4. Staff Cross Exhibits 1 and 2.....	22
	a. Staff Cross Exhibit 1 .....	22
	b. Staff Cross Exhibit 2.....	27
	c. Conclusion on Staff Cross Exhibits 1 and 2 .....	29
	C. Staff Witness Lounsberry’s “Overall Storage Concerns” Do Not Demonstrate That IP Was Imprudent in its Investigation and Remediation of the Hillsboro Deliverability Issues .....	30
	1. Overview.....	30
	2. Reduction in Peak Day Capacity .....	31
	3. Manpower .....	32
	4. Capital Expenditures.....	33
	5. Identification of Problems.....	36
	a. December 2000 Hillsboro Incident.....	36
	b. Gas Dispatch Tracking.....	37
	D. Dynegy Indemnification .....	38
	E. Purported Consistency with Rate Case Order.....	39
	F. Quantification Issues.....	41
IV.	CONCLUSION.....	46

## **I. Introduction**

The Initial Brief of Illinois Power Company d/b/a AmerenIP (“IP” or “Company”) anticipated and responded to many of the arguments in Staff’s Initial Brief in support of its contentions that gas cost disallowances should be imposed on IP for (i) pipeline overrun charges incurred on a total of two pipelines on two days during the 2003 reconciliation year and (ii) IP’s management and operation of its Hillsboro Storage Field (“Hillsboro”, the “Field” or “HSF”). As shown in IP’s Initial Brief and in this Reply Brief, Staff’s proposed disallowances constitute inappropriate applications of the prudence standard. The record shows that IP managed its operations prudently and reasonably in connection with the two matters on which Staff witness Eric Lounsberry based his disallowance proposals.

As indicated at page 7 of our Initial Brief, AmerenIP has not contested the recommendation of Staff witness Burma Jones that IP’s recoverable gas costs be reduced by \$40,009, representing the cost of gas lost due to damage to gas lines by third parties for which IP was reimbursed by the third parties causing the damage.

## **II. Staff Witness Lounsberry’s Proposed Disallowance for Unauthorized Overrun Charges Should Be Rejected**

### **A. Staff Seeks to Hold IP to a Standard of Perfection, Not Prudence**

During 2003, IP incurred overrun charges on two pipelines on a total of two days. The overrun charges for the two incidents totaled \$15,718. Staff contends that IP was imprudent in incurring this small amount of unauthorized overrun charges on these two days because they were not shown to be the result of “extraordinary events”. (Staff Init. Br., p. 5.)

Staff’s nit-picking argument misses the big picture. The question should not be simply, did IP act imprudently on March 9 in incurring \$11,435 of overrun charges on Natural Gas Pipeline Company of America (“NGPL”) and on April 6 in incurring \$4,283 of overrun charges

on Panhandle Eastern Pipe Line Company (“PEPL”)? Rather, the Commission should consider whether throughout the reconciliation period, IP prudently and reasonably managed the functions of nominating gas on its five pipelines, managing deliveries on those pipelines and using gas from storage on a daily basis so as to avoid incurring overrun charges. The fact that IP incurred overrun charges on only two of 1,825 pipeline days in 2003 (i.e., 365 days times five pipelines) shows that IP prudently and reasonably managed these functions during the reconciliation period. Indeed, the fact that IP incurred overrun charges on only these two occasions during all of 2002, 2003 and 2004 – only two overrun charges out of 5,475 pipeline days in this period – demonstrates that IP has prudently and reasonably managed these functions over an extended period. This track record shows that IP has had systems, practices and procedures in place that were designed and implemented so as to avoid pipeline overrun charges. Further, IP did not do anything differently in nominating and managing its gas deliveries on March 9 and April 6 than it did on all the other days in 2002, 2003 and 2004. (See IP Init. Br., pp. 11-12.)

In light of this track record, IP should not be penalized by a disallowance for incurring overrun charges on just two pipelines on two days in the entire reconciliation period. Staff’s intensive focus on IP’s activities on just these two days, without considering IP’s overall successful record in managing nominations, deliveries and use of storage withdrawals on a daily basis, is unreasonable and should be rejected. AmerenIP acknowledges that at some point the amount of overrun charges incurred by a gas utility – number of occurrences and amount of charges – would warrant review for possible imprudence and disallowance of the charges, but that point is far from being reached in IP’s case.

The effect of Staff’s position in this case is that IP should be held to a standard not of prudence, but of perfection. IP believes that the evidence, as discussed in IP’s Initial Brief and

below in this brief, shows that IP has managed the relevant functions prudently and that its gas dispatchers did not act imprudently on March 9 and April 6. But even if the actions (or inactions) of IP's gas dispatchers in these two instances out of 1,825 were characterized as "errors", this should not lead to a finding of imprudence or a disallowance, in light of all the circumstances. As the Commission and the courts have recognized, a small amount of human error is unavoidable. *Business & Professional People for the Public Interest v. Commerce Commission*, 279 Ill. App. 3d 824, 833 (1<sup>st</sup> Dist. 1996); *Illinois Commerce Commission v. Commonwealth Edison Co.*, Docket 84-0395 (Oct. 7, 1987), p 19; *Illinois Commerce Commission v. Illinois Power Co.*, Docket 01-0701 (Feb. 19, 2004), p. 23. In the first cited case, an appeal from an order in a §9-220 reconciliation case, the Appellate Court affirmed the Commission's conclusions that there was no imprudence, and no fuel cost disallowances should be imposed, where the utility experienced a total of 25 days of outages at its nuclear plants due to employee errors, but there was no evidence that the utility had failed to adequately hire and train the employees.<sup>1</sup> (See 279 Ill. App. 3d at 828-29.) The Appellate Court stated, "a utility at maximum efficiency will still encounter costs from human error." (*Id.* at 831.) The same is true of the \$15,718 of overrun charges resulting from the two occurrences placed at issue by Staff witness Lounsberry in this case. Staff's proposed disallowances should be rejected.

#### **B. March 9 Pipeline Day**

IP does not agree with Staff's characterization, at pages 5-6 of Staff's Initial Brief, of IP's explanation of why the overrun charges incurred on March 9 on NGPL were not imprudently

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<sup>1</sup>Undoubtedly the amount of additional fuel and purchased power costs that the utility incurred and charged to its customers as the result of these 25 days of nuclear plant outages far exceeded the \$15,718 of overrun charges that Staff witness Lounsberry seeks to disallow in this case.

incurred. IP's explanation is presented at pages 11-18 (§III.A and B) and 19-21 (§III.D) of IP's Initial Brief.<sup>2</sup>

Staff asserts that IP's "own dispatch center estimate indicated the Company was in a situation to incur unauthorized use gas charges (by a total of 240 DTH)." (Staff Init. Br., p. 5.) Staff neglects to mention that this estimate was not made until the *end* of the March 9 gas day, when it was too late to take any corrective actions, and in any event even this calculation was based on estimated data, not on the final pipeline delivery data and Btu factors that would be used for billing purposes. (See IP Init. Br., p. 20.) Staff also asserts that IP was aware that differences potentially exist between its telemetered readings and the pipeline's actual billing amounts "and that the Company should account for some level of potential telemetering error as it monitors and adjusts its delivery volumes from the interstate pipeline companies." (Staff Init. Br., pp. 6-7.) However, the record shows that in fact IP uses its allowed pipeline tolerances to avoid overruns, and never plans on using its daily pipeline tolerances during its operations. (See IP Init. Br., p. 22.) Unfortunately, on March 9 on NGPL (and April 6 on PEPL), out of the 1,825 pipeline days in the year, the use of the allowed pipeline tolerances plus the other actions taken by IP's operators during the day to monitor system load and deliveries and adjust storage activity (see IP Init. Br., pp. 17, 18-19) were not sufficient to avoid the small overruns that occurred.

Staff also asserts that IP "did not tie any specific telemetered or non-telemetered load inaccuracies to the events that occurred on March 9, 2003." (Staff Init. Br., p. 7.) What point

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<sup>2</sup>However, Staff does mention one additional mitigating factor that IP did not discuss in its Initial Brief, namely, that "there are no standards for telemetered load." (Staff Init. Br., p. 5.) That is, the telemetered data on gas deliveries to the IP system is not completely accurate or complete in real time (see IP Init. Br., pp. 14-15), but there are no guidelines or standards for an acceptable percentage of error between telemetered data and actual data. (See Rev. IP Ex. 2.1, p. 7.)

Staff is trying to make here is unclear.<sup>3</sup> IP did not contend that its telemetry equipment failed to operate properly on March 9. More generally, IP did not, and cannot in hindsight, pinpoint a single, specific reason why an overrun occurred on NGPL on March 9.<sup>4</sup> Rather, the overrun occurred as a result of the cumulative impact of all the factors discussed in IP's testimony and Initial Brief, including that (i) the actual pipeline Btu content values for the day at the various pipeline delivery stations cannot be known during the course of the day, (ii) not all delivery stations are telemetered, (iii) control of devices on the system from the Decatur dispatch center to reduce gas in-flows is not instantaneous, (iv) the March 9 gas day ran from 9 A.M. on Sunday to 9 A.M. on Monday, and gas supply had to be purchased and pipeline nominations made by 9 A.M. on the preceding Friday, and (v) the actual mean temperature on the March 9 gas day was 13 degrees versus a forecast of 20 degrees available on March 6 when gas purchase and pipeline nomination decisions were being made.<sup>5</sup> (See IP Init. Br., pp. 13-18.)

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<sup>3</sup>Staff also refers on page 7 to a variance of only 0.5% between IP's dispatch center readings and NGPL's actual billed amount, but this is again referring to an estimate made by IP at the end of the March 9 gas day when the overrun had already been incurred.

<sup>4</sup>Therefore, it is not IP's position, as Staff seems to suggest on page 8 of its Initial Brief, that the gas deliveries in the last five minutes of the March 9 gas day caused IP to incur the overrun on that day. The point of the IP testimony to which Staff is referring was simply that the dispatchers do not have a continuously updated total of the accumulated gas deliveries for the day, but rather that information on the accumulated gas flows for the day is only available after the end of each hour. Further, even the accumulated volumes available at the end of each hour are estimates, not actual values used for pipeline billing. (See IP Ex. 2.11, pp. 4-5.)

<sup>5</sup>While Staff witness Lounsberry provided no definition to what he would consider an "extraordinary event", IP notes that the difference between the forecasted mean temperature (20 degrees) and actual mean temperature (13 degrees) on the March 9 gas day was significant. Further, as pointed out at page 16 of IP's Initial Brief, the impact of the lower actual temperature on gas loads on the March 9 gas day may have been greatest in the last few hours of the gas day (i.e., on Monday morning) as businesses, schools and other users that did not operate on Sunday were resuming operations. A surge in load in the last few hours of the gas day limits IP's ability to take actions to remain within allowed pipeline tolerances for the gas day.

