00-155

# PUBLIC SERVICE COMMISSION OF WISCONSIN
## Memorandum

July 30, 2001

CR 00-155

**FOR COMMISSION INFORMATION**

TO: The Commission

FROM: Joyce S. Mahan
Office of General Counsel

RE: In the Matter of Rulemaking to Revise Wis. Admin. Code Chapter PSC 163, Telecommunications Utility Price Regulation, Regarding the Productivity Offset Factor 1-AC-193

An overriding legal question in this case is whether the productivity factor offset percentage can be adjusted every three years and raised by up to 1 percent in each of the three years, or whether it can be adjusted every three years and raised by up to 1 percent total over all three years.

Wis. Stat. § 196.196(1)(c)1. states:

> No earlier than 6 years after September 1, 1994, and no more frequently than every 3 years thereafter, the commission may, following notice and an opportunity for hearing, by rule increase or decrease the gross domestic product price index percentage offset by a maximum of one percentage point in any 12-month period to reflect any statewide changes in the productivity experience of the telecommunications industry.

In an easier to read "stripped down" version it reads:

> … no more frequently than every 3 years …, the commission may …increase or decrease the GDPPI percentage offset by a maximum of one percentage point in any 12-month period ….

The first step is to look at the plain language of the statute. On the one hand, Ameritech argues that this statutory language means only one adjustment can occur every three years and that the size of the adjustment can be no more than 1 percentage point. The crux of the question is the meaning and application of the phrase "in any 12-month period." Ameritech argues one interpretation, that the phrase permits multiple cumulative adjustments over time and that otherwise the statute could have been interpreted as permitting only a 1 percentage point adjustment total over time. On the other hand, one could argue that Ameritech's reading ignores or conflicts with the "in any 12-month period" language and that the statutory language means that the decision to adjust can only occur every three years, but that the adjustment decision every three years can be to adjust in more than one of the three upcoming years. Otherwise, why the focus on "any 12-month period?" Arguably, Ameritech's reading of the statute requires adding words to the statute such as: "..by a maximum of one percentage point in any *one of the three ensuring* 12-month period*s*." If, as Ameritech argues, the language only allows one increase every three years, the reference to a 12-month period is arguably meaningless.

If the Commissioners believe that one or the other above readings is the plain meaning of the statute, the analysis can end there. However, if the Commissioners believe the statute's language is ambiguous, the next step is to look at the legislative history. However, the legislative history is not relevant if the Commission believes the statutory language is clear. In that case, no matter what information is presented as the intent at the time the law was written, one must follow the language of the law.

Ameritech has supplied much of the legislative history for this statutory provision. The difficulty with this is that while the history indicates that some changes were viewed as necessary, the real question is what fix was done. If the intent of the fix was to say that more than one cumulative adjustment can be made over time, this was arguably a confusing and ineffective language choice. Of course, such language is generally submitted in the heat of negotiation, with little if any time to revise for precision. However, it is the choice of language that arguably leaves open the question of what change was actually made. It is possible that this language choice simply does not accomplish the clarification that Ameritech argues was intended.

There are two other considerations. First, in the 6/6/94 memo from the Legislative Fiscal Bureau it suggests that a couple of clarifications might be helpful. First it states the (then) proposed statutory language, and then it states:

> It is also unclear...whether the 1% adjustment limitation specified in the draft represents the maximum total adjustment which could ever be made to the 2% offset or whether the 1% adjustment limitation applies on a "per adjustment" basis so that, in theory, the entire 2% adjustment could be eliminated after two successive adjustments.

However, there is arguably a question as to what time period the writer is working from. It is at least arguable that since the adjustments being discussed involve a 3-year time period, that time period is assumed for purposes of the discussion. In that case, what may be being suggested is to clarify whether the 1 percent represents the maximum total adjustment that could be made ever over the time period at issue (3 years) or whether the 1 percent could be applied multiple times within the three years.

An additional piece of information is a 5/19/94 memo from Gary Evenson to the Legislative Council and Legislative Fiscal Bureau in response to their request for comments on a draft of an LFB memo. In Gary's memo he presents an understanding that the adjustments can occur annually:

> The Fiscal Bureau raises concerns about the adjustment to the offset for productivity used in the price regulation formula and specifically the annual adjustment that the PSC may make to the offset beginning in six years....The intent of the price regulation section was that the 1% adjustment would be the maximum in any year. If the bill is ambiguous to that effect, the PSC does not oppose a clarification.

There is no indication of any challenge to Gary's characterization.

## OPTIONS

Find that the language in s. 196.196(1)(c)1., Stats.:

1. Allows for an adjustment of up to 1% per year for three years.

2. Allows for an adjustment of up to 1% total over three years.

JSM:xxx:t:\rules\Productivity Offset Factor\step2\memo on percentage.doc

BEFORE THE

PUBLIC SERVICE COMMISSION OF WISCONSIN

| | |
|---|---|
| In the Matter of Rulemaking to Revise Wis. Admin. Code Chapter PSC 163, Telecommunications Utility Price Regulation, Regarding the Productivity Offset Factor | 1-AC-193 |

Clearinghouse No. 00-155

## PROPOSED ORDER ADOPTING RULES

The Public Service Commission of Wisconsin proposes an order to amend PSC 163.04(2)(b) and create PSC 163.04(2)(br) relating to the telecommunications utilities price regulation productivity factor.

## REPORT TO THE LEGISLATURE

Set forth herein as Attachment A.

## FISCAL ESTIMATE

This rule change has no fiscal impact. A completed Fiscal Estimate form is included as Attachment B.

## EFFECTIVE DATE

These rules shall take effect on the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22(2)(intro.), Stats.

## CONTACT PERSON

Questions from the media may be directed to Jeffrey L. Butson, Public Affairs Director at (608) 267-0912. Other questions regarding this matter should be directed to Christopher Larson, docket coordinator, at (608) 267-9508, or by email at *larsoc@psc.state.wi.us*. Hearing or speech-impaired individuals may also use the Commission's TTY number, (608) 267-1479.

The Commission does not discriminate on the basis of disability in the provision of programs, services, or employment. Any person with a disability who needs accommodations to participate in this proceeding or who needs to obtain this document in a different format should contact the docket coordinator listed above.

Dated at Madison, Wisconsin, ______________________________

By the Commission:

______________________________

Lynda L. Dorr
Secretary to the Commission

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Attachments

Docket 1-AC-193 Attachment A

## REPORT TO THE LEGISLATURE

### A. NEED FOR THE RULE

Section 196.196(1)(c), Stats., provides for the use of a productivity offset mechanism in determining the amount a price-regulated company may increase or shall decrease its rates for price-regulated services. Pursuant to this section, the first time the productivity offset may be changed is after September 1, 2000. Section PSC 163.04(2)(b) sets forth the factors the Commission may consider in determining any statewide changes in productivity. Under this rule, the Commission shall provide for a productivity study for the telecommunications industry in the state.

In docket 05-TI-174, Investigation of Telecommunications Utility Price Regulation Pursuant to §196.196(1)(g), Stats., the Commission found that a rulemaking proceeding should be initiated at this time to review the productivity offset.

### B. PLAIN LANGUAGE ANALYSIS

Statutory Authority: ss. 196.02(3), 196.196(1)(c), and 227.11, Stats.
Statutes Interpreted: s. 196.196(1)(c)1., Stats.

The objective of the proposed rule revision in this proceeding is to make those changes to s. PSC 163.04(2)(b) regarding the productivity offset factor deemed necessary as a result of a productivity study for the telecommunications industry in the state pursuant to s. PSC 163.04(2)(bm). Pursuant to s. PSC 163.04(2)(bm), each time the productivity factors are reviewed, the Commission shall provide for a productivity study for the telecommunications industry in this state. This study shall address the factors set forth in s. PSC 163.04(2)(b) plus additional evidence relative to a utility's ability to increase productivity in the future.

The proposed rule revisions interpret s. 196.196(1)(c)1., Stats., to mean that the Commission may, at this time, change the productivity offset by a maximum of one percent, effective immediately and for each of the next two years. The earliest the Commission could examine these factors again would then be three years after the effective date of this rule.

