

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

ELECTRONIC TARIFF FILING OF BIG RIVERS)	CASE NO. 2023-00312
ELECTRIC CORPORATION AND KENERGY)	
CORP. TO REVISE THE LARGE INDUSTRIAL)	
CUSTOMER STANDBY SERVICE TARIFF)	

DIRECT TESTIMONY

OF

LARRY BLANK

ON BEHALF OF

KIMBERLY-CLARK CORPORATION

December 4, 2023

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1 **I. IDENTIFICATION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.**

3 A. My name is Larry Blank. My business address is TAHOEconomics, LLC, 6061
4 Montgomery Road, Midlothian, TX 76065. My email address is LB@tahoecomonomics.com.

5 **Q. WHERE ARE YOU EMPLOYED?**

6 A. I am the principal of TAHOEconomics, LLC (“Tahoe”), a Texas-registered consulting firm
7 I founded in August 1999 (originally in Nevada), specializing in most policy and
8 ratemaking facets of regulated utility industries. I am also a Professor of Economics and
9 Associate Director with the Center for Public Utilities in the College of Business at New
10 Mexico State University (“NMSU”). For the purposes of this proceeding, I have been
11 engaged through Tahoe, the expert opinions expressed herein are my own, and nothing in
12 this testimony necessarily reflects the opinions of NMSU.

13 **Q. PLEASE PROVIDE A BRIEF SUMMARY OF YOUR BACKGROUND AS IT IS**
14 **RELEVANT TO THIS TESTIMONY.**

15 A. I have primarily served the public in various capacities for over thirty-five years. I received
16 a Ph.D. in Economics from The University of Tennessee in 1994, specializing in Industrial
17 Organization & Public Policy (including regulatory policy), Econometrics, and Finance. I
18 previously served as an Economist with the National Regulatory Research Institute
19 (“NRRRI”) at the Ohio State University and later as the Manager of Regulatory Policy &
20 Market Analysis with the Regulatory Operations Staff of the Nevada Public Utilities
21 Commission. As a consultant, I have served a variety of clients, including government
22 agencies, utility customers, and utility companies as an expert witness and/or advisor in

1 over 150 rate cases and rulemakings of various types. I have previously filed written
2 testimony in the following utility regulatory commission jurisdictions: Alaska, Arizona,
3 Arkansas, Colorado, Delaware, Georgia, Kansas, Montana, Nevada, New Hampshire, New
4 Mexico, North Carolina, Oklahoma, Texas, and with the Federal Energy Regulatory
5 Commission. At NMSU, I teach advanced graduate utility regulation to the Masters of
6 Economics students who have elected to specialize in this profession. I also direct a
7 professional Graduate Certificate Program in Public Utility Regulation & Economics, the
8 Masters of Economics program, as well as help deliver nationally-recognized rate case
9 training programs, which are attended each year by hundreds of regulatory professionals
10 from across the United States and are endorsed by the National Association of Regulatory
11 Utility Commissioners (“NARUC”). My resume is attached as Exhibit LB-1.

12 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING?**

13 A. I am testifying on behalf of the Kimberly-Clark Corporation (“Kimberly-Clark”).

14 **Q. WHAT IS K-C’S INTEREST IN THIS MATTER?**

15 A. At its Owensboro Mill facility (“Owensboro Facility”), Kimberly-Clark currently operates
16 a gas-fired combustion turbine for the production of electricity to partially meet on-site
17 electrical load and the production of heat from the otherwise wasted thermal energy. This
18 Kimberly-Clark unit serves as a base-load production facility with normal production of
19 electrical power and thermal energy 24 hours a day, seven (7) days a week. The Kimberly-
20 Clark Owensboro Facility is also connected to Big Rivers Electric Corporation (“Big
21 Rivers” or “BREC”) with service through Kenergy Corporation (“Kenergy”) as the
22 exclusive providers of utility grid electricity in that service area. As such, the Large

1 Industrial Customer Standby Service (“LICSS”) tariff proposed by BREC and Kenergy are
2 of particular interest to Kimberly-Clark.¹

3 **II. PURPOSE AND SUMMARY**

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

5 A. My testimony provides analysis and recommendations related to BREC and Kenergy’s
6 (“collectively, “Big Rivers”) proposed LICSS and supporting testimony filed on
7 September 1, 2023, currently under consideration by the Kentucky Public Service
8 Commission (“PSC” or “Commission”).

9 **Q. PLEASE SUMMARIZE YOUR REVIEW AND RECOMMENDATIONS.**

10 A. Big Rivers’ proposed structure for the LICSS is extremely unusual and, to my knowledge,
11 not in line with a structure followed by any other regulated electric utility. The proposed
12 LICSS contains an illogical structure not founded on cost-based service principles. For
13 these reasons, the proposed LICSS is not just and reasonable, and I recommend the
14 Commission reject the LICSS tariff design filed by Big Rivers. The Pilot LICSS currently
15 in effect is equally unreasonable and should be replaced with the design I provide herein.

16 Second, I recommend an alternative LICSS tariff schedule that is based on a logical
17 construct and consistent with industry standards. My recommended LICSS tariff includes
18 Supplemental Power Service, a Monthly Standby Reservation Charge, Maintenance Power
19 Service, and Backup Power Service. It is important that each of these components of a
20 standby service tariff are distinctly provided for, with charges that are objectively
21 determined based on Big Rivers’ actual costs to provide such services.

¹ See also Motion for Full Intervention of Kimberly-Clark, Case No. 2023-00312, September 28, 2023.

1 **Q. WHAT LOGIC SHOULD BE FOLLOWED IN DESIGNING A REASONABLE**
2 **STANDBY SERVICE TARIFF?**

3 A. The logical construct for a standby service tariff generally followed by many electric
4 utilities includes a Monthly Standby Reservation Charge, Maintenance Power Service,
5 Backup Power Service, and Supplemental Power Service. Most standby service customers
6 self-provide firm power on-site and have made large investments in generation equipment
7 to provide that power. The customer generation, like any generator, will experience
8 scheduled outages for maintenance purposes and may experience unscheduled outages
9 from time to time. Because the customer generator will experience outages, it has the need
10 for reserve capacity. Because the customer remains interconnected with the electric utility,
11 the reserve capacity may be most efficiently provided by the utility. This reserve capacity
12 should be reasonably priced, usually at a rate considerably lower than the demand charges
13 for power actually delivered. A monthly standby reservation charge is the common way
14 to compensate the utility for reserve capacity. One acceptable way to establish the \$/kW
15 reservation charge is to multiply the standard tariff demand charge for power by the
16 probability that the customer will experience an unscheduled outage. This is similar to the
17 use of loss of load probability studies in the determination of the appropriate level of
18 reserve capacity for an electric utility. Because the standard demand charge is for power
19 actually delivered, not just capacity during outages, the outage probability factor serves to
20 scale the demand charge to a cost-based level for capacity actually needed for power during
21 an outage. Alternatively, a market-based proxy for the cost of such reserve capacity could
22 be used, namely the MISO Planning Resource Auction (“PRA”) clearing price for the Big
23 Rivers zone; however, for reasons discussed below, I am not recommending this proxy for

1 the purpose of designing the LICSS. It is interesting to note, however, that Big Rivers
2 proposes a monthly Back Up charge that uses the MISO PRA clearing price as a discount
3 off its proposed standard demand charge. This approach is illogical because the PRA price
4 is for capacity similar to the capacity that a standby service customer requires from the
5 utility. As such, it could be a reasonable proxy, but Big Rivers views it as an appropriate
6 discount, which is just the opposite from a logical use of this price.

7 Maintenance outages should be scheduled during system off-peak times of the year.
8 Because these maintenance outages occur during off-peak times, the charges for that power
9 delivered should reflect the lower costs normally incurred by the utility during off-peak
10 times. One reasonable approach is to apply a 50% of daily-prorated monthly demand
11 charge. This approach has already been approved by the Commission for maintenance
12 service in the Duke Energy Kentucky, Rider GSS, Generation Support Service.
13 Replacement energy actually delivered during the outage is priced at the full energy
14 charge(s).

15 The charges for the power delivered during unscheduled backup outages should be
16 priced at a full daily (or hourly) cost of that power. One reasonable approach is to utilize
17 a daily demand charge during unscheduled outages based on the daily-prorated monthly
18 demand charge as approved by the Commission for Duke Energy Kentucky in its Rider
19 GSS, Generation Support Service. Replacement energy delivered during the outage is
20 priced at the full energy charge(s).

21 Supplemental Power Service provides electrical power needs not met by the
22 customer's generator and should be priced at the otherwise applicable full tariff rates.