Staff faults IP for not having hour-by-hour data on flow accumulation from NGPL for March 9 because IP did not begin to archive its hourly average pipeline deliveries in its SCADA system until April 2004. (Staff Init. Br., p. 8.) Staff cites no requirement that IP should have maintained such data, and its subsequent assertion that IP “has no evidence to support a claim that it incurred the unauthorized use gas charges on the March 9 gas day because the Company did not retain any details from that day” is an attempt to place an unreasonable evidentiary burden on the Company.<sup>6</sup> (Staff Init. Br., p. 8.) In any event, IP reiterates that the small overrun it incurred on NGPL on March 9 was the result of the cumulative effect of all the factors identified in the immediately preceding paragraph.

Staff concludes its discussion of the March 9 overrun on NGPL by repeating, for the third time in just a few pages, its misleading assertion that IP “was aware of potential errors between its telemetered readings and the interstate pipeline billing amounts and that it was or should have been aware that its dispatch center’s readings indicated an overrun situation was occurring, yet the Company failed to act upon this information.” (Staff Init. Br., pp. 8-9.) IP reiterates that its “dispatch center’s readings” did not indicate an overrun situation was occurring until the end of the March 9 gas day. Further, as IP showed in the discussion at pages 20-21 and 22-23 of its

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<sup>6</sup>Another factor contributing to the unreasonable evidentiary burden placed on the utility when Staff demands detailed documentation concerning rather unexceptional events such as the March 9 overrun on NGPL is the pace at which this reconciliation case has been prosecuted. This docket was initiated by Commission order issued November 12, 2003. Although IP’s direct testimony was timely filed on April 1, 2004, as required by the Initiating Order, Staff’s direct testimony (where it first identified its proposed disallowances) was not filed until *February 15, 2005*. (Although Staff was originally given a reasonable due date for its direct testimony of September 23, 2004, Staff requested and was granted an extension to February 15, 2005.) At this point the events in question were almost two years old. Such delays in the presentation of Staff’s direct testimony, where its issues are raised for the first time, are prejudicial to the utility because the passage of time can make it difficult to reconstruct what happened in a particular occurrence, especially when the reconstruction must be based at least in part on the recollections of the personnel involved and the occurrence is a relatively insignificant one in the context of the utility’s overall operations.

Initial Brief, in light of the very small number of overruns and very small amount of overrun charges that IP has incurred, it would not be cost-effective for IP's customers for the Company to operate with a sufficiently large "cushion" to eliminate all potential overrun situations (as opposed to incurring overruns only on approximately 0.04% of the pipeline days as IP did during the period 2002-2004, *see* IP Init. Br., pp. 11-12).

### **C. April 6 Pipeline Day**

IP again disagrees with Staff's characterization of IP's explanation for the April 6 overrun on PEPL. (Staff Init. Br., p. 9.) IP's explanation of this occurrence is found at pages 18-23 (§II.C and D) of its Initial Brief.

Staff contends that IP incurred an overrun on PEPL on April 6 because the Company failed to use "up-to-date heat content factors when it was estimating its deliveries from PEPL." (Staff Init. Br., p. 9.) Staff makes the totally hindsight-based argument that on the April 6 pipeline day, IP should have used the average Btu factor on PEPL for the April 3, 4 and 5 pipeline days to adjust the telemetered readings from PEPL's delivery stations on the IP gas system. (Staff Init. Br., pp. 10-11.) As AmerenIP witness Shipp pointed out in his surrebuttal testimony (IP Ex. 2.11, p. 5) and IP discussed in its Initial Brief (pages 21-22), while the average Btu factors for April 3-5 may have been reasonably close to the actual Btu factors for April 6, the use of the prior three days' average Btu factor will not consistently match (or come close to) the actual Btu factors for the particular day.<sup>7</sup> The data shows that the prior three days' average is not

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<sup>7</sup>In fact, IP Exhibit 2.12 shows that the actual Btu factor on April 6 was (i) identical to the April 3-5 average at the Clinton delivery station on PEPL, (ii) close but not identical to the April 3-5 average at the Decatur and Danville delivery stations, and (iii) not very close to the April 3-5 average at the Jacksonville delivery station. "Closeness" should be considered in the context of the fact that the April 6 overrun was only 0.5% of the total deliveries from PEPL, so differences such as the 0.37% difference on April 6 at Danville (1075 vs. 1071) and 1.0% on April 6 at Jacksonville (996 vs. 1006) are significant in this context.

a systematic indicator of the current day's Btu factor – which does explain why IP did not “update its heat content assumptions” in the manner Staff now says IP should have done (see Staff Init. Br., p. 12). Staff's contention as to how IP should have determined the Btu factors to use during the course of each day is arbitrary and completely based on hindsight.<sup>8</sup>

Referring to page 6 of IP Exhibit 2.11, Staff states that it disagrees with IP's assertion that the heat content factors on IP Exhibit 2.12 show a 10% variance. (Staff Init. Br., p. 12.) On review, AmerenIP acknowledges that the sentence on page 6 of IP Exhibit 2.11 to which Staff refers is confusing and could have been better stated. The intent of the testimony at page 6 of IP Exhibit 2.11 was that a pipeline Btu factor can change by as much as 10% from one day to the next, not that IP Exhibit 2.12 shows any 10% variances in Btu factors. IP Exhibit 2.12 shows the daily Btu factors at just four delivery points on one of IP's five pipelines for just the month of April 2003 (when the overrun on PEPL occurred). AmerenIP agrees that IP Exhibit 2.12 does not show a variance of 10% on any day from the previous day at any of the four delivery points for the one month of data presented on the exhibit. However, IP Exhibit 2.12 does show (as stated on page 6 of IP Exhibit 2.11) that “the pipeline Btu factor can change significantly from one day to the next”. For example, at the Decatur PEPL delivery point the Btu factor changed by 1.31% from April 6 to April 7 (1007 to 994); at the Danville PEPL delivery point the Btu factor changed by 2.59% from April 8 to April 9 (1071 to 1044), by 2.61% from April 18 to April 19 (1063 to 1036), by 2.24% from April 23 to April 24 (1046 to 1070), and by 1.34% from April 29

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<sup>8</sup>Staff states that Staff Schedule 4.02R shows that on April 6, IP used a Btu factor of 940 for the Clinton delivery point when the Btu factor had not been below 1004 on any day in the month. (Staff Init. Br., p. 12.) Of course, at that point there had only been five days in the month. In any event, the Btu factors that IP used on April 6 for the Decatur (referred to as “Elwin” on Schedule 4.02R), Danville and Jacksonville delivery points, shown on Staff Schedule 4.02R, were much more consistent with the actual Btu factors at these stations on April 1-5 (shown on IP Exhibit 2.12).

to April 30 (1055 to 1041); and at the Jacksonville PEPL delivery point, the Btu factor changed by 1.61% from April 22 to April 23 (1010 to 994). To put these variances in context, the amount of the overrun that IP experienced on PEPL on April 6 was 0.5%. (Rev. IP Ex. 2.1, p. 4.)

Finally, Staff argues that IP should have maintained an additional variance above the full nomination variance (tolerance) allowed by PEPL. Staff suggests an additional 1% variance. (Staff Init. Br., p. 11.) As IP pointed out in its Initial Brief, Staff witness Lounsberry provided no basis for this 1% figure, and in any event, IP never plans on using its allowed pipeline tolerances as a source of gas during its daily operations. Thus, IP already has a “cushion” in place to accommodate variances between its load forecast and actual loads, weather changes, operational issues and other factors affecting gas demand on the particular day. (IP Init. Br., p. 22.) More importantly, in light of the very small number of overruns and amount of overrun charges that IP has incurred while following the operating practices it used in 2002-2004, maintaining an even larger “cushion” would result in IP not fully utilizing its contracted pipeline firm transportation (“FT”) capacity, or in IP having to acquire additional FT capacity, and would not be cost-effective for customers. (*Id.*, pp. 22-23.) The cost of eliminating all overrun charges is a factor to consider in evaluating the utility’s prudence. It is worth noting what the Appellate Court stated in this regard in *Business & Professional People for the Public Interest v. Commerce Commission*, 279 Ill. App. 3d 824 (1<sup>st</sup> Dist. 1996):

Two of the dictionary definitions of “prudence” are “sagacity or shrewdness in the management of affairs” and “skill or good judgment in the use of resources.” Webster’s Ninth Collegiate Dictionary 949 (1985). When determining employee management practices, the most efficient management of resources will minimize the *sum* of (1) the costs of human error, and (2) the costs of preventing human error. The latter includes extra salary to hire more qualified employees, increased training for employees, and additional management personnel for greater oversight. When the sum of costs in (1) and (2) is minimized, the utility will be able to provide its service at the least possible cost to consumers. Thus, a utility at maximum efficiency will still encounter costs from human error. In setting

rates, the Commission must allow the utility to recover costs prudently and reasonably incurred. (279 Ill. App. 3d at 831; emphasis in original.)

So it is the case with the management functions at issue with respect to the overrun charges. IP has come close to holding pipeline overrun charges to zero (only \$15,718 of charges incurred in a three-year period). Presumably there are a variety of actions that IP could take to attempt to reduce overrun charges even closer to zero, such as installing telemetering equipment at those delivery points that are not telemetered; assigning additional personnel to the dispatch function to monitor even more closely the telemetered data or make additional or more sophisticated projections of likely Btu adjustment factors for the five pipelines; or operating with larger tolerances between nominations and expected load as Mr. Lounsberry recommended. One does not need to do a study to conclude that the cost of any of these measures would exceed the amount of pipeline overrun charges that IP has incurred which have averaged less than \$5,250 per year.

#### **D. Past Cases**

Staff asserts that “utilities [sic] have agreed in the past that their unauthorized use gas charges were imprudently incurred.” (Staff Init. Br., p. 13.) In support of this assertion, Staff cites two PGA reconciliation orders for Central Illinois Light Company (“CILCO”), Dockets 00-0710 and 03-0695. The Commission should give no weight to these cases in deciding whether IP’s overrun charges in this case were imprudently incurred and should be disallowed. In the Commission’s Order in Docket 00-0710 (issued February 6, 2002), there is no mention of any issue relating to unauthorized overrun charges. That case did involve an unrelated issue concerning treatment of management fees received by CILCO for certain non-jurisdictional transactions. The Commission’s conclusion in its Order in Docket 00-0710 was that

The evidence shows that during calendar year 2000, *CILCO acted reasonably and prudently in its purchases and management of natural gas, except for its treatment of certain management fee revenues as described in the prefatory portion of this Order (Order in Docket 00-0710, p. 9, Finding (4); emphasis added.)*

Although the Order in Docket 00-0710 is silent with respect to the treatment of any unauthorized overrun charges, it appears that CILCO may have elected for its own reasons simply to remove the overrun charges from its proposed recoverable gas costs for 2000. Such a decision by CILCO, however, is by no means precedential for this or any other case.

The Order in Docket 03-0695 (issued March 23, 2005) does discuss the positions of Staff and CILCO with respect to overrun charges incurred by CILCO in 2003, but the ultimate disposition of the issue was that:

In her surrebuttal testimony, Ms. Seckler [of CILCO] stated that although CILCO did not agree that it should be held to a standard of perfection in managing its gas supply transactions, it is willing to accept Mr. Lounsberry's adjustments solely for purposes of resolving this case. (Order in Docket 03-0695, p. 4.)

