

COMMONWEALTH OF KENTUCKY
BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

In the Matter of:)
)
ELECTRONIC TARIFF FILING OF)
BIG RIVERS ELECTRIC CORPORATION)
AND KENERGY CORP.)
TO IMPLEMENT A NEW STANDBY)
SERVICE TARIFF)

Case No. 2021-00289

Direct Testimony of Justin Bieber

on behalf of

Kimberly-Clark Corporation

October 15, 2021

1 **Direct Testimony of Justin Bieber**

2

3 **Introduction**

4 **Q. Please state your name and business address.**

5 A. My name is Justin Bieber. My business address is 111 E Broadway, Suite
6 1200, Salt Lake City, Utah, 84111.

7 **Q. By whom are you employed and in what capacity?**

8 A. I am a Senior Consultant for Energy Strategies, LLC. Energy Strategies is
9 a private consulting firm specializing in economic and policy analysis applicable to
10 energy production, transportation, and consumption.

11 **Q. On whose behalf are you testifying in this proceeding?**

12 A. My testimony is being sponsored by the Kimberly-Clark Corp. (“Kimberly-
13 Clark”). Kimberly-Clark is the manufacturer of well-known brands such as
14 Kleenex, Scott, Huggies, Kotex, Viva and Cottonelle.

15 Kimberly-Clark’s mill in Owensboro, Kentucky broke ground in 1992 and
16 now employs hundreds of full-time personnel and full-time contractors, producing
17 Kleenex and Scott tissue and hand towels for hotels, restaurants and workplace
18 settings. Kimberly-Clark’s Owensboro mill is a large industrial customer of Big
19 Rivers Electric Corporation (“Big Rivers”) through Kenergy Corporation.
20 Kimberly-Clark recently installed an approximately 14 MW natural gas turbine
21 cogeneration unit at its Owensboro facility that is a Qualified Facility (“QF”).
22 Kimberly-Clark’s Owensboro facility would take service under the proposed Large

23 Industrial Customer Standby Service (“LICSS”) tariff if it is approved by the
24 Commission.

25 **Q. Please describe your professional experience and qualifications.**

26 A. My academic background is in business and engineering. I earned a
27 Bachelor of Science in Mechanical Engineering from Duke University in 2006 and
28 a Master of Business Administration from the University of Southern California in
29 2012. I am also a registered Professional Civil Engineer in the state of California.

30 I joined Energy Strategies in 2017, where I provide regulatory and technical
31 support on a variety of energy issues, including regulatory services, transmission
32 and renewable development, and financial and economic analyses. I have also filed
33 and supported the development of testimony before various state utility regulatory
34 commissions.

35 Prior to joining Energy Strategies, I held positions at Pacific Gas and
36 Electric Company as Manager of Transmission Project Development, ISO
37 Relations and FERC Policy Principal, and Supervisor of Electric Generator
38 Interconnections. During my career at Pacific Gas and Electric Company, I
39 supported multiple facets of utility operations, and led efforts in policy, regulatory,
40 and strategic initiatives, including supporting the development of testimony before
41 and submittal of comments to the FERC, California ISO, and the California Public
42 Utility Commission. Prior to my work at Pacific Gas & Electric, I was a project
43 manager and engineer for heavy construction bridge and highway projects.

44 **Q. Have you testified previously before this Commission?**

45 A. Yes, I have testified in the following proceedings before this Commission:

- 46 • Duke Energy Kentucky’s 2017 general base rate case, Case No. 2017-
47 00321;
- 48 • Kentucky Utilities and Louisville Gas and Electric’s 2018 general rate
49 cases, Case Nos. 2018-00294, and 2018-00294, respectively;
- 50 • Duke Energy Kentucky’s 2019 general base rate case, Case No. 2019-
51 00271; and
- 52 • Kentucky Utilities and Louisville Gas and Electric’s 2020 general rate
53 cases, Case Nos. 2020-00349, and 2020-00350, respectively.

54 **Q. Have you filed testimony previously before any other state utility regulatory**
55 **commissions?**

56 **A.** Yes. I have testified before state utility commissions in Colorado, Indiana,
57 Michigan, Montana, Nevada, New Mexico, North Carolina, Ohio, Oregon, Utah,
58 Virginia, and Wisconsin.

59

60 **Overview and Conclusions**

61 **Q. What is the purpose of your testimony in this proceeding?**

62 **A.** My testimony addresses Big Rivers Electric Corporation’s (“Big Rivers”)
63 proposed Large Industrial Customer Standby Service (“LICSS”) tariff.

64 **Q. Please summarize your recommendations to the Commission.**

65 **A.** Big Rivers’ proposed LICSS tariff would not result in reasonable rates for
66 standby service. The proposed tariff would charge standby customers for
67 Maintenance and Backup demand equal to their Self-Supply Capacity on a year-

68 round basis when Big Rivers is only required to obtain a fraction of that capacity in
69 order to provide service.

70 Further, the proposed credit that Big Rivers proposes to provide for self-
71 supply capacity is based on its calculation of the marginal cost of capacity, which
72 is only a fraction of the embedded cost of capacity that Big Rivers proposes to
73 charge standby customers for that *same* capacity. However, LICSS customers are
74 not *selling* capacity to Big Rivers; they are *buying* standby service. The LICSS
75 tariff rates should be based on Big Rivers' cost to provide that service.

76 Big Rivers' proposed LICSS tariff also represents a significant departure
77 from the precedent set by this Commission in approving the rates for Maintenance
78 and Back-up Power Service under the Standard Rate QFS – Cogeneration/Small
79 Power Production Sales Tariff ("QFS") and would result in unduly discriminatory
80 rates for a very similar service.

81 I recommend that the rate design for Maintenance and Backup Power
82 under the LICSS tariff should be structured similar to the rates for Maintenance
83 and Back-up demand under the QFS tariff. However, to the extent that the
84 Commission does not approve my recommended modifications, then I
85 recommend that Big Rivers' proposed LICSS Maintenance and Backup Power
86 Demand charge should be modified to reflect a standby customer's contribution to
87 Big Rivers' Planning Reserve Margin Requirement ("PRMR").

88

89 **Large Industrial Customer Standby Service Tariff**

90 **Q. When did Kimberly-Clark begin operating its cogeneration unit at its**
91 **Owensboro mill?**

92 A. Kimberley Clark’s cogeneration unit was placed in-service on online July 1, 2021.
93 It is currently operating without a standby service tariff under standard LIC rates.

94 **Q. Please describe the proposed LICSS tariff?**

95 A. Big Rivers witness John Wolfram explains that the proposed LICSS tariff
96 is available to large industrial customers with a generation resource that is capable
97 of supplying all or part of its power requirements. The proposed LICSS describes
98 the provisions of service for large industrial customers standby customers who
99 request Supplemental, Maintenance, or Backup Power Service.¹

100 **Q. How are these services defined in the LICSS tariff?**

101 A. Mr. Wolfram defines these services as follows:

- 102 • Supplemental Power Service refers to transmission and power supply that
103 exceeds the capability of a standby customer’s self-generation.
- 104 • Maintenance Power Service refers to the transmission and power supply
105 during *scheduled* outages of the standby customer’s self-generation.
- 106 • Backup Power Service refers to the transmission and power supply during
107 *unscheduled* outages.²

108 The proposed LICSS tariff also defines Self-Supply Capacity as “the
109 demonstrated capacity of the Standby Customer’s generating unit(s), as determined

¹ Direct Testimony of John Wolfram, p. 3.

² *Id.*

110 by the reduction in Big Rivers’ MISO Planning Reserve Margin Requirement that
111 results from the Standby Customer’s own generation.”³

112 **Q. Please describe the rates that Big Rivers has proposed for the LICSS tariff?**

113 A. For Supplemental Power Service, the proposed LICSS tariff would require
114 a customer to pay the standard Large Industrial Customer (“LIC”) tariff rates for
115 demand and energy charges. For Maintenance Power and Backup Power demand,
116 Big Rivers proposes to charge standby customers the standard LIC demand rate less
117 a capacity credit equal to \$3.80/kW-month, applicable to the standby customer’s
118 Self-Supply Capacity. For Maintenance and Backup energy, the proposed tariff
119 would require a standby customer to pay the higher of the energy charges under the
120 LIC tariff schedule or the market price.⁴ Big Rivers’ proposed LICSS rate structure
121 is summarized in Table JB-1 below.

