

**INTEGRATED RESOURCE PLAN (IRP)**

Date: 4/28/200

IRPs shall consider all reasonable opportunities to meet future energy resource requirements using Demand Side Management techniques, new renewable resources and other programs that will provide retail consumers with electricity at the lowest possible costs, and minimize, to the extent practicable, adverse environmental effects.

To meet your Integrated Resource Planning reporting requirement, complete the following. Unaddressed items will be deemed incomplete and not eligible for approval. Western reserves the right to require customers to provide any supporting back-up data used to support and develop this report.

**Customer Contact Information:**

(Provide contact information for your organization. Contact person should be able to answer questions concerning the plan)

<b>Customer Name:</b>	<b>Eastside Power Authority (ESPA)</b>
<b>Address:</b>	<b>14181 Avenue 24, Delano, CA 93215</b>
<b>Contact Person:</b>	<b>Dale Brogan, GM of ESPA</b> <b>Stuart Robertson, PE, Robertson-Bryan, Inc. (RBI)</b> <b>Cori Pritchard, Robertson-Bryan, Inc. (RBI)</b>
<b>Title:</b>	<b>Dale Brogan, GM Eastside</b> <b>Stuart Robertson, PE, President of RBI</b> <b>Cori Pritchard, Operations Analyst, RBI</b>
<b>Phone Number:</b>	<b>Dale Brogan (661)725-2526</b> <b>Stuart Robertson (916)687-7799</b> <b>Cori Pritchard (916)405-8923</b>
<b>E-Mail Address:</b>	<b>Dale Brogan , <u>dbrogan@deid.org</u></b> <b>Stuart Robertson, <u>stuart@Robertson-Bryan.com</u></b> <b>Cori Pritchard, <u>cori@Robertson-Bryan.com</u></b>
<b>Website:</b>	<b>ESPA: none, RBI: <u>www.robertson-bryan.com</u></b>

**Type of Customer:**

(Check one as applicable)

<input type="checkbox"/>	<b>Municipal</b>
<input type="checkbox"/>	<b>State</b>
<input type="checkbox"/>	<b>Federal</b>
<input checked="" type="checkbox"/>	<b>Irrigation Districts</b>
<input type="checkbox"/>	<b>Water District</b>
<input type="checkbox"/>	<b>Other (Specify) _____</b>

**Capacity and Energy Data for Previous 5 Years:**

(Provide peak demand and total energy for past 5 years. Western can assist with obtaining this data if needed)

<b>Calendar Year</b>	<b>Peak Demand (kW)</b>	<b>Total Energy (kWh)</b>
2003	14,738	37,831,327
2004	12,170	33,451,171
2005	12,566	35,029,092
2006	12,202	35,537,712
2007	11,097	37,796,412

**Identification of Resource Options (considerations that may be used to develop potential options include cost, market potential, consumer preferences, environmental impacts, demand or energy impacts, implementation issues, revenue impacts, and commercial availability):**

**Supply-side options:**

(Including, but not limited to: purchase power contracts and conventional and renewable generation)

<b>List existing supply-side options:</b>	<b>List future supply-side resource options considered and evaluated:</b>
On-Site Solar PV Generation	Full Requirements PPAs; ESPA ownership Partnering with Private
Long-term Contract	Covering systemic demand after hydropower with market power

**Demand-side options:**

<b>List existing demand-side options:</b>	<b>List future demand-side resource options considered and evaluated:</b>
Load Curtailment	Demand Response Options
Pump Refurbishment	Capacity Bidding Programs

**Resource options chosen:**

(Provide a narrative statement that describes the option chosen and clearly demonstrates that decisions were based on a reasonable analysis of the options)

Over the past 18 months, East Side Power Authority undertook exhaustive feasibility studies and project financing plans for a 4.5 MW Solar PV generation project. Applications were submitted and ultimately denied for multiple allocations of Clean Renewable Energy Bonds. Thus far, no financing option other than CREB bonds has been able to provide an economically and financially viable opportunity. East Side Power Authority continues to evaluate renewable resource opportunities, Distributed Generation for local resource adequacy.