Again, CILCO elected to withdraw the overrun charges from its proposed recoverable gas costs, so that at the end of the case the recovery or disallowance of the overrun charges was not a contested issue. Therefore, the fact that overrun charges challenged by Staff were not recovered in Docket 03-0695 is not precedential for this (or any other) subsequent case.<sup>9</sup>

Lest the ALJ and the Commission be under the impression from Staff's citation of these two orders that pipeline overrun charges are always disallowed, IP refers to *Monarch Gas Company v. Commerce Commission*, 261 Ill. App. 3d 94 (5<sup>th</sup> Dist. 1994), in which the Commission, in a PGA reconciliation case, disallowed "unauthorized overtake charges" incurred

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<sup>9</sup>The Order in Docket 03-0695 indicates that CILCO incurred overrun charges on five occasions in 2003 and that the overrun charges were incurred on four of those occasions because an incorrect nomination figure was submitted to CILCO's dispatch center and on the fifth occasion because the dispatch center used the incorrect date for the commencement of a gas supply contract. (Order in Docket 03-0695, pp. 3-4.)

by Monarch on NGPL. The Appellate Court reversed the Commission's order imposing the disallowance, finding that the incurrence of the overrun charges by Monarch under the factual circumstances presented was a lesser cost action than the actions that would have been necessary to avoid the overtake charges, and that under the facts of the case, the Commission's disallowance of the overtake charges was unreasonable. Similarly, in this case, disallowance of the \$15,718 of overrun charges that IP occurred on two pipeline days out of 1,825 in 2003 would be unreasonable.

### **III. Staff Witness Lounsberry's Proposed Disallowances Related to the Hillsboro Storage Field Should Be Rejected**

#### **A. Overview**

The lynchpin of Staff's disallowance proposal relating to the Hillsboro Storage Field is the assertion that "The Company should have recognized the inventory shortfall at the Hillsboro storage field at a much earlier date and started replacing the gas associated with the significant gas measurement error in 2000 rather than 2003." (Staff Init. Br., pp. 14-15.) As shown in IP's Initial Brief and as discussed further herein, Staff's recommendation is fundamentally inconsistent with the prudence standard. Staff's recommendation is based on Staff witness Lounsberry's hindsight review of the history of the Hillsboro deliverability issues, and is dependent on isolated facts to which Mr. Lounsberry, in hindsight, assigns a significance that could not have been apparent at the time in the context of *all* the information and circumstances confronting management. Further, it is Staff's position that IP should have commenced reinjecting significant quantities of gas inventory into Hillsboro in 2000 *before* IP had fully investigated and eliminated the possible reservoir and structural causes for the Hillsboro deliverability decline. However, as shown in IP's Initial Brief and as discussed further herein, it would have been *imprudent* for IP to begin reinjecting gas into the Field before eliminating the

possible reservoir/structural causes, because to do so carried a significant risk – based on the information available to management at the time – that the reinjected gas would migrate to inaccessible areas and be lost. Staff’s recommendations relating to Hillsboro must be rejected.

At pages 19-20 of its Initial Brief, Staff presents a “Summary of Company’s Actions at Hillsboro.” AmerenIP finds this summary to be generally accurate so far as it goes, but it is truncated and contains no discussion of why particular actions were taken at the times they were taken. AmerenIP refers the ALJ and the Commission to the more extensive discussion of the history of the Hillsboro activities at pages 25-41 of AmerenIP’s Initial Brief.

AmerenIP also notes that in the third bullet point in its summary on page 19, Staff states that “In 1997, Company had a vertical seismic profile prepared by an outside consultant in order to determine if the field was experiencing a reservoir problem.” While this statement may be accurate in an indirect sense, the specific purpose for having the vertical seismic profile prepared was to use it in evaluating whether conducting a 3-D seismic profile of the Field would be a viable approach to determining the underground structure of the Field. (IP Ex. 5.0, p. 9.)

As discussed at pages 44-50 and 54-55 of IP’s Initial Brief and further discussed below, Staff’s assertion that “the Company’s investigations failed to make use of readily available information to reach a conclusion that disputed the reservoir problem theory” (Staff Init. Br., p. 20) is erroneous and inconsistent with the prudence standard. First, the information that Staff refers to was not “readily available”. Second, the interpretation that Staff places on that information and the conclusions Staff asserts that IP should have reached based on that information are the product of hindsight. Third, the record shows that even if IP had drawn the conclusions that Staff, in hindsight, contends IP should have drawn from the “readily available information”, it would have been unreasonable and imprudent, based on all the information

available to IP at the time, for the Company to have taken the course of action Staff now contends should have been taken.

**B. The Specific Hillsboro Actions Cited by Staff Witness Lounsberry Do Not Show That IP Acted Imprudently**

Staff witness Lounsberry cited three specific items which he contended showed that IP “had several opportunities to detect the large inventory problem at the Hillsboro Field, yet failed to do so.”<sup>10</sup> (Staff Init. Br., p. 21.) IP discussed these three Hillsboro-specific items at pages 41-55 of its Initial Brief and demonstrated that they do not support Mr. Lounsberry’s position nor indicate that any different course of action by IP would have been appropriate at the times in question, let alone that there was any imprudence. In its Initial Brief, Staff also relies on two additional documents not discussed by Mr. Lounsberry in his direct or rebuttal testimony. However, as shown in §III.B.4 below, Staff’s characterization of these documents is highly selective and incomplete, and they provide no support for Staff’s position.

**1. Hillsboro Metering Review**

Most of the arguments presented at pages 21-25 of Staff’s Initial Brief under “Hillsboro Metering Review” were addressed at pages 43-50 of IP’s Initial Brief. Staff’s assertions that after receiving the report of Peterson Engineering’s audit of the Hillsboro metering, IP did not “conduct[] a thorough review of the situation” or “conduct a thorough analysis in 2000” (Staff Init. Br., pp. 22, 25) are without merit. What these generalized assertions boil down to is Staff’s

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<sup>10</sup>As discussed at page 49 of IP’s Initial Brief, Staff’s references to IP’s purported failure to discover the “inventory problem” at Hillsboro at an earlier date are not meaningful. IP knew all along that there was an “inventory problem” at Hillsboro – the Company had not been able to withdraw the annual amounts of working gas inventory expected to be available after the Field was expanded in 1993. The “inventory” shortfall was not the cause of the “problem”, it was the *result* of the problem. The issue was determining the *cause* of the Hillsboro deliverability decline, and eliminating other plausible causes, so that IP could then take corrective actions that were appropriate and not counter-productive.

contention that in 2000, IP should have recognized that it could use data from charts that recorded temperature and pressure data for individual injection/withdrawal (“I/W”) wells at Hillsboro to estimate the cumulative extent of the measurement error that had occurred on the main plant injection meters. IP in fact determined in 2003 that the individual I/W well data could be used for this purpose. Staff’s contention, however, that IP should have done so in 2000 is pure hindsight. Staff has cited no information to indicate that this was a common (or even an uncommon) use of such data in the industry. (See IP Init. Br., pp. 45-46.)

Moreover, the availability of the I/W well charts needed to do this type of analysis was limited. (*Id.*, pp. 44-45.) As the ALJ will recall, for this and other reasons, Staff witness Lounsberry contended in IP’s recent rate case (Docket 04-0476) that the well chart analysis was not sufficiently reliable to produce an acceptable estimate of the inventory depletion caused by the turbine metering measurement error.<sup>11</sup> It is unreasonable for Staff to now contend that IP was imprudent in not using, in 2000, a methodology to determine the cumulative amount of the turbine metering error when in Docket 04-0476, Staff criticized the reliability and accuracy of this approach and contended that its results should not be accepted. Additionally, when the well chart analysis was conducted in 2003, it produced a range of estimated values for the injection meter measurement error of 7.0% to 22.1% (Staff Ex. 2.00R, p. 28). The lower end of this range (7.0%) is not significantly larger than the estimate IP made in 1999 of the cumulative measurement error at the main plant injection meters, 5.4%. (IP Ex. 5.0, pp. 13-14.)

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<sup>11</sup>See, e.g., the Order in Docket 04-0476 (May 17, 2005), at page 13 (“According to Staff, *the methods used by IP to calculate its Hillsboro storage field measurement errors, the resulting actual gas inventory, the recoverable base gas withdrawal, and the injection amounts are simply too speculative and not sufficiently accurate to provide a reasonable basis for an adjustment to and recalculation of the value of recoverable base gas amounts*” (emphasis added)) and page 15 (referring to “Staff’s criticisms of the well chart analysis”).

Although the Company's 1999 estimate of the cumulative amount of the turbine injection meter measurement error ultimately proved to be incorrect, that estimate was based on the best information available to IP at the time. That information included Peterson Engineering's calculations of the amount of over-registration on the injection meters at various loading levels of the plant compressors, and the judgment and experience of storage field operations personnel as to the extent to which the Hillsboro compressors had operated at the various loading levels over time. (IP Init. Br., pp. 43-44.) As pointed out at page 44 of IP's Initial Brief, records of the operation of the compressors showing the loadings at which they operated at each point in time had not been retained, but Staff did not fault the Company for not maintaining such records.

Staff's contention that had IP more accurately estimated the size of the injection metering error in 1999-2000, it should have commenced reinjecting gas inventory into Hillsboro, even while it continued to investigate whether there was a reservoir/structural problem with the Field, is unreasonable. (Staff Init. Br., p. 24.) Staff has yet to explain how it would have been prudent for IP to begin reinjecting significant quantities of gas into Hillsboro while IP was still investigating and evaluating information which indicated that gas injected into the Field could be migrating to areas where it could not be accessed for withdrawal -- possibilities that Staff does not dispute were realistic in 1999-2000 based on the information available at the time. (See IP Init. Br., pp. 46-48, 50.)

Staff's final contention under "Hillsboro Metering Review" is that IP had observed thinning of the gas bubble in the Hillsboro reservoir, which could have been caused by gas moving away from the structure of the reservoir *or* an "inventory shortfall", and that had IP found there was an "inventory shortfall" in a timely fashion, it could have recognized that "a loss of inventory" was "at least a portion of the cause of the deliverability problems it was

experiencing” at Hillsboro. (Staff Init. Br., pp. 24-25.) Again, asserting that there was an “inventory shortfall” or a “loss of inventory” is not useful; the problem under investigation was *why* there was an “inventory shortfall” and a “loss of inventory” being experienced. In any event, as Staff acknowledges, loss of gas from the reservoir due to a structural problem was one possible cause of the observed thinning of the gas bubble, so this observation still begged the question of *why* an inventory shortfall was occurring and whether there were structural issues in the expanded reservoir that were causing loss of gas. These possibilities were still being investigated in 2000. Staff witness Lounsberry’s contention that IP should have commenced reinjecting gas into Hillsboro in 2000 while these possibilities were still under investigation (investigations that Staff concedes were warranted, *see* Staff Init. Br., p. 24) is unreasonable, hindsight-based and not an appropriate application of the prudence standard.