1 **III. FLAWS IN BIG RIVERS' PROPOSED LICSS TARIFF**

2 **Q. HAVE YOU REVIEWED BIG RIVERS' PROPOSED LICSS TARIFF?**

3 A. Yes.

4 **Q. WHAT ARE THE ELEMENTS OF THE PROPOSED LICSS?**

5 A. The proposed LICSS does not differentiate between standby reservation, maintenance
6 service for scheduled outages, and backup service for unscheduled outages. Instead, the
7 proposed LICSS has a rudimentary structure with only "Supplemental Power Service" and
8 "Backup Power Service." For "Backup Power Service," the standby customer would pay
9 the same monthly demand charge as customers receiving power from Big Rivers under
10 the Large Industrial Customer (LIC) standard rates less a credit equal to the MISO Planning
11 Resource Auction ("PRA") clearing price for the Big Rivers zone. This "Backup Power
12 demand" charge would be applied to the customer's full generation capacity each month,
13 even in months in which the customer's generation capacity does not experience an outage.

14 **Q. DO YOU HAVE ANY SUBSTANTIVE CONCERNS WITH THE PROPOSED**
15 **SUPPLEMENTAL POWER SERVICE?**

16 A. No. It is standard practice that supplemental power is billed at the standard tariff rates,
17 which in this case, are the LIC rates.

18 **Q. WHAT CONCERNS DO YOU HAVE WITH THE BIG RIVERS' PROPOSED**
19 **BACKUP POWER DEMAND CHARGE?**

20 A. First, the construct of Big Rivers' proposed LICSS is inconsistent with the logical construct
21 approved for other electric utilities, which include a distinct Monthly Standby Reservation
22 Charge, Maintenance Power Service, Backup Power Service, and Supplemental Power
23 Service. Instead, the Companies have bundled the first three components of a standby

1 service tariff into one monthly charge which ignores the important differences between
2 these service components and is, therefore, not just and reasonable because the pricing does
3 not recognize the important distinctions between these sub-services to standby customers.

4 Second, Big Rivers' use of the full LIC monthly demand charge and the MISO
5 Planning Resource Auction ("PRA") clearing price as a credit is illogical. The standard
6 LIC monthly demand charge is designed for customers who are actually receiving power
7 at that level. The standby customers only receive power to replace their capacity when
8 there is an outage of the customer's generator without a corresponding reduction in
9 customer load demand. For this reason, the standard tariff demand charge is normally
10 prorated based on the probability of an outage as a monthly charge and then more fully
11 applied when there is an outage prorated by the number of days an outage occurred. This
12 encourages the customer generator to be more efficient and reliable in its management of
13 its generation unit(s) in that outages will increase both the monthly reservation charge in
14 the following year and increase the monthly backup and maintenance charges in the month
15 the outages occur.

16 The proposed use of the MISO PRA clearing price as a credit also does not follow
17 a logical construction for a standby tariff. As I stated earlier, the MISO PRA clearing price
18 may serve as a proxy for the cost of providing reserve capacity but has nothing to do with
19 the value of customer's generation capacity within the MISO system, because the customer
20 generator is already committed to serving the customer's load and is not a dispatchable
21 system resource. Therefore, the customer's generation is not available for participation
22 within the MISO PRA market and to give a credit as if the customer's generation capacity
23 is being bid into the PRA market is illogical. An appropriate development of a credit from

1 the standard demand charge should be based on actual frequency of past customer
2 generator outages as a monthly reservation charge, and then when outages occur moving
3 forward, an additional backup charge and maintenance charge based on the duration of
4 outages in those months in which outages occur.

5 Third, Big Rivers' proposed LICSS includes a requirement that the customer
6 generation become "electric capacity accredited by MISO for the Standby Customer's
7 generating unit(s)."² Despite our attempts through two sets of discovery to determine the
8 exact meaning of this proposed requirement and the procedures to attain such accreditation,
9 Big Rivers has yet to respond. We have also requested examples of other behind-the-meter
10 customer generators that have obtained the purported MISO accreditation contemplated by
11 Big Rivers and Big Rivers has provided none.³ Therefore, it is unclear what is meant by
12 this accreditation requirement and whether the requirement is actually attainable.
13 Furthermore, it is unclear as to what happens under the proposed LICSS tariff if the
14 customer generation is unable to attain MISO accreditation.

15 Fourth, Big Rivers' proposed LICSS creates perverse incentives for a standby
16 customer to intentionally use Big Rivers' power at times it may be economical or simply
17 convenient for the customer to do so because there are no additional demand charges
18 applied during an outage. For example, there is no provision to schedule maintenance
19 outages with Big Rivers, and presumably, the customer could perform maintenance during
20 the peak demand season. If a customer could bid their capacity into a reserve capacity
21 market at some point in the future, a customer may be economically enticed to simply use

² "Self-Supply Capacity" definition in Big Rivers' proposed LICSS.

³ Kimberly-Clark Set 1 22.1.4.

1 Big Rivers power with no additional demand charge (just energy charges) and sell capacity
2 into the market. These perverse standby customer incentives under the proposed LICSS
3 may cause system instability and jeopardize system reliability.

4 Fifth, Big Rivers' proposed LICSS does not distinguish in its charges between
5 reliable customer generation and not-so-reliable customer generation. Those customers
6 with more unscheduled outages should pay more under a standby tariff, but under the
7 proposed LICSS, all customers pay the same price per kW each month irrespective of
8 customer generator performance. This is unduly discriminatory within a tariff in which
9 customer generator reliability is important to system reliability.

10 Sixth, Big Rivers' proposed LICSS creates an unreasonable barrier to customer
11 generation. Through its proposed back up charge, Big Rivers is seeking full recovery of
12 its demand charge through a combination of the monthly demand charge it obtains from
13 the standby customer as well as the PRA market revenues it will receive for any Big Rivers
14 excess capacity it can sell. Effectively, the standby customer would be forced to cover
15 both its cost of a large efficient power system investment plus the embedded cost of Big
16 Rivers even in months the customer has no need for the Big Rivers power. Whether or not
17 Big Rivers intended it, this erects an unwarranted barrier to entry by customer generation.
18 Customer generation investment removes load off the Big Rivers system thereby adding
19 reliability for other customers, and when the customer is utilizing the thermal energy from
20 the generation, as is the case with Kimberly-Clark, the customer generation adds efficiency
21 in the use of the two forms of energy, electricity, and heat.

22 **Q. IS THE PILOT LICSS CURRENTLY IN EFFECT A REASONABLE STANDBY**
23 **TARIFF DESIGN?**

1 A. No. The Pilot LICSS is effectively the same construct as the proposed LICSS with a
2 different discount applied to the monthly backup demand charge. Therefore, it suffers from
3 many of the same shortcomings as the proposed tariff.

4 IV. **KIMBERLY-CLARK RECOMMENDED LICSS**

5 **Q. HAVE YOU DESIGNED AN LICSS TARIFF SCHEDULE THAT COMPORTS**
6 **WITH INDUSTRY STANDARDS AND PRODUCES JUST AND REASONABLE**
7 **RATES?**

8 A. Yes. I have attached my resume as Exhibit LB-1 and my recommended LICSS tariff
9 schedule as Exhibit LB-2.

10 **Q. PLEASE DESCRIBE THE COMPONENTS OF YOUR LICSS TARIFF**
11 **SCHEDULE.**

12 A. First, Supplemental Power Service is priced at the full LIC charges no different from that
13 proposed by Big Rivers.

14 Second, my recommended LICSS contains a Monthly Standby Reservation Charge
15 which uses Big Rivers' LIC demand charge multiplied by a customer Generator Outage
16 Rate. The customer Generator Outage Rate is based on the number of hours the generator
17 was not available in the prior 12-month period excluding Scheduled Outages divided by
18 the number of hours in a year. The customer Generator Outage Rate is a measure of
19 unscheduled outage probability, as I discussed earlier, and provides the expected use of
20 replacement power by the customer to determine an appropriate cost-based reservation
21 charge.

1 Third, my recommended LICSS contains distinct Maintenance Power Charges
2 based on 50% of the LIC demand charge prorated based on the number of outage days
3 divided by total days in the month in which the scheduled maintenance outage occurred.
4 Kilowatthour (“kWh”) energy usage during the outage is simply charged at the full LIC
5 energy charge along with supplemental energy. This approach is consistent with the
6 Commission-approved Duke Energy Kentucky standby service. The 50% discount from
7 the standard demand charge is in recognition that maintenance will be scheduled during
8 off-peak seasons of the year and coordinated with Big Rivers to avoid any system concerns
9 or conflicts with scheduled maintenance for Big Rivers’ own resources.

