

**BEFORE THE PUBLIC SERVICE COMMISSION
OF
THE STATE OF MISSISSIPPI**

ENERGY MISSISSIPPI, INC.
EC123008200

DOCKET NO. 2016-UA-261

IN RE: APPLICATION FOR APPROVAL OF ADVANCED METERING
INFRASTRUCTURE AND RELATED MODERNIZATION IMPROVEMENTS

ORDER APPROVING APPLICATION

COMING THIS DAY Entergy Mississippi, Inc.'s ("Entergy Mississippi," "EMI" or the "Company") Application, this Commission, being fully advised in the premises, and upon the recommendation of the Mississippi Public Utilities Staff (the "Public Utilities Staff" or the "Staff"), finds as follows:

PROCEDURAL HISTORY

1. On November 30, 2016, Entergy Mississippi filed its Application seeking authorization from the Commission and requesting a certificate of public convenience and necessity ("CCN") for the Company to acquire, construct, deploy, own, operate and maintain Advanced Metering Infrastructure ("AMI"), which includes advanced meters that enable two-way data communication, a secure and reliable communications network that supports two-way data communication, along with related and supporting systems, including a Meter Data Management System ("MDMS"), an Outage Management System ("OMS"), and a Distribution Management System ("DMS), along with related accounting treatment for existing and future assets and costs. In support of the Application, the Company included with the filing the pre-filed Direct Testimonies and Exhibits of Direct Testimonies of Haley R. Fisackerly, J. Robbin Jeter, Rodney W. Griffith, Jay A. Lewis, Dorman J. Davis and Dr. Ahmad Faruqui.

2. On January 11, 2017, the Commission noticed this matter. Notice of the filing was given as required by law and this Commission's Procedural Rules to all persons who were parties of record in the Company's last authorized major rate case proceeding, to all other interested persons, and by publication on January 17, 2017, in *The Clarion-Ledger*, a newspaper of general circulation published in Jackson, Mississippi. No persons timely intervened in this matter, although 25 x '25 Initiative did seek intervention out of time on April 12, 2017.¹

3. The Staff conducted an extensive investigation of Entergy Mississippi's filing and had the benefit of substantial amounts of data provided by the Company in the discovery process. The Staff propounded dozens of data requests, to which the Company fully responded.

4. On May 1, 2017, the Staff and the Company entered into and filed a Joint Stipulation in this Docket.

5. The Commission finds that the Application, all pleadings, testimony, data, documentation, and exhibits in this Docket filed by Entergy Mississippi comply with all of the statutory filing requirements and the requirements of the Commission's Procedural Rules, subject to the waivers granted herein. The Commission further finds that there is substantial evidence to support each and every agreement and stipulation contained in the Joint Stipulation and the conclusions contained therein. The Commission finds that the Joint Stipulation and the matters contained therein are in the public interest. The Commission finds that 25 x '25's motion for late intervention does not present a substantial interest or present just cause to support late intervention and granting such would otherwise delay the proceedings. Therefore, the Commission hereby accepts and adopts as its own the Joint Stipulation and incorporates the same herein by reference.

¹ 25 x '25's motion for late intervention is addressed, herein.

OVERVIEW

6. The application stated that, as Entergy Mississippi fulfills its mission to power life, the Company continues to prepare to meet customers' rising expectations and transform its business as technology and the industry evolve. In the years leading up to and since the filing of its 2014 Bright Future Plan, Entergy Mississippi significantly modernized its power plants, adding both cleaner and more efficient energy sources in order to provide its customers with reliable, safe, and low-cost energy. Entergy Mississippi also significantly invested in transmission to expand for growth, to comply with increasing federal reliability requirements, and to maintain the decades-old system that is the backbone of its power grid. In order to continue these efforts to enhance the reliable service the Company provides to its customers at a reasonable cost, while improving customer service and how customers interact with Entergy Mississippi, this filing seeks the Commission's approval for the implementation of AMI and related systems for the benefit of Entergy Mississippi's customers.