122 **Table JB-1**
123 **Big Rivers Proposed**
124 **Large Industrial Customer Standby Service Rate Structure**
125

Supplemental Power Service	Billed at Standard LIC demand and energy rates
Maintenance Power/Backup Power Service	Demand equal to Self-Supply Capacity billed at the current LIC demand rate of \$10.715/kW-Month less a credit equal to \$3.80/kW-Month (i.e. \$6.915/kW-Month) Energy usage billed at higher of Standard LIC Energy rate or market price

³ Big Rivers Proposed LICSS – Large Industrial Customer Standby Service Tariff, Sheet No. 69.01.

⁴ *Id.* Sheet Nos. 60-69.05.

126 **Q. Can you please clarify how the demand charges for Maintenance and Backup**
127 **Power would apply to a standby customer under proposed LICSS tariff?**

128 A. Big Rivers proposes to bill LICSS customers for all Maintenance/Backup
129 Power demand at the LIC tariff rate less a credit equal to \$3.80 per kW-month. The
130 level of Maintenance Power/Backup Power demand is proposed to be equal to the
131 standby customer's Self-Supply Capacity.⁵ Under this proposed rate structure, the
132 standby customer would be required to pay demand charges at a rate of \$6.915/kW-
133 month⁶ year-round for a level of demand equal to the Self-Supply Capacity,
134 regardless of whether or not the standby customer actually received Maintenance
135 or Backup Power in a given month.

136 **Q. Will Big Rivers incur any capacity costs to provide Maintenance Power**
137 **Service?**

138 A. No, the provision of Maintenance Power Service to a standby service
139 customer should not cause Big Rivers to incur any capacity costs. According to the
140 proposed tariff, a standby customer is required to schedule Maintenance outages at
141 least 60 days prior to the start of the calendar year, subject to approval by Big
142 Rivers. This provides Big Rivers the opportunity to ensure that Maintenance
143 outages will be scheduled during periods in which Big Rivers has sufficient *unused*
144 capacity to provide Maintenance Power Service, such as off-peak periods.
145 Therefore, the provision of Maintenance Power Service will not impact Big Rivers'
146 *peak* load forecasts or its PRMR. Since Big Rivers' PRMR would be unaffected

⁵ *Id.*

⁶ LIC Demand Charge of \$10.715/kW-month less LICSS credit of \$3.80/kW-month = \$6.915/kW-month.

147 by the provision of Maintenance Power, Big Rivers will not need to procure any
148 incremental capacity in order to provide Maintenance Power.

149 **Q. Will Big Rivers incur any capacity costs to provide Backup Power Service?**

150 A. A standby customer requires Backup Power Service when an unplanned
151 outage of its self-generation facility occurs. As a transmission owning member of
152 the Midcontinent Independent System Operator (“MISO”), Big Rivers plans to
153 meet MISO’s annual PRMR.⁷ MISO conducts an annual Loss of Load Expectation
154 study to determine planning reserve margin requirements, a study which among
155 other factors takes into account equipment forced outage rates.⁸ Big Rivers utilizes
156 a PRMR that is equal to 9.4% of its forecasted summer coincident peak load, where
157 the peak load forecast includes 1.6% transmission losses.⁹ This results in a reserve
158 margin that is 11.1% greater than forecasted peak load, excluding transmission
159 losses.¹⁰ While it is unlikely that a standby customer would experience a forced
160 outage coincident with the system peak, it may be reasonable for Big Rivers to incur
161 costs to increase its PRMR by an amount up to 11.1% of the standby customer’s
162 Self-Supply Capacity in order to provide Backup Power Service. However, Big
163 Rivers will not be required to obtain additional capacity above this amount in order
164 to provide Backup Power Service.

⁷ Big Rivers Corporation and Kenergy Corp. Joint Response to Kimberly-Clark Corporation’s First Set of Data Requests, Item 3, September 3, 2021, Reproduced in Exhibit JB-1.

⁸ [Midcontinent Independent System Operator Planning Year 2021-2022 Loss of Load Expectation Study Report](#), pp. 5-7.

⁹ Big Rivers Corporation and Kenergy Corp. Joint Response to Commission Staff’s First Set of Data Requests, Item 2, September 3, 2021, Reproduced in Exhibit JB-1.

¹⁰ Load Forecast Before Transmission Losses x (1 + 1.6% Transmission Losses) x (1 = 9.4% Planning Reserve Margin Requirement) – 1 = 11.1%.

165 **Q. What is your assessment of Big Rivers’ proposal to bill standby customers for**
166 **demand year-round that is equal to their Self-Supply Capacity?**

167 A. It is not appropriate to bill standby customers for this level of demand year-
168 round at the rates proposed by Big Rivers. As I explain above, Big Rivers would
169 not reasonably be required to obtain capacity greater than 11.1% of a standby
170 customer’s self-generating capacity in order to provide Maintenance and Backup
171 Power Service. However, the proposed tariff would require customers to pay
172 demand charges year-round for Maintenance and Backup Power billing demand
173 that is equal to the customer’s Self-Supply Capacity. Thus, the proposed billing
174 demand equal to the Self-Supply Capacity is substantially higher than the amount
175 of capacity that Big Rivers would need to obtain in order to provide Maintenance
176 and Backup Power Service.

177 **Q. What is the basis for Big Rivers’ proposed LICSS capacity credit applicable**
178 **to self-generation capacity?**

179 A. According to Mr. Wolfram, the proposed \$3.80/kW-month capacity credit
180 is “based on the value of capacity described by Big Rivers in its recent filing
181 regarding the conversion of the Green Station units to natural gas.”¹¹ In response
182 to discovery, Big Rivers confirms that it considers this to be the marginal cost of
183 new capacity.¹² Thus, Big Rivers’ proposed LICSS tariff would essentially pay
184 standby customers a credit equal to Big Rivers’ calculation of the marginal cost of
185 capacity for the capacity provided by the customer’s on-site generation.

¹¹ Direct Testimony of John Wolfram, pp. 3-4.

¹² Big Rivers Corporation and Kenergy Corp. Joint Response to Kimberly-Clark Corporation’s First Set of Data Requests, Item 1b, September 3, 2021.

186 **Q. Do you agree that the LICSS tariff should charge customers the LIC demand**
187 **rate for Self-Supply Capacity minus a credit for the value of capacity based on**
188 **marginal cost?**

189 A. No. KRS 278.030(1) allows a utility to collect fair, just and reasonable rates for
190 services rendered or to be rendered. The service to be rendered by Big Rivers
191 through the LICSS tariff is the provision of standby service. LICSS customers are
192 not *selling* capacity to Big Rivers; they are *buying* standby service. The LICSS
193 tariff rates should be based on Big Rivers' cost to provide that service.

194 **Q. Does Big Rivers currently offer Backup and Maintenance Power to customers**
195 **under an existing tariff?**

196 A. Yes, it does. Big Rivers currently offers Supplementary Service,
197 Unscheduled Back-up Service, and Maintenance Service under its QFS tariff.¹³

198 **Q. Can you please describe the standard QFS tariff?**

199 A. The standard QFS tariff is available to members of a Member Cooperative
200 with capacity requirements of 100 kW or more with onsite generation capacity
201 between 100 kW and 5,000 kW that operates more than 200 hours per year and
202 meets the criteria for a QF. The QFS definitions for Supplementary Service,
203 Unscheduled Back-up Service, and Maintenance Service are generally similar to
204 the definitions proposed in the LICSS tariff, which I have described above.
205 However, the rate structure for Unscheduled Back-up Service and Maintenance

¹³ Big Rivers Electric Corporation Rates, Terms, and Conditions for Furnishing Electric Service, Effective February 1, 2014, Sheet Nos. 42-49.

206 Service in the existing QFS tariff differs substantially relative to the rate structure
207 that Big Rivers has proposed for the LICSS tariff.¹⁴

208 **Q. Please describe the rate structure for Unscheduled Back-up and Maintenance**
209 **Service under the QFS tariff?**

210 A. The monthly charges for Unscheduled Back-up Demand are equal to 110%
211 of Big Rivers' actual cost, including transmission service, to import energy from a
212 third party supplier to supply the Unscheduled Back-up Service.

213 Maintenance Service that occurs on-peak is charged the greater of
214 \$3.3200/kW of maintenance demand per week plus an energy charge equal to the
215 standard rate schedule per kWh rate for Rural Delivery Service ("RDS"), or 110%
216 of the energy price in the futures market at the time the Maintenance Energy is
217 scheduled.

