STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

In the Matter of the	)	
	)	
Proposed Revision to the Collocation	)	
Tariffs to Eliminate Charges for DC	)	**ICC Docket No. 05-0675**
Power on a Per Kilowatt-hour Basis	)	
and to Implement Charging on a Per	)	
Amp Basis	)	

INITIAL BRIEF OF JOINT CLECS

COVAD COMMUNICATIONS COMPANY,
MCLEODUSA TELECOMMUNICATIONS SERVICES, INC.,
MPOWER COMMUNICATIONS CORP., AND
XO COMMUNICATIONS SERVICES, INC.

MAY 2, 2006

PUBLIC VERSION

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JOINT CLECS' INITIAL BRIEF

This Initial Brief is submitted pursuant to Section 200.800 of the Illinois Commerce Commission's Rules of Practice, 83 Ill. Adm. Code § 200.800, by the following competitive local exchange carriers ("Joint CLECs"): CIMCO Communications, Inc., Covad Communications Company, McLeodUSA Telecommunications Services, Inc., Mpower Communications Corporation d/b/a Mpower Communications of Illinois, and XO Communications Services, Inc.

SUMMARY OF THE POSITION OF THE JOINT CLECs

Joint CLECs respectfully request that the Commission reject in their entirety the tariff sheets proposed by Illinois Bell Telephone Company d/b/a AT&T Illinois ("AT&T") filed on September 15, 2005[1], the modified proposal submitted by AT&T in its rebuttal testimony,[2] and the second modified proposal submitted by AT&T in its Surrebuttal testimony.[3] Each of these three different tariffs proposed by AT&T are inconsistent with the Commission's February 17, 1996 Order in ICC Docket Nos. 96-0486/96-569. There, the Commission directed AT&T to bill collocated CLECs for electric power delivered to their collocation spaces "on a per-unit basis, which is measured for power consumed or reduce the charge to a square foot basis, which closely mirrors its actual charges."[4]

While AT&T's proposed methods of billing CLECs for DC power delivered to the CLECs' collocation equipment has shifted throughout this proceeding, even AT&T's last

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1 AT&T Ex. 5.0, Sch. RAS-1.

2 AT&T Ex. 5.1, Sch. RAS-2.

3 AT&T Ex. 5.2, Sch. RAS-14.

4 Illinois Commerce Commission, Docket Nos. 96-0486 and 96-0569, *Investigation into Forward-Looking Cost Studies and Rates in Ameritech Illinois for Interconnection, Network Elements, Transport and Termination of Traffic*, Second Interim Order at 99 (Feb. 17, 1998)("Illinois 1998 Order").

proposal as reflected in Schedule RAS-14 must be rejected by the Commission. When AT&T initially designed a system to measure the electrical usage of collocators, it elected to use a system of power measurement units (PMUs) and electrical shunts installed on the return side of the power delivery arrangement. Not only did this method prove to be defective, as it did not accurately measure all of the power used by the collocation equipment, but the record demonstrates that AT&T (and its vendors) should have known that the power metering configuration AT&T elected to implement would not accurately measure all the electricity delivered to the CLECs' collocation spaces. AT&T discovered this "leakage" issue in early 2002 – but, other than lobbying the Commission Staff in private meetings, AT&T waited almost four year before taking any action to address the problems. In the meantime, CLECs paid millions of dollars in tariffed nonrecurring charges to AT&T to purchase, engineer and install the PMU devices which AT&T now seeks Commission approval to abandon – all the while failing to tell CLECs that they were paying for a defective power metering system.

Now, four years after AT&T discovered the problem, AT&T proposes an alternative method of measuring power – by shifting the burden of measuring power consumption to the CLECs so that AT&T can bill for usage. However, AT&T not only wants to force *CLECs* to assume the costs and responsibility of measuring the power supplied to them by AT&T, it also wants virtually unlimited ability to audit the CLECs' reported power usage, and assess back-billing and even penalties in the event that the CLECs make an error in its power usage measurements. But if AT&T would simply measure the power itself – as the Commission ordered it to do in 1998, and the record demonstrates it can readily do through other means, including the same means it is now asking the CLECs to use, then there would be no need for

AT&T's proposed system of self-certifications, audits, back-billing and penalties and associated dispute resolution mechanisms.

Moreover, AT&T's latest proposal includes a minimum amp charge, even if the CLECs equipment draws less than 1 amp of power, or draws no power at all. This minimum amp charge also violates the Commission's Illinois 1998 Order, which required that AT&T bill collocated CLECs for the electric power they actually used.

The Joint CLECs request that the Commission reject AT&T's proposed tariffs. While CLECs agree that the current metering system that AT&T elected to deploy is not accurate and should be replaced, there are several other alternatives that AT&T could deploy without shifting to CLECs the expense and administrative burdens of measuring the power used. AT&T could use PMUs and shunts on the supply side of the power delivery arrangement, rather than the return side. AT&T, Staff and CLECs all agree that using the PMUs and shunt devices AT&T currently uses on the supply side of the power delivery arrangement would result in accurate power measurements, without the need to abandon the equipment already purchased by CLECs. Another option available to AT&T is to user Split Core Transducers, small devices that are mounted on the supply side of the power delivery arrangement and measure the power flowing through a particular power feed. Finally, AT&T could do what it is insisting that the CLEC's do and use hand-held measuring devices (amp meters) to periodically measure the electricity being used, and base its bills on these readings. The parties generally agree that today's digital telecommunications equipment deployed in virtually all CLECs' collocations uses DC power at a fairly constant rate and that periodic measurements, rather than continuous measurements, are adequate for billing purposes. So if AT&T were to take periodic measurements using hand-held amp meters and bill the CLECs based on those measurements, AT&T could comply with the

Commission's orders by simply eliminating the current rate elements for the installation of the PMUs, and converting the per-kilowatt-hour ("kWh") rate in its current tariff to a per-amp rate (a change which Joint CLECs would accept).

CLECs should not bear the costs and administrative burdens of measuring collocation power usage, particularly where AT&T retains virtually unlimited rights to do its own measurements, audit CLECs, and then assess penalties, as AT&T has proposed in its final proposal (RAS-14.) However, if the Commission permits AT&T to shift the burden in any way to CLECs, and only as a last resort, then the Commission should reject AT&T's proposal (Schedule RAS-14), and instead adopt Joint CLECs' proposed recommendations set forth in Section IV of this brief for a "self-certification" process.

The power measurement problem arose entirely as a result of AT&T's choice of a deficient engineering approach to measuring CLEC's collocation power usage. AT&T should not now be allowed to "solve" its leakage problem by shifting the costs and administrative burdens of measuring collocation power usage to the CLECs. Moreover – assuming the Commission does not simply direct AT&T to find a different way to measure collocation power usage (which the record clearly shows AT&T can do), but instead decides that a self-certification process should be adopted – the Joint CLECs' proposed certification procedures are necessary given the limited administrative resources of the CLECs. The Joint CLECs' proposals are also appropriate given the fact that the power usage of digital equipment used by carriers today is fairly constant under normal operating conditions. It would be unreasonable and a waste of resources for the Commission to require CLECs to conduct physical power measurements and report those measurements to AT&T on an annual basis when no equipment changes have occurred, in the collocation, which would change power consumption, The Joint CLECs'

proposal for self-certification are reasonable and balanced, yet at the same time provide appropriate incentives for accurate measurement of power consumption. If the Commission elects to impose any burden on CLECs to conduct measurements, then the Commission should reject AT&T's proposed terms contained in Schedule RAS-14, and adopt the Joints CLECs' proposal for self-certification described in Section IV of this brief.

ARGUMENT

I. The Commission Must Remain Committed to Existing Precedent Without The Need for Any Tariff Modifications

Charging CLECs for the amount of power they actually use in their respective collocation arrangements is the law in Illinois. Nothing has changed to justify any revision to the existing tariff or the Commission's original decision, even with AT&T's failure and malfeasance to correct a problem associated with self-imposed power metering known since 2002. AT&T wants this Commission to believe that the *only* way to solve a perceived leakage problem that it has hidden from its customers almost since AT&T instituted return side power metering, is by making wholesale modifications to its tariff. Because AT&T wants to entirely change the way power is measured and billed, it intends to abandon millions of dollars of metering equipment paid for by CLECs. There are financial and detrimental implications of AT&T's revised tariffs The tariff that AT&T is now proposing (unlike the tariffs it filed to initiate this proceeding) entirely shifts the burden of reporting usage to CLECs and does so in an inefficient manner that will add unnecessary collocation costs. Consequently, the new tariff proposal includes a complex scheme of self-verification by CLECs of power consumption, audits by AT&T of that same power consumption, penalties and dispute procedures when the meter readings do not match. Moreover, because the tariff AT&T proposed in the later stages of this case includes such

items as minimum consumption charges, it will result in CLECs paying for power they do not consume and AT&T receiving revenues above its costs. Sound reasoning and the record evidence supports a finding that AT&T has failed to support its proposal, even as modified through Joint CLECs' efforts.

Joint CLECs request that the Commission reject AT&T's tariff proposal in its entirety. If AT&T perceives a problem in the mechanical way in which it measures power consumed, AT&T should implement one of the alternative methods of measuring power (*i.e.,* using split core transducers, or Power Measuring Units on the supply side cabling) that have been explicated in the record.

A. The Parties Agree that the Commission Order Requires AT&T to Charge CLECs Based on Power Used, Not Power Ordered.

CLECs and AT&T agree on at least one premise that should underpin any decision reached on the merits of this case – the Commission's 1998 Order, which remains good law, requires that AT&T charge CLECs for collocation power based on the CLEC's power usage.[5] Specifically, the Commission approved the Staff's recommendation in that case, stating:

> Staff suggested that the power consumption charges should be based on usage and not per-circuit capacity of the equipment located in the cage. (Tr. 211) Staff

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[5] At the outset of this Brief, it is very important to ensure that CLECs are clear on the terminology used as to the difference in the amount of power *ordered*, *used (or consumed*), and *reported*. There are important differences in each term.

Power ordered refers to the amount of DC Power that a CLEC *orders* initially from AT&T to define the size of the DC Power Delivery arrangement (*i.e.,* 20, 40, 50, or 60 Amps). The amount of power ordered by the CLEC when it is applying for a collocation space and power then defines the size of the DC Power Delivery arrangement, including cable and fuse sizes. Joint CLEC Ex. 2.0 at 9-10.

Power used refers to the amount of DC Power that a CLEC actually uses or consumes through its equipment placed in its collocation space.

Power reported refers to the number of amps reported by the CLEC to AT&T in the event that the Commission requires CLECs to self-report its usage. The reported usage should reflect CLEC's actual usage at a given point in time (*i.e.*, as a snapshot). However, as discussed later in this brief, there is general agreement that if measured in amperes ("amps"), such a measurement will represent the CLEC's usage at that power delivery arrangement at any time under normal operating conditions, until it adds or removes equipment connected to the power delivery arrangement.

> proposed that Ameritech should be directed to recalculate those charges and either provide a cost on a per-unit basis, which is measured for power consumed or reduce the charge to a square foot basis, which closely mirrors its actual charges. … We conclude that Ameritech Illinois has failed to justify the level of its power consumption charges . . . We direct Ameritech Illinois to recalculate the charges along the lines suggested by Staff.[6]

While AT&T gives lip service to the requirement in the 1998 Illinois Order that collocation power is to be charged on a usage basis, its original tariff filing in this case contained language that would have allowed AT&T to charge CLECs based on the size of the fuses ordered for their power delivery arrangements, rather than the actual power consumed. AT&T now says it always intended to charge for power consumed, but the fact that AT&T's rebuttal testimony introduced the entire self-certification/audit/penalty scheme as a means to measure consumption (a scheme that would be unnecessary if charging based on the size of fuses ordered) illustrates how AT&T cannot keep its story straight. AT&T's admission that charges for power should be based on the amount of power used is likewise inconsistent with its position that it can impose a minimum per amp charge for each power delivery arrangement provisioned off of the battery distribution fuse bay ("BDFB") and/or main power board at the central office.[7] The importance of the 1998 Illinois Order, however, should not and cannot be ignored for purposes of determining whether AT&T's revised tariff proposal and proposed new methodology of charging CLECs for power should be adopted. AT&T has offered no justification for this Commission to move away from that decision, and, therefore, Joint CLECs request that the Commission use the 1998 Illinois Order as the underpin for this case.

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[6] Illinois Commerce Commission, Docket Nos. 96-0486 and 96-0569, *Investigation into Forward-Looking Cost Studies and Rates of Ameritech Illinois for Interconnection, Network Elements, Transport and Termination of Traffic*, Second Interim Order at 99 (Feb. 17, 1998)("Illinois 1998 Order").

[7] *See* Section III.C.1, *infra.*

B. AT&T Elected to Use Return Side Power Metering and Wholly Failed to Mitigate Any Problems Associated with Its Self-Implemented Form of Power Metering.

AT&T's attempt to shift to the CLECs the burden of how it identifies and then bills CLECs for collocation power should be seen for what it really is – a jury-rigged solution to the problems with a power metering system that AT&T, and AT&T alone, implemented; a power metering system that AT&T knew was defective as early as 2002, but failed to take *any* action to correct until it filed to abandon power metering completely in late 2005, while still collecting significant non-recurring charges from its customers for the power metering units it has now disclosed will not meter power usage accurately; and a problem that AT&T failed to advise the CLECs about for almost four years. The Commission is faced now with AT&T claiming that it has lost substantial amounts of collocation revenues, even though, AT&T did not take any action to mitigate those losses since 2002. And, instead of proposing a method to fix the actual problem, AT&T proposes to shift to the CLECs the burden and responsibility to measure the power actually consumed. The Commission cannot allow AT&T to shift away from the existing tariff in ways that only benefit AT&T; particularly given AT&T's admitted failure to take timely steps to mitigate the problems and its change in proposals in the middle of this proceeding.

After the Commission ordered AT&T to implement a method to bill based on "power consumed", AT&T retained a third-party vendor, Marconi, to assist in determining what type of power metering product could be implemented. AT&T admits that it made the ultimate decision to use the Return Side power metering architecture (also referred to as the shunt bar architecture).[8] The problem that AT&T learned about in 2002, and should have known about at

[8] McLeodUSA Ex. 105 (AT&T Response to Joint CLEC Data Request 2.9(c)). *Also see*, Jt. CLEC Ex. 2.0 at 24–25. The architecture chosen by AT&T required the insertion of a shunt into the return side cable from the collocation arrangement back to the AT&T BDFB. A Power Metering Unit ("PMU") is used to measure the voltages on each side of the shunt and to record the current and resulting power used within the circuit. *Id.*

the time that it was making the determinations on the proper architecture (because it was known in the industry), is that for most telecommunications equipment, return side shunts would not provide an accurate measurement of DC Power; instead, only if the shunts were placed on the supply side could accurate measurements be taken.[9]

AT&T admits that it became aware of a purported leakage problem with the return side power metering architecture in "early" 2002.[10] AT&T retained Telcordia Technologies, Inc. ("Telcordia") to study the power metering leakage issue and the results were published in August 2002.[11] Based on tests it conducted at just three AT&T central offices, Telcordia opined that the power metering architecture employed by AT&T did not accurately measure the collocation power consumed.[12] The Commission could reasonably expect that this purported leakage AT&T now relies upon to support its revised tariff proposal would have galvanized any reasonable utility management to take immediate corrective actions. But, not AT&T – it *took no action to correct the identified leakage problem*.[13] AT&T took no action to advise CLECs of the concern or to work with the CLECs to determine if there was a solution to the problem.[14] Apparently, AT&T met with Commission Staff in May and October 2002, but AT&T admits that CLECs

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[9] Even the 2002 Telcordia Report (commissioned by AT&T) summarized "Industry Practices and Standards" that related to grounding for telecommunications equipment and noted that it was common knowledge and practice that return side architecture would only work for certain equipment; not the type of equipment that CLECs employ in AT&T's central offices. Jt. CLEC Ex. 2.0 at 28-30. AT&T further acknowledged that it was aware of the different architectures and distinctions on the equipment configurations that directly impacted the type of power metering architecture that it chose to employ. *See* McLeodUSA Ex. 102 (AT&T Response to Kansas Staff Data Request 1.05). *Also see*, Jt. CLEC Ex. 2.0 at 31-32.

