

OVERVIEW

1. 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 for the benefit of Entergy Mississippi's customers.

2. 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. Entergy Mississippi believes that AMI is the next step in the modernization of its power grid and will deliver significant benefits to its 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 lower their bills. AMI will create value for customers through enhanced reliability, operational efficiencies and new products and services, all while allowing Entergy Mississippi to provide reliable, safe and low-cost energy. Finally, Entergy Mississippi believes that AMI will produce \$496 million¹ in customer benefits over a 15 year period, which when netted against the costs of AMI results in \$183 million of net customer benefits.

3. 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. Advanced metering technology has helped utilities around the nation put more information into their customers' hands, while paving the path for a more energy efficient future with the integration of new technology.

4. Attached hereto made a part hereof are the Direct Testimonies of Haley R. Fisackerly (ATTACHMENT A), J. Robbin Jeter (ATTACHMENT B), Rodney W. Griffith

¹ On a nominal basis.

(ATTACHMENT C), Jay A. Lewis (ATTACHMENT D), Dorman J. Davis (ATTACHMENT E) and Dr. Ahmad Faruqui (ATTACHMENT F). The Company 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 included with 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.

5. 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 a 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 customers²	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>

6. 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

² Including the amortization of the deferred customer education and AMI-related O&M expenses. The Direct Testimony of Mr. Griffith addresses the costs associated with AMI.

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 bad debt expense.

7. 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 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, 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 meter failures, inaccurate meters, tampering, and theft of services, which are categorized as “non-technical losses.” An 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.

8. Now is an appropriate time for Entergy Mississippi to adopt AMI. The U.S. electric utility industry is undergoing a time of significant change driven by new technology, the pace of technology innovation, increased customer interest around self-supply and control, an emphasis on efficiency, increasing regulation driving mandatory investments, aging infrastructure, and uncertainty surrounding evolving standards and environmental regulations. Moreover, technology and innovation are changing customer expectations as a result of how products and services are delivered both inside and outside of the utility industry. Added to this is the wealth of knowledge and services that are available to consumers via the internet. Over the past several years, there has been a significant increase in customers’ expectations that they be able to access information and manage services via mobile devices like smart phones, tablets, and other devices. For example, at any hour, customers can interact and conduct business electronically with many retailers, banks, and other service providers. To keep up with changing customer expectations, Entergy Mississippi has taken various steps to invest in communication

technology that improves customers' access to usage and other important information via electronic devices. For example as discussed by Mr. Jeter, Entergy Mississippi has implemented a mobile device application as well as added new features to its website, such as the ability to view outage information. But as technology evolves, so must our capabilities.

9. AMI is a fundamental step in enabling us to deliver what customers increasingly want - ways to better understand and manage their utility bills and energy usage. Advanced meters and the accompanying communication network infrastructure will allow Entergy Mississippi to offer more detailed energy usage information and energy management tools to customers. For example, with AMI, the Company's web portal will allow customers to track daily electricity usage, analyze their historic and current usage patterns, and view an estimate of their monthly bills. Company witness Dr. Faruqui explains how such detailed information about energy usage enables customers to make more informed decisions about their usage that ultimately will result in lower bills for many customers.

10. With AMI in place, Entergy Mississippi would be positioned to invest in new technology and infrastructure upgrades to move beyond a largely centralized, one-way distribution grid and move towards a more advanced power grid. AMI is a foundational technology for an integrated energy network that would support additional features such as distribution automation and the further integration of distributed energy resources. In other words, AMI is the first step towards integrating advanced technology into our operations.

11. The Direct Testimony of Mr. Jeter discusses in more detail some of the potential future capabilities that can be built upon AMI. Those future capabilities include the potential to prevent certain outages from occurring. Moreover, in instances when an outage does occur, Mr. Jeter explains that, based on data from the advanced meters, investments could be made so that,

after an outage, power could be automatically rerouted (in parts of the power grid where that capability does not exist today), which would allow for fewer overall outages or shorter interruptions. These potential future capabilities would not be possible without the communications and information technology improvements that will be part of Entergy Mississippi's AMI deployment.

