

## 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 (EPAAct). 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 EPAAct.

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 (EPAAct) 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](http://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
Section 7 .....	Public Participation
Section 8 .....	Action Plan and Measurement Strategies
Section 9 .....	Signatures and Approval

# INTEGRATED RESOURCE PLAN (IRP) 5-Year Plan

<b>Customer Name:</b>
Garden City, Kansas

<b>IRP History:</b> Check one as applicable.	
<input checked="" type="checkbox"/>	<b>This is the submitter's first IRP submittal.</b>
<input type="checkbox"/>	<b>This submittal is an update/revision to a previously submitted IRP.</b>

<b>Reporting Dates:</b>	
<b>IRP Due Date:</b>	10-1-2014
<b>Annual Progress Report Due Date:</b>	10/1

<b>Customer Contact Information:</b> Provide contact information for your organization. The contact person should be able to answer questions concerning the IRP.	
<b>Customer Name:</b>	Garden City, Kansas
<b>Address:</b>	301 North 8 <sup>th</sup> Street
<b>City, State, Zip:</b>	Garden City, Kansas
<b>Contact Person:</b>	Mike Muirhead
<b>Title:</b>	Public Utilities Director
<b>Phone Number:</b>	620-271-1577
<b>E-Mail Address:</b>	<a href="mailto:Mike.Muirhead@gardencityks.us">Mike.Muirhead@gardencityks.us</a>
<b>Website:</b>	<a href="http://www.garden-city.org">www.garden-city.org</a>

<b>Type of Customer:</b> Check one as applicable.	
<input checked="" type="checkbox"/>	<b>Municipal Utility</b>
<input type="checkbox"/>	<b>Electric Cooperative</b>
<input type="checkbox"/>	<b>Federal Entity</b>
<input type="checkbox"/>	<b>State Entity</b>
<input type="checkbox"/>	<b>Tribal</b>
<input type="checkbox"/>	<b>Irrigation District</b>
<input type="checkbox"/>	<b>Water District</b>
<input type="checkbox"/>	<b>Other (Specify):</b>

**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 you submit to the U.S. Energy Information Administration (EIA).

<b>Reporting Period</b>	
Reporting Period Start Date (mm/dd/yyyy)	01/01/2013
Reporting Period End Date (mm/dd/yyyy)	12/31/2013
<b>Energy Sales &amp; Usage</b>	
Energy sales to Ultimate End Customers (MWh)	255,900
Energy sales for Resale (MWh)	
Energy Furnished Without Charge (MWh)	8,995
Energy Consumed by Respondent Without Charge (MWh)	0
Total Energy Losses (MWh entered as positive number)	6,784
Total Energy Usage (sum of previous 5 lines in MWh)	271,679
<b>Peak Demand (Reporting Period)</b>	
Highest Hourly Summer (Jun. – Sept.) Peak Demand (MW)	67.4
Highest Hourly Winter (Dec. – Mar.) Peak Demand (MW)	35.7
Date of Highest Hourly Peak Demand (mm/dd/yyyy)	07/19/2013
Hour of Highest Hourly Peak Demand (hh AM/PM)	03 PM
<b>Peak Demand (Historical)</b>	
All-Time Highest Hourly System Peak Demand (MW)	67.4
Date of All-Time Hourly System Peak Demand (mm/dd/yyyy)	07/19/2013
Hour of All-Time Hourly Peak System Demand (hh AM/PM)	03 PM
<b>Number of Customers/Meters (Year End of Reporting Period)</b>	
Number of Residential Customers	9,825
Number of Commercial Customers	1,017
Number of Industrial Customers	407
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.

Service territory is everything within the corporate City limits of the City of Garden City, Kansas. In addition to the electrical services, Garden City also provides water and wastewater services. The City's biggest electrical competitor is the local REA, which serves the areas outside the immediate bounds of the City. The Garden City community is growing with new retail and residential developments that will require additional energy / capacity resources to meet the demands of a growing community.

Customer mix:

Residential – 9,825  
Commercial – 1,017  
Industrial – 407

Garden City is a city in and the county seat of Finney County, Kansas, United States. As of the 2010 census, the City's population was 26,658. The City is home to Garden City Community College and the Lee Richardson Zoo, the largest zoological park in western Kansas.

**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.

- 1 – Public Utilities Director – Administrative
- 1 – Superintendent – Administrative & Operations
- 1 – SCADA / Engineering Manager – Operations
- 1 – Generation / VFD Specialist – Operations
- 3 – Foremen - Operations
- 5 – Journeymen Linemen – Operations
- 6 – Apprentice Linemen – Operations
- 1 – Warehouse Technician - Operations
- 2 – Meter Technician - Operations
- 2 – Clerical Staff – Administrative

Until December 31, 2013, the City was a total requirements purchaser from Wheatland Electric Cooperative, Inc. The City went through a lengthy power supply RFP process, which resulted in the City opting to pursue power supply purchases from the Kansas Municipal Energy Agency (KMEA), effective January 1, 2014. Up until that point, the City's power supplier was responsible for resource planning decisions and the City had little or no input.