[10] AT&T Ex. 1.0 at 14.

[11] AT&T Ex. 3.0 at 12.

[12] *Id.* at Schedule MN-6 [Telcorida Study] at 15.

[13] Tr. 162-63. Further, AT&T's failure to act cannot have been because it failed initially to appreciate the scope of the problem. A March 28, 2002, internal AT&T e-mail states that **BEGIN PROPRIETARY**

END PROPRIETARY Another internal e-mail also dated March 28, 2002 **BEGIN PROPRIETARY**
END PROPRIETARY. McLeodUSA Ex. 106.

[14] Tr. 162-63.

were not invited to, or even informed of, these meetings to identify and to discuss the AT&T concerns.[15] Notably, AT&T admits that its failure to act involved its decision that there were other more pressing matters to address, including its efforts to obtain 271 relief and a large rate increase for UNE loops.[16] Thus, for at least four years AT&T has been installing, and CLECs have been paying for, metering equipment that AT&T knew it was likely to propose abandoning.

AT&T has not even attempted to show that it took any corrective actions since learning of the leakage concerns in 2002. The first time that AT&T took any action to address the leakage problem was when it filed its initial tariff proposal in September 2005, a proposal that completely and wholly abandoned the power metering rate structure and methodology.[17] Prior to filing the proposed tariff revisions, AT&T did not contact or work with CLECs on any proposed solutions. These actions, or more accurately inactions, can hardly lay support for AT&T's claimed "harm" of its inability to be compensated fully for power consumption.

However, while Joint CLECs dispute that they are being under-billed 30-50% for power consumed, Joint CLECs do agree that AT&T's return side power metering system does not result in accurate measurement of power used or consumed.[18] But that fact alone does not justify a complete abandonment of the existing tariff, the junking of installed equipment, the transfer of meter reading responsibility to CLECs along with the creation of an inefficient and onerous system of self-certification, audits, penalties and dispute resolution (as AT&T proposed in the later stages of this case), and authorization for AT&T to bill for power that is not consumed by

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15 *Id.*; Tr. 469; McLeodUSA Ex. 104 (attendance lists refer only to AT&T and Staff representatives).

16 Tr. 469-74; AT&T Ex. 1.1 at 3.

17 AT&T Ex. 5.0 at 11 (AT&T advised CLECs of tariff modifications via Accessible Letter dated September 15, 2005).

18 Jt. CLEC Ex. 2.0 at 26.

adding in minimum use charges. AT&T cannot now be allowed to implement a process that significantly increases CLECs' cost of collocation.

AT&T's assertions that it has been financially harmed by the inability to collect the full collocation power charges should not be given any weight by the Commission, for several reasons. First, AT&T was in complete and total control of implementing the power metering architecture.[19] The fact that it took two years to implement the return side metering system can hardly be considered anyone else's fault and certainly AT&T could have, but did not, seek regulatory relief.[20] Second, AT&T was in complete and total control of mitigating and fixing the leakage problem; even to date, it has not shown that it took any corrective action.[21] Third, AT&T has not demonstrated the extent of the financial "losses" with credible evidence. All AT&T has identified is that the return side metering produced inaccurate readings at a handful of central offices.[22] Further, the extent of the error varied significantly from collocation to collocation arrangement, and AT&T's quantification was not based on any statistically valid analysis, but rather what appeared to be a review of arrangements that were "accessible"[23]

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[19] In addition to admitting that it made the decision to implement the return side metering architecture, AT&T further admits that it tested the accuracy readings at the return shunts and at the PMUs prior to implementing return shunt power metering. McLeodUSA Ex. 105 (AT&T Response to Joint CLEC Data Request 2.6).

[20] It is not clear, for example, why AT&T did not simply begin using hand held meters in the interim while determining how to implement a measured power architecture. AT&T admits it did not identify any other option prior to installation to the current power metering architecture, but fails to state why it did not consider other options. McLeodUSA Ex. 102 (AT&T Response to Staff Data Request KS 1.04). Furthermore, AT&T states that no other vendor bid on the power metering architecture, other than Marconi, and, therefore, apparently, AT&T was satisfied with the lengthy development by its sole vendor. McLeodUSA Ex. 102 (AT&T Response to Staff Data Request KS 1.03).

[21] AT&T refused to answer Joint CLECs' Data Request that sought information to determine if AT&T took any legal action against Marconi, other than it has no "pending" actions against Marconi. McLeodUSA Ex. 105 (AT&T Response to Joint CLEC Data Request 2.7 (Revised)). At least then, the parties and the Commission might know if AT&T did anything at all to mitigate the problems in power measurement. Certainly, to the extent that AT&T reached any financial settlement with Marconi, at least that would have mitigated some, if not all, of AT&T's claimed losses.

[22] *See* Section II.D , *infra*.

[23] *Id.*; *also see* Tr. 409, 420.

Importantly, AT&T has never demonstrated that the CLECs as a group have been under-billed by the AT&T stated 38 percent. Fourth, the fact that AT&T may have under-billed for DC power for several years is not the unmitigated blessing for CLECs that AT&T makes it out to be. CLECs have set budgets, made investments in additional or made decisions to retain existing collocations, and priced their services based on their costs of provisioning services, including DC power costs, which they now have been told are inaccurate and CLECs now face large bill increases (on average 38% for DC power if AT&T is to be believed).[24]

Finally, notwithstanding AT&T's admitted knowledge of the power metering leakage problem, AT&T continued to use the methodology and bill CLECs non-recurring charges for the new installations of the PMUs and related equipment. CLECs have invested a tremendous amount of money into the metering arrangement that AT&T now wants to abandon. For each collocation arrangement, the collocator has paid a non-recurring charge of $2,911.85 per arrangement for the PMU under AT&T's existing tariff.[25] In addition, the CLEC paid a Power Measurement Charge of $272.47 for existing non-measured arrangements. AT&T refused to quantify the aggregate amount of the two non-recurring charges collected from December 2000 to date from CLECs.[26] Joint CLECs at least, however, provided some perspective on the financial gain for AT&T through collection of the two NRCs associated with the PMUs. Mr. Turner calculated that four CLECs (Covad, XO, McLeodUSA and MPower) alone invested approximately $1,518,755 in establishing the metering arrangements in Illinois that AT&T now wants to abandon with no recompense to CLECs.[27] Even this amount does not represent most of

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[24] Tr. 105-06.

[25] Jt. CLEC Ex. 2.0 at 39. AT&T witness Parker stated that the $2,911.85 "recovers costs for purchase and installation of Power Metering Units." AT&T Ex. 1.0 at 13.

[26] *Id.* at 40. *Also see* McLeodUSA Ex. 105 (AT&T Response to Joint CLEC Data Request 2.8).

[27] Jt. CLEC Ex. 2 at 41-43.

the CLECs' collocation PMU investments since these four collocators represented only about 42% of the total number of collocation arrangements in Illinois.[28]

While it is apparent that the leakage problem must be fixed (and it was certainly apparent to the Joint CLECs when they first learned of the problem in late 2005), the appropriate solution is to have AT&T take corrective measures, as it should have done beginning in 2002 when it learned of the problem. AT&T should not be allowed to use its self-created problem as an excuse to shift costs and administrative burdens to CLECs, while at the same time raising AT&T's revenues. AT&T has only made the leakage problem worse by failing to act, and any losses suffered by AT&T can only be blamed on AT&T, not the CLECs. Joint CLECs urge the Commission, when determining the appropriate outcome of this case, to keep in mind AT&T's failure to act.

II. There Are Alternatives to Return Side Power Metering That AT&T Can Implement to Measure Actual Usage, Based on the Current Tariff.

It is clear that the Commission requires AT&T to implement some method to measure the power actually used by CLECs in their collocation arrangements, and to bill based on the actual power used. The Commission's 1998 Order did not instruct or require AT&T to use any particular method of measuring usage, and AT&T's current tariffs do not specifically require that AT&T use PMUs on the return side cable to measure the actual usage. AT&T claims that return side shunts are not sufficiently accurate to measure usage. However, that does not mean that the Commission should modify its prior orders to shift the burden of measuring and billing for power usage to the CLECs, as AT&T has done in its revised proposals, or even to abandon the use of PMUs as the mechanical device with which to take measurements.

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[28] As Mr. Turner explained, at the end of 2004, AT&T had 1,177 collocations. Covad, XO, and MPower had 347 collocations out of the total. Jt. CLEC Ex. 2.0 at 43. In addition, McLeodUSA has 143 collocations. McLeodUSA Ex. 1.0 at 3.

While AT&T's current tariff contains significant nonrecurring charges for Power Measurement for each customer arrangement and a separate Power Measurement Engineering charge, there is no provision in AT&T's tariffs that requires AT&T to use PMUs affixed to the return side shunts. Indeed, there are other methods that can be employed by AT&T to measure and bill CLECs for power actually used, and to implement the Commission's directive in the Illinois 1998 Order. First, AT&T could measure the actual power used by CLECs by installing the PMUs on the supply side of the cabling, rather than on the return side. In the alternative, AT&T could use Split Core Transducers to measure the power used, and bill based on these readings. Finally, AT&T could use, as it proposes that the CLECs do, hand-held measuring devices, taking periodic readings and billing based on those readings. The testimony is unrebutted that any of these alternative methods can be implemented by AT&T to measure actual power used. The Commission need not prescribe the technology that AT&T should use as a result of this proceeding. Instead, AT&T should simply implement a mechanical method that accurately measures power.

A. AT&T Can Implement Supply Side Metering.

One method of measuring the actual power used by CLECs is for AT&T to use shunts and PMUs as it does today, but to install these devices on the supply side of the power delivery cabling arrangement, rather than the return side. Using PMUs and shunts is not itself a defective form of measuring actual electricity usage. What was defective was AT&T's choice to install PMUs on the return side of the power delivery arrangement.[29] These same PMUs and shunts can and should be deployed by AT&T on the supply side of the power delivery arrangement. This

[29] Jt. CLEC Ex. 2.0 at 46.

approach would accurately measure electricity actually used by CLECs,[30] a fact that AT&T concedes.[31]

Supply side metering simply refers to a configuration in which the power measurement is taken on the supply side cable, *i.e.*, between the BDFB and the CLEC's equipment, so that power is measured before the power reaches the CLEC's telecommunications equipment. Taking the measurement at this location would eliminate leakage because the leakage takes place at the telecommunications equipment frame.[32] If AT&T wants to correct the problem caused by its selection of return-side metering, it could do so without any intervention by the Commission, and without any modification of the existing tariff. AT&T could install PMUs and shunts on the supply side cabling.[33] Staff acknowledged that the "currently utilized shunt system could be installed and utilized on the supply side."[34]

While AT&T has raised some concerns about the use of PMUs on the supply side of collocation cabling, AT&T never contended that this configuration would be impossible to install or maintain, and did not prove that supply side measurement would be inefficient or cost-prohibitive. AT&T claimed that there are space limitations in the cable racking, and supply side PMUs would "creat[e] congestion in some cases."[35] However, Joint CLEC witness Steve Turner showed that AT&T's concerns were exaggerated. He testified that the PMUs are 1) already in use; 2) are small and do not take up significant room; and 3) are connected to the existing wiring

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30 *Id.*

31 AT&T Ex. 3.0 at 13; AT&T Ex. 3.1 at 12.

32 AT&T Ex. 3.0 at 14.

33 AT&T Ex. 3.1 at12; Jt. CLEC Ex. 1.0 at 44..

34 Staff Ex. 1.0 at at 11.

35 AT&T Ex. 3.1 at 10.

with very thin wire.[36] The best AT&T could assert in response is that congestion is but one of the many drawbacks to supply-side metering.[37] Vague contentions that supply side metering would "creat[e] congestion in some cases" is an insufficient basis for the Commission to completely modify AT&T's existing tariff, and to allow AT&T to adopt some alternative method of measurement.

AT&T also indicated that there were other "drawbacks" to the use of Supply Side shunts, namely that power metering itself imposes increased risks to network reliability when the PMUs are installed, whether those power meters are installed on the supply side or the return side.[38] AT&T witness Mr. Nevels claimed that "power metering, by its nature, requires that powered DC circuits be broken in order to install the shunt to measure the DC consumption of the CLEC."[39] According to AT&T, this causes an increase likelihood of "shorting DC power circuits due to vendor activity" and "would increase the risk of network reliability by exposing workers in the racking environment to even more places where a DC circuit can be shorted", which could harm technicians.[40]

However, AT&T has already evaluated shunts and determined that placing them in the DC Power Delivery circuit was sufficiently safe, efficient, and reliable as a means to comply with the Commission's prior orders. All of the concerns raised by AT&T regarding safety[41] are

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36 Jt. CLEC Ex. 2.0 at 46.

37 AT&T Ex. 3.0 at 10.

38 *Id.*, at 14.

39 *Id.*

40 *Id.*

41 For example, Mr. Nevels claims that shunts are dangerous because a worker could accidentally touch a shunt, and become disoriented. AT&T Ex. 3.0 at 15.

present with the system that AT&T elected to use in the first place.[42] Moreover, there are power shunts that are available with casings that completely cover them so that inadvertent contact by telecommunications personnel or their tools can be avoided, thus avoiding the accidental electrical short and safety issues that AT&T is now concerned about.[43] These casings are also available with simple key locks that can prevent unauthorized or untrained personnel from gaining access to the shunts.[44]

It would not be surprising that AT&T was not aware of these common-sense solutions to its safety concerns, because AT&T apparently chose not to use shunts with these safety covers on its existing installations.[45]

As discussed above, four of the CLECs in this case alone[46] have paid AT&T in excess of $1,500,000 for the PMUs, supply side shunts, wiring and engineering for power measurement to implement the Commission's prior orders.[47] It would be ludicrous, inefficient, and poor policy for the Commission to allow AT&T to abandon this investment simply because AT&T erroneously chose to put the measuring devices in the wrong place. The Commission should make no modification to AT&T's tariff, and should order that if AT&T wants to abandon its use of return side PMUs, it may at its own cost reuse the PMUs for supply side metering.

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42 As noted in Section I.A. above, there has been a transition in AT&T's position in this case. When AT&T filed its direct testimony, it was attempting to convince the Commission that the Commission should abandon any method of measuring collocation power usage, and instead bill based on fused or ordered amps. AT&T's exaggerated statements regarding its concerns over having personnel measure power should be taken into context that AT&T now advocates in its current proposal to actually have personnel periodically measure the power delivery with hand-held units.

43 Jt. CLEC Ex. 2.1 at 48-49.

44 *Id.*

4545 AT&T Ex. 4.0 at 9, Figure 6.

46 Covad, XO, McLeodUSA, and MPower.

47 Jt. CLEC Ex. 2.0 at 43..

B. AT&T Can Measure Usage Using Split Core Transducers.

Another alternative available to AT&T to fix its purportedly defective collocation power measurement system is to use Split Core Transducers to measure electricity usage. Split Core Transducers are doughnut-shaped devices that measure the power flowing through a particular power feed.[48] The current would be measured by transducers permanently mounted on the supply side of the power feed located close to each CLEC's collocation equipment. Tranducers would be attached to monitors in a different part of the central office. Monitors are capable of measuring and storing power usage on up to 32 sets of power feeds per card within the central office, with a capacity of 4 cards in some instances. After being loaded with the appropriate software, the monitors would be capable of automatically taking frequent power readings over the course of each day and recording them. After the necessary infrastructure is put in place, the data would then be accessed remotely by AT&T and used to calculate the monthly bills.

Split Core Transducers are products that are currently in use.[49] The transducers can be installed on the drop cable that goes to each CLEC collocation space, reducing any adverse effect relating to magnetic forces.[50] Moreover, Split Core Transducers do not require the opening of the power delivery configuration, because they wrap around the cable. Further, they pose no risk to personnel because there is no exposed power cabling with this form of current measurement.[51] Split core transducers even have an advantage over reinstalling PMUs on the supply side of the power delivery arrangement because, as Staff Witness Stewart testified, installing a transducer

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48 Jt. CLEC Ex. 2.0 at 50. .