7. The Application states, and the Commission finds, that technology advancements have fundamentally changed the way electricity is supplied and distributed today, as well as how EMI interacts with its customers. Technology advancements have also changed customer expectations regarding how they interact with their service providers and how they manage the services that are provided. The Commission finds that AMI is the next appropriate step in the modernization of EMI's power grid and will deliver significant benefits to EMI's customers and the communities it serves. A key benefit of AMI is that it will enable Entergy Mississippi to more accurately identify outage locations, which will allow quicker and more accurate detection of service problems, improved outage and restoration communications with customers, and overall faster restoration of service after outages. AMI will also assist customer service representatives in

more effectively addressing customer billing issues. Further, AMI will be able to provide customers timely access to their detailed energy usage data through a web portal that will include tools and notifications to allow customers to manage their energy usage more effectively and to create more opportunities to lower their bills. AMI will create value for customers through enhanced reliability, operational efficiencies and enablement of new products and services, all while allowing Entergy Mississippi to provide reliable, safe and low-cost energy. Finally, Entergy Mississippi has provided information that AMI will produce an estimated \$496 million in total customer benefits over a 15-year period, which when netted against the costs of AMI results in an estimated \$183 million of net customer benefits.²

8. Entergy Mississippi explained that AMI is a broad term that encompasses a range of related technologies and processes. Essentially, as described by Entergy Mississippi witness Mr. Rodney Griffith, AMI is a system, including the associated hardware, software, and communications systems, that collects time-differentiated energy usage from advanced meters. The advanced metering system collects, processes, and records the information, and makes the information available to customers and their utility. The benefits of advanced meters, and their related infrastructure, have been documented across the country, as more than 45% of all electric meters in the U.S. are advanced meters. Entergy Mississippi witness Dr. Ahmad Faruqui notes that if advanced meter deployments continue on pace with historical rates, the vast majority of all electric customers in the U.S. would have advanced meters by the time Entergy Mississippi completes its AMI deployment.

² Both estimates are on a nominal basis and based on the Company's filed estimates.

9. Entergy Mississippi has conducted a cost/benefit analysis that quantifies several of the expected benefits from AMI deployment. As discussed by Mr. Lewis, those quantified benefits are broken down into two categories: (1) Operational Benefits; and (2) Other Benefits. There also are a number of other benefits that have been identified by other utilities in conjunction with their respective AMI deployments, such as increased billing accuracy and reduced customer service call volume. These other potential benefits were not quantified within Entergy Mississippi's cost/benefit analysis. Similarly, the benefits to customers that will result from quicker and more accurate detection of service problems, improved outage and service restoration communications with customers, and overall faster restoration of service after outages also have not been quantified.

10. The cost/benefit analysis described by Mr. Lewis shows that it is reasonable to expect that customers will substantially benefit from the AMI deployment and that the benefits exceed the overall costs of the deployment over the 15-year expected life. Specifically, the AMI cost/benefit analysis demonstrates a net benefit to Entergy Mississippi customers of \$52 million on a present value ("PV") basis, assuming a 15-year useful life of the assets. The table below provides the Company's summary of the cost/benefit analysis on both a nominal and PV basis.

		Nominal (\$M)	PV (\$M, 2016)
	Quantified Operational Benefits		
1	Routine Meter Reading	\$77	\$34
2	Meter Services	\$24	\$11
3	Reduced Customer Receivables Write-offs	\$5	\$2
4	Total Quantified Operational Benefits	\$106	\$46
	Quantified Other Benefits		
5	Consumption Reduction	\$208	\$89
6	Peak Capacity Reduction	\$95	\$40
7	Unaccounted For Energy Reduction	\$83	\$34
8	Elimination of Meter Reading Equipment	\$3	\$1
9	Total Quantified Other Benefits	\$390	\$164
10	Total AMI Quantified Benefits	\$496	\$211

	AMI lifetime costs to customers³	Nominal (\$M)	PV (\$M, 2016)
11	Depreciation & Amortization	\$137	\$66
12	Return on Rate Base	\$84	\$48
13	AMI O&M Costs	\$54	\$24
14	Property Tax	\$39	\$21
15	Total AMI Costs	\$313	\$158
16	Net AMI Benefit	<u>\$183</u>	<u>\$52</u>