218 Maintenance Service that occurs off-peak is charged \$3.3200/kW of
219 maintenance demand per week plus an energy charge equal to the standard rate
220 schedule per kWh rate for RDS.

221 **Q. How is the weekly demand charge for QFS Maintenance Demand calculated?**

222 A. In Big Rivers' 2013 general rate case, Company witness John Wolfram
223 explained that the demand charge for the QFS tariff is determined by converting
224 the demand charge for the RDS tariff from a \$/kW-month rate to a \$/kW-week rate.
225 This is accomplished by dividing the \$/kW-month rate by approximately 30 days

¹⁴ *Id.*

226 in a month and multiplying by seven days in a week.¹⁵ This relationship holds true
227 for the current RDS and QFS demand charges.¹⁶

228 **Q. What is your assessment of the QFS rate structure for Maintenance and Back-**
229 **up Power Service?**

230 A. The Commission approved QFS rates for Maintenance and Back-up Power
231 service are based on the standard service rate schedule and are reasonably designed
232 to recover the costs that Big Rivers will incur to provide service. The QFS tariff
233 provides off-peak Maintenance Demand at the same effective rates at which it
234 provides service under the standard RDS rate schedule. The weekly demand charge
235 is equal to the monthly RDS demand charge converted to a weekly rate and the off-
236 peak Maintenance Energy is billed at the same rate as the standard RDS energy
237 rate. This appropriately reflects the fact that, as I explained above, Big Rivers is
238 not required to obtain additional capacity in order to provide off-peak Maintenance
239 Service. Back-up Power Service charges are equal to the actual costs that Big
240 Rivers incurs to provide the service plus a premium of 10%. This 10% premium is
241 appropriate because Big Rivers may incur some additional capacity or other costs
242 in order to reliably provide Back-up Service in the event of an unplanned outage.

¹⁵ *Application of Big Rivers Electric Corporation for a General Adjustment in Rates*, Case No. 2013-00199, Direct Testimony of John Wolfram (June 28, 2013), p. 29.

¹⁶ Current RDS Demand Charge \$13.8050/kW-Month ÷ 30 days/month x 7 days/week = Current QFS Demand Charge \$3.2200/kW-week.

243 **Q. Why would a standby customer like Kimberly-Clark take service on the**
244 **LICSS tariff instead of the QFS tariff?**

245 A. Although Kimberly-Clark's generator is a QF, Kimberly-Clark cannot take
246 service on the existing QFS rate because its generator has a capacity that is larger
247 than 5,000 kW. The QFS tariff is clearly a more appropriate rate for a standby
248 customer relative to Big Rivers proposed LICSS tariff because the QFS tariff only
249 charges customers for Maintenance and Back-up Power when it is needed, as
250 opposed to billing for demand equal to a standby customer's entire Self-Supply
251 Capacity year-round. Big Rivers' proposed LICSS tariff would result in rates that
252 are unduly discriminatory towards large industrial standby customers with self-
253 generation, such as Kimberly-Clark, because it would effectively charge a much
254 higher rate relative to the QFS tariff for essentially the same service.

255 **Q. What do you recommend with respect to the proposed LICSS tariff?**

256 A. I recommend that the Commission reject Big Rivers' proposed LICSS tariff.
257 It would not be reasonable for Big Rivers to charge standby customers for
258 Maintenance and Backup Power demand equal to their Self-Supply Capacity on a
259 year-round basis when Big Rivers is only required to obtain a fraction of that
260 capacity in order to provide service. Nor would it be reasonable to charge LICSS
261 customers a rate based on the embedded cost for capacity but at the same time
262 provide a credit for that same capacity at a rate that reflects a substantially lower
263 marginal cost. Further, Big Rivers' proposed LICSS tariff represents a significant
264 departure from the precedent set by this Commission in approving the QFS tariff

265 rates for Maintenance and Back-up Power Service and would result in unduly
266 discriminatory rates for essentially the same service.

267 **Q. What changes do you recommend to the proposed LICSS tariff?**

268 A. I recommend that the rate design for Maintenance and Backup Power
269 demand under the LICSS tariff should be structured similar to the rate design for
270 Maintenance and Back-up demand under the QFS tariff. The Commission has
271 already approved this rate structure for the QFS tariff which provides essentially
272 the same service.

273 Specifically, I recommend that the LICSS customers should be charged
274 110% of Big Rivers actual cost to provide Backup Service, including transmission
275 service, by importing energy from a third party. I also recommend that the LICSS
276 Maintenance Demand charge should be determined by converting the demand
277 charge for the LIC tariff from a \$/kW-month rate to a \$/kW-week rate. Similar to
278 the weekly demand rate in the QFS tariff, this would be accomplished by dividing
279 the standard LIC \$10.7150/kW-month demand rate by 30 days in a month and
280 multiplying by seven days in a week, resulting in an LICSS Maintenance Demand
281 charge of \$2.50/kW-week. I do not recommend any changes to Big Rivers'
282 proposal to bill for Maintenance Power energy at the higher of the LIC energy rate
283 or the market price. My recommended LICSS tariff is presented in Exhibit JB-2
284 and summarized in Table JB-2 below.

285
286
287
288

Table JB-2
Kimberly-Clark Primary Recommendation
Large Industrial Customer Standby Service Rate Structure

Supplemental Power Service	Billed at Standard LIC demand and energy rates
Maintenance Power Service	Scheduled Maintenance Demand billed at \$2.5002/kW-Week Energy usage billed at higher of Standard LIC Energy rate or market price
Backup Power Service	Unscheduled Backup Demand charged 110% of Big Rivers actual cost to import energy from a third party, including transmission service

289 **Q. Do you have an alternative recommendation if the Commission does not**
290 **approve your rate design recommendation for Maintenance and Backup**
291 **Power under the LICSS tariff to be structured similar to the rate structure for**
292 **Maintenance and Back-up demand under the QFS tariff?**

293 A. To be clear, my primary recommendation is that the rate design for
294 Maintenance and Backup Power under the LICSS tariff should be structured similar
295 to the rate design for Maintenance and Back-up Service demand under the QFS
296 tariff. However, to the extent that the Commission does not approve my
297 recommendation, then I recommend that Big Rivers' proposed LICSS Maintenance
298 and Backup Power Demand charge should be modified to reflect the standby
299 customer's contribution to Big Rivers' PRMR. Specifically, I recommend that the
300 Maintenance Power/Backup demand charge should be equal 11.1% of the LIC *cost-*
301 *based* demand charge of \$16.452/kW-Mo,¹⁷ or \$1.83/kW-Mo. My alternative

¹⁷ See Big Rivers Corporation and Kenergy Corp. Joint Response to Kimberly-Clark Corporation's Second Set of Data Requests, Item 4 b, October 1, 2021, Reproduced in Exhibit JB-1 and *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Annual Report on MRSB Credit*, Case No. 2021-00061, Direct Testimony of John Wolfram Exhibit Wlforam-8 (February 26, 2021), p. 1.

302 recommended LICSS tariff is presented in Exhibit JB-3 and summarized in Table
 303 JB-3 below.

304 **Table JB-3**
 305 **Kimberly-Clark Primary Recommendation**
 306 **Large Industrial Customer Standby Service Rate Structure**
 307

Supplemental Power Service	Billed at Standard LIC demand and energy rates
Maintenance Power/Backup Power Service	Demand equal to Self-Supply Capacity billed at \$1.83/kW-Month Energy usage billed at higher of Standard LIC Energy rate or market price

308 **Q. Please explain why it would be appropriate for a standby customer’s**
 309 **Maintenance/Backup Service demand charge to be equal to 11.1% of the LIC**
 310 **cost-based demand rate?**

311 A. As I explain above, it would not be necessary for Big Rivers to procure
 312 additional capacity equal to the standby customer’s Self-Supply Capacity, but it
 313 might be reasonable to increase its PRMR by an amount up to 11.1% of the
 314 maximum Backup Power demand.¹⁸ In contrast, Big Rivers would be required to
 315 procure capacity equal to 111.1%¹⁹ of a large industrial customer’s coincident peak
 316 load to provide standard service under the LIC tariff. Accordingly, the amount of
 317 capacity needed to provide Maintenance/Backup Service for 1 MW of Backup
 318 Power demand would be no greater than 10.0%²⁰ of the capacity that would be

¹⁸ Load Forecast Before Transmission Losses x (1 + 1.6% Transmission Losses) x (1 + 9.4% Planning Reserve Margin Requirement) – 1 = 11.1%.

