INTEGRATED RESOURCE PLAN (IRP)

Western Area Power Administration's (Western) customers must comply with the requirements of the Energy Planning and Management Program (EPAMP (10 CFR Part 905)) to meet the objectives of Section 114 of the Energy Policy Act of 1992 (EPAct). A Western customer is any entity that purchases firm capacity with or without energy, from Western under a long-term firm power contract. Integrated resource planning allows customers to meet the objectives of Section 114 of EPAct.

Integrated resource planning is a planning process for new energy resources that evaluates the full range of alternatives, including new generating capacity, power purchases, energy conservation and efficiency, renewable energy resources, district heating and cooling applications, and cogeneration, to provide reliable service to electric consumers. An IRP supports utility-developed goals and schedules. An IRP must treat demand and supply resources on a consistent and integrated basis. The plan must take into account necessary features for system operation, such as diversity, reliability, dispatchability, and other risk factors. The plan must take into account the ability to verify energy savings achieved through energy efficiency and the projected durability of such savings measured over time. *(See 10 CFR § 905.11 (a)).*

Who May Use This Form:

Utilities that primarily provide retail electric service that have limited staff, limited resource options, and obtain a significant portion of its energy needs through purchase power contracts are eligible to use this form. Utilities using this form may generate a limited amount of energy if the generating resources are primarily used as back up resources, to support maintenance and outages, or during periods of peak demand.

Completing This Form:

To meet the Integrated Resource Planning reporting requirement, complete this form in electronic format in its entirety. Unaddressed items will be deemed incomplete and the IRP may not be eligible for approval. All of the data fields in this form automatically expand. Additional information may be attached to and submitted with this report. Western reserves the right to require supporting back-up materials or data used to develop this report. If there is any conflict between this form and the requirements defined in EPAMP, the requirements in EPAMP shall prevail.

Submit the completed report with a cover letter to:

Attention: Power Marketing Manager
Western Area Power Administration
Rocky Mountain Region
P.O. Box 3700
5555 E. Crossroads Blvd.
Loveland, CO 80539-3003

EPAMP Overview

The Energy Planning and Management Program (EPAMP) is defined in the Code of Federal Regulations in Title 10, Part 905 (10 CFR 905). The purposes of EPAMP are to meet the objectives of the Energy Policy Act of 1992 (EPAct) while supporting integrated resource planning; demand-side management, including energy efficiency, conservation, and load management; and the use of renewable energy.

EPAMP was initially published in the Federal Register at 60 FR 54714 on October 20, 1995, and revised in 65 FR 16795 on March 30, 2000, and 73 FR 35062 on June 20, 2008. 10 CFR § 905.11 defines what must be included in an IRP.

Western's Energy Services Web site (www.wapa.gov/es/irp) provides extensive information on integrated resource planning and reporting requirements. If you have questions or require assistance in preparing your IPR, contact your Western regional Energy Services representative.

IRP Content

Cover Page ..... Customer Name & Contact Information
Section 1 ..... Utility/Customer Overview
Section 2 ..... Future Energy Services Projections (Load Forecast)
Section 3 ..... Existing Supply-Side Resources
Section 4 ..... Existing Demand-Side Resources
Section 5 ..... Future Resource Requirements and Resource Options
Section 6 ..... Environmental Effects
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INTEGRATED RESOURCE PLAN (IRP)
5-Year Plan

Customer Name:
City of Ottawa, Kansas

IRP History: Check one as applicable.	
X	This is the submitter's first IRP submittal.
	This submittal is an update/revision to a previously submitted IRP.