11. As discussed by Mr. Lewis, there are three components to the quantified Operational Benefits, which are (i) routine meter reading; (ii) meter services; and (iii) reduced customer receivables write-offs. First, as described in more detail by Mr. Jeter, the Company incurs expenses for contract personnel (and their vehicles) to physically travel to and read customer meters each month. The two-way communications functionality of the advanced meters along with the communications and IT infrastructure being deployed with AMI allows meters to be read remotely, and therefore eliminates the need for routine meter reading trips. Second, the Company incurs expenses for personnel (and their vehicles) to travel to customer premises for a variety of meter-related services, which include service starts and stops, certain meter re-reads, and service disconnections related to non-payment, as well as any subsequent reconnections. The advanced meters and related communications infrastructure will eliminate the need for the vast majority of these physical trips. Third, after a disconnect ticket to suspend service for non-payment is issued to field personnel, it takes additional time to physically go to the customer premises and disconnect the service at the meter. Eliminating the lag between scheduling and dispatching a technician to disconnect electric service through use of the remote disconnect feature of advanced electric meters reduces the amount of revenue that becomes uncollectible and is ultimately reflected in rates through lowered bad debt expense.

³ Including the requested amortization of the deferred customer education and AMI-related O&M expenses. The Direct Testimony of Mr. Griffith addresses the costs associated with AMI.

12. Mr. Lewis also describes four quantified Other Benefits, which are: (i) consumption reduction; (ii) peak capacity reduction; (iii) unaccounted for energy (“UFE”) reduction; and (iv) elimination of the need to maintain and replace existing meter reading equipment. First, Company witness Dr. Faruqui explains why it is well-recognized that access to more detailed, time-differentiated usage information made available through AMI allows customers to better manage their energy usage in ways that reduce consumption. Reduced consumption, in turn, results in ongoing fuel cost savings for customers due to less energy being produced at generating facilities, and it results in temporary non-fuel benefits. Second, as explained by Mr. Jeter, the information and tools made available to customers as a result of AMI will encourage customers to take various actions to reduce energy usage at peak times. Because the Company’s peak load is a key component in determining its need for capacity planning reserves, reducing peak load would result in a decrease in capacity needs. The reduced capacity need is assumed to result in a decrease in capacity purchases or increase in capacity sales in MISO’s capacity market, which benefits all customers. Third, as explained by Mr. Jeter and Dr. Faruqui, there is always more energy injected into the power grid than recorded by the end-point meters as having been consumed. Reasons include such things as line and transformation losses (“technical losses”) and meter failures, inaccurate meters, tampering, and theft of services, which are collectively categorized as “non-technical losses.” The expected reduction in overall UFE associated with the AMI deployment is based upon an expected reduction in these non-technical losses, which will result in both fuel and non-fuel benefits for customers. Fourth, there are a number of handheld electronic devices used by the Company’s contract meter readers to perform manual meter reads today. There are capital costs incurred by the Company associated with the purchase and replacement of these handheld devices, as well as O&M costs associated with annual

software and warranty costs. In the future, because meter reading will be performed remotely these devices will no longer be required, and future costs associated with these devices will be avoided. The Commission finds that the Company's cost/benefit analysis described by Mr. Lewis is reasonable and further finds that customers will substantially benefit from the AMI deployment over the 15-year expected life. The Commission finds that a 15-year useful life for the AMI is reasonable and supported by the evidence. The Commission further finds that the Company's analysis supports the conclusion that customer benefits will exceed the estimated costs of AMI deployment over the 15-year expected life.

13. The Commission finds that AMI is the foundation of EMI's modernized power grid and will deliver significant benefits, including a better ability for Entergy Mississippi to pinpoint and communicate outage locations, which will allow quicker and more accurate detection of service problems and restoration of service, improved outage and restoration communications with customers, and overall faster restoration of service after outages. AMI also will assist customer service representatives in more quickly and effectively addressing customer billing issues. AMI will provide customers with greater insight into their energy usage by providing more timely and detailed data, which will allow customers to better manage their usage and drive consumption reduction. AMI will create value through enhanced reliability, operational efficiencies and enablement of new products and services. Moreover, once AMI is put in place, Entergy Mississippi will be positioned to take additional steps to modernize its power grid and support additional features listed in the Direct Testimony of Mr. Griffith. The Commission finds that the public convenience and necessity requires the deployment by Entergy Mississippi of the advanced metering infrastructure described fully herein and in the Company's Application and testimony.