49 Tr. 280.

50 *Id.* at 362.

51 Jt. CLEC Ex. 2.1 at 27.

would not require supply side leads to be cut or spliced, and would result in no service interruption.[52]

C. AT&T Can Measure Collocation Power Usage with Its Own Hand-Held Metering Units and Can Use Those Measurements to Bill CLECs for Collocation Power Usage.

Another alternative to return-side metering that AT&T can implement to bill CLECs for collocation power usage, within AT&T's existing Illinois tariff, is to measure the CLECs' collocation power usage using hand-held metering units. This is exactly the same method that AT&T now proposes that the CLECs undertake. If the Commission determines (notwithstanding the arguments presented by the CLECs in Section II.A and B above) that it will not require AT&T to simply fix the problems it claims exist with its present power metering system, then the Joint CLECs' secondary recommendation is that the Commission direct AT&T to use hand-held metering units to measure CLECs' collocation power usage and to use those measurements to bill the CLECs for collocation power.[53]

Under this alternative, AT&T would take power usage readings at the power delivery arrangements to each CLEC collocation space using hand-held amperage meters ("amp meters"). There is general agreement among the parties in this case that commercially available amp meters can be used with relative ease and, when used in accordance with the manufacturer's instructions, provide usage readings of sufficient accuracy for billing purposes.[54] Based on the

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[52] Staff Ex. 1.0 at 11.

[53] Jt. CLEC Ex. 2.2 at 12.

[54] Mr. Turner testified that hand-held meters are quite accurate when used properly and provide sufficiently accurate measurements to establish the amount of power usage for billing purposes. Jt. CLEC Ex. 2.1 at 10-11. Staff witness Kathy Stewart testified that "taking readings with a hand-held amp meter provides an accurate reading." Staff Ex. 1.0 at 12. AT&T witness Marvin Nevels agreed with Ms. Stewart that "if properly used they [hand held meters] can accurately measure the power being used at that very moment." AT&T Ex. 3.1 at. 20.) Mr. Nevels also testified that due to certain disadvantages, "any metering proposal based on hand held meters is not practical." AT&T Ex. 3.1 at.20. However, since AT&T is now proposing that the CLECs be required to take power usage readings using hand-held meters (Tr. 335-36) and that AT&T audit the self-certifications using its own hand

engineering formula linking voltage, amperage and kilowatts, the fact that 1 amp at constant use represents 456.40 kilowatt-hours ("kWh") per year[55], and the fact that the modern digital telecommunications equipment deployed in virtually all CLECs' collocations uses DC power at a fairly constant rate 24 hours per day, seven days per week[56], AT&T would then convert the amperage readings (which would be point-in-time measurements) for each power delivery arrangement to kWh usage for the month (or other applicable billing interval). AT&T would then bill the CLEC for its collocation power usage on a per-kWh basis. Alternatively, AT&T could use the readings it takes with hand-held amp meters to bill the CLEC for its collocation power usage on a per-amp basis, using the monthly rate of $9.80 per amp presented by AT&T in this case that was developed by conversion from the existing per-kWh rate. Joint CLECs would be willing to accept the switch from basing collocation power charges on a per-kWh used basis to a per-amp used basis, at AT&T's proposed rate of $9.80 per amp per month.[57]

Under this alternative, AT&T would remain responsible for taking the periodic power usage readings at the CLECs' collocation sites; there would be no "self-certification" process

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held meters (McLeodUSA Ex. 107 (AT&T Response to QCC Data Request 3.13), either Mr. Nevels has changed his mind or his employer has chosen to ignore his opinion.

[55] Power (kilowatts) equals current (amperage) times voltage. *See* Jt. CLEC Ex. 2.0 at 13, n.12, 26 n. 29, and 72; *see also* AT&T Ex. 2.0 at 5-6; Staff Ex. 2.0 at 3; and McLeod USA Ex. 102 (AT&T response to Staff Data Request KS 1.06).

[56] Jt. CLEC Ex. 2.1 at 29-30; AT&T Ex. 3.1 at 27-28; AT&T Ex. 5.1 at 36.

[57] Jt. CLEC Ex. 2.2 at 12. To bill CLECs for collocation power usage on a per-amp basis would require tariff revisions to eliminate the nonrecurring charges related to the purchase and installation of the Power Measuring Units, to specify that the billing will be on a per-amp basis and to specify the per-amp rate. Based on (i) the fact that modern digital telecommunications equipment draws power at a fairly constant rate regardless of the traffic load on the equipment and (ii) the development of the $9.80 per amp rate as presented by AT&T in this case, Joint CLECs would not object to switching from billing on a per-kWh basis to billing on a per-amp basis. Joint CLECs (as well as Staff) agree that the $9.80 per amp rate developed by AT&T is accurately calculated based in the information used to develop the existing 28 cents per KWH rate approved by the Commission in Docket 98-0396. Jt. CLEC Ex. 2.1 at 3; Staff Ex. 2.0 at 3.

and no audit or penalty procedures.[58] From the Joint CLECs' perspective, this outcome would be consistent with the status quo, except that it should produce more accurate power usage measurements and billings than, apparently, are produced by the existing power metering arrangements that AT&T developed and implemented. The alternative of AT&T using hand-held amp-meters would be consistent with the status quo also because AT&T would continue to be responsible for obtaining the power usage readings and billing the CLECs – just as AT&T is doing today. The only difference would be that AT&T would be obtaining the power usage measurements using hand-held metering devices rather than the existing return-side metering infrastructure. This difference would be transparent (and acceptable) to Joint CLECs. The only perceptible difference from the CLECs' perspective would be the switch from billing for collocation power usage on a per-kWh basis to billing on a per-amp basis (assuming the Commission adopts that alternative). As noted above, Joint CLECs would find a switch from billing on a per-kWh basis to billing on a per-amp basis acceptable, although not necessary, assuming that AT&T continues to be responsible for obtaining the power usage measurements, and assuming that the non-recurring charges for the purchase and installation of the PMUs would be eliminated.

Under this alternative, AT&T would no longer be using the existing return-side metering infrastructure, for which the CLECs have paid substantial non-recurring charges to AT&T, but rather would be using hand-held amp-meters.[59] Joint CLECs could find this outcome acceptable because they paid AT&T (through significant non-recurring charges) for a functioning power

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[58] Because the CLECs' equipment uses power at a constant level under normal operating conditions, AT&T need not measure power consumption each month, although AT&T could, if it so desires, take periodic measures as often as it likes. In fact, once power consumption at a power arrangement is determined, AT&T need not measure consumption again until the CLEC adds or removes equipment from that collocation arrangement. CLECs would agree to a requirement that they notify AT&T of such changes in equipment.

[59] The disposition of the significant non-recurring charges that CLECs have paid to AT&T for the existing return-side power metering equipment and system is discussed in Section II.E below.

measurement system that would enable AT&T to obtain accurate measurements of each CLEC's collocation power usage and to bill the CLEC for that usage.[60] Under the alternative of allowing AT&T to use hand-held amp-meters to obtain the power usage measurements, Joint CLECs would still be receiving a functioning power measurement system that would enable AT&T to obtain accurate measurements of each CLEC's collocation power usage and to bill the CLEC for that usage. The only difference would be that AT&T would be using a different form of measuring device, but as stated above, this difference would be transparent to the CLECs.

This outcome, therefore, would be eminently fair and reasonable for all parties – AT&T would continue to be responsible for obtaining collocation power usage measurements, as it is today and as the Commission originally directed; CLECs would be receiving what they have paid AT&T for through significant non-recurring charges – a functioning power measurement system that enables AT&T to obtain accurate measurements for billing purposes; CLECs would be charged only for collocation power actually used, as the Commission originally ordered; and both AT&T and CLECs would benefit from the accurate measurements and billings that use of hand-held amp-meters would provide. AT&T would achieve the objective it sought to achieve when it filed its proposed tariffs, namely, to eliminate the use of its return-side power metering system. Moreover, AT&T would be compensated for the provision of collocation power to the CLECs, and CLECs would pay for their actual collocation power usage, at the rate approved by the Commission in Docket 98-0396 (converted to a per-amp basis if the Commission approves that option).

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[60] Jt. CLEC Ex. 2.2 at 14.

D. As a Last Resort, and with Additional Collocation-Specific Verification, AT&T Can Adjust Return-Side Meter Readings for Individual CLEC Collocations by a Factor to Account for Leakage

One other option that was noted in the record of this proceeding for addressing the inaccuracies in billing that AT&T claims result from its return-side power metering system, is for AT&T to adjust the recorded kWh usage for a CLEC's collocation by a factor intended to compensate for the "leakage" that is not measured by AT&T's return-side power metering equipment. Although this was not one of the solutions recommended by Joint CLEC witness Steve Turner, it was discussed by at least one other party[61], and the Administrative Law Judge indicated interest in having the parties comment on this option.

Joint CLECs agree that they should be accurately billed for their collocation power usage (even if this means that a CLEC may be billed for higher amounts of usage at a collocation in the future than has occurred in the past). While (as discussed in Section I.B above), Joint CLECs acknowledge that AT&T's existing power metering arrangements do not produce accurate usage readings, Joint CLECs do not agree with AT&T's assertions as to the extent of the inaccuracy, or that the extent of the inaccuracy is essentially the same for every wire center, or the same for every CLEC collocation site. Joint CLECs would oppose a scenario whereby existing collocation sites that are accurately measuring power usage would see an increase in the billed amounts simply because other carriers' collocation sites are not accurately measuring power.

Joint CLECs' position is that the option of adjusting usage as recorded on the return-side PMUs by a factor to account for "leakage" should be considered only as a last resort, and should only be implemented after additional, carrier and collocation-specific verification by AT&T. This option is definitely less preferable than the other alternatives that Joint CLECs discuss in

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[61] QCC Ex. 1.0 at. 7-8.

this Brief, including (in the order recommended by Joint CLECs) (1) simply requiring AT&T to fix its apparently defective power-metering system, whether by implementing supply-side metering, using split-core transducers, or another means that AT&T could develop (see Section II.A and B above), (2) allowing AT&T to take collocation power measurements using hand-held amp meters (Section II.C above), or (3) through the self-certification process proffered by Joint CLECs (see Section IV below). Joint CLECs see no reason that at least one of these three approaches cannot be adopted in this proceeding. However, if for some reason the Commission concludes that none of these three approaches is feasible or practical, then the approach of adjusting power usage as measured by the return-side PMUs by a factor to account for "leakage" could be considered as a fourth-best solution.

Joint CLECs emphasize that *if* this approach were adopted, the adjustment factor *should not* be the 36% - 38% "average" leakage that AT&T contends results from its existing return-side metering arrangements.[62] First, AT&T has not established that the under-measurement at all CLEC collocations in Illinois averages, or is as high as, 38%. In fact, AT&T has not demonstrated that power usage is under-measured at all CLEC collocations at AT&T wire centers in Illinois. While the limited testing that AT&T and its consultant conducted at a handful of collocations at a handful of AT&T's scores of wire centers in Illinois may be sufficient to establish that a problem exists with the accuracy of usage readings obtained from the existing return side metering arrangement, AT&T's limited testing in no way establishes the extent of the under-measurement to a degree of accuracy sufficient to be used for revenue billing purposes.

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[62] AT&T Ex. 1.0 at 7; AT&T Ex. 4.0 at 12. Elsewhere, AT&T witnesses contended that the present power metering system failed to measure between 30% and 50% of the power used by the collocators. AT&T Ex. 1.0 at 4-5; AT&T Ex. 5.0 at 6.) While Joint CLECs believe that the magnitude of these amounts is exaggerated, the fact that AT&T believes there is such a wide range of inaccuracy in the existing power metering arrangements helps to demonstrate that no single "adjustment factor" could be appropriate for all CLEC collocations.

AT&T's initial attempt to determine if the return-side PMUs were under-recording collocation power usage, and if so to determine the extent of the under-reporting, was to commission a study by Telcordia. Telcordia's report was issued in November 2002 and was based on measurements taken by Telcordia at four AT&T wire centers in Chicago.[63] Telcordia concluded with respect to power metering:

> **BEGN PROPRIETARY** In view of current sharing between the DC return and CBN for DC-C equipment, accurate measurements of power delivered to the equipment cannot be obtained by measuring the current on the return side. *In the majority of cases*, this approach is *likely* to underestimate the delivered power. *It is not possible to provide an estimate of the error on a theoretical basis*. **END PROPRIETARY** [64]

Telcordia took measurements of the amount of "leakage" ("frame current") at collocations at three AT&T central offices in Chicago. At the first central office, Telcordia measured frame current for 13 collocations; the frame current measured at individual collocations ranged from **BEGIN PROPRIETARY** **END PROPRIETARY** For eight of the 13 collocations, the measured frame current was **BEGIN PROPRIETARY** **END PROPRIETARY**.

At the second central office, Telcordia measured frame current for 21 collocations; the frame current measured at individual collocations ranged from **BEGIN PROPRIETARY** **END PROPRIETARY** For seven of the 21 collocations, the measured frame current was **BEGIN PROPRIETARY** **END PROPRIETARY**. At the second central office, the highest frame current was measured at the collocation of **BEGIN PROPRIETARY** **END PROPRIETARY**[65] For seven of the 21

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63 AT&T Ex. 3.0, Sch. MN-6.

64 *Id.* at Sch. MN-6, p. 15 [emphasis supplied].

65 The frame current measurements at any collocations of this carrier should be removed in the calculation of any "average" leakage attributable to CLEC collocations for purposes of this proceeding.

collocations, the measured frame current was **BEGIN PROPRIETARY** **END PROPRIETARY**.

At the third office, Telcordia measured frame current for 22 collocations with equipment; the frame current measured at individual collocations ranged from **BEGIN PROPRIETARY** **END PROPRIETARY** For nine of the 22 collocations, the measured frame current was **BEGIN PROPRIETARY** **END PROPRIETARY**. (AT&T Sched. MN-6, pp. 17-18.)

Based on these and other analyses, Telcordia concluded:

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However, **BEGIN PROPRIETARY**

END PROPRIETARY[68] The Commission cannot and should not rely upon any of the measurements from the Telcordia report to establish any average amount of leakage, or to identify any billing adjustment factor.

Three years after the Telcordia report, in 2005, AT&T commissioned one of its Power Engineers, Ms. Muellner, to take additional measurements of leakage from collocations at four

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66 AT&T Ex. 3.0, Sch. MN-6 at 24.

67 Jt. CLEC Ex. 2.0 at 28, fn. 31, citing AT&T Ex. 3.0, Sch. MN-6 at 6.

68 *Id.*

central offices, two of which had previously been tested by Telcordia.[69] She took measurements at a total of 12 CLEC collocations at the four central offices.[70] According to her testimony, she found that the percent of current not measured by the return-side shunt bars at these 12 collocations ranged from 0% to 90%, with numerous values in between these extremes.[71] Ms. Muellner measured the "current unbalance" (difference between the battery current and the current measured at the return-side shunt bars) for a total of 24 loads at these 12 collocations (*i.e.*, the A and B feeds to each collocation). For eight of the 24 loads, the current imbalance was 2.5% or less, and for three of these loads the current imbalance was negative (meaning the return-side shunts measured *more* current than the battery current).[72]

In addition, Ms. Muellner attempted to replicate Telcordia's measurements at one of the central offices where it had conducted testing. However, she acknowledged on cross-examination that **BEGIN PROPRIETARY**

END PROPRIETARY[73] She did find a similar wide range of frame current measurements from CLEC collocation to CLEC collocation, ranging from 0 amps to 50.5 amps. For nine of the 16 collocations at this central office for which she took measurements, the frame current was 1.2

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[69] AT&T Ex. 4.0 at 4. AT&T witness Larry Parker testified that he was unaware as to whether AT&T had conducted similar tests on any other central offices between 2002 and 2005. Tr. 476-77. AT&T provided no evidence of any such testing or measurements for leakage at any central offices other than the total of six at which measurements were taken by Telcordia and/or Ms. Muellner.