10 Fourth, my recommended LICSS contains distinct Backup Power Charges based
11 on the full LIC demand charge prorated based on the number of outage days and with
12 energy charged at the full LIC energy charge. This approach is consistent with the
13 Commission-approved Duke Energy Kentucky standby service.

14 **Q. HOW IS YOUR RECOMMENDED CONSTRUCTION OF THE LICSS JUST**
15 **AND REASONABLE?**

16 A. First, it properly separates Monthly Standby Reservation Charge, Maintenance Power
17 Service, Backup Power Service, and Supplemental Power Service as distinct services with
18 distinct charges. This design is consistent with standard industry practices and ensures that
19 customer generators that are more reliable with less outages pay less than those customers
20 with less reliable generation. This design also properly distinguishes between scheduled
21 maintenance outages coordinated with Big Rivers during off-peak season times are priced
22 lower than unscheduled outages due to customer generator failure.

1 Second, my recommended LICSS provides reasonable charges with objective
2 methods for each distinct service component with an order of magnitude that is logical.
3 The Monthly Standby Reservation Charge paid each month is less than the Maintenance
4 Power charges during scheduled outages, which is less than the Backup Power Service
5 charges during unscheduled outages, and the Supplemental Power Service charges are at
6 the full LIC levels because this power is delivered on a regular daily basis.

7 **Q. HOW IS YOUR PROPOSED MONTHLY STANDBY RESERVATION CHARGE**
8 **REASONABLY PRICED?**

9 A. The starting point is the standard LIC monthly demand charge which presumably is just
10 and reasonable for the delivery of power as approved by the Commission. The Monthly
11 Standby Reservation Charge is not compensation for the actual delivery of power but only
12 for the possibility that power may be needed to replace the customer's generation during
13 an unscheduled outage. Therefore, it is reasonable to use a probability factor to determine
14 the magnitude of the Monthly Standby Reservation Charge. The Generator Outage Rate
15 based on the individual customer generator outages serves as a probability factor and is
16 specific to the performance of that customer generator. This also ensures that more reliable
17 customer generators pay a lower reservation charge versus less reliable generators. Given
18 this logical construct, my proposed Monthly Standby Reservation charge is cost-based and
19 just and reasonable.

20 **Q. WHY ARE YOU NOT RECOMMENDING THE USE OF THE MISO PRA**
21 **MARKET CLEARING PRICE AS A REASONABLE PROXY FOR THE**
22 **MONTHLY STANDBY RESERVATION CHARGE?**

1 A. The MISO PRA Market Clearing Price theoretically may serve as a proxy, however, I am
2 not recommending its use for the Monthly Standby Reservation Charge for the following
3 reasons. First, the MISO PRA Market Clearing Price is variable year to year and season
4 to season and not necessarily reflective of Big Rivers' cost as captured by the standard
5 demand charge. Second, the standby customer's generation capacity is not actually bid
6 into the MISO PRA because it is committed to serving the customer's load. For this reason,
7 the PRA price may serve as a market-based proxy for cost but not actual cost such as the
8 approved Big Rivers demand charge for LIC prorated appropriately as I have
9 recommended. Third, the construct of the PRA market is that of MISO and subject to
10 FERC jurisdiction which could change outside the control of the Kentucky PSC. Such
11 changes, if they occur in the future, may force the need for reconsideration of the LICSS
12 design.

13 **Q. PLEASE EXPLAIN WHY YOUR RECOMMENDED MAINTENANCE SERVICE**
14 **CHARGES ARE JUST AND REASONABLE.**

15 A. First, the maintenance service charge for scheduled outages is less than the backup service
16 charge for unexpected outages because these outages will be coordinated with Big Rivers
17 to avoid any unnecessary conflicts with system operations. This ensures that any system
18 impacts due to the maintenance outage are greatly mitigated if not eliminated. Therefore,
19 it is just to charge less for a scheduled maintenance outage versus an unscheduled outage.
20 Furthermore, the greater the maintenance outage duration, the greater the billing impact on
21 the customer. This encourages standby customers to be efficient in their maintenance
22 scheduling and minimize the duration of the outage.

1 **Q. PLEASE EXPLAIN WHY YOUR RECOMMENDED BACKUP SERVICE**
2 **CHARGES ARE JUST AND REASONABLE.**

3 A. First, the charges for unscheduled backup service are greater than maintenance service
4 outages because the likelihood of system impact is higher. Second, with the daily prorated
5 demand charge, less reliable customer generators with more frequent and more lengthy
6 unscheduled outages will pay more, which is also just and reasonable. It is not reasonable
7 to charge a customer with a five minute outage the same as a customer with a 5 day outage.
8 It is also not reasonable to charge a customer the same price per kW every month, as
9 proposed by Big Rivers, that does not distinguish between customers with frequent outages
10 versus customers with no outages.

11 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS.**

12 A. First, for the reasons provided above, I recommend that the Commission reject Big Rivers'
13 proposed LICSS and the existing Pilot LICSS. Second, I recommend adoption and order
14 the implementation of my recommended LICSS, as reflected in my attached tariff language
15 in Exhibit LB-2, with a Monthly Standby Reservation Charge, Maintenance Power Service,
16 Backup Power Service, and Supplemental Power Service as distinct services with distinct
17 charges. Adoption of my recommended methodologies for determination of the various
18 LICSS charges will properly charge less for scheduled maintenance outages versus
19 unscheduled outages, and the monthly reservation charge is dependent on the reliability of
20 the individual customer's generator as reflected in the application of the generator outage
21 rate.

22 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**


23 A. Yes.

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

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ELECTRONIC TARIFF FILING OF BIG RIVERS) CASE NO.
ELECTRIC CORPORATION AND KENERGY) 2023-00312
CORP. TO REVISE THE LARGE INDUSTRIAL)
CUSTOMER STANDBY SERVICE TARIFF)

**VERIFICATION OF KIMBERLY-CLARK CORPORATION'S
INTERVENOR TESTIMONY BY LARRY BLANK**

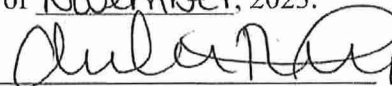
The undersigned, Larry Blank, being duly sworn, deposes and says that he is the principal in the firm of TAHOEconomics, LLC, that he has personal knowledge of the matters set forth in the foregoing testimony and exhibits, and that the answers contained therein are true and correct to the best of his information, knowledge, and belief.



Larry Blank
Principal, TAHOEconomics, LLC

STATE OF New Mexico)
) ss.
COUNTY OF Doña Ana)

Subscribed and sworn to before me on this 20 day of November, 2023.



Notary Public

STATE OF NEW MEXICO
NOTARY PUBLIC
ALONDRA RENTERIA
COMMISSION # 1127781
COMMISSION EXPIRES: 12-12-2023

My commission expires: Dec 12, 2023.

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

ELECTRONIC TARIFF FILING OF BIG RIVERS)	
ELECTRIC CORPORATION AND KENERGY)	CASE NO. 2023-00312
CORP. TO REVISE THE LARGE INDUSTRIAL)	
CUSTOMER STANDBY SERVICE TARIFF)	

**DIRECT TESTIMONY OF LARRY BLANK
OF KIMBERLY-CLARK CORPORATION**

L-B Exhibit 1

Larry Blank

Education

Ph.D. in Economics, The University of Tennessee, Knoxville, August 1994.

B.S. in Economics (major), Mathematics (minor), Bemidji State University, Minnesota, May 1989.

Fields of Concentration

Industrial Organization & Public Policy (including utility rates and regulation)
Econometrics
Finance

Professional Experience

Principal Consultant, TAHOEconomics, LLC, August 1999 - Present. Clients have included Government Agencies, Utility Customers, and Utility Companies focusing on most aspects of regulatory policy development and rate regulation for public utilities.

Professor of Economics, Department of Economics, Applied Statistics, & International Business, New Mexico State University (NMSU), August 2021 – Present. Currently teaching graduate-level public utility regulation, business and government, antitrust policy/economics, and applied microeconomics.

Associate Professor of Economics, Department of Economics, Applied Statistics, & International Business, New Mexico State University (NMSU), August 2009 – July 2021.

Associate Director, Center for Public Utilities, NMSU, January 2011 – Present. Electric Utility and Natural Gas Distribution ratemaking training. The Center's training is endorsed by the National Association of Regulatory Utility Commissioners (NARUC).

Senior Associate, Center for Public Utilities, NMSU, August 2003 – December 2010.

Assistant Professor of Economics, Department of Economics & International Business, New Mexico State University (NMSU), August 2003 – July 2009.

Manager of Regulatory Policy and Market Analysis, Regulatory Operations Staff, Public Utilities Commission of Nevada, October 1997 - August 1999.