12. Beyond AMI that starts at the interface of the utility system with each customer's home or business, there are opportunities for additional customer benefits across the distribution grid. Technological innovation continues to make possible additional ways to maximize the capabilities of the distribution grid, like the creation of an integrated energy network with features such as distribution automation, self-healing networks, and further integration of distributed energy resources. Even without AMI, Entergy Mississippi believes that additional customer benefits could be delivered through modernization of our aging distribution grid, such as with replacement of poles, conductor and other equipment and devices. Just as Entergy Mississippi's customers have benefitted from recent improvements in generation and transmission, Entergy Mississippi expects to continue to evaluate and pursue improvements to its distribution system that will benefit customers.

13. AMI is the foundation of a 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 information on customer accounts, which will allow customers to better manage their usage and drive consumption reduction. AMI will create value through enhanced reliability, operational efficiencies and new products and services. Moreover, once AMI is put in place, the Company will be positioned to take additional steps to modernize its power grid and support additional features listed in the Direct Testimony of Mr. Griffith.

14. The Direct Testimony of Mr. Griffith describes how AMI vendor selection for four of the AMI components was conducted by a team comprised of representatives from Entergy Mississippi, Entergy Services, Inc.,³ 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 of the communications network. Accenture, LLP ("Accenture") was selected to be the vendor of the

³ 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.

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.

15. Assuming Commission approval is received in 2017, 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

16. The costs of deploying AMI are broken down into the main components shown below, and additional detail is 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, is currently estimated to be \$3.0 million. Additional detail is provided in confidential Exhibit RWG-3 to the Direct Testimony of Mr. Griffith.

17. Entergy Mississippi proposes 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 explained herein) and meters are deployed. With respect to the Other Benefits, Entergy Mississippi proposes 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.

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 our 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 our 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. Because AMI is a multi-year program, there are a number of times when Entergy Mississippi plans to educate, communicate, and engage our 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.

19. Entergy Mississippi also is seeking authority to defer certain IT costs that will be incurred in 2017 in connection with the AMI deployment. Entergy Mississippi is likely to begin incurring these costs before the Commission issues an order in this proceeding. Consequently, Entergy Mississippi does not believe that these IT costs would be allowed to be reflected in its 2017 FRP Evaluation Report. Upon approval of this Application and the requested CCN supporting Entergy Mississippi's AMI deployment, Entergy Mississippi would thereafter reflect future IT O&M expenses in its annual Evaluation Report through the forward features of Entergy Mississippi's FRP.

20. The Company is seeking 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 continued recovery of 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. It is common utility ratemaking practice to include in rate base the unrecovered cost of assets that are retired early,

and the Commission has recognized and approved this practice in the past. The retirement of the existing meters will be contingent upon the Commission agreeing with the Company that AMI deployment satisfies the public interest and will provide benefits to our customers. The impact of this continued depreciation is not reflected in the benefits analysis presented by Mr. Lewis, because these costs are currently included in rates. While Entergy Mississippi is not seeking any changes to the current depreciation rates in this proceeding, Entergy Mississippi does not intend by this request to limit its future ability to reflect these assets in future deprecation studies and to request appropriate future depreciation rates.

21. The following table summarizes Entergy Mississippi’s annual estimated revenue requirement for each year beginning with year 2018 through the full deployment year in 2022. As described by Mr. Lewis and Mr. Griffith, the Company expects to incur O&M expenses and realize O&M Operational Benefits generated by the AMI deployment. Each year the revenue requirement reflects the net of the estimated O&M expenses and Operational Benefits.