## **2. Orifice Metering Accuracy**

Staff’s arguments under the heading “Orifice Metering Accuracy” were addressed at pages 51-54 of IP’s Initial Brief.

Although Staff devotes a considerable portion of its Initial Brief to this topic (pp. 25-32), all of Staff’s discussion relates to IP’s purported failure to devote adequate attention to the accuracy of the Hillsboro *withdrawal* meters, not the main plant injection meters where a significant measurement error occurred.<sup>12</sup> The only problem with any of the four withdrawal meters that bore any relationship to the main plant injection meter measurement error and the resultant “inventory shortfall” was the erroneously-labeled orifice opening on the meter on the south secondary withdrawal run at Hillsboro, which resulted in an understatement of withdrawals

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<sup>12</sup>The measurement error at the main plant injection meters resulted from the fact that when the plant compressors operated at certain loadings, this caused the main plant turbine injection meters to spin and over-register (IP Ex. 5.0, pp. 10-11), but Staff has never contended that this problem was the result of imprudence.

through that meter. Due to the fact that this was only one of the four withdrawal runs and one of the two lesser-used runs, and the relatively small discrepancy between the actual size of the opening and the size stamped on the plate (see IP Init. Br., pp. 33-34), the cumulative impact of the resulting measurement error was not significant. Additionally, there was no withdrawal measurement error identified due to any “dirt, ice and other extraneous material” (Staff Init. Br., p. 28) on these meters. Further, even had IP discovered this problem sooner than 1999, it would not have resulted in the true extent of the *injection* metering error being discovered sooner – the problem was not simply that IP believed the injection and withdrawal metering errors were approximately offsetting, but that IP underestimated the cumulative amount of the injection metering error. (See IP Init. Br., pp. 53-54.) Thus, the “if only” arguments that Staff makes at pages 25, 27 and 31 of its Initial Brief are misplaced. Different or “better” maintenance practices for the HSF *withdrawal* meters would not have led to earlier discovery of the cumulative size of the measurement error at the main plant *injection* meters.

Staff provides no new information in its Initial Brief to demonstrate that the Commission’s regulations in Code Part 500 are applicable to the Hillsboro Storage Field withdrawal meters. Indeed, the portion of §500.180(c) that Staff quotes at page 27 starts with, “Each utility furnishing metered gas service through orifice type meters . . .”, a precondition that does not apply to the storage field meters. (IP Ex. 5.0, p. 30.) Nor does Staff dispute that AGA Report No. 3 pertains to *installation* of orifice meters, not to their operation and maintenance – in fact, Staff acknowledges at page 28 of its Initial Brief (in small type in a footnote) that “AGA Report #3 contains *the guidelines for the installation of orifice meters*” (emphasis supplied). But Staff then twice criticizes IP for not complying with the provision of AGA Report No. 3 that “the plate shall be clean at all times and free from accumulations of dirt, ice, and other extraneous

materials” (Staff Init. Br., pp. 28, 29), without acknowledging that this provision describes the condition of the plates that should exist *at the time of installation*. Staff has never disputed IP’s testimony that the Company in fact installed the four withdrawal orifice meters to the specifications of AGA Report No. 3. (IP Ex. 5.0, p. 30; see Staff Init. Br., p. 29.)

In addition to relying on Code Part 500 and AGA documents it concedes do not establish requirements for the storage field withdrawal meters, Staff also cites the fact that the Peterson Report recommended annual inspections of the orifice plates. (Staff Init. Br., p. 29.) However, the fact that this consultant’s report made this recommendation in 1999 does not mean that IP was imprudent in not conducting annual inspections prior to that time, particularly given the absence of any regulations, codes or standards that imposed such a requirement for these meters.

Staff’s contention that “it is understood in the gas industry that in order to maintain accurate metering, frequent checking of the orifice plates is necessary” (Staff Init. Br., p. 30) is completely unsupported. Staff witness Lounsberry’s assertion to this effect in his rebuttal testimony (Staff Ex. 4.00R, p. 26) was completely devoid of any supporting references, and was simply a last resort after it was demonstrated that the industry documents on which he relied were not applicable to the storage field withdrawal meters. Industry documents such as AGA Report No. 3 and the AGA Gas Measurement Manual, and even regulatory provisions such as Code Part 500, are generally reflective of industry practices, so the fact that there is no regulation or industry code or standard that requires annual inspections for storage field orifice withdrawal meters is telling. Additionally, IP witnesses Hood and Kemppainen, who testified to IP’s metering practices at Hillsboro and disputed Mr. Lounsberry’s contentions, have considerably more experience “in the gas industry” than does Mr. Lounsberry. (See IP Ex. 5.0, pp. 1-2, and IP Init. Br., pp. 25-26.)

Staff's discussion at page 30 of its Initial Brief of what IP "should have" done in terms of checking the orifice meters is totally-hindsight based. Staff provided no basis in industry standards or practice or in any other source for this discussion, and it does nothing to establish any sort of criteria or benchmark for determining the prudence of IP's actions.

Staff cites two reports which it contends show that dirty orifice plates can cause measurement errors.<sup>13</sup> (Staff Init. Br., pp. 30-31.) The first of these is a Nova Corporation study that found a 3.3% measurement loss when grease was deposited on the orifice plate. In this study, the researchers applied eight disks, approximately 0.4 inches in diameter by 1/16 inch thick, at the edge of an 8 inch by 1.5 inch orifice plate, and noted a 3.3% measurement error. (IP Ex. 5.3, p. 10.) However, when the disks were moved to the mid-point on the plate between the pipe wall and the orifice, *no* error was measured. (*Id.*) Further, the Hillsboro meter orifice plates are larger than those used in the Nova study, both with respect to the plate diameter and the size of the opening. (*Id.*) As AmerenIP witnesses Hood and Kemppainen explained, the only condition for evaluating the effect of grease (dirt) deposits on measurement accuracy tested in the Nova study was significantly different than the conditions at Hillsboro.<sup>14</sup> (*Id.*)

The second report cited by Staff is a paper entitled "Effect[s] of Various Conditions in Primary Element[s] on Orifice Meter Measurement Table". (Staff Init. Br., p. 31.) In fact, the actual title of this document, which was entered into evidence as IP Cross Exhibit 1, is "Did You

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<sup>13</sup>IP reiterates that there were no measurement errors found at Hillsboro due to dirty orifice withdrawal plates, and in any event that the problem at Hillsboro was an *injection* metering measurement error whose impact was erroneously understated when it was first identified.

<sup>14</sup>Staff witness Lounsberry apparently cited the Nova Corporation study only because it was referred to in the Peterson Engineering Report, and cited only the information from the Nova study that was recited in the Peterson Report. (See Staff Ex. 4.00R, p. 27, and Staff Init. Br., p. 30-31.) There is nothing in the record to indicate that Mr. Lounsberry ever actually read the Nova Corporation study.

Know? – Rules of Thumb in Gas Measurement”, and it hardly appears to be a scholarly or scientific work. The subtitle of the paper is, “Many shortcuts are available as tools to measurement personnel”, and it consists primarily of the author’s compilation of “rules of thumb” or “short cuts” for estimating the impact of various gas meter calibration errors. It contains such empirically-validated pronouncements as: “Primary element errors cannot be quantified well enough to project an equitable adjustment – Like many things in real life, this one depends.” It lacks sources or references for the information provided and the physical conditions its measurement error numbers apply to. (IP Ex. 5.3, p. 10.) In any event, the 27.4% measurement error cited by Staff (Staff Init. Br., p. 31) was for an orifice plate coated on both sides with ¼ inch of valve grease, which far exceeded the conditions experienced with the Hillsboro orifice plates. (IP Ex. 5.3, p. 10). The paper reports much smaller measurement errors associated with more realistic, less overstated “dirty” conditions, such as: (i) three deposits of valve lubricant on upstream side of plate – 0.0%; (ii) nine deposits of valve lubricant on upstream side of plate – 0.6%; (iii) coated bottom ½ of downstream side of plate 1/16 inches thick – 0.8%; and (iv) coated full face of downstream side of plate 1/16 inch thick – 1.7%.<sup>15</sup> (See IP Cross Ex. 1.)

### **3. Withdrawal Volumes**

Staff’s arguments under “Withdrawal Volumes” (Staff Init. Br., pp. 32-33) were addressed at pages 54-55 of IP’s Initial Brief. Staff mis-states the facts at page 32 when it asserts that in 1999-2000 and 2000-2001, IP had the opportunity to observe that “the *working gas volumes* in the [Hillsboro] reservoir had declined to below the pre-expansion volume of 3.1 Bcf”

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<sup>15</sup>To put these measurement errors in perspective, the Commission’s regulations on “Customer Meter Accuracy Requirements” at 83 Ill. Adm. Code 500.190(a) allow new gas meters installed for the use of customers to be up to 2% slow and up to 1% fast, and customer meters removed from service and reset without being opened for repairs to be up to 2% fast or slow.

(emphasis supplied). In fact, what IP observed was that the *amount of gas it was able to withdraw* in those years fell below 3.1 Bcf. This observation did not tell IP *what the volume of gas in the Field* was or, more importantly, whether volumes of gas in the Field had migrated to inaccessible locations due to structural causes, or could not be withdrawn due to formation damage (obstructions) in the vicinity of withdrawal wells. (See IP Init. Br., p. 55.) Because this observation did not tell IP whether or not there were structural problems with the reservoir, this observation was not – contrary to Staff’s hypothesis (Staff Init. Br., pp. 32-33) – an indicator or a “large flag” that IP should have commenced reinjecting gas into the Field in 2001.<sup>16</sup>

#### **4. Staff Cross Exhibits 1 and 2**

In its Initial Brief, Staff also relies for the first time on documents identified as Staff Cross Exhibits 1 and 2. (Staff Init. Br., pp. 33-35.) However, Staff’s characterizations of these documents are selective and incomplete, and the conclusions it seeks to draw from them are flawed at worst and unremarkable at best.

##### **a. Staff Cross Exhibit 1**

Staff asserts that “Staff Cross Exhibit 1 contains all of the information and basis relied on by the Company to support it conducting the vertical seismic survey (or vertical seismic profile) (“VSP”) in 1997 at the Hillsboro storage field.” (*Id.*, p. 33.) This assertion is inaccurate in several respects. First, Staff Cross Exhibit 1 is a copy of IP’s response to a Staff data request which asked: “Provide the work order(s) and any other documentation regarding the need for the vertical seismic survey conducted in 1997 at the Hillsboro storage field”, which is not nearly as

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<sup>16</sup>Staff states that “no matter what temperatures were experienced at the field the Company should have been able to cycle at least 3.1 Bcf from the field.” (Staff Init. Br., p. 33.) The point of Staff’s reference to “no matter what temperature” is unclear. In any event, Staff’s assertion is not correct if the expansion of the reservoir (i.e., injection of an additional 11.5 Bcf of gas) resulted in breaches in the structure or pushed gas to new areas from which it could leak or migrate to areas not accessible by the withdrawal wells.

broad as Staff's characterization of the exhibit in its Brief. Further, as the exhibit shows, IP *objected* to the data request as written "insofar as it requests 'any other documentation regarding the need for the vertical seismic survey . . .'" (emphasis added), on the grounds that it is overbroad and that responding to this portion of the request would be unduly burdensome and expensive." Staff did not take issue with the Company's objection to responding to the data request as written. Therefore, although IP did provide the work order and four other documents that were readily available, it objected to responding to the data request as written and Staff took no action to compel a more extensive answer.

