

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF DUKE ENERGY KENTUCKY,	)	Case No.
INC. FOR THE ANNUAL COST RECOVERY	)	2012-00495
FILING FOR DEMAND SIDE MANAGEMENT	)	

ORDER

On November 15, 2012, Duke Energy Kentucky, Inc. ("Duke Kentucky") filed a Demand-Side Management ("DSM") application ("Application"). Included in the Application is the Annual Status Report, Adjustment of the DSM Cost Recovery Mechanism, and Amended Tariff Sheets for Gas Rider DSMR and Electric Rider DSMR. According to the Application, those members in attendance at the Residential Collaborative<sup>1</sup> and the Commercial and Industrial Collaborative,<sup>2</sup> with the exception of the Attorney General ("AG"), agreed with the Application. Also filed was a Process and Impact Evaluation of the Low Income Refrigerator Replacement Program in Kentucky, 2010-2011, which included consideration of allowing renters to participate in the program.

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<sup>1</sup> The Residential Collaborative members in attendance were: Jennifer Black Hans (Office of the Kentucky Attorney General); Jock Pitts (People Working Cooperatively); Florence Tandy and Kowana Goode-Story (Northern Kentucky Community Action Commission); Laura Pleiman (Boone County); Carl Melcher (Northern Kentucky Legal Aid); Karen Reagor (Kentucky NEED Project); Lee Colten (Department of Energy Development and Independence); Jeremy Faust (Greater Cincinnati Energy Alliance); Pat Dressman (Campbell County); and Tim Duff and Trisha Haemmerle (Duke Energy).

<sup>2</sup> The Commercial & Industrial Collaborative members in attendance were: Jennifer Black Hans (Office of the Kentucky Attorney General); Jock Pitts (People Working Cooperatively); Karen Reagor (Kentucky NEED Project); Lee Colten (Department of Energy Development and Independence); Pat Dressman (Campbell County); Chris Baker (Kenton County Schools); and Tim Duff and Trisha Haemmerle (Duke Energy).

Duke Kentucky was subject to two rounds of discovery and two telephonic informal conferences. There were no intervenors.

DISCUSSION OF PRIOR PORTFOLIO DSM PROGRAMS

The following is a discussion of the prior residential, commercial and industrial DSM portfolio of programs offered through June 30, 2012. Beginning July 1, 2012,<sup>3</sup> a revised portfolio of DSM programs was offered by Duke Kentucky.

1. Residential Conservation and Energy Education – This program focused on Low Income Home Energy Assistance Program customers that met the income qualification level, which is income below 150 percent of the federal poverty level. The program provided direct installation of weatherization and energy-efficiency measures and educated customers about their energy usage and other opportunities to reduce energy consumption and lower their costs.

2. Residential Home Energy House Call – This program, administered by contractor Wisconsin Energy Conservation Corporation, Inc., provided a comprehensive walk-through, in-house analysis. The audit reviewed total home energy usage and checked appliances and heating/cooling systems.

3. Residential Comprehensive Energy Education – This program was operated under contract by the National Energy Education Development (“NEED”). Energy education coordinators worked with schools, teachers, and students on energy-education programs. Home Energy Efficiency Kits were distributed to students.

4. Program Administration, Development & Evaluation – This program was responsible for designing, implementing, and capturing costs related to the

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<sup>3</sup> Case No. 2012-00085, Application of Duke Energy Kentucky, Inc. for an Energy Efficiency Cost Recovery Mechanism and for Approval of Additional Programs for Inclusion in Its Existing Portfolio (Ky. PSC Jun. 29, 2012).

administration, evaluation, and support of the overall DSM effort. The program's funds were utilized for the redesign of programs and for the development of new programs or program enhancements.

5. Payment Plus – This was a home energy-assistance program with three parts: (1) Energy & Budget Counseling; (2) Weatherization; and (3) Bill Assistance. The program was offered for six months during the heating season, starting in October.

6. Power Manager – This was a load-control program intended to reduce demand by controlling residential air conditioning usage during peak demand conditions in the summer months.

7. Energy Star Products – This program promoted Energy Star products, particularly compact fluorescent lights (“CFL”). Discount coupons were mailed directly to customers' homes. Customers received a coupon mailer offering \$3 off the purchase of two General Electric CFL two-packs.