Responsibilities: Directed a ten-person division with duties covering most aspects of utility regulation and competitive restructuring across all industries (primarily telecommunications, electric, and natural gas); implementation of the Telecommunications Act of 1996; division

management of all rates and tariffs; lead management of staff's electric and natural gas restructuring activities. Close coordination with legal division in litigated case preparation including lead negotiation experience.

Supervising Economist, Regulatory Operations Staff, Public Service Commission of Nevada, March 1996 - October 1997. Duties similar to those above.

Research Economist, National Regulatory Research Institute, The Ohio State University and the National Association of Regulatory Utility Commissioners (NARUC), September 1994 - March 1996.

Lecturer, School of Public Policy and Management, The Ohio State University (taught Graduate Public Finance).

Published Papers and Reports

“Assessing the Impact of Selected Determinants on Renewable Energy Sources in the Electricity Mix,” (with Khezri, Karimi, Mamkhezri, and Ghazal). *Energies*, 15 (2022).

“Do Residential Net Metering Customers Pay Their Fair Share of Electricity Costs? Evidence from New Mexico Utilities,” *Utilities Policy Journal*, Volume 61, (December 2019).

“An Enhanced Two-Part Tariff Methodology When Demand Charges Are Not Used,” (with Doug Gegax). *The Electricity Journal*, Volume 29, No. 3 (2016).

“Residential Winners and Losers behind the Energy versus Customer Charge Debate,” (with Doug Gegax). *The Electricity Journal*, Vol. 27, No. 4 (2014).

“Benchmarking Electric Distribution Utilities in the Philippines,” (with Doug Gegax and Ben Widner). *Asian Social Science*, Vol. 8, No. 3 (2012).

“Objectively Designing Shared Savings Incentive Mechanisms: An Opportunity Cost Model for Electric Utility Efficiency Programs,” (with Doug Gegax). *The Electricity Journal*, Vol. 24, No. 9 (2011), pp. 31-40.

“Endogenous Regulatory Constraints and The Emergence of Hybrid Regulation,” (with John Mayo). *Review of Industrial Organization*, Vol. 35 (2009), pp. 233-255.

“Promotions as Coopetition in the Soft Drink Industry,” (with Mike Hyman and Michael Meade). *Academy of Marketing Studies Journal*, September, 2009.

“A Dynamic Model of Insurgency: The Case of the War in Iraq,” (with C.E. Enomoto, D. Gegax, T. McGuckin, and C. Simmons), *Peace Economics, Peace Science and Public Policy*,

Vol. 14, No. 2, 2008.

"The Role of Regulation in Expanding Access to Electricity: Reform in the Philippines,"
(with Mk Shean), *Energy Update*, Issue No. 4, 2005.

"Open Entry and Local Telephone Rates: The Economics of IntraLATA Toll Competition,"
(with David Kaserman, John Mayo, and Simran Kahai), *Review of Industrial Organization*, Vol. 14,
No. 4, June 2000, pp. 303-319.

**"Dominant Firm Pricing with Competitive Entry and Regulation: The Case of IntraLATA
Toll,"** (with David Kaserman and John Mayo), *Journal of Regulatory Economics*, Vol. 14, 1998, pp.
35-53.

"Concavity Assumptions in Regulatory Models and the Capital Waste Controversy," *Journal
of Regulatory Economics*, Vol. 9, 1996, pp. 95-100.

"Key Antitrust Pricing Issues for Regulated Industries with Emerging Competition," *NRRI
Quarterly Bulletin*, Vol. 17, No. 2, 1996, pp. 279-298.

"Telephone Vouchers: Experiences in Other Markets," *NRRI Quarterly Bulletin*, Vol. 16, No. 4,
1995, pp. 537-547.

Selected Reports:

Telecommunications Service Quality (with V.W. Davis, D. Landsbergen, R.W. Lawton, N.
Zearfoss, and J. Hoag), National Regulatory Research Institute, The Ohio State University,
Columbus, March 1996.

***Telecommunication Infrastructure Investments and State Regulatory Reform: A Preliminary
Look at the Data*** (with Vivian Davis and Catherine Reed), The National Regulatory Research
Institute, The Ohio State University, Columbus, December 1994.

***Considerations in Preparing and Reviewing Socioeconomic Impact Assessments for Low-Level
Waste Disposal Facilities*** (with Mary English, Matthew Murray, and Zoe Hoyle), for the U.S.
Department of Energy. National Low-Level Waste Management Program, EG&G Idaho, Inc., Idaho
Falls, Idaho: August 1992.

Economic Impact of Chem-Nuclear Systems, Inc. on Barnwell County, South Carolina (with
Matthew Murray), for the U.S. Department of Energy. Energy, Environment and Resources Center,

The University of Tennessee, Knoxville, November 1990.

Grants

U.S. Department of Energy, Technical Assistance to the Energy Regulatory Commission of the Philippines, January 2002 – January 2005.

U.S. Department of Energy, Sustainable Energy Development Program (Philippines), January 2005 – August 2005. Completed the Open Access Distribution Service Rules governing 140 electric distribution utilities.

Presentations and Conference Participation

“Utility Finance 101: A Discussion of Basics for Commissioners,” *Utility Commissioners Wall Street Dialogue*, organized by Gee Strategies Group and Edison Electric Institute, May 2022.

“ERCOT and the week of February 14, 2021,” technical presentation to the Lubbock Economics Council, March 4, 2021.

Lead speaker at the Edison Electric Institute’s Advanced Ratemaking Course, University of Wisconsin, every July since 2011.

“Statistically Determining Proper Recovery of Demand-Related Costs through the Energy Charge,” and Discussant: *CRRRI University Advanced Workshop in Regulation and Competition*, Monterey, CA, June 2013.

“The FERC’s Vintage and Original Purpose Doctrine for Transmission Pricing: Distorted Economics and Economic Distortions,” and Discussant: *CRRRI University Advanced Workshop in Regulation and Competition*, Monterey, CA, June 2012.

“Objectively Designing Shared Savings Incentive Mechanisms: An Opportunity Cost Model for Electric Utility Efficiency Programs,” and Discussant: *CRRRI Rutgers University Advanced Workshop in Regulation and Competition*, Sky Top, PA, May 2011.

Presentation: **“Can Regulators Stop the Tax Bleeding of the Universal Service Fund?”** and Discussant: *CRRRI Rutgers University Advanced Workshop in Regulation and Competition*, Sky Top, PA, May 2008.

Presentation: **“Endogenous Regulatory Constraints and the Emergence of Hybrid Regulation,”**

Western Economic Association Meetings, Seattle, WA, July 2007.

Presentation: "PUHCA Uncertainty...States," *Western Governors' Association Energy Summit*, Albuquerque, NM, April 15, 2004.

Discussant, *Advanced Workshop in Regulation and Competition*, Monterey, CA, July 6, 2000.

Presentation: "**Nevada Electric Restructuring**," *Western Risk Management & Claims Workshop*, Western Electric Power Institute, San Diego, CA, July 8, 1999.

Discussant, *Advanced Workshop in Regulation and Competition*, San Diego, CA, July 7-9, 1999.

Participant, *Danish Ministry Workshop on Telecommunications Interconnection*, Special invitation by the Danish Ministry of Research and Information Technology, London, UK, December 14-15, 1998.

Presentation: "**Regulatory Choice: Constraints and Inefficiency**," *Advanced Workshop in Regulation and Competition*, Monterey, CA, July 10, 1998.

Presentation: "**Regulatory Choice: Constraints and Inefficiency**," *The 73rd Annual Western Economic Association Conference*, June 29, 1998.

Discussant, *The 25th Annual Telecommunications Policy Research Conference (TPRC)*, Alexandria, VA, September 27-29, 1997.

Presentation: "**Electricity Restructuring Issues**," two presentations before the *Nevada State Senate Committee on Commerce and Labor*, February 1997.

Presentation: "**Regulating Market Penetration: A Higher-Powered Incentive Scheme for Local Exchange Companies**," *The Tenth NARUC Biennial Regulatory Information Conference*, Hosted by the National Regulatory Research Institute at The Ohio State University, Columbus, September 11, 1996.

Presentation: "**Regulating Market Penetration: A Higher-Powered Incentive Scheme for Local Telephone Companies**," *The Advanced Workshop in Regulation and Public Utility Economics*, Hosted by the Center for Research in Regulated Industries at Rutgers University, Lake George, NY, May 30, 1996.

Presentation: "**Balancing Seemingly Conflicting Goals through a Minimum Subscribership**

Plan: Economic Efficiency and the Risks Borne by Regulators," *The 27th Annual Conference of the Institute of Public Utilities*, Williamsburg, VA, December 12, 1995.