Reporting Dates:	
IRP Due Date:	April 1, 2014
Annual Progress Report Due Date:	April 1, 2015

Customer Contact Information: Provide contact information for your organization. The contact person should be able to answer questions concerning the IRP.	
Customer Name:	City of Ottawa, Kansas
Address:	P.O. Box 60, 101 S. Hickory St.
City, State, Zip:	Ottawa, Kansas, 66067
Contact Person:	Jeffrey S. Oleson
Title:	Asst. Utility Director
Phone Number:	785-229-3633
E-Mail Address:	joleson@ottawaks.gov
Website:	www.ottawaks.gov

Type of Customer: Check one as applicable.	
X	Municipal Utility
	Electric Cooperative
	Federal Entity
	State Entity
	Tribal
	Irrigation District
	Water District
	Other (Specify):

SECTION 1 | UTILITY/CUSTOMER OVERVIEW

Customer Profile:
Enter the following data for the most recently completed annual reporting period. Data may be available on form EIA-861, which your submit to the U.S. Energy Information Administration (EIA).

Reporting Period	
Reporting Period Start Date (mm/dd/yyyy)	01/01/2013
Reporting Period End Date (mm/dd/yyyy)	12/31/2013
Energy Sales & Usage	
Energy sales to Ultimate End Customers (MWh)	139,243
Energy sales for Resale (MWh)	0
Energy Furnished Without Charge (MWh)	0
Energy Consumed by Respondent Without Charge (MWh)	1,356
Total Energy Losses (MWh entered as positive number)	8,578
Total Energy Usage (sum of previous 5 lines in MWh)	149,177
Peak Demand (Reporting Period)	
Highest Hourly Summer (Jun. – Sept.) Peak Demand (MW)	37.4
Highest Hourly Winter (Dec. – Mar.) Peak Demand (MW)	21.2
Date of Highest Hourly Peak Demand (mm/dd/yyyy)	07/09/2013
Hour of Highest Hourly Peak Demand (hh AM/PM)	4PM
Peak Demand (Historical)	
All-Time Highest Hourly System Peak Demand (MW)	41.2
Date of All-Time Hourly System Peak Demand (mm/dd/yyyy)	08/02/2011
Hour of All-Time Hourly Peak System Demand (hh AM/PM)	2PM
Number of Customers/Meters (Year End of Reporting Period)	
Number of Residential Customers	5,670
Number of Commercial Customers	434
Number of Industrial Customers	108
Other (Specify):	
Other (Specify):	
Other (Specify):	
Other (Specify):	
Other (Specify):	

Customer Service Overview:

Describe your customer service territory and the services provided. Include geographic area, customer mix, key customer and significant loads, peak demand drivers, competitive situation, and other significant or unique aspects of the customer and/or service territory. Provide a brief summary of the key trends & challenges impacting future resource needs including population changes, customer growth/losses, and industrial developments.

-The City of Ottawa provides electricity to residential, commercial and industrial Customers mostly located within in the City limits, but with a small quantity outside city limits. The Area of Service is NE Kansas

-Electric sales for 2013
* Residential sales - 62,230 MWH - 45%
* Industrial Sales - 60,931 MWH -44%
* Commercial Sales - 16,082 MWH -11%

-Customers with significant load are
American Eagle Outfitters Distribution Center, Wal-Mart Super Center, Hotels, Ottawa COOP, Ransom Hospital, Ottawa University, and Neosho County Community College

-Peak Demand for High Users
American Eagle Outfitters DC - Daily and hot summer day loads
Wal-Mart Super Center – 24-hour service, hot summer day loads
Hotels – Travel and vacation times
Ottawa COOP - During harvest of crops - Seasonal
Ransom Hospital - Regional hospital emergency services, inpatient care
Ottawa University - While classes are in session
Neosho County Community College – While classes are in session
Unified School District 290 - While classes are in session

-Population trends have been a steady or slightly growing.

-Ottawa University and Neosho County Community College are growing, so we are getting more students.

-Industrial Developments could include growth within the Industrial Park or surrounding annexed property within City limits.

-Recent expansion of Mac Fasteners and construction of a Love's Travel plaza.

-Our mission is to keep rates low for our customers, but also providing efficient and reliable energy.

-Outside our service area Kansas City Power & Light (KCPL) provides Electric Service.