14. The Direct Testimony of Mr. Griffith describes how AMI vendor selection for each of the four AMI components was conducted by a team comprised of representatives from Entergy Mississippi, Entergy Services, Inc.,⁴ and the other Operating Companies. The selection team performed a rigorous, comprehensive and competitive vendor selection process to identify, attract, and contract with experienced and competent AMI equipment and service providers. The selection team followed the Company's standard vendor selection process for large capital programs, which included initial market research; a competitive RFP process; detailed bid evaluation; oral presentations from selected vendors; and a detailed contract negotiation process to establish clear and fair commercial terms and vendor performance expectations. As a result of this RFP process, Elster Solutions, LLC, a Honeywell Company ("Elster") was selected to be the primary vendor for the advanced meters, with Landis+Gyr Technology, Inc. ("Landis+Gyr") as the secondary vendor. Additionally, Elster was selected as the vendor responsible for meter installation. Silver Springs Networks, Inc. ("SSN") was selected to be the vendor for the communications network. Accenture, LLP ("Accenture") was selected to be the vendor for the MDMS. The Company selected International Business Machines Corporation ("IBM") as the System Integrator for the advanced meters, communications infrastructure, and MDMS and legacy IT systems. The Commission finds that the vendor selection process was reasonable and that the Company acted prudently in its vendor selection.

⁴ Entergy Services, Inc. ("ESI") is a service company affiliate of EMI that provides general executive, management, advisory, administrative, human resources, accounting, finance, legal, regulatory, and engineering services. These services are provided in accordance with Service Agreements entered into by ESI and the Operating Companies, to whom ESI provides services, and are approved by the Federal Energy Regulatory Commission ("FERC"). The Entergy Operating Companies include EMI; Entergy Arkansas, Inc.; Entergy Louisiana, LLC; Entergy New Orleans, Inc.; and Entergy Texas, Inc.

15. Entergy Mississippi stated that the communications network deployment is expected to begin by late 2018, after the necessary IT infrastructure is in place. Under the current expected schedule, the deployment and installation of the advanced meters on customers' premises would begin in early 2019 and take approximately three years to complete. The table below shows Entergy Mississippi's preliminary meter deployment schedule using approximate meter numbers.

Preliminary Deployment Schedule			
	2019	2020	2021
Advanced Meters	148,000	177,000	128,000

The Commission finds that this deployment schedule is reasonable. In the Joint Stipulation, the Staff and Company agreed that EMI will provide recurring status reports to the Staff related to the progress of the Company's AMI deployment.

16. The costs of deploying AMI are broken down into the main components shown below, and additional detail was provided in confidential Exhibit RWG-2 to the Direct Testimony of Mr. Griffith.

Estimated AMI Implementation Costs for Entergy Mississippi

Line item	(\$M)
Meters and installation	58.8
Communication network and head-end	16.0
MDMS	4.3
System integration	11.2
DMS/OMS	7.9
Other	37.8
Total implementation cost	136.0

Ongoing O&M costs will be incurred for the vendor-supported systems as well as internal support for continued data analytics in the network operations center, unaccounted for energy detection, maintenance of the communications network, and various other meter services related to

supporting AMI. Entergy Mississippi's estimated first full year of ongoing annual AMI-related O&M, starting in 2022, was estimated to be \$3.0 million. The Commission finds this estimate to be reasonable.

17. Entergy Mississippi proposed to reflect the costs of AMI and the Operational Benefits of AMI through the annual FRP Evaluation Reports, as costs are incurred (subject to a deferral request) and meters are deployed. With respect to the Other Benefits, Entergy Mississippi proposed to reflect the fuel-related benefits in its annual redetermination and submittal under the Energy Cost Recovery Rider Schedule ECR-4 in proportion to the average number of advanced meters expected to be deployed beginning in 2019. The energy cost factor under Schedule ECR would be trued-up to actual costs and revenues in the November 2019 Schedule ECR redetermination and submittal and also would reflect the fuel-related benefits expected in 2020, which again would be in proportion to the average number of advanced meters expected to be deployed in 2020, plus the actual number of meters deployed in 2019. The same would be true for subsequent Schedule ECR redeterminations and submittals. The Commission finds that costs and benefits of AMI should be reflected in the aforesaid manner.