8. Energy Efficiency Website, On-line Energy Assessment – This program offered customers the opportunity to view their Online Service accounts and encouraged them to take a short energy efficiency survey (“EE survey”). Participants received an immediate, on-line, printable energy efficiency report (“EE report”) and were sent a package of six free CFLs. The report contained month-to-month usage (kWh/Ccf) and customized energy tips.

9. Personalized Energy Report Program – This program was similar to the Energy Efficiency Website, On-line Energy Assessment, except that it was delivered by mail. An EE report and six CFLs were mailed to customers who sent in a completed EE survey.

10. Commercial & Industrial High Efficiency Incentive (Business and School) – The Business program provided incentives to small commercial and industrial customers to install high-efficiency equipment in applications involving new construction, retrofit and replacement of failed equipment. The School program provided funding to schools for facility assessments, custom and prescriptive measures, rebates, and energy-efficiency (“EE”) education from NEED.

11. PowerShare – This was the brand name of Duke Kentucky’s voluntary Peak Load Management Program. The program offered non-residential customers the opportunity to reduce their electric costs by managing their electric usage during peak-load periods.

12. Residential Smart Saver – The objective of this program was to offer additional incentives to qualifying residential customers in support of the Kentucky Housing Corporation’s Kentucky Home Performance (“KYHP”) conservation program. The KYHP is a statewide program that targets households at or above 200 percent of poverty in order to initiate energy conservation and to stimulate the residential home improvement market. While Duke Kentucky believed that customers with moderate to higher income levels were more likely to participate, there was no floor or income level requirement to participate in the program. Improvement measures included attic insulation and air sealing, duct sealing, and tune-ups for central air conditioning and heat pump equipment. The program also offered incentives for the installation of high-efficiency heat pumps or air conditioners in both existing homes and new construction.

13. Smart Saver Custom Energy Efficiency Incentive Program – This pilot program was offered to non-residential electric customers. Approved in Case No. 2011-

00471,<sup>4</sup> it was an expansion of the Smart Saver Customer Incentive Program that was available only for schools (grades K-12), with two notable exceptions: (1) The eligibility in the pilot program was expanded to include non-residential customers; and (2) The pilot did not include the energy assessment opportunities offered to schools in the previous program.

This pilot program included commercial and industrial customers served under Duke Kentucky's non-residential rates, specifically, rates DS, Service at Secondary Distribution Voltage; DP, Service at Primary Distribution Voltage; DT, Time-of-Day Rate for Service at Distribution Voltage; EH, Optional Rate for Electric Space Heating; SP, Seasonal Sports Service; or GS-FL, General Service Rate for Small Fixed Loads. The pilot was limited to a maximum of \$500,000 in incentives offered for the fiscal year.<sup>5</sup> Customers served under Rate TT were excluded from the pilot because these customers do not participate in Duke Kentucky's DSM rate Rider DSMR.

The following table<sup>6</sup> lists the programs' participation levels and kWh and kW impacts for the 12 months ending June 2012:

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<sup>4</sup> Case No. 2011-00471, Application of Duke Energy Kentucky, Inc. to Implement a Pilot Nonresidential Smart Saver Custom Energy Efficiency Program (Ky. PSC Apr. 12, 2012).

<sup>5</sup> A fiscal year is from July 1 to June 30, as established per Case No. 2011-00448, Application of Duke Energy Kentucky, Inc. for the Annual Cost Recovery Filing for Demand Side Management (Ky. PSC Apr. 13, 2012).

<sup>6</sup> Application, Summary of Load Impacts July 2011 Through June 2012, page 6.