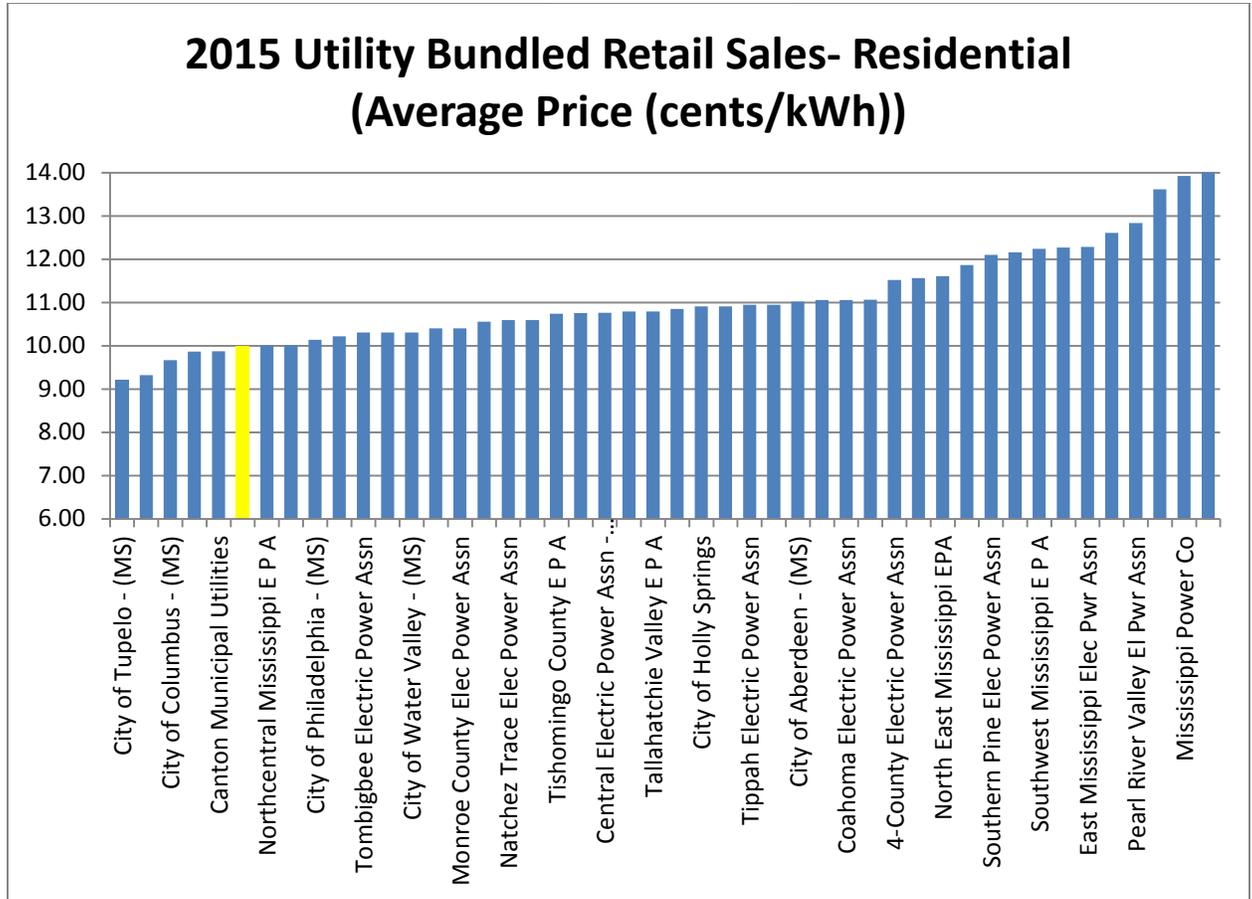
Table 1

<u>Description</u>	Estimated AMI Impact on FRP Revenue Requirements (\$000s)				
	2018	2019	2020	2021	2022
Additions to Plant In Service	\$ 51,233	\$ 28,555	\$ 30,393	\$ 21,689	\$ 64
Ending Rate Base	\$ 41,164	\$ 60,864	\$ 83,115	\$ 94,445	\$ 85,311
Average Rate Base	\$ 20,582	\$ 51,014	\$ 71,990	\$ 88,780	\$ 89,878
Net Operation and Maintenance Expense (Net of Savings)	\$ 310	\$ 497	\$ (1,101)	\$ (2,736)	\$ (3,346)
Total Revenue Requirements	\$ 4,562	\$ 12,327	\$ 15,873	\$ 18,683	\$ 21,648

22. As discussed by Mr. Davis, due to the quantified benefits provided by AMI, Entergy Mississippi expects that changes to residential rates as a result of AMI deployment will be reasonable. Entergy Mississippi’s residential retail rates have consistently remained below the national average and among the lowest rates in the state of Mississippi in recent years. The chart below, EXHIBIT DJD-1A to the Direct Testimony of Mr. Davis, shows the average residential

rates (cents/kWh) of 45 Mississippi electric utilities reported by the Energy Information Agency (“EIA”) for 2015 (the latest data available):