The productivity offset is currently either 2 percent or 3 percent, depending on the number of access lines a utility has when it elects price regulation. The rule revision increases the productivity offset to 3 percent or 4 percent on the effective date of the rule, to 4percent or 4.3 percent one year later, and to 4.3 percent for all price regulated utilities one year after that.

C. TEXT OF FINAL RULE

SECTION 1. PSC 163.04(2)(b)(intro.) is amended to read:

**PSC 163.04(2)(b)** ~~According to s. 196.196(1(c), Stats., the productivity factor offset to the Δ GDPPI shall be 2 percentage points. For a telecommunications utility with more than 500,000 access lines, the percentage offset shall be 3 percentage points.~~ Section 196.196(1)(c)1., Stats., sets the GDPPI percentage offset, but provides that ~~Beginning~~ beginning in the year 2000 and every 3 years thereafter, for the purpose of adjusting the GDPPI percentage offset~~, pursuant to s. 196.196(1)(c), Stats.,~~ to reflect any statewide changes in the productivity experience of the telecommunications industry, the commission may consider the following historical factors:

SECTION 2. A note following PSC 163.04(2)(b) is created to read:

**Note:** The percentage offsets were originally set at 3 percentage points for utilities with more than 500,000 access lines at the time of electing price regulation, and 2 percentage points for utilities with 500,000 or less access lines at the time of electing price regulation.

SECTION 3. PSC 163.04(2)(br) is created to read:

**PSC 163.04(2)(br)** Based on the most recent statewide productivity study, the productivity factor offset to the Δ GDPPI shall be:

1. For telecommunications utilities with 500,000 or less access lines at the time of electing to be price regulated:

a. 3 percentage points, effective on the effective date of this paragraph....[revisor inserts date].

b. 4 percentage points, effective one year after the effective date of this paragraph....[revisor inserts date].

c. 4.3 percentage points, effective two years after the effective date of this paragraph....[revisor inserts date].

2. For telecommunications utilities with more than 500,000 access lines at the time of electing to be price regulated:

a. 4 percentage points, effective on the effective date of this paragraph....[revisor inserts date].

b. 4.3 percentage points, effective one year after the effective date of this paragraph [revisor inserts date].

These rules shall take effect on the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22 (2) (intro.), Stats.

D. PUBLIC HEARING ATTENDEES

The following are the names of those who attended the public hearings and who submitted written comments concerning the proposed rule.

AMERITECH WISCONSIN
by
Mr. Michael Paulson
722 North Broadway
Milwaukee, WI 53202-4396

VERIZON NORTH INC.
by
Stacy Rodriguez
Carl Lian
Daniel Matson
Paul Verhoeven
P.O. Box 49
100 Communications Drive
Sun Prairie, WI 53590-0049

No modifications to the proposed rules were made as a result of the comments submitted in this proceeding. Comments of the parties are summarized in Attachment A1, together with the response from the Commission.

E. RESPONSE TO LEGISLATIVE COUNCIL REPORT

A copy of the Legislative Council's report, and responses to it, are included with this Report as Attachment A2.

F. FINAL REGULATORY FLEXIBILITY ANALYSIS

These rules may have an effect on small telecommunications utilities, which are small businesses under s. 196.216, Stats., for the purposes of s. 227.114, Stats., because they may elect to become price-regulated under s. 196.196(1), Stats., which would result in these rules becoming applicable to them. The agency has considered the methods in s. 227.114(2), Stats., for reducing the impact of the rules on small telecommunications utilities and finds that incorporating any of these methods into the proposed rules would be contrary to the statutory objectives which are the basis for the proposed rules. In addition, the election of price regulation under this chapter is voluntary, and more flexibility and less stringent compliance requirements for small telecommunications utilities are available in ss. 196.195 (12) and 196.196 (4), Stats.

There are 84 local exchange companies in Wisconsin, 77 of which are small telecommunications utilities. The agency finds that the availability of a voluntary price regulation election under s. 196.196, Stats., and the process set forth in this chapter to govern the price regulation election are in the public interest for all telecommunications utilities in the state.

## Comments and Responses

### Verizon North Inc.

**Comment:**

The proposed rule revisions are contrary to s. 196.196(1)(c)1., Stats., in that they assume that the productivity offset can be changed by 1 percent each year during the 3-year period between productivity studies. Productivity offset cannot change by more than 1 percent in any review period.

**Response:**

Construing the statute as Verizon suggests makes the statutory language "in any 12-month period" meaningless. The plain language of the statute allows the commission to act to adjust the productivity offset factor percentage every 3 years and to adjust it by 1 percent in each of the 3 years.

**Comment:**

The staff productivity study is fatally flawed because it violates the fundamental principles of price regulation and is inconsistent with sound economic theory. Rather than examine the productivity of the telecommunications industry as a whole, it examines company-specific cost and revenue data. For example, the staff study includes an adjustment for the estimated merger cost savings resulting from the GTE/ Bell Atlantic and Ameritech/SBC mergers.

**Response:**

Staff's study combines company-specific data from all local exchange companies in the state into a statewide examination of telecommunications industry productivity. This is required by s. PSC 163.04(2)(bm).

Verizon argues that it is inappropriate to consider company-specific merger savings in the productivity study. The code, however, allows such savings to be considered:

> …this study…shall address the above factors plus additional evidence relative to a utility's ability to increase productivity in the future. [s. PSC 163.04(2)(bm)].

Verizon argues that consideration of merger savings would violate a fundamental principle of price regulation by penalizing efficient companies. It claims that the fundamental principle of price regulation is to sever the link between a regulated company's cost and prices. Contrary to Verizon's assertion, use of the staff study would not recapture all of the merger savings by any means. The productivity factor established in this proceeding will apply to only price regulated services, which account for less than 20 percent of Ameritech's total operating revenues, and less than 30 percent for Verizon. Ameritech and Verizon are therefore able to retain 70 to 80 percent of their productivity gains as additional net income.

In addition, Ameritech and Verizon would retain the excess of their productivity gains over the statewide average. Staff's study uses an average statewide productivity estimate, so that estimated merger savings are averaged in with the other incumbent local exchange companies in the state. There is no doubt that merger-related productivity gains are a part of the overall productivity changes experienced by the telecommunications industry in this state.

**Comment:**

The staff study is incomplete and unsupported. The staff study excludes several items normally included in net investment rate base because the data was not readily available or such data would have made an immaterial difference.

**Response:**

Excluding items because the data was not readily available, or because inclusion would have made an immaterial difference, are routine problems that are encountered in any similar study. In this case, staff excluded data related to plant under construction and deferred income taxes. In any study, one needs to use the best information available at the time of the study. Since certain information was not available for all companies or reported information was not consistent from year-to-year, staff determined that the data related to plant under construction and deferred income taxes was flawed and any study based on such data would be flawed. Regarding the materiality question, staff excluded data related to materials and supplies and RTB Class B Stock. Such data was considered by staff to be immaterial to this productivity study. To be efficient in the completion of any study, there needs to be materiality limits. Without materiality limits, time would be wasted reflecting factors that would have no impact on the results of the study.

**Comment:**

Verizon North's study reflects price regulation theory. Verizon conducted several separate productivity studies based on well-accepted economic principles. Based on Verizon's studies, the productivity offset factor should be 0.77 percent. However, due to statutory limitations, the productivity offset factor should be reduced to 1 percent or, at least maintained at the current 2 percent.

**Response:**

While the applicable statutes and rules allow a good deal of flexibility in determining an appropriate productivity factor, the requirement to examine statewide data is clear:

> …the commission may…(change the productivity offset)… to reflect any statewide changes in the productivity experience of the telecommunications industry.[s. 196.196(1)(c)1., Stats.]

> Each time the productivity factors are reviewed, the commission shall provide for a productivity study for the telecommunications industry in this state. [s. PSC 163.04 (2)(bm)]

Regardless of any arguments about the theoretical validity of different methodologies, the Commission's use of Verizon's study would be unlawful, because it uses national measures of productivity rather than statewide measures.

The Commission discussed hiring an outside firm to conduct a study. Due to budgetary and time constraints, Ameritech and Verizon were asked to agree to be directly billed by a Commission-approved consultant. (The statute provides for price-regulated companies to pay for this study.) Both companies declined. As a result, staff performed its own study using the best available information.

