

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

In The Matter Of:

Application Of Kentucky Power Company For )  
(1) Authority To Modify Certain Existing )  
Demand-Side Management Programs; (2) Authority )  
To Implement New Programs; (3) Authority To )  
Discontinue Certain Existing Demand-Side Management )  
Programs; (4) Authority To Recover Costs And Net Lost )  
Revenues, And To Receive Incentives Associated With )  
The Implementation Of The Programs; And (5) All Other )  
Required Approvals and Relief )

Case No. 2015-00271

**APPLICATION**

Kentucky Power Company applies to the Public Service Commission of Kentucky pursuant to KRS 278.285(1) for an Order: (1) authorizing Kentucky Power to terminate six existing Demand-Side Management (“DSM”) programs; (2) authorizing Kentucky Power to modify five of its existing DSM programs (3) granting the Company authority to implement six new DSM programs; (4) approving the Company’s recovery through its Demand-Side Management Clause (Tariff Sheet 22-1 to 22-2) of its full costs, including lost revenues and incentives, associated with the Company’s DSM programs as modified through this application; and (5) granting all other required relief or approvals. In support thereof Kentucky Power states:

## APPLICANT

1. Kentucky Power was organized in 1919 under the laws of the Commonwealth of Kentucky.<sup>1</sup> The Company's mailing address is 101A Enterprise Drive, P.O. Box 5190, Frankfort, Kentucky 40602-5190. Its electronic mail address is [kentucky\\_regulatory\\_services@aep.com](mailto:kentucky_regulatory_services@aep.com) . Kentucky Power is engaged in the generation, purchase, transmission, distribution and sale of electric power. The Company serves approximately 170,000 retail customers in the following 20 counties of eastern Kentucky: Boyd, Breathitt, Carter, Clay, Elliott, Floyd, Greenup, Johnson, Knott, Lawrence, Leslie, Letcher, Lewis, Magoffin, Martin, Morgan, Owsley, Perry, Pike and Rowan. In addition, the Company also supplies electric power at wholesale to other utilities and municipalities in Kentucky for resale. Kentucky Power is a utility as that term is defined at KRS 278.010. [807 KAR 5:001, Section 14].

2. Kentucky Power is a direct, wholly-owned subsidiary of American Electric Power Company, Inc.

### KENTUCKY POWER'S EXISTING DSM/EE PROGRAMS

3. Kentucky Power has offered DSM/EE programs since 1994. It currently offers ten residential (including the Energy Education for Students Program that is offered to schools in the Company's service territory for the benefit of their students) and three commercial DSM/EE programs:

- Targeted Energy Efficiency;

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<sup>1</sup> A certified copy of the Company's Articles of Incorporation and all amendments thereto was attached to the Joint Application in *In the Matter Of: The Joint Application Of Kentucky Power Company, American Electric Power Company, Inc. And Central And South West Corporation Regarding A Proposed Merger*, P.S.C. Case No. 99-149. The Company's September 8, 2015 Certificate of Existence is attached as **EXHIBIT 1**.

- Modified Energy Fitness;
- Energy Education For Students;
- Community Outreach CFL;
- Residential Efficient Products;
- High Efficiency Heat Pump;
- Mobile Home High Efficiency Heat Pump;
- Mobile Home New Construction;
- Small Commercial HVAC;
- Commercial Incentive Program;
- Residential Home Performance;
- Appliance Recycling; and
- School Energy Manager Program.

4. Since their implementation, Kentucky Power's DSM/EE programs have produced cumulative energy savings of approximately 635,144,834 kWh (692,307,869 kWh when "avoided" transmission and distribution line losses are accounted for) and an approximate cumulative winter demand reduction of 36,434 kW (40,077 kW when "avoided" transmission and distribution line losses are accounted for.) Through June 30, 2015 the year to date reductions totaled approximately 11,314,917 kWh (12,333,260 kWh when "avoided" transmission and distribution line losses are accounted for) and 1,586 kW reduction in winter demand (1,744 kW when "avoided" transmission and distribution line losses are accounted for.)

5. Year-to-date through June 30, 2015 the Company collected \$2,077,776 through the DSM factor. For the same period Kentucky DSM program costs and incentive payments and realized lost revenues totaling \$2,955,574. For the entirety of the Company's offer of DSM/EE

programs it has incurred, through June 30, 2015, \$36,251,403 in program costs, lost revenues, and incentive payments, and received \$34,973,828 in revenue through the DSM factor.

