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August 31, 2021

Ms. Lisa Felice
Executive Secretary
Michigan Public Service Commission
7109 West Saginaw Highway
Post Office Box 30221
Lansing, MI 48909

Re: MPSC Case No. U-12278 – Consumers Energy Company's Load Reduction Program Annual Filing

Dear Ms. Felice:

Included for electronic filing in the above-captioned case is **Consumers Energy Company's Motion to Remove Reporting Requirement.** This is a paperless filing and is therefore being filed only in PDF format.

Sincerely,

Digitally signed by
Gary A. Gensch, Jr.
Date: 2021.08.31
14:03:34 -04'00'

Gary A. Gensch, Jr.

cc: Paul Proudfoot, MPSC

S T A T E O F M I C H I G A N

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of **CONSUMERS ENERGY COMPANY** for a new tariff provision concerning contractual provisions for load reduction in times of high system demands.	))))))	Case No. U-12278

CONSUMERS ENERGY COMPANY'S
MOTION TO REMOVE REPORTING REQUIREMENT

Pursuant to Rule 792.10115 of the Administrative Hearing Rules governing motion practice before the Michigan Public Service Commission ("MPSC" or the "Commission"), Consumers Energy Company ("Consumers Energy" or the "Company") respectfully requests that the Commission grant this motion to remove the requirement that Consumers Energy continue demand response reporting in Case No. U-12278 ("Motion"). In support of its Motion, Consumers Energy states as follows:

1. On January 12, 2000, Consumers Energy submitted an application in Case No. U-12278 requesting approval of amended tariff provisions to allow the Company to make contractual arrangements with customers who can self-generate power, shift load from on-peak to off-peak periods, or provide other forms of voluntary load reduction in times of high system demand. In an Order dated February 9, 2000 ("February 9 Order"), the Commission granted ex parte approval of the proposed tariff amendment and required the Company to "file each year on the anniversary of this order information on the number of customers enrolled in its load reduction program and the corresponding load reduction accomplished."

2. Since the February 9 Order, the Commission has required that Consumers Energy perform additional reporting that includes the information that Consumers Energy is also reporting in Case No. U-12278.

3. For example, in the Commission's November 7, 2016 Order in Case No. U-18013 ("November 7 Order"), the Commission required the Company to provide demand response details as part of its monthly 45-day reports under MCL 460.6j(11), which include number of accounts enrolled, MW enrolled, MW available, MW called, MW response, and event type. November 7 Order, Exhibit A. The Commission also required an annual report that provides information related to total demand reduction available, total demand reduction achieved, and related costs. November 7 Order, Exhibit B.

4. As part of the three-phase framework for demand response adopted in the Commission's September 15, 2017 Order in Case No. U-18369, Consumers Energy is required to file annual demand response reconciliation cases that include review of demand response programs, costs, amounts, and other data. In addition, the annual reporting that was previously required in Case No. U-18013 now occurs as part of the annual demand response reconciliation proceedings. See Case No. U-18369, Staff Report dated August 24, 2017, page 4. Also, in the Commission's October 29, 2020 Order in Case Nos. U-20628 and U-20348, Consumers Energy was required to submit information on its communication protocols with customers during demand response events in the annal demand response reports provided as part of demand response reconciliation proceedings.

5. The demand response reporting that the Company performs as part of the three-phase regulatory framework is illustrated in the Company's most recent demand response reconciliation filing, which was filed with the Commission on June 1, 2021 in Case No. U-21080.

In that case, the Company included an annual 2020 demand response report as pre-filed Exhibit A-3 (SQM-3) that details demand response investments, MW savings, enrollments, and event results. Additional detail is provided throughout the Company's testimony and exhibits in that case. The 2020 demand response report is included as Attachment 1 to this Motion.

6. In its annual Case No. U-12278 reporting, Consumers Energy similarly provides demand response enrollment and load reduction information. See, for example, Consumers Energy's Load Reduction Program Annual Filing for the Year 2020, which was filed on February 9, 2021 in Case No. U-12278 and is included as Attachment 2 to this Motion. Thus, the information that Consumers Energy provides in its annual demand reduction reports in Case No. U-12278 is also being provided to the Commission as part of the Company's monthly 45-day reports and annual demand response reconciliation cases. Since the information provided to the Commission in the annual Case No. U-12278 report is duplicative of information that the Company provides to the Commission elsewhere, the annual Case No. U-12278 is no longer necessary. Removing this duplicative reporting requirement will conserve the resources of both the Company and the Commission.

WHEREFORE, for the reasons stated above, Consumers Energy Company requests that the Commission issue an order removing the requirement that Consumers Energy continue demand response reporting in Case No. U-12278.

Dated: August 31, 2021 By: _____

Gary A. Gensch, Jr. (P66912)
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Attorneys for Consumers Energy Company
Tel: (517) 788-2910

ATTACHMENT 1

CONSUMERS ENERGY

2020 Demand Response Annual Report

Case No. U-21080

June 1, 2021

Consumers Energy
Count on Us®

2020 Demand Response Annual Report

This *2020 Demand Response Annual Report* summarizes Consumers Energy Company's ("Consumers Energy" or the "Company") 2020 electric demand response achievements and describes the Company's portfolio of Demand Response ("DR") programs, which are designed to reduce load on peak days and offer savings opportunities to customers. This report serves to inform Consumers Energy's stakeholders, encourage transparency and collaboration, and provide an overview of residential and business demand response activities for the 2020 calendar year. This includes all customer enrollment activities throughout 2020 for the Midcontinent Independent System Operator, Inc. ("MISO") planning year that begins June 1, and for the demand response event season (from June 1 to September 30).