**Ameritech Wisconsin**

**Comment:**

Has not done an independent total factor productivity study for statewide telecommunications industry in Wisconsin, so did not comment on the results of the study.

**Comment:**

Recommends that Commission reject the proposed rule to the extent that it increases the productivity offset by more than 1 percent over the next three years. Believes that the legal conclusion embodied in the proposed rule contradicts s. 196.196(1)(c)1., Stats., by attempting to adjust the productivity offset three times over the next three years.

**Response:**

Construing the statute as Ameritech suggests makes the statutory language "in any 12-month period" meaningless. The plain language of the statute allows the commission to act to adjust the productivity offset factor percentage every 3 years and to adjust it by 1 percent in each of the 3 years.

Attachment A2

## **Response to Report from Legislative Council**

*2. Form, Style and Placement in Administrative Code*

a. Agree. Suggested change done.

b. Agree. Suggested changes done.

c. Agree. Suggested change done.

d. Agree. Suggested change done.

e. Agree. Suggested change done.

f. Agree. Suggested change done.

*4. Adequacy of References to Related Statutes, Rules and Forms*

a. Agree. Suggested change done.

b. Agree. Suggested change done.

Attachment B

**2001 Session**

LRB or Bill No./Adm. Rule No.

Amendment No. if Applicable

# FISCAL ESTIMATE

DOA-2048 N(R10/96)

X ORIGINAL ☐ UPDATED

☐ CORRECTED ☐ SUPPLEMENTAL

**Subject**

In the Matter of Proposed Revision for a Rulemaking of Wis. Admin. Code Chapter PSC 163 Telecommunications Utility Price Regulation, Regarding the Productivity Offset Factor

**Fiscal Effect**

State: X No State Fiscal Effect

Check columns below only if bill makes a direct appropriation or affects a sum sufficient appropriation.

☐ Increase Existing Appropriation ☐ Increase Existing Revenues

☐ Decrease Existing Appropriation ☐ Decrease Existing Revenues

☐ Create New Appropriation

☐ Increase Costs - May be possible to Absorb Within Agency's Budget ☐ Yes ☐ No

☐ Decrease Costs

Local: X No local government costs

1. ☐ Increase Costs ☐ Permissive ☐ Mandatory
2. ☐ Decrease Costs ☐ Permissive ☐ Mandatory
3. ☐ Increase Revenues ☐ Permissive ☐ Mandatory
4. ☐ Decrease Revenues ☐ Permissive ☐ Mandatory
5. Types of Local Governmental Units Affected: ☐ Towns ☐ Villages ☐ Cities ☐ Counties ☐ Others ______ ☐ School Districts ☐ WTCS Districts

**Fund Sources Affected**

☐ GPR ☐ FED ☐ PRO ☐ PRS ☐ SEG ☐ SEG-S

**Affected Ch. 20 Appropriations**

**Assumptions Used in Arriving at Fiscal Estimate**

Section 196.196(1)(c), Stats., provides for the use of a productivity offset mechanism in determining the amount a price-regulated company may increase or shall decrease its rates for price-regulated services. According to this section, the productivity factor offset to the change in the gross domestic product price index (GDPPI) shall be 2 percentage points. For a telecommunications utility with more than 500,000 access lines, the percentage offset shall be 3 percentage points. Pursuant to s. 196.196(1)(c), Stats., the first time the productivity offset may be changed is after September 1, 2000. Section PSC 163.04(2)(b) sets forth the factors the Commission may consider in determining any statewide changes in productivity.

The objective of the proposed rule revision in this proceeding is to make those changes to s. PSC 163.04(2)(b) regarding the productivity offset factor deemed necessary as a result of a productivity study for the telecommunications industry in the state pursuant to s. PSC 163.04(2)(bm). Pursuant to s. PSC 163.04(2)(bm), each time the productivity factors are reviewed, the Commission shall provide for a productivity study for the telecommunications industry in this state.

These proposed rule revisions are considered minor in nature and should not require a change in staffing needs or any other changes in costs. Therefore, no fiscal impact is expected.

**Long-Range Fiscal Implications**

**NONE**

| Agency/Prepared by: (Name & Phone No.) | Authorized Signature/Telephone No. | Date |
|---|---|---|
| Gordon Grant/608-267-9086 | | January 26, 2001 |

SBC Ameritech

# Memorandum

To: Members of Senate Health, Utilities, Veterans and Military Affairs Committee

From: Holly Reed

Re: Productivity Rulemaking (1-AC-193)

Date: November 6, 2001

The PSC recently completed a review of the productivity factor used in Wisconsin's price cap formula. (The formula is used to determine how much price-regulated telecommunications utilities can raise or must lower rates for basic local exchange service to residential and small-business customers.) The productivity factor estimates changes in a company's productivity and is one part of the formula that affects rates for price-capped services.

When the price cap formula first went into effect in 1994, SBC Ameritech's annual productivity factor offset was set at 3%, and Verizon's was set at 2%.

As part of its recent statutory review of the productivity factor, the PSC staff conducted a study that concluded that price-regulated telecommunications utilities would see a 4.3% productivity increase over the next three years. In contrast, a study Verizon commissioned determined that productivity would increase 0.77%.

The studies differ in part because of the criteria each considered. The PSC staff study focused on the historical financial performance of Wisconsin telcos from 1996 – 1999, boom years for the Wisconsin economy. The Verizon study, conducted by economist Dr. Greg Duncan, was based on economic conditions in the U.S. that drive the economy. Because of the different approaches, the results from the two studies represent opposite ends of the spectrum on this issue.

The two studies do share a common factor – because of their timing, the studies do not explicitly reflect the increase in competition and decreasing business demand – and related loss in revenues – which SBC Ameritech has seen recently.

Also, the studies focus on historical economic data at a time when most economists today, looking at information from 2001, are predicting a slowdown in the telecommunications industry and U.S. economy. Given the recent downturn, telecom companies are unlikely to see a prospective 4.3% annual increase in productivity.

**With economic conditions in flux, retaining the current productivity factor (3% for Ameritech) for three more years would give the PSC time to conduct a more complete study that would reflect the changing economic climate in Wisconsin.**

Adopting the 4.3% factor now would impose new downward pressure on rates, which have dropped or remained frozen every year since 1994. Such an action now should be avoided, specifically at this time because:

- Most economists are predicting that the economy is headed into a recession – this is not the time to further drive down rates.
- The telecommunications industry as a whole has announced widespread force reductions – additional revenue reductions will only make this situation worse.
- The productivity increase would reduce basic residential rates, greatly decreasing the incentive for competitors to serve residential customers – the further these rates are driven down, the less likely robust competition will ever enter the marketplace.

In addition, an increase in the productivity factor at this time would reduce the taxes paid to the State of Wisconsin and other levels of government as taxable revenues decrease. **For SBC Ameritech alone, the 4.3% factor if adopted would reduce customer sales tax and corporate income tax revenues to the State of Wisconsin by nearly $1 million over the next three years.** This estimate does not include additional tax losses to the state from Verizon customer sales taxes and corporate income taxes.

**Given the current economic climate and expected downturn into at least 2002, the committee should consider suggesting that the PSC take into account the recent economic situation and reschedule until 2004 the possibility of changing the productivity factor.** At that point, it would be prudent for the PSC to perform an economic productivity study for the Wisconsin telecommunication industry.

**Committee on Health, Utilities, Veterans & Military Affairs**
**November 7, 2001**
Clearinghouse Rule 00-155

**Richard Bohling**
**Verizon**

Senator Moen and committee members my name is Richard A. Bohling and I represent Verizon Communications, a price regulated telecommunications provider. With me today is Dr. Gregory M. Duncan, a consultant to Verizon who is an economist with expertise in the area of conducting valid productivity studies. He will address you on those technical issues.

But first I would like to summarize the objections that Verizon has to the proposed changes to Administrative Rule PSC 163 that is before you today.