¹⁹ Large Industrial Customer Coincident Peak Load x (1 + 1.6% Transmission Losses) x (1 + 9.4% Planning Reserve Margin Requirement) = 111.1% of Coincident Peak Load

²⁰ 11.1% of Standby Customer Backup Demand ÷ 111.1% of Large Industrial Customer Coincident Peak Demand = 10.0%.

319 required to serve 1 MW of coincident demand for a large industrial customer. My
320 proposal to set the LICSS Maintenance/Backup demand charge equal to 11.1% of
321 the LIC cost-based demand charge is conservative because 11.1% is greater than
322 the ratio of the capacity cost that would be incurred to provide the
323 Maintenance/Backup Service relative to the capacity cost that would be incurred to
324 provide standard service.

325 **Q. Please explain why your alternative recommendation would utilize the LIC**
326 ***cost-based* demand rate instead of the *current* LIC demand rate to determine**
327 **the LICSS Maintenance/Backup demand charge?**

328 A. The *current* LIC demand rate of \$10.7150/kW is substantially less than the
329 *cost-based* LIC demand rate of \$16.4524. My alternative recommended rate design
330 would utilize the higher *cost-based* rate to derive the LICSS Maintenance/Backup
331 demand charge in order to align with underlying cost of service.

332 **Q. Does this conclude your direct testimony?**

333 A. Yes, it does.

COMMONWEALTH OF KENTUCKY

BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

In the Matter of:)

ELECTRONIC TARIFF FILING OF)
BIG RIVERS ELECTRIC CORPORATION)
AND KENERGY CORP.)
TO IMPLEMENT A NEW STANDBY SERVICE)
TARIFF)

Case No. 2021-
00289

AFFIDAVIT OF JUSTIN BIEBER


STATE OF UTAH)
COUNTY OF SUMMIT)

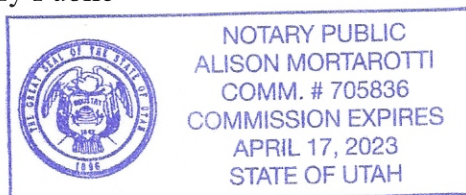
Justin Bieber, being first duly sworn, deposes and states that:

1. He is a Senior Consultant with Energy Strategies, L.L.C., in Salt Lake City, Utah;
2. He is the witness who sponsors the accompanying testimony entitled "Direct Testimony of Justin Bieber;"
3. Said testimony and exhibits were prepared by him and under his direction and supervision;
4. If inquiries were made as to the facts in said testimony and exhibits he would respond as therein set forth; and
5. The aforesaid testimony is true and correct to the best of his knowledge, information and belief.


Justin Bieber

Subscribed and sworn to or affirmed before me this 15th day of October, 2021, by Justin Bieber.


Notary Public



COMMONWEALTH OF KENTUCKY
BEFORE THE
KENTUCKY PUBLIC SERVICE COMMISSION

In the Matter of:)
)
ELECTRONIC TARIFF FILING OF)
BIG RIVERS ELECTRIC CORPORATION)
AND KENERGY CORP.)
TO IMPLEMENT A NEW STANDBY)
SERVICE TARIFF)

Case No. 2021-00289

EXHIBITS

Case No. 2021-00289

Exhibit JB-1

**Big Rivers Electric Corporation Responses to
Data Requests Referenced in Testimony**

**BIG RIVERS ELECTRIC CORPORATION
KENERGY CORP.**

**ELECTRONIC TARIFF FILING OF
BIG RIVERS ELECTRIC CORPORATION
AND KENERGY CORP.
TO IMPLEMENT A NEW STANDBY SERVICE TARIFF
CASE NO. 2021-00289**

**Joint Response to Kimberly-Clark Corporation's
First Set of Data Requests
dated August 20, 2021**

September 3, 2021

1 Item 1) *Refer to the Direct Testimony of John Wolfram, pp.3-4. "The*
2 *credit is based on the value of capacity described by Big Rivers in its recent*
3 *filing regarding the conversion of the Green Station units to natural gas in*
4 *Case No. 2021-00079. See In the Matter of: Electronic Application Of Big*
5 *Rivers Electric Corporation For A Certificate Of Public Convenience And*
6 *Necessity Authorizing The Conversion Of The Green Station Units To*
7 *Natural Gas Fired Units And An Order Approving The Establishment Of A*
8 *Regulatory Asset, filed February 28, 2021. In that filing, Big Rivers describes*
9 *the capacity price projections in the Direct Testimony of Mark Eacret on*
10 *pages 9-12 and in Eacret Exhibit 3."*

11 a. *Please provide an unredacted copy of Mark Eacret's referenced*
12 *testimony, including Exhibit 3.*

13

**BIG RIVERS ELECTRIC CORPORATION
KENERGY CORP.**

**ELECTRONIC TARIFF FILING OF
BIG RIVERS ELECTRIC CORPORATION
AND KENERGY CORP.
TO IMPLEMENT A NEW STANDBY SERVICE TARIFF
CASE NO. 2021-00289**

**Joint Response to Kimberly-Clark Corporation's
First Set of Data Requests
dated August 20, 2021**

September 3, 2021

- 1 ***b. Does BREC believe that the cost to convert the Green Station units***
2 ***to natural gas represents BREC's marginal cost of capacity?***
3 ***i. Please explain why or why not.***
4 ***c. What is BREC's embedded cost of generation capacity?***
5 ***i. Please provide all supporting workpapers, in Excel format with***
6 ***working formulas.***
7 ***d. What is BREC's embedded cost of transmission capacity?***
8 ***i. Please provide all supporting workpapers, in Excel format with***
9 ***working formulas.***

10

11 **Response)**

- 12 a. Please see the referenced testimony and exhibit provided with this response
13 (*Attachment 1*).
14 b. Yes.
15 i. From a resource planning standpoint, the conversion of the Green
16 Station units to natural gas effectively serves as Big Rivers' next

**BIG RIVERS ELECTRIC CORPORATION
KENERGY CORP.**

**ELECTRONIC TARIFF FILING OF
BIG RIVERS ELECTRIC CORPORATION
AND KENERGY CORP.
TO IMPLEMENT A NEW STANDBY SERVICE TARIFF
CASE NO. 2021-00289**

**Joint Response to Kimberly-Clark Corporation's
First Set of Data Requests
dated August 20, 2021**

September 3, 2021

1 resource acquisition. Analysis more fully described in Case No. 2021-
2 00079 indicated that the cost per kw/month of the Green conversion was
3 very similar to the bilateral market cost of capacity over the same
4 period, confirming the reasonableness of that approach for procuring the
5 next required MW. The capacity cost of the converted Green Station
6 units is the capacity cost Big Rivers incurs to meet incremental demand,
7 and therefore represents the marginal cost of capacity.

8 c. Big Rivers assessed the embedded cost of capacity in its recent filing of two
9 cost of service studies in Case No. 2021-00061. Using the preferred study
10 (using 12 CP allocation instead of Average & Excess for production
11 demand), the embedded costs of generation and transmission capacity are
12 provided in the attachment ("*Attachment 2*") provided with this response.

13 i. Please see the confidential Excel spreadsheet file ("*Attachment 3*")
14 provided with these responses.

15 d. Please see the above response to subpart c.

16

**BIG RIVERS ELECTRIC CORPORATION
KENERGY CORP.**

**ELECTRONIC TARIFF FILING OF
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CASE NO. 2021-00289**

**Joint Response to Kimberly-Clark Corporation's
First Set of Data Requests
dated August 20, 2021**

September 3, 2021

1 **Witness)** John Wolfram

**BIG RIVERS ELECTRIC CORPORATION
KENERGY CORP.**

**ELECTRONIC TARIFF FILING OF
BIG RIVERS ELECTRIC CORPORATION
AND KENERGY CORP.
TO IMPLEMENT A NEW STANDBY SERVICE TARIFF
CASE NO. 2021-00289**

**Joint Response to Kimberly Clark Corporation's
Initial Request for Information
dated August 20, 2021**

September 3, 2021

1 **Item 3)** *What planning reserve margin does BREC plan for to meet its*
2 *peak demand requirements?*

3

4 **Response)** As a transmission-owning member of MISO,¹ Big Rivers plans to meet
5 MISO's annual planning reserve margin requirements indicated in Planning
6 Resource Auction ("PRA") Document "Loss of Load Expectation ("LOLE") Study
7 Reports" located on MISO website: [https://www.misoenergy.org/planning/resource-](https://www.misoenergy.org/planning/resource-adequacy/#t=10&p=0&s=FileName&sd=desc)
8 [adequacy/#t=10&p=0&s=FileName&sd=desc](https://www.misoenergy.org/planning/resource-adequacy/#t=10&p=0&s=FileName&sd=desc) .