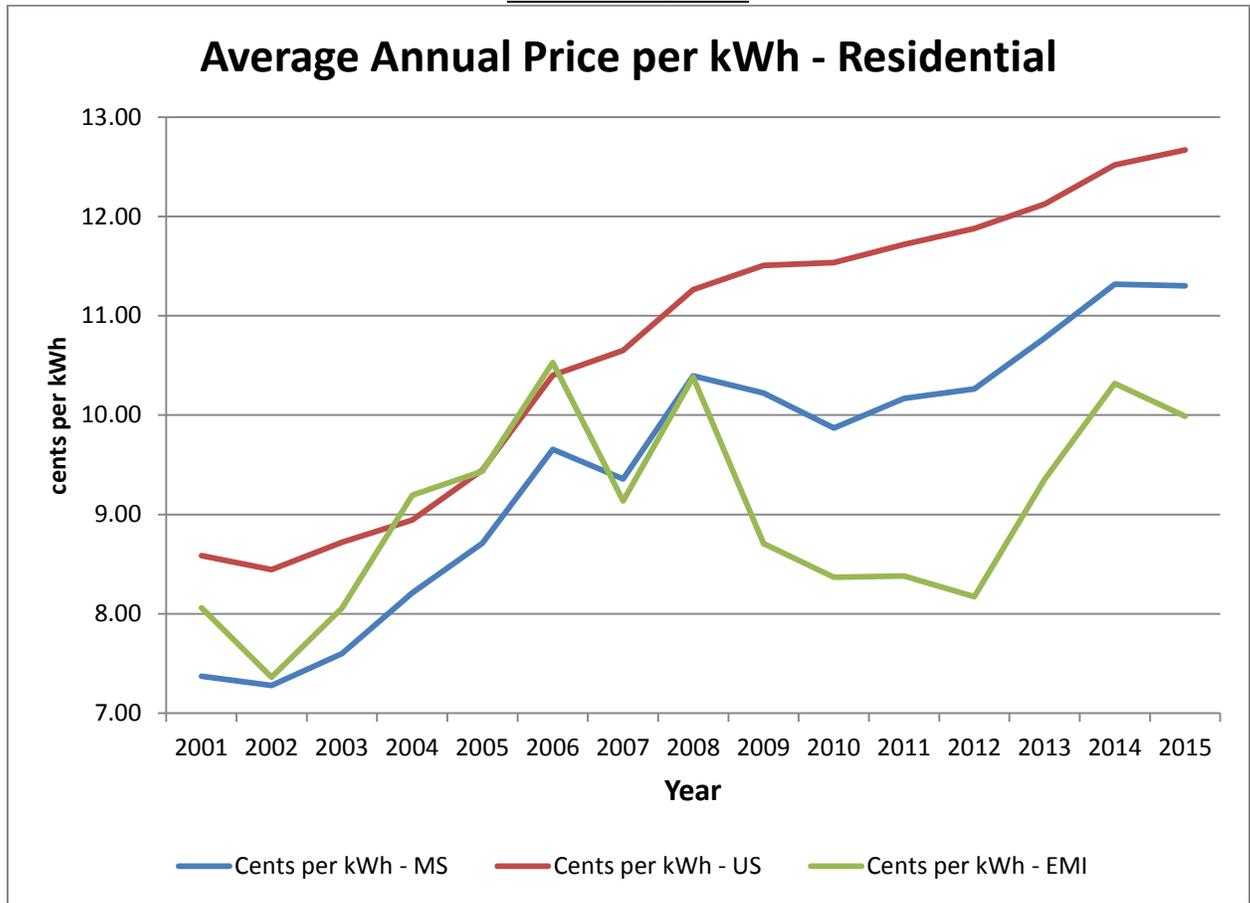
EXHIBIT DJD-1A⁴



In addition, the chart below, which is EXHIBIT DJD-1B to the Direct Testimony of Mr. Davis, shows how Entergy Mississippi’s residential rates have compared favorably over time to both the U.S. national average and the Mississippi average annual residential price per kWh:

⁴ Because of the reduced size of this exhibit for inclusion in the Notice of Intent, the names of the 45 utilities are not completely displayed. For a complete list, please see EXHIBIT DJD-1.

EXHIBIT DJD-1B



As these charts demonstrate, Entergy Mississippi has been able to make improvements to provide reliable electric service and quality customer service, and plan for the future, all while keeping its rates low for customers.