-Our current rates are comparable to KCPL for residential, and slightly higher for Commercial and Industrial.

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Electricity Utility Staff & Resources:

Summarize the number of full-time equivalent employees by primary functions such as power production, distribution, and administration. Describe any resource planning limitations, including economic, managerial, and/or resource capabilities.

The City of Ottawa has the following Employees

Administration
-One Utility Director
-One Asst. Utility Director
-GIS/AutoCad Technician is vacant due to hiring freeze - Duties assigned to Asst. Utility Director

Electric Production
-Thirteen Electric Production Employees

Electric Distribution
-Eight Electric Distribution employees.

Warehouse
-Three Warehouse staff provide material and technical coverage for the Water, Sewer, and Electric Divisions.

Other Utility-funded Positions
-Billing, Meter Reading, and Customer Service positions are under the Finance Dept., but covered under a separate budget within the Utility Dept.

Historical Energy Use:

Enter the peak system demand and total annual energy use for the preceding ten (10) reporting years. For total energy, include retail sales, energy consumed or provided without charge, and system losses.

Reporting Year	Peak Demand (MW)	Total Energy (GWh)
2004	33.5	124.0
2005	33.7	133.5
2006	37.9	137.5
2007	39.9	152.9
2008	38.8	156.4
2009	39.1	150.3
2010	39.0	154.8
2011	41.2	151.9
2012	39.8	148.9
2013	42.1	149.2

SECTION 2 | FUTURE ENERGY SERVICES PROJECTIONS

Load Forecast:

Provide a load forecast summary for the next ten (10) years; **and** provide a narrative statement describing how the load forecast was developed. Discuss any expected future growth. If applicable, you may attach a load forecast study and briefly summarize the results in this section. *(See 10 CFR § 905.11 (b) (5)).*

Load Forecast:

Reporting Year	Peak Demand (MW)	Total Energy (GWh)
2014	43.0	151.9
2015	43.9	153.4
2016	44.7	155.0
2017	45.6	156.5
2018	46.5	158.1
2019	47.4	159.6
2020	48.4	161.2
2021	49.3	162.9
2022	50.3	164.5
2023	50.3	165.4

Narrative Statement:

Ottawa's load growth flattened over the recent 5 years. It is anticipated as the economy recovers and then grows, that the future load projection will grow at a 0.5 - 2% rate, but may jump due to industrial load growth caused by the 4-lane completion of US59 North to Lawrence, KS or the completion of the BNSF intermodal Northeast on I-35 between Edgerton, KS and Gardner, KS.

Projections were taken from the 2013 KMEA Municipal Power Supply Committee study and the 2013 Ottawa Electric Master Plan update study. The information was revised from the KMU/KMEA/KPP/KCBPU Power Supply Study of 2010.

SECTION 3 | EXISTING SUPPLY-SIDE RESOURCES

Existing Supply-Side Resource Summary:
Provide a general summary of your existing supply-side resources including conventional resources, renewable generation, and purchase power contracts (including Western Area Power Administration contracts). Describe the general operation of these resources and any issues, challenges, or expected changes to these resources in the next five (5) years. *(See 10 CFR § 905.11 (b) (1)).*

-The City of Ottawa has supply resources from several suppliers, such as GRDA, KC-BPU, WAPA, and SWPA. Ottawa has 5 generation units at its power plant. Prior to 2006 the City of Ottawa relied upon a combination of agreements for KCPL Load Regulation with options for Economy and Emergency power. Since 2006, Ottawa has been a member of the KMEA Energy Management Project #1 (EMP1) with 4 cities also located within the KCPL service territory. The EMP1 project allows for the economic dispatch of available resources to meet the needs of the group. EMP1 also utilizes a market agent to purchase and sell power on the market within the Southwest Power Pool (SPP).

-Ottawa has constructed two 161kv substation (Bulk Electric System), one in the Southeast (2004) and one in the Northeast (2009) regions of the City to mitigate against outages, increase reliability, and be able to transfer circuits to or from the Municipal Power Plant while generating. The 2nd Street substation is at the Power Plant. We normally maintain the circuits at their respective substation to lower their supply line losses.