6. With the exception of the School Energy Manager Program, Kentucky Power's existing DSM/EE programs were most recently approved by Order of the Commission dated February 13, 2015.<sup>2</sup>

7. The School Energy Manager Program consists of two subparts. The 2014 School Energy Manager Program, which was limited to Lawrence and adjoining counties in the Company's service territory ("2014 School Energy Manager Program"), was approved by the Commission by Order dated July 25, 2014.<sup>3</sup> Pursuant to the terms of the July 2, 2013 Settlement Agreement approved by the Commission's October 7, 2013 Order in Case No. 2012-00578,<sup>4</sup> the costs of the 2014 School Energy Manager Program are funded solely by the Company and are not being recovered through the Company's DSM surcharge.

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<sup>2</sup> Order, *In the Matter of: Application Of Kentucky Power Company For (1) Re-Authorization Of Certain Of Its Existing Programs; (2) Authority To Discontinue The Commercial And Residential HVAC Diagnostic And Tune-Up Programs; (3) Authority To Amend Its Demand-Side Management Program To Implement Residential Home Performance And Appliance Recycling Programs; (4) Authority To Recover Costs And Net Lost Revenues And To Receive Incentives Associated With The Implementation Of The Programs; And (5) All Other Required Approvals And Relief*, Case No. 2014-00271 (Ky. P.S.C. February 13, 2015).

<sup>3</sup> Order, *In The Matter Of: The Application Of Kentucky Power Company For (1) Approval of A School Energy Manager Program; And (2) For All Other Required Approvals And Relief*, Case No. 2014-00178, (Ky. P.S.C. July 25, 2014) ("2014 School Manager Program Order").

<sup>4</sup> Order, *In the Matter of: The Application of Kentucky Power Company For: (1) A Certificate of Public Convenience And Necessity Authorizing The Transfer To the Company Of A Fifty Percent Undivided Interest In The Mitchell Generating Station And Associated Assets; (2) Approval Of The Assumption By Kentucky Power Company Of Certain Liabilities In Connection With The Transfer Of The Mitchell Generating Station; (3) Declaratory Rulings; (4) Deferral of Costs Incurred In Connection With The Company's Efforts To Meet Federal Clean Air Act And Related Requirements; And (5) For All Other Required Approvals And Relief*, 2012-00578 (Ky. P.S.C. October 7, 2013) ("Mitchell Approval Order").

8. The 2015 School Energy Manager Program was approved by Order of the Commission dated August 3, 2015.<sup>5</sup> The 2015 School Energy Manager Program extended the program to the 15 school districts in the 13 counties in its service territory not eligible to participate in the 2014 School Energy Manager Program. In the 2015 School Energy Manager Program Order the Commission also authorized Kentucky Power to recover through its DSM tariff the \$200,000 annual funding to be provided by the Company in connection with the 2015 School Energy Manager Program.<sup>6</sup>

9. Except for the Small Commercial HVAC Program and the 2014 School Energy Manager program, the Company's existing DSM programs have been approved through 2017.<sup>7</sup> The Small Commercial HVAC Program was extended for one year through December 31, 2015.<sup>8</sup> It was re-evaluated as part of the Applied Energy Group's "Kentucky Power Company (KPCO) Demand Side Management Program Plan – *Final Report*" and not recommended for continuation. A copy of the Applied Energy Group's "Kentucky Power Company (KPCO) Demand Side Management Program Plan – *Final Report*" is attached to this Application as **EXHIBIT 6**. The School Energy Manager Program will be included in a process evaluation, along with the Company's other DSM programs, beginning in the fall of 2016.

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<sup>5</sup> Order, *In the Matter of: Application of Kentucky Power Company For (1) Approval Of Modified School Manager Program And (2) For All Other Required Approvals And Relief*, Case No. 2015-00189 (Ky. P.S.C. August 3, 2015) ("2015 School Energy Manager Program Order").

<sup>6</sup> *Id.* at 7-8.

<sup>7</sup> Order, *In the Matter of: Application Of Kentucky Power Company For (1) Re-Authorization Of Certain Of Its Existing Programs; (2) Authority To Discontinue The Commercial And Residential HVAC Diagnostic And Tune-Up Programs; (3) Authority To Amend Its Demand-Side Management Program To Implement Residential Home Performance And Appliance Recycling Programs; (4) Authority To Recover Costs And Net Lost Revenues And To Receive Incentives Associated With The Implementation Of The Programs; And (5) All Other Required Approvals And Relief*, Case No. 2014-00271 (Ky. P.S.C. February 13, 2015).

<sup>8</sup> *Id.* at 7.

10. Kentucky Power's DSM/EE programs are administered in conformity with Company's tariffs:

- (a) Targeted Energy Efficiency Program (Tariff Sheet 22-3);
- (b) Modified Energy Efficiency Program (Tariff Sheet 22-4);
- (c) Energy Education For Students (Tariff Sheet 22-5);
- (d) Community Outreach CFL (Tariff Sheet 22-6);
- (e) Residential Efficient Products Program (Tariff Sheet 22-7);
- (f) High Efficiency Heat Pump Program (Tariff Sheet 22-8);
- (g) Mobile Home High Efficiency Heat Pump Program (Tariff Sheet 22-9);
- (h) Mobile Home New Construction Program (Tariff Sheet 22-10);
- (i) Small Commercial HVAC Program (Tariff Sheet 22-12);
- (j) Commercial Incentive Program (Tariff Sheet 22-13);
- (k) Residential Home Performance (Tariff Sheet 22-14);
- (l) Appliance Recycling (Tariff Sheet 22-15); and
- (m) School Energy Manager Program (Tariff Sheet 22-10).

KENTUCKY POWER'S MARKET POTENTIAL ASSESSMENT

11. Kentucky Power contracted with Applied Energy Group, Inc. on November 14, 2014 to perform a market potential assessment of its demand-side management and energy efficiency programs.

12. Pursuant to the Commission's February 13, 2015 Order in Case No. 2014-00271,<sup>9</sup> the market potential assessment was filed with the Commission in that case on August 10, 2015, and supplemented on August 14, 2015.

THE EXISTING PROGRAMS THE COMPANY SEEKS AUTHORITY TO TERMINATE.

13. Kentucky Power seeks approval to terminate the following six programs:

- Modified Energy Fitness Program, High Efficiency Heat Pump Program, and Mobile Home High Efficiency Heat Pump Program. Kentucky Power proposes to incorporate these three programs in its proposed Whole House Efficiency Program.
  
- Commercial Incentive Program. The Company proposes to integrate the Commercial Incentive Program services in three new programs: Commercial Incentive Prescriptive Custom Program, Commercial Express Install Program, and the New Construction Program.

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<sup>9</sup> Order, *In the Matter of: Application Of Kentucky Power Company For (1) Re-Authorization Of Certain Of Its Existing Programs; (2) Authority To Discontinue The Commercial And Residential HVAC Diagnostic And Tune-Up Programs; (3) Authority To Amend Its Demand-Side Management Program To Implement Residential Home Performance And Appliance Recycling Programs; (4) Authority To Recover Costs And Net Lost Revenues And To Receive Incentives Associated With The Implementation Of The Programs; And (5) All Other Required Approvals And Relief*, Case No. 2014-00271 (Ky. P.S.C. February 13, 2015).

- Small Commercial HVAC Program. Kentucky Power proposes to incorporate similar services in the new Commercial Incentive Prescriptive Custom Program.

- Mobile Home New Construction Program. Kentucky Power seeks authority to incorporate these services in the proposed New Manufactured Home Program.

THE EXISTING DSM/EE PROGRAMS THE COMPANY SEEKS AUTHORITY TO MODIFY

14. Kentucky Power seeks authority to modify the five existing DSM/EE programs described below. Each of the programs is projected to be cost-effective as modified.

(a) Residential Efficient Products.

15. The Company proposes to modify the Residential Efficient Products program to delete Energy Star® refrigerators and freezers, as well as heat pump water heaters, from the list of products eligible for the program. Energy Star® refrigerators and freezers and heat pump water heaters are no longer cost-effective in light of updated appliance standards and the Company's avoided costs. Kentucky Power also proposes to add Energy Star® air purifiers to the list of products eligible for the program.

16. If the modification is approved, the following products will be eligible for the program: CFL bulbs, LED bulbs, Specialty LED bulbs, and Energy Star® air purifiers, clothes washers, and dehumidifiers. The program will continue to provide "upstream" incentives to qualifying dealers for CFL and LED lighting products, and mail-in rebates for purchasers of qualifying efficient appliances.



17. The modified Residential Efficient Products Program is projected to be cost-effective under the low<sup>10</sup> [TRC 1.62 (2016) - 2.67 (2025)], mid<sup>11</sup> [TRC 1.62 (2016) – 2.59 (2025)], and high<sup>12</sup> [TRC 1.62 (2016) – 2.50 (2025)] scenarios.

(b) Appliance Recycling Program.

18. Kentucky Power proposes to modify its Appliance Recycling Program to increase the rebate amount to \$50-\$70. The proposed modifications are premised upon the Demand Side Management Program Plan prepared by Applied Energy Group, Inc. and filed with this Application as **EXHIBIT 6**.