[70] AT&T Ex. 4.0 at 4. Ms. Muellner testified that she selected the collocations that she tested **BEGIN PROPRIETARY**

END PROPRIETARY. Tr. 407-09. Thus, it was hardly a statistically valid sample. Further, the collocations that Ms. Muellner measured, shown on Schedule JM-3, represent something less than 10% of all AT&T collocation sites. McLeodUSA Ex, 107 (AT&T response to QCC Data Request 2.20).

[71] AT&T Ex. 4.0 at 12-14 and Sch. JM-3.

[72] AT&T Ex. 4.0, Sch. JM-3.

[73] Tr. 404.

amps or less.[74] In responding to discovery, AT&T was clear that the amount of leakage should be expected to vary from collocation to collocation and from central office to central office:

> Schedules JM-2 and JM-3 show varying rates of leakage due to different types and quantities of telephone equipment bays and the different ground paths present in a central office. Different types of telephone equipment bays produce varying amounts of frame ground currents. The frame ground current reading can vary due to the size, length and quantities of the associated central office ground cables and incidental ground connections to building steel and threaded support rods.[75]

Two points emerge from the sum total of the evidence presented by AT&T, as summarized above, on the extent of the power that is not measured by AT&T's existing return-side metering arrangements due to "leakage". First, AT&T has not proven with credible evidence that the "leakage" averages 38%, or what the extent of the leakage is, at the hundreds of other CLEC collocations at AT&T's scores of other central offices in Illinois. All AT&T has shown, at best, is that there is leakage and/or current unbalance at the specific collocations at the six central offices at which measurements were performed. The "closest" that AT&T came to proving the extent of the leakage, if any, at any other CLEC collocations was this brief testimony by Ms. Muellner:

> Q. Do you have any reason to believe that the results would be any different at collocation arrangements in other SBC Illinois central offices?
>
> A. No. As I discussed above, there is no reason why the results found at the four central offices would differ at other SBC Illinois central offices. All of the SBC Illinois central offices utilize the same architecture for measuring CLEC power usage, i.e., the same return shunt bars and the same power metering units.[76]

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74 AT&T Ex. 4.0, Sch. JM-2.

75 McLeodUSA Ex. 107 (AT&T response to QCC Data Request 2.28).

76 AT&T Ex. 4.0 at 13.

Thus, even on *direct examination,* Ms. Muellner could not make an affirmative assertion that the leakage *is* or *would be* the same at all other CLEC collocations at all other AT&T central offices; rather, she could only testify that she could not think of any reason why the results would be different at other CLEC collocations in other central offices. Moreover, her testimony is contradicted by AT&T's response to QCC Data Request 2.28, quoted above. Neither Ms. Muellner nor any other AT&T witness presented any statistical analysis, based on the results of the measurements that were taken at the six central offices, to support the hypothesis that "leakage" is 38% at all CLEC collocations or even that "leakage" averages 38% at all AT&T central offices.[77]

Second, even if one accepts the measurement results at the collocations at the six central offices tested by Telcordia and Ms. Muellner to be representative of the results that would be obtained at all other CLEC collocations at all AT&T other central offices, the measurements obtained by Telcordia and Ms. Muellner demonstrate that application of a single "average" adjustment factor for all CLEC collocations to the power measurements obtained by the PMUs for those collocations would be highly inappropriate and inequitable. While AT&T's testing yielded an "average" of 36% - 38%, the frame current measurements at individual collocations varied widely from this "average." For some collocation arrangements, the indicated adjustment factor would be zero or close to zero. In fact, for some collocations the indicated adjustment factor would be *negative* (*i.e.*, the adjustment factor should *reduce* the power usage measured by the return-side PMU for those collocations).[78]

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[77] Should AT&T respond to this point by asserting that the CLECs failed to present evidence to contradict Ms. Muellner, the Commission should keep in mind that AT&T is the only party in this case that has the necessary access to all its central offices to attempt to determine the "leakage" at other collocations.

[78] For the reasons discussed in this section, AT&T's estimates of the revenue losses it has experienced and claims to be experiencing due to the under-measurement of collocation power usage are completely unfounded. *See* AT&T Ill. Ex. 1.0, pp. 5, 17; AT&T Ill. Ex. 5.1, pp. 23-24. These estimates are based on an assumption of 36%

In summary, should the Commission decide that AT&T should be required (or allowed) to address the problems with its return-side power metering arrangements by applying an adjustment factor to the power usage recorded by its return side PMUs (which as discussed above, is at most the fourth best approach presented in this case), AT&T should not be allowed to apply a system-wide average adjustment factor to all CLEC collocations. Rather, AT&T should be required to take measurements and determine a leakage factor for *each* CLEC collocation, and then apply the resulting collocation-specific adjustment factor to the recorded power usage at each CLEC collocation. This approach (assuming the "factor adjustment" remedy is considered at all) would be consistent with the requirement of the Illinois 1998 Order that each CELC be charged for the collocation power it actually uses. In contrast, application of a single, "average" adjustment factor would not be inconsistent with the Illinois 1998 Order because it would result in some CLECs being charged for more power than they actually use and others being charged for less than they actually use.

E. If the Commission Allows AT&T to Move to a New Method of Measuring Collocation Power Usage, the Disposition of the Significant Amounts of Nonrecurring Charges that CLECs Have Paid for the Existing System Must Be Taken Into Account

The record in this proceeding shows that CLECs have paid substantial amounts in non-recurring charges to AT&T for the existing return-side power metering arrangements. If the Commission directs or allows AT&T to move to a new method of measuring collocation power (such as the use of hand-held measuring units), the substantial amount of non-recurring charges the CLECs have already paid, and the disposition of those amounts, must be taken into consideration.

"leakage" at each and every CLEC collocation in AT&T's Illinois central offices, over a multi-year period, which is an assumption that has simply not been substantiated in this record.

As discussed above, under AT&T's existing collocation tariff, CLECs have been charged a non-recurring Power Measurement Charge of $2,911.85 for each collocation to which a CLEC ordered power, to recover costs for purchase and installation of PMUs; and a $272.47 non-recurring Power Measurement Engineering Charge for existing non-measured arrangements (*i.e.*, for each power delivery arrangement installed to a collocation), to recover costs for installing shunts and associated wiring.[79] AT&T refused, in response to a data request, to provide the total amount of non-recurring charges it has collected under these two provisions since December 2000.[80] However, just the four Joint CLECs in this proceeding[81] have paid approximately $1,518,755 in non-recurring charges to AT&T for the existing power metering arrangements.[82] Yet, the representative CLECs for which information was available represented only about 42% of all CLEC collocation arrangements. Thus, based on the available information, it is clear that CLECs in the aggregate have paid AT&T several million dollars in non-recurring charges to establish the power metering system that AT&T now seeks to abandon.[83]

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79 Joint CLEC Ex. 2.0, pp. 39-40.

80 *Id.* at 40; McLeodUSA Exhibit 105 (AT&T Response to Joint CLEC Data Request 2.8). While AT&T refused to provide this information, which should be readily available from its billing records, AT&T indulged the record with speculative estimates of the collocation power revenues it has lost due to its defective power metering system.

81 Covad, McLeodUSA, Mpower and XO.

82 Jt. CLEC Ex 2.0 at 41-43.

83 To add insult to injury, although AT&T discovered in early 2002 that its return-side metering system may be defective (Tr. 106), and initiated secret meetings with Commission Staff as early as May 2002 to attempt to persuade Staff of the need to move to another approach (see McLeodUSA Ex. 104), AT&T did not inform any CLECs that the existing power metering arrangements may be defective until the time of this tariff filing in 2005 (Tr. 106-107); and during that period, AT&T continued to install return-side power metering arrangements for CLEC collocations and to collect the associated non-recurring charges from those CLECs. (Tr. 107-108.) The Commission should not minimize the significance of this conduct. That AT&T did so while postponing a filing with the Commission to address this matter while the Commission was addressing more important matters to AT&T, such as its Section 271 application and its request for a large UNE loop rate increase, further supports placing all the costs of resolving the power metering problem on AT&T and not shifting any of the costs or responsibilities to the CLECs.

Should the Commission adopt the Joint CLECs' principal recommendation and simply reject AT&T's proposed tariffs and require it to fix its power metering system via one of the available options (see Sections II.A and B above), there is no need to make any disposition of the non-recurring charges that CLECs have paid for the existing power-metering arrangements, particularly if the PMUs are reinstalled on the supply side of the power delivery arrangement.[84] CLECs paid these non-recurring charges to obtain a power metering system that accurately measured their collocation power usage, and so long as AT&T fixes or modifies the existing system so that it accurately measures the CLECs' collocation power usage, the non-recurring charges will have been appropriately paid to and retained by AT&T. However, any additional costs that AT&T incurs in implementing a solution should be borne by AT&T, not billed to the CLECs, who have already paid the Commission-approved charges for a viable power metering system.[85]

On the other hand, if the Commission allows AT&T to abandon its existing power metering arrangements, which CLECs have paid for, and move to a different method of measuring CLECs' collocation power usage – such as using hand-held amp meters (Joint CLECs' secondary recommendation) or a self-certification process (Joint CLECs' tertiary recommendation) – then a disposition of the substantial non-recurring charges that CLECs have paid for the existing arrangements must be part of this determination.

The simplest disposition of the accumulated non-recurring charges would be for AT&T to refund them to the CLECs that paid these charges. One way to implement such a refund would be as bill credits, over a reasonable amortization period, against the increased amount

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[84] If AT&T determines that it will install split core transducers, some refund amount may be appropriate, depending on the cost of the transducers.

[85] Further, AT&T should be required to reimburse a CLEC for any costs the CLEC is required to incur in connection with AT&T's implementation of modified power metering arrangements. (Jt. CLEC Ex. 2.0 at 43-44.

each CLEC pays AT&T for collocation power under the per-amp approach compared to what it paid under the per-KWH approach.[86] Joint CLECs recognize that this approach could raise some concerns insofar as the non-recurring charges were paid to AT&T under tariffs that were lawfully in effect at the time of the payments. However, AT&T knew as of 2002 that the return side PMUs that CLECs were purchasing and installing did not accurately measure power, and CLECs should have never paid for these return side PMUs in the first instance. In addition, as the record in this case (as summarized in Section I.B above) makes clear, the costs incurred by AT&T to implement the existing system, for which the non-recurring charges were intended to reimburse AT&T, were the result of engineering errors. A utility or carrier should not be allowed to charge its non-competitive services customers for costs that, when challenged on the record, have not been shown to be prudently incurred. Based on the record in this case, the Commission can conclude in its order that AT&T has failed to demonstrate that the costs of the return-side power meeting arrangements, for which it collected non-recurring charges from the CLECs, were prudently incurred.

Normally, the Commission is able to review and make a determination of the prudence of costs for non-competitive services before the utility or carrier is allowed to charge its customers to recover those costs. In this instance, however, because AT&T was allowed to impose up-front, non-recurring charges for the return-side power metering arrangements, and the deficiencies of those arrangements were not disclosed until after the non-recurring charges were approved, billed and collected, that review did not incur. The sequence of events that has transpired, however, should not entitle AT&T to retain monies it collected from the CLECs for a

[86] Jt. CLEC Ex. 2.0 at 74. As AT&T witness Mr. Smith acknowledged, a CLEC that has been budgeting for collocation power expense based on the bills it has been receiving from AT&T may have to significantly increase its budget for this cost if AT&T's proposal is adopted. Tr. 105-06.

power metering system that proved to be defective and that AT&T is seeking to abandon. Indeed, insofar as AT&T billed a CLEC nonrecurring charges for installing a metering system it knew to be faulty after AT&T learned of the problems in early 2002, AT&T was billing the CLEC for a service and equipment it knew to be defective and was not providing the functionality for which the charges were assessed.[87]

AT&T has argued that allowing it to keep the millions of dollars in non-recurring charges it has collected is in some way fair because (1) many of the PMUs that have been installed have failed after a short time in service and have been replaced by AT&T at no additional charge to the CLECs[88], and (2) AT&T has incurred millions of dollars in revenue losses due to the underbilling of collocation power usage.[89] These arguments should be rejected. As to the first point, the selection of the power metering approach and the specific PMUs was done entirely by AT&T, with no consultation with or input from CLECs, the Commission, or its Staff.[90] Further, AT&T elected to recover the costs of the power metering arrangements through one-time, up front, non-recurring charges, rather than through recurring charges which AT&T could seek Commission approval to adjust from time to time if it incurred new or additional costs.[91] In any event, to date AT&T has not sought Commission approval to charge CLECs for the PMU replacement costs it claims to have incurred.

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87 As discussed herein, it is clear from the record that AT&T intentionally continued to charge CLECs for installing a metering system it knew was flawed in order to manipulate when the issue would be litigated before the Commission so as not to interfere with AT&T's more pressing (to it) regulatory agenda. One can only imagine the broad consumer outcry if AT&T had taken a similar tact with respect to a retail service – offering a service to consumers and charging them a substantial up-front fee to install a service AT&T knew did not work properly at the time of installation. For AT&T to claim it is the victim in this matter given its behavior is absurd.

88 AT&T Ex. 5.1 at 25.

89 *Id.* at 23-24.

90 Joint CLEC Ex. 2.0 at 24-26, 33-34.

91 Additionally, AT&T has given no indications that it may be pursuing legal actions against the company or companies that furnished the PMUs. *See* McLeodUSA Ex. 105 (AT&T revised response to Joint CLEC Data Request 2.7.

As to the second point, as discussed in Section II.D above, AT&T's estimates of its revenue losses are speculative and unsubstantiated because they are based on the assumption that the average power "leakage" that AT&T measured at a handful of collocation sites has occurred at all CLEC collocations in AT&T central offices. Moreover, AT&T's revenue losses are largely a self-inflicted wound because (as discussed earlier in this section and in Section I.B above) AT&T waited almost four years after discovering the problems with its power metering arrangements to seek Commission approval for a different approach (a process AT&T must have known would likely then take another eleven months).[92] As Mr. Turner testified, AT&T's actions, or more accurately its inactions, in this regard were unreasonable.[93] Finally, AT&T's "rough justice" is hardly just when one realizes that CLECs that paid for PMUs which AT&T continued to install on the return side just a few months ago and thus experienced only a short period of the supposed underbilling would lose the same amount as those that paid for PMUs installed years ago.

A second alternative disposition of the non-recurring charges CLECs have already paid would be available should AT&T be allowed to move to a different or modified approach for measuring collocation power usage that involves the incurrence of new costs for which the

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92 In fact, it appears that AT&T intentionally put off pursuing resolution of the power metering problem at the Commission for some two years while it pursued its request for higher UNE loop rates in Docket 02-0864. An internal memorandum written by SBC's General Manager- Network Regulatory – Collocation on October 11, 2002, states: **BEGIN PROPRIETARY**

END PROPRIETARY

McLeodUSA Ex. 104 (AT&T Response to McLeodUSA Data Request 2.2). *See also* AT&T Ex. 1.1 at 31 Tr. 469, 472 (during 2003 and 2004, AT&T deferred resolution of the power metering problem while it "worked through several higher priority proceedings before the Commission" including Docket 02-0864 and its Section 271 proceeding).

93 Jt. CLEC Ex. 2.0 at 35.

Commission determines AT&T should be allowed to charge CLECs.[94] In such event, AT&T should be required to provide each CLEC credits against the new charges, in the amount of the non-recurring charges the CLEC has previously paid for the existing power metering arrangements, before the CLEC is required to make any payments of additional charges towards recovery of the new costs.