This proposed rule arises out of the rate change section of the telecommunications price regulation statue. Statute 196.196 established a formula that includes a productivity factor differential between telecommunications utilities with more than 500,000 access lines and those with less than 500,000 access lines. "No earlier than 6 years after September 1, 1994, and no more frequently than every 3 years thereafter, the commission may, following notice and an opportunity for hearing, by rule increase or decrease the [productivity factor] by a maximum of one percentage point in any 12-month period to reflect any statewide changes in the productivity experience of the telecommunications industry" Wis. Stat. 196.196 (1)(c). The Public Service Commission of Wisconsin rule before you purports to implement this statute, but it fails. It fails for three reasons.

1. First the Commission has failed to follow the statutory requirement that any changes to the productivity offset "reflect any statewide changes in the productivity experience of the telecommunications industry". The Commission purported to conduct a productivity study to determine if there were any statewide changes in the productivity experience of the telecommunications industry. A productivity study is a reasonable tool to make this determination. However, the Commission staff's analysis falls far short of a productivity study. The Commission failed to conduct a valid productivity study in this instance, and as a result the proposed rules using the Commission's revised productivity offset factor from this study are flawed. Dr. Gregory Duncan will address this issue more directly by showing why the Commission's position is flawed.

2. We also believe that the Commission's proposed rule fails to maintain the statutory difference in the productivity factor offset between telecommunications providers with 500,000 access lines or less and those with more than 500,000 access lines as established in Ch 196.196 (1) (c) 1 and 2 of the Wisconsin statutes.

This statutory difference is shown on the top half of Exhibit 1. Currently, as the Exhibit shows, for telecommunications utilities with 500,000 access lines or less, the productivity factor offset is 2% versus 3% or, 2/3 of the productivity factor offset for telecommunications utilities with more than 500,000 lines. This statutory difference must be maintained. After a valid productivity study is performed, for telecommunications utilities with 500,000 access lines or less, the productivity factor must be 2/3 of the offset for telecommunications utilities with more than 500,000 lines. If it is not, the harm to telecommunications utilities with 500,000 access lines or less is shown on the lower half of Exhibit 1. As it indicates, given equal circumstances for both types of telecommunications utilities, those with 500,000 lines and under would be penalized by a required rate decrease while those with more than 500,000 would be rewarded with a rate increase. This is not what the legislature intended. At the time that Wisconsin ACT 496 was passed this difference was discussed extensively and the reason for the statutory difference was to allow for rural versus urban differences.

3. It is also our position that the Commission has incorrectly interpreted Wis. Stat. 196.196 (1)(c), which provides that the Commission may change the productivity factor after September 1, 2000, "no more frequently than every 3 years" and then only by 1 %. In other words, the legislature intended for any change of the offset after September 1, 2000, up to a maximum of 1%, to be made once every 3 years. The proposed rule is inconsistent with that intent. First, the Commission has instituted a rule that provides for more than one increase to the offset in the three-year period. Second, the proposed rule provides for multiple increases to the offset during the three-year period of up to 2.3% instead on 1%. The proposed Commission rule should follow the intent of the statute.

Now Dr. Gregory Duncan will take just a few minutes to explain why the analysis the Commission used as its basis does not meet the statutory requirement to "reflect any statewide changes in the productivity experience of the telecommunications industry". *Wis. Stat. 196.196 (1) (c)*

**Dr. Gregory Duncan Comments**

There is one other issue that must also be addressed. The PSC staff made a comment in its transmittal of the proposed rule about a proposal for the Staff to unilaterally hire a consultant and asked that Ameritech and Verizon pay the consultant directly.

The Commission's own rules reflect the requirement that a study be conducted. PSC 163.04 (2) (bm) provides that "Each time the productivity factors are reviewed, the Commission shall provide for a productivity study for the telecommunications industry in this state". The Commission chose not to hire an outside consultant to perform a valid productivity study and to not use its authority to assess price-regulated companies for this study after it is completed. Instead, the Commission settled for a process performed by its staff. The following testimony is taken from the December 6, 2000 Commission hearing record regarding this rulemaking proceeding when the staff was asked what methodology was used in their study. It says, *".....I worked off of my memory of some of the work that was performed in those prior dockets. The studies were performed a long time ago. I don't know if we still have the records of them. I did not refer to any written records of prior studies."* We do not believe that is even close to what is required by the statute for a valid study.

Therefore, today we respectfully request that your Committee return these rules to the Commission with instructions to revise the proposed rules to reflect the statutory difference between providers with under 500,000 access lines and those with more than 500,000 access lines. Further, the Commission should be instructed to complete a productivity study performed in compliance with the statute to accurately reflect productivity changes. And finally, the Commission should be instructed to follow the intent of the statute so that any change to the productivity offset is made only once every 3 years up to a maximum of 1%.

Thankyou for receiving our comments and we would be glad to take any questions that you may have.

## Exhibit 1

### Current Statutory Differences in 196.196(1)(c)

| Telecommunication utilities with 500,000 lines or less | | Statutory Difference | Telecommunication utilities with more than 500,000 lines | |
|---|---|---|---|---|
| Change in Gross Domestic Product Price Index | X.XX% | | Change in Gross Domestic Product Price Index | X.XX% |
| Less: Productivity Factor Offset | -2.00% | is 2/3 of >>>> | Less: Productivity Factor Offset | -3.00% |
| Quality of Service Penalty | -1.00% | is 1/2 of >>>>> | Quality of Service Penalty | -2.00% |
| Plus: Infrastructure Investment Incentive | 1.00% | is 1/2 of >>>>> | Plus: Infrastructure Investment Incentive | 2.00% |
| Allowed rate increase or required decrease | X.XX% | | Allowed rate increase or required decrease | X.XX% |

### Example of Effects of Proposed Rule PSC 163.04(2)(br)
**Best Case Scenario**
**Two Years after Effective Day of Rule**

| Effect on Telecommunication utilities with 500,000 lines or less | | Proposed Rule Difference | Effect on Telecommunication utilities with more than 500,000 lines | |
|---|---|---|---|---|
| *Forecasted Change in Gross Domestic Product Price Index - 4th qtr | 2.57% | | *Forecasted Change in Gross Domestic Product Price Index - 2nd qtr | 2.53% |
| Less: Productivity Factor Offset | -4.30% | no difference> | Less: Productivity Factor Offset | -4.30% |
| Quality of Service Penalty (Assume no penalty; -1% max) | 0.00% | is 1/2 of >>>>> | Quality of Service Penalty (Assume no penalty; -2% max) | 0.00% |
| Plus: Infrastructure Investment Incentive (Assume 100% attained) | 0.80% | is 1/2 of >>>>> | Plus: Infrastructure Investment Incentive (Assume 100% attained) | 1.60% |
| Commission Discretion (Assume 100% attained) | 0.10% | is 1/2 of >>>>> | Commission Discretion (Assume 100% attained) | 0.20% |
| **Required rate decrease** | **-0.83%** | | **Allowed rate increase** | **0.03%** |

*The actual change in GDPPI may be different from what is shown, however, this would not change how the proposed rule affects telecomm. utilities with 500,000 lines or less as compared to telecomm. utilities with more than 500,000 lines.

# PSC Proposed Increase to Productivity Offset for Price Regulated Telecommunications Utilities

CR 00-155
Christopher Larson, CPA
Auditor
Public Service Commission of Wisconsin

# Price Regulation Formula for Basic Services

- Average rates for basic services may change by: GDPPI – PO + INC – PEN
  - GDPPI = Annual change in the Gross Domestic Product Price Index
  - PO = Productivity offset (a.k.a. GDPPI percentage offset) of 3% for Ameritech, 2% for Verizon
  - INC = Up to 2% incentive for Ameritech infrastructure investment (1% for Verizon)
  - PEN = Up to 2% penalty for Ameritech infrastructure or service quality (1% for Verizon)

# Revenues Subject to Price Regulation

## ($ Millions)


| | Ameritech Wisconsin | Verizon |
|---|---|---|
| Total Intrastate Revenue | $1,054 | $329 |
| Price Regulated Local Revenues | $219 | $78 |

# Wis. Stat. s. 196.196 (1)(c)

- No earlier than 6 years after September 1, 1994, and no more frequently than every 3 years thereafter, the commission may, following notice and an opportunity for hearing, by rule increase or decrease the gross domestic product price index percentage offset by a maximum of one percentage point **in any 12-month period** to reflect any **statewide changes** in the productivity experience of the telecommunications industry.