23. The Company is sensitive to various concerns that have been raised within other AMI proceedings around the country, although Entergy Mississippi believes such concerns to be unfounded. Accordingly, Entergy Mississippi proposes that an opt-out option be available, but that it be limited to residential customers.⁵ A customer's decision to opt out comes with a cost. Some of the costs associated with a customer choosing to opt out depends upon the timing of the

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.

opt-out request (e.g., whether the opt-out request is provided to the Company before or after an advanced meter is installed at the customer's home). In addition, regardless of when the customer opts out of advanced metering, the Company will incur other up-front costs associated with the purchase of meter locks, processing of the opt-out paperwork, and billing set-up costs to make the necessary modifications to the Company's customer billing system. There also will be ongoing monthly costs associated with the need to continue to manually read the meter, manage billing and customer data such as tracking move outs and manually performing meter services such as meter re-reads. If a customer chooses to opt out of an advanced meter prior to the installation of the advanced meter, the Company proposes to allow the customer to keep his/her existing meter following an inspection of that existing meter for safety-related issues or tampering issues and a test to ensure the meter meets the Company's and the Commission's applicable standards for accuracy. By conducting a meter inspection and test, the Company will be able to identify potential safety issues, inaccurate or defective meters as well as evaluate whether tampering or theft may be occurring, and install a new meter seal with the correct color and barrel lock on the meter. If the customer chooses to opt out after an advanced meter has already been installed on their home, then the Company will incur further costs to remove the advanced meter, install a non-advanced meter, and ensure the new meter meets safety and accuracy standards.

24. The Company proposes that the up-front costs associated with the customer billing 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 proposes 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 Company will 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.

25. The Company proposes that the opt-out fees be cost-based. Based on actual opt-out rates of other utilities that have deployed AMI, the Company estimates that approximately 0.25% of Entergy Mississippi's customers may choose to opt out of having an advanced meter on their home. This equates to approximately 1,100 out of Entergy Mississippi's 445,000 customers. The 0.25% estimate is based on an average of reported opt-out rates of other electric utilities. See Exhibit JAL-6 to the Direct Testimony of Mr. Lewis for the opt-out rates used to determine the 0.25% estimate. For illustrative purposes, the Company has estimated the up-front costs and on-going costs in order to demonstrate the possible charges an opt-out customer would incur. The illustrative fees include use of Company servicemen to perform the meter reads, tests, and removal/installation. Exhibit DJD-2 to the Direct Testimony of Mr. Davis includes the illustrative fee along with the calculation of the trip fee cost components included in these illustrative opt-out fee calculations.

26. As the Company's analysis shows, and described in more detail by Mr. Lewis, all customers benefit from AMI, even those that opt- out, and it is therefore reasonable and appropriate for opt-out customers to pay for the AMI deployment costs in addition to the upfront and on-going fees associated with opting out. As described previously, advanced meters provide benefits that help customers reduce consumption, which will, in turn, result in reduced fuel costs for all customers. In addition, customers that use the capabilities provided through AMI to

reduce peak load will reduce the Company's future capacity requirements and therefore reduce overall costs for all customers. Opt-out customers also will benefit in other ways from the AMI deployment. For example, as described by Company witnesses Mr. Jeter and Mr. Griffith, the AMI deployment includes an OMS and DMS that will help speed up and improve restoration of service, especially after significant outage events. It would be unfair for opt-out customers to share in these benefits without having to pay for the associated costs of the AMI deployment.

27. Entergy Mississippi is not seeking approval of a specific opt-out tariff in this filing, but it is requesting approval of the methodology described above to calculate the opt-out charges. The Company proposes to make a compliance filing closer to its deployment of advanced meters. That filing will include the opt-out form the customer would execute, the form of the tariff, as well as the actual proposed charges and associated costs used to derive the opt-out charges following the methodology approved by the Commission, as part of this proceeding.