-Ottawa has developed an updated Electric System Master Plan in 2013, which will improve the reliability of the system and lower the distribution line losses by replacing the older 4.16kv feeder circuits with 12.47kv circuits.

-The 4 Dual-Fuel RICE units at the Municipal Power Plant are RICE NESHAP compliant, having completed the required upgrades in 2012 and 2013.

-Improvements have been made to the Combined-Cycle gas turbine unit at the Power Plant, having completed an overhaul of the Steam Turbine in 2013. Over the previous 5 years replacement of older controls systems and boiler tube sections have improved the reliability of the unit.

-The Municipal Power Plant is manned 24 hours/day. The units are routinely called upon by the EMP1 group for economic dispatch. The units have been called upon by SPP for system reliability (Reliability Unit Commitment - RUC) requirements in 2014.

-In December 2012 the EMP1 group entered into the Energy Imbalance Services (EIS) of the SPP, and entered the SPP Integrated Marketplace (IM) in 2014.

Existing Generation Resources:

List your current supply-side resources, including conventional resources and renewable generation. If you do not own any generating resources, insert N/A in the first row. Insert additional rows as needed.

Resource Description (Identify resources as base load, intermediate, or peaking)	**Fuel Source**	**Rated Capacity (MW)**	**In-Service Date** (Year)	**Estimated Expiration/ Retirement Date** (Year)
Peaking Unit #3	DF	3.75	1962	2030
Peaking Unit #4	DF	3.5	1958	2025
Peaking Unit #5	NG	11.5	1967	2020
Peaking Unit #6	DF	6.0	1980	2031
Peaking Unit #7	DF	6.0	1980	2031

Existing Purchase Power Resources:

List your current purchase power resources. Define whether the contract provides firm service, non-firm service, all requirements or another type of service. Include Western Area Power Administration resources. If applicable, include a summary of resources that are under a net metering program. Insert additional rows as needed.

Resource Description	**Fuel Source** (If applicable)	**Contracted Demand (MW)**	**Type of Service** (Firm, Non-firm, Requirements, Other)	**Expiration Date** (Year)
Grand River Dam Authority (GRDA)	System	12.0	Firm	2026
Nearman (KC BPU)	Coal	10.0	Firm	2015
Western Area Power Admin. (WAPA)	Hydro	3.0	Firm	2024
Southwestern Area Power Admin (SWPA)	Hydro	1.0	Firm	2018
Kansas City Power & Light (KCPL)	Variable	Load Following	Firm	2015
EMP1 Marketing	SPP IM market	Variable	Market purchases	

SECTION 4 | EXISTING DEMAND-SIDE RESOURCES

Demand-side programs alter a customer's use pattern and include energy conservation, energy efficiency, load control/management, education, and distribution system upgrades that result in an improved combination of energy services to the customer and the ultimate consumer.

Existing Demand-Side Resources:
List your current demand-side programs, including energy conservation, energy efficiency, load control/management, education, or maintenance plans, or system upgrades. Programs may impact the utility distribution system, municipally owned facilities, and/or end-user energy consumption. Refer to Section 9 of this form for a list of example programs. Insert additional rows as needed.
(See 10 CFR § 905.11 (b) (1)).

Program Description	Estimated Program Savings (MW and/or MWh if known) (Include annual impact and impact over the life of the program if known.)
Continue with Community Involvement.	Variable
System Upgrades at the Power Plant substation and Feeder upgrades from 4.16kv to 12.47kv.	Estimated to lower supply voltage line losses by 1 -3 % and replace outdated transformers and switches.
Perform rate schedule review 2013	Allocate energy costs to the correct customer class which could affect usage patterns.
LED Street Lighting changeover program.	60% savings on energy usage per year
Tree trimming on system. Also infrared imaging on System loops & feeders.	Improved reliability
Upgraded tie transformer, oil substation, breakers And switches.	Ongoing in Power Plant substation, improved reliability and reduced manpower costs
Completed Investment Grade Audit of City-owned facilities - 2009	40% or greater energy usage savings on lighting at the Fire Station and City Hall.
Take Charge Challenge 2010	Lowered residential energy usage by 1% or more in 2011.