# Productivity Basics

- Measured by rate of change of outputs, compared to rate of change of inputs
- Telecommunications industry historically more productive than overall economy
- Price regulated companies can increase profits by being more productive than average Wisconsin telecommunications utility

# Wis. Admin. Code
# s. PSC 163.04 (2) (b)

- …for the purpose of adjusting the GDPPI percentage offset…the commission may consider the following historical factors:
  - Sales volumes
  - Labor
  - Materials
  - Rent
  - Services
  - Other expenses
  - Plant-in-service
  - Cost of capital
  - Any other data relevant to measuring productivity

# Docket 1-AC-193 Timeline

| | |
|---|---|
| PSC completes productivity study | September 1, 2000 |
| Notice of rulemaking hearing issued | November 1, 2000 |
| Rulemaking hearing held | December 6, 2000 |
| Comments filed | December 11-12, 2000 |
| PSC approves proposed order adopting rules and submits to legislature | October 11, 2001 |

# PSC Proposed Order Adopting Rules

- Pending rulemaking (1-AC-193) proposes increase to 4.3% for all companies
- Based on PSC's statewide productivity study

# Docket 1-AC-193 Comments from Ameritech & Verizon

- PSC productivity study is inconsistent with sound economic theory
- Verizon's study reflects price regulation theory
  - PSC response: PSC productivity study is theoretically sound, and consistent with requirement for statewide productivity study, as opposed to Verizon's subsequently-filed national study. PSC attempts to perform a more sophisticated study were thwarted by companies' refusal to be directly billed.
- Proposed increase of more than 1% over 3 years is unlawful
  - PSC response: PSC interprets plain language of statute to allow 1% change in each year.

# PSC Productivity Study

- Used financial data filed by all 84 Wisconsin local exchange companies
- Used Wisconsin-only data, as required by law

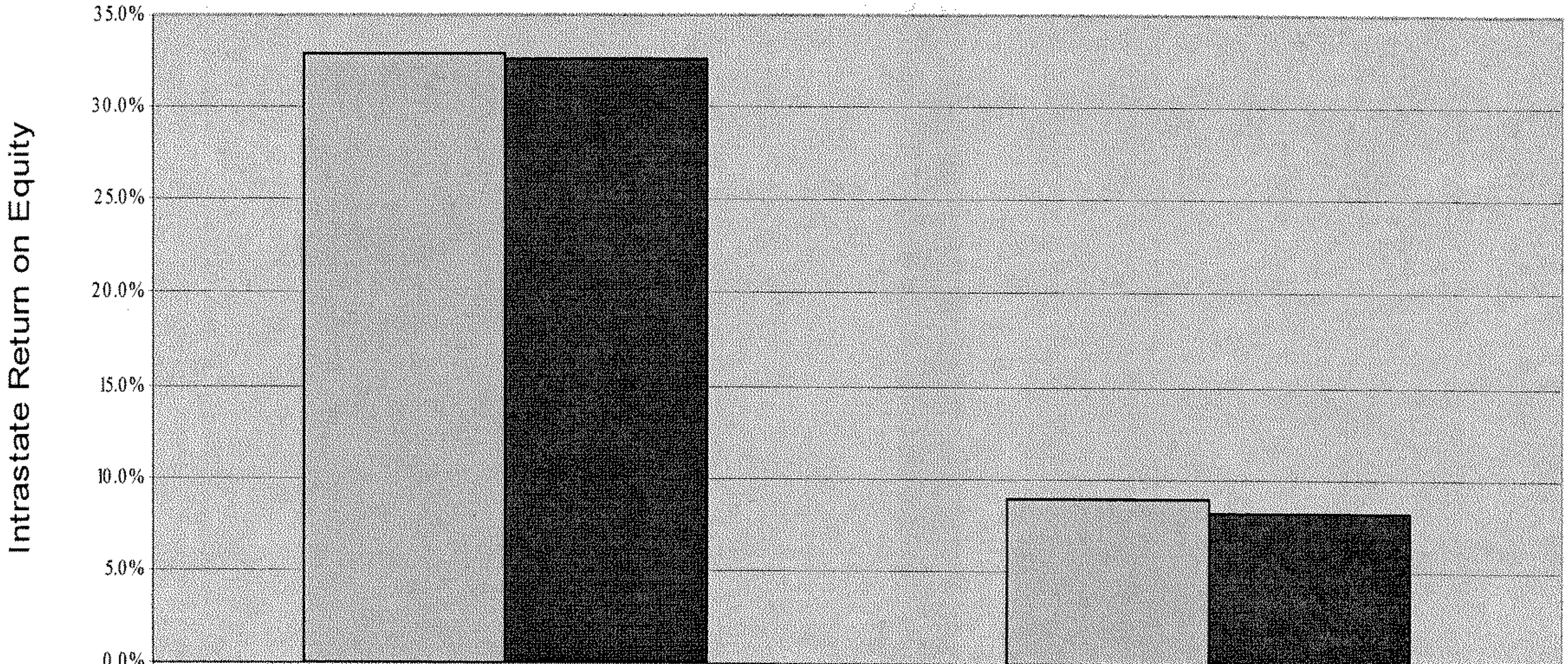
# PSC Productivity Study (cont.)

- Calculated 1996-1999 changes in price-adjusted revenues, inflation-adjusted expenses, and capital compensation
- Capital compensation defined as depreciation and return on investment
- Adjusted for estimated efficiencies resulting from Ameritech-SBC and GTE-Bell Atlantic mergers

# PSC Productivity Study (cont.)

- Forecasts productivity at 4.3% for 2000-2002
- No significant variation between large and small companies

# Pro-Forma Impact of PSC Proposal on 2000 Profits




| | Ameritech | Verizon |
|---|---|---|
| Actual | 32.9% | 8.9% |
| Adjusted | 32.5% | 8.2% |

# Telecommunications Industry Productivity According to Other Jurisdictions and Studies

- 6.5% Federal Communications Commission
- 4.3% Illinois Commerce Commission
- 1.0% Michigan Public Service Commission
- 3.0% Public Utilities Commission of Ohio
- 3.0% Delaware Public Service Commission
- 2.0% New Jersey Public Utilities Board
- 6.8% Ameritech Wisconsin 1995-1998 per TFP study performed by Trevor Roycroft, Ph.D., Ohio University

**Testimony of Dr. Gregory Duncan**
**Sr. Vice President**
**National Economic Research Associates, Inc.**
**NERA**

**On Behalf of**
**Verizon Communications**

**In opposition to Clearinghouse Rule 00-155**
relating to Wisconsin Administrative Code
Chapter PSC 163

**Committee on Health, Utilities, Veterans & Military Affairs**
**November 7, 2001**
Clearinghouse Rule 00-155

## INTRODUCTION AND SUMMARY

1. My name is Gregory M. Duncan and I am a Senior Vice President of National Economic Research Associates, Inc. or NERA and a faculty member of the Economics Department at the University of California Berkeley. I have a Master's degree in Statistics and a Ph.D. in Economics, both from the University of California, Berkeley. Over the course of my career, I have taught courses in economics and statistics at Northwestern University and Washington State University. I also was a Staff Scientist at GTE Laboratories specializing in economic issues.

2. The traditional form of regulation for local exchange telephone rates used to be rate of return, which limited or "capped" a carrier's profits. Today, it is price regulation, which caps *prices* not *profits*. Carriers typically are permitted to adjust their prices periodically based on well-defined measures. The measures used to determine how a carrier must adjust its prices (raise or lower them) usually are the change in some measure of inflation (the GDPPI or the CPI) over time minus changes in productivity (a comparison of the goods and service produced with the inputs used in production) over time. The change in productivity over time is commonly referred to as the productivity factor, the productivity offset, or the "X factor."

3. Wisconsin Statutes provide for the use of a productivity offset in order to determine the amount a price-regulated company may change its rates for price-regulated services. The Wisconsin Administrative Code requires the Public Service Commission of Wisconsin to provide for a productivity study each time the productivity factor is reviewed. In September 2000, the Commission staff produced a study, which I will call the Staff Study. Although well intentioned, the staff chose to ignore standard methods of measuring productivity and instead created a new method. Verizon North asked me to review the Staff Study to determine if it was based on sound economic principles. I was also asked to discuss the economic impact of the flaws in the Staff Study and to propose an alternate methodology that better captures the effects of productivity improvements.