28. The data that is collected, stored, and transmitted by the advanced meters will be protected with administrative, physical, and technological safeguards at various stages of the deployment. As Mr. Jeter describes, Entergy Corporation has data privacy and protection policies already in place, which will continue to be applicable to any new data collected through AMI. Additionally, data protection and encryption designed to protect AMI data will be built into the advanced meters, communication systems, and data-processing systems. Cyber security industry standards were included as part of the procurement process, and cyber security controls for advanced meters and related systems that store and transmit data collected by advanced meters are being implemented. Standards and research such as those from the following entities are being used by our vendors to guide the development and implementation of AMI cyber security controls to protect AMI components and customer data:

- NIST (National Institute of Standards and Technology)
- IEC (International Electrotechnical Commission)
- IEEE (Institute for Electrical and Electronics Engineers)
- NERC (North American Electric Reliability Corporation) Critical Infrastructure Protection (CIP) v5
- EPRI (Electric Power Research Institute)
- IETF (Internet Engineering Task Force)
- Other standards such as ANSI, ISO/IEC would also be applied to functional requirements

While the Company already has cyber security controls in place with respect to its current customer data storage systems, controls related to the new advanced meters and related infrastructure are being developed as part of the AMI design phase. These new controls will be implemented during the build, test and deployment phases of the project to ensure continued protection of Company and customer data after AMI is deployed.

29. Pursuant to the requirements of Appendix “A”, Schedule 3, of the Procedural Rules, the Company attaches, incorporates by reference, or seeks particularly specified Commission disposition with respect to the following items:

- a. (Appendix “A,” Schedule 3, Item 1 – If the utility has made any revisions to its corporate charter or its articles of incorporation since receiving its initial authority to operate, provide a copy of said revisions. If a partnership, provide a copy of any revision to the original partnership agreement. If there have been no changes, provide the docket number of the proceeding in which the company received its initial authority to operate.) A copy is on file in Commission Docket 2014-UN-132 and incorporated by reference herein.

- b. (Appendix “A,” Schedule 3, Item 2 – If a corporation, the names and addresses of its board of directors, officers and any person owning fifteen percent (15%) or more of its stock. If not a corporation, the names and addresses of all owners or partners.) See ATTACHMENT G to this Application.
- c. (Appendix “A,” Schedule 3, Item 3 – An outline map of the utility’s existing certificated area showing the location of the proposed new facilities.) An outline of Entergy Mississippi’s existing certificated area in on file with the Commission. The AMI components will be located all throughout Entergy Mississippi’s service area.
- d. (Appendix “A,” Schedule 3, Item 4 – A detailed description of the facilities proposed.) See the Direct Testimony of Rodney W. Griffith, ATTACHMENT C hereto.
- e. (Appendix “A,” Schedule 3, Item 5 – A copy of any required approvals from the Health or Environmental Quality authorities.) Not applicable.
- f. (Appendix “A,” Schedule 3, Item 6 – An estimate of the cost to the utility and all sources of funding for the project.) See paragraph 16 above and EXHIBIT RWG2 to the Direct Testimony of Rodney W. Griffith. AMI will be funded out of internally generated funds and other available cash resources. The AMI will be part of those Company facilities necessary and useful to the Company’s electric utility operations and will be recorded in the Company’s books and records as utility plant.
- g. (Appendix “A,” Schedule 3, Item 7 – A complete set of engineering plans and specifications.) See paragraph 30 below.
- h. (Appendix “A,” Schedule 3, Item 8 – An estimate of the impact of the cost of facilities upon rate base and rates. This item shall not apply to public utilities

excluded from rate regulation pursuant to Miss. Code Ann. § 77-3-1 or § 77-3-5 or to public utilities heretofore or hereafter exempt by Commission order from rate base regulation or to public utilities whose rates are allowed, by Commission order, to be filed for informational purposes only.) See the Direct Testimony of Mr. Dorman Davis, ATTACHMENT E hereto.

- i. (Appendix "A," Schedule 3, Item 9 - An exhibit listing the names and addresses of all interested persons as defined in RP 2.115 of the Commission's Procedural Rules together with a certificate that the filing utility has served a notice of the filing upon each.) See ATTACHMENT H to this Application.
- j. (Appendix "A," Schedule 3, Item 10 – All testimony to be relied upon at hearing.) Attached hereto as ATTACHMENTS A through E.
- k. (Appendix "A," Schedule 3, Item 11 - A copy of the current balance sheet and income statement.) See the Company's Evaluation Report under the Formula Rate Plan, incorporated herein by reference.

30. Pursuant to Procedural Rule RP 1.102, the Company hereby moves for and requests 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 this 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 Mississippi Public Utilities Staff ("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

since they do not yet exist, and such requirement also would be unnecessary because the complete plans and specifications will be available for Public Utilities Staff review when they are completed.