A third alternative disposition of the non-recurring charges that CLECs have paid for the existing power metering arrangements is to support the Joint CLECs' position that if AT&T is allowed to move to the use of hand-held amp meters to measure collocation power usage, AT&T should be required to take the usage readings, but should not be allowed to impose any additional charges on the CLECs for taking the readings (see Section III.A below). As discussed in Section III.A, such an outcome would be equitable, because CLECs have paid AT&T significant non-recurring charges for a functioning power measurement system that would enable AT&T to obtain accurate measurements of each CLEC's collocation power usage and to bill the CLEC for that usage; and under the approach of allowing AT&T to use hand-held amp meters to obtain the power usage measurements, CLECs would still be receiving a functioning power measurement system that would enable AT&T to obtain accurate measurements of each CLEC's collocation power usage and to bill the CLEC for that usage. Further, as Staff witness Mark Hanson testified:

> I believe [Joint CLEC witness] Turner's evidence on non-recurring costs should be considered by the Commission. Although I am not a technician, the preponderance of evidence sponsored by all parties in the case indicates present metering arrangements are defective. I am not qualified to speak upon whether the remedies to metering suggested by Mr. Turner are feasible. However, assuming they are, it appears to me that implementing them is going to cost someone money. I can understand the position of Mr. Turner's clients that they

[94] AT&T has not made any proposal to charge CLECs for new costs associated with collocation power in this case; any such cost recovery proposal would need to be the subject of a separate proceeding.

> have already spent a considerable amount of money for these arrangements and that they shouldn't have to pay to fix AT&T Illinois' mistakes. In Staff's view, this is a perfectly reasonable position and one which the Commission should consider.[95]

Mr. Hanson testified that it would be consistent with the spirit of his recommendation for the Commission to allow AT&T to move to a per-amp measurement system but to require AT&T to be responsible for taking the amperage readings at the CLECs' collocations at AT&T's own expense, at least for some period of time into the future.[96]

The bottom line is that CLECs have paid millions of dollars in non-recurring charges to AT&T for a functioning power measurement system (without being allowed any input into how collocation power usage measurement would be accomplished), and therefore CLECs should not be forced to bear any incremental or additional costs to move to a new system of measuring collocation power usage.

III. AT&T's Proposed Tariff, Even as Revised, Should Be Rejected.

As noted, AT&T's Illinois' tariff proposal seeks to reform completely the manner and method by which it measures electrical usage. However, the purported reason that AT&T wants to modify its tariff is due to engineering mistakes AT&T made over six years ago, and more than four years after AT&T discovered the problem with the engineering approach it chose. In the interim, as shown above CLECs have invested significant amounts of money purchasing the PMUs that AT&T now want to abandon, and establishing their collocation equipment in reliance on AT&T's existing tariff.

AT&T now proposes to shift to CLECs the costs to manually measure power using hand-held devices, and establish a charge for minimum amps, even where CLECs would use no

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95 Staff Ex. 2.1 at 3-4.

96 Tr. 595-596.

electricity to serve its equipment. Most problematic, however, is that AT&T keeps modifying the tariff that it seeks to have approved. When the Commission initially suspended AT&T's proposed tariff, AT&T had proposed that the electricity charges be based on the number of amperes that a CLEC ordered, with no discussion of how the "ordered" amps would be reported, or converted to a billed value.[97] In rebuttal, AT&T modified its proposal to charge based on what the CLEC would measure on its own, based on semi-annual measurements.[98] Then, in surrebuttal, AT&T again modified its proposal to charge based on what CLECs would certify their usage to be.[99] Neither the parties nor the Commission should have to guess how much further AT&T will move or modify its proposal in the context of a contested case proceeding. AT&T's tariff proposal is nothing more than a moving target that is still flawed for several reasons, and consequently, should be rejected.

A. AT&T's Tariff Revisions Are Based on an Improper Shift of Primary Responsibility to CLECs.

AT&T's most recent proposal in Schedule RAS-14 does more than propose to change the rate from one based on kWh to ampere. Instead, AT&T's latest proposed terms would shift to CLECs all of the administrative and operational costs and burdens of measuring their collocation power usage. Meanwhile, AT&T would be given virtually unbridled opportunity to measure electrical usage by the CLECs, audit CLECs' certified claims, and then impose back-billing and penalties on CLECs where errors are found. If AT&T wants to collect for electricity which it measures through an audit or otherwise, then AT&T should conduct the measurements in the first instance, and bill accordingly. While the CLECs are willing to accept the proposed change from basing power charges on a per-kWh basis to a per-amp used basis, Joint CLECs oppose

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97 AT&T Ex. 5.0, Sch. RAS-2.

98 AT&T Ex. 5.1, Sch. RAS-4.

99 AT&T Ex. 5.2, Sch. RAS-14.

AT&T's proposal to shift to CLECs the costs and administrative burdens of actually taking power usage readings. The power measurement problem arose entirely as a result of AT&T's choice to implement a deficient engineering solution to the Commission's prior orders. AT&T should not now be allowed to "solve" its leakage problem by merely shifting the administrative burden of metering power usage to the CLECs. AT&T must continue to be fully responsible for obtaining the power usage measurements, as it is today.

The proposed revised tariff sheets that AT&T filed at the outset[100], and which constitute the basis for this proceeding, did not require the CLECs to take power usage readings at their collocations, did not require CLECs to provide periodic self-certifications, and contained no provisions for audits by AT&T.[101] Nothing in AT&T's originally-filed tariffs would have imposed on CLECs the additional costs and burdens of being responsible for taking and providing power usage readings at their collocations at periodic intervals (while, it should be emphasized, they continue to pay AT&T the same effective rate for collocation power usage as specified in the existing tariffs), or enabled AT&T to relieve itself of those costs and responsibilities. In sharp contrast to its original tariff filing, AT&T's rebuttal proposal would place all of the burden and expense of collecting DC power usage information on the collocating CLECs.[102] Because of the radical shift in the nature of AT&T's proposal from its originally filed tariffs, it is highly questionable whether the Commission could (let alone should) approve new

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100 AT&T Ex. 5.0, Sch. RAS-2.

101 AT&T witness Roman Smith agreed that the tariff sheets AT&T filed to initiate this proceeding contained no requirement that a CLEC take physical readings of its DC power usage and no provisions for audits. (Tr. 118.)

102 AT&T's entire scheme of self-certification, audits and penalties first appeared in Schedule RAS 4, which was filed with AT&T's rebuttal testimony. AT&T's current proposal is contained in Schedule RAS 14.)

tariffs in this proceeding that would shift to CLECs the costs and burdens of obtaining and providing the power usage readings, as AT&T first proposed in its rebuttal testimony.[103]

Indeed, from the Joint CLECs' perspective as customers, such an outcome would be comparable to a situation in which Commonwealth Edison or Nicor Gas filed tariffs that would produce a 10% rate increase, and the Commission, at the end of the rate case, awarded the utility a 13% rate increase. Such an outcome would be, at a minimum, bad policy and would set bad precedent. Moreover, to allow AT&T, through a new proposal submitted late in the case, to shift the costs and burdens of taking power usage measurements to the CLECs, while AT&T continues to charge the same rate for power usage that was approved in Docket 98-0396, is the functional equivalent of awarding a utility a higher rate increase than it filed for.[104]

Second, such an outcome would go well beyond curing the problems that AT&T claimed to be seeking to fix when it filed the proposed tariffs that resulted in this proceeding. The problems that AT&T sought to fix by its original tariff filing were that (according to AT&T) the existing return-side power metering system was inaccurate and incapable of being made accurate; CLECs were not being accurately billed for their collocation power usage; and AT&T was not receiving the revenues to which it was entitled for providing collocation power to CLECs. AT&T initially sought to fix these problems by gaining Commission approval to switch from charging on a per-kWh billing basis to charging on a per-amp billing basis, and eliminating use of its existing return-side metering infrastructure.[105] The result originally sought by AT&T

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[103] AT&T witness Smith acknowledged that today, AT&T reads the power meters, that under AT&T's final proposal, CLECs would be required to obtain the power usage readings, and that this would be a cost that the CLECs do not incur today. Tr. 141-143.

[104] In light of the substantive costs and administrative burdens that AT&T's proposal would shift to the CLECs, its representation that its proposal "results in no rate increases for the CLECs" is a hollow promise indeed. AT&T Ex. 5.0 at 2.

[105] *See* AT&T Ex. 1.0 at 4-7, 24-25; AT&T Ex. 5.0 at 6-7.

would be fully and completely achieved by allowing AT&T to use hand-held amp-meters to measure the CLECs' collocation power usage and to switch to a per-amp basis of billing at the proposed $9.80 per amp rate. In contrast, the "self-certification" process that AT&T unveiled in the later stages of this case would impose new costs and responsibilities on the CLECs that go well beyond, and are not necessary to, solving the problems on which AT&T's original tariff filing was predicated.

Third, AT&T's proposed self-certification process would create additional steps and processes and increase the total costs to all parties of measuring and billing the CLECs' collocation power usage. Having to physically measure their power usage at each of their collocations two times per year – as AT&T now proposes[106] – will impose new costs and resource requirements on collocated CLECs that they do not bear today. These new burdens are significant and would be costly for CLECs to implement, as there would be additional manpower and time required to complete the physical readings and complete the self-certifications.[107] Further, in addition to seeking to shift the costs and burdens of measuring collocation power usage to the CLECs, AT&T is also proposing, and insists it is entitled to, an unlimited right to audit the CLEC's collocation power usage by taking its own usage readings.[108] This audit process – which AT&T contends is necessary to prevent CLECs from under-reporting their power usage through the self-certification process[109] – in turn carries with it additional new procedures (and associated costs) for reporting the results to CLECs, back-billing the CLEC if AT&T's audit reading exceeds the CLEC's last self-certification by more than 10%, resolving

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106 AT&T Ex. 5.2, Sch. RAS-14, § 16A.

107 Jt. CLEC Ex. 2.2 at 14. For example, McLeodUSA has collocations in more than 140 AT&T central offices throughout the State of Illinois. McLeodUSA Ex. 1.0 at. 3; AT&T Ex. 5.2, Sch. RAS-11; Tr. 132.)

108 AT&T Ex. 5.2 at 15-16.

109 *Id*. at. 13-15.

disputes over the audit results, and in some cases requiring the CLEC to reimburse AT&T for the (at this point unspecified) costs of the audit.[110] *All of these additional costs and resource requirements are unnecessary if AT&T simply measures the CLEC's collocation power usage periodically using hand-held measuring units*.[111] Moreover, if AT&T takes the collocation power measurements, there is no need for any concern over the possibility of CLECs gaming the system, or over the accuracy of the power usage information that CLECs would provide under AT&T's "self-certification" proposal.[112]

Mr. Turner succinctly summarized why AT&T's mid-case proposal to shift the costs and responsibilities of obtaining power usage measurements to the CLECs should be rejected. The Commission should adopt Mr. Turner's recommendation on this issue:

> AT&T-Illinois' proposal shifts the burden to CLECs to determine their power usage through physical readings at their collocation sites. Based on "how we got here" as described in my Direct Testimony, which was basically not rebutted by AT&T-Illinois, there is no justification for shifting the costs and administrative burdens of determining actual power usage from AT&T-Illinois to the collocators. AT&T-Illinois' new solution would place all of the administrative and operational burdens and risks on the collocators. . . . CLECs would also find it acceptable for AT&T-Illinois to take periodic usage readings using hand-held meters, as I described in my Direct Testimony, for the purpose of determining the amount that each CLEC should be billed for power consumption. CLECs are also willing to

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[110] AT&T Ex. 5.2, Sch. RAS-14, §21. AT&T witness Mr. Smith testified that over time, it would be likely that AT&T would come to recognize that some CLECs provide accurate power usage information in their self-certifications, and therefore AT&T would audit these CLECs only infrequently; while other CLECs that had a less reliable record for providing accurate self-certifications would be audited more frequently. AT&T Ex. 5.2 at 16. These predictions of what AT&T will do in the future are not comforting to Joint CLECs in the face of AT&T's proposed tariff language that would allow it to audit each CLEC's collocation power delivery arrangements an unlimited number of times each year. *See id.* and AT&T Ex. 5.2, Sch. RAS-14, § 21.

[111] AT&T intends to use hand-held meters to conduct the audits of CLECs' collocation power usage. McLeodUSA Ex. 102 (AT&T Response to QCC Data Request 3.13).

[112] In evaluating AT&T's self-certification proposal, the Commission should consider the fundamental question of why the power customer (CLECs), rather than the power provider (AT&T), should *ever* be responsible for measuring the customers' usage for billing purposes. The Commission would find it odd, to say the least, if Commonwealth Edison, Nicor Gas or Illinois-American Water Company required that its customers be responsible for owning and maintaining the meters at the customers' premises, recording the amount of electricity, gas or water delivered to them by the utility, and reporting the usage measurements to the utility to be used for billing the customers.

> accept the proposed change from basing the collocation power charges on a per-killowatt-hour used basis to a per-amp used basis, at AT&T Illinois' proposed rate of $9.80 per amp per month. However, CLECs do not find it acceptable that they should also have to take on the costs and administrative burdens of actually taking power usage readings when this problem arose entirely as a result of AT&T-Illinois' implementation of a faulty system of power metering. AT&T Illinois can take these readings using the same hand-held equipment that AT&T Illinois presumably expects the CLECs to use under its proposal. AT&T Illinois can take readings on a periodic basis for billing purposes, and then would have the security of knowing that CLECs are being billed for the actual amount of power that is being used. This process would be much simpler than implementing self-certifications, audits, and penalties to prevent CLECs from under-reporting their power usage. Further, AT&T Illinois' proposed approach necessitates the introduction of a complex and potentially controversial system of periodic audits by AT&T-Illinois, which would be unnecessary if AT&T-Illinois simply takes the readings of the collocator's power usage for billing purposes. I believe that such a solution would be the most cost-efficient method of accomplishing AT&T-Illinois' stated goal of ensuring that CLECs are paying for the power they are consuming.[113]

Finally, if the Commission concludes that AT&T be allowed to take collocation power usage measurements using hand-held amp-meters, but that AT&T should be allowed to assess an additional charge to the CLEC for the cost of taking the readings, Joint CLECs point out that there is no cost information in the record of this case on which to base such a charge.[114] Therefore, there is no basis in the evidentiary record in this docket to establish a charge for taking collocation power measurements. Moreover, as discussed in greater detail in Section II.E. above), Joint CLECs would consider allowing AT&T to impose a new charge at this point in time for taking collocation power usage readings to be an inappropriate and inequitable outcome, particularly in light of the substantial sums that CLECs have paid to AT&T in nonrecurring charges for the return-side metering equipment that AT&T now seeks to abandon.[115] AT&T should not be allowed to charge the CLECs for the cost of performing meter readings, because

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113 Jt. CLEC Ex. 2.2 at 11-13.

114 *Id*. at 13.

115 *Id.*

the need to move to using hand-held meters (assuming the Commission adopts this alternative) arises solely due to the fact that AT&T decided to implement a return-side metering system for which the CLECs have paid but which is inadequate and ineffective to obtain accurate measurements of power usage.[116]

B. AT&T's Proposed Minimum Amp Charge Must Be Rejected.

AT&T's proposal to require CLECs to pay a minimum amperage monthly recurring charge must be rejected. If CLECs are not using or drawing power for a particular delivery arrangement, they should not be charged a minimum amp charge, as the charge is inconsistent with the 1998 Illinois Order that mandates that CLECs be charged for power used or consumed. Moreover, the proposed minimum amp charge ensures that the proposed tariff revisions are not revenue neutral, and, in fact, will result in higher costs to CLECs and windfalls to AT&T.

1. AT&T's Proposed Minimum Amp Charge Violates the 1998 Illinois Order.

The 1998 Illinois Order mandates that CLECs be billed for power actually used or consumed. To ensure that this principle is upheld, AT&T's minimum amperage requirements must be rejected.

AT&T originally proposed a minimum amp charge of 10 amps for each power delivery arrangement if the power is provided via the BDFB or 51 amps if the power is provided via the power board.[117] Although AT&T later revised the minimum amp charge to 5 amps per power delivery arrangement if the power is provided through the BDFB, that charge would still be imposed irrespective of whether the CLEC is actually consuming power.[118]

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116 Jt. CLEC Ex. 2.1 at 35.