9

10

11 **Witness)** Mark J. Eacret

12

¹ Midcontinent Independent System Operator, Inc.

**BIG RIVERS ELECTRIC CORPORATION
KENERGY CORP.**

**ELECTRONIC TARIFF FILING OF
BIG RIVERS ELECTRIC CORPORATION
AND KENERGY CORP.
TO IMPLEMENT A NEW STANDBY SERVICE TARIFF
CASE NO. 2021-00289**

**Joint Response to Kimberly-Clark Corporation's
Second Set of Data Requests
dated September 17, 2021**

October 1, 2021

1 **Item 4)** *Refer to Big Rivers' Excel Attachment KC 1-1 (JW Att3 CNF) –*

2 *Big Rivers_COSS_2019_FILED to Response KC 1-1, tab 'Rates-Opt1.'*

3 *a. The workpaper indicates that the LIC cost-based demand charge is*
4 *16.452/kW-Mo. Please provide workpapers or analyses showing the*
5 *derivation of this cost-based rate using the results of the cost-of-*
6 *service study.*

7 *b. Please explain the reasons why Big Rivers' current LIC demand*
8 *charge of \$10.715/kW-Mo differs from the cost-based rate?*

9 *c. Does Big Rivers believe it is appropriate to utilize a top-down rate*
10 *design for the LICSS tariff, starting with the LIC rates if the LIC*
11 *rates are not cost-based?*

12 *i. Please explain why or why not.*

13

**BIG RIVERS ELECTRIC CORPORATION
KENERGY CORP.**

**ELECTRONIC TARIFF FILING OF
BIG RIVERS ELECTRIC CORPORATION
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TO IMPLEMENT A NEW STANDBY SERVICE TARIFF
CASE NO. 2021-00289**

**Joint Response to Kimberly-Clark Corporation's
Second Set of Data Requests
dated September 17, 2021**

October 1, 2021

1 **Response)**

2 a. The referenced spreadsheet is the workpaper. The derivation of the cost-
3 based rate on tab "Rates-Opt-1" was explained in Case No. 2021-00061.¹
4 In that case, I began with the per-unit energy charges from the cost-of-
5 service study and adjusted it to remove the effects of the Fuel Adjustment
6 Clause, the Non-Smelter Non-FAC Purchased Power Adjustment, and the
7 energy-related portion of the Environmental Surcharge. This yields the
8 energy charge on a basis comparable to that of the tariff rate. Then I
9 computed the demand charge such that the overall class revenues (before
10 applying the Member Revenue Stability Mechanism) were achieved while
11 holding the other rate riders constant. I performed these steps for both
12 the Rural Delivery Service (RDS) and Large Industrial Customer (LIC)
13 customer classes. This is explained in my Direct Testimony in Case No.
14 2021-00061.

¹ See *In the Matter of: Electronic Application of Big Rivers Electric Corporation for Annual Report on MRSB Credit*, P.S.C. Case No. 2021-00061, Application (filed February 26, 2021).

**BIG RIVERS ELECTRIC CORPORATION
KENERGY CORP.**

**ELECTRONIC TARIFF FILING OF
BIG RIVERS ELECTRIC CORPORATION
AND KENERGY CORP.
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CASE NO. 2021-00289**

**Joint Response to Kimberly-Clark Corporation's
Second Set of Data Requests
dated September 17, 2021**

October 1, 2021

- 1 b. See the Commission's Order dated June 9, 2021, in Case No. 2021-00061, at
2 the top of page 12, which states, "Finally, the Commission notes that the
3 COSSs illustrate that the subsidization between the RDS and LIC classes is
4 minimal and finds that no change to the current rate allocations is
5 warranted."
6 c. Big Rivers believes it is appropriate to utilize a top-down rate design for the
7 LICSS tariff, starting with the LIC rates.
8 i. It is appropriate for the LICSS rate to be established on the same basis
9 as the rates applicable to Big Rivers' other industrial customers
10 pursuant to the LIC tariff.

11

12

13 **Witness)** John Wolfram

14

**BIG RIVERS ELECTRIC CORPORATION
KENERGY CORP.**

**ELECTRONIC TARIFF FILING OF
BIG RIVERS ELECTRIC CORPORATION
AND KENERGY CORP.
TO IMPLEMENT A NEW STANDBY SERVICE TARIFF
CASE NO. 2021-00289**

**Joint Response to Commission Staff's
First Request for Information
dated August 18, 2021**

September 3, 2021

1 **Item 2) Refer to the Application, proposed tariff LICSS, Sheet Nos. 69–**
2 **69.01 and to the Direct Testimony of Mark J. Eacret, page 17, lines 1–13, in**
3 **Case No. 2021-00282.¹ Provide in Excel format with all formulas, columns,**
4 **and rows unprotected and fully accessible BREC's monthly estimate of the**
5 **energy and capacity requirements it would have to supply for those large**
6 **industrial customers who are or potentially may be standby customers and**
7 **who may subscribe to one or all of the services to be offered through LICSS**
8 **for the period 2022–2026. Include with the response BREC's Midcontinent**
9 **Independent System Operator (MISO) capacity requirements and BREC's**
10 **capacity position and reserve margin including transmission losses and the**
11 **PPAs when they come online.**

12

13

¹ Case No. 2021-00282, *Electronic Tariff Filing of Big Rivers Electric Corporation and Jackson Purchase Energy Corporation for Approval and Confidential Treatment of a Special Contract and Cost Analysis Information and a Request for Deviation from the Commission's September 24, 1990 in Administrative Case No. 327* (filed June 21, 2021).

**BIG RIVERS ELECTRIC CORPORATION
KENERGY CORP.**

**ELECTRONIC TARIFF FILING OF
BIG RIVERS ELECTRIC CORPORATION
AND KENERGY CORP.
TO IMPLEMENT A NEW STANDBY SERVICE TARIFF
CASE NO. 2021-00289**

**Joint Response to Commission Staff's
First Request for Information
dated August 18, 2021**

September 3, 2021

1 **Response)** Paper Excellence (formerly Domtar) and Kimberly Clark Corporation
2 are the only two large industrial members of which Big Rivers is aware who
3 potentially may subscribe to one or all of the services to be offered through the
4 proposed LICSS tariff for the period 2022–2026.

5 Big Rivers will not be providing any additional MISO capacity to these two
6 retail members because they subscribe to services offered through LICSS. The MISO-
7 accredited capacity value of the members' generation equipment will reduce the
8 amount of MISO-accredited capacity which Big Rivers would otherwise need to
9 provide. The value associated with that generation is the rationale for the \$3.80/kw-
10 month credit applied to Maintenance Power/Backup Power.

11 Please see the confidential Excel spreadsheet provided with these responses
12 for the data requested.

13

14

15 **Witness)** Mark J. Eacret

16

**Big Rivers Electric Corporation
Planning Reserve Margins/Load Comparison 2022-2026**

Planning Year 2021 Planning Reserve Margin Requirement (PRMR) target is 10% based on unforced capacity (UCAP) 9.4% plus 1.6% Transmission Losses

Source of UCAP PRMR MISO *Planning Year 2021-2022 Loss of Load Expectation Study Report* available at:
<https://cdn.misoenergy.org/PY%202021%202022%20LOLE%20Study%20Report489442.pdf>

Planning Year	Wilson ZRC	Green 1 ZRC	Green 2 ZRC	Reid CT ZRC	SEPA Hydro ZRC	Solar - McCracken County	Solar - Meade County	Solar Henderson / Webster County	Capacity in MW	Forecasted Summer Coincident peak (Native MW + 1.6% Losses)	Summer Peak plus Planning Reserve Margin of 9.4%	Bilateral Capacity Sales or (Purchase) NET MW	KyMEA Capacity MW	OMU Capacity MW	Capacity Position Sale or (Purchase) MW
										MW	MW*				
2022	384	190	183	58	178				993	608	665				
2023	404	190	183	57	178	49	31		1092	820	897				
2024	396	190	183	56	178	19	13	50	1084	822	899				
2025	396	190	183	56	178	18	12	49	1081	823	901				
2026	396	190	183	56	178	18	12	47	1079	825	903				

* Does not include Blockware Mining, LLC load. That contract is pending before the Commission in Case No. 2021-00282. Also does not include Pratt Industries, Inc., which plans to locate a [redacted] plant in Henderson County. That project was announced July 29, 2021.

Potential LICSS Members

	Paper Excellence		Kimberly Clark		Total	
	MW	MWh _1/	MW	MWh _2/	MW	MWh
2022			14		14	
2023	50		14		64	
2024	50		14		64	
2025	50		14		64	
2026	50		14		64	

_1/ Estimate based upon 2017-7/2021 backup provided under existing special contract

_2/ This generator began operation in June of 2021, so Big Rivers has no experience from which to estimate Kimberly Clark's requirement for Backup or Maintenance energy.

We have assumed 5% here.

Case No. 2021-00289

Exhibit JB-2

**Kimberly-Clark Corporation
Recommended LICSS – Large Industrial Customer
Standby Service Tariff**



(Name of Utility)

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

Third Revised SHEET NO. 69

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

Second Revised SHEET NO. 69

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service

[N]

Applicability:

Applicable in all territory served by Big Rivers' transmission system.

Availability:

This schedule is available to any of Big Rivers' 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 its power requirements for other than emergency purposes, who requests supplemental, maintenance or backup power, and who has or enters into a special contract that provides rates for electric service other than supplemental, maintenance or backup power (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 which 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 which the Standby Customer ordinarily generates on its own.

DATE OF ISSUE June 24, 2021
DATE EFFECTIVE August 1, 2021

/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

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

Second Revised SHEET NO. 69.01

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

First Revised SHEET NO. 69.01

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – large Industrial Customer Standby Service – (continued)

[N]

Definitions (continued):

“Maintenance Power Service” – a service which provides transmission capacity as well as the energy and capacity requirements for use by the Standby Customer during scheduled outages or interruptions of the Standby Customer’s own generation.

“Backup Power Service” – a service which provides transmission capacity as well as the energy and capacity requirements for use by the Standby Customer to replace energy generated by the Standby Customer’s own generation during an unscheduled outage or other interruption of the Standby Customer’s own generation.

“Self-Supply Capacity” – the demonstrated capacity of the Standby Customer’s generating unit(s), as determined by the reduction in Big Rivers’ MISO Planning Reserve Margin Requirement that results from the Standby Customer’s own generation.

Billing:

The provisions of the Standard Rate Schedule LIC – Large Industrial Customer tariff schedule and all applicable adjustment clauses and riders shall apply to Supplemental Power Service, Maintenance Power Service and Backup Power Service except where noted otherwise.

Big Rivers shall bill each Member Cooperative in accordance with the billing and payment terms set forth in the Billing section of Big Rivers’ Standard Rate LIC – Large Industrial Schedule 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 June 24, 2021
 DATE EFFECTIVE August 1, 2021

/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
 President and Chief Executive Officer
 Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

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

Original SHEET NO. 69.02

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

_____ SHEET NO. _____

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

[N]

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.
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 Big Rivers' Standard Rate Schedule LIC – Large Industrial Customer tariff schedule.

DATE OF ISSUE June 24, 2021
DATE EFFECTIVE August 1, 2021

/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



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

Original SHEET NO. 69.03

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

_____ SHEET NO. _____

(Name of Utility)

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

[N]

B. Maintenance Power Service and Backup Power Service

Requirements

- ~~1. The level of Maintenance Power/Backup Power demand shall equal the Standby Customer's Self Supply Capacity.~~
- 2.1. The Standby Customer shall be required to cooperate with Big Rivers to schedule Maintenance outages so as to maximize the value of Standby Customer's Self-Supply Capacity. The Standby Customer's Maintenance Power requirements for each generating unit must be submitted to Big Rivers at least sixty (60) days prior to the beginning of each calendar year. Within thirty (30) days of such submission, Big Rivers shall respond to the Standby Customer either approving the Maintenance Power schedule or requesting that the Standby Customer reschedule those Maintenance Power requirements. The Standby Customer may adjust the Maintenance Power schedule upon prior notice to Big Rivers.
- 2. The Standby Customer shall notify Big Rivers by telephone within one (1) hour of the beginning and end of any outage. Within forty-eight (48) hours of the end of an outage, the Standby Customer shall supply written notice to Big Rivers of the dates and times of the outage with verification that the outage had occurred.
- 3. The level of Maintenance Power shall equal the Standby Customer's Scheduled Maintenance Demand. Scheduled Maintenance Demand shall not exceed the design capacity of the Standby Customer's generator.
- ~~3.4.~~ The level of Backup Power shall be equal to the Standby Customer's Self-Supply Capacity less the metered output of the Standby Customer's generator, but in no event will the Backup Power amount be less than zero.

Billing

- 1. Administrative Charge: The Administrative Charge shall be \$150 per month.
- 2. ~~The charge for Maintenance Power demand shall be \$2.5002 per kW of Scheduled Maintenance Demand per week. Demand Charges: All Maintenance Power/Backup Power demand shall be billed at the Standard Rate Schedule LIC – Large Industrial Customer tariff rate, less a credit equal to \$3.80 per kW month times Standby Customer's Self Supply Capacity.~~

DATE OF ISSUE June 24, 2021
DATE EFFECTIVE August 1, 2021

/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

For All Territory Served By
Cooperative's Transmission System
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)

[N]

Billing (continued)

- 3. ~~Energy Charges~~: All Maintenance Power/~~Backup Power~~ energy usage shall be billed at the higher of the charges of Big Rivers' Standard Rate Schedule LIC – Large Industrial Customer tariff schedule or the market price, which shall include the energy charge Big Rivers would have had to pay to provide service to the Member Cooperative for the Standby Customer, plus any transmission charges, MISO fees, or other costs.
- ~~3.4.~~ Backup Power service shall be billed at one hundred-ten percent (110%) of Big Rivers' actual cost, including transmission service, to import energy from a Third Party supplier to supply the unscheduled Backup Power service.
- 4.5. During any period in which the metered output of the Standby Customer's generator is less than its Self-Supply Capacity, Maintenance Power/Backup Power energy shall be the first through the meter, up to the Self-Supply Capacity. Energy consumed above the Self-Supply Capacity for any period shall be Supplemental Power energy.

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. Standby Customer shall be required to adhere to Big Rivers' requirements and procedures for interconnection.
- 3. The Standby Customer shall be required to allow Big Rivers to meter 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 additional facilities associated with providing service under the provisions of this schedule.
- 5. The Standby Customer shall be responsible for any MISO charges, fees, penalties, or other costs associated with Standby Customer's generation, outages of Standby Customer's generation, or Maintenance or Backup Power service.

DATE OF ISSUE June 24, 2021
DATE EFFECTIVE August 1, 2021

/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

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

Original SHEET NO. 69.05

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

_____ SHEET NO. _____

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

[N]

Terms and Conditions (continued):

- 6. The Standby Customer shall not transmit energy to Big Rivers or to the Member Cooperative.
- 7. The Member Cooperative may enter into special agreements with Big Rivers and Standby Customers which may deviate from the provisions of this schedule. Such agreements shall address those significant characteristics of service and cost which would influence the need for such an agreement.
- 8. The supplying of, and billing for, service and all conditions applying thereto, are subject to the jurisdiction of the Commission, and to Big Rivers' and the Member Cooperative's generally applicable rules, terms, and conditions currently in effect, as filed with the Commission.



DATE OF ISSUE June 24, 2021
DATE EFFECTIVE August 1, 2021

/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

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

Third Revised SHEET NO. 69

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

Second Revised SHEET NO. 69

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service

[N]

Applicability:

Applicable in all territory served by Big Rivers' transmission system.

Availability:

This schedule is available to any of Big Rivers' 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 its power requirements for other than emergency purposes, who requests supplemental, maintenance or backup power, and who has or enters into a special contract that provides rates for electric service other than supplemental, maintenance or backup power (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 which 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 which the Standby Customer ordinarily generates on its own.