Consumers Energy submits this *2020 Demand Response Annual Report* to the Michigan Public Service Commission ("MPSC" or "Commission") as part of its annual Demand Response Reconciliation filing.

In compliance with the October 29, 2020 Order in MPSC Case No. U-20628, an updated Exhibit B from MPSC Case No. U-17936 is provided as Attachment A to this report and customer communication protocols are incorporated in the demand response portfolio and program sections.

History of Demand Response Regulatory Framework

Public Act 342 of 2016 encouraged the development and implementation of demand-side resources, such as demand response, to address current and future electric generation capacity needs in Michigan. On May 11, 2017, in Case No. U-18369, the Commission directed its staff to convene a stakeholder work group to explore and recommend a regulatory framework for evaluating the efficiency of demand response programs and cost recovery of utility investments in these programs. In its September 15, 2017 Order in Case No. U-18369, the Commission approved its staff's recommended three-phase approach of approval and cost recovery occurring in Integrated Resource Plans ("IRP") and rate cases and an annual reconciliation for demand response programs.

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Acronyms and Abbreviations

Acronym	Definition
Commission	Michigan Public Service Commission
Company	Consumer Energy Company
CPP	Critical Peak Pricing
DPP program	Dynamic Peak Pricing program
DR	Demand Response
EM&V	Evaluation, Measurement, and Verification
IRP	*Integrated Resource Plan*
MISO	Midcontinent Independent System Operator, Inc.
MPSC	Michigan Public Service Commission
O&M	Operations and Maintenance
PTR	Peak Time Rewards
STP	Smart Thermostat Program

Executive Summary

The full deployment of the Company's business and residential demand response ("DR") programs in 2017 marked a milestone in its journey to provide reliable, safe, affordable, and sustainable clean energy offerings to customers. The Company integrated DR into its capacity portfolio to meet the aggressive DR program goals in its approved IRP, MPSC Case No. U-20165.

In 2020, the Company continued to draw from previous years' learnings to expand and improve upon its DR programs. While the COVID-19 pandemic impacted DR, the DR programs delivered on the Company's triple bottom line of people, planet, and prosperity, making significant advancements in building a transformative, cost-effective DR capacity resource.

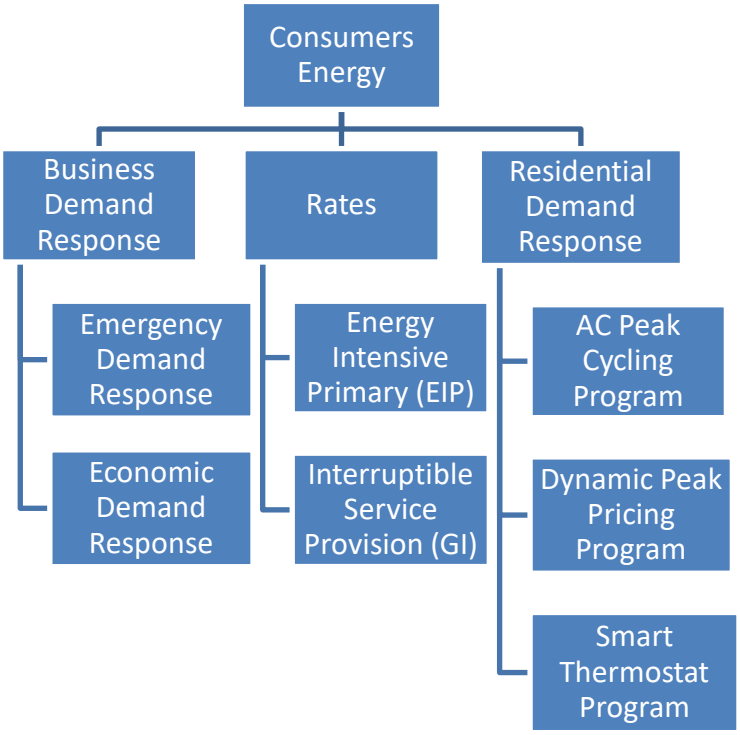
Consumers Energy's DR programs help customers save money and reduce the Company's need to purchase, produce, and deliver additional energy at peak times, when prices are high. Through its DR portfolio, Consumers Energy also offered its customers an opportunity to build energy awareness, save money, and understand energy price signals. Consumers Energy takes pride in its environmental leadership and commitment to managing customer bill impacts responsibly. The Company's 2020 DR portfolio achievements also exemplify its commitment to customers and communities by providing a wide variety of choices to meet energy needs throughout Michigan.

In 2020, Consumers Energy's DR program faced significant challenges due to the COVID-19 pandemic, including engaging customers who were facing pandemic-related economic uncertainty while also spending more time at home, program safety challenges, and pauses to all program activation requiring in-person activity during the stay-at-home orders. Despite these challenges, the Company exceeded its 2020 DR enrollment goals. Other milestone 2020 DR program achievements include:

- A 30% increase in DR program enrollment from 2019 levels. By December 31, 2020, 145,849 business and residential customers were enrolled in Consumers Energy's DR programs;
- Successful transition of the Smart Thermostat pilot to a full DR program, exceeding customer enrollment targets;
- Continued high customer satisfaction ratings;
- Utilization of DR to reduce peak demand through seven AC Peak Cycling program events, six Dynamic Peak Pricing events, and seven Smart Thermostat Program events; and
- Development of additional pilot proposals for 2021 to ensure that the Company is prepared to deliver the aggressive DR goals proposed in its IRP for 2021 and beyond.