18. As part of its AMI deployment and as discussed by Company witness Mr. Jeter, Entergy Mississippi plans to conduct a broad educational outreach to its customers in order to explain the benefits, functionality and advantages provided by the AMI technology. Entergy Mississippi is developing an education plan to ensure that customers are educated about the benefits of AMI and understand how to take advantage of those benefits, particularly those that require specific customer action, such as to reduce energy consumption. AMI is a multi-year deployment, which will allow Entergy Mississippi a number of opportunities to educate, communicate, and engage with its customers. Education messages will be used to inform

customers that advanced meters are coming, to inform businesses how to schedule convenient installation times, to introduce and explain the benefits of AMI, and to explain how customers can take advantage of those benefits. Because of the multi-year nature of Entergy Mississippi's AMI deployment, Entergy Mississippi will incur costs over several years to develop and implement its customer education plan. As discussed by Mr. Griffith, Entergy Mississippi expects to spend \$3.9 million on its AMI customer education efforts from 2017 through 2021. Entergy Mississippi is seeking Commission authority to defer these education costs that will be incurred in connection with the AMI deployment, and proposes to amortize these costs through the Formula Rate Plan. The Commission finds that the use of a customer education plan is prudent and that the estimated costs of the described plan are reasonable.

19. The Direct Testimony of Mr. Davis stated that the unique nature of EMI's AMI deployment (the systematic replacement of EMI's meters in a relatively short time period) raises policy considerations associated with modernizing infrastructure and the manner in which AMI costs and benefits will be reflected in rates to customers. The Joint Stipulation between the Staff and the Company recognizes that this is a valid concern, but one that does not need to be addressed immediately. As such, the Company and Staff stipulated that they will work together to propose any necessary updates to the FRP that may be appropriate to revise the manner by which AMI costs and benefits are allocated among various customer classes. Any such FRP revisions should, to the extent practical, be filed by September 1, 2019, so that any resulting FRP revisions would be applicable to the Company's 2020 FTY Evaluation Report.

20. Entergy Mississippi also sought authority to defer certain IT O&M costs that will be incurred in 2017 in connection with the AMI deployment. Entergy Mississippi began incurring these costs before the Commission issued an order in this proceeding. Entergy Mississippi

proposed that it would reflect future IT O&M expenses in its annual Evaluation Report through the forward features of Entergy Mississippi's FRP.

21. The Commission finds that the certain customer education and IT O&M costs sought to be deferred that were incurred through December 31, 2017, should be deferred as ordered herein. Due to the forward looking features of EMI's FRP, the Commission does not believe that a deferral of costs past December 31, 2017, is needed in order to ensure that EMI has an opportunity to fully recover these costs. By limiting the deferral of these costs as described herein, the Commission finds that future customer education and IT O&M costs associated with the Company's AMI deployment shall be allowed as known & measurable changes in the Company's FRP Evaluation Reports beginning with calendar year 2018.

22. The Company requested confirmation from the Commission that it will be allowed to continue to include the remaining net book value of the existing meters in rate base and continue to depreciate those assets. The Commission finds that the continued recovery of and on the Company's remaining investment in existing meters is appropriate because these amounts represent prudent investments that have not yet been fully recovered from customers. The Commission finds that it is common ratemaking practice to include in rate base the unrecovered cost of assets that are retired early, and the Commission has recognized and approved this type of treatment in the past. The Commission finds that the proposed accounting treatment depicted in the attachment to the Joint Stipulation is reasonable and should be implemented by EMI.

23. Entergy Mississippi has proposed that an opt-out option be available, but that it be limited to residential customers⁵, and that the up-front costs associated with the customer billing

⁵ This approach will minimize the types of non-advanced meters that would have to be maintained, thereby reducing costs to the small number of opt-out customers expected by the Company.

set-up, meter locks, trip charge, and processing of opt-out paperwork be charged to the opt-out customer through a one-time fee when they opt out. In addition, the Company proposed to charge opt-out customers a monthly fee associated with the ongoing monthly costs of manual meter reading and resulting customer service activities necessary to schedule, bill and support these opt-out customers. The Commission hereby finds that an opt-out option is reasonable and finds that the Company shall use a formal process to document the customer's voluntary decision to opt out, including having the customer fill out, sign, and submit a form indicating their decision to opt out of advanced metering and their acknowledgement of the added cost to serve them, including their acceptance that they will incur an up-front fee as well as the monthly recurring fee on their bill. The Commission finds that the opt-out fees charged to customers shall include the categories of costs proposed by EMI in calculating the opt-out fee. The Commission further finds that the Company shall make a compliance filing closer to its deployment of advanced meters to implement the opt-out option, including the opt-out form the customer would execute, the form of the tariff, as well as the actual proposed fees and associated costs used to derive the opt-out fees following the methodology approved by the Commission in this proceeding.