SECTION 5	FUTURE RESOURCE REQUIREMENTS AND RESOUCE OPTIONS

Balance of Loads and Resources (Future Resource Requirements):
Provide a narrative statement that summarizes the new resources required to provide retail consumers with adequate and reliable electric service during the 5-year resource planning period. Identify any federal or state regulations that may impact your future resource requirements. If you are not experiencing or anticipating load growth and a need for new resources, describe your current procedure to periodically evaluate the possible future need for new resources.

-The City of Ottawa is pursuing a long-term balanced portfolio plan for the addition of Supply Resources through the KMEA Municipal Power Supply Committee for:

*Baseload energy
*Intermediate energy
*Peaking energy

- A Proposal has been received outlining a plan for the addition of Supply resources starting in 2021 and beyond to meet Ottawa's supply needs using the balanced-portfolio process. These source choices could include Nuclear, Coal, and Natural Gas fuel sources, along with new peaking generation installation. The general presentations started in August 2013 and project participation will develop over time into late 2014, where contracts and price negotiations will be determined.

- The City Commission voted to terminate the existing contract for Nearman (BPU) in April 2014. The decision was due to a pending Environmental Upgrade outage starting in 2016. The costs of energy from this unit would be too high for the remaining term of the contract. Due to the ending of the Nearman (BPU) contract on Dec. 31, 2015, the City of Ottawa will be pursuing Baseload and Intermediate power supplies starting in 2016.

Identification of Resource Options

Identification and comparison of resource options is an assessment and comparison of existing and future supply-side and demand-side resources available to a customer based upon size, type, resource needs, geographic area, and competitive situation. Resource options evaluated must be identified. The options evaluated should related to the resource situation unique to each Western customer as determined by profile data such as service area, geographical characteristics, customer mix, historical loads, projected growth, existing system data, rates, financial information, and load forecast. *(See 10 CFR § 905.11 (b) (1)).*

Considerations that may be used to develop potential resource options include cost, market potential, consumer preferences, environmental impacts, demand or energy impacts, implementation issues, revenue impacts, and commercial availability. *(See 10 CFR § 905.11 (b) (1) (iii)).*

Future Supply-side Options:

List the future supply-side resource options that were considered and evaluated, including, but not limited to conventional generation, renewable generation, and power purchase contracts. Include a brief discussion on the applicability of each option for further consideration or implementation based on your system requirements and capabilities. If new resources are not required during the 5-year resource planning period, please indicate that below. Insert additional rows as needed.
(See 10 CFR § 905.11 (b) (1)).

Supply-Side Option	Applicability for Implementation or Further Consideration
Baseload	Working with the KMEA Municipal Power Supply Committee
Intermediate	Working with the KMEA Municipal Power Supply Committee
Peaking	Working with the KMEA Municipal Power Supply Committee
Customer-owned generation	Net Metering policy/ Interconnect Agreement implemented in 2009
Renewable sources	Evaluate the inclusion of renewable sources such as Wind and Solar PV/Hot Water as a stand-alone system or building-integrated system
Peaking	Performing Gas turbine and RICE unit evaluation for possible installation at the Northeast substation.