31. To the extent, if any, that this filing does not meet all of the technical requirements of the Commission's rules, the Company hereby respectfully moves and requests, pursuant to RP 1.102, that the noncompliance be waived by the Commission.

32. Subject to the receipt of necessary regulatory approvals, Entergy Mississippi is ready, willing, and able to acquire, construct, own, operate, and maintain the facilities that are the subject of this Application. The public convenience and necessity justify the issuance by the Commission of a Certificate of Public Convenience and Necessity authorizing the acquisition, construction, ownership, operation, and maintenance of Advanced Metering Infrastructure, and Entergy Mississippi's AMI deployment is consistent with the public interest.

33. Entergy Mississippi expressly reserves all of its rights insofar as any order of the Commission or any court may result in confiscatory rates that constitute deprivation of property without due process of law and insofar as matters in this proceeding are within the exclusive jurisdiction of the FERC, the Securities and Exchange Commission ("SEC"), or any other agency having jurisdiction over Entergy Mississippi. Entergy Mississippi's reservation of rights is based on all applicable constitutional provisions, statutes and rules of law.

34. Service on Entergy Mississippi in this proceeding should be made to:

Robert C. Grenfell
Vice President Regulatory Affairs
Entergy Mississippi, Inc.
P.O. Box 1640
Jackson, Mississippi 39215-1640
Telephone (601) 969-2338
Fax (601) 969-2406
E-Mail: rgrenfe@entergy.com

Jeremy C. Vanderloo
Shelly M. Bass
Entergy Services, Inc.
P.O. Box 1640
Jackson, Mississippi 39215-1640
Telephone (601) 969-4838
Fax (601) 969-2406
E-Mail: jvandel@entergy.com
sbass@entergy.com

WHEREFORE, PREMISES CONSIDERED, Entergy Mississippi prays that the Commission will set this matter for disposition; and the Company further prays that the Commission grant a waiver of and permission for deviation from any filing requirement as referenced in paragraph 30 above, and of any other filing requirement referenced in paragraph 31 above, and that process be issued by this Commission in the manner provided by law and by the Procedural Rules giving reasonable notice of this matter hereof to all interested and other persons as in the Commission's judgment may be necessary.

The Company further prays that the Commission approve the estimated implementation costs of AMI and shall grant 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 and that the Commission otherwise find that Entergy Mississippi's proposed deployment of AMI is consistent with the public interest.

The Company further prays that the Commission find that Entergy Mississippi will be allowed to continue to include the remaining book value of its existing meters in rate base and continue to depreciate those assets. The Company further prays that the Commission will authorize Entergy Mississippi to defer certain education and other AMI-related O&M costs

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described herein and in the attached direct testimonies, and will allow Entergy Mississippi to amortize these costs through the Formula Rate Plan. The Company further prays that the Commission will approve the Company's opt-out methodology, including the manner by which the Company intends to calculate the cost-based opt-out charges.

The Company prays for such other, further, and general relief as may be required, needed, or beneficial.

This the 30th day of November 2016.

Respectfully submitted,

ENTERGY MISSISSIPPI, INC.

BY: 
ROBERT C. GRENFELL (MSB No. 5010)
VICE PRESIDENT, REGULATORY AFFAIRS

Jeremy C. Vanderloo, MSB No. 101678
Shelly Mott Bass, MSB No. 103857
Entergy Services, Inc.
P.O. Box 1640
Jackson, Mississippi 39215
(601) 969-4838

STATE OF MISSISSIPPI

COUNTY OF HINDS

Personally appeared before me, the undersigned authority in and for the jurisdiction aforesaid, Robert C. Grenfell, who after being by me first duly sworn states that he is Vice President, Regulatory Affairs of Entergy Mississippi, Inc., and that as such is fully authorized to make this affidavit; and further states that the matters and things contained in the foregoing Application of Entergy Mississippi, Inc., are true, accurate, and correct as therein set forth to the best of his knowledge, information, and belief.

BY: 
ROBERT C. GRENFELL (MSB No. 5010)
VICE PRESIDENT, REGULATORY AFFAIRS
ENTERGY MISSISSIPPI, INC.

SWORN TO AND SUBSCRIBED before me, this the 30th day of November 2016.


NOTARY PUBLIC

My Commission Expires:

