
**SABIC INNOVATIVE PLASTICS, MT. VERNON, LLC'S
COMMENTS ON THE INDIANA UTILITY REGULATORY COMMISSION'S
GAO 2017-3 ON
BACKUP, MAINTENANCE AND SUPPLEMENTAL POWER RATE REVIEW**

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SABIC Innovative Plastics, Mt. Vernon, LLC ("SABIC") offers its comments in response to the IURC Staff's April 27, 2018 request for comments in GAO 2017-3 on the appropriate use of demand ratchets in connection with the Commission's inquiry and report on the backup, maintenance and supplemental power rate review. SABIC is the sole customer with cogeneration facilities in the Southern Indiana Gas & Electric Company, d/b/a Vectren ("Vectren") service territory that is served under Vectren's Backup Auxiliary and Maintenance Power ("BAMP") rate. SABIC offers these comments from the perspective of a customer that is facing unexpected adverse financial consequences as a result of Vectren's BAMP tariff and the unreasonable demand ratchet provisions of Vectren's contract.

EXECUTIVE SUMMARY

SABIC offers its unique perspective as the sole customer in Vectren's service territory with a recently built cogeneration unit paying Vectren's BAMP rate and governed by Vectren's punitive demand ratchet contract provisions. As a result of Vectren's demand ratchet, BAMP tariff and post-contract changes to Vectren's tracker calculation methods, SABIC pays more for backup power than it pays for any other electric rate among its five plants in the United States. Vectren's rates and practices have rendered SABIC's project significantly less economic than projected. Vectren's rates and practices discourage cogeneration and private generation projects in contravention of the State of Indiana's policy to encourage alternative energy and cogeneration facilities to provide for the most efficient utilization of the state's finite energy resources.

BACKGROUND

SABIC employs approximately 1,200 Hoosiers at its Mt. Vernon, Indiana campus where SABIC produces engineered thermoplastics, chemicals and other materials which go into thermoplastics. SABIC constructed its own 86 megawatt (“MW”) cogeneration facility to serve most, but not all, of SABIC's electric needs. Vectren continues to supply SABIC with the portion of SABIC's load not served by the cogeneration unit. In January 2017, SABIC transitioned its service to three types of service from Vectren: (i) Auxiliary Power Service under the Large Power Service Rate (“LP”) during periods when Backup and Maintenance Power Service are not required by SABIC; (ii) Non-Firm Backup Power Service under Rate BAMP when Backup Service is required by SABIC as a result of unplanned cogeneration system outages; and (iii) Maintenance Power Service under the Rate BAMP during periods when SABIC performs scheduled maintenance service on the cogeneration facility. Outside of an event when SABIC's generator requires Backup or Maintenance Power Service, power service to SABIC is considered Auxiliary Power Service and is delivered and priced in accordance with Vectren's LP rates.

VECTREN'S 100% DEMAND RATCHET

Vectren's BAMP tariff requires SABIC to contract with Vectren for the BAMP rates. The three-year confidential contract (“Contract”) establishes the conditions of BAMP service. SABIC was required to specifically elect whether it will subscribe to firm or non-firm BAMP service. Based on the extent of the higher cost for firm BAMP service (which cannot be interrupted by Vectren), SABIC elected to pay for lower cost, non-firm BAMP service.

The Contract includes a demand ratchet provision that automatically increases SABIC's original billing demand to match SABIC's peak usage for the duration of the Contract's three-year term, regardless of the duration of the peak. For example, if the original Contract billing demand is set at 20MW of SABIC usage, and if in the first month of the cogeneration unit's operation the unit generates less power (e.g. unexpected trip or unit troubleshooting) causing SABIC to take 100 MW of electricity from Vectren for one fifteen minute interval, the Contract's demand ratchet provision is triggered unless SABIC notifies Vectren of this occurrence within 24 hours. Once the demand ratchet is triggered, SABIC must pay Vectren as though SABIC is always using 100MW for the remaining 35 months of the Contract – regardless of whether SABIC ever exceeds the 20MW level again. This type of demand ratchet is known as a 100% demand ratchet because the customer pays 100% of the difference between its prior billing demand and the new peak demand experienced at any one point in time. When SABIC's cogeneration unit has had short, periodic unexpected outages in the initial start-up phase, SABIC has experienced the unreasonable and punitive nature of the 100% demand ratchet provision in concert with Vectren's decision to change – *after SABIC entered into the BAMP contract* – the methodology to calculate certain trackers that apply to SABIC as Vectren's only Rate BAMP customer. It is also important to note that Vectren's 100% demand ratchet is applicable only to SABIC as the sole backup and maintenance service customer. For Rate LP customers, Vectren's tariff includes a 60% demand ratchet, meaning that unless otherwise specified in a contract, the billing demand for a current month is the maximum demand for the month, but not less than 60% of the highest maximum demand for the prior year. The power SABIC buys from Vectren that is not for backup and maintenance purposes is considered Auxiliary Power Service, which is delivered and priced in accordance with Vectren South's LP rates.

PRACTICAL EFFECT OF 100% DEMAND RATCHET

The combination of the Contract's 100% demand ratchet provision and the new methodology for calculating certain trackers now results in SABIC paying for certain charges on nearly the same basis as it would pay if the cogeneration unit was *always* only running at a fraction of its capacity – which is not the case. The net effect of the 100% demand ratchet is that SABIC is now paying for a level of demand that is approximately 33% greater than SABIC's average peak usage during the two years prior to the installation of the cogeneration unit when Vectren supplied 100% of SABIC's electricity. SABIC's cost of the electricity from Vectren has increased 150% over the costs incurred before the cogeneration unit went in service. Vectren's BAMP power is the highest power rate SABIC pays among all five of its United States primary manufacturing sites. Had Vectren's new methodology for calculating its trackers been in place when the Contract was signed, SABIC could have made a more accurate and informed decision on the six-figure annual financial impact of the 100% demand ratchet, especially during the early operational life of the cogeneration unit when SABIC was working through start-up issues.