2020 Demand Response Portfolio

This chapter outlines investments, savings achievements, successes, and lessons learned for the 2020 business and residential DR programs.



*There were no enrollments in the Business Economic DR program in 2020

Demand Response Program Investments

The Company invested $32.1 million in its business and residential DR programs in 2020 (Table 1). The Company also offered business customers two interruptible rates, Rate GI and Rate EIP. These combined investments achieved 473.9 MW in demand reduction.

Table 1. Demand Response Portfolio Investments

Demand Response Program	Capital	O&M Expenditure	Customer Payments	Total
Business	$ 376,049	$ 2,278,211	$4,099,840	**$6,754,100**
Residential	$3,824,200	$ 9,315,646	$2,738,227	**$15,878,073**
Administrative/Pilots/IT	$4,159,417	$ 5,344,288	$ -	**$ 9,503,706**
Total	**$8,359,666**	**$16,938,145**	**$6,838,067**	**$32,135,878**

Demand Response Program Savings Achievements

The December 31, 2020 demand reduction of 473.9 MW (Table 2) is a significant accomplishment that exceeds the 451 MW projection from the Company's approved IRP. The 2020 DR portfolio savings achievement clearly demonstrates the Company's commitment to building a cost-effective DR portfolio to be called upon to meet Michigan's electric needs.

Table 2. Demand Response Program Savings

Demand Response Program	Program Saving (MW)		
	December 31, 2019	June 1, 2020	December 31, 2020
Business	111.4	153.6	153.6
Residential	65.3	73.2	94.3
Rate GI	157.3	157.3	157.3
Rate EIP	68.7	68.7	68.7
Total	**431.8**	**452.8**	**473.9**

Notes: AC Peak Cycling program demand reduction per-customer planning values changed from 0.70 kW in 2019 to .63 kW in 2020. Dynamic Peak Pricing ("DPP") program demand reduction per-customer planning values changed from 0.48 kW in 2019 to .5 kW for Critical Peak Pricing and .32 kW for Peak Time Rewards in 2020. The Smart Thermostat Program ("STP") was commercialized from our Pilot in 2019. Program demand reduction per-customer planning values were calculated and registered at 1.2 kW per household and utilized for the 2020 STP year.

Demand Response Program Successes

- By December 31, 2020, 145,849 business and residential customers were enrolled in Consumers Energy's DR programs, an increase of 29.7% from 2019 levels.
- The Company operationalized its STP in 2020, exceeding customer enrollment targets and successfully calling seven DR events. The program added Google Nest and Emerson thermostats to the program offering, making the program available to more customers.
- Customer satisfaction with residential DR programs remained high. The AC Peak Cycling program achieved ratings of 9.3, 8.7, and 9.2 for the call center, website, and installation experience, respectively (based on a 10-point scale, where 1 meant *not at all satisfied* and 10 meant *very satisfied*). The DPP program achieved ratings of 9.2 and 8.3 for the call center and website experience, respectively. The STP achieved overall customer satisfaction scores of 8.4 before event season and 8.8 after event season. The STP post season findings also recorded a Net Promoter Score of +60 and a CXi of +82.
- In 2020, Consumers Energy called seven AC Peak Cycling program events, six DPP events, and seven STP events on non-holiday weekdays between June 1 and September 30 on the summer's hottest afternoons when electric demand for cooling was highest, thus maximizing the demand reduction potential.

  - The Company dispatched one geotargeted AC Peak Cycling event as part of the Company's Non Wires Solutions pilot.
  - The Company dispatched an STP critical test event on August 10 to test the program's response and performance during emergency conditions. The critical test event simulated the conditions of a MISO emergency event and as such the pre-cooling and customer notification times were reduced.
- The Company completed evaluation and measurement efforts including residential DR program evaluations.
- The Company's industry benchmarking and evaluation work led to developing additional pilot proposals for 2021. These pilots will help prepare the Company to deliver the aggressive DR goals proposed in its IRP for 2021 and beyond.

Business Demand Response Emergency and Economic Programs

Through the Business DR Emergency Program, Consumers Energy provides grid reliability in the event that peak energy demand exceeds the available supply. During the 2020 DR season, the Company enrolled 153.6 MW, representing 262 customer facilities in its business DR program. The Company also offers a business DR economic option for customers enrolled in the emergency program; however, no customers subscribed to the economic option in 2020.

Consumers Energy communicated with enrolled customers prior to the beginning of the DR season on June 1 with marketing materials, updates, and reminders of participation in the program. Additionally, at the end of the DR season, Consumers Energy communicated with participants thanking them for their role in supporting our Clean Energy Plan and IRP process.

As no MISO Emergency Events were called in 2020, there were no communications to customers on curtailment requirements. If MISO had called a DR event, per the Company's established communication protocol, enrolled customers would have been provided at least one, possibly two, notices of probable interruption by MISO at least 30 minutes prior to required interruption. Customers are notified by telephone to the contact numbers provided by the customer with the customer confirming receipt through the automated response process. Failure to acknowledge receipt does not relieve the customer of the obligation for interruption. The customer is also informed, when possible, of the estimated duration of the interruption. At the end of the event season, customers receive communication that the DR season has ended and that they will receive bill credits based on contracted capacity payment.

In 2020, business DR customers received $4,099,840 in incentives for their willingness and ability to support grid reliability by participating in the Business DR Emergency Program (Table 3).

Table 3. Business Demand Response Expenditures and Enrollments

Year	Capital Expenditure	O&M Expenditure	Customer Incentive Payments	Cumulative Enrollments (December 31)
2017	$1,419,366	$1,686,055	$ -	50.1 MW
2018	$ 517,313	$1,159,364	$ -	73.1 MW
2019	$1,317,026	$2,295,854	$2,808,394	111.4 MW
2020	$ 376,049	$2,278,210	$4,099,840	153.6 MW

* Historical actuals updated to exclude administrative, IT, and pilot costs

Residential Demand Response

This chapter outlines details of the 2020 events and expenditures for each of Consumers Energy's three residential DR program offerings.

In 2020, the Company communicated with its residential customers in the STP and DPP programs through pre-event communications (email, text, or voicemail) notifying customers of the upcoming event and post-event notifications outlining their performance during the event. Additionally, at the end of the DR season, Consumers Energy communicated with STP participants thanking them for their role in supporting our Clean Energy Plan and IRP process.

AC Peak Cycling

AC Peak Cycling is a residential direct load management program, through which the Company places a two-way communicating load control switch on the outside of a customer's central air conditioning condenser. Participants receive a gift card for enrolling in the program and earn an $8.00 per month bill credit during the peak event season lasting June through September. During Energy Savings Day events, the Company activates the switch to cycle the central air conditioner based on a 50% cycle strategy to reduce customer electric use for short periods of time. The Company may call up to 10 Energy Savings Day events between 7 a.m. and 8 p.m. during the event season.

In 2020, the Company called 6 Energy Savings Day events (Table 4), achieving maximum peak hour savings of 0.63 kW per customer on July 9, 2020. The Company also called one geotargeted AC Peak Cycling test event related to the non wires alternative pilot, which is highlighted in the Exhibit A-4 (SQM-4) Non-Wires Alternative Candidate Analysis.

Table 4. AC Peak Cycling Energy Savings Day Events (2020)

Date	Time	Responsive Switches	Average Temperature [a]	Per-Switch kW Reduction [b]	
				Average	Maximum
July 1	3 p.m. to 7 p.m.	74,445	85°F	0.25	0.27 (6 p.m. to 7 p.m.)
July 2	3 p.m. to 7 p.m.	74,114	87°F	0.45	0.46 (3 p.m. to 4 p.m.)
July 8	3 p.m. to 7 p.m.	73,837	86°F	0.57	0.61 (4 p.m. to 5 p.m.)
July 9	2 p.m. to 6 p.m.	73,850	87°F	0.57	0.63 (2 p.m. to 3 p.m.)
August 26	2 p.m. to 6 p.m.	73,374	83°F	0.36	0.40 (4 p.m. to 5 p.m.)
August 27	2 p.m. to 6 p.m.	73,816	83°F	0.44	0.49 (2 p.m. to 3 p.m.)

[a] The Cadmus team calculated this temperature estimate as the weighted average of National Oceanic and Atmospheric Administration weather data for Consumers Energy service territory, using the closest weather stations for each participant zip code.

[b] These estimates reflect the average value among responsive switches.

In 2020, the Company installed 11,462 switches; however, higher-than-anticipated program attrition of 7,791 resulted in 3,671 net switches for the year. This attrition was

primarily due to a high move-out rate and customers de-enrolling from the program. The Company has engaged in strategies to help mitigate move-out program impacts, including gaining approval to notify and auto-enroll customers who move into properties where a switch is already installed.

The Company monitored customer satisfaction with field services, the call center, and the website, with customers rating their overall satisfaction with each as 9.3, 8.7, and 9.2, respectively, based on a 10-point scale (where 1 meant *not at all satisfied* and 10 meant *very satisfied*).

Table 5 outlines expenditures and enrollments for the AC Peak Cycling program.

Table 5. AC Peak Cycling Expenditures and Enrollments

Year	Capital Expenditure	O&M Expenditure	Customer Incentive Payments	Cumulative Enrollments (Dec 31)
2015	$ 269,976	$ 194,683	$ 36,962	-
2016	$1,200,429	$ 477,431	$ 74,625	1.96 MW
2017	$5,987,902	$2,256,160	$ 577,216	33.85 MW
2018	$6,157,580	$2,672,294	$1,326,857	30.62 MW
2019	$7,291,856	$3,258,957	$2,191,891	51.54 MW
2020	$3,824,200	$2,144,911	$2,442,898	48.70 MW

* Historical actuals updated to exclude administrative, IT, and pilot costs

Dynamic Peak Pricing

Through the DPP program, Consumers Energy offers Critical Peak Pricing ("CPP") and Peak Time Rewards ("PTR") options to residential electric customers with advanced metering infrastructure meters. The Company designed this program to reduce energy loads during summer peak hours and to encourage energy savings by shifting load from high-cost periods to low-cost periods.

Customers can select between the two DPP program options. CPP customers pay a penalty of $0.95 per kWh for energy used and PTR customers earn an incentive of $0.95 per kWh for energy saved. The Company measures the penalty or reward provided for peak hours against a baseline use. The Company may call CPP and PTR events up to 14 times between 2 p.m. and 6 p.m. during summer months.

In 2020, the Company used a per-customer demand reduction factor of 0.50 kW for CPP and 0.32 kW for PTR and achieved program enrollment of 15.1 MW for the DR season.

The Company monitored customer satisfaction with the website, the call center enrollment experience, and their likelihood to recommend the program with customers rating their overall satisfaction with each as 8.3, 9.2, and 8.0, respectively, based on a 10-point scale (where 1 meant *not at all satisfied* and 10 meant *very satisfied*). The satisfaction with the call center increased significantly to 9.2 in 2020, up from 8.6 in 2019.

Table 6 outlines expenditures and enrollments for the DPP Program, while Table 7 outlines details of the six events called during the 2020 season.

Table 6. Dynamic Peak Pricing Expenditures and Enrollments

Year	Capital Expenditure	O&M Expenditure	Customer Incentive Payments	Cumulative Enrollments (Dec 31)
2015	$ -	$ -	$ -	-
2016	$ -	$ 206,353	$ 124	0.02 MW
2017	$ -	$2,015,148	$ 40,282	11.0 MW
2018	$ -	$ 635,503	$213,496	13.8 MW
2019	$ -	$ 650,943	$ 72,993	13.8 MW
2020	$ -	$ 923,561	$295,329	15.1 MW

* Historical actuals updated to exclude administrative, IT, and pilot costs

Table 7. Dynamic Peak Pricing Energy Savings Day Events (2020)

Date	Participants in Sample		Average Demand Impacts (kW)		Peak Demand Impacts (kW)	
	CPP	PTR	CPP	PTR	CPP	PTR
July 1	7,744	28,591	-0.15	-0.16	-0.19	-0.19
July 2	7,744	28,591	-0.10	-0.13	-0.15	-0.15
July 8	7,744	28,591	-0.24	-0.23	-0.26	-0.26
July 9	7,744	28,591	-0.13	-0.16	-0.21	-0.19
August 26	7,744	28,591	-0.13	-0.09	-0.16	-0.12
August 27	7,744	28,591	-0.10	-0.06	-0.12	-0.07

Smart Thermostat Program

Consumers Energy enrolled 25,436 customers in the 2020 STP and included three thermostat brands (Ecobee, Emerson, and Google Nest).

In response to the COVID-19 pandemic and more customers working from home, the Company quickly responded with an STP energy waste reduction and DR coordinated program to help customers meet energy savings goals and the Company meet STP enrollment targets. This innovative effort prioritized customer, employee, and trade ally safety through an offering that did not require a professional installer in the customer's home. Through this coordinated campaign, the Company offered nearly free Google Nest E smart thermostats to customers who also enrolled in the STP at the time of purchase, resulting in 10,500 new customers participating in the STP.

Prior to an STP Energy Savings Day event, the thermostat was set to pre-cool the home to reduce or eliminate the air conditioning runtime during the Energy Savings Day event, typically between 2 p.m. and 7 p.m. Events could occur from June 1 through September 31, between 7 a.m. and 8 p.m. In 2020, the Company called six STP Energy Savings Day events and one STP Critical Test Event (Table 8), achieving maximum peak hour savings of 0.98 kW per customer on July 8, 2020. Note that the Company utilized

demand reduction performance on the Consumers Energy System peak day (July 9) to calculate forward looking kW/customer planning values.

Table 8. Smart Thermostat Pilot Energy Savings Day Events (2020)

Date	Time	Event Participants[a]	Average Temperature[b]	Average Per Participant Demand Reduction (kW)	Average Peak Hourly Per Participant Demand Reduction (kW) and Hour
July 1	3 p.m. to 7 p.m.	12,838	87°F	0.90	1.10 (3 p.m. to 4 p.m.)
July 2	3 p.m. to 7 p.m.	12,931	90°F	0.82	1.12 (3 p.m. to 4 p.m.)
July 8[c]	3 p.m. to 7 p.m.	13,297	87°F	0.98	1.30 (3 p.m. to 4 p.m.)
July 9[d]	3 p.m. to 7 p.m.	13,378	86°F	0.88	1.31 (3 p.m. to 4 p.m.)
August 10[e]	3 p.m. to 7 p.m.	16,608	86°F	0.78	1.16 (3 p.m. to 4 p.m.)
August 26	2 p.m. to 6 p.m.	16,983	86°F	0.75	0.84 (3 p.m. to 4 p.m.)
August 27	2 p.m. to 6 p.m.	17,036	86°F	0.86	0.97 (3 p.m. to 4 p.m.)
Average	-	**14,724**	**87°F**	**0.85**	**1.11**

[a] Customers whose thermostats were controlled during the event.

[b] Weighted average of temperature conditions recorded by National Oceanic and Atmospheric Administration (NOAA) weather stations nearest to each participant.

[c] July 8 was the best performing event in terms of average per participant demand reduction.

[d] July 9 was the Consumers Energy 2020 summer peak demand day.

[e] August 10 was a critical test event.

The Company monitored customer satisfaction using a pre- and post-event season customer survey provided by Consumers Energy's Customer Experience Team. The overall customer satisfaction rating was 8.8 on a 10-point scale (where 1 meant *not at all satisfied* and 10 meant *very satisfied*) and the pilot observed a customer experience index score of 82.