19. The modified Appliance Recycling Program is projected to be cost-effective under the low [TRC 1.01 (2016) – 1.22 (2025)], mid [TRC 1.04 (2016) – 1.23 (2025)], and high [TRC 1.03 (2016) – 1.21 (2025)] scenarios.

(c) Targeted Energy Efficiency Program.

20. Kentucky Power proposes to modify its Targeted Energy Efficiency Program by expanding the program to include windows and doors as eligible measures, and to increase the average eligible cost per home to \$2,000.

21. The modified Targeted Energy Efficiency Program is projected to be cost-effective under the low [TRC 1.05 (2016) – 1.16 (2025)], mid [TRC 1.06 (2016) – 1.16 (2025)], and high [TRC 1.06 (2016) – 1.16 (2025)] scenarios.

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<sup>10</sup> The “low scenario” reflects low program participation due to high barriers to customer acceptance, non-ideal implementation conditions, limited program budgets, and limited access to support for implementation.

<sup>11</sup> The “mid scenario” reflects barriers to customer acceptance and non-ideal implementation conditions, but less so than under the low scenario.

<sup>12</sup> The “high scenario” reflects ideal market implementation and few barriers to customer acceptance.

(d) Energy Education for Students.

22. Kentucky Power proposes to expand the target audience for the program to middle school students. This will permit the Company to begin the energy efficiency education process sooner and over a longer period than possible through the current exclusive focus on seventh graders.

23. Kentucky Power will continue to administer the program internally. AEG investigated using a third-party contractor to administer the program but determined the program would not be cost-effective if the Company did so. The program will remain cost-effective if administered internally.

(e) Community Outreach CFL Program.

24. Kentucky Power proposes to amend the name to eliminate "CFL." In concert with the name change, the Company will expand the program's focus beyond the CFL bulbs currently being distributed. Kentucky Power will continue to administer the program internally.

THE PROPOSED NEW PROGRAMS.

25. Kentucky Power proposes to establish the six new programs (two residential programs and four commercial programs) described below. Each of the new programs takes existing programs, or components of existing programs, and incorporates them into new programs to increase their effectiveness.

a. Whole House Energy Efficiency Program.

26. The Whole House Efficiency Program incorporates the existing Modified Energy Fitness, High Efficiency Heat Pump, Mobile Home High Efficiency Heat Pump, and New Mobile Home Construction programs. In addition, home weatherization measures are included as part of the new program.

27. The program is available to customers residing in single-family and multi-family residences that have an electric central air cooling system.<sup>13</sup> Eligible customers must either own the residence, or if renting, have the written permission of their landlord to participate.

28. The Whole House Efficiency Program comprises four separate sub-programs:

(i) *Home Energy Audit* – In addition to an electric central air cooling system, participants must also have an electric central heating system. Eligible participants receive at no cost a home energy audit and the direct installation of identified energy conservation measures, including high efficiency lighting, domestic hot water pipe insulation, electric water heater insulation, low flow shower head, low flow faucet aerator, duct sealing, weather stripping, caulking, and door sweeps.

(ii) *Weatherization Measures* – customers are provided incentives to purchase and install air sealing, duct sealing, and insulation. Measures must be installed by a dealer, except that insulation, other than attic insulation, may be customer-installed. Duct and air sealing installations are subject to a blower door test to verify energy and demand savings.

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<sup>13</sup> Participants in the Home Energy Audit subprogram must also have an electric central heating system.

(iii) *HVAC Equipment* – customers are provided incentives for dealer-installed heat pump ductless mini-splits, heat pumps, and programmable thermostats.

29. The Whole House Efficiency Program is projected to be cost-effective under the low<sup>14</sup> [TRC 1.31 (2016) – 1.62 (2025)], mid<sup>15</sup> [TRC 1.35 (2016) – 1.61 (2025)], and high<sup>16</sup> [TRC 1.37 (2016) – 1.62 (2025)] scenarios.

30. Evaluation, equipment, program implementation, and other vendor services will be secured through a competitive request for proposals. The estimated budget for 2016 is attached as **EXHIBIT 5** to this application. The 2016 budget will be updated, and budgets for 2017 and 2018 prepared based on the accepted vendor proposals.

31. The results of the Whole House Energy Efficiency Program cost-benefit analysis are provided at page 59 of the AEG Demand Side Management Program **EXHIBIT 6**.

32. The projected net energy and demand savings for the Whole House Efficiency Program are provided at pages 55-57 of the AEG Demand Side Management Program Plan **EXHIBIT 6**.

b. New Manufactured Home.