Finally, the reason that the Company had the vertical seismic profile prepared by outside consultants in 1997 was already explained in the testimony of AmerenIP witnesses Hood and Kemppainen, namely, "in order to evaluate whether conducting a three-dimensional ("3-D") seismic profile of the Field would be a viable approach to defining the structure of the Field." (IP Ex. 5.0, p. 9.) Staff witness Lounsberry did not dispute the need for or reason for conducting the vertical seismic profile in his testimony. In its Initial Brief (p. 34), Staff asserts that statements in Staff Cross Exhibit 1 are "contrary to the Company's claims that the purpose of the VSP was to determine if the field was experiencing a reservoir problem", and cites IP Exhibit 5.0, page 9. Staff is apparently referring to the question at lines 181-182, "What actions did Illinois Power initially take to investigate whether there was a reservoir problem?" As the answer to that question makes clear, IP had the vertical seismic profile prepared *to help determine if a 3-D seismic analysis would be a viable technique at Hillsboro*, and then, based on the results of the vertical seismic profile, IP had a 3-D seismic study performed. The 3-D seismic study indicated that there in fact was a structural problem with the reservoir, specifically, the existence of a separate sub-structure to which gas was migrating. (IP Ex. 5.0, pp. 9-10.)

In any event, Staff’s characterization of the documents in Staff Cross Exhibit 1 is selective, incomplete, and demonstrates nothing new that is material to the issues in this case or in any way inconsistent with the Company’s testimony. The work order for the VSP (Schedule 1 in Staff Cross Ex. 1) states that it is “to determine feasibility of 3D Seismic Survey for optimizing gas storage reservoir operations and future field expansion.” As described above, this is consistent with the discussion in Mr. Hood and Mr. Kemppainen’s testimony. The need for “optimizing gas storage reservoir operations” was exactly the problem at hand – as of the date of the work order (April 1997), IP had experienced several years of declining performance at Hillsboro.<sup>17</sup> Other documents in IP Cross Exhibit 1 are also consistent with this. For example, Schedule 5 (a proposal to IP from Schlumberger Well Services for performing the vertical seismic profile) states: “The objective [of] the program is to evaluate the feasibility of a successful 3D/4D seismic survey at Hillsboro. **Such a survey would give Illinois Power the reservoir information necessary to increase the field’s deliverability.**”<sup>18</sup> (Emphasis added.) Schedule 4 (a letter from IP to the Gas Research Institute) states that the vertical seismic profile would be used to identify whether 3-D seismic could be employed “**to delineate the location of the stored gas within the aquifer reservoir**” and for “**delineating the vertical extent of the gas bubble in the aquifer reservoir.**” (Emphasis added.)

Schedules 2 (a March 1997 paper by Professors J.W. Rector and P. Witherspoon) and 3 (a paper entitled “High Resolution, Direct Detection of Gas at the Hillsboro Gas Storage Field using Advanced Seismic Technologies”) describe the types of information about an underground

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<sup>17</sup>As discussed at page 28 of IP’s Initial Brief, a potential problem with the expanded Field was first noted following the 1995-1996 winter season.

<sup>18</sup>The Schlumberger proposal (Schedule 5) goes on to describe several issues relating to design of a 3D seismic study which will be addressed by the vertical seismic profile.

storage reservoir that can potentially be obtained through a 3-D seismic analysis. Without providing a detailed summary of these technical papers, the information on the Hillsboro reservoir that they state can be obtained using 3D seismic technology includes (i) the structural delineation of the Hillsboro anticline, (ii) major faults in the structure, and (iii) the gas bubble thickness and lateral extent at the Hillsboro Field. (See p. 2 of Schedule 2 and p. 2 of Schedule 3.) Schedule 2 also states that 3-D seismic surveys “are principally conducted to image geologic structure” and are also “often collected to provide more detailed information about the reservoir, including stratigraphy and delineation of reservoir boundaries.”<sup>19</sup> (See page 1 of Schedule 2.) The bottom-line point here, which is apparently too subtle for Staff, is that IP suspected (with good reason) that the deliverability performance of the recently-expanded Field was being impacted by a structural problem with the reservoir (see IP Ex. 5.0, pp. 7-9 and IP Ex. 6.0, p. 7), and it needed the type of information that a 3-D seismic analysis could provide on the shape and characteristics of the underground structure and the gas bubble in order to fully investigate this possibility. (See IP Ex. 5.0, pp. 9-10.)

Staff also cites Schedule 4 of Staff Cross Exhibit 1, a letter to the Gas Research Institute (“GRI”), in which the vertical seismic profile was described as “preliminary experimental work.” (Staff Init. Br., p. 33.) First, IP was attempting to get funding support from the GRI for this activity and should be commended for this effort, not criticized.<sup>20</sup> Second, Staff’s point is not apparent. IP acknowledges that the use of vertical seismic profiling and 3-D seismic techniques in the context of underground gas storage reservoirs was innovative and state-of-the-art. As

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<sup>19</sup>Both Schedule 2 and Schedule 3 discuss how data useful in evaluating if a 3-D seismic study could obtain such information on the Hillsboro Field can be obtained through the VSP.

<sup>20</sup>As indicated in both Schedules 2 and 3 of Staff Cross Exhibit 1, GRI had already done a report on the use of 3-D seismic analysis at the Lexington Storage Field, another gas storage field in Illinois but one with different characteristics than Hillsboro.

stated in Schedule 4 of Staff Cross Exhibit 1, “delineating the vertical extent of the gas bubble in the aquifer reservoir pushes the limits of seismic resolution. Therefore, innovative technologies such as VSP may be required for a successful 3D seismic project.” More specifically, although 3-D seismic had been used extensively in the industry in investigating oil and gas production reservoirs, the extension of the technique to analyzing gas storage reservoirs was novel.<sup>21</sup> As stated in both Schedules 2 and 3 to Staff Cross Exhibit 1:

Given the reliance of the oil and gas industry on 3-D seismic, it would seem that extensions to delineating gas storage fields would be straightforward. However, there are several characteristics of gas storage fields, particularly those located in the mid-continent region, that complicate conventional 3-D seismic surveys.

The discussion in Schedule 3 goes on to conclude that the authors believe the use of 3-D seismic analysis for profiling the structure of the gas storage reservoir “will be successful only if an integrated approach combining seismic measurements on cores, log correlation, synthetic elastic modeling, *vertical seismic profiling (VSP)*, and seismic attribute analysis is used to design and interpret the 3-D seismic data” (emphasis added).

In any event, there is no reason to criticize IP for using an innovative, leading edge technique to attempt to develop a better model of the underground structures at the Hillsboro Field (if that in fact is what Staff is attempting to do, which isn’t clear from its Brief). Obviously, the techniques previously available and used by IP had not provided a sufficiently well-defined picture of the underground structure to enable the Company to evaluate adequately potential structural causes for the Hillsboro deliverability decline.<sup>22</sup> The 3-D seismic surveys

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<sup>21</sup>The document included as Schedule 4 to Staff Cross Exhibit 2 points out that “3D seismic has presently moved from a tool for exploration to more of a tool for reservoir characterization.”

<sup>22</sup>See, e.g., IP Ex. 5.0, p. 8, referring to “the possibility . . . that the shape of the reservoir was not what it was believed to be or that unknown substructures existed, in either case with the result that some of the additional 11.5 Bcf of gas injected into the Field with the new wells, which were

enabled IP “to develop a new independent structural interpretation” of the reservoir. (IP Ex. 6.0, p. 5.) The benefits of 3-D seismic analysis in terms of improved information about the Hillsboro Field are also detailed in Staff Cross Exhibit 2, such as “improved reservoir characterization”, “identification of gas bubble thickness”, “identification of gas bubble perimeter”, “shape of reservoir structure” and “supplements conventional well data.” (See Schedule 2 of Staff Cross Ex. 2.<sup>23</sup>) Therefore, it was reasonable and appropriate for IP to utilize a technique such as 3-D seismic surveys which could provide a more complete and better defined image of the underground reservoir and structures than was previously available. As the Commission stated in its Order in Docket 01-0701 (p. 25), “a natural gas aquifer storage field is a complex physical system”, and IP was responding to the challenge of managing the Hillsboro Field by using innovative, leading-edge techniques to acquire better information about the reservoir.

**b. Staff Cross Exhibit 2**

Staff states that Schedule 1 in Staff Cross Exhibit 2 indicates that the 1998 3-D seismic survey at Hillsboro “was conducted to optimize both future expansion *and current reservoir operations which did not meet the design criteria for the annual withdrawal volume.*” (Staff Init. Br., p. 34.) This of course is fully consistent with IP’s testimony that the 3-D seismic survey was performed as part of investigating whether the Hillsboro deliverability decline was due to a

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farther away and down structure from the original formation, could be migrating to areas from which the gas could not be accessed by the withdrawal wells.”

<sup>23</sup>Similarly, the document that is Schedule 4 to Staff Cross Exhibit 2 states that “Detailed geologic structure features such as the ‘spill point’ are more accurately identified with 3D seismic surveys. Also identifies zones of high permeability within the reservoir having lateral and vertical discrimination capabilities. . . The 3D surveys delineate reservoir continuity, create images of small structures, and improve volumetric calculations, geographic modeling, and reservoir simulation.” As AmerenIP witness Hower explained, in a major expansion of an underground reservoir such as had been completed at Hillsboro, gas migration out of the reservoir across structural spill points can result. (IP Ex. 6.0, p. 7.)

reservoir problem. (IP Ex. 5.0, pp. 9-10.) Staff also states that the documents in Staff Cross Exhibit 2 “indicates that in 1998 the Company was concerned about the deliverability problems at the Hillsboro storage field” (Staff Init. Br., p. 34), which of course it was. Nothing new or remarkable is revealed here.