	Incremental Participation	Load Impacts	
		Net of Free Riders *** kWh	kW
<u>Residential Programs</u>			
Home Energy House Call	533	210,070	36.8
Energy Efficient Website	5,179	1,393,895	289.8
Energy Star Products *	15,687	703,676	146.3
Low Income Program	220	137,060	37.7
Refrigerator Replacement	64	72,298	13.5
Personalized Energy Report	5,369	1,445,032	300.4
Power Manager **	9,231	0	11,830.7
NEED	331	38,492	3.3
Residential Smart Saver	470	725,440	223.4
<b>Total Residential</b>	<b>37,084</b>	<b>4,725,963</b>	<b>12,881.9</b>
<u>Non-Residential Programs</u>			
C&I Lighting	30,481	5,801,293	1,559.0
C&I HVAC	6,945	456,614	184.7
C&I Motors	256	487,623	93.5
C&I Other	0	0	0.0
Custom Incentive Schools	0	0	0.0
Power Share	18	0	28,228.0
Smart Saver Custom Energy Efficiency Incentive Program (Pilot)	850	212,315	53.2
<b>Total Non-Residential</b>	<b>38,550</b>	<b>6,957,845</b>	<b>30,118.4</b>
<b>Total</b>	<b>75,634</b>	<b>11,683,808</b>	<b>43,000.3</b>

\* Energy Star Products is number of bulbs, not participants.

\*\* Cumulative number of controlled devices installed.

\*\*\* Impacts are without losses.

## DISCUSSION OF EXISTING DSM PORTFOLIO PROGRAMS

The following is a discussion of the existing portfolio of DSM programs as approved in Case No. 2012-00085.<sup>7</sup>

1. Low Income Services Program – The purpose of this program is to assist low-income customers with installation of EE measures in their homes to reduce energy

<sup>7</sup> Case No. 2012-00085, Application of Duke Energy Kentucky, Inc. for an Energy Efficiency Cost Recovery Mechanism and for Approval of Additional Programs for Inclusion in Its Existing Portfolio (Ky. PSC Jun. 29, 2012).

usage. Weatherization and equipment-replacement assistance is available to income-qualified customers on Duke Kentucky's system in existing, individually metered, residences, condominiums, and mobile homes. Funds are available for weatherization measures, and/or refrigerator replacement with an Energy Star appliance, and/or furnace repair/replacement. The measures eligible for funding will be determined by an energy audit of the residence, which will be provided at no charge to the customer.

Availability of this program will be coordinated through vendors or local agencies that administer weatherization programs. The vendor or agency must certify the household income level according to Duke Energy standards. Payment Plus provides EE and budget counseling to help customers understand how to control their energy usage and how to manage their household bills.

Participants are also encouraged to participate in weatherization and equipment-replacement assistance to increase the EE in customers' homes. Bill assistance credits are provided to customers upon completion of each component of Payment Plus. Participants are not eligible for payments under any other Duke Kentucky EE Programs for the same EE measure provided under this program.

2. Residential Energy Assessments Program – The purpose of this program, administered by contractor Wisconsin Energy Conservation Corporation, Inc., is to assist residential customers in assessing their energy usage and to provide recommendations for more efficient use of energy in their homes. The program will also help identify those customers who could benefit most by investing in new EE measures, undertaking more energy-efficient practices, and participating in Duke Kentucky

programs. Duke Kentucky may require a minimum number of months of historical usage data before performing an analysis for customers.

Duke Kentucky will perform on-site assessments of owner-occupied residences and reserves the right to determine eligibility throughout the life of the program. Duke Kentucky will provide a detailed residential energy assessment, including EE recommendations.

Participating customers will be offered home EE measures such as an EE starter kit and/or CFL bulbs. The incentive may be delivered in a variety of ways, including but not limited to: in-home installation, direct mail, rebates, discount coupons, in-store promotions, or online discounts.

3. Energy Education Program for Schools Program – The purpose of this program is to educate students about EE in homes and schools through an EE curriculum. The program is operated under contract by NEED and provides an approach that educates students about energy. This program enables eligible students to conduct a paper or online energy audit of their home. Eligible students who complete a home energy audit receive EE measures for their homes, such as a package of CFL bulbs or an EE starter kit.

4. Residential Smart Saver Energy Efficient Residences Program – This program provides incentives to customers, builders, heating, ventilation and air conditioning (“HVAC”) dealers, and weatherization contractors to promote and install high-efficiency air conditioners and heat pumps with electronically commutated fan motors (“ECM”), as well as attic insulation and air sealing, duct sealing, HVAC tune-ups, and lighting. Additional measures new to this program include duct insulation and



property-manager lighting. This program is promoted through trade-ally outreach and direct communications to customers using numerous channels, such as direct mail, community presentations, and website promotions.