Future Demand-side Options:

List the future demand-side resource options that were considered and evaluated. Demand-side programs alter a customer's use pattern and include energy conservation, energy efficiency, load control/management, education, and distribution system upgrades that result in an improved combination of energy services to the customer and the ultimate consumer. Include a brief discussion on the applicability of each option for further consideration or implementation based on your system requirements and capabilities. Insert additional rows as needed. *(See 10 CFR § 905.11 (b) (2)).*

Demand-Side Option	Applicability for Implementation or Further Consideration
Adopting building codes to make new construction more Energy Efficient	2012 International Building Code, and subsequent sub-sections, adopted by the City Commission on June 5, 2013
City building upgrades	Normal budget processes
LED Street Light Program	Annual basis using normal budgets
Customer reduction programs	Developed to assist in reducing End-use of energy for customers
Upgrade breaker position lighting - Power Plant	Phase I was Completed in 2013, Phase II to be completed in 2014.
Upgrade lighting - Utility Center	Evaluating proposal to replace all building lighting with LED fixtures

Resource Options Chosen:

Describe the resource options that were chosen for implementation or further consideration and clearly demonstrate that decisions were based on a reasonable analysis of the options. Resource decisions may strike a balance among applicable evaluation factors such as cost, market potential, customer preferences, environmental impacts, demand or energy impacts, implementation issues or constraints, revenue impacts, and commercial availability. *(See 10 CFR § 905.11 (b) (1) (iv)).*

-The City evaluated solar PV/Hot Water systems as part of its FCIP energy audit. The costs were determined to not be competitive in 2010, but will continue to monitor system costs in the future.

-The City evaluated Electric vehicle charging stations in 2011, but the local vehicle usages didn't show the need at that time. but will continue to monitor customer needs in the future.

-A Long-term energy supply plan which maintains reliability with cost-effective options is being developed with KMEA and member Cities as part of the Municipal Power Supply Committee. This plan will provide a balance of supplies which meet the Baseload, Intermediate, and Peaking needs of each community and regions in Kansas.

-The City has a Net Metering/interconnection agreement ordinance which would allow distributed energy sources on the system. This ordinance has been in place since 2009.

-The City has replaced 118 Street Lights with LED fixtures. A Planned 54 LED Street Light changeover is being installed in 2014.This accounts for almost 17% or the total number of street lights. The City will continue with the LED Street Light program on an annual budget basis. The annual energy usage shows a 60% savings, on average. Maintenance costs are being evaluated on an ongoing basis. Updating of these lights lower the supply resources required by lowering the overall need as the City grows.

-Evaluate Street lighting Construction Specifications to determine if LED lighting should be specified in new subdivision or street construction projects.

SECTION 6 | ENVIRONMENTAL EFFECTS

Environmental Effects:
To the extent practical, Western customers must minimize environmental effects of new resource acquisitions and document these efforts. IRPs must include a qualitative analysis of environmental impacts in summary format. Describe the efforts taken to minimize adverse environmental effects of new resource acquisitions. Describe how your planning process accounts for environmental effects. Include a discussion of policies you conform with or adhere to, and resource decisions that have minimized or will minimize environmental impacts by you and/or your wholesale electricity supplier(s). Western customers are neither precluded from nor required to include a qualitative analysis of environmental externalities as part of the IRP process. If you choose to include a quantitative analysis, in addition to the summary below, please attach separately. *(See 10 CFR § 905.11 (b) (3)).*

-The City Power Plant reports annually to KDHE, the EPA, as well as the Department of Energy. The City has a Class I Air Permit and NPDES permit with KDHE. Purchase Power Agreements are with large utilities which are experiencing numerous changes in EPA regulations, which will increase future contract energy costs, but lower their environmental impact.

-The City upgraded their 4 RICE units with equipment to meet the RICE NESHAP regulations in 2012 and 2013 at the total cost of $330,000. This lowers the emissions of Hazardous Air Pollutants.

-KCPL, Westar, and Sunflower do have a required % of Renewable Energy Resources.

- Since 2008, estimates of Renewable Energy Resources being supplied through contracts is 8 - 12% of total energy supply.

-The City of Ottawa has evaluated several projects to increase their Renewable Energy Supply Resources options. Options included evaluating the Bowersock hydro plant in Lawrence, KS, but the contract conditions did not warrant the cost. We evaluated a run-of-the-river hydro plant along the Marias des Cygnes river, but the stream conditions could not support the investment.