Staff further notes that the document included as Schedule 4 in Staff Cross Exhibit 2 indicates that the benefits of performing the 3-D seismic study include, among other things, the possibility of avoiding having to inject 3 Bcf of base gas to regain the 7.6 Bcf of annual deliverability, and that this shows the Company recognized the potential need to add inventory to regain the rated annual deliverability of the Field. Staff then points out that IP did not begin reinjecting additional gas into Hillsboro until five years later. (*Id.*, p. 34.) Again, Staff’s point is completely unremarkable. IP did recognize the “potential need” to reinject inventory into the Field well before 2003, but as has been reiterated many times in IP’s testimony and briefs in this case, IP also recognized that it would be inadvisable and imprudent to begin injecting large amounts of additional gas into the Field until the possible reservoir/structural causes of the deliverability decline were investigated and confirmed or eliminated – since otherwise the newly injected gas could also be lost through migration to a substructure or other area of the underground structure where it was not accessible by the withdrawal wells. Staff’s argument based on Schedule 4 of Staff Cross Exhibit 2, at pages 34-35 of its Initial Brief, simply begs a question that is already at issue at this case, namely, could IP prudently have commenced reinjecting gas into the Hillsboro Field before fully investigating possible structural/reservoir problems that could result in the loss of the newly-injected gas. As IP has thoroughly demonstrated in its evidence and briefs in this case, the answer is “No.”

With respect to the specific reference in Schedule 4 of Staff Cross Exhibit 2 that one benefit of performing the 3-D seismic survey could be avoiding reinjecting 3 Bcf of gas into the Field, this is entirely consistent with IP's testimony. One of the possible causes of the reduced deliverability that IP was investigating was that gas had migrated to locations where it was not accessible by the withdrawal wells, either because the actual shape of the reservoir was different than what it was believed to be, because there were unknown substructures, or due to faults or cracks in the structure. (IP Ex. 5.0, pp. 7-8.) If this were in fact what had happened, but the migrating gas could be located, it would be possible to drill additional wells to access this gas, and thus replacement would not be needed. The 3-D seismic survey would provide a better image of the underground structure (*Id.*, pp. 9-10), and could thereby enable IP to determine if in fact there were previously-unidentified substructures to which gas had migrated. Indeed, this was the original conclusion drawn from the 3-D seismic results – that a separate substructure existed to the northeast of the known reservoir structure, to which approximately 3.5 Bcf of gas had migrated. The Company then drilled the Furness well to attempt to recover this gas. (*Id.*, pp. 10, 14; IP Ex. 6.0, p. 8.)

**c. Conclusion on Staff Cross Exhibits 1 and 2**

The foregoing discussion shows that a *complete* reading of the documents included in Staff Cross Exhibits 1 and 2 demonstrates that Staff's assertion that these documents indicate the Company's initial basis for using vertical seismic profiling and 3-D seismic analysis "was not necessarily to investigate the deliverability problems that the field was experiencing" (Staff Init. Br., p. 34) is erroneous and misplaced. Further, the fact that there were other, longer-term benefits of performing a 3-D seismic survey of Hillsboro does not detract from the fact that this technique would provide IP with additional, improved information about the characteristics of

the underground structure and the gas bubble that would be useful in evaluating the possible causes of the Hillsboro deliverability decline. Frankly, the argument that Staff has cobbled together at this late date based on selective passages from, and unwarranted inferences based on, these documents, shows that Staff realizes the utter weakness of its arguments in this case and is simply grasping at straws to try to preserve them.

**C. Staff Witness Lounsberry’s “Overall Storage Concerns” Do Not Demonstrate That IP Was Imprudent in its Investigation and Remediation of the Hillsboro Deliverability Issues**

**1. Overview**

Staff witness Lounsberry’s “overall storage concerns” were addressed at pages 58-75 of AmerenIP’s Initial Brief. Staff asserts at page 35 of its Initial Brief that “These concerns also indicate that the Company’s actions or lack thereof, exacerbated or contributed to the problems faced at the Hillsboro storage field.” However, Staff fails in its Initial Brief, just as it failed in its testimony, to show *any* causal connection between Mr. Lounsberry’s “overall storage concerns” and the Hillsboro deliverability decline or the speed with which IP investigated, identified and remediated its causes. Nor has Staff yet shown any causal connection to support its assertion at page 37 of its Initial Brief that Hillsboro’s peak day capacity was reduced “in large part due to the manner that the Company operates, reviews, and oversees its storage operations and its ability, or inability, to properly conduct root cause analyses of its problems at its storage fields.” Mr. Lounsberry’s continued repetition of unsupported assertions like these have become at best psittacisms and at worst stridulations. Staff witness Lounsberry’s “overall storage concerns” provide absolutely no support for Staff’s proposed imprudence finding and disallowance.

## 2. Reduction in Peak Day Capacity

Staff's arguments on this point were addressed at pages 60-61 of AmerenIP's Initial Brief. Only a brief response is required here to points in Staff's Initial Brief (pp. 36-37).

Referring to Mr. Hower's testimony, Staff states that "The Company expressed surprise that Staff was concerned that it had experienced a deliverability decline at its two largest storage fields." (Staff Init. Br., p. 36.) Mr. Lounsberry is apparently having difficulty keeping straight in his mind the records of all the cases in which he has raised these same "concerns." What Mr. Hower said in *this* case about this point was: "I disagree with his [Mr. Lounsberry's] statements, although now that he has made the same statements in three cases, I am no longer surprised by them." (IP Ex. 6.0, p. 21.)

Staff agrees that "It is true that storage well and field deliverability declines are not uncommon in the industry." (Staff Init. Br., p. 36; see IP Init. Br., p. 61 and IP Ex. 6.0, pp. 21-22.) Staff goes on to state that "there is a difference between a decline in an individual storage well deliverability and the overall deliverability of a storage field." (Staff Init. Br., p. 37.) Whatever point Staff is attempting to make here is unclear. As Mr. Hower pointed out, in his professional experience in evaluating other storage fields that have experienced problems with declines in gas inventory, the most frequent cause was gas leaks or gas losses across faults or through fractures in the reservoir rock, resulting in a permanent loss of gas and an unwanted migration of gas into non-storage reservoirs or aquifers. (IP Ex. 6.1, p. 4.) Further, neither his own professional experience or the overall experience of the gas storage industry as reported by the U.S. Department of Energy ("DOE") is specific to a decline in performance in individual

wells.<sup>24</sup> (*Id.*) To the contrary, the DOE data is based on gas storage *reservoirs*, and in Mr. Hower's professional experience the causes of the deliverability declines have proven to be overall loss of inventory through leakage or migration from the structure, not problems with individual wells. (*Id.*, pp. 4-5.)

Thus, Staff's response fails to rebut the fact that reduction in gas deliverability from a storage field is not uncommon, and does not necessarily signify that a problem or an unusual circumstance exists with the management of a given storage field. (IP Ex. 6.1, p. 5.)

### **3. Manpower**

Staff's arguments on this topic (Staff Init. Br., pp. 38-39) were fully addressed at pages 62-65 of AmerenIP's Initial Brief. Here, as with Mr. Lounsberry's other "overall storage concerns", Staff shows no causal connection between the reduction in number of storage field supervisors (but not operators) and the Hillsboro deliverability decline. Once again, Staff's statement that "Staff considers the reduction in management oversight at its storage fields a factor in the Company's inability to conduct a thorough root cause analysis and was thus also a factor in the decision to reduce the peak day capacity at two of its largest storage fields" (Staff Init. Br., pp. 38-39) is just an unsupported assertion. Further, Staff ignores the fact that the investigation of significant operating problems would be conducted by headquarters engineering personnel and outside consultants, not by the storage field operating personnel who have day-to-day operating and maintenance responsibilities. (See IP Init. Br., p. 63.)

In referring to the reduction of the peak day capacity at the Shanghai Storage Field (which was in effect for just the 2000-2001 winter), Staff forgets that in IP's 2001 PGA

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<sup>24</sup>As discussed at page 61 of IP's Initial Brief, data published by DOE shows that, based on more than 350 U.S. storage reservoirs, most gas storage operators experience a loss in deliverability over time; and deliverability decline is reported to be the most common problem in the gas storage industry.

reconciliation case, the Commission, after a full review of the facts, concluded that “IP acted reasonably and prudently with regard to its decision to reduce the peak day deliverability of Shanghai by 25,000 Mcf/d”. (Order in Docket 01-0701 (Feb. 19, 2004), p. 25.) In that case Staff witness Lounsberry also tried to link the reduction in the number of IP’s storage field supervisors, the level of IP’s storage field capital expenditures, and the purportedly inadequate investigation of the December 2000 Hillsboro accident, to the reduction in peak day capacity at Hillsboro and Shanghai (see Order in Docket 01-0701, pp. 13-16), all to no avail.<sup>25</sup>

#### **4. Capital Expenditures**

Staff’s arguments on this point were addressed at pages 65-70 of AmerenIP’s Initial Brief. Only a brief response is required here to points in Staff’s Initial Brief (pp. 39-41). Staff fails here (as it does with its other “overall storage concerns”) to show any causal connection between the levels of capital expenditures in certain years and the Hillsboro deliverability decline, and fails to rebut IP’s specific evidence that there was no connection. Staff’s failure is particularly glaring with respect to its “capital expenditures” concern, because IP presented detailed information on its storage field capital expenditures and projects for the 1995-2003 period (see IP Init. Br., pp. 66-67), as well as detailed evidence on how it investigated the Hillsboro deliverability decline, yet Staff has identified no capital projects that IP should have undertaken, but did not, that would have expedited resolution of the deliverability decline. There is absolutely no evidentiary support for Staff’s reference to “the unwillingness of the Company to perform capital projects.” (Staff Init. Br., p. 41.)

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<sup>25</sup>The Commission’s response to this effort was: “While appreciative of Staff’s effort in compiling these observations about IP’s storage field operations, the Commission is unsure how Staff would have the Commission respond.” (Order in Docket 01-0701, p. 24.)

Moreover, Staff's argument is internally inconsistent: Staff's specific concern is that the levels of capital expenditures in 2002, 2003 and 2004 (the year *after* this reconciliation period) were lower than in 2000 and 2001 and generally lower than in the period 1995-2001 (Staff Init. Br., p. 39), yet Staff contends that "IP's capital expenditure levels have been reduced over the same time period that the Company experienced problems at its two largest storage fields. (*Id.*, p. 40.) But it was the 2000-2001 winter when IP reduced the peak day capacity at Shanghai, and the deliverability decline at Hillsboro occurred during the period that Staff believes the Company's storage field capital expenditures were adequate. Further, the essence of Staff's imprudence allegation is that IP should have recognized in 1999 or 2000 that the cause of the Hillsboro deliverability decline was the injection meter measurement error, rather than possible reservoir/structural problems which IP continued to investigate in 2000-2002 through capital intensive activities such as drilling the Furness well and well stimulation treatments. Staff has suggested no storage field capital projects that would have led IP to discover the true cause of the Hillsboro deliverability decline sooner.

Finally, Staff refers to an isolated and unattributed comment in a "due diligence" report prepared by Ameren Corporation during its negotiations to acquire IP, which Staff obtained in discovery in Docket 04-0476. (Staff Init. Br., pp. 39-40.) Staff then purports to summarize IP's response to this evidence (*Id.*, p. 40), but fails to mention the testimony of AmerenIP witness Scott Glaeser who addressed the comment in the "due diligence" report directly. Mr. Glaeser was part of Ameren's acquisition team that was responsible for performing due diligence during Ameren's investigation and negotiations concerning the possible acquisition of IP, and was the

co-author of the “due diligence” report cited by Staff witness Lounsberry. Thus, Mr. Glaeser has personal knowledge which Mr. Lounsberry lacks.<sup>26</sup> (IP Ex. 4.0, p. 7.)