Table 9 outlines expenditures and enrollments for the Smart Thermostat program.

Table 9. Smart Thermostat Pilot Expenditures and Enrollments

Year	Capital Expenditure	O&M Expenditure	Cumulative Enrollments (December 31)
2019	$ -	$1,806,311	1.4 MW
2020	$ -	$6,247,174	30.5 MW

* Historical actuals updated to exclude administrative, IT, and pilot costs

Evaluation, Measurement, and Verification

An evaluation, measurement, and verification ("EM&V") plan is necessary to ensure that Consumers Energy's DR programs are delivering reliable demand reduction and to improve overall program design and operation. The Company developed its EM&V Plan to evaluate and measure savings for electric DR products during and after each performance year in order to confirm that savings and technical assumptions are accurate. The robustness of any EM&V plan must be balanced against the cost of performing EM&V, keeping in mind the objectives of ensuring accurate savings calculations, while keeping expenditures prudent and maintaining program cost-effectiveness.

Description of Overall Evaluation Process

The Company commissioned the Cadmus team to conduct its evaluation and measurement activities. The Cadmus team's 2020 EM&V approach included the impact evaluation activities described in more detail below.

Impact Evaluation

The Cadmus team used regression analysis to determine peak demand reduction, event day and non-event day impacts, and energy use impacts.

AC Peak Cycling

To estimate the impact of program events, the Cadmus team compared program participants' energy savings and demand reduction to those of a randomized control group of nonparticipants using a regression analysis designed to identify peak demand reduction and overall energy use.

Dynamic Peak Pricing

To estimate participants' enrollment and event impacts, the Cadmus team relied on an industry standard methodology to identify program impacts by comparing the energy use between program participants and a matched control group of nonparticipants. The team used panel regression analysis to identify peak demand reduction (during event and non-event days), in addition to overall changes in energy use.

Smart Thermostat

The Cadmus team conducted two distinct impact analysis activities to evaluate the STP: 1) a regression analysis to measure demand reduction and energy savings, and 2) analysis of thermostat telemetry data to identify factors that influenced event performance.

To analyze demand impacts during events, the Cadmus team used a regression model to compare the difference in average consumption between program participants randomly assigned to the treatment group and the randomly selected control group (customers who were enrolled in the program but who did not receive the pre-cooling treatment during a particular program event). The regression included independent

variables for temperature conditions (cooling degree hours) and hour-of-sample fixed effects. To control for differences in average demand between customers in the treatment and control groups, the regression included customer average demand during the same hour on non-holiday, non-event weekdays during the program season.

To identify factors that influenced event performance, Cadmus assessed environmental conditions, participant behaviors and characteristics, and event operations during each event to isolate the factors that contributed to differences in event performance between the 2019 and 2020 program seasons. The research concluded that temperature, humidity, and pre-cooling time impact demand reduction performance.

Pilots

The Company initiated two new residential DR pilot programs in 2020.

The Generator pilot is aimed at recruiting residential customers with whole home generators. During a DR event, the generator will become the source of electricity for the customer's home. In 2020, the pilot focused on designing the solution. In 2021, the Company is focusing on enrolling customers and dispatching DR events to measure demand reduction.

The Multi-Use Switch pilot enrolled over 500 customers in 2020 with the majority of switches installed on hot water heaters. In 2021, the Company will dispatch DR events to these switches to measure demand reduction.

Looking to the future, the Company has included a Low-Income DR pilot and a Smart Home Pilot in the most recent electric rate case to support the development of the residential DR portfolio.

Future Plans

Looking ahead, the Company will continue to offer cost-effective options to help customers meet their energy and sustainability goals. For both the residential and business programs, the Company plans to leverage data analytics, including propensity models and load shapes, to optimize customer acquisition.

The Business DR Program will continue to investigate expanding options for customers to participate in DR such as the addition of products within the MISO market. Additionally, the business DR program launched a small business DR pilot to focus on the needs of small to medium businesses and evaluate opportunities to increase DR participation from this customer segment.

The Residential portfolio will launch several enhancements to the customer enrollment experience, making it easier for customers to enroll in DR programs and eliminate waste in back-end processes. Those enhancements include a customized DR offer as part of the online move-in move-out experience and an automated enrollment flow on the Consumers Energy website that allows customers to 'browse' all residential DR programs at once, select the one that best fits their needs, and move forward with enrollment without entering an account number. Additionally, the team will launch a customer communication plan for the summer peak rate, which will incorporate residential DR programs as a tool to control energy consumption and save money on the new summer peak rate.

The DPP Program, which serves as the entry-level, no-regrets step into DR, is exploring new ways to expand eligibility criteria, including further utilization of Interactive Voice Response to allow customers that do not have email or text message access to enroll in the program and receive pre-and post-event notifications through automated voice messages to a landline or cell phone. It is believed that this could help increase enrollment numbers and allow for more equitable solutions for certain demographics including senior citizens and low-income customers.

Finally, the Company will continue to scale the STP to its maximum potential within our service territory, with an aggressive enrollment glide path. As the market penetration of smart thermostats grows, this is a thoughtful step toward delivering efficient and reliable DR resources. In future years, we will work to continuously improve the program's performance by working to reduce opt-outs and improve notification methods. The Company plans to add further thermostat manufacturers as well as improve customer experience in the coming years.