Presentation: **"The Minimum Subscription Plan (MSP): Quality, Prices, and Current Policy,"** *The 23rd Annual Telecommunications Policy Research Conference (TPRC)*, Solomons, MD, October 2, 1995.

Presentation: **"A Positive Theory of Price-Cap and Rate-of-Return Regulation: Substitutes or Complements?"** *Southern Economic Association Meetings*, Orlando, FL, November 22, 1994.

Journal Referee

Peace Economics, Peace Science and Public Policy, July 2011.

The American Economic Review, April 1995.

Case Participation

Electricity:

DE PSC Docket No. 22-0897, IN THE MATTER OF THE APPLICATION OF DELMARVA POWER & LIGHT COMPANY FOR AN INCREASE IN ELECTRIC BASE RATES, 2023.

NM PRC Case No. 22-00058-UT, "In the matter of Public Service Company of New Mexico's Application for Authorization to implement Grid Modernization Components including Advanced Metering Infrastructure." Expert witness testimony on behalf of the City of Albuquerque, 2023.

GA PSC Docket No. 44280, "Georgia Power Company's 2022 Rate Case." Expert witness testimony on behalf of the United States Department of Defense, 2022.

NV PUC Docket No. 22-06014, "Application of Sierra Pacific Power Company for Authority to Adjust its annual Revenue Requirement." Expert witness testimony on behalf of Peppermill Casinos Inc., 2022.

NV PUC Docket No. 22-03028, "Joint Application of Nevada Power Company and Sierra Pacific Power Company for Approval to Merge." Expert witness testimony on behalf of the Southern Nevada Gaming Group, 2022.

WY PSC Docket No. 2003-214-ER-22, "In the matter of the Application of Cheyenne Light,

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Fuel and Power Company d/b/a Black Hills Energy for a General Rate Increase.” Expert witness testimony on behalf of Microsoft Corporation, 2022.

AR PSC Docket No. 22-001-TF, “In the matter of Entergy Arkansas, LLC’s Request for Tariff Changes to Rate Schedule No. 41.” Expert witness testimony on behalf of Arkansas Electric Energy Consumers, Inc. and the Hospitals and Higher Education Group, 2022.

NM PRC Case No. 19-00018-UT, “In the matter of Public Service Company of New Mexico’s Abandonment of San Juan Generating Station Units 1 and 4.” Expert witness testimony on behalf of Western Resource Advocates, 2022.

NH PUC Docket No. DE-21-030, “Unitil Energy Systems, Inc. Request for Change in Rates.” Expert witness testimony on behalf of the New Hampshire Department of Energy (Staff), 2021.

TX PUC Docket No. 52195, “Application of El Paso Electric Company to Change Rates.” Expert witness testimony on behalf of the U.S. Department of Defense, 2021.

TX PUC, Docket No. 51802, “Application of Southwestern Public Service Company for Authority to Change Rates.” Expert witness testimony on behalf of the Federal Executive Agencies and Orion Engineered Carbons, 2021.

CO PUC, Proceeding No. 20-AL-0432E, “In the matter of Advice Letter...by Public Service Company of Colorado to revise its Colorado Electric Tariff,” Phase II cost allocation and rate design expert witness testimony on behalf of the Federal Executive Agencies (DOE), 2021.

DE PSC, Docket No. 20-0149, “In the matter of the Application of Delmarva Power & Light Company for an Increase in Electric Base Rates.” Expert witness testimony on behalf of the Public Service Commission Staff, 2020-21.

NM PRC Case No. 20-00222-UT, “In the matter of the Joint Application of Avangrid, Inc, Avangrid Networks, Inc, NM Green Holdings, Inc, Public Service Company of New Mexico and PNM Resources, Inc. for approval of the Merger...” Expert Witness testimony on behalf of the City of Albuquerque, 2021.

NM PRC Case No. 20-00237-UT, “In the matter of Public Service Company of New Mexico’s Application for Approval of its 2022-2023 Transportation Electrification Program.” Expert witness testimony on behalf of the City of Albuquerque, 2021.

NM PRC, Docket No. 20-00121-UT, "In the matter of the Petition of Public Service Company of New Mexico, Pursuant to the Efficient Use of Energy Act and the Public Utility Act, for Approval of a Rate Adjustment Mechanism to Remove Regulatory Disincentives and Original Rider No. 5." Expert witness testimony on behalf of the City of Albuquerque, 2020.

AR PSC, Docket No. 16-036-FR, "In the matter of the Formula Rate Plan filings of Entergy Arkansas, Inc. pursuant to APSC Docket No. 15-015-U." Expert witness testimony on behalf of the Hospitals and Higher Education Group, 2020.

NV PUC, Docket No. 20-06003, "Nevada Power Application to adjust revenue requirement." Expert witness testimony on behalf of the Southern Nevada Gaming Group, 2020.

TX PUC, Docket No. 49831, "Application of Southwestern Public Service Company for Authority to Change Rates." Expert witness testimony on behalf of the United States Department of Energy, 2020.

AZ CC, Docket No. E-01933A-19-0028, "In the matter of the Application of Tucson Electric Power Company for the Establishment of Just and Reasonable Rates..." Expert witness testimony on behalf of the United States Department of Defense and all other Federal Executive Agencies, 2020.

GA PSC, Docket No. 42516, "In RE: Georgia Power Company's 2019 Rate Case." Expert witness testimony on behalf of the United States Department of Defense and all other Federal Executive Agencies, 2019.

DE PSC, Docket 17-0977, "In the matter of the Application of Delmarva Power & Light Company for an Increase in Electric Base Rates." Expert witness testimony on behalf of the Public Service Commission Staff, 2019 (Phase II- State Jurisdictional Allocation).

NM PRC, Case No. 19-00158-UT, "In the matter of the Application of Public Service Company of New Mexico for Approval of PNM Solar Direct Voluntary Renewable Energy Program, Power Purchase Agreement, and Advice Notice Nos. 560 and 561." Expert witness testimony on behalf of the City of Albuquerque, 2019.

AR PSC, Docket No. 19-008-U, "In the matter of the Application of Southwestern Electric Power Company for Approval of a General Change in Rates and Tariff." Expert witness testimony on behalf of the Board of Trustees of the University of Arkansas, 2019.

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NM PRC, Case No. 18-00383-UT, "In the matter of the filing of Advice Notice No. 69 by Socorro Electric Cooperative, Inc.." Expert witness testimony on behalf of the City of Socorro and New Mexico Institute of Mining and Technology, 2019.

AR PSC, Docket No. 16-036-FR, "In the matter of the Formula Rate Plan filings of Entergy Arkansas, Inc. pursuant to APSC Docket No. 15-015-U." Expert witness testimony on behalf of the Hospitals and Higher Education Group, 2018.

NM PRC, Case No. 17-00255-UT, "In the matter of Southwestern Public Service Company's Application for revision of its Retail Electric Rates under Advice Notice No. 272." Expert witness testimony on behalf of the City of Albuquerque, 2018.

KS CC, Docket No. 18-WSEE-328-RTS, "In the matter of the Joint Application of Westar Energy, Inc. and Kansas Gas and Electric Company for Approval to make certain changes to their Charges for Electric Service." Expert witness testimony on behalf of the United States Department of Defense and all other Federal Executive Agencies, 2018.

DE PSC, Docket 17-0977, "In the matter of the Application of Delmarva Power & Light Company for an Increase in Electric Base Rates." Expert witness testimony on behalf of the Public Service Commission Staff, 2018.

AK RCA, Docket No. U-17-008, "In the Matter of the Tariff Revision Designated as TA326-121 Filed by the Municipality of Anchorage D/B/A Municipal Light and Power Department." Expert witness testimony on behalf of the Federal Executive Agencies, Dec. 2017.

NM PRC, Case No. 16-00276-UT, "In the matter of the Application of Public Service Company of NM for revision of its Retail Electric Rates." Expert witness testimony on behalf of the City of Albuquerque, 2017.

OK Corporation Commission, Cause No. PUD 201700151, "In the matter of Public Service Company of OK Application for Adjustment in Rates." Expert witness testimony on behalf of the Department of Defense, 2017.

AR PSC, Docket 16-052-U, "In the matter of the Application of Oklahoma Gas and Electric Company for a General Change in Rates, Charges and Tariffs." Expert witness testimony on behalf of the Arkansas River Valley Energy Consumers, 2017.

DE PSC, Docket 16-0649, "In the matter of the Application of Delmarva Power & Light Company for an Increase in Electric Base Rates." Expert witness testimony on behalf of the Public Service

Commission Staff, 2016.