As Mr. Glaeser explained, from the potential buyer’s perspective, a primary purpose of the due diligence effort is to identify as many negatives, concerns and risk exposures as possible about the company or assets under consideration, as a basis for negotiating the acquisition price or determining to end the acquisition effort. (IP Ex. 4.0, p. 7.) All of this must be done in a limited amount of time and with incomplete information, in order to determine the maximum risk scenario, even if possible risks later prove to be minor or nonexistent. (*Id.*, pp. 7-8.) In fact, the same paragraph of the report stated that a thorough investigation of IP’s storage fields was needed but there was insufficient time to do this in the “due diligence” period. (*Id.*, p. 8.) In the end, “due diligence” conclusions are based on incomplete or imperfect information and are focused on identifying all *potential* risks with the objective of negotiating a favorable purchase price. (*Id.*) The isolated statement cited by Staff must be considered in this context. (*Id.*) Further, any analysis included or reflected in the due diligence report of the Company’s actions that Staff claims were imprudent – actions which occurred in 1999-2002 – is a hindsight review that is not appropriately considered in evaluating the prudence of IP’s actions.<sup>27</sup>

In any event, following the closing of Ameren’s acquisition of IP on September 30, 2004, detailed integration of IP into Ameren began, with Ameren management at that point gaining full

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<sup>26</sup>Mr. Lounsberry admitted that he has no experience in negotiating purchase agreements such as the agreement by which Ameren acquired IP, and of course he did not participate in the negotiations that led to Ameren’s agreement to acquire IP. (Tr. 35-36.)

<sup>27</sup>See the Commission’s Order in Docket 01-0701, IP’s 2001 PGA reconciliation case, in which the Commission concluded that a report prepared in 2001 analyzing events leading up to the temporary reduction in the peak day capacity of the Shanghai Storage Field for the 2000-2001 winter “constitutes hindsight review since the possible causes of the reduced deliverability were only identified after IP realized that a problem existed.” (Order in Docket 01-0701 (Feb. 19, 2004, p. 23.)

access to IP's assets, personnel and records. (*Id.*, p. 9.) Mr. Glaeser explained that the detailed integration activities have uncovered no evidence that IP's capital spending at its storage fields has been inadequate. To the contrary, Ameren's examination of the storage field expenditures has shown that the expenditures have been relatively stable with some variations due to larger capital projects in some years. Ameren has found no evidence of needed capital projects that were rejected or deferred due to capital spending constraints and no evidence that capital projects were not implemented in a timely manner. (*Id.*)

## **5. Identification of Problems**

Staff's arguments concerning IP's purported "inability to identify and therefore correct various problems associated with its storage fields" (Staff Init. Br., p. 41) were addressed at pages 70-75 of AmerenIP's Initial Brief. Staff states that the two "scenarios" it discusses, relating to the December 2000 Hillsboro incident and "gas dispatch tracking", "are representative of the Company's inability to identify problems." (Staff Init. Br., p. 41.) This is a misleading statement, as it is intended to make the reader think that Staff has identified a whole host of such examples. In fact, it has not – the two items discussed in Staff's Initial Brief (pp. 41-46) are the **only** two "examples" Staff and Mr. Lounsberry have identified of IP's purported "inability to identify and therefore correct various problems". Moreover, as detailed at pages 70-75 of IP's Initial Brief, Staff's two "examples" prove no such thing.

### **a. December 2000 Hillsboro Incident**

IP reiterates that the purpose of an accident investigation and root cause analysis is to identify and implement corrective and preventative actions that will prevent the accident from recurring. Although IP has detailed all of the corrective and preventative actions it implemented following the December 2000 incident in both the gas rate case (Docket 04-0476) and this case

(and it is a lengthy list – see IP Exhibit 5.0, pp. 41-42), Staff has yet to identify any deficiencies or omissions in IP’s corrective actions and has not suggested any additional corrective or preventative actions that IP should take but has not implemented. The Commission must conclude that Staff has no other corrective or preventative actions to offer, because in light of the potential injury to persons and property (and continuity of gas service) that could result from a recurrence of the December 2000 accident, Staff would be derelict in its duties if it were aware of additional corrective or preventative actions but failed to recommend them to IP. Finally, with respect to Mr. Lounsberry’s assertion that the factors that led to the over-pressurization of the produced water tank were the real root cause of the December 2000 incident (Staff Init. Br., p. 42), Staff has not contended that IP’s corrective and preventative actions do not address this root cause.<sup>28</sup> Therefore, the Commission must conclude that IP’s investigation and analysis of the December 2000 Hillsboro incident (which included investigation and recommendations by a qualified outside forensic engineering firm, *see* IP Init. Br., pp. 70-71) accomplished the intended purpose of a root cause analysis.

**b. Gas Dispatch Tracking**

Staff’s arguments concerning “gas dispatch tracking” were addressed at pages 72-75 of AmerenIP’s Initial Brief, and only brief additional response is required here to pages 43-45 of Staff’s Initial Brief. Staff’s assertion that the average daily metering error was at least 13% of gas deliveries to IP’s system during the summer months is flawed and incomplete because the denominator of Staff witness Lounsberry’s calculation did not include *all* the gas entering IP’s

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<sup>28</sup>The use of the word “Staff” rather than “Mr. Lounsberry” in this section of Staff’s Initial Brief is particularly inappropriate because the Commission’s Office of Pipeline Safety (“OPS”) conducted its own investigation of, and issued a report on, the Hillsboro incident, but did not find any fault with the quality or completeness of the investigations conducted by IP or its consultant. Nor has OPS criticized IP’s corrective and preventative actions or recommended additional corrective or preventative actions. (See IP Init. Br., p. 71.)

system on a daily basis. (See IP Init. Br., p. 74.) IP Exhibit 2.14 showed the daily deliveries into the IP gas system on every day of the injection seasons during the period from 1994 to 1999 (when the injection meter measurement error was occurring), and the percentage of the daily deliveries that the average injection metering error represented on each day in that period. On average, the injection metering error was only 1.99% of the daily deliveries to the IP gas system, and it reached 3% of the deliveries to the IP system on only five days in the entire six-year period. (IP Init. Br., pp. 73-74.) This data reinforces the fact that on a daily basis, the amount of additional gas entering the IP system (rather than being injected into storage) due to the Hillsboro metering error would not stand out as noticeable against the total gas volumes entering IP's system. (See IP Init. Br., pp. 72-74.)

#### **D. Dynege Indemnification**

Staff points out that the February 2, 2004, Stock Purchase Agreement by which Ameren acquired IP included a provision whereby Dynege will reimburse Ameren for (among other things) one-half of any refunds ordered in PGA cases for the years 2001 through 2004 in excess of specified amounts, including disallowances of gas costs relating to events at Hillsboro prior to the closing of the acquisition. Staff asserts that this provision shows that “Ameren was . . . concerned about the manner in which [IP] had operated the field”.<sup>29</sup> (Staff Init. Br., p. 45.) However, this “indemnification” provision – which was entered into long after the events at issue in this case that Mr. Lounsberry has characterized as imprudent – should be giving no weight in deciding the Hillsboro-related prudence issue in this case.

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<sup>29</sup>Of course, Staff witness Lounsberry, who made this allegation in his testimony, was forced to admit that he had no involvement in the negotiation of this contract provision or any insights directly from the parties as to why this provision was included in the Stock Purchase Agreement, let alone any experience in negotiating agreements of this type. (Tr. 35-36.)

AmerenIP witness Scott Glaeser expressly rejected Mr. Lounsberry’s assessment that the indemnification provision was included in the Stock Purchase Agreement because Ameren was “so concerned about the manner” that IP had operated the Field. (IP Ex. 4.0, p. 10.) He pointed out that in light of the limitations inherent in the “due diligence” process (discussed earlier in this Brief) as well as the uncertainties associated with the outcome of litigation that is pending at the time of the acquisition, indemnification provisions in acquisition agreements are commonly used as a way for the parties to share or allocate the risks associated with such uncertainties. (*Id.*) He also noted that the full indemnification provision (not quoted by Mr. Lounsberry) was over 7 pages long plus attachments, one of which was a 40-page list of potential litigation exposures. The indemnification covered all aspects of IP’s utility business including environmental issues, tax issues, outstanding lawsuits, warranties, and representation by the seller. (*Id.*, p. 11.) Thus, there was nothing unique about inclusion of potential PGA refunds in open reconciliation cases in the indemnification provision.

Specifically with respect to PGA reconciliation cases, Ameren did not believe it should bear 100% of the risk of possible disallowances in open reconciliation cases relating to prior periods when IP was not under Ameren’s control. (*Id.*) However, as Mr. Glaeser pointed out, Ameren was sufficiently *unconcerned* about the risks associated with open PGA cases, and the Hillsboro Field in particular, that it was willing to accept a 50-50 sharing of those risks rather than insisting that Dynegy bear 100% of the risks. (*Id.*, p. 12.)

#### **E. Purported Consistency with Rate Case Order**

Staff’s final argument is that adoption of Mr. Lounsberry’s proposed prudence disallowances would be consistent with the gas rate case order in Docket 04-0476 in which the Commission ruled against the Company on two Hillsboro-related issues. (Staff Init. Br., p. 47.)

Staff asserts that “both of these positions were advocated by Staff based upon virtually the same information that was presented in the instant proceeding.” (*Id.*) Staff is wrong both factually and substantively.

In this case, the parties’ positions and arguments are based on the consequences of specific actions of IP concerning the Hillsboro deliverability decline, evaluated under the prudence standard. In contrast, in Docket 04-0476 the Commission found the Hillsboro Field to be only 53.44% used and useful based on data presented by Staff on the actual peak day capacity and amount of working gas inventory cycled from the Field. Whether or not IP’s actions “caused” the reductions in Hillsboro’s peak day and working gas capabilities during this period was not a factor in the Commission’s used and useful determination. The used and useful determination was based simply on the fact that, whatever the reason, Hillsboro had not been operating at its full capacities. (See Commission Conclusion on the used and useful issue at p. 41 of the Order in Docket 04-0476.) Similarly, with respect to the Hillsboro base gas issue, although the Commission’s conclusion in the Docket 04-0476 Order (p. 27) is extremely abbreviated, the basis for the conclusion appears to have been that a gas utility should not be allowed to increase the dollar value of its recoverable base gas inventory between the time a storage field is opened (or, in the case of HSF, expanded) and the date the field is retired. Moreover, the Commission made *no* findings in its Docket 04-0476 Order that any of IP’s actions with respect to the Hillsboro Field were imprudent.<sup>30</sup> (IP Ex. 2.11, pp. 11-12.)

Further, the determinations of “used and useful” and “prudence” are two distinct legal findings that are based on different standards and different facts. The Commission can make a finding that a utility asset is not used and useful without finding any imprudence by the utility

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<sup>30</sup>AmerenIP has appealed the Commission’s conclusions on the used and useful and Hillsboro base gas issues in Docket 04-0476 to the Third District Appellate Court.