33. The New Manufactured Home program is limited to newly manufactured homes. It integrates the Mobile Home New Construction Program services. Kentucky Power proposes to expand the program by adding a second tier of incentives. Level 1 provides a \$450 incentive

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<sup>14</sup> The “low scenario” reflects low program participation due to high barriers to customer acceptance, non-ideal implementation conditions, limited program budgets, and limited access to support for implementation.

<sup>15</sup> The “mid scenario” reflects barriers to customer acceptance and non-ideal implementation conditions, but less so than under the low scenario.

<sup>16</sup> The “high scenario” reflects ideal market implementation and few barriers to customer acceptance.

for residential customers purchasing a new manufactured home with Zone 3 insulation and an efficient heat pump (SEER 15, HSPF 8.5). Level 2 provides a \$1,200 incentive for residential customers purchasing an Energy Star qualifying mobile home.

34. The New Manufactured Home program is projected to be cost-effective under the low [TRC 1.50 (2016) – 1.86 (2025)], mid [TRC 1.54 (2016) – 1.87 (2025)], and high [TRC 1.52 (2016) – 1.81 (2025)] scenarios.

35. Evaluation, equipment, program implementation, and other vendor services will be secured through a competitive request for proposals. The estimated budget for 2016 is attached as **EXHIBIT 5** to this application. The 2016 budget will be updated, and budgets for 2017 and 2018 prepared based on the accepted vendor proposals.

36. The results of the New Manufactured Home program cost-benefit analysis are provided at page 51 of the AEG Demand Side Management Program Plan **EXHIBIT 6**.

37. The projected net energy and demand savings for the New Manufacture Home program are provided at pages 48-50 of the AEG Demand Side Management Program Plan **EXHIBIT 6**.

c. Express Install Program.

38. The Express Install measures presently are available through the Commercial Incentive Program. The Express Install Program targets installations performed the same day as the energy audit.

39. Express Install is available to all small commercial (non-industrial) customers with a peak bill demand of less than 100 kW. The program pays eligible customers up to 70% of the cost of the equipment and installation, including lighting and refrigeration measures. Customers are provided a walk-through energy audit, educational services, and reduced cost equipment purchase and installation through payment of incentives to the implementation contractor.

40. The Express Install Program is projected to be cost-effective under the low [TRC 1.00 (2016) – 1.15 (2025)], mid [TRC 1.01 (2016) – 1.15 (2025)], and high [TRC 1.01 (2016) – 1.15 (2025)] scenarios.

41. Evaluation, equipment, program implementation, and other vendor services will be secured through a competitive request for proposals. The estimated budget for 2016 for the Express Install Program is attached as EXHIBIT 5 to this application. The 2016 budget will be updated, and budgets for 2017 and 2018 prepared based on the accepted vendor proposals.

42. The results of the Express Install Program cost-benefit analysis are provided at page 76 of the AEG Demand Side Management Program Plan EXHIBIT 6.

43. The projected net energy and demand savings for the Express Install Program are provided at pages 74-75 of the AEG Demand Side Management Program Plan EXHIBIT 6.

d. New Construction Program.

44. The New Construction Program incorporates elements currently available through the Commercial Incentive Program, and is available to all (non-industrial) commercial customers and commercial builders. The program provides incentives to encourage the incorporation of

greater energy efficiency into commercial building design and commercial building construction practices in connection with new construction and major renovation projects.

45. The New Construction Program incorporates two approaches:

(i) *Whole Building Approach* – targets projects pursuing integrated design. Incentives are available only for projects that can demonstrate, using an energy use simulation model, that they are at least 10% more efficient than a baseline building designed to ASHRAE 90.1-2007 Standards.

(ii) *Systems Approach* – focuses on individual systems including lighting and HVAC systems.

46. Under either approach, incentives are limited to 50% of the incremental equipment cost up to an annual limit of \$20,000 per account number based on program implementation contractor recommendations and overall customer response to the program.

47. The New Construction Program is projected to be cost-effective under the low [TRC 1.24 (2016) – 1.55 (2025)], mid [TRC 1.24 (2016) – 1.55 (2025)], and high [TRC 1.24 (2016) – 1.55 (2025)] scenarios.

48. Evaluation, equipment, program implementation, and other vendor services will be secured through a competitive request for proposals. The estimated budget for 2016 for the New Construction Program is attached as **EXHIBIT 5** to this application. The 2016 budget will be updated, and budgets for 2017 and 2018 prepared based on the accepted vendor proposals.

49. The results of the New Construction Program cost-benefit analysis are provided at page 80 of the AEG Demand Side Management Program Plan [EXHIBIT 6].