Even now, the City relies primarily on outside advisors, including consultants and KMEA, to assist in resource planning decisions. The City's staffing is exclusively directed at retail distribution operations, as opposed to generation resource planning and operations. The lack of resource planning staff, coupled with the reliance on the City's previous total requirements power supplier, are limiting factors in the City's resource planning capabilities. As the City evolves as an independent entity, it will add capabilities and improve its approach to integrated resource planning.

**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.

<b>Reporting Year</b>	<b>Peak Demand (MW)</b>	<b>Total Energy (MWh)</b>
<b>2004</b>	54.0	190,073
<b>2005</b>	54.0	201,056
<b>2006</b>	53.0	202,871
<b>2007</b>	63.0	214,059
<b>2008</b>	57.9	232,778
<b>2009</b>	59.9	228,971
<b>2010</b>	63.4	262,096
<b>2011</b>	65.4	269,285
<b>2012</b>	67.3	270,344
<b>2013</b>	67.4	271,679

**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:

<b>Reporting Year</b>	<b>Peak Demand (MW)</b>	<b>Total Energy (MWh)</b>
<b>2014</b>	66.5	273,675
<b>2015</b>	66.6	274,150
<b>2016</b>	66.7	274,669
<b>2017</b>	66.9	275,217
<b>2018</b>	67.0	275,784
<b>2019</b>	67.0	276,352
<b>2020</b>	67.0	276,992
<b>2021</b>	67.0	277,492
<b>2022</b>	67.0	278,064
<b>2023</b>	67.0	278,637

## Narrative Statement:

Projected capacity and energy requirements were identified by Sawvel and Associates, Inc. (Sawvel) and Sunflower Electric Cooperative, Incorporated (Sunflower)/Wheatland as part of the power supply RFP process. For purposes of this IRP, the load forecast prepared by Sunflower/Wheatland was used. Peak demand is projected to increase from 66.5 MW in 2014 to 67.0 MW in 2023. Energy requirements were projected to increase from 274,000 MWh in 2014 to 279,000 MWh in 2023. The forecast appears to be reasonable based on the existing customer base and projected changes.

## 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 is in the process of transitioning from a total requirements purchaser to a portfolio of resources. These resources are primarily purchase arrangements, with the exception of the Jameson Energy Center, a 27.5 MW peaking generation plant that is interconnected to the City's distribution system.

Purchase resource options are greatly limited by transmission constraints in the Southwest Power Pool (SPP), as well as the lengthy aggregate study process. The City is currently purchasing capacity from four different sources, with energy primarily coming from one of the purchases (KCPL) and the SPP Integrated Marketplace. The Jameson Energy Center provides a local resource which can be used if market prices increase or if transmission constraints limit the ability of energy resources to be delivered to the City.

The City will be considering other baseload resources over the next three years. It is expected there will be capacity available from other Kansas municipal utilities as well as from other entities with surplus capacity that have approached the City. The City will be considering these resources and likely will enter into agreements to purchase 10-20 MW of baseload capacity as existing arrangements expire.

**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.

<b>Resource Description</b> (Identify resources as base load, intermediate, or peaking)	<b>Fuel Source</b>	<b>Rated Capacity (MW)</b>	<b>In-Service Date (Year)</b>	<b>Estimated Expiration/Retirement Date (Year)</b>
Jameson Energy Center – Combustion Turbine used primarily for peaking capacity / emergency backup	Natural Gas	27.5	2014	2044

**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.

<b>Resource Description</b>	<b>Fuel Source</b> (If applicable)	<b>Contracted Demand (MW)</b>	<b>Type of Service</b> (Firm, Non-firm, Requirements, Other)	<b>Expiration Date (Year)</b>
Western	Hydro	2 MW	Firm	2050
Kansas City Power & Light (capacity and energy)	NA	10 MW	Capacity	Dec. 2018
Associated Electric – capacity with market-priced energy	NA	20 MW	Capacity	Dec. 2015
Kingman – peaking capacity	Natural Gas/Oil	16 MW	Capacity	Dec. 2015
Omaha Public Power District – peaking capacity with market-priced energy	NA	6 MW	Capacity	Dec. 2015

**SECTION 5**

**FUTURE RESOURCE REQUIREMENTS  
AND RESOURCE 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.

See table, next page.

**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)).

<b>Program Description</b>	<b>Estimated Program Savings (MW and/or MWh if known)</b> (Include annual impact and impact over the life of the program if known.)
High efficiency street lights	Unknown. City evaluates when it reviews bid results to assess least cost alternatives.
Distribution planning for loss reduction	Unknown. City is continually evaluating condition of distribution system to identify economic feasibility of improvements that may reduce distribution system losses.