As yet market resource options continue as the mainstay of supplemental power supply

**Action Plan:**

**Specific Action Items to be Implemented Over the Next 5 Years:**

(Lists are not meant to be inclusive, complete and provide other action items as applicable)

**Energy Consumption Improvements:**

Proposed Items	Begin Date	End Date	Est. kW capacity savings per year	Est. kWh savings per year	Milestones to evaluate accomplishments
Boiler, Furnace, air conditioning retrofits	N/A				
Weatherization, insulation storm windows/doors	N/A				
Insulation of air ducts, boilers, pipes, etc.	N/A				
Clock thermostats and equipment system timers	N/A				
Heat pumps	N/A				
Energy audits	Ongoing				
Public education programs	Ongoing				
Loan arrangements or rebate program for energy efficient equipment	1/2007	6/2008	4,500	7,000,000	Contracts under review
Use of infrared heat detection equipment	N/A				
Energy efficient lighting	N/A				
Equipment inspection programs	Ongoing				
Electric motor replacements	Ongoing				
Upgrading of distribution lines/substation equipment					
Power factor improvement					
Other:					

### Renewable Energy Activities:

Proposed Items	Begin Date	End Date	Est. kW savings per year	Est. kWh savings per year	Milestones to evaluate accomplishments
Solar thermal/photovoltaic projects	11/2005	ongoing	4,500	8,000,000	EPC contract and Financing
Day lighting technologies					
Active solar installations					
Active solar installations					
Biomass/refuse-derived fuels					
Geothermal projects					
Small-scale hydro projects					
Other: Friant Power Authority_____	1986	ongoing			Hydro power shares from members. Sales of power to SCE

### Load Management Techniques:

Proposed Items	Begin Date	End Date	Est. kW savings per year	Est. kWh savings per year	Milestones to evaluate accomplishments
Load management devices/systems	1/1/2005	On-going	2000		Demand response on emergency notification
Demand control techniques and equipment					
Smart meters or automated equipment					
Time-of-use meters					Completed
Other:					

### Rate Design Improvements:

Proposed Items	Begin Date	End Date	Est. kW savings per year	Est. kWh savings per year	Milestones to evaluate accomplishments
Cost-of-service pricing					
Elimination of declining block rates					
Time-of-day rates	1998	On-going			All costs pass through to water rates
Seasonal rates	1998	On-going			All costs pass through to water rates
Interruptible rates					
Other:					

**Agricultural Improvements:**

Proposed Items	Begin Date	End Date	Est. kW savings per year	Est. kWh savings per year	Milestones to evaluate accomplishments
Irrigation pump utilization/scheduling	Ongoing				District participant records
Irrigation pump testing or efficiency improvements	Ongoing				District participant records
Electric motor replacement	Ongoing				District participant records
Photovoltaic pumping systems					
Ditch lining or piping	Ongoing				District participant records
Laser land leveling					
Pumpback systems					
Water conservation programs	Ongoing				District participant records
Other:					

**Environmental Effects:**

(Provide a narrative statement that sets forth the efforts taken to minimize adverse environmental effects of new resource acquisitions)

Estimated annual Emission Reduction from proposed 4.5 MW Solar Project

Type of Pollution	Amount of Pollution per Year
Greenhouse Gases (CO <sub>2</sub> )	5670302 Pounds
Nitrogen Oxides (NO <sub>x</sub> )	2771 Pounds
Sulfur Dioxide (SO <sub>2</sub> )	1034 Pounds
<b>Toxic Metals Pollution</b>	<b>Amount of Pollution</b>
Mercury (Hg)	4772 Milligrams

**Public Participation:**

(Customers must provide ample opportunity for full public participation in preparing and developing an IRP. Provide a brief description of 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 it responded to the public comments)

ESPA reviews project options at publicly noticed meetings. On implementation ESPA follows CEQA standards for public participation

**Future Energy Service Projections:**

(Provide a load forecast to show expected growth or expansion; or a narrative statement concerning expected future growth)

<b>Calendar Year</b>	<b>Peak Demand (kW)</b>	<b>Total Energy (kWh)</b>
<b>2009</b>	<b>13,000</b>	<b>38,000,000</b>
<b>2010</b>	<b>12,500</b>	<b>38,000,000</b>
<b>2011</b>	<b>12,500</b>	<b>38,000,000</b>
<b>2012</b>	<b>12,500</b>	<b>38,000,000</b>
<b>2013</b>	<b>12,500</b>	<b>38,000,000</b>

or Narrative Statement:

Districts are fully developed with constant water supply, accordingly, demand and energy should remain constant

**Measurement Strategies:**

(Provide a brief description of measurement strategies for options identified in the IRP to determine whether the IRP's objectives are being met. These validation methods must include identification of the baseline from which a customer will measure the benefits of its IRP implementation)

ESPA continuously monitors Forward Market forecasts and compares these options with local alternatives for renewables and distributed generation.

Current alternative energy sources available demonstrate only marginal cost and or energy savings that do not justify project capital expense.

**Other Information:**

(Provide/attach additional information if necessary)