OK Corporation Commission, Cause No. PUD 201500208, "In the matter of Public Service Company of OK Application for Adjustment in Rates." Expert witness testimony on behalf of the Department of Defense, 2015.

AR PSC, Docket 15-015-U, "In the Matter of the Application of Entergy Arkansas, Inc. for Approval of Changes in Rates for Retail Electric Service." Expert witness testimony on behalf of the Hospitals and Higher Education Group, 2015.

CO PUC, Docket 14AL-0660E, "In the Matter of Advice Letter NO 1672-Electric Filed by Public Service Company of Colorado PUC No. 7-Electric Tariff to Implement a General Rate Schedule Adjustment and Other Rate Changes Effective July 18, 2014." Expert witness testimony on behalf of the Federal Executive Agencies, November 2014.

AK RCA, Docket No. U-13-184, "In the Matter of the Tariff Revision Designated as TA332-121 Filed by the Municipality of Anchorage D/B/A Municipal Light and Power Department." Expert witness testimony on behalf of the Federal Executive Agencies, May 2014.

AK RCA, Docket No. U-13-006, "In the Matter of the Tariff Revision Designated as TA326-121 Filed by the Municipality of Anchorage D/B/A Municipal Light and Power Department." Expert witness testimony on behalf of the Federal Executive Agencies, October 2013.

AR PSC, Docket No. 13-028-U, "In the matter of the application of Entergy Arkansas, Inc. for approval of changes in rates for retail electric service," expert witness testimony on behalf of Hospitals and Higher Education Group, August 2013.

AZ ACC, Docket No. E-01345A-11-0224, "In the matter of the application of Arizona Public Service Company for a hearing to determine the fair value of the utility property of the company for ratemaking purposes, to fix a just and reasonable rate of return thereon, to approve rate schedules designed to develop such return," expert witness testimony on behalf of the Federal Executive Agencies, January 2012.

NM PRC, Case No. 11-00265-UT, "In the matter of Public Service Company of NM's Renewable Energy Portfolio Procurement Plan for 2012," direct and rebuttal testimony on renewable cost threshold and related matters, on behalf of Public Service Company of New Mexico, October 2011.

AK RCA, Docket No. U-10-31, "In the Matter of the Revenue Requirement and Cost-of-Service Studies Designated as TA304-121 and the Tariff Filing Designated as

TA306-121 and TA309-121 Filed by the MUNICIPALITY OF ANCHORAGE D/B/A MUNICIPAL LIGHTAND POWER,” expert witness testimony on behalf of the Federal Executive Agencies, prepared December 2010.

AR PSC, Docket No. 08-137-U, “In the Matter of the Consideration of Innovative Approaches to Ratebase Rate of Return Ratemaking Including, but not Limited to, Annual Earnings Reviews, Formula Rates, and Incentive Rates for Jurisdictional Electric and Natural Gas Utilities,” expert witness testimony responding to the mechanisms related to this docket, 2010.

CO PSC, Docket No. 10M-245E, “In the Matter of Commission Consideration of Public Service Company of Colorado Plan in Compliance with House Bill 10-1365, ‘Clean Air-Clean Jobs Act’,” expert witness testimony responding to the fundamental ratemaking issues regarding compliance with the Clean Air-Clean Jobs Act, September 2010.

AR PSC, Docket No. 09-084-U, “In the Matter of the Application of Entergy Arkansas, Inc. for Approval of Changes in Rates for Retail Electric Service,” expert witness testimony responding to certain aspects of revenue requirement, cost-of-service, and rate design. Also, responding to the proposed Formula Rate Plan, Lost Contributions to Fixed Costs, and the Shared Savings mechanism, 2010.

CO PSC, Docket No. 09AL-299E, “In the Matter of Advice Letter No. 1535 by Public Service Company of Colorado to Revise Its Colorado PUC No. 7 Electric Tariff to Reflect Revised Rates and Rate Schedules to be Effective on June 5, 2009,” expert witness testimony responding to the Phase II issues contained in the revised rate design on behalf of the Federal Executive Agencies, December 2009.

CO PSC, Docket No. 09AL-299E, “In the Matter of Advice Letter No. 1535 by Public Service Company of Colorado to Revise Its Colorado PUC No. 7 Electric Tariff to Reflect Revised Rates and Rate Schedules to be Effective on June 5, 2009,” expert witness testimony responding to the Phase I issues contained in the proposed revenue requirements on behalf of the Federal Executive Agencies, September 2009.

NV PUC, Docket No. 08-12002, “Application of Nevada Power Company for authority to increase its annual revenue requirement for general rates charged to all classes of customers to recover costs of acquiring the Bighorn Power Plant, constructing the Clark Peakers, environmental retrofits, and other generating, transmission, and distribution plant additions; to reflect changes in cost of service; and for relief properly related thereto,” expert witness testimony responding to certain aspects of the cost of service and rate design on behalf of The Board of Regents of the Nevada System of Higher Education, April 2009.

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AZ ACC, Docket No. E-01345A-08-0172, “In the Matter of the Application of Arizona Public Service Company for a Hearing to Determine the Fair Value of the Utility Property of the Company for Ratemaking Purposes, to Fix a Just and Reasonable Rate of Return Thereon, to Approve Rate Schedules Designed to Develop Such Return,” expert witness testimony responding to certain aspects of the cost of service and rate design on behalf of the Federal Executive Agencies, January 2009.

FERC, Docket No. EL07-101-000, expert witness testimony assessing transmission rate design on behalf of American Electric Power Service Corporation, August 2007.

MD PSC, Case No. 9092, “In the Matter of the Application of PEPCO for Authority to Revise Rates,” conducted training and provided advisory services to the Maryland Commissioners and advisory staff (2007).

AR PSC, Docket No. 06-101-U, “In the Matter of the Application of Entergy Arkansas, Inc. for Approval of Changes in Rates for Retail Electric Service,” expert witness surrebuttal testimony responding to the cost of service study used by EAI, Staff, and interveners on behalf of the Federal Executive Agencies, March 2007.

Vermont Department of Public Service, Cost of Service analysis related to Green Mountain Power Corp.

Philippines ERC, design of Open Access Distribution Services Rules, 2005.

Philippines Energy Regulatory Commission, Project Director and key advisor for over three years on policy development related to industry restructuring and over 140 rate unbundling cases, 2001-2005.

Philippines Department of Energy and Energy Regulatory Board, Electricity Ratemaking Training and Rulemaking for Restructured Wholesale and Retail Electricity Industry (July 2000 – February 2001).

TX PUC, Docket No. 22349, Application of TX-NM Power Company for approval of unbundled cost of service rates (testimony filed). 1999-2000.

NV PUC, Docket No. 99-10049, Petition for Advisory Opinion, Rules that may or may not apply to master-metered mobile home parks after restructuring of electric and natural gas markets, (testimony), 1999.

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NV PUC, Docket No. 99-4019, Utility.com, Inc., Application for Licensing as an Alternative Seller (testimony), 1999.

NV PUC, Docket No.s 98-12007 and 12009, Sierra Pacific Power Co. And Nevada Power Co. Applications for authorization to provide potentially competitive services through affiliates (testimony), 1998.

NV PUC, Docket No. 98-7023, Sierra Pacific Power Company and Nevada Power Company, Joint Application for Approval of Merger (testimony), 1998.

NV PUC, Docket No. 98-9038, Regulatory Operations Staff, Application to Designate Unbundled Services as Potentially Competitive (testimony), 1998.

NV PUC, Docket No. 98-8034, Nevada Power Company, Application to Designate Unbundled Services as Potentially Competitive (testimony), 1998.

NV PUC, Docket No. 97-10004, Nevada Power Company's Green Power Tariff (testimony), 1997.

NV PUC, Docket Nos. 97-11018 and 97-11028, Proposed Unbundling Methodologies of Sierra Pacific Power Co. and Nevada Power Co. (testimonies), 1997.

NV PUC, Docket No. 97-8001, Investigation of issues to be considered as a result of restructuring of electric industry (extensive comments and testimony on all restructuring issues including the development of new regulations), 1997 - 1999.

NV PUC, Docket No. 97-6008, Nevada Power Company's Resource Plan (evaluation of load forecasting), 1997.

NV PUC, Docket No. 97-5034, Rulemaking to establish standards of conduct and related requirements for distribution companies and affiliates, 1997.

NV PUC, Docket No. 96-7020, Nevada Power Company Deferred Energy Case (testimony), 1996.

NV PUC, Docket No. 96-6013 and 96-6014, Sierra Pacific Power Company tariff filing to allow negotiated contracts (testimony), 1996.

NV PUC, Docket No. 95-9022, Nevada Electric Restructuring Investigation (several extensive comments), 1996.