24. The Company has requested a waiver of and permission for deviation from part of the requirements of Appendix "A," Schedule 3, Item 7, of the Procedural Rules to allow the Company not to file with its Application a complete set of plans and specifications for the facilities proposed herein, but rather to make such a complete set of plans available, upon request to the Public Utilities Staff when such plans and specifications are completed and thereby available. The Direct Testimony of Rodney Griffith explains that design work is underway and meter deployment is not expected to begin until 2019. Requiring complete plans and

specifications to be filed with this Application would be unduly burdensome and impractical.

The Commission finds that the requested waiver should be granted.

25. The Commission finds that 25 x '25's motion for late intervention should be denied. 25 x '25 makes no attempt to show that good cause exists for allowing late intervention. The group's motion comes very late in the process (April 12) after which Staff had completed its investigation and begun the process of negotiating a stipulation (agreed to on May 1); therefore, party intervention at this late date would delay the proceedings. Moreover, other than expressing a general interest in the technology and data related to AMI, 25 x '25 did not show a substantial interest in these proceedings.

IT IS, THEREFORE, ORDERED by the Commission that:

1. The pleadings, data, documentation, and exhibits submitted in connection with the Company's Application and otherwise in this matter, being a part of the full record in this matter, comply with the applicable requirements of law and the rules, regulations, and orders of the Commission. The Commission hereby does grant the Company a waiver of and permission for deviation from any filing requirement as referenced in paragraphs 30 or 31 of the Application.
2. 25 x '25's motion for late intervention be, and is hereby, denied.
3. The Commission does hereby accept and adopt in its entirety the Joint Stipulation dated May 1, 2017, as its own and hereby fully incorporates said Joint Stipulation into this Order. Entergy Mississippi shall work together with the Staff to propose any necessary updates to the FRP that may be appropriate to revise the manner by which AMI costs and benefits are allocated among various customer classes. Any such FRP revisions should, to the extent

practical, be filed with the Commission by September 1, 2019, so that any resulting FRP revisions would be applicable to the Company's 2020 FTY Evaluation Report.

4. The Commission approves the Company's Application and hereby authorizes the Company to acquire, construct, deploy, own, operate and maintain Advanced Metering Infrastructure ("AMI"), which includes advanced meters that enable two-way data communication, a secure and reliable communications network that supports two-way data communication, along with related and supporting systems, including a Meter Data Management System ("MDMS"), an Outage Management System ("OMS"), and a Distribution Management System ("DMS), along with related accounting treatment for existing and future assets and costs. The Commission further grants unto the Company a certificate that the public convenience and necessity requires and will require the acquisition, construction, ownership, operation, and maintenance of the physical infrastructure related to the Company's AMI deployment. The Commission further finds that Entergy Mississippi's proposed deployment of AMI is consistent with the public interest. The Commission hereby approves the estimated implementation costs of AMI and approves a 15-year useful life of AMI assets for ratemaking purposes, and the Company is authorized to recover such costs through the Formula Rate Plan as described herein and in the Joint Stipulation.

5. The Commission hereby authorizes Entergy Mississippi to defer certain customer education and other 2017 IT O&M costs related to the AMI deployment and incurred through December 31, 2017, with the amortizations of such deferred costs to occur through the FRP. The complete amortization of the deferred customer education and IT O&M costs shall begin with the first billing cycle after the MPSC order addressing the Company's 2018 Evaluation Report and conclude by May 31, 2019. The Commission authorizes EMI, beginning in 2018, to include

in future FRP Evaluation Reports as known & measurable changes future customer education and IT O&M costs directly related to the AMI deployment.

6. The Commission approves the continuation of the depreciation of the Company's remaining net book value of its existing meters that will be retired with the AMI deployment and approves the continued inclusion of such net book value in EMI's rate base until fully depreciated and hereby approves the necessary accounting that may be required to implement said continued depreciation, or the equivalent amortization, of EMI's existing meters, as depicted in the Joint Stipulation. Nothing herein limits Entergy Mississippi's future ability to reflect these meter assets in future deprecation studies and to request appropriate future depreciation rates, including a change to the current depreciation rate.