50. The projected net energy and demand savings for the New Construction Program are provided at pages 78-79 of the AEG Demand Side Management Program Plan [EXHIBIT 6].

e. Retro-Commissioning Program

51. The Retro-Commissioning Program seeks to encourage commercial customers to optimize their facility systems and reduce energy consumption. To participate otherwise eligible customers must have a functioning building automaton system. The program provides eligible customers with building energy automation studies and incentives. It consists of two alternatives:

– RCx Lite: Applicable to buildings with 50,000 ft<sup>2</sup> – 150,000 ft<sup>2</sup> with peak demands of 150 kW – 499 kW. Customers must agree to spend at least \$5,000 on recommended alternatives that yield a “payback” within 18 months or less. Customers also receive rebates of \$0.12 kWh of first year kWh savings, subject to an annual limitation of \$100,000 per customer.

– RCx Standard: Applicable to buildings with greater than 150,000 ft<sup>2</sup> with peak demands of in excess of 499 kW. Customers must agree to spend at least \$15,000 on recommended alternatives that yield a “payback” within 18 months or less.

52. The Retro-Commissioning Program is projected to be cost-effective under the low [TRC 1.13 (2016) – 1.37 (2025)], mid [TRC 1.23 (2016) – 1.45 (2025)], and high [TRC 1.28 (2016) – 1.53 (2025)] scenarios.



53. Evaluation, equipment, program implementation, and other vendor services will be secured through a competitive request for proposals. The estimated budget for 2016 for the Retro-Commissioning Program is attached as EXHIBIT 5 to this application. The 2016 budget will be updated, and budgets for 2017 and 2018 prepared based on the accepted vendor proposals.

54. The results of the Retro-Commissioning Program cost-benefit analysis are provided at page 91 of the AEG Demand Side Management Program Plan [EXHIBIT 6].

55. The projected net energy and demand savings for the Retro-Commissioning Program are provided at pages 89-90 of the AEG Demand Side Management Program Plan [EXHIBIT 6].

f. Commercial Incentive Prescriptive Custom Program.

56. This is a new program that incorporates the certain of the rebate features of the former Commercial Incentive Program as well as the services available through the former Small Commercial HVAC Program.

57. Two types of rebates will be offered through the Commercial Incentive Prescriptive Custom Program:

(a) Prescriptive rebates are paid in connection with the purchase and installation of energy efficient equipment, including lighting, HVAC, and motors, from a pre-approved list.

(b) Custom rebates are payable in connection with the installation and

purchase of energy efficient equipment not found on the pre-approved list. The equipment must be pre-approved by the implementation contractor and must yield a Total Resource Cost benefit-cost ratio of at least 1.0.

58. Rebates are limited to \$20,000 annually per customer account.

59. The Commercial Incentive Prescriptive Custom Program is projected to be cost-effective under the low [TRC 1.56 (2016) – 1.92 (2025)], mid [TRC 1.55 (2016) – 1.95 (2025)], and high [TRC 1.58 (2016) – 1.92 (2025)] scenarios.

60. Evaluation, equipment, program implementation, and other vendor services will be secured through a competitive request for proposals. The estimated budget for 2016 for the Commercial Incentive Prescriptive Custom Program is attached as **EXHIBIT 5** to this application. The 2016 budget will be updated, and budgets for 2017 and 2018 prepared based on the accepted vendor proposals.

61. The results of the Commercial Incentive Prescriptive Custom Program cost-benefit analysis are provided at pages 71-72 of the AEG Demand Side Management Program Plan **EXHIBIT 6**.

62. The projected net energy and demand savings for the Commercial Incentive Prescriptive Custom Program are provided at pages 69-71 of the AEG Demand Side Management Program Plan **EXHIBIT 6**.

REVIEW BY THE COMPANY'S COLLABORATIVE.

63. Representatives of the Company's collaborative and Sierra Club were afforded the opportunity to review and comment on early drafts of the Market Study and Program Design. A total of three meetings and five webex style conference calls were scheduled with the Collaborative, Sierra Club, Kentucky Power, and AEG to review and discuss the Market Study and Program Design information. AEG took the Collaborative Member's comments and suggestions into account in formulating final program designs and recommendations. The DSM Program Plan was completed July 30, 2015 and received its final review by the Collaborative on July 30, 2015.

64. A telephone conference was conducted on August 26, 2015 to review the AEP Program Plan and the Company's proposed DSM/EE plan. Representatives of the Office of Attorney General, Office of Rate Intervention, Big Sandy Community Action Council, LKLP Community Action Council, Northeast Kentucky Community Action Agency, Big Sandy Area Development District, Appalachian Research and Defense Fund, and Sierra Club, along with representatives of the Company, participated in the call.