Attachment A

2020 ANNUAL DEMAND RESPONSE REPORT

Tariff & Sheet No.	Total demand reduction available[1]	Maximum demand reduction achieved (MW)[2]	Total resource capacity reported to MISO (MW)[3]	Total energy reduction achieved (MWh)[4]	Total spending on marketing and administration ($)[5]	Total capital expense ($) (excluding AMI)	Average customer response (%)[6]	Notes
RESIDENTIAL INTERRUPTIBLE AND PRICE RESPONSE								
Peak Power Savers® -Air Conditioning Peak Cycling Program; Sheet No. D - 11.10	48.7	45.7	41.5 LMR	139.8	2,144,911	3,824,200	98.3	
Peak Powers Savers® - Critical Peak Time of Use (RDP) and Peak Rewards Time of Use (RDPR); Sheet No. D-13.00 to D-13.04	15.1	9.4	n/a	30.3	923,561	-	n/a	
Smart Thermostat Program	30.5	17.5	7.9 LMR	114.5	6,247,174	-	94.9	
COMMERICAL AND INDUSTRIAL INTERRUPTIBLE AND PRICE RESPONSE								
Rate GPD/GI Provision; Sheet No. D-34.00 & D-34.10	157.3	n/a	157.3	n/a	n/a	n/a	n/a	
C&I DR – Emergency	153.6	n/a	153.6	n/a	9,630,248	1,344,913	n/a	
C&I DR – Economic	0.0	n/a	n/a	n/a	n/a	n/a	n/a	

[1] Report total demand response (i.e., potential demand reduction), in MW, available at the end of the year for each tariff.

[2] Report the maximum amount of demand reduction achieved during a single event hour in the reported year. If this is an estimate, indicate how the estimate was calculated.

[3] Report the capacity amount associated with the DR program that was reported to MISO as a capacity resource (if it was reported as a resource). Also indicate the MISO category (LMR, DRR, other (specify)).

[4] Report the total energy reduction achieved (offset by pre-cooling or post-event rebound demands), on a cumulative basis, for each DR program during the reported year.

[5] Marketing and administration program costs reported do not include DR portfolio level administrative, EM&V and pilot expenses or residential DR bill credits.

[6] Report the annual customer responsiveness (i.e., number of customers who responded) as a percentage of customers called for each program for the reporting year. If this is an estimate, indicate how the estimate was calculated.

ATTACHMENT 2

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February 9, 2021

Ms. Lisa Felice
Executive Secretary
Michigan Public Service Commission
7109 West Saginaw Highway
Post Office Box 30221
Lansing, MI 48909

Re: MPSC Case No. U-12278 – Consumers Energy Company's Load Reduction Program Annual Filing

Dear Ms. Felice:

Included for electronic filing in the above-captioned case is **Consumers Energy Company's Load Reduction Program Annual Filing for the Year 2020.** This is a paperless filing and is therefore being filed only in PDF format.

Sincerely,

Digitally signed by
Gary A. Gensch, Jr.
Date: 2021.02.09
15:30:02 -05'00'

Gary A. Gensch, Jr.

cc: Paul Proudfoot, MPSC

S T A T E O F M I C H I G A N

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of **CONSUMERS ENERGY COMPANY** for a new tariff provision concerning contractual provisions for load reduction in times of high system demands	))))))	Case No. U-12278

CONSUMERS ENERGY COMPANY'S
LOAD REDUCTION PROGRAM ANNUAL FILING FOR THE YEAR 2020

Consumers Energy Company ("Consumers Energy" or the "Company") makes this annual informational filing of customers enrolled in its load reduction program for the year 2020 as required by the Michigan Public Service Commission's ("MPSC" or the "Commission") Order Approving Application dated February 9, 2000. The Order provides: "Consumers Energy Company shall file each year on the anniversary of this order information on the number of customers enrolled in its load reduction program and the corresponding load reduction accomplished."

During 2020, Consumers Energy conducted three residential demand response programs known as Air Conditioning ("AC") Peak Cycling, Smart Thermostat ("STP"), and Peak Time of Use ("TOU"). The TOU program comprises both the Peak Time Rewards ("PTR") and Critical Peak Pricing ("CPP") programs. Total program enrollment as of December 31, 2020 was 77,299 for AC Peak Cycling, 25,436 for STP, and 42,852 for TOU. The peak load reduction in the AC Peak Cycling Program was 0.63 kW per customer. The peak load reduction in the STP was 1.2 kW per customer. The peak load reduction in the Peak TOU Program was 0.5 kW per customer for CPP and 0.32 kW per customer for PTR.

The Company also operated a Commercial and Industrial ("C&I") emergency demand response program in 2020. The C&I emergency demand response program had 153.6 MW under contract and included 356 customers. There were no emergency demand response events called by Midcontinent Independent System Operator, Inc. ("MISO") during the 2020 demand response season.

The Company has offered an interruptible service rate to primary voltage customers for many years. In 2020, 18 customers were on this rate, with 151.3 MW of load designated as interruptible. There were no emergency demand response events ordered by MISO in 2020.

Consumers Energy notes that it is providing the Commission additional reports that contain the same information that is in this report. For example, the Company provides demand response information as part of its monthly 45-day reports. Consumers Energy also performs demand response reporting as part of its annual demand response reconciliation filings. Accordingly, Consumers Energy requests that the Commission issue an order removing the requirement that Consumers Energy continue demand response reporting in Case No. U-12278.