4. Based on my review, I have found that the staff's approach resembles no accepted productivity measure and utterly fails to capture statewide variations in productivity. Specifically, it has problems in both concept and application, and overestimates attainable productivity. Adopting this method will have deleterious economic consequences for the State of Wisconsin. Specifically, telecommunications investment may be reduced by as much as 33 percent, which would result in a decline of 15 percent in Wisconsin economic activity.

5. My recommendation to the Commission was and is that it should not implement the 4.3 percent productivity offset produced by its staff's new method in its rulemaking on telecommunications utility price regulation. Instead, the Commission should adopt a

productivity offset around 0.77 percent, which is calculated using standard productivity measurement techniques and sound economic principles.

## PRICE REGULATION

6. The regulation of prices, as opposed to profits, is well understood. The Interstate Commerce Commission, the Federal Communications Commission, the Bureau of Labor Statistics, the Bureau of Economic Analysis, the Federal Energy Regulatory Commission, and state utility commissions have been relying on price regulation for many years. Price regulation is a simple concept: initial prices are set by a regulator usually based on existing prices and revenues. These prices may be frozen for a period-of-time and then periodically adjusted or adjustments can be allowed to take effect immediately at the next rate adjustment interval.

7. Currently, there are over 40 states with some form of price regulation. More than 25 states have had or currently have an indexed price cap plan (a plan tied to a particular measure of inflation). Most of these indexed price cap plans specify that prices for baskets (categories of goods or services) be constrained by a price cap index or "PCI," which is nothing more than an adjustment factor that is applied to the current year's rates to obtain the next year's rates. The PCI is calculated using a "price cap formula," which may be as simple as an inflation index (such as GDPPI or CPI), or which may be more complex, involving a productivity factor, and adjustments for exogenous costs and service quality.

8. Almost every state with an indexed plan uses a price cap formula that subtracts the change in productivity from the change in inflation. That is, prices are adjusted according to the percentage change in the national rate of inflation and the expected change in productivity.

9. The FCC's 1990 price cap formula, for instance, was □GNPPI-X+/–Z where X was based on two productivity studies (Frentrup-Uretsky a short-term study of LEC switched access rates in the tariff years 1984-1990 and Spavins-Lande a long-term study encompassing 1928-1989) and Z represented exogenous costs or costs outside the control of the carrier usually caused by regulation or legislation. In 1995, the FCC changed from GNPPI to GDPPI. In 1997, when establishing a permanent X factor, the FCC changed its method of calculating X by migrating from an historical-based offset to a Total Factor Productivity or TFP-based factor and incorporating an input price differential. The X factor as calculated by the FCC includes not only industry-specific indexes, but economy-wide indexes.

10. TFP, a methodology commonly used to measure productivity growth in the economy as a whole, measures productivity as the ratio of an index of outputs (physical units or things such as minutes-of-use or calls) of an industry to an index of its inputs (labor, materials, and capital services). Changes in this ratio over time produce a measure of productivity growth. The ICC was probably the first agency to use a TFP-based method when it established the Rail Cost Adjustment Factor for the railroad industry. The BLS also uses a TFP-based methodology for calculating its annual multifactor productivity statistics for certain industries.

11. Output prices also can be used to measure an industry's productivity, as they will reflect a change in the price paid for services. Over time, the rate of the change in an industry's prices, net of the rate of change in its input prices, will equal the rate of change in its costs given the rate of technological change. National inflation, expressed using either the CPI or the GDPPI, represents the average growth of output prices of US firms, which embodies the rate of growth of US productivity. To find an appropriate productivity factor for a regulated industry alone, you need the growth differential between the annual growth of the regulated industry and the US economy. The BLS produces a monthly index on the change in prices for local, intrastate toll, and interstate toll telecommunications services relative to a base year. Aggregating these indexes by each service's share of revenues in the industry allows you to develop a telecommunications industry index representative of those services under price cap regulation.

## PROBLEMS WITH THE STAFF APPROACH

12. First, the staff develops a new and novel approach that resembles no accepted productivity measure and utterly fails to capture statewide variations in productivity. In other words, it does not accurately reflect statewide changes in the productivity experience of the telecommunications industry.

13. Second, it is standard practice for statewide productivity offsets to be calculated net of economy-wide productivity; otherwise, national effects are mixed in with statewide effects. To obtain the stand-alone state effect, the national effect must be removed from the equation. The staff fails to do this. Consequently, its estimated productivity offset is approximately 1.15 percent too high based on this one error.

14. Third, contrary to the staff's approach the gains from specific cost reducing activities, as opposed to long run processes of technological improvement, should never be included in productivity studies. This is because true productivity studies automatically capture these effects. It also is contrary to the intent of price regulation to identify these types of actions on the part of the firm and include them, positively or negatively, in the price cap index. Price regulation is only effective if it severs the relationship between the price mechanism and any specific action of the firm. No firm rationally takes identifiable cost reducing actions if it knows the gains will be taken away. By including merger savings in its calculation of the productivity offset, the staff turned the intended price regulation mechanism into a form of profit regulation; the very kind of regulation the legislation was enacted to eliminate. Had the staff performed a true productivity study, the effects of the merger would have been reflected *naturally* but not specifically in the measure. Inclusion of this erroneous term increases the staff's offset by around 1.35 percent.

15. Fourth, I worry that some of the data used by the staff for its analysis, particularly those for costs, are accounting allocations of firm-wide data. They are not and cannot be state specific because they relate to the operation of the entire firm. They are simply accounting conventions. Changing these conventions would erroneously change an assessment of productivity while the productivity of the firm and the Wisconsin experience of that

productivity would remain unchanged. Ignoring them is not a solution because they contribute to overall productivity.

16. Although I do not support the staff's method, I corrected the errors in the Staff Study for the TFP calculation and the merger savings removal. The result I obtained was a productivity offset of 1.8 percent. This number is close to the range of numbers I obtained using traditional methods. The table below summarizes this point:

| Study | Formula | X Factor Estimate |
|---|---|---|
| Original Staff Study | $X=\square TFP_{LEC}$ | 4.3% |
| Staff study corrected for economy wide productivity change | $X=(\square TFP_{LEC}-\square TFP_{US})$ | 3.1% |
| Staff study corrected for merger saving adjustment | No change | 1.8% (cumulative) |
| NERA study using the FCC's TFP method | $X=(\square TFP_{LEC}-\square TFP_{US})$ | 0.43%-1.16% |
| NERA study using the Output-Price Method | $\frac{\dot{P}_{US}}{P_{US}} - \frac{\dot{P}_{tel}}{P_{tel}} = X$ | 0.43%-0.85% |
| NERA study using an ARIMA forecast | Output-Price Equation using Autoregressive Integrated Moving Average | 0.77% |

## ECONOMIC CONSEQUENCES OF TOO HIGH AN OFFSET

17. The consequences of using a number that is too high and unrelated to productivity are dire, especially in these times. Fewer competitors will enter Wisconsin because they would have to match the ILECs' prices in order to compete, but there is insufficient margin for them to do this and be able to recover their investment in a timely fashion. They will opt to enter markets in other states where higher profits are achievable.

18. There likely will be reduced telecommunications investment in Wisconsin as incumbent and existing competitive carriers have very little incentive to invest in new infrastructure. I asked Dr. Mark Thoma, an econometrician at the University of California, San Diego, to share some preliminary results of a paper he and I are working on. Our preliminary analysis suggests that for every one point increase in the allowed X factor, or productivity offset, statewide investment in telecommunications infrastructure will fall about 10 percent. If the X factor is 3 points too high, as I claim it is, then investment will be about a third less than what it would otherwise be.

19. This reduced investment in the telecommunications sector, in turn, adversely affects economic growth in other industries in Wisconsin. My distinguished colleague, Professor Leonard Waverman and a coauthor, published the results of research on investment in telecommunications and economic well being in a recent American Economic Review paper entitled "Telecommunications Infrastructure and Economic Development: A Simultaneous Approach." They report that a 1 percent decrease in investment in

telecommunications leads to a 0.45 percent to 0.75 percent reduction in economic activity as measured by Gross State Product. Using the smaller of these numbers, a 33 percent reduction in telecommunications investment will lead to a decrease in economic activity of approximately 15 percent.