65. A vote was taken to approve the Company's proposals with respect to its existing and proposed DSM/EE programs. There were no objections; the representative of the Office of the Office of Attorney General, Office of Rate Intervention and the representative of Sierra Club abstained from the vote. A copy of the minutes of the August 26, 2015 Collaborative Meeting are attached as **EXHIBIT 4**.

66. A copy of the Company's DSM/EE Status Report is attached as **EXHIBIT 2**; a copy of Schedule C is attached as **EXHIBIT 3**.

BASES FOR THE REQUESTED AUTHORITY

- (a) The Changes To The Company's DSM Programs Are Consistent With And In Furtherance Of The Commission's October 7, 2013 Order In Case No. 2012-00578

67. On July 2, 2013 Kentucky Power, Kentucky Industrial Utility Customers, Inc., and Sierra Club and its residential intervenors entered into a Stipulation and Settlement Agreement in Case No. 2012-00578. Paragraph 12 of the Stipulation and Settlement Agreement provides in part:

Further, Kentucky Power agrees to increase its aggregate spending on cost-effective DSM and energy efficiency measures through Commission-approved DSM programs to \$4 million in 2014; \$5 million in 2015; and \$6 million in 2016, 2017, 2018.<sup>17</sup>

68. On October 7, 2013, the Commission entered its Order in Case No. 2012-00578 approving, with four modifications, the terms and conditions of the July 2, 2013 Stipulation and Settlement Agreement. None of the modifications affected or otherwise addressed the provision quoted in paragraph 54 above.

69. On October 14, 2013, Kentucky Power filed its acceptance of the four modifications to the Stipulation and Settlement Agreement imposed by the Commission's October 7, 2013 Order.

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<sup>17</sup> Order, *In the Matter of: The Application of Kentucky Power Company For: (1) A Certificate of Public Convenience And Necessity Authorizing The Transfer To the Company Of A Fifty Percent Undivided Interest In The Mitchell Generating Station And Associated Assets; (2) Approval Of The Assumption By Kentucky Power Company Of Certain Liabilities In Connection With The Transfer Of The Mitchell Generating Station; (3) Declaratory Rulings; (4) Deferral of Costs Incurred In Connection With The Company's Efforts To Meet Federal Clean Air Act And Related Requirements; And (5) For All Other Required Approvals And Relief* App. A at 9 (Ky. P.S.C. October 7, 2013) ("Mitchell Transfer Order").

70. Kentucky Power projects total DSM/EE expenditures of \$6,015,334.85 during calendar year 2016 exclusive of the Company-provided funding for the 2014 School Energy Manager Program. A copy of the proposed 2016 Kentucky Power DSM/EE budget is attached as **EXHIBIT 5**.

71. By this application the Company is seeking all required authorizations to terminate the existing programs as described in paragraph 13; to modify the existing programs as described in paragraphs 14-24 above; and to implement the new DSM programs described in paragraphs 25-62.

(b) The Proposed Changes Are Reasonable.

72. KRS 278.285(1) provides that the Commission may “determine the reasonableness of demand-side management plans proposed by any utility under its jurisdiction.” The proposed changes to the Company’s existing DSM/EE programs:

(a) are intended to produce specific changes in customer consumption patterns;

(b) are consistent with Kentucky Power’s 2013 Integrated Resource Plan. In fact, the Preferred Portfolio described in the plan included DSM/EE levels consistent with that being proposed by the Company in this Application;

(c) will not unreasonably prejudice or disadvantage any class of customers;

(d) are available, affordable, and useful for all or a significant portion of the Company’s residential customers; and

(e) are projected to be cost-effective.

AUTHORIZATION PERIOD

73. Because of the nature of the modifications being proposed to existing programs, and to permit an adequate period for the operation and review of such program, Kentucky Power respectfully requests that the following DSM/EE programs be authorized through December 31, 2018:

- (a) Targeted Energy Efficiency;
- (b) Energy Education for Students;
- (c) Community Outreach;
- (d) Residential Efficient Products;
- (e) New Construction;
- (f) Express Install;
- (g) Retro-Commissioning;
- (h) Commercial Incentive Prescriptive Custom;
- (i) Residential Home Performance;
- (j) Whole House Efficiency; and
- (k) New Manufactured Home.

## TARIFFS AND DSM SURCHARGE

74. Proposed form tariffs for the Whole House Energy Efficiency Program, Express Install Program, and New Construction Program, along with the modified tariffs for the Company's existing programs that are proposed to be modified, are attached as EXHIBIT 7 to this Application. The Company requests that its full costs, as that term is defined in the Company's Tariff D.S.M.C., associated with the Company's entire DSM/EE portfolio be recovered through Kentucky Power's Demand-Side Management Clause (Tariff Sheets 22-1 and 22-2).