117 AT&T Ex. 5.0, Sch. RAS-2, Original Sheet 31.5, Part 23, § 4, ¶ 1.C.17 (Direct Current ("DC") Power Amperage).

118 AT&T Ex. 5.1, Sch. RAS-4, ¶ 17; Tr. 207-08.

The 1998 Illinois Order is unequivocal – the CLEC will be charged based on the power used.[119] AT&T has ignored the Commission's previous order by suggesting that it be allowed to charge CLECs a minimum of 5 amps or 51 amps regardless of whether the CLECs are actually consuming the power. On its face, the minimum amperage is inconsistent with the 1998 Illinois Order. In fact, AT&T has not claimed consistency – it has simply stayed silent on the issue.

2. AT&T's Proposed Minimum Amp Charge is not Revenue Neutral and Will Cause CLECs' Costs to Significantly Increase.

AT&T's claim that the revised tariff proposal is revenue neutral to CLECs is absolutely false. The result of the minimum power amperage is that CLECs' costs will increase and AT&T will receive a windfall because AT&T will be charging CLECs for electricity that they are not using or consuming.

AT&T claims erroneously that its proposed tariff has a "neutral net effect, from a cost perspective, to both the CLECs and SBC Illinois."[120] The reality, however, is the there are two aspects of the minimum amp requirement that will cause CLECs' costs and AT&T's revenues to increase significantly and to ensure that CLECs will <u>not</u> be charged only for the power they actually consumed.

First, the minimum amperage requirement is applied to each DC Power Delivery Arrangement, not to the collocation arrangement, and thus, AT&T's proposal will increase CLEC costs for DC Power Delivery arrangements that may not be in use. A "DC Power Delivery arrangement" is the infrastructure that provides for the DC power cabling from the AT&T BDFB to the collocation arrangement (the cable that also includes the A and B feeds that

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[119] 1998 Illinois Order at 99. The full quote of the Commission's ruling is found in Section I, *supra*.

[120] AT&T Ex. 2.0 at 7.

are attached to the CLEC's equipment).[121] The "collocation arrangement" is the actual space or bays, along with the power and all other associated facilities provided by AT&T to the CLEC. A collocation arrangement may include more than a single DC Power Delivery arrangement. As Mr. Turner explained:

> Many collocators establish more than one DC Power Delivery Arrangement into the collocation arrangement. It is not uncommon for a CLEC to have three or more collocation bays, and therefore possibly establish three or more DC Power Delivery Arrangements at the CLEC's collocation site in an AT&T-Illinois central office. These DC Power Delivery Arrangement are typically targeted as specific pieces of equipment. As was described in my Direct Testimony, the collocator pays for the full cost of these DC Power Delivery Arrangements up front via nonrecurring charges.[122]

Under the AT&T revised proposal, the CLEC will be charged a minimum amp charge for each *power delivery arrangement* irrespective of the actual power used in each of those arrangements.[123] AT&T readily admits this.[124] Therefore, to the extent that a particular power delivery arrangement is not drawing any power or drawing less than the minimum amperage, AT&T will still bill and receive monthly recurring revenues. This windfall will occur whether the CLEC is served off of the BDFB or the power board.

Second, and most obvious, the minimum amp requirements allow AT&T to bill for power that is not being consumed or used. AT&T admits this as well.[125] AT&T tried to allay concerns about this admission by suggesting that all equipment draws more than 5 amps, so that there should be no concern.[126] But Mr. Turner, who has first hand knowledge of provisioning collocation arrangements and power delivery arrangements, explained that there are some types

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121 *Id.*

122 Jt. CLEC Ex. 2.2 at 5-6.

123 *Id.*

124 Tr. 332.

125 *Id.* at 179.

126 AT&T Ex. 3.1 at 25.

of equipment used by collocators that draw less than 5 or 10 amps, such as alarm and cross-connect equipment.[127] Therefore, to the extent that a Power Delivery Arrangement does not draw more than 5 or 51 amps, AT&T will receive compensation for power that is not being consumed.

The Joint CLECs have quantified this aspect of the AT&T proposal. Mr. Turner explained that Covad, for example, will experience an increase in monthly recurring power costs of approximately 13.73% simply through implementation of the 5 amp minimum.[128] The reason for this is that there are some power delivery arrangements that currently draw less than 5 amps. CLECs that are served from the power board are likewise affected since the 51 amp minimum is applied to each DC Power Delivery arrangement served from the power board, irrespective of whether the delivery arrangement has ever drawn more than 51 amps. As QCC witness Victoria Hunnicutt-Bishara explained, QCC typically has four (4) Power Delivery Arrangements in a given collocation arrangement[129] and many of QCC's collocation arrangements are served from the power board (even if QCC did not request being served from the power board). The 51 amp minimum would be applied to each DC Power Delivery Arrangement, again, irrespective of the amount of power drawn, thus resulting in a significant increase in monthly power costs to QCC.[130] QCC estimated that the AT&T revised proposal will increase QCC's DC power costs over 8900% if QCC makes no changes to its current power requests and approximately 2700%, even if QCC takes advantage of AT&T's power fuse reduction offer.[131]

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127 Jt. CLEC Ex. 2.2 at 9-10.

128 *Id.* at 6.

129 Tr. 523.

130 QCC Ex. 1.0 at 5.

131 QCC Ex. 1.0 at 4.

For all of these reasons, AT&T's proposed minimum amperage provision must be rejected in full.

C. Other Aspects of AT&T's Proposed Tariff are Less Problematic, But Its Adoption Is Still Not Warranted.

As discussed above, the Commission should reject AT&T's revised proposed tariff because AT&T should be required to change its power metering system or the method that it measures power without any changes to the tariff, and without shifting the costs and administrative burdens of measuring power usage to the CLECs. There are aspects of the revised proposal that are not at issue, but simply because there is not a dispute, does not provide any support to adopt the revised tariff modification. In other words, simply because there is not a dispute on one or two aspects of the proposal, does not mean that the Commission should allow AT&T to abandon its responsibility to mitigate the problems caused by its return side power measurement system.

1. Modification of the kWh rate to a per amp rate is acceptable as long as the rate is charged on a per used amp.

AT&T proposes to change the rate structure to charge for power from a per kWh basis to a per amp basis.[132] The AT&T proposed monthly recurring rate is $9.80 per amp for DC Power. AT&T derived this proposed rate by converting the current rate of $0.28 per kWh to a per ampere rate. Joint CLECs do not dispute the mathematical conversion calculation performed by AT&T. Based on AT&T's rebuttal and surrebuttal, it now appears that AT&T agrees that the per amp rate be assessed per used amp, and not per ordered amp.[133] In the event that AT&T uses hand held meters or revises the manner that it measures power usage in amperes, Joint CLECs do not object to use of the per used amp rate ($9.80).

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132 AT&T Ex. 5.0, Sch. RAS-2, Sheet No. 43, ¶ B.

133 AT&T Ex. 5.1 at 15.

2. AT&T's fuse reduction offer is not relevant to the determination of the other issues in the case because the offer is not compulsory.

AT&T has offered a short-term offering that would allow CLECs to obtain reductions in the sizes of the fuses used in collocation arrangement, with the CLECs paying the service order charges related to the requested change.[134] Even though there is no time limit for the offer in the AT&T proposed tariff, apparently, AT&T has decided that the offer will only be available for 12 months.[135]

As a short-term offer, Joint CLECs are not opposed to the offering, with the exception of the important change to both Sections 18 and 19 that make the offering applicable to fuse "modifications", rather than simply fuse "reductions." This issue is addressed in greater detail in Section IV below. Recognizing that the offer is limited and voluntary to CLECs, to the extent that CLECs identify a need for fuse reductions, that offer allows CLECs to make such determinations. Joint CLECs' concerns with the provisions currently proposed by AT&T are: (1) the offer now appears to be of limited value in that it will only be available for 12 months; and (2) if a CLEC accepts the offer, but then has growth that necessitates moving back to the original fuse size or larger, the CLEC will be assessed all costs associated with a fuse change on an individual case basis since there are no Commission-approved rates for fuse changes. Therefore, to the extent that a CLEC anticipates growth at some point in the future, there is little or no incentive to use this offer. Consequently, the offer is of limited value in the overall scheme of the collocation tariff and does not provide rationale to allow AT&T to abandon its power metering system or the current tariff.

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134 AT&T Ex. 5.0. Schedule RAS-2, Sheet No. 31.6, ¶¶ 18-20.

135 Tr. 493. Joint CLECs note that AT&T witnesses did not have a solid time frame in mind for the availability of the power fuse reduction aspect of the proposed tariff, as the time frame varied from "unknown" to three years to about one year. Presumably, if these modifications are adopted, AT&T would add language that would identify the time frame associated with the offering, although AT&T has not offered such language for consideration.

IV. If the Commission Determines that AT&T Should be Allowed to Shift the Burden to Measure Power to CLECs, Then the Commission Should Adopt Joint CLECs' Positions on the Disputed Issues with Respect to a Self-Certification Process.

The "third-best" solution to the problems created by AT&T's power metering system would be to adopt a self-certification process. However, if such a process is adopted, it should not be the process proposed by AT&T in Mr. Smith's surrebuttal exhibit, Schedule RAS-14. Instead, that proposal would need to be modified with respect to a number of issues, as discussed in this section. The Joint CLECs' positions stated in this Section IV with respect to a self-certification process are our final positions based on our consideration of the entire record, including the record complied at the evidentiary hearings.

As noted above, when AT&T "clarified" in its rebuttal testimony that it really meant to charge for amperage used and not (ordered) fused amps, it also announced that it wanted Joint CLECs to measure that usage. Surprised by this significant change in AT&T's proposal, CLECs requested and were granted permission to file surrebuttal testimony addressing that proposal. Mr. Turner provided surrebuttal testimony that illustrated the defects in AT&T's proposal and presented an alternative means of providing self-certification and auditing. In response, AT&T modified its proposal in its own surrebuttal testimony, adopting some of Mr. Turner's proposals. As discussed below, although the AT&T revised proposal moderates some of the more outrageous aspects of the AT&T self-certification and auditing provisions, it is still woefully inadequate. Thus, except for where described below, the Commission should reject the AT&T disputed language and accept the Joint CLECs' proposals.

Joint CLECs note, however, that they are not conceding by having proposed alternative language or that they accept the concept of self-certification and auditing. Joint CLECs particularly oppose any process that would shift to the CLECs the obligation to measure power for AT&T's billing purposes. AT&T's proposal would turn the present system totally "on its

head." Whereas the present system is self-effectuating, AT&T would implement an on-going, manual metering system and require the CLECs to make the on-going manual meter readings. If the Commission were to decide that periodic, manual meter readings are appropriate, Joint CLECs would be willing to have AT&T institute such a system, if AT&T takes the readings. AT&T is the party demanding periodic, manual meter readings and while AT&T would like to impose such a system on the CLECs, AT&T is adamantly opposed to undertaking such a process itself. Something is very wrong with this picture. Thus, if the Commission determines that periodic, manual meter readings should be undertaken, AT&T should be required to make them. Such a decision would not only be fair, it would eliminate almost the entire debate over certifications and audits.

Despite the foregoing, if the Commission were to decide that CLECs should measure their own power consumption, it should require AT&T to adopt the changes to RAS-14 recommended below.

A. Joint CLEC's Proposal For Self-Certification Provides the Only Rational, Workable, and Even-Handed Method of Requiring CLECs to Report Usage.

The Commission should ensure that the method chosen to measure power consumption is accurate, efficient, and fair to both AT&T and CLECs. AT&T's proposal is none of these. AT&T proposes a burdensome, redundant system that forces CLECs to expend large amounts of time and money to measure power consumption, while still leaving them at risk for paying large sums for unavoidable penalties. AT&T's proposed system should therefore be rejected and replaced with the set of procedures set out below, which provide a balanced approach that will minimize the cost to AT&T and CLECs of measuring power usage while providing accuracy and accountability.

1. Summary of AT&T Proposal.

AT&T proposes that CLECs report to AT&T the amount of their power consumption by performing self-certifications two times per year. Both self-certifications would require physical site inspections of each collocation arrangement. The results would have to be provided to AT&T accompanied by an attestation of a "responsible officer" of the CLEC that "at no time" would the CLEC exceed the reported power draw on that power delivery arrangement. The initial self-certification would have to be made within 90 days of the effective date of the tariff. AT&T proposes that it would have the right to conduct unlimited audits with penalties associated with under-reporting of the actual power usage by either 10% or 20% or more. In order to make the meter readings required by AT&T's tariff, CLECs will be forced to obtain hand held meters and expend manpower and time to (1) travel between collocation arrangements and complete the physical readings, (2) complete the paperwork for the semi-annual self-certifications, and (3) respond to unlimited audits that could be initiated by AT&T. If CLECs are going to be forced to accept basically full responsibility for reporting their power usage, then it is critical for the

Commission to take into consideration the valid concerns about timing, use of limited resources, and potential harassment with unlimited audits.

2. Review of AT&T Proposed Language in RAS-14

a. Collocator Specified Amperage Load (Section 16A)

i. Timing of Initial Certification

AT&T proposes that CLECs be given 90 days from the effective date of its new tariff to conduct physical inspections of their collocations and conduct meter readings. Ninety days to perform a site visit on each and every collocation arrangement for a CLEC must be rejected and, instead, Joint CLECs proposal to have 180 days to perform the initial reports should be adopted. AT&T's 90-day timetable is unreasonable and wholly unworkable for CLECs. As noted by Mr. Turner (who was never rebutted by AT&T in any way), the Joint CLECs:

> have, in some cases, several hundred DC power delivery arrangements in scores (for some of my clients in excess of 100) of AT&T-Illinois' central offices that will have to be inspected. These companies simply do not have the staff to perform all of these physical inspections and self-certifications across the State of Illinois in a 30-day period.[136]

Further, a fast track for the initial readings is completely unnecessary since under the revised proposal, AT&T is given the right to back-bill CLECs to the effective date of its tariff. As proposed by Mr. Turner (and apparently agreed to by AT&T), from the date of the tariff until the date the CLEC provides its initial self-certification, AT&T would be charging the CLEC for power based on an Interim Reported Usage (average of three months prior use). Then, when the CLEC provides its initial self-certification, AT&T has the ability to true-up the difference between the Interim Reported Usage and the actual amount reported in the initial self-

[136] Jt. CLEC Ex. 2.2 at 15.

certification,[137] thus reimbursing AT&T or CLECs, as the case may be, for any differences in the amounts billed between the effective date of the tariff and the self-certification.[138] Finally, it would be more efficient to set a longer period so that CLECs could have meters read during their technicians regular visits to collocation arrangements, rather than force them to make special visits simply to measure power consumption.[139] From Joint CLECs' perspective, this is a critical issue in dispute with AT&T with respect to the self-reporting process.

ii. Physical site, measured verification

AT&T proposes that the initial power usage verification indicate that the CLEC has performed a physical site, measured verification of the total actual DC current drain. As noted by Mr. Turner, it would be prudent for a CLEC to make an initial site visit in order to measure power consumption.[140] Nevertheless, he indicated that it is possible that a CLEC could have engineering records that identify power consumption. Given the fact that AT&T can audit the results and obtain back billing, AT&T would not be harmed if a CLEC decided to state its power usage based on its engineering records rather than measure its power consumption.[141] Moreover, the power consumption listed in the CLECs records will in most cases be greater than the power that would actually be measured. Thus, AT&T could receive greater revenue from CLECs that chose to rely on their records.[142]

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137 *Id.* at SET-3, § 16A (2nd para.). AT&T would be required to implement the true-up within 90 days of the date that the CLEC provided its initial self-certification so that there is some reasonable certainty for billing and planning purposes. Again, it appears that AT&T has already agreed to this language, so it is completely mystifying that it could not agree to the 180 days to allow CLECs to make their initial self-certification.

138 *Id.* at 16.

139 Tr. 252.

140 *Id.* at 249.

141 *Id.* at 284.

142 Tr. 296.

In any event, the initial site visit requirement perfectly illustrates the redundancy and wastefulness of AT&T's self-certification proposal, which essentially is intended to increase the CLECs' costs. AT&T insists on being able to perform an unlimited number of audits on each collocation requirement and thus rejected the proposal of CLECs that it be limited to one audit per power delivery arrangement each year.[143] However, AT&T indicated that it will probably conduct random audits initially upon the approval of its tariff and, at some future date, will scale back audits only on those CLECs that appear to be accurately reporting usage.[144] Moreover, Mr. Nevels acknowledged that the most efficient way to audit would be to audit all of the collocations within a single facility at once.[145] AT&T's extensive auditing plans raise the question that if AT&T is planning to visit each collocation and read the power consumption for audit purposes, why can't it simply issue the bills based on those readings in the first place, instead of implementing a complex and onerous process that burdens the CLECs? If AT&T retains the right to conduct an unlimited number of meter readings, then AT&T should just use its meter readings to issue a bill. Again, the elaborate scheme of self-certification, audits and penalties is an inefficient and costly way to measure power consumption intended only to increase the CLECs' costs of collocation.

iii. Certification for new arrangements

AT&T proposes that CLECs be given 30 days to self certify new DC power delivery arrangements. This proposal suffers additional defects beyond those inherent in AT&T's proposal that CLECs certify existing power delivery arrangements within 30 days of the effective date of its tariff. As explained by Mr. Turner, CLECs must ensure that the DC power

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143 *See* RAS-14, § 21A.

144 Tr. 145-46.

145 *Id.* at 346.

delivery arrangement is in place prior to installing the collocation equipment that will utilize this power.[146] Delays in installation of the telecommunications equipment, testing, and final turnover of services to that equipment may take well beyond 30 days. Thus, the equipment may not reach its regular power draw until well beyond 30 days after the installation of the power arrangement. As a result, a CLEC may not know its power consumption until months after the 30 day deadline being imposed by AT&T. Compounding the problem, AT&T's audit and penalty provisions would penalize the CLEC that makes a self-certification within 30 days that does not accurately reflect the power use once the telecommunications equipment is fully operational. Accordingly, Joint CLECs' proposal is that the CLECs self certify within the earlier of 90 days after installation of a new DC power delivery arrangements or 30 days after the CLEC knows that equipment has been turned up to utilize the DC power delivery arrangement.

iv. Wording of the Self-Certification

There are two aspects of the wording of the self-certification that warrant discussion. AT&T proposes that CLEC self-certifications include an attestation by a "responsible officer" of the CLEC. AT&T witness Mr. Smith admitted that AT&T, of course, does not have a responsible officer verify each bill it sends out to CLECs.[147] He also testified that when AT&T audits a CLEC's power usage, finds that the CLEC's usage exceeds its last reported self-certification, and sends notice to that effect to the CLEC, AT&T will not have the audit results attested to by a responsible officer of AT&T.[148] Nor should AT&T have to do so. It would be nonsensical to require an AT&T corporate officer to spend the time needed to be able to attest to the accuracy of every invoice or audit results notice sent to CLECs. Similarly, it would be

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146 Jt. CLEC Ex. 2.2 at 16-17.

147 Tr. 109-10.

148 *Id*.

nonsensical for an officer of a CLEC to be required to spend the time needed to attest to the accuracy of the CLEC's self-certifications. The bottom line is that the CLEC is going to be bound by the power usage amount is specifies in its self-certification. If a CLEC provides a self-certification that turns out to be far enough below the audited level to trigger prospective and retroactive bill adjustments and, potentially, penalties, it will be subject to those adjustments and penalties, regardless of who signed the self-certification. That should be all that matters. Therefore, any self-certification process adopted by the Commission should not include any requirement for verification or attestation by an officer of the CLEC.

The second issue with the form of the self-certification is the phrase "is not exceeding the total load of power as reported on the Certification." A similar issue arises in paragraph 17 of RAS-14, where the disputed language proposed by AT&T provides:

> Under this provision the Collocator represents and warrants that it **at no time will draw more than its Collocator-Specified Amperage Load** on the DC power leads provided by SBC Illinois for a power arrangement. (emphasis added)

The language in both sections is specific and harsh. It does not recognize that equipment will draw additional electricity as it is first powered up or that minor fluctuations may occur during operation. Mr. Smith agreed with this problem and consented to modifying the language to reflect AT&T's desire that the CLEC simply certify that over a period of time the equipment will not draw more than the certified level.[149] The language that he agreed would be reasonable for paragraph 17 of RAS-14 reads as follows:

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[149] Tr. 112-14.

> Under this provision, collocator represents and warrants that under normal operating conditions, it will not draw more than its collocator specified amperage load on the DC power leads provided by SBC Illinois for a power arrangement.[150]

Mr. Smith also agreed that it would be reasonable to add the phrase "under normal operating conditions" to paragraph 16 of RAS-14, so it would read " under normal operating conditions, is not exceeding the total load of power as reported on the Certification."[151]

v. Subsequent Self-certifications

AT&T is not content to force CLECs to physically measure their DC power consumption within a short time following the effective date of its tariff adopted in this proceeding. AT&T also wants CLECs to visit each collocation site and measure power consumption every six months. This is an extraordinarily burdensome demand and one of the most onerous provisions contained in the latest AT&T proposal. If CLECs are going to be forced to perform self-certifications, a process must be implemented that is fair and workable – self-reporting that requires physical measurements every six months is not reasonable or workable under any perspective. Instead, the goal, if this process is accepted, should be to obtain accurate readings that will be useful for billing purposes. Joint CLECs submit that a self certification, without a physical inspection, can be provided to AT&T one time per year, unless there has been a change in the CLEC's use of power (*i.e.,* increase in line cards; equipment modification, including adding or taking out equipment), which should be the only triggering event within a single year that would require another physical reading.

From an operational perspective, CLECs do not have personnel visiting every collocation arrangement on a regular schedule that would allow compliance with AT&T's request of

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150 *Id.* at 114.

151 *Id.* at 116-17.

physical readings two times per year. More likely, some offices will be visited often, others infrequently and only if operational problems occur. But AT&T's proposal does not take CLEC resources or use of those resources into account. Thus, many CLECs will need to dedicate new personnel responsible for visiting their collocations to conduct meter readings, and for the administrative tasks of tracking these activities. AT&T witness Smith, who opined that CLEC technicians or their vendors would visit collocation arrangements at least twice per year[152] is not an engineer[153], has never worked for a CLEC, does not know the experience or expertise of CLEC technicians visiting the offices, does not know the type of work they perform, and, in fact, does not know how frequently they visit the offices.[154]

The Commission must remember that the time needed to measure power consumption will include not only time in the collocation arrangement, but also travel time between collocation arrangements. As noted by Mr. Turner:

> The concern is that you're dealing with a hundred different physically disparate locations that the way that staffing is generally done for CLECs is probably going to be, you know, a very small handful of people having to schedule driving to all these different locations to perform metering.[155]

AT&T provided no reason why it would be necessary for CLECs to measure DC power consumption every six months or even every year. The initial reading will create a reasonable baseline for future billings. As Mr. Turner explained:

> [t]here is not reason to perform a "physical site, measured verification" of every DC power delivery arrangement in Illinois every six months. If AT&T-Illinois needs a written self-certification that the DX Power Consumption is unchanged from the prior-self-certification, this can be provided without a physical verification. A "physical site, measured verification" should only be required if

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152 AT&T Ex. 5.2 at 6,

153 Tr. 155.

154 Tr. 144-45.

155 *Id.* at 294.

> the CLEC knows that it has added or removed equipment from the collocation arrangement. In this situation, the CLEC will be able to perform this metering of the power when the CLEC's personnel are on site for the work of adding or removing the equipment. In this way, the measured validation could be performed in a rational and efficient manner.[156]

Regardless of the time period allowed between meter readings, complying with AT&T's proprosal would be costly for the CLECs. Moreover, measurement of power consumption on a regular basis would be unnecessary. As noted by Mr. Turner, the choice of self-certification methodology should be a balancing between efficiency and accuracy. As discussed earlier in this brief, modern digital telecommunications equipment tends to draw approximately the same amount of power regardless of the amount of telephone traffic load on the equipment at various times during the day or week. Once power consumption has been measured, there is no need for another measurement unless equipment is added or removed at that site, thereby changing the draw of power.[157] Thus, a more sensible approach would be for CLECs to be required to certify, annually that DC power consumption is unchanged from the prior self-certification. This process was agreed to and is being used by Verizon.[158] A measurement of DC power consumption requiring a site visit should only be required if the CLEC has added or removed equipment from the collocation arrangement. Most likely, the CLEC will be able to perform this measurement of power consumption when the CLEC's personnel are on site for the work of adding or removing the equipment. Therefore, the measured verification could be performed efficiently and would provide AT&T with the assurance that its billing is accurate. Further, AT&T would be adequately protected by the ability to conduct audits.

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156 Jt. CLEC Ex. 2.2 at 17-18.

157 Tr. 289.

158 Jt. CLEC Ex. 2.2 at 18.

Joint CLECs urge this Commission to reject AT&T's proposal to require CLECs to perform actual measurements every six months. A single self-report one time per year, unless there has been a change in equipment that would necessitate a change in power usage. In that latter event, CLECs could submit a self-certification within 30 days after the equipment has been modified, and that revised self-report could be used as the basis for future billing until or unless any other changes occurred.

In no event, however, should CLECs be forced to submit self-certifications on a strict schedule (*e.g.*, once every six months) that would force CLECs to schedule personnel to make special visits to their collocation arrangements to make power consumption readings. If any type of physical reading is required to be performed by the CLECs, the CLEC should be permitted to perform the readings on a schedule that allows CLEC technicians to make those readings during visits to the collocation that they have scheduled for purposes of doing other work. Addressing the fact that AT&T's proposal would necessitate special visits by CLEC personnel to collocation arrangements in order to make readings at the time intervals specified by AT&T, Mr. Turner stated: "To me that would be a very inefficient approach and one that could create unnecessary cost on the part of the industry."[159]

Instead, therefore, if there is *any* requirement for CLECs to take periodic physical readings, that requirement should provide that the CLEC can take the reading at any time during the specified time period (e.g., at any time during the calendar year).

b. **Direct Current ("DC") Power Amperage (Section 17)**

As discussed above in Section A.4, Mr. Smith agreed that the language in this section should be modified to add the phrase in bold below:

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[159] Tr. 292.

> Under this provision, collocator represents and warrants that **under normal operating conditions,** it will not draw more than its collocator specified amperage load on the DC power leads provided by SBC Illinois for a power arrangement.[160]

c. Recognition of Power Consumption Reduction (Sections 18 and 19)

As previously discussed, AT&T's fuse reduction proposals are basically of little consequence in this proceeding since the proposals are voluntary and apparently only available for a short period time.[161] However, in the event that the Commission adopts the fuse reduction proposals, there is an important change to the proposal that must be adopted. Under AT&T's latest proposal in RAS-14, the fuse reduction plan allows a CLEC to obtain a fuse reduction by paying only the applicable service charge. Joint CLECs submit that it is important to allow this fuse reduction proposal and its accompanying service charge to also apply if the fuse size is "modified", meaning that it would cover situations in which the fuse size is enlarged, as well. As Mr. Turner explained, when a CLEC is faced with potential augments, or increased power consumption (even through change of a line card), it may need to change the size of a fuse.[162] Currently, there are no terms, conditions, or rates for fuse changes, except for this limited offer for fuse reductions where the CLEC pays only for the service order charge. If a CLEC takes advantage of the fuse reduction only and then is faced with an augment or equipment change that will necessitate the fuse being increased, then it will be charged on an individual case basis of unknown levels of fees, thereby providing even more of a disincentive to use the fuse reduction

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[160] Tr. 114.

[161] With AT&T now limiting the fuse reduction proposal to one year, it is highly likely that many CLECs will not be able to take advantage of the proposal, to the extent that they chose to use it, because of the other requirements in this process, including initial measurements within 180 days (as proposed by CLECs), implementation and training of internal guidelines and processes to require technicians to perform measurements, preparation for random audits and creation of internal timeframes for timely reviewing audits and making determinations of whether to accept results.

[162] Jt. CLEC Ex. 2.2 at 35.

offer in the first place. Therefore, sections 18 and 19 of RAS-14 should be revised to provide that if a CLEC is faced with a fuse modification (whether it is an increase or decrease), it would be allowed to do so by paying for the service order charge.

B. Joint CLECs' Proposal For Audits and Penalties Are Reasonable and Balanced While Providing Appropriate Incentives For Accurate Measurement and Reporting of Power Consumption.

If the Commission determines in this docket that metering responsibilities are to be placed on the CLECs, it should adopt the Joint CLECs' proposals regarding audit rights and penalties because those proposals provide the best balancing of burdens under a self-certification approach. The Joint CLEC proposals would eliminate the most onerous proposals by AT&T, while still protecting AT&T from not obtaining adequate revenue to cover its costs. The disputed audit provisions are contained in Section RAS-14 and are discussed below. Once more, though, Joint CLECs remind the Commission that it need not address the convoluted and inefficient audit process if it simply directs AT&T to perform all power consumption measurements. The need for the entire audit regime – with AT&T auditors and CLEC meter readers having to conduct redundant meter reads and check each other's work - is caused by AT&T's late-breaking proposal to have CLECs measure their own power consumption. Nevertheless, if the Commission accepts AT&T's audit scheme at all, it should make the following modifications to the audit and penalty provisions.

1. Frequency of Audits (Section 21B)

AT&T requests the right to conduct an unlimited number of audits on each collocation power arrangement. That is an unreasonable request given the administrative burden that repeated audits would impose on CLECs. There should be a limitation in order to provide

CLECs and AT&T with incentives to act responsibly.[163] Joint CLECs therefore propose that AT&T be allowed to conduct one audit per year for each collocation power arrangement, with one exception: if the audit concludes that the reading was inaccurate over 20%, then AT&T could audit that collocation arrangement one additional time during the calendar year to ensure compliance.

2. Copies of Audits (Section 21B)

AT&T proposes to provide a copy of the audit results whenever the audit will cause a billing increase (and a retroactive billing adjustment). This unduly limited use of the audit process fails to take advantage of a resource that could be valuable to both parties. Joint CLECs propose that AT&T be required to provide the audit results as a matter of process regardless of whether the audit results are used for a billing increase.[164] As pointed out during the hearing, it is likely that AT&T will create a process for its audit in which a technician will meter the power delivery arrangement; have the results fed into some form of database; have the results reviewed to determine if the reading shows a need for resolution (*i.e.,* 10% deviance or higher); and then notify the CLEC if the audit requires a billing increase.[165] If the audit results are mechanized, then a process can be established so that the results (regardless of whether the results show a need for further audit activity) can be provided to the affected CLEC. CLECs are not asking AT&T to create any records – simply to share the readings that they take during the audits as a routine course of conducting business.

Information in the audit report would allow the CLECs to compare their results with those of AT&T and would assist CLECs in determining whether there will be disputes regarding

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163 Jt. CLEC Ex. 2.2 at 24.

164 *Id.* at 2.

165 Tr. 340-41.

methods, differences in metering equipment, time of day or other elements that could possibly lead to discrepancies between results. It could also allow CLECs to determine whether errors may have occurred that should be corrected and should help to reduce the number of disputes, especially in the early days of instituting new procedures. Joint CLECs therefore propose that AT&T provide a copy of basic audit information to the CLEC within 30 days.