7. The Commission approves the Company's opt-out methodology, including the manner by which the Company intends to calculate the opt-out fees for residential customers that choose to opt out of receiving an advanced meter, and orders the Company to make an opt-out tariff compliance filing prior to commencing advanced meter deployment.

8. The Commission directs Entergy Mississippi to provide the Staff with semi-annual updates on the status of the AMI deployment, with the first report to be due within six months of the date of this order. The Commission further directs that EMI will provide these updates to the Staff on a quarterly basis once advanced meter deployment to EMI's customers begins. The Staff and Company shall work together to develop a reasonable format for these updates.

This order shall be deemed issued on the day it is served upon the parties herein by the Executive Secretary of this Commission who shall note the service date in the file of this Docket.

Chairman Brandon Presley voted aye; Vice Chairman Cecil Brown voted aye; and Commissioner Samuel F. Britton voted aye.

Dated this the 4th day of May, 2017.

MISSISSIPPI PUBLIC SERVICE COMMISSION

Brandon Presley
BRANDON PRESLEY, CHAIRMAN

Cecil Brown
CECIL BROWN, VICE CHAIRMAN

Samuel F. Britton
SAMUEL F. BRITTON, COMMISSIONER

ATTEST: A TRUE COPY

Katherine Collier
KATHERINE COLLIER, EXECUTIVE SECRETARY



Effective this 4th day of May, 2017.

FILED

MAY 0 1 2017

BEFORE THE MISSISSIPPI PUBLIC SERVICE COMMISSION
MISSISSIPPI PUBLIC SERVICE COMMISSION

ENTERGY MISSISSIPPI, INC.

EC-123-0082-00

Docket 2016-UA-261

IN RE: APPLICATION FOR APPROVAL OF
ADVANCED METERING
INFRASTRUCTURE AND RELATED
MODERNIZATION IMPROVEMENTS

JOINT STIPULATION

This Joint Stipulation is entered into by and between the Mississippi Public Utilities Staff (the "Staff") and Entergy Mississippi, Inc. ("Entergy Mississippi" or the "Company") pursuant to the Mississippi Public Utilities Act of 1956, Section 77-3-1, *et seq.*, of the Mississippi Code of 1972, as amended, (the "Act") and the Mississippi Public Service Commission's ("MPSC" or the "Commission") Public Utilities Rules of Practice and Procedure ("Procedural Rules").

PROCEDURAL HISTORY

1. On November 30, 2016, Entergy Mississippi filed its Application seeking authorization from the Commission and requesting a certificate of public convenience and necessity ("CCN") for the Company to acquire, construct, deploy, own, operate and maintain Advanced Metering Infrastructure ("AMI"), which includes advanced meters that enable two-way data communication, a secure and reliable communications network that supports two-way data communication, along with related and supporting systems, including a Meter Data Management System ("MDMS"), an Outage Management System ("OMS"), and a Distribution Management System ("DMS), along with related accounting treatment for existing and future assets and costs. In support of the Application, the Company included with the filing the pre-

filed Direct Testimonies and Exhibits of Direct Testimonies of Haley R. Fisackerly, J. Robbin Jeter, Rodney W. Griffith, Jay A. Lewis, Dorman J. Davis and Dr. Ahmad Faruqui.

2. The Staff conducted an extensive investigation of Entergy Mississippi's filing and had the benefit of substantial amounts of data provided by the Company in the discovery process. The Staff propounded dozens of data requests, to which the Company fully responded.

3. This Joint Stipulation is entered into as a result of the filing by the Company in this Docket, the discovery conducted by the Staff, the Staff's extensive continuing knowledge and understanding of the books, records, and business of Entergy Mississippi, and research and investigation conducted by the Staff in this proceeding.

4. It is hereby stipulated and agreed between the Staff and Entergy Mississippi as follows:

(a) The Staff and the Company agree that the Commission has jurisdiction over the parties and subject matter in this proceeding.

(b) The Staff and the Company agree that the Commission should find that the public convenience and necessity requires the deployment by Entergy Mississippi of the advanced metering infrastructure described fully in the Company's Application and testimony and that such deployment is consistent with the public interest.

(c) The Staff and the Company agree that a 15-year useful life for the AMI is reasonable and supported by the evidence.