(and in fact, even though it finds all the utility's actions were prudent).<sup>31</sup> Conversely, the Commission can find a utility asset is fully used and useful even though it finds that a portion of the costs of the asset resulted from imprudence by the utility. In any event, in this case, the determination as to whether IP's actions relating to the management of the Hillsboro Field and the investigation, identification and remediation of the Hillsboro deliverability decline were prudent should be based on the facts and arguments presented in this case, and not on the Commission's determinations on legally distinct issues in Docket 04-0476.

#### **F. Quantification Issues**

Staff's proposed disallowance for the Hillsboro issues has two components, a peak day capacity component and a seasonal capacity component. As stated at page 76 of IP's Initial Brief, although IP believes no disallowance is warranted, IP reached agreement with Staff on the methodology for calculating the seasonal capacity component. The record contains calculations of the seasonal capacity component assuming it were concluded that IP should have commenced reinjecting gas into Hillsboro in 2000 (Staff Sched. 4.01R and IP Ex. 2.6), 2001 (Staff Sched. 4.04R) or 2002 (IP Ex. 2.13).

As discussed at pages 76-79 of IP's Initial Brief, IP does not agree with Mr. Lounsberry's calculation of the peak day capacity component of his proposed disallowance. The correct calculation (assuming any disallowance were appropriate, which is not the case) is \$524,987, not \$825,008 as proposed by Mr. Lounsberry. It is undisputed that the peak day capacity component

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<sup>31</sup>For example, in its Order in Dockets 84-0055, 87-0695 & 88-0256 (Cons.) (March 30, 1989), the Commission found that IP's management of the generation capacity planning function and its decisions to commence and complete construction of the Clinton Power Station were reasonable, and rejected arguments that IP imprudently managed this function (*Id.*, p. 38), but the Commission nevertheless found Clinton Power Station to be only 27.2% used and useful because at the time of completion, it resulted in excessive capacity reserve margins and did not produce economic benefits for customers. (*Id.*, pp. 137-151.)

is applicable only to the 2002-2003 winter portion of the 2003 reconciliation year, and not to the 2003-2004 winter portion of the 2003 reconciliation year. IP's calculation (presented by AmerenIP witness Shipp) is based on the cost of a pipeline FT contract that was actually in effect during the 2002-2003 winter and was terminated at the end of that winter. (Rev. IP Ex. 2.1, p. 21; IP Init. Br., pp. 77-78.) Mr. Lounsberry's calculation, in contrast, is based on the cost of a pipeline FT contract entered into in 2002 for a ten-year term that continues in effect today. Thus, the contract used by Mr. Lounsberry is not a contract that IP entered into to replace the temporary reduction in Hillsboro's peak capacity nor that IP terminated when Hillsboro's peak capacity was restored to 125,000 Mcf/day in 2003.<sup>32</sup>

Further, although the contract that Mr. Lounsberry used to calculate its peak day capacity component does not expire until 2012, he arbitrarily used the cost of this contract for the months of January through October 2003 to calculate his peak day component. His reasoning for including the months of January through October 2003 in his disallowance calculation were (1) that IP "returned the [Hillsboro] field to its rated capacity in November" (Staff Init. Br., p. 16) and (2) IP's purported "historical practice of signing transportation contracts through October" (*Id.*, pp. 16, 17). Both prongs of Mr. Lounsberry's reasoning were flawed and erroneous.

First, IP in fact returned the Hillsboro Field to its rated capacity at the end of the 2002-2003 winter, not in November 2003. IP's response to Staff Data Request ENG 2.4, which was

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<sup>32</sup>In response to Mr. Lounsberry's request in his direct testimony that IP present information concerning its decision to enter into the pipeline contract with NGPL that Mr. Lounsberry used as the basis for his calculation, Mr. Shipp presented extensive information on this topic, including the economic analysis that IP performed before entering into this contract. (Rev. IP Ex. 2.1, pp. 1-17; IP Ex. 2.3-2.4.) Nothing in Mr. Shipp's testimony or exhibits on this topic, including the contemporaneous (2002) economic analysis, suggests that IP entered into this 10-year FT contract to replace the unavailable HSF peak day capacity. In fact, the principal economic benefit of entering into this NGPL contract was to displace capacity on Mississippi River Transmission Corp. ("MRTC") and enable IP to access different gas suppliers than those available through MRTC. (See Rev. IP Ex. 2.1, pp. 11-13, and IP Ex. 2.3.)

placed into the record as IP Exhibit 2.5, showed the peak day capacity of Hillsboro as 100,000 Mcf for January through May 15, 2003, and 125,000 Mcf for May 16-December 31, 2003. (Rev. IP Ex. 2.1, p. 21.) Staff provided no basis to support its assertion that HSF was not restored to 125,000 Mcf/day until November, or to controvert IP's data request response. (See Staff Init. Br., p. 16, and Staff Ex. 2.00R, p. 16.) Further, once the winter coverage period ended at the end of March (and storage operations moved from a withdrawal mode to primarily an injection mode), IP would have had no need or reason to continue to replace the 25,000 Mcf/day reduction in Hillsboro's peak day capacity. IP only needed the shortfall in Hillsboro's peak day capacity to be covered through March 31. (Rev. IP Ex. 2.1, p. 20.) Therefore, Mr. Lounsberry's inclusion of pipeline FT costs in his disallowance calculation through October 2003 was arbitrary and without any evidentiary basis (regardless of what contract he used to obtain the price).<sup>33</sup>

Second, Mr. Lounsberry's reference to a "historical practice" of signing transportation contracts through October has no basis in the context of this disallowance calculation for the 2003 reconciliation year. He asserted that "my review of IP's 2003 transportation capacity contracts indicated that its transportation capacity contracts expired prior to the start of the next winter season versus expiring immediately after the winter season ends (contracts expired in October versus April)." (Staff Ex. 2.00R, p. 16.) However, it is unclear what he looked at, since, as AmerenIP witness Shipp testified without contradiction, IP did not have *any* transportation contracts that expired in October 2003. (Rev. IP Ex. 2.1, pp. 19-20.) IP did, however, have a transportation contract that was terminated on March 31, 2003, which Mr. Shipp used in his calculation of the peak day capacity component. (*Id.*, pp. 19, 21.) Mr. Lounsberry, in contrast,

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<sup>33</sup>Mr. Lounsberry might have had a better argument on this point had IP actually entered into a replacement contract for the 25,000 Mcf of HSF peak day capacity that ran through October 2003, but that was not the case.

based his calculation on the capacity price in a transportation contract that does not expire until 2012, not on a contract that expired in October 2003 (or in any other month in that year).

Even if the contract that Mr. Lounsberry selected is used in calculating the peak day component of the disallowance (even though that contract was not terminated in 2003 but rather does not expire until 2012), there is no justification for disallowing its costs for the months of January through October 2003. Rather, the disallowance should only be calculated for the months of January through March, or at most the period January through May 15, 2003.

Staff argues that the contract IP used in its calculation was inappropriate because the Hillsboro peak capacity was reduced in 1999, not prior to the 2002-2003 winter, and that in any event, prior to the 2002-2003 winter, IP would not have known when the Field would be restored to 125,000 Mcf/day. (Staff Init. Br., p. 17.) Staff's argument is flawed in several respects. First, there is no evidence that IP entered into a long-term contract for additional pipeline capacity in 1999 when the Hillsboro peak day rating was reduced. Second, given the ongoing efforts to identify and remediate the cause(s) of the HSF deliverability decline, the need to replace the reduction in HSF capacity would have been a year-to-year proposition. Third, only costs actually incurred by IP and charged to customers through the PGA during 2003 are at issue in this PGA reconciliation case. Fourth, Mr. Lounsberry did not base his own disallowance calculation on the capacity price in a pipeline contract that was entered into in 1999. Rather, just like Mr. Shipp, Mr. Lounsberry used the capacity price from a contract that was entered into in 2002. (Rev. IP Ex. 2.1, pp. 11-12.) Thus, Staff's criticism of the contract that Mr. Shipp used is equally applicable to the contract that Mr. Lounsberry used. Finally, regardless of whether or not IP knew going into the 2002-2003 winter that Hillsboro would be restored to 125,000 Mcf/day peak capacity following that winter, at the *end* of that winter IP specifically terminated a pipeline

FT contract, which is the contract that Mr. Shipp used in calculating the peak day capacity component of the proposed disallowance.

Staff's final argument on this issue is that it used the same transportation contract in its disallowance calculation that it used to calculate the value of Hillsboro's peak day value in the used and useful calculation in Docket 04-0476, and that "Staff[] has seen no reason to depart from the Commission's conclusions in that proceeding." (Staff Init. Br., p. 17.) Apparently Staff did not "see" §9-220, the statutory provision that governs this proceeding. While the NGPL contract that Staff used may have been appropriate in estimating the value of Hillsboro's peak day capacity for a used and useful analysis<sup>34</sup>, the issue in this case is: What costs did IP actually incur during the 2003 reconciliation year and bill to its customers through the PGA that it would not have incurred if the purportedly imprudent management actions had not occurred? There is absolutely no evidence that the pipeline contract Mr. Lounsberry used in his calculation – which was entered into in 2002 for a ten-year term ending in 2012 based largely on an economic analysis that focused on the benefits of displacing capacity purchases on another pipeline and accessing additional gas suppliers, and not for the purpose of replacing Hillsboro's capacity (see IP Ex. 2.3), and which was not terminated or reduced in 2003 when Hillsboro was returned to 125,000 Mcf/day peak capacity – would not have been entered into if HSF had been returned to 125,000 Mcf/day peak capacity *prior* to the 2002-2003 winter. In contrast, the pipeline contract that IP used to calculate the peak day component of the proposed disallowance was entered into in 2002 and was terminated effective March 31, 2003, at the point at which replacement capacity for the incremental HSF peak day capacity reduction was no longer needed.

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<sup>34</sup>IP has disputed this in Docket 04-0476 and on appeal, on grounds not pertinent to the issues in this reconciliation case.

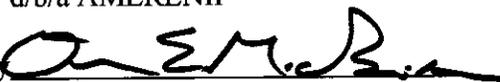
Thus, consistent with §9-220, the capacity price in the contract that IP used in the calculation is an actual incremental capacity cost that IP incurred and included in its PGA charges to customers only during the portion of the 2003 reconciliation period that the Hillsboro peak day rating was reduced and needed to be replaced. (IP Ex. 2.11, p. 9.) The contract cost that Staff witness Lounsberry used is not.

#### IV. Conclusion

For the reasons detailed in AmerenIP's Initial Brief and in this Reply Brief, the Commission should adopt AmerenIP's proposed reconciliation of gas costs and revenues collected under the PGA for the 2003 reconciliation year, as presented in IP Exhibit 1.1, adjusted only for the reduction of gas costs by \$40,009 for cost of gas lost due to damage by third parties for which the Company was reimbursed, as recommended by Staff witness Ms. Jones.

Respectfully submitted,

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