75. To permit the recovery of program costs and lost revenues and incentives and under recovery, Kentucky Power proposes to increase the residential DSM factor from \$0.000383/kWh to \$0.003116/kWh, and increase its commercial DSM factor from \$0.001473/kWh to \$0.001848/kWh. Support for the calculation of the proposed DSM factors is provided by EXHIBIT 3 [Schedule C].

76. Kentucky Power does not propose as part of this Application any other modifications to its Demand-Side Management Clause or its DSM tariffs.

## Testimony

77. The testimony of John A. Rogness III is filed in support of this application.

Exhibits

78. The exhibits listed in the Appendix to this Application are attached to and made a part of this Application.

Communications

79. The Applicant respectfully requests that communications in this matter be transmitted electronically to:

Mark R. Overstreet  
STITES & HARBISON PLLC  
[moverstreet@stites.com](mailto:moverstreet@stites.com)

Kentucky Power Company  
[Kentucky\\_regulatory\\_services@aep.com](mailto:Kentucky_regulatory_services@aep.com)

ON BEHALF OF KENTUCKY POWER

WHEREFORE, Kentucky Power Company requests that the Commission issue an Order:

(1) authorizing Kentucky Power to terminate its Modified Energy Fitness Program, High Efficiency Heat Pump Program, Mobile Home High Efficiency Heat Pump Program, Commercial Incentive Program, Small Commercial HVAC Program, and Mobile Home New Construction Program;

(2) authorizing Kentucky Power to modify its Residential Efficient Products Program, Appliance Recycling Program, Targeted Energy Efficiency Program, Energy Education for Students, and Commercial Outreach CFL Program, and to operate such programs as modified through December 31, 2018;

(3) authorizing Kentucky Power to implement and operate through December 31, 2018 the Whole House Energy Efficiency Program, New Manufactured Home, Express Install Program, New Construction Program, Retro-Commissioning Program, and Commercial



Incentive Prescriptive Custom Program;

(4) approving the modification of Kentucky Power Company's residential DSM factor to \$0.003116/kWh and its commercial DSM factor to \$0.001848/kWh to permit the Company's recovery through its Demand-Side Management Clause of its full costs, including lost revenues and incentives, associated with both the Company's proposed DSM/EE portfolio; and

(5) granting all other required relief or approvals.

This 15<sup>th</sup> day of September, 2015.

Respectfully submitted,



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COUNSEL FOR:  
KENTUCKY POWER COMPANY

## LIST OF EXHIBITS

- EXHIBIT 1: September 8, 2015 “Certificate of Existence” for Kentucky Power Company issued by the Secretary of State of the Commonwealth of Kentucky.
- EXHIBIT 2: DSM/EE Status Report.
- EXHIBIT 3: “Schedule C.”
- EXHIBIT 4: Minutes of the August 26, 2015 Kentucky Power Company Collaborative meeting.
- EXHIBIT 5: 2016 Kentucky Power Company DSM/EE Budget.
- EXHIBIT 6: Applied Energy Group’s “Kentucky Power Company (KPCO) Demand Side Management Program Plan – *Final Report*”
- EXHIBIT 7: Proposed Form Tariffs.

**CERTIFICATE OF SERVICE**

I hereby certify that a true and accurate electronic copy on disc of the foregoing Application and accompanying exhibits and testimony were served as indicated below upon:

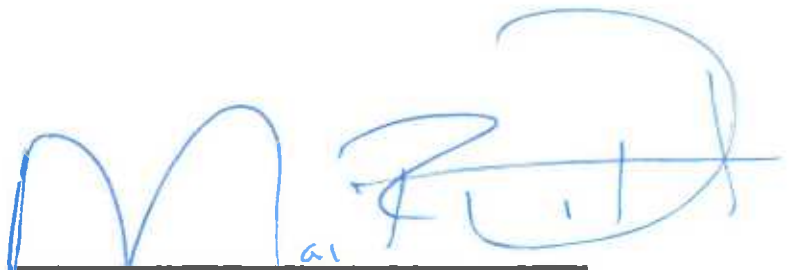
Shannon Fisk  
Earthjustice  
1617 JFK Boulevard, Suite 1675  
Philadelphia, PA 19103

Jennifer Black Hans  
Lawrence W. Cook  
Angela Goad  
Kentucky Attorney General's Office  
1024 Capital Center Drive, Suite 200  
Frankfort, Kentucky 40601-8204

*By Overnight Delivery*

*By Overnight Delivery*

on this the 15<sup>th</sup> day of September, 2015.



Mark R. Overstreet