Natural Gas and Water Distribution:

CT PURA, Docket No. 22-07-01, “Application of Aquarion Water Company of Connecticut to Amend its Rate Schedules.” Staff consultant advisor including delivery of cross examination and review of the record for decision making.

NM PRC, Case No. 18-00124-UT, “In the Matter of the Petition by EPCOR Water New Mexico Inc. for Adjustment of Water Rates for its Clovis District.” Expert witness work on behalf of the City of Clovis, 2019.

AR PSC, Docket No. 15-098-U, “In the Matter of the Application of Centerpoint Energy Resources Corp., d/b/a Centerpoint Energy Arkansas Gas, for a General Change or Modification in its Rates, Charges and Tariffs.” Expert witness testimony on behalf of the University of Arkansas, 2015-16.

AR PSC, Docket No. 15-011-U, “In the Matter of the Application of SourceGas Arkansas, Inc. for Approval of a General Change in Rates and Tariffs.” Expert witness testimony on behalf of the University of Arkansas, 2015.

AR PSC, Docket No. 13-079-U, “In the Matter of the Application of SourceGas Arkansas Inc. for Approval of a General Change in Rates.” Expert witness testimony on behalf of the University of Arkansas, May 2014.

NV PUC, Docket No. 12-11010, “Investigation and rulemaking to address a recovery mechanism for the accelerated replacement of gas infrastructure.” Expert witness testimony on behalf of the Federal Executive Agencies, December 2012.

NM PRC, Case No. 11-00196-UT, “In the matter of the petition by New Mexico-American Water Co. for adjustment of water rates for its Clovis District.” Expert witness testimony on behalf of the City of Clovis, November 2011.

NM PRC, Case Nos. 11-00085-UT and 11-00293-UT, Acquisition and financing of NM American Water Co. by EPCOR, Inc. Expert witness testimony on financing and customer hold-harmless on behalf of the City of Clovis, July-August 2011.

NM PRC, Case No. 08-00134-UT, “In the Matter of the Petition by New Mexico-American Water Company, Inc. for Adjustment of Water Rates for Its Clovis District,” expert witness testimony responding to revenue requirements and rate design in the petition to adjust water rates on behalf of

the City of Clovis, December 2008.

NM PRC, Case No. 08-00321-UT, “In the Matter of the Petition by New Mexico-American Water Company, Inc. for a Certificate of Convenience and Necessity and Other Authorizations Related to an Exploratory Test Well into the Lower Dockum Formation to Serve the Clovis District,” expert witness testimony assessing accounting and regulatory treatment of the project costs associated with the proposed exploratory test well into the lower Dockum Formation to serve the Clovis district of New Mexico-American Water Company, Inc. (“NMAW” or “Company”) on behalf of the City of Clovis, March 2009.

NV PUC, Docket No. 97-8002, Investigation into alternative forms of regulation for natural gas local distribution companies and alternative sellers of natural gas, and related matters (extensive comments and testimony on all restructuring issues including the development of new regulations), 1997.

NV PUC, Docket No. 97-5034, Rulemaking to establish standards of conduct and related requirements for distribution companies and affiliates, 1997.

Telecommunications:

NM PRC, Case No. 18-00295-UT, “In the Matter of the Petition of CenturyLink QC Regarding Effective Competition for Retail Residential Services.” Expert witness testimony on behalf of the City of Albuquerque, 2019.

MT PSC, Docket No. D2005.6.105, Investigation on Use of Federal Universal Service Funds (testimony filed on behalf of PSC advocacy staff), 2005.

NM PRC, Case No. 05-00094-UT, Qwest Corporation’s Amended Alternative Form of Regulation Plan, (testimony filed on behalf of Qwest regarding computation and appropriateness of refund), 2005.

Line Extension Policy and Contribution in Aid of Construction, expert witness work on behalf of 3 Rivers Telephone Cooperative, before the Montana Eighteenth Judicial District Court, Cause No. DV-04-731, March 2006.

NV PUC, Docket No. 00-7012, Nevada Bell Petition for order commencing a proceeding to determine new costs and rates for unbundled network elements (testimony filed on behalf of wholesale customers), 2000.

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FCC CC Docket No. 00-247, Petition for Arbitration, Developed Unbundled Costs and Interconnection Agreement on behalf of Virtual Hipster Corp., December 2000.

Case No. CV771923, Superior Court of the State of California (Santa Clara), Worldcom v. Co-net Communications, Oral Expert Witness Testimony on potential service development including cost and revenue estimates, damage estimate, standard of care in circuit disconnect, and other circuit contractual issues (deposition and oral testimony), April 2000.

NV PUC, Docket Nos. 98-10015 and 99-11007, Nevada Bell Arbitrations on the issue of reciprocal compensation and Internet service provider traffic, 1998.

NV PUC, Review of Interconnection and Resale Agreements between Incumbent Local Exchange Carriers and Competitors for approval in Nevada.

NV PUC, Docket No. 98-6005, Sprint of Nevada, Unbundled Network Element Costs (testimony), 1998.

NV PUC, Docket No. 98-6004, Nevada Bell, Unbundled Network Element Costs (testimony), 1998.

NV PUC, Docket No. 97-11017, Virtual Hipster Corp., Petition to terminate rural exemption of Churchill County Telephone Company (testimony), 1997.

NV PUC, Docket No. 96-8035, GTE, Depreciation Filing (testimony), 1997.

NV PUC, Docket No. 97-5027, Central Telephone Company-Nevada, tariff filing requesting an increase in directory assistance rates (testimony and cost analysis), 1997.

NV PUC, Docket No. 97-5018, Investigation into the impact of the Telecommunications Act of 1996 on Universal Service in Nevada (comments), 1997.

NV PUC, Docket No. 96-4041, Nevada Bell Petition on Confidential Nature of Telecommunications Cost Studies (testimony filed), 1996.

NV PUC, Docket No. 96-9035, Investigation into Procedures and Methodologies to Develop Costs for Bundled or Unbundled Telephone Services (comments, testimony and cost analysis), 1996.

NV PUC, Docket Nos. 96-3002 and 96-3003, Nevada Bell's Entry into a Plan of Alternative Regulation (testimony), 1996.

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

ELECTRONIC TARIFF FILING OF BIG RIVERS)	
ELECTRIC CORPORATION AND KENERGY)	CASE NO. 2023-00312
CORP. TO REVISE THE LARGE INDUSTRIAL)	
CUSTOMER STANDBY SERVICE TARIFF)	

**DIRECT TESTIMONY OF LARRY BLANK
OF KIMBERLY-CLARK CORPORATION**

L-B Exhibit 2



Exhibit LB-2
AS PROPOSED BY KIMBERLY-CLARK

For All Territory Served By
Cooperative's Transmission System
P.S.C. KY. No. _____ 27

Fourth Revised SHEET NO. 69

CANCELLING P.S.C. KY. No. _____ 27

Third Revised SHEET NO. 69

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service

Applicability:

In all territory served by the Company's transmission system.

Availability:

This schedule is available to any of the Company's then-existing Member Cooperatives for service to any large industrial customer of the Member Cooperative having generation equipment capable of supplying all or a portion of the customer's power requirements for other than emergency purposes, who requests standby service, including Backup Power Service, Maintenance Power Service, and/or Supplemental Power Service, and who has or enters into a special contract that provides rates for electric service other than Standby Power Service (the "Standby Customer"). This schedule shall only apply to a Member Cooperative who has a standby service tariff under which it can pass through the charges under this schedule to a Standby Customer.

Term:

This rate schedule shall take effect at 12:01 AM CPT on the effective date of this tariff.

Definitions:

Please see Section 4 for definitions common to all tariffs.

"Supplemental Power Service" – a service that provides transmission capacity to the Standby Customer as well as the energy and capacity requirements for use by the Standby Customer's facility in addition to the electric power that the Standby Customer ordinarily generates on its own.

DATE OF ISSUE PENDING
DATE EFFECTIVE TBD

Proposed by Kimberly-Clark /s/

ISSUED BY: (PENDING) Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 710 W. 2nd Street, Owensboro, KY 42301



Exhibit LB-2
AS PROPOSED BY KIMBERLY-CLARK

For All Territory Served By
Cooperative's Transmission System
P.S.C. KY. No. 27

Third Revised SHEET NO. 69.01

CANCELLING P.S.C. KY. No. 27

Second Revised SHEET NO. 69.01

(Name of Utility) AS PROPOSED BY KIMBERLY CLARK

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service – (continued)

Definitions (continued):

“Standby Contract Demand” – the maximum customer generator backup demand as specified in the Standby Service Agreement. The Standby Contract Demand shall not exceed the capacity of the Standby Customer’s generator(s).