DATE OF ISSUE June 24, 2021
DATE EFFECTIVE August 1, 2021

/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

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

Second Revised SHEET NO. 69.01

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

First Revised SHEET NO. 69.01

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – large Industrial Customer Standby Service – (continued)

[N]

Definitions (continued):

“Maintenance Power Service” – a service which provides transmission capacity as well as the energy and capacity requirements for use by the Standby Customer during scheduled outages or interruptions of the Standby Customer’s own generation.

“Backup Power Service” – a service which provides transmission capacity as well as the energy and capacity requirements for use by the Standby Customer to replace energy generated by the Standby Customer’s own generation during an unscheduled outage or other interruption of the Standby Customer’s own generation.

“Self-Supply Capacity” – the demonstrated capacity of the Standby Customer’s generating unit(s), as determined by the reduction in Big Rivers’ MISO Planning Reserve Margin Requirement that results from the Standby Customer’s own generation.

Billing:

The provisions of the Standard Rate Schedule LIC – Large Industrial Customer tariff schedule and all applicable adjustment clauses and riders shall apply to Supplemental Power Service, Maintenance Power Service and Backup Power Service except where noted otherwise.

Big Rivers shall bill each Member Cooperative in accordance with the billing and payment terms set forth in the Billing section of Big Rivers’ Standard Rate LIC – Large Industrial Schedule 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 June 24, 2021
 DATE EFFECTIVE August 1, 2021

/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
 President and Chief Executive Officer
 Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

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

Original SHEET NO. 69.02

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

_____ SHEET NO. _____

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

[N]

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.
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 Big Rivers' Standard Rate Schedule LIC – Large Industrial Customer tariff schedule.

DATE OF ISSUE June 24, 2021
DATE EFFECTIVE August 1, 2021

/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

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

Original SHEET NO. 69.03

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

_____ SHEET NO. _____

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

[N]

B. Maintenance Power Service and Backup Power Service

Requirements

1. The Standby Customer shall be required to cooperate with Big Rivers to schedule Maintenance outages so as to maximize the value of Standby Customer's Self-Supply Capacity. The Standby Customer's Maintenance Power requirements for each generating unit must be submitted to Big Rivers at least sixty (60) days prior to the beginning of each calendar year. Within thirty (30) days of such submission, Big Rivers shall respond to the Standby Customer either approving the Maintenance Power schedule or requesting that the Standby Customer reschedule those Maintenance Power requirements. The Standby Customer may adjust the Maintenance Power schedule upon prior notice to Big Rivers.
2. The Standby Customer shall notify Big Rivers by telephone within one (1) hour of the beginning and end of any outage. Within forty-eight (48) hours of the end of an outage, the Standby Customer shall supply written notice to Big Rivers of the dates and times of the outage with verification that the outage had occurred.
3. The level of Maintenance Power shall equal the Standby Customer's Scheduled Maintenance Demand. Scheduled Maintenance Demand shall not exceed the design capacity of the Standby Customer's generator.
4. The level of Backup Power shall be equal to the Standby Customer's Self-Supply Capacity less the metered output of the Standby Customer's generator, but in no event will the Backup Power amount be less than zero.

Billing

1. Administrative Charge: The Administrative Charge shall be \$150 per month.
2. The charge for Maintenance Power demand shall be \$2.5002 per kW of Scheduled Maintenance Demand per week.

DATE OF ISSUE June 24, 2021
DATE EFFECTIVE August 1, 2021

/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

For All Territory Served By
Cooperative's Transmission System
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)

[N]

Billing (continued)

3. All Maintenance Power energy usage shall be billed at the higher of the charges of Big Rivers' Standard Rate Schedule LIC – Large Industrial Customer tariff schedule or the market price, which shall include the energy charge Big Rivers would have had to pay to provide service to the Member Cooperative for the Standby Customer, plus any transmission charges, MISO fees, or other costs.
4. Backup Power service shall be billed at one hundred-ten percent (110%) of Big Rivers' actual cost, including transmission service, to import energy from a Third Party supplier to supply the unscheduled Backup Power service.
5. During any period in which the metered output of the Standby Customer's generator is less than its Self-Supply Capacity, Maintenance Power/Backup Power energy shall be the first through the meter, up to the Self-Supply Capacity. Energy consumed above the Self-Supply Capacity for any period shall be Supplemental Power energy.

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. Standby Customer shall be required to adhere to Big Rivers' requirements and procedures for interconnection.
3. The Standby Customer shall be required to allow Big Rivers to meter 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 additional facilities associated with providing service under the provisions of this schedule.
5. The Standby Customer shall be responsible for any MISO charges, fees, penalties, or other costs associated with Standby Customer's generation, outages of Standby Customer's generation, or Maintenance or Backup Power service.

DATE OF ISSUE June 24, 2021
DATE EFFECTIVE August 1, 2021

/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

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

Original SHEET NO. 69.05

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

_____ SHEET NO. _____

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

[N]

Terms and Conditions (continued):

- 6. The Standby Customer shall not transmit energy to Big Rivers or to the Member Cooperative.
- 7. The Member Cooperative may enter into special agreements with Big Rivers and Standby Customers which may deviate from the provisions of this schedule. Such agreements shall address those significant characteristics of service and cost which would influence the need for such an agreement.
- 8. The supplying of, and billing for, service and all conditions applying thereto, are subject to the jurisdiction of the Commission, and to Big Rivers' and the Member Cooperative's generally applicable rules, terms, and conditions currently in effect, as filed with the Commission.



DATE OF ISSUE June 24, 2021
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/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420

Case No. 2021-00289

Exhibit JB-3

Kimberly-Clark Corporation
Alternative LICSS – Large Industrial Customer
Standby Service Tariff



(Name of Utility)

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

Third Revised SHEET NO. 69

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

Second Revised SHEET NO. 69

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service

[N]

Applicability:

Applicable in all territory served by Big Rivers' transmission system.

Availability:

This schedule is available to any of Big Rivers' 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 its power requirements for other than emergency purposes, who requests supplemental, maintenance or backup power, and who has or enters into a special contract that provides rates for electric service other than supplemental, maintenance or backup power (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 which 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 which the Standby Customer ordinarily generates on its own.

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/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

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

Second Revised SHEET NO. 69.01

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

First Revised SHEET NO. 69.01

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – large Industrial Customer Standby Service – (continued)

[N]

Definitions (continued):

“Maintenance Power Service” – a service which provides transmission capacity as well as the energy and capacity requirements for use by the Standby Customer during scheduled outages or interruptions of the Standby Customer’s own generation.

“Backup Power Service” – a service which provides transmission capacity as well as the energy and capacity requirements for use by the Standby Customer to replace energy generated by the Standby Customer’s own generation during an unscheduled outage or other interruption of the Standby Customer’s own generation.

“Self-Supply Capacity” – the demonstrated capacity of the Standby Customer’s generating unit(s), as determined by the reduction in Big Rivers’ MISO Planning Reserve Margin Requirement that results from the Standby Customer’s own generation.

Billing:

The provisions of the Standard Rate Schedule LIC – Large Industrial Customer tariff schedule and all applicable adjustment clauses and riders shall apply to Supplemental Power Service, Maintenance Power Service and Backup Power Service except where noted otherwise.

Big Rivers shall bill each Member Cooperative in accordance with the billing and payment terms set forth in the Billing section of Big Rivers’ Standard Rate LIC – Large Industrial Schedule 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 June 24, 2021
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/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
 President and Chief Executive Officer
 Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

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

Original SHEET NO. 69.02

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

_____ SHEET NO. _____

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

[N]

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.
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 Big Rivers' Standard Rate Schedule LIC – Large Industrial Customer tariff schedule.

DATE OF ISSUE June 24, 2021
DATE EFFECTIVE August 1, 2021

/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

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

Original SHEET NO. 69.03

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

_____ SHEET NO. _____

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

[N]

B. Maintenance Power Service and Backup Power Service

Requirements

1. The level of Maintenance Power/Backup Power demand shall equal the Standby Customer's Self-Supply Capacity.
2. The Standby Customer shall be required to cooperate with Big Rivers to schedule Maintenance outages so as to maximize the value of Standby Customer's Self-Supply Capacity. The Standby Customer's Maintenance Power requirements for each generating unit must be submitted to Big Rivers at least sixty (60) days prior to the beginning of each calendar year. Within thirty (30) days of such submission, Big Rivers shall respond to the Standby Customer either approving the Maintenance Power schedule or requesting that the Standby Customer reschedule those Maintenance Power requirements. The Standby Customer may adjust the Maintenance Power schedule upon prior notice to Big Rivers.
3. The Standby Customer shall notify Big Rivers by telephone within one (1) hour of the beginning and end of any outage. Within forty-eight (48) hours of the end of an outage, the Standby Customer shall supply written notice to Big Rivers of the dates and times of the outage with verification that the outage had occurred.