5. Residential Smart Saver Energy Efficient Products Program – The purpose of this voluntary program is to encourage the installation of Energy Star or other high-efficiency products in new or existing residences. The program will provide incentives to offset a portion of the higher cost of higher-efficiency products. The types of equipment eligible for incentives may include, but are not limited to, the following: (1) high-efficiency lighting; (2) high-efficiency clothes washers; (3) high-efficiency refrigerators; and (4) high-efficiency dishwashers. Incentives under this program are available only for Energy Star or other EE products for which incentives pass Duke Kentucky's Utility Cost Test.

6. Smart Saver Prescriptive Program ("Prescriptive") – The purpose of this program is to encourage the installation of high-efficiency equipment in new and existing nonresidential establishments. The program will provide incentive payments to offset a portion of the higher cost of energy-efficient equipment. The program also encourages maintenance of existing equipment in order to reduce or maintain energy usage. The following types of equipment are eligible for incentives: (1) high-efficiency lighting; (2) high-efficiency HVAC installations; (3) high-efficiency motors, pumps, and variable frequency drives; (4) high-efficiency food service installations; (5) high-efficiency process equipment installations, including compressed air systems; (6) other high-efficiency installations as determined by Duke Kentucky on a case-by-case basis; and (7) maintenance to increase the efficiency of existing equipment.

Incentives offered are designed to offset a portion of the capital cost of moving to higher efficiency equipment. The incentive amounts are known to the customers before they undertake their projects, so the customers can proceed and submit documentation after installation.

7. Smart Saver Custom Program (“Custom”) – The purpose of this program is to encourage the installation of high-efficiency equipment in new and existing nonresidential establishments. The program will provide incentive payments to offset a portion of the higher cost of energy-efficient installations that are not included in the Prescriptive program. A key difference between the Prescriptive program and the Custom program is that the Custom program requires customers to submit an application before they begin their projects.

The following types of equipment are eligible for incentives: (1) high-efficiency lighting; (2) high-efficiency HVAC installations; (3) high-efficiency motors, pumps, and variable frequency drives; (4) high-efficiency food-service installations; (5) high-efficiency process equipment installations, including compressed-air systems; and (6) other high-efficiency installations as determined by Duke Kentucky on a case-by-case basis. The potential incentive amounts are based on the avoided energy and avoided capacity produced by the installed measure(s).

8. Smart Saver Energy Assessments Program – The purpose of this program is to assist nonresidential customers in assessing their energy usage and to provide recommendations for more efficient energy usage. The program will also help identify those customers who could benefit from other Duke Kentucky nonresidential EE programs.

There are several types of energy assessments available as follows: (1) Online Analysis; (2) Telephone Interview Analysis; and (3) On-site Audit and Analysis. The Online Analysis and Telephone Interview Analysis are offered free of charge to the customer. The cost of the on-site audit and analysis is shared by Duke Kentucky and the customer. The cost of the on-site assessment can vary depending on the length of time an assessor spends at a customer's facility. The customer pays 50 percent of the cost, and Duke Kentucky pays 50 percent, but the customer's cost can be further reduced upon payment by Duke Kentucky of incentives for equipment installed by adopting recommendations made in the audit under the Prescriptive or Custom programs.

9. Power Manager Program – This is a voluntary residential load-control program offered to individually metered, single-family residences. This program is available for the cycling control of electric central air conditioning (cooling) systems.

10. PowerShare – This is the brand name of Duke Kentucky's voluntary Peak Load Management Program. This is a voluntary program that offers non-residential customers the opportunity to reduce their electric costs by managing their electric usage during peak load periods. The customer and Duke Kentucky will enter into a service agreement under this Rider which will specify the terms and conditions under which the customer agrees to reduce usage.