## CONCLUSION

20. The table above clearly demonstrates that the methodology in the Staff Study produces too high of a productivity offset, the economic consequences of which are severe and likely would lead to a significant reduction in market entry by competitive carriers. Quite simply, if prices for local telephone service are capped below cost or below the level of a normal return on investment, carriers will not enter the market. Instead, they will opt to serve markets in other states where higher profits are achievable. Alternatively, if prices are set too high, even for a short time, carriers will enter the market in hopes of achieving the potential profits promised by too high prices. Initially, as competitors enter the market, prices will stay too high for a short while. Eventually, however, price cap regulation will drive prices down; and as the carriers have been able to recoup their initial investment, full-scale price competition will ensue.

21. My recommendation to the Commission was and is that it should not implement the 4.3 percent offset produced by its staff's analysis in its rulemaking on telecommunications utility price regulation. Instead, I argued that the Commission should adopt a productivity offset, based on standard productivity measurement techniques and sound economic principles, of around 0.77 percent. I described the approach used and presented my calculations supporting the 0.77 percent offset in my affidavit, filed before the Public Service Commission of Wisconsin on December 12, 2000.

**Executive Summary**

**of**

**Testimony of Dr. Gregory Duncan**
**Sr. Vice President**
**National Economic Research Associates, Inc.**
**NERA**

**On Behalf of**
**Verizon Communications**

**In opposition to Clearinghouse Rule 00-155**
relating to Wisconsin Administrative Code
Chapter PSC 163

**Committee on Health, Utilities, Veterans & Military Affairs**
**November 7, 2001**
Clearinghouse Rule 00-155

- The mechanics of measuring productivity are well known, well understood, and well accepted. They are used by the FCC, the ICC, the BLS, the BEA, FERC, and various state commissions throughout the country for the regulation of telecommunications, energy, and transportation prices. In Europe, they are used for telecommunications, gas, water, airport charges, and electricity prices. There are two general approaches: the Total Factor Productivity Approach, developed in large part by the faculty of your own University of Wisconsin at Madison, and the equivalent Output Price approach. Mathematically, all productivity studies must be variants of these two methods. The Commission's staff, in what I am sure was a well-intended effort to determine a productivity offset for regulating ILEC prices in Wisconsin, used neither of these approaches and, as a consequence, fails to measure statewide productivity in Wisconsin. The staff analysis suffers from four fundamental flaws, resulting in a mechanism that is useless for effective price regulation. Adopting this method will have deleterious economic consequences for the State of Wisconsin. Specifically, telecommunications investment may be reduced by as much as 33 percent, which would result in a decline of 15 percent in Wisconsin economic activity.

## PROBLEMS WITH THE STAFF APPROACH

- First, the staff develops a new and novel approach that resembles no accepted productivity measure and utterly fails to capture statewide variations in productivity. In other words, it does not accurately reflect statewide changes in the productivity experience of the telecommunications industry.

- Second, it is standard practice for statewide productivity offsets to be calculated net of economy-wide productivity; otherwise, national effects are mixed in with statewide effects. To obtain the stand-alone state effect, the national effect must be removed from the equation. The staff fails to do this. Consequently, its estimated productivity offset is approximately 1.15 percent too high based on this one error.

- Third, contrary to the staff's approach the gains from specific cost reducing activities, as opposed to long run processes of technological improvement, should never be included in productivity studies. This is because true productivity studies automatically capture these effects. It also is contrary to the intent of price regulation to identify these types of actions on the part of the firm and include them, positively or negatively, in the price cap index. Price regulation is only effective if it severs the relationship between the price mechanism and any specific action of the firm. No firm rationally takes identifiable cost reducing actions if it knows the gains will be taken away. By including merger savings in its calculation of the productivity offset, the staff turned the intended price regulation mechanism into a form of profit regulation; the very kind of regulation the legislation was enacted to eliminate. Had the staff performed a true productivity study, the effects of the merger would have been reflected *naturally* but not specifically in the measure. Inclusion of this erroneous term increases the staff's offset by around 1.35 percent.

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## ECONOMIC CONSEQUENCES OF TOO HIGH AN OFFSET

- The consequences of using a number that is too high and unrelated to productivity are dire, especially in these times. Fewer competitors will enter Wisconsin because they would have to match the ILECs' prices in order to compete, but there is insufficient margin for them to do this and be able to recover their investment in a timely fashion. They will opt to enter markets in other states where higher profits are achievable.

- There likely will be reduced telecommunications investment in Wisconsin as incumbent and existing competitive carriers have very little incentive to invest in new infrastructure. I asked Dr. Mark Thoma, an econometrician at the University of California, San Diego, to share some preliminary results of a paper he and I are working on. Our preliminary analysis suggests that for every one point increase in the allowed X factor, or productivity offset, statewide investment in telecommunications infrastructure will fall about 10 percent. If the X factor is 3 points too high, as I claim it is, then investment will be about a third less than what it would otherwise be.

- This reduced investment in the telecommunications sector, in turn, adversely affects economic growth in other industries in Wisconsin. My distinguished colleague, Professor Leonard Waverman and a coauthor, published the results of research on investment in telecommunications and economic well being in a recent American Economic Review paper entitled "Telecommunications Infrastructure and Economic Development: A Simultaneous Approach." They report that a 1 percent decrease in investment in telecommunications leads to a 0.45 percent to 0.75 percent reduction in economic activity as measured by Gross State Product. Using the smaller of these numbers, a 33 percent reduction in telecommunications investment will lead to a decrease in economic activity of approximately 15 percent.

- My recommendation to the Commission was and is that it should not implement the 4.3 percent offset produced by its staff's analysis in its rulemaking on telecommunications utility price regulation. Instead, I argued that the Commission should adopt a productivity offset, based on standard productivity measurement techniques and sound economic principles, of around 0.77 percent. I described the approach I used and presented my calculations supporting the 0.77 percent offset in my affidavit, filed before the Public Service Commission of Wisconsin on December 12, 2000.

**Before the**
**HEALTH, UTILITIES, VETERANS & MILITARY AFFAIRS SENATE COMMITTEE**
**Senator Rod Moen, Chair**

| | | |
|---|---|---|
| **In the matter of Rulemaking to Revise** | ) | |
| **Wisconsin Administrative Code, Chapter PSC 163,** | ) | **Docket No. 1-AC-193** |
| **Telecommunications Utility Price Regulation** | ) | |
| **Regarding the Productivity Offset Factor** | ) | |

**Comments of Dennis K. Winters**
**on behalf of SBC Ameritech**

**November 7, 2001**

## I. Introduction

- B.S. in Agricultural Economics from UW—Madison
- M.S. in Economics from Colorado State University
- 25-years of experience in market analysis and forecasting, including senior positions with the two premier quantitatively based economic forecasting firms, Data Resources, Inc. and Wharton Econometric Forecasting Associates
- generated numerous short-term and long-term economic forecasts
- Principle Investigator and lead Author of "Wisconsin's Economy in the Year 2010" and "Wisconsin's High-Tech Opportunities"
- testified previously before legislative panels, including recently Representative Kreibich's Committee on Colleges and Universities and Senator George's and Representative Hundertmark's Legislative Committee on Labor Shortage

## II. U.S. Short-term Forecast Changes

There has been a dramatic shift in the outlook for the U.S. economy since the terrorist attacks on the World Trade Center in New York City on September 11.

| GDP Forecasts | Third Quarter | Fourth Quarter | 2001 | 2002 |
|---|---|---|---|---|
| Pre-September 11 | 1.6 | 2.6 | 1.6 | 2.7 |
| Post-September 11 | - 0.5 | - 0.7 | 1.1 | 1.5 |
| Source: Blue Chip Economic Indicators | | | | |

## III. Status of U.S. Economy

Recent empirical data validates the change in direction of the economy's path.

| Economic Measures, periodicity | Previous Period | Latest Data |
|---|---|---|
| Gross Domestic Product Change, quarterly | 0.3 | - 0.4 |
| Unemployment Rate, monthly | 4.9 | 5.4 |
| Unemployment Change, monthly | - 52,000 | - 732,000 |
| Consumer Confidence, monthly | 114 | 98 |
| Consumer Spending, monthly | 2.5 | 1.2 |
| Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Conference Board | | |

## IV. Status of Wisconsin Economy

Wisconsin's economy may fair worse than the national economy, due to the state's heavy reliance on manufacturing.