-The City of Ottawa had performed investment energy audits of its facilities in 2009. Upgraded building lighting at the Fire Station and City Hall were completed in 2010 and 2011. The Water Treatment Plant completed lighting upgrades in 2012 - 2013. The City Garage upgraded its lighting in 2013. The Power Plant will replace all breaker indication lights with LED fixtures in 2013 and 2014. The Utility Center is evaluating upgrades for all building lighting using LED technology. These improvements lower the supply resource need from fossil-fuel sources.

-The City of Ottawa started the delivery of WAPA Hydro power allocations in October 2012, which reduces the amount of energy required using fossil fuels.

-The City of Ottawa implemented a Net Metering/ Interconnect Agreement in 2009 to allow customers to install renewable sources.

SECTION 7 | PUBLIC PARTICIPATION

Public Participation:
Customers must provide ample opportunity for full public participation in preparing and developing an IRP. Describe the public involvement activities, including how information was gathered from the public, how public concerns were identified, how information was shared with the public, and how your organization responded to the public's comments. *(See 10 CFR § 905.11 (b) (4)).*

-The draft IRP plan was placed on the City website. Paper copies of the IRP were made available at the Customer Service desk and with the Asst. Utility Director for customer pickup. A link on the City's Facebook page to the draft IRP was listed. The plan and public hearing was announced on the City's Government Access Channel (Channel 20).

-The IRP was placed on the Study Session agenda and presented to City Commission on August 19, 2013 for discussion.

-Public Notice for the September 4, 2013 regular Commission Meeting was published August 8, 2013

-The IRP public hearing was performed on September 4, 2013.

-There was No public comments and No comments from the Commission.

-Resolution was passed /approved.

-IRP has been made available for public viewing on the City of Ottawa website.

- IRP will be officially posted on Western Area Power Adm. Energy Services Website.

- In addition, throughout the previous 48 months the City has been very visible to the public. during events, we gave away light bulbs, weatherization kits, programmable thermostats and other educational tools. The City participated in the 2010 Take Charge Challenge with the cities of Gardner, Baldwin City, and Paola.

- The City has worked with the Franklin County Energy Manager to perform building evaluations of several large customers.

- The City worked with the American Eagle Outfitters distribution center in 2012 to discuss and recommend methods to lower their energy and monthly peak usages. The City forwarded the Kansas List of Energy Auditors that were pre-authorized for the Kansas Facility Conservation Improvement Program (FCIP). The annual City of Ottawa Peak load was lowered by more than 1mW by the improvements implemented by American Eagle Outfitters in 2013

SECTION 8	ACTION PLAN & MEASUREMENT STRATEGIES

Action Plan Summary:
Describe the high-level goals and objectives that are expected to be met by the implementation of this resource plan within the 5-year resource planning period. Include longer term objectives and associated time period(s) if applicable. *(See 10 CFR § 905.11 (b) (2)) and (See 10 CFR § 905.11 (b) (6)).*

-These will be taking place during our Integrated Resource Plan period of 2014-2019

-Educate customers about benefits of Energy Efficiency and reducing energy consumed by the City of Ottawa.

-Promote Energy Efficiency throughout City properties and business customers.

-Promote Energy Audits for customers property to promote Energy Efficiency

-Continue evaluating the Supply Resource options with the KMEA Municipal Power Supply Committee.

-Continue implementing Energy Efficiency measure throughout City properties.

-Provide adequate and reliable energy

Specific Actions:
List specific actions you will take to implement your plan over the 5-year planning horizon.