11. Low Income Neighbor – The purpose of this program is to assist low-income customers in reducing energy costs through energy education and by installing or providing energy conservation measures for each customer's residence. Under this program, participating customers will receive the following: (1) an energy assessment to

identify EE opportunities in the customer's home; (2) one-on-one education on EE techniques and measures; and (3) a comprehensive package of energy conservation measures installed or provided to the extent the measure is identified as an EE opportunity based on the results of the energy assessment. Energy conservation measures, with a value of up to \$210, may include low-cost EE starter items, such as air infiltration reduction measures, energy-efficient lighting, water-conservation measures, HVAC filters, or other energy-saving devices.

12. My Home Energy Report – The purpose of this voluntary program is to use comparative household electric usage data for similar residences in the same geographic area to help customers to better manage and reduce energy usage. These normative comparisons are intended to induce an energy consumption behavior change. The program will assist residential customers in assessing their energy usage and provide recommendations for more efficient use of energy in their homes. The program will help identify those customers who could benefit most from investing in new EE measures, undertaking more energy-efficient practices and participating in Duke Kentucky programs. Customers will receive periodic comparative usage data reports via direct mail or online channels. Delivery may be interrupted during the off-peak energy usage months in the fall and spring. Duke Kentucky may require a minimum number of months of historical usage data before allowing participation.

13. Appliance Recycling Program (“ARP”) – The ARP is designed to prevent the continued use of inefficient, working refrigerators and freezers by taking the units out of homes and recycling them in an environmentally friendly manner (with approximately 95 percent of the material recycled and only five percent going to a

landfill.) Qualifying units include residential-style refrigerators and freezers ranging from 10 to 30 cubic feet that are currently in Duke Kentucky customer's homes. These qualifying units will be removed at no cost to the customer by a Duke Kentucky-approved third-party vendor. Duke Kentucky residential customers that elect to participate will be paid a cash incentive of up to \$30 dollars per unit, with a maximum of two units per year.

#### FUTURE EVALUATIONS OF DSM PROGRAMS

It is the belief of the Commission that Duke Kentucky should evaluate its entire portfolio of DSM programs by December 31, 2016. The exception would be in applications that include a new program or an expansion of an existing program.

#### COSTS<sup>8</sup>

Duke Kentucky's DSM revenue requirement, including program costs, lost revenues, and financial incentives, is \$9.5 million. This level of expenditure, along with under- and over-recovery from the prior period, results in a total DSM revenue requirement of \$3.2 million, which is a result of \$5.7 million allocated to electric operations and (\$2.5) million allocated to gas operations. The \$5.7 million allocated to electric operations includes a (\$2.4) million over-recovery from the prior period, \$8.1 million of expected DSM program costs, and \$144,950 of customer meter charge for Home Energy Assistance ("HEA"). The (\$2.5) million allocated to gas operations includes (\$3.9) million over-recovery from the prior period, \$1.4 million of expected DSM program costs, and \$104,610 of customer meter charge for HEA.

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<sup>8</sup> Application, Appendix B, filed Nov. 15, 2012, page 5 of 6.

## CONCLUSIONS

Based on the evidence of record and being otherwise sufficiently advised, the Commission finds that:

1. Duke Kentucky has kept the Commission informed of the progress and status of its DSM programs by timely filing summary status reports on their programs.

2. Duke Kentucky's Application should be approved.

3. Duke Kentucky's revised DSM surcharge factors, which are based on its expected level of DSM program costs and the true-up of prior period DSM costs and revenues, are reasonable and should be approved.

4. Duke Kentucky should evaluate its entire portfolio of DSM programs by December 31, 2016. The exception would be in applications that include a new program or an expansion of an existing program.

5. Duke Kentucky should continue the practice of not including DSM or EE related costs in base rates.

6. In a year when DSM program evaluations, proposed program expansion(s), or new programs are filed with the Commission, Duke Kentucky should file an application by August 15 that includes the following: (1) an Appendix A, in a manner that is currently filed, of the Cost Effectiveness Test Results of all programs; (2) an Appendix B, in a manner that is currently filed, for the recovery of program costs, lost revenues, and shared savings that are used in determining the true-up of proposed DSM factor(s); (3) a signed and dated proposed Rider DSMR, Demand Side Management Rate, for both electric and natural gas customers; and (4) all program evaluations, proposed program expansions, or new programs.