**Projected Capacity Requirements and Resources**  
**Garden City Municipal**  
 KMEA Resource Portfolio  
 (MW)

Description	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Peak Demand	66.5	66.6	66.7	66.9	67.0	67.0	67.0	67.0	67.0	67.0
Transmission Losses @.3%	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Total System Demand + Losses	68.5	68.6	68.7	68.9	69.0	69.0	69.0	69.0	69.0	69.0
Capacity Sales	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserves (2)	9.0	9.0	9.0	9.1	9.1	9.1	9.1	9.1	9.1	9.1
Total Capacity Requirements	77.5	77.6	77.7	78.0	78.1	78.1	78.1	78.1	78.1	78.1
<b>Firm Power</b>										
WAPA LAP	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Total Firm Purchases	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
<b>Capacity Resources</b>										
KCPL	10.0	10.0	10.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0
New Peaking Capacity	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5
AECI	20.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
KPP	16.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OPPD	6.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Capacity	79.5	79.5	37.5	37.5	37.5	27.5	27.5	27.5	27.5	27.5
Total Capacity Resources	81.8	81.8	39.8	39.8	39.8	29.8	29.8	29.8	29.8	29.8
Capacity Surplus / (Deficit)	4.0	4.0	(38.0)	(38.0)	(38.0)	(48.0)	(48.0)	(48.0)	(48.0)	(48.0)

**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)).

<b>Supply-Side Option</b>	<b>Applicability for Implementation or Further Consideration</b>
	Additional resources beyond those selected through the RFP process were not evaluated. As short-term agreements expire, the City will complete an economic assessment of potential replacement resources.

**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)).

<b>Demand-Side Option</b>	<b>Applicability for Implementation or Further Consideration</b>
Refrigerator recycling	Will consider based on economic assessment and customer interest.
Customer efficiency measures	Will consider based on economic assessment and customer interest.
Customer communication	Will consider based on economic assessment and customer interest.
Peak demand reduction strategies	Given City's disparity between summer and winter peak, City may evaluate peak demand reduction strategies.

The next IRP will likely include more detailed evaluation of broader demand side options. The 2012 evaluations were focused on replacing an expiring total requirements contract and were not subject to EPAMP requirements. The City may evaluate these programs over the next few years. The City will also work to develop measurement techniques to assess impacts of the various DSM measures.

**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)).

Resources shown in Section 5, Balance of Loads and Resources, were selected through an RFP process. They were selected based on economic factors, deliverability, and reliability.

**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)).

Jameson Energy Center was constructed with "dry low emission" combustors and the manufacturer, Siemens, provided emissions guarantees for nitrous oxides and carbon monoxide.

Other purchased resources come from a diverse fuel supply mix. Future resource plans may consider purchases of renewable resources, such as wind energy.

## 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)).

During the power supply studies in 2012-2013, comments were solicited from the public through local newspapers and customers were invited to attend the City Commission meetings for public comments. This plan was placed on the City Commission's agenda, with a published meeting notice, and reviewed with the opportunity for public comment.

## 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)).

- Complete detailed evaluation of additional demand-side measures.
- Continue evaluation of high efficiency street lighting measures.
- Evaluate replacement purchases for short-term purchase agreements that are expiring between now and 2020. In particular, additional baseload capacity and energy as well as a replacement for the KCPL purchase are necessary.
- Enhance planning processes in future, including development of improved resource planning models.
- Evaluate transmission system enhancements which may improve the City's access to resources in the future.

**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)).

<b>Proposed New Resource</b>	<b>Begin Date</b>	<b>Est. New Capacity (MW)</b>	<b>Milestones to evaluate progress and/or accomplishments</b>
Replacement baseload	Jan. 2019	10 MW	January 2018 – solicit proposals July 2018 – contract execution
Replacement reserve capacity	Jan. 2016	42 MW	January 2015 – solicit proposals July 2015 – contract execution
Baseload	Jan. 2016	10 MW	July 2015 – solicit proposals October 2015 – contract execution

**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
General program evaluation				October 2015

**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)).

- Monthly and annual tracking of actual costs compared to previous projections and cost under previous resources.
- Comparisons of peak demand and energy requirements to previous years.
- Develop measurement strategies for implemented DSM measures. Baseline will be existing system prior to implementation of identified DSM measures.

**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)).

<u>Roy Cessna</u> (Name - Print or type)	<u>Mayor</u> (Title)
<u>Roy Cessna</u> (Signature)	<u>9-16-2014</u> (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:

<input type="checkbox"/>	Customer will post the approved IRP on its publicly available website and send the URL to Western.
<input checked="" type="checkbox"/>	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](http://www.wapa.gov/es/irp)