- Wisconsin's share of manufacturing employment is 22% versus 13% for the U.S.
- Manufacturing sector has been more severely affected by the economic slowdown
- Wisconsin's employment growth was negative in second quarter of 2001
- Wisconsin's Jobless claims have been rising since September 11
- Pre-September 11, forecast for Wisconsin showed an employment decrease for next four quarters, losing 35,000 jobs over five quarters from 2001:1 to 2002:2.[1]
- Post-September 11, projections suggest Wisconsin could lose between 62,000 and 192,000 jobs from business cycle peak to trough.[2]

## V. Short-term Effects on Productivity

- Slower economic growth leads to lower capital investment
- Lower capital investment leads to lower productivity gains

## VI. U.S. Long-term Forecast Changes

Recent data revisions have forced decreases in the expected long-term growth rate for U.S. Gross Domestic Product and for Productivity gains. Average long-term economic growth is now projected at 2.8% per year, instead of 3.1%.[3]

Total Factor Productivity projections have also been decreased to 2.0% per year.[4] That is lower than the robust 2.5% per year rates seen in the late 1990s, but higher than the 1.5% per year average rates experienced during the 1975 to 1995 period.

## VII. Long-term Outlook for Wisconsin Economy

Wisconsin per capita income is projected to decline from 95% of U.S. average to 83% by 2024. To change that result, Wisconsin needs to:

- Increase investment in high-tech industries
- Make the state attractive to high-tech businesses and high-tech workers
- Install the backbone infrastructure that leads the needs of a high-tech economy

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[1] Wisconsin Economic Outlook, released September 6, 2001, Wisconsin Department of Revenue

[2] American Economics Group, Washington, D.C.

[3] Wisconsin Economic Outlook, released September 6, 2001, Wisconsin Department of Revenue

[4] Consensus view of economists in Productivity: The Real Story, *BusinessWeek online*, November 5, 2001

00-155

WISCONSIN STATE SENATE
**RODNEY C. MOEN**
SENATOR – 31ST DISTRICT

State Capitol, P.O. Box 7882, Madison, Wisconsin 53707-7882 Phone: (608) 266-8546 Toll-free: 1-877-ROD-MOEN

**TO:** Members, Senate Committee on Health, Utilities and Veterans and Military Affairs

**FROM:** Senator Rod Moen, Chair

**RE:** Clearinghouse Rule 00-155, relating to the telecommunications utilities price regulation productivity factor.

**DATE:** November 20, 2001

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Attached pleased find a paper ballot motion requesting modifications to Clearinghouse Rule 00-155, relating to the telecommunications utilities price regulation productivity factor. The committee held a hearing on the rule on November 7, 2001.

Please return the paper ballot to my office by **2:00 PM on Monday, November 26, 2001**. If you have any questions, please do not hesitate to contact me.

MOTION: CLEARINGHOUSE RULE 00-155, RELATING TO THE TELECOMMUNICATIONS UTILITIES PRICE REGULATION PRODUCTIVITY FACTOR.

**Move adoption of the following motion:**

1. The Senate Committee on Health, Utilities, Veterans and Military Affairs requests that the Public Service Commission conduct a productivity study for the telecommunications industry in this state, as described in s. PSC 163.04 (2) (bm), Wis. Adm. Code.

2. The Senate Committee on Health, Utilities, Veterans and Military Affairs requests that the Public Service Commission modify Clearinghouse Rule 00-155 by setting productivity factor offsets in proposed s. PSC 163.04 (2) (br) that are based on the findings of the study requested under Item 1, of this motion.

3. If the Public Service Commission has not responded in writing by the close of business on November 28, 2001 that it agrees to consider making the modification requested in Item 2. of this motion, the Senate Committee on Health, Utilities, Veterans and Military Affairs objects to Clearinghouse Rule 00-155 in its entirety, under s. 227.19 (4) (d), on the grounds that the rule conflicts with state law in that its promulgation did not comply with the productivity study requirement under s. PSC 163.04 (2) (bm) and that the resulting rule is arbitrary and capricious.

☒ Aye

☐ No

Signature: Rob Cowles

Date: 11-26-01

MOTION: CLEARINGHOUSE RULE 00-155, RELATING TO THE TELECOMMUNICATIONS UTILITIES PRICE REGULATION PRODUCTIVITY FACTOR.

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☒ **Aye**

☐ **No**

Signature: Mary A. Lazich JSM

Date: 11/26/01

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☑ **Aye**

☐ **No**

Signature: Roger Breske

Date: 11-26-01

MOTION: CLEARINGHOUSE RULE 00-155, RELATING TO THE TELECOMMUNICATIONS UTILITIES PRICE REGULATION PRODUCTIVITY FACTOR.

**Move adoption of the following motion:**

1. The Senate Committee on Health, Utilities, Veterans and Military Affairs requests that the Public Service Commission conduct a productivity study for the telecommunications industry in this state, as described in s. PSC 163.04 (2) (bm), Wis. Adm. Code.

2. The Senate Committee on Health, Utilities, Veterans and Military Affairs requests that the Public Service Commission modify Clearinghouse Rule 00-155 by setting productivity factor offsets in proposed s. PSC 163.04 (2) (br) that are based on the findings of the study requested under Item 1, of this motion.

3. If the Public Service Commission has not responded in writing by the close of business on November 28, 2001 that it agrees to consider making the modification requested in Item 2. of this motion, the Senate Committee on Health, Utilities, Veterans and Military Affairs objects to Clearinghouse Rule 00-155 in its entirety, under s. 227.19 (4) (d), on the grounds that the rule conflicts with state law in that its promulgation did not comply with the productivity study requirement under s. PSC 163.04 (2) (bm) and that the resulting rule is arbitrary and capricious.

☑ Aye

☐ No

Signature: Peggy Rosenzweig

Date: 11-26-01

MOTION: CLEARINGHOUSE RULE 00-155, RELATING TO THE TELECOMMUNICATIONS UTILITIES PRICE REGULATION PRODUCTIVITY FACTOR.

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☒ Aye

☐ No

Signature: Mark Meyer

Date: 11/20/01

MOTION: CLEARINGHOUSE RULE 00-155, RELATING TO THE TELECOMMUNICATIONS UTILITIES PRICE REGULATION PRODUCTIVITY FACTOR.

**Move adoption of the following motion:**

1. The Senate Committee on Health, Utilities, Veterans and Military Affairs requests that the Public Service Commission conduct a productivity study for the telecommunications industry in this state, as described in s. PSC 163.04 (2) (bm), Wis. Adm. Code.

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☒ Aye

☐ No

Signature: ______________________

Date: ______________________

MOTION: CLEARINGHOUSE RULE 00-155, RELATING TO THE TELECOMMUNICATIONS UTILITIES PRICE REGULATION PRODUCTIVITY FACTOR.

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☒ **Aye**

☐ **No**

Signature: Judy Robson

Date: 11-21-01

MOTION: CLEARINGHOUSE RULE 00-155, RELATING TO THE TELECOMMUNICATIONS UTILITIES PRICE REGULATION PRODUCTIVITY FACTOR.

**Move adoption of the following motion:**

1. The Senate Committee on Health, Utilities, Veterans and Military Affairs requests that the Public Service Commission conduct a productivity study for the telecommunications industry in this state, as described in s. PSC 163.04 (2) (bm), Wis. Adm. Code.

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☒ **Aye**

☐ **No**

Signature: R. C. Moen

Date: 11/26/01

MOTION: CLEARINGHOUSE RULE 00-155, RELATING TO THE TELECOMMUNICATIONS UTILITIES PRICE REGULATION PRODUCTIVITY FACTOR.

**Move adoption of the following motion:**

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☐ **Aye**

☒ **No**

Signature: Scott Fitzgerald

Date: 21 NOV 01