Dated: February 9, 2021

Respectfully submitted,

CONSUMERS ENERGY COMPANY

Attachment 1

Case U-12278

Annual Demand Response Report for 2020

Tariff and Sheet No.	Number of Service Accounts Enrolled[1]	Total MW Enrolled[2]	Total MW Available[3]	Total MW Called On[4]	Notes
RESIDENTIAL INTERRUPTIBLE AND PRICE RESPONSE PROGRAMS					
Peak Power Savers® -Air Conditioning Peak Cycling Program; Sheet No. D - 11.10	77,299	48.7	48.7	See event report below	Summer Only Resource
Peak Powers Savers® - Critical Peak Time of Use (RDP) and Peak Rewards Time of Use (RDPR); Sheet No. D-13.00 to D-13.04	42,852	15.1	15.1	See event report below	Summer Only Resource
Smart Thermostat Program	25,436	30.5	30.5	See event report below	Summer Only Resource
TOTAL	145,587	94.3	94.3		
COMMERCIAL AND INDUSTRIAL INTERRUPTIBLE AND PRICE RESPONSE PROGRAMS					
Rate GPD/GI Provision; Sheet No. D-34.00 & D-34.10	18	151.3	151.3	0.0	No emergency events called
C&I DR – Emergency	356	153.6	153.6	0.0	No events were conducted
C&I DR – Economic	0	0.0	0.0	0.0	*no 2020 enrollments
TOTAL	374	304.9	304.9	0.0	

7715 CPP x.5/1000 = 3.86
35,137 x.32/1000 =11.2
7715+35.137=42,852

[1] Report the total (cumulative) number of customer accounts enrolled in each demand response program at the end of the reporting period.

[2] Report the total number of MW enrolled in each demand response program at the end of the reporting period, even if the resource is not actually available in the reporting period. Residential program total MW enrolled is calculated by multiplying the total number of service counts in the program by .63 kW per customer for ACPC; .5 kW per customer for Critical Peak Pricing (RDP); .32 kW per customer for Peak Time Rewards (RDPR) and 1.2 kW per customer for STP (new in 2020).

[3] Report the maximum number of available MW that could have been called on, if necessary, during the reporting period.

[4] Report the total amount of demand response for interruptible programs, or realized for price response programs, during the reported month.

[5] Total MW enrolled, available and called on are customer level MWs and are not grossed up.

Monthly Event Reporting

Date	HOUR	TARIFF	MW CALLED	MW RESPONSE	EVENT TYPE	Notes
07/01/20	1500-1900 EDT	ACPC	48.1	18.7	Economic	
07/01/20	1500-1900 EDT	STP	10.0	10.9	Economic	
07/01/20	1400-1800 EDT	CPP	5.4	2.3	Economic	
07/01/20	1400-1800 EDT	PTR	26.7	6.7	Economic	
07/02/20	1500-1900 EDT	ACPC	98.4	23.2	Economic	
07/02/20	1500-1900 EDT	STP	10.0	10.5	Economic	
07/02/20	1400-1800 EDT	CPP	5.4	1.6	Economic	
07/02/20	1400-1800 EDT	PTR	26.6	3.3	Economic	
07/08/20	1500-1900 EDT	ACPC	84.8	49.5	Economic	
07/08/20	1500-1900 EDT	STP	10.5	14.3	Economic	
07/08/20	1400-1800 EDT	CPP	5.3	2.8	Economic	
07/08/20	1400-1800 EDT	PTR	n/a	8.3	Economic	
07/09/20	1400-1800 EDT	ACPC	107.4	50.9	Economic	
07/09/20	1500-1900 EDT	STP	22.8	15.3	Economic	
07/09/20	1400-1800 EDT	CPP	6.7	2.8	Economic	
07/09/20	1400-1800 EDT	PTR	26.4	7.5	Economic	
08/10/20	1500-1900 EDT	STP	35.7	9.1	Economic	Values from DRMS as of 10/12/2020. Emergency test event of Uplight's DRMS
08/26/20	1400-1800 EDT	ACPC	69.7	13.4	Economic	Values from DRMS as of 10/12/2020
08/26/20	1400-1800 EDT	CPP	8.7	0.4	Economic	Values from DRMS as of 10/12/2020
08/26/20	1400-1800 EDT	PTR	35.0	2.5	Economic	Values from DRMS as of 10/12/2020
08/26/20	1400-1800 EDT	STP	35.3	10.1	Economic	Values from DRMS as of 10/12/2020
08/27/20	1400-1800 EDT	ACPC	66.8	48.6	Economic	Values from DRMS as of 10/12/2020
08/27/20	1400-1800 EDT	CPP	8.9	2.7	Economic	Values from DRMS as of 10/12/2020
08/27/20	1400-1800 EDT	PTR	36.0	8.3	Economic	Values from DRMS as of 10/12/2020
08/27/20	1400-1800 EDT	STP	35.3	16.4	Economic	Values from DRMS as of 10/12/2020
08/28/20	1600-2000 EDT	H2O Pilot	0.0	0.0	Economic	Values from DRMS as of 10/12/2020. Pilot test event of water heater cycling
09/16/20	1400-1800 EDT	ACPC	0.0	0.0	Economic	Values from DRMS as of 11/10/2020. Circuit-level test event of ACPC customers (four circuits)
10/27/20	1100-1130 EDT	GENR Pilot	0.0	0.0	Economic	Values from DRMS as of 12/10/2020. Generator pilot test event (one customer)