SABIC's experience with Vectren suggests that the current regulatory landscape is not conducive to cogeneration projects and that, absent change mandated by law, Vectren will not willingly establish pricing and practices that align with Indiana's stated goal of encouraging cogeneration. SABIC certainly has no incentive to buy excess power from Vectren for any new projects or additional load. Specifically, SABIC has experienced the following interactions with Vectren:

1. When SABIC began considering constructing a cogeneration unit to replace its existing boilers with new technology that complies with new environmental requirements, SABIC

tried to partner with Vectren or explore Vectren ownership of the technology, which had environmental and cost advantages to both parties. Vectren dismissed this approach, presumably because there was no incentive for Vectren to cooperate in such an endeavor. From a policy perspective, SABIC wonders why existing laws incent utilities to self-build costly new generation projects rather than creating incentives for utilities to partner in projects like the SABIC project that improve the environment and create synergies such as a host that will take steam supply.

2. After SABIC and Vectren executed the 3-year BAMP contract (for which Vectren stated Commission review and approval was not required), Vectren significantly changed the methodology for calculating tracker rates applicable to SABIC as the sole BAMP customer. SABIC expended considerable resources challenging these modifications without success. These modifications in calculating the trackers, coupled with Vectren's 100% demand ratchet, imposed significant and unforeseeable additional costs on SABIC. These issues are more fully explained in SABIC's testimony filed in Cause Nos. 43354 MCRA-21 and 44910 TDSIC-2.
3. Vectren's changes to the methodology for calculating tracker rates applicable to SABIC as the sole BAMP customer, coupled with the 100% demand ratchet, have significantly undermined SABIC's projected financial outcomes related to the cogeneration unit.

RECOMMENDATIONS

SABIC echoes the April 20, 2018 comments submitted by the Alliance for Industrial Efficiency, the Indiana Industrial Energy Consumers, Inc. and the Midwest Cogeneration Association ("MCA"), collectively (the "Non-Utility Commenters"). SABIC's experience

demonstrates the accuracy of the MCA's observations that Vectren's standby rates are based on the unlawful assumption that SABIC's need for standby service will occur at the same time as Vectren's system peak. Vectren's standby rates are also problematic because they were developed long before any Vectren standby customers existed in Vectren's service territory and they do not reflect any actual standby customer use. Finally, Vectren's 100% demand ratchet provision sends the wrong price signal for efficient grid operation. In other words, SABIC has no financial incentive to operate its cogeneration unit efficiently after the demand ratchet provision has been triggered.

According to the study *Standby Rates for Customer-Sited Resources: Issues, Considerations on the Elements of Model Tariffs* prepared for the United States Environmental Protection Agency Combined Heat and Power Partnership, "a high demand ratchet places an extreme emphasis on a customer's demand during just one hour (or less) of the year; hence, customers will have relatively little incentive to conserve during all other hours of the year, particularly if the energy rate is low."¹ The study goes on to note that "demand ratchets may also be perceived as being inequitable. It may seem unfair to a customer to be required to pay for [kilowatts] that he did not actually use during the current month, especially if his low level of demand during a particular month frees up capacity which can be used by other customers."² This is particularly relevant given that SABIC's cogeneration unit eliminated one of the largest customer loads on Vectren's system and that Vectren is currently requesting authority to build a new generation resource in IURC Cause No. 45052. Perhaps if Vectren's standby pricing and demand ratchet provisions were set appropriately, more customers would build and efficiently use alternative

¹ <http://www.raonline.org/wp-content/uploads/2016/05/rap-weston-standbyratesforcustomersitedresources-2009-dec.pdf>

² *Id.*

energy projects, thereby mitigating Vectren's need to build new generation and further burden customers with increased rates.

Vectren's 100% demand ratchet provisions should be replaced by a structure that more accurately reflects Vectren's cost to serve SABIC. One option is to follow the example of the Minnesota Power Company, which according to MAC's comments, sets a standby demand charge based on the actual outage rate *after* the first year of a cogeneration unit's operations and that adjusts annually thereafter. Another option is to follow NIPSCO's approach to charge a daily, rather than fixed, demand charge based on standby use during peak hours. Without question, Vectren's ability to charge a 100% demand ratchet for up to 35 months is punitive. As MAC's comments observe, even ratchets that apply for a twelve month period may collect more than necessary to cover the utility's cost of providing standby service.

The Indiana General Assembly has declared that it is the policy of this state to encourage the development of alternative energy production facilities and cogeneration facilities to conserve our finite energy resources.³ It has directed the Commission to encourage the participation of utilities in cogeneration facilities and private energy projects.⁴ Based on SABIC's first-hand experience, much work needs to be done to fulfill the legislature's expectations. Under the current conditions, it is doubtful that any additional cogeneration or private energy projects will be undertaken without a significant change to Vectren's existing rates for backup, maintenance and supplemental power and its draconian 100% demand ratchets. To honor the vision of the Indiana General Assembly, SABIC recommends that the Commission require that all standby rates and demand ratchets comply with the best practices and principles identified by MCA and the other Non-Utility Commenters so that customers pay only for costs

³ I.C. 8-1-2.4-1

⁴ I.C. 8-1-2.4-3

which are directly attributable to their presence on a utility's system and not for service that they do not use.

Respectfully submitted,



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