In order to ensure that necessary information is contained in the audit report, AT&T and CLECs should cooperate in developing a form to be used. Joint CLECs believe that the data contained in the audit report should include: a) the date and time of audit; b) the location of the collocation arrangement audited (by CLLI, fuse position and bay); c) the equipment used to perform the audit (by manufacturer and model) and d) the number of amps measured. Such information would allow CLECs to verify the source of any reported discrepancies between their results and AT&T's results.[166]

3. Resolution of Audit in Favor of CLEC (Section 21D)

Audits that result in a billing discrepancy should also be fair and even-handed; AT&T's is not. Joint CLECs worked extensively on the audit procedures in Sch. SET-3, but disputed issues remain. An important distinction that Joint CLECs seek is that the audit provisions should recognize that if the audit results in a favorable outcome for a CLEC, the CLECs should not be required to pay for the audit. This limitation should also place some burden on AT&T to perform only audits that are needed and not encourage unlimited audits. Joint CLECs propose language to clarify that they would not be responsible for AT&T's audit costs or back bills if the CLEC successfully challenged an audit in a dispute process in either the Tier 2 (10%-19% discrepancy) or Tier 3 (20% or higher discrepancy). Certainly, the CLEC should not be

166 *See* Jt. CLEC Ex. 2.2, Sch. SET-3 at § 21A.

responsible for AT&T's audit costs if it successfully challenge that audit. Apparently, the dispute involves AT&T's concern over how to define a successful dispute result. For example, if the audit shows that usage has been underreported by 24 percent and after the dispute resolution it is found to be 23 percent, AT&T believes it is entitled to recover its audit costs because the result is still above the 20% range that triggers audit cost responsibility. CLECs are willing to make it clear that in this context, a successful challenge would be one that brings the final figure below the 20% trigger.

V. McLeodUSA Cross Exhibit 1 Should Be Admitted into the Record and Considered in the Resolution of this Case

During the April 10 evidentiary hearing in this docket, during the cross-examination of AT&T witness Roman Smith, McLeodUSA had marked for identification, and offered into evidence, McLeodUSA Cross Exhibit 1. The ALJ denied admission of the exhibit.[167] In this section of our Brief, Joint CLECs seek a reversal of this ruling, by the ALJ or the Commission, so that McLeodUSA Cross Exhibit 1 can be admitted into the record and considered by the ALJ and the Commission in the resolution of issues in this proceeding. In particular, the exhibit shows that one of the other major ILECs determines CLEC collocation power usage by taking readings of the CLEC's power usage, up to four times per year. However, McLeodUSA Cross Exhibit 1 has not been cited elsewhere in this brief and cannot be considered in deciding issues in this case unless the ALJ's ruling is changed or reversed.[168]

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[167] *See* Tr. 120-29. An offer of proof was made on the record at that time. Tr. 128.

[168] A petition for interlocutory review of the ALJ's ruling under 83 Ill. Admin. Code § 200.520, although not required, could have been filed, but the petition would have been due the day before the initial briefs, and this process would have called for separate responses by other parties and imposed a requirement on the ALJ to submit a separate report to the Commission. Given the procedural status of the case, Joint CLECs concluded that addressing the issue in a separate section of their initial brief would provide a more administratively convenient procedure. If the ALJ or the Commission concludes that McLeodUSA Cross Exhibit 1 should be admitted, it can then be considered by the ALJ and the Commission in deciding issues in this case.

McLeodUSA Cross Exhibit 1 is a copy of McLeodUSA's response to AT&T's First Data Request to McLeodUSA, item 1.06, including Schedule AT&T-1.06 that was provided to AT&T as part of the response. AT&T Data Request 1.06 and McLeodUSA's response are as follows:

> **Request:**
>
> Provide all Documents that refer to, relate to or discuss methods to measure (or "meter") power other than the return side power metering methodology employed by AT&T Illinois. These Documents will include, but will not be limited to, those that discuss the economic and technical feasibility of such alternatives, as well as those that discuss any alleged benefits or drawbacks of such alternatives.
>
> **Response:**
>
> Schedule AT&T-1.06 is provided, which is the ICA amendment that McLeodUSA and Qwest have implemented in the states in which McLeodUSA is collocated in Qwest central offices.

Among other provisions, the ICA amendment between McLeodUSA and Qwest, dated August 2004 and entitled "DC Power Measuring", provided to AT&T in response to its data request as Schedule AT&T-1.06 contains the following provision:

> Qwest will monitor usage at the power board on a semi-annual basis. However, Qwest also agrees to take a reading within thirty (30) Days of a written CLEC request, after CLEC's installation of new equipment. Qwest will perform a maximum of four (4) readings per year on a particular collocation site. Based on these readings, if CLEC is utilizing less than the ordered amount of power, Qwest will reduce the monthly usage rate to CLECs' actual use. If CLEC is utilizing more than the ordered amount, Qwest will increase the monthly usage rate to the CLEC's actual use. Until such time that CLEC places equipment and a request is received from Qwest to monitor, Qwest will bill CLEC based on the amount of power ordered. Once Qwest receives a CLEC monitoring request, it will bill the actual power usage rate from the date of the CLEC's monitoring request until the next reading. The next reading date may be generated as a result of the CLEC request or a Qwest routine reading and Billing will be adjusted on whichever date comes first.

In short, the ICA amendment shows that Qwest takes responsibility for performing actual readings of the CLECs' power usage at its collocation site, up to four times per year, for purposes of billing the CLEC for its actual collocation power usage.[169]

The ALJ ruled that McLeodUSA Cross Exhibit 1 would not be admitted because a foundation for its admission had not been established through the cross-examination of AT&T witness Roman Smith. Joint CLECs respectfully submit that the ALJ's ruling was in error and that an adequate foundation for admission of the exhibit was established, as shown by the following description: Mr. Smith testified in his pre-filed testimony that in states in which Qwest is the ILEC, it charges for collocation power on a per amp basis and does not meter power in the way AT&T does in Illinois.[170] He also stated in his pre-filed testimony that it was unclear to him how Qwest makes the determination of what is actually used by the CLEC.[171] He claimed to have done extensive research attempting to determine how Qwest determines the

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[169] The ICA amendment also shows that upon taking a usage reading that is lower than the amount previously specified, Qwest will reduce the CLEC's monthly billing for collocation power accordingly.

[170] AT&T Ex. 5.1 at 21; Tr. 120.

[171] *Id.* at 22; Tr. 120.

CLEC's actual collocation power usage.[172] He then cited McLeodUSA's response to an AT&T data request to further substantiate that Qwest charges for collocation power consumption on a per amp basis:

> Q. Did McLeodUSA's responses to discovery offer more insight to how Qwest charges for power consumption?
>
> Yes. McLeodUSA's response to AT&T Illinois Data Request 2.07 says that "Qwest Corporation (12 states) bills collocation power on a per amp basis." [173]

However, as shown during the cross-examination of Mr. Smith, his quotation of McLeodUSA's response to AT&T Data Request 2.07 in his pre-filed testimony was incomplete – in addition to the portion of the response that Mr. Smith quoted, the remainder of the data request response stated: "See Schedule AT&T 1.06."[174] Thus, McLeodUSA's response to AT&T Data Request 2.07, which Mr. Smith selectively quoted in his pre-filed testimony in support of his position, pointed him directly to Qwest documentation that showed that Qwest (not the collocated CLEC) takes responsibility for taking readings at the CLEC's collocation in order to determine the CLEC's actual collocation power usage for billing purposes – a fact that Mr. Smith claimed to be unable to find out despite ostensibly conducting extensive research.

Further, although Mr. Smith claimed, despite having quoted most of McLeodUSA's answer to AT&T Data Request 2.07, not to have bothered to look at Schedule AT&T 1.06 that was expressly referenced in that answer,[175] it is hard to believe that he was not aware of Schedule AT&T 1.06. In the same piece of pre-filed testimony[176], Mr. Smith cited McLeodUSA's

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172 *Id.* at 22.

173 *Id*.

174 Tr. 122.

175 *See* Tr. 123.

176 AT&T Ex. 5.1.

responses to items 1.02, 1.09 and 1.20 of AT&T's First Data Request to McLeodUSA, and he attached to that pre-filed testimony as his Schedules RAS-10, RAS-11 and RAS 13, Schedules AT&T-1.02, AT&T-1.09 and AT&T-1.20, respectively, that McLeodUSA had provided in response to AT&T's First Data Request.[177]

Additionally, whether or not Mr. Smith had read this document, there is no dispute that AT&T itself had possession of the information. Mr. Smith was AT&T's witness on the topic of how CLECs' collocation power usage should be measured and billed. His proposals on these topics were not simply his personal opinion, but the positions of his employer, AT&T.[178] Thus, for foundation purposes admission of the document can be premised on the fact that the party whose position Mr. Smith was presenting, AT&T, had the document and should be charged with knowledge of its contents.

The ALJ also appeared to base his ruling on the premise that instead of attempting to introduce Schedule AT&T-1.06 into evidence through cross-examination of Mr. Smith, Joint CLECs should have done so in a subsequent round of pre-filed testimony responding to Mr. Smith's pre-filed rebuttal testimony, AT&T Exhibit 5.1.[179] That premise was incorrect. Under the procedural schedule originally established in this docket, the CLECs were not entitled to submit further testimony in response to AT&T's rebuttal testimony.[180] The ALJ subsequently allowed the CLECs to file surrebuttal testimony in response to a revised proposal presented in

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177 AT&T Ex. 5.1 at 31-34; Tr. 132-33.

178 For example, at the outset of his rebuttal testimony, in answer to the question "What is the purpose of your rebuttal testimony?", Mr. Smith stated "I also explain how *AT&T Illinois*" has responded to the testimony of the CLECs and Staff by modifying its position in several important ways", and "I . . . explain why *AT&T Illinois* has taken a reasonable position . . . ." AT&T Ex. 5.1 at 2-3 (emphasis supplied). The portion of his testimony to which McLeodUSA Cross exhibit relates starts with the question, "Did *AT&T Illinois* request information through discovery to determine how the Qwest ILEC charges for collocation power?" *Id*., at 21.

179 Tr. 127-28.

180 *See* Tr. 10 (Nov. 15, 2005).

AT&T's rebuttal testimony; however, that surrebuttal testimony was limited in scope to responding to pages 7-13 and Schedule RAS-4 of Mr. Smith's rebuttal testimony[181] and pages 21-22 of AT&T witness Nevels' rebuttal testimony[182], and thus did not encompass responding to pages 21-22 of Mr. Smith's rebuttal testimony.[183] In any event, the admission of an otherwise admissible exhibit should not be determined by whether it is offered as part of prepared testimony or in the course of cross-examination.

Further, admission of McLeodUSA Cross Exhibit 1 (specifically, Schedule AT&T-1.06) is consistent with and warranted by Section 200.670(c) of the Commission's Rules of Practice (83 Ill. Admin. Code §200.670(c)):

> Designation of Part of Document as Evidence. When relevant and material matter offered in evidence is embraced in a book, paper or document containing other matter not material or relevant, the person offering the same must plainly designate the matter so offered. . . All other parties and staff witnesses or their attorneys appearing at the hearing shall be afforded an opportunity to examine the book, paper or documents and to offer in evidence in like manner other portions thereof if found to be material and relevant.

Here, as shown above, Mr. Smith quoted a portion of McLeodUSA's response to AT&T Data Request 2.07 but omitted the reference in that response to Schedule AT&T-1.06. Under the circumstances, admission of Schedule AT&T-1.06, included in McLeodUSA Cross Exhibit 1, is consistent with Section 200.670(c).

Certainly, there is no question as to the relevance of McLeodUSA Cross Exhibit 1, as shown by the following discussion at Tr. 128:

> Mr. MacBride: Yes. I would make an offer of proof the document that's been marked as McLeodUSA Cross-Examination Exhibit No.1, which consists of McLeodUSA's response to AT&T Illinois data request 1.06 including Schedule

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181 AT&T Ex. 5.1.

182 AT&T Ex. 3.1.

183 *See* Tr. 52-53 (Mar. 17, 2006).

> AT&T 1.06 attached there too [sic]. This schedule is cited in another data request response that Mr. Smith quotes in his prepared testimony and it contains information that bears on the question that he said he was unable to determine through investigation, namely, how Qwest determines the amount of power that a collocation – that a CLEC uses at its collocation. This is relevant to one of the issues in this case because one of the issues in dispute is whether the CLECs should be required to take readings and submit their readings to AT&T or whether AT&T should be responsible for making this through whatever means.
>
> Judge Gilbert: I mean, I think its relevance is clear . . . You have exposed him for not having read the material and I think that's as far as you can go.[184]

The ALJ has indicated that one of the topics the parties should attempt to address in their briefs is what other state commissions have approved regarding collocation power for CLECs. It seems odd, therefore, that a document demonstrating how one of the other major ILECs in the U.S. provides for the measurement of collocation power it supplies to CLECs should be excluded from the record. And it is outrageous that AT&T would object to the Commission being apprised that one of the other major ILECs determines the collocation power usage of CLECs in its central office by taking readings of the CLEC's power usage.

For all the foregoing reasons, Joint CLECs respectfully request that the ALJ or the Commission reverse the evidentiary ruling discussed herein, and admit McLeodUSA Cross Exhibit 1 into the record.

VI. Conclusion

This case is about much more than whether AT&T's significantly revised tariff proposals, which continue to be a moving target, should be adopted. Instead, this case is about whether AT&T should be allowed to abandon its responsibility to operate an efficient and accurate methodology to ensure that CLECs are billed for power consumed. AT&T implemented the return side shunt architecture; waited for four years before taking any corrective

[184] Note that if McLeodUSA Cross Exhibit 1 is not admitted into the record, the record will not show what material it is that Mr. Smith failed to read.

action; and now wants to place the burden entirely on CLECs to measure and to report power consumption. The Commission must not lose sight of AT&T's inactions when determining how to resolve the perceived leakage problem.

Joint CLECs agree that AT&T needs to take action – but not the wholesale abandonment of the existing tariff structure proposed by AT&T. Joint CLECs urge the Commission to put the burden squarely on AT&T as it did in the Illinois 1998 Order to implement a methodology that will bill CLECs for power consumed. Joint CLECs have identified options that AT&T could and should implement without the need to make wholesale changes to the existing tariff. AT&T wants this Commission to believe that it has no other option – but the evidence from Joint CLEC witness Steve Turner demonstrates that AT&T has numerous, better options. The Commission should therefore reject AT&T's tariff revisions and order AT&T to fix the problem.

In the event that the Commission determines that it wants to give guidance to AT&T on how to "fix" AT&T's leakage problem, at the very least, the Commission should require AT&T to take the meter readings using whatever means AT&T seeks to employ, including the use of hand held meters. However, because AT&T caused the problem and has taken no corrective actions for 4 years, the CLECs should not have to bear any costs of taking power readings. The Commission's determination will enable AT&T to implement a straight-forward process that would not necessitate complex procedures for CLEC self-reporting, audits, or penalties.

Finally, if the Commission nonetheless concludes that a new procedure is required to ensure that CLECs are billed for power consumed, then it should adopt the Joint CLECs' modifications to AT&T's final tariff proposal. Of importance to the Joint CLECs is that the process be as efficient and workable as possible so that it can be implemented within normal business operations. AT&T's latest proposal is neither efficient nor workable, and instead will

add considerable cost to collocation. Joint CLECs should be allowed to provide the initial self-report within 180 days of the effective date of the tariff; that initial self-report would be supported by a physical read for each collocation arrangement. After that, however, for subsequent self-reports on existing collocation arrangements, the CLEC should be allowed to file on an annual basis that would not necessitate a physical site reading unless CLECs had an equipment change that necessitated a change in power. When the equipment change is made, then CLECs could provide a self-report and that revised report would be used as the basis for future billing. For new collocation arrangements, the time frame associated with providing the initial self-report should be tied to when the equipment is actually up and running; not an artificial time frame that may not account for a delay in installation of the equipment.

With respect to the audit procedure, A&T should be limited to one audit per year per collocation arrangement. Unlimited audits simply give AT&T the right to harass and to disrupt a CLEC's business. An even-handed approach would be to place reasonable limitation so that AT&T is required to make reasonable decisions about the number and frequency of the audits. In addition, the audit results should be provided to CLECs on a routine basis, instead of on the limited basis proposed by AT&T. Finally, if the audit results in a dispute in which the CLEC wins, then CLECs should not be forced to pay the costs of the audit. All of these changes are reflected in Joint CLECs' proposal and should be adopted.

In conclusion, the burden and responsibility of fixing its self-created problem should remain on AT&T, not the CLECs. For all of the reasons stated, herein, Joint CLECs respectfully request that the Commission reject AT&T's proposed tariff amendments (and all subsequent revisions) and to adopt Joint CLECs' recommendations.

May 2, 2006 Respectfully submitted,

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