(d) The Staff and the Company agree that Entergy Mississippi shall work together with the Staff to propose any necessary updates to the Formula Rate Plan ("FRP") that may be appropriate to revise the manner by which AMI costs and benefits are allocated among various customer classes. Any such FRP revisions should, to the extent practical, be filed with the

Commission by September 1, 2019, so that any resulting FRP revisions would be applicable to the Company's 2020 FRP Evaluation Report.

(e) The Staff and Company agree that the Commission should authorize Entergy Mississippi to defer certain customer education and any 2017 IT O&M costs¹ related to the AMI deployment and incurred through December 31, 2017, with the amortizations of such deferred costs to occur through the FRP. The Staff and Company further agree that the complete amortization of the deferred costs should begin with the first billing cycle after the MPSC order addressing the Company's 2018 Evaluation Report and conclude by May 31, 2019.

(f) The Staff and Company agree that the Commission should approve the continuation of the depreciation of the Company's remaining net book value of its existing meters that will be retired with the AMI deployment and should approve the continued inclusion of such net book value in EMI's rate base until fully depreciated. In the discovery process, the Company provided an explanation, of the necessary accounting treatment to implement said continued depreciation, or the equivalent amortization, of EMI's existing meters, and the Staff and the Company agree that such necessary accounting should also be approved. A copy of the explanation is attached hereto as Confidential Exhibit 1.

(g) The Staff and Company agree that the Company's proposed opt-out proposal is reasonable. The Staff and Company further agree that the Commission should approve the Company's opt-out methodology, including the manner by which the Company intends to calculate the opt-out fees for residential customers that choose to opt out of receiving an advanced meter. The Staff and Company further agree that EMI should make an opt-out tariff compliance filing prior to commencing advanced meter deployment.

¹ Information Technology Operating and Maintenance costs

(h) The Staff and the Company agree that Entergy Mississippi will provide the Staff with semi-annual updates on the status of the AMI deployment, with the first report to be due within six months of Commission approval of the Company's AMI deployment. The Staff and the Company further agree that these updates will be provided to the Staff on a quarterly basis once advanced meter deployment to EMI's customers begins. The Staff and Company agree to work together on a reasonable format for these updates.

(i) The Staff and the Company agree that the stipulations contained herein are just and reasonable and consistent with applicable law and the rules of this Commission.

OTHER PROVISIONS

5. It is agreed that the Staff and the Company shall not be considered as necessarily agreeing with or conceding the applicability of any principle, or any method of ratemaking or cost of service determination, or design of rate schedules, or terms or conditions of service, or the applicability of any rule or interpretation of law, that may underlie, or be thought to underlie, this Joint Stipulation.

6. The Staff and the Company understand and expressly agree that, except as previously stated, the stipulations made herein are for the purpose of this proceeding only and shall not apply to or be used as precedent in any other proceeding of Entergy Mississippi or any other utility. Nothing herein shall operate to prevent the Company or the Staff from making any filing or proposing any change in rates. Both the Staff and the Company fully reserve their respective rights under state and federal law, and the Company fully reserves its rights under state or federal law with regard to the recovery of costs through retail rates. Nothing in this Joint Stipulation shall constitute a waiver by Entergy Mississippi of its rights with respect to matters

within the jurisdiction of the Federal Energy Regulatory Commission, the Securities and Exchange Commission, or any other agency or governmental body having jurisdiction over Entergy Mississippi.

7. It is agreed that this Joint Stipulation is expressly conditioned upon acceptance by the Commission of all of its provisions. It is also specifically understood and agreed that this Joint Stipulation is interdependent, non-separable, and cannot be severed. If the Commission does not accept this Joint Stipulation in its entirety, it is agreed that neither the Staff nor Entergy Mississippi will be thereafter bound by any of its provisions.

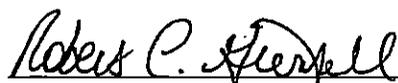
8. Both the Staff and Company agree that the matters set out in this Joint Stipulation are just, reasonable, and in the best interest of the customers, the Company, and the general public.

SO STIPULATED this the 1st day of May 2017.

MISSISSIPPI PUBLIC UTILITIES STAFF

By: 
 VIRDEN JONES
 Executive Director

ENTERGY MISSISSIPPI, INC.

By: 
 ROBERT C. GRENFELL
 Vice President, Regulatory Affairs