“Maintenance Power Service” – a service that provides transmission capacity as well as the energy and capacity requirements for use by the Standby Customer during Scheduled Outages.

“Backup Power Service” – a service that provides transmission capacity as well as the energy and capacity requirements for use by the Standby Customer to replace power generated by the Standby Customer’s own generation during an Unscheduled Outage.

“Generator Outage Rate”- the Generator Outage Rate will be calculated as the number of hours the generator was not available in the prior 12-month Period, excluding Scheduled Outages, divided by the number of hours in a year. For new Standby Customers without 12-months of historical data, the Company shall use the average Generator Outage Rate for all other existing Standby Customers.

“Scheduled Outage” - planned outage periods that are prearranged by the Standby Customer with the Company.

“Unscheduled Outage” – any customer generator outage that occurs outside of Scheduled Outages, except for generator outages caused by a system emergency on the Company’s system or another transmission system in the MISO region.

Rates and Billing:

The Company shall bill each Member Cooperative in accordance with the billing and payment terms set forth in the Billing section of the Company’s Standard Rate Schedule LIC – Large Industrial

DATE OF ISSUE PENDING

DATE EFFECTIVE TBD

Proposed by Kimberly-Clark /s/

ISSUED BY: (PENDING) Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 710 W. 2nd Street, Owensboro, KY 42301
DATE OF ISSUE _____



Exhibit LB-2
AS PROPOSED BY KIMBERLY-CLARK

For All Territory Served By
Cooperative's Transmission System
P.S.C. KY. No. 27

Third Revised SHEET NO. 69.01

CANCELLING P.S.C. KY. No. 27

Second Revised SHEET NO. 69.01

(Name of Utility) AS PROPOSED BY KIMBERLY CLARK

RATES, TERMS AND CONDITIONS – SECTION 2

Customer tariff schedule, or the Standby Customer's special contract with the Member Cooperative. Each month, each Member Cooperative shall be required to pay separately for each of its Standby Customers taking service under this schedule, in each case using that individual Standby Customer's contract demand (if any) or metered demand, as applicable.

DATE OF ISSUE PENDING

DATE EFFECTIVE TBD

Proposed by Kimberly-Clark /s/

ISSUED BY: (PENDING) Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 710 W. 2nd Street, Owensboro, KY 42301
DATE OF ISSUE _____



Exhibit LB-2
AS PROPOSED BY KIMBERLY-CLARK

For All Territory Served By
Cooperative's Transmission System
P.S.C. KY. No. _____ 27

First Revised SHEET NO. 69.02

CANCELLING P.S.C. KY. No. _____

Original SHEET NO. 69.02

(Name of Utility) AS PROPOSED BY KIMBERLY CLARK

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

A. Supplemental Power Service

Requirements

1. The level of demand required for Supplemental Power Service shall be the level of demand under the special contract between the Member Cooperative and the Standby Customer (if any) or, alternatively, metered demand, excluding any Maintenance Power demand and Backup Power demand.
2. All power not specifically identified as Maintenance Power or Backup Power shall be deemed to be Supplemental Power.
3. The total of the Supplemental Power, Maintenance Power, and Backup Power demand shall not exceed Standby Customer's Maximum Contract Demand in any month. Maintenance Power and Backup Power demand shall not be included in determining minimum demand charges for any month.

Billing

1. Supplemental Power energy shall be the actual measured energy excluding Maintenance Power energy and Backup Power energy sold to the Standby Customer in each month.
2. Demand and Energy Charges: All Supplemental Power shall be billed under the terms and charges of the Company's Standard Rate Schedule LIC – Large Industrial Customer tariff schedule.

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PENDING /s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
 President and Chief Executive Officer
Big Rivers Electric Corporation, 710 W. 2nd Street, Owensboro, KY 42301



	First Revised	SHEET NO.	69.03
(Name of Utility)	CANCELLING P.S.C. KY. No.		
	Original	SHEET NO.	69.03

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

B. Monthly Standby Reservation Charge (\$/kW)

The Customer shall pay a Standby Reservation Charge equal to the Company's Standard Rate Schedule LIC – Large Industrial Customer demand charge times the Standby Contract Demand times the Generator Outage Rate.

C. Maintenance Power Charges (Scheduled Outages)

Maintenance Power Demand Charge (\$/kW). The Maintenance Power billing demand shall equal the Standby Contract Demand multiplied by the ratio of the number of days the Scheduled Outage lasts during the billing period and the number of days in the billing period. The Standby Customer's total billing demand including Maintenance Power billing demand shall not exceed the maximum metered demand during the scheduled maintenance outage. The demand charge for scheduled Maintenance Power shall equal fifty (50) percent of the Company's Standard Rate Schedule LIC – Large Industrial Customer demand charge times the Maintenance Power billing demand.

Maintenance Energy Charge (\$/kWh). Maintenance Power energy usage shall be billed at the Company's Standard Rate Schedule LIC – Large Industrial Customer energy charge (\$/kWh).

D. Backup Power Charges (Unscheduled Outages)

Backup Power Demand Charge (\$/kW). The Backup Power billing demand shall equal the Standby Contract Demand multiplied by the ratio of the number of days the Unscheduled Outage lasts during the billing period and the number of days in the billing period. The Standby Customer's total billing demand including Backup Power billing demand shall not exceed the maximum metered demand during the Unscheduled Outage. The demand charge for Backup Power for Unscheduled Outages shall equal the Company's Standard Rate Schedule LIC – Large Industrial Customer demand charge (\$/kW) times the Backup Power billing demand for that billing period.

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RATES, TERMS AND CONDITIONS – SECTION 2

Backup Energy Charge (\$/kWh). Backup Power energy usage shall be billed at the Company's Standard Rate Schedule LIC – Large Industrial Customer energy charge (\$/kWh).

E. Scheduled Outages

The Standby Customer must provide at least 30 days' advance notice to the Company of the Standby Customer's proposed timeline for a Scheduled Outage. The Company will respond to the proposed Scheduled Outage within 10 days. The Standby Customer may modify the outage schedule with 15 days' notice to the Company, or fewer than 15 days upon mutual agreement. Scheduled Outages may not exceed 60 days in any calendar year unless otherwise agreed to by the Company in writing. Any extension of the Scheduled Outage period may be requested by the Standby Customer in writing and shall be responded to by the Company in writing. Standby Customers that do not comply with the terms and conditions for qualifying Scheduled Outage periods will be subject to Unscheduled Outage charges to the extent of any such non-compliance.

F. Unscheduled Outages

The Standby Customer shall notify the Company by telephone within one (1) hour of the beginning and end of any Unscheduled Outage, unless circumstances preclude such notification, in which case notification must be provided as soon thereafter as feasible. Within forty-eight (48) hours of the end of an outage, the Standby Customer shall supply written notice to the Company of the dates and times of the start and the end of the Unscheduled Outage.

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(Name of Utility)

Exhibit LB-2
AS PROPOSED BY KIMBERLY-CLARK

For All Territory Served By
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P.S.C. KY. No. 27

Original SHEET NO. 69.04

CANCELLING P.S.C. KY. No. _____

_____ SHEET NO. _____

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

Terms and Conditions:

1. The Standby Customer shall be subject to all adders, riders, terms and conditions, and other provisions of any applicable schedule of the Member Cooperative's tariff under which the Standby Customer takes service.
2. The Standby Customer shall be required to adhere to the Company's requirements and procedures for interconnection.
3. The Standby Customer shall be required to allow Big Rivers to meter the Standby Customer's generation, and to provide access for Big Rivers to install, operate and maintain the metering equipment, which shall remain the property of Big Rivers.
4. The Standby Customer shall be required to pay the cost of any new or additional facilities associated with providing service under the provisions of this schedule.

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RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

Terms and Conditions (continued):

5. The Standby Customer shall not transmit energy to the Company or to the Member Cooperative.
6. The supplying of, and billing for, service and all conditions applying thereto, are subject to the jurisdiction of the Kentucky Public Service Commission, and to the Company's and the Member Cooperative's generally applicable rules, terms, and conditions currently in effect, as filed with the Kentucky Public Service Commission.
7. Standby Customer shall design, construct, install, own, operate, and maintain its generation equipment in accordance with all applicable codes, laws, regulations, and generally accepted utility practices.
8. Standby Customer shall obtain insurance in the following minimum amounts for each occurrence:
 - a. Public Liability for Bodily Injury - \$1,000,000.00
 - b. Property Damage - \$500,000.00
9. The Standby Customer shall pay for all interconnection costs arising out of the Standby Customer's generator.
10. During system emergencies, the Company may discontinue sales of Backup Power Service to the Standby Customer.

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