New Supply-Side Resource Acquisitions:

List new resource options your organization is planning to implement, investigate, or pursue in the next five years. Include conventional generation, renewable resources, net metering programs, and purchase power contracts. Include key milestones such as the issuing an RFP, executing a contract, or completing a study. *(See 10 CFR § 905.11 (b) (2)).*

Proposed New Resource	Begin Date	Est. New Capacity (MW)	Milestones to evaluate progress and/or accomplishments
Municipal Power Supply Committee	2016	Variable	Long-term planning through KMEA
Nearman replacement	2016	4 - 10	Municipal Power Supply Committee
GRDA	2026	12	Municipal Power Supply Committee
Local Generation	2019 - 2020	15 - 20	Municipal Power Supply Committee
Renewables - Intermittent energy	2016	2 -5	Municipal Power Supply Committee

New Demand-Side Programs & Energy Consumption Improvements:

List energy efficiency, energy conservation, and load management programs your organization is planning to implement or evaluate in the next five years. Include key milestones to evaluate the progress of each program. Insert additional rows as needed. *(See 10 CFR § 905.11 (b) (2)).*

Example programs could include:

- Education programs & communications
- Energy efficient lighting upgrades
- Energy audits
- Weatherization & Insulation
- Window/doors upgrades
- Boiler, furnace or air conditioning retrofits
- Programmable thermostats
- Equipment inspection programs
- Use of infrared heat detection equipment for maintenance
- Tree-trimming/brush clearing programs
- Electric motor replacements
- Upgrading distribution line/substation equipment
- Power factor improvement
- Loan arrangements for energy efficiency upgrades
- Rebate programs for energy efficient equipment
- Key account programs
- Load management programs
- Demand control equipment
- Rate designs
- Smart meters (Time-of-Use Meters

Proposed Items	Begin Date	Est. kW capacity savings per year	Est. kWh savings per year	Milestones to evaluate progress and/or accomplishments
Energy Efficient Lighting upgrades	2014			Per Energy Audit report of 2010
Infrared imaging of Entire Distribution System	Annual			Less outages due to equipment failure because of overheating
Tree Trimming	Annual			Limited outages due to tree tree limbs on power lines.
Upgrading Distribution system/Substations	CIP	Variable	Variable	Better voltage to customers during peak summer hours.
Improved Metering System	2015	Variable	Variable	Expand customer services after completing the upgrade of the billing computer in 2013
Customer programs	2015	Variable	Variable	Work with Customers with methods to better manage electric purchases

Measurement Strategies:
Describe your plan to evaluate and measure the actions and options identified in the IRP to determine if the IRP's objectives are being met. The plan must identify and include a baseline from which you will measure the IRP implementation's benefits. *(See 10 CFR § 905.11 (b) (6)).*

The City will use 2013 for data baseline.

Customers and Citizens can provide feedback and recommendations throughout each year.

Once a year the IRP will be reviewed and then submitted to Western Area Power.

We will track progress of programs, and review results with staff and City Commission annually.

SECTION 9 | SIGNATURES AND APPROVAL

IRP Approval:
Indicate that all of the IRP requirements have been met by having the responsible official sign below; and provide documentation that the IRP has been approved by the appropriate governing body (i.e. provide a copy of the minutes that document an approval resolution). *(See 10 CFR § 905.11 (b) (4)).*

Richard U. Nienstedt	**City Manager**
(Name – Print or type)	**(Title)**
(Signature)	**September 19, 2013**
	(Date)

Other Information:
(Provide/attach additional information if necessary)

IRP Posting Requirement:
10 CFR § 905.23 of the EPAMP as amended effective July 21, 2008, facilitates public review of customers' approved IRPs by requiring that a customer's IRP be posted on its publicly available Web site or on Western's Web site. Please check the method in which you will comply with this requirement within thirty (30) days of receiving notification the IRP has been approved:

	Customer will post the approved IRP on its publicly available website and send the URL to Western.
X	Customer would like Western to post the approved IRP on Western's website.

IRP Updates:
Western's customers must submit updated IRPs every five (5) years after Western's approval of the initial IRP.

IRP Annual Progress Reports:
Western's customers must submit IRP progress reports each year within thirty (30) days of the anniversary date of the approval of the currently applicable IRP. Annual progress reports can be submitted using Western's on-line reporting tool, which can be accessed at: www.wapa.gov/es/irp