7. In a year when there are no DSM program evaluations, proposed program expansion(s), or new DSM programs filed with the Commission, Duke Kentucky should file the following by November 15 using the Commission's electronic Tariff Filing System:

- A revised tariff sheet showing the proposed DSM factors that are to be effective for the first billing cycle for the revenue month of January for the next year.
- All necessary supporting documentation to support the true-up of the proposed DSM factor(s) including: (1) an Appendix A, in a manner that is currently filed, of the Cost Effectiveness Test Results of all programs; (2) an Appendix B, in a manner that is currently filed, for the recovery of program costs, lost revenues, and shared savings, that are used in determining the true-up of proposed DSM factor(s); and (3) a signed and dated proposed Rider DSMR, Demand Side Management Rate, for both electric and natural gas customers.

IT IS THEREFORE ORDERED that:

1. Duke Kentucky's Application is approved as of the date of this Order.
2. Duke Kentucky should continue the practice of not including DSM or EE related costs in base rates.
3. Duke Kentucky shall evaluate its entire portfolio of DSM programs by December 31, 2016. The exception would be in applications that include a new program or an expansion of an existing program.
4. In a year when there are DSM program evaluations, proposed program expansion(s), or new programs filed with the Commission, Duke Kentucky shall file an application by August 15 that includes the following: (1) an Appendix A, in a manner that

is currently filed, of the Cost Effectiveness Test Results of all programs; (2) an Appendix B, in a manner that is currently filed, for the recovery of program costs, lost revenues, and shared savings, that are used in determining the true-up of proposed DSM factor(s); (3) a signed and dated proposed Rider DSMR, Demand Side Management Rate, for both electric and natural gas customers; and (4) all program evaluations and/or proposed expanded or new programs.


5. In a year when there are no DSM program evaluations, proposed program expansion(s), or new DSM programs filed with the Commission, Duke Kentucky shall file the following by November 15 using the Commission's electronic Tariff Filing System:

- A revised tariff sheet showing the proposed DSM factors that are to be effective for the first billing cycle for the revenue month of January for the next year.
- All necessary supporting documentation to support the true-up of the proposed DSM factor(s) including: (1) an Appendix A, in a manner that is currently filed, of the Cost Effectiveness Test Results of all programs; (2) an Appendix B, in a manner that is currently filed, for the recovery of program costs, lost revenues, and shared savings, that are used in determining the true-up of proposed DSM factor(s); and (3) a signed and dated proposed Rider DSMR, Demand Side Management Rate, for both electric and natural gas customers.

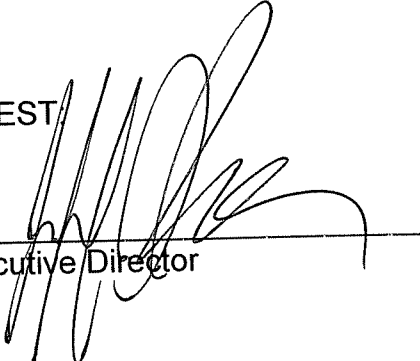
6. Within 10 days of the date of this Order, Duke Kentucky shall file its revised DSM tariffs with the Commission showing the date of issue and that they were issued by authority of this Order.



By the Commission

ENTERED   
APR 11 2013  
KENTUCKY PUBLIC  
SERVICE COMMISSION

ATTEST

  
\_\_\_\_\_  
Executive Director

Case No. 2012-00495

## APPENDIX

### APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2012-00495 DATED APR 11 2013

The following rates and charges are prescribed for the customers in the area served by Duke Energy Kentucky, Inc. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the effective date of this Order.

#### Duke Energy Kentucky, Inc. – Electric and Gas Customers

<u>Rate Schedule Riders</u>	<u>DSM Cost Recovery Rider (DSMR)</u>
<u>Electric Rider DSM</u>	
Residential Rate RS	\$0.001988 per kWh
Distribution Level Rates Part A DS, DP, DT, GS-FL, EH & SP	\$0.000034 per kWh
Transmission Level Rates & Distribution Level Rates Part B TT	\$0.001070 per kWh
Distribution Level Rates Total DS, DP, DT, GS-FL, EH & SP	\$0.001104 per kWh
<u>Gas Rider DSM</u>	
Residential Rate RS	-\$0.039396 per Ccf

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