Billing

1. Administrative Charge: The Administrative Charge shall be \$150 per month.
2. Demand Charges: All Maintenance Power/Backup Power demand shall be billed at a rate equal to eleven and one-tenth percent (11.1%) of the Standard Rate Schedule LIC – Large Industrial Customer tariff rate, less a credit equal to \$3.80 per kW-month times Standby Customer's Self Supply Capacity.

DATE OF ISSUE June 24, 2021
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/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

For All Territory Served By
Cooperative's Transmission System
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)

[N]

Billing (continued)

3. Energy Charges: All Maintenance Power/Backup Power energy usage shall be billed at the higher of the charges of Big Rivers' Standard Rate Schedule LIC – Large Industrial Customer tariff schedule or the market price, which shall include the energy charge Big Rivers would have had to pay to provide service to the Member Cooperative for the Standby Customer, plus any transmission charges, MISO fees, or other costs.
4. During any period in which the metered output of the Standby Customer's generator is less than its Self-Supply Capacity, Maintenance Power/Backup Power energy shall be the first through the meter, up to the Self-Supply Capacity. Energy consumed above the Self-Supply Capacity for any period shall be Supplemental Power energy.

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. Standby Customer shall be required to adhere to Big Rivers' requirements and procedures for interconnection.
3. The Standby Customer shall be required to allow Big Rivers to meter 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 additional facilities associated with providing service under the provisions of this schedule.
5. The Standby Customer shall be responsible for any MISO charges, fees, penalties, or other costs associated with Standby Customer's generation, outages of Standby Customer's generation, or Maintenance or Backup Power service.

DATE OF ISSUE June 24, 2021
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/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
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(Name of Utility)

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

Original SHEET NO. 69.05

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

_____ SHEET NO. _____

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

[N]

Terms and Conditions (continued):

- 6. The Standby Customer shall not transmit energy to Big Rivers or to the Member Cooperative.
- 7. The Member Cooperative may enter into special agreements with Big Rivers and Standby Customers which may deviate from the provisions of this schedule. Such agreements shall address those significant characteristics of service and cost which would influence the need for such an agreement.
- 8. The supplying of, and billing for, service and all conditions applying thereto, are subject to the jurisdiction of the Commission, and to Big Rivers' and the Member Cooperative's generally applicable rules, terms, and conditions currently in effect, as filed with the Commission.



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/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
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Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

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

Third Revised SHEET NO. 69

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

Second Revised SHEET NO. 69

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service

[N]

Applicability:

Applicable in all territory served by Big Rivers' transmission system.

Availability:

This schedule is available to any of Big Rivers' 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 its power requirements for other than emergency purposes, who requests supplemental, maintenance or backup power, and who has or enters into a special contract that provides rates for electric service other than supplemental, maintenance or backup power (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 which 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 which the Standby Customer ordinarily generates on its own.

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/s/ Robert W. Berry

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President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

For All Territory Served By Cooperative's Transmission System P.S.C. KY. No. 27
Second Revised SHEET NO. 69.01
CANCELLING P.S.C. KY. No. 27
First Revised SHEET NO. 69.01

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – large Industrial Customer Standby Service – (continued)

[N]

Definitions (continued):

“Maintenance Power Service” – a service which provides transmission capacity as well as the energy and capacity requirements for use by the Standby Customer during scheduled outages or interruptions of the Standby Customer’s own generation.

“Backup Power Service” – a service which provides transmission capacity as well as the energy and capacity requirements for use by the Standby Customer to replace energy generated by the Standby Customer’s own generation during an unscheduled outage or other interruption of the Standby Customer’s own generation.

“Self-Supply Capacity” – the demonstrated capacity of the Standby Customer’s generating unit(s), as determined by the reduction in Big Rivers’ MISO Planning Reserve Margin Requirement that results from the Standby Customer’s own generation.

Billing:

The provisions of the Standard Rate Schedule LIC – Large Industrial Customer tariff schedule and all applicable adjustment clauses and riders shall apply to Supplemental Power Service, Maintenance Power Service and Backup Power Service except where noted otherwise.

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

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

Original SHEET NO. 69.02

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

_____ SHEET NO. _____

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

[N]

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.
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 Big Rivers' Standard Rate Schedule LIC – Large Industrial Customer tariff schedule.

DATE OF ISSUE June 24, 2021
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/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

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

Original SHEET NO. 69.03

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

_____ SHEET NO. _____

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

[N]

B. Maintenance Power Service and Backup Power Service

Requirements

1. The level of Maintenance Power/Backup Power demand shall equal the Standby Customer's Self-Supply Capacity.
2. The Standby Customer shall be required to cooperate with Big Rivers to schedule Maintenance outages so as to maximize the value of Standby Customer's Self-Supply Capacity. The Standby Customer's Maintenance Power requirements for each generating unit must be submitted to Big Rivers at least sixty (60) days prior to the beginning of each calendar year. Within thirty (30) days of such submission, Big Rivers shall respond to the Standby Customer either approving the Maintenance Power schedule or requesting that the Standby Customer reschedule those Maintenance Power requirements. The Standby Customer may adjust the Maintenance Power schedule upon prior notice to Big Rivers.
3. The Standby Customer shall notify Big Rivers by telephone within one (1) hour of the beginning and end of any outage. Within forty-eight (48) hours of the end of an outage, the Standby Customer shall supply written notice to Big Rivers of the dates and times of the outage with verification that the outage had occurred.

Billing

1. Administrative Charge: The Administrative Charge shall be \$150 per month.
2. Demand Charges: All Maintenance Power/Backup Power demand shall be billed at a rate equal to eleven and one-tenth percent (11.1%) of the Standard Rate Schedule LIC – Large Industrial Customer tariff rate

DATE OF ISSUE June 24, 2021
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ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
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(Name of Utility)

For All Territory Served By
Cooperative's Transmission System
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)

[N]

Billing (continued)

3. Energy Charges: All Maintenance Power/Backup Power energy usage shall be billed at the higher of the charges of Big Rivers' Standard Rate Schedule LIC – Large Industrial Customer tariff schedule or the market price, which shall include the energy charge Big Rivers would have had to pay to provide service to the Member Cooperative for the Standby Customer, plus any transmission charges, MISO fees, or other costs.
4. During any period in which the metered output of the Standby Customer's generator is less than its Self-Supply Capacity, Maintenance Power/Backup Power energy shall be the first through the meter, up to the Self-Supply Capacity. Energy consumed above the Self-Supply Capacity for any period shall be Supplemental Power energy.

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. Standby Customer shall be required to adhere to Big Rivers' requirements and procedures for interconnection.
3. The Standby Customer shall be required to allow Big Rivers to meter 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 additional facilities associated with providing service under the provisions of this schedule.
5. The Standby Customer shall be responsible for any MISO charges, fees, penalties, or other costs associated with Standby Customer's generation, outages of Standby Customer's generation, or Maintenance or Backup Power service.

DATE OF ISSUE June 24, 2021
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/s/ Robert W. Berry

ISSUED BY: Robert W. Berry,
President and Chief Executive Officer
Big Rivers Electric Corporation, 201 Third Street, Henderson, KY 42420



(Name of Utility)

For All Territory Served By
Cooperative's Transmission System
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Original SHEET NO. 69.05

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

_____ SHEET NO. _____

RATES, TERMS AND CONDITIONS – SECTION 2

LICSS – Large Industrial Customer Standby Service (continued)

[N]

Terms and Conditions (continued):

- 6. The Standby Customer shall not transmit energy to Big Rivers or to the Member Cooperative.
- 7. The Member Cooperative may enter into special agreements with Big Rivers and Standby Customers which may deviate from the provisions of this schedule. Such agreements shall address those significant characteristics of service and cost which would influence the need for such an agreement.
- 8. The supplying of, and billing for, service and all conditions applying thereto, are subject to the jurisdiction of the Commission, and to Big Rivers' and the Member Cooperative's generally applicable rules, terms, and conditions currently in effect, as filed with the Commission.



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