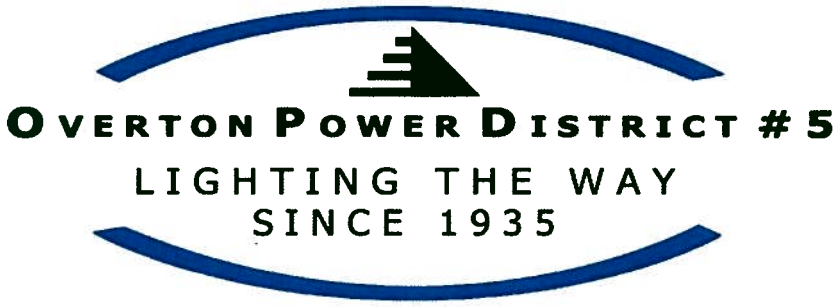


# Integrated Resource Plan

## 2007 – 2012

**Serving the communities of Overton, Mesquite, Moapa, Logandale, Bunkerville in southern Nevada**

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**Introduction**

Overton Power District #5 (District) was formed by the State of Nevada in 1935 as a non-profit quasi-municipal special improvement district. The District currently operates under Nevada Revised Statute (NRS) 318. The District's service territory is 2500 square miles and is located entirely within Clark County, Nevada. The City of Mesquite and the unincorporated towns of Overton, Logandale, Bunkerville and Moapa are located in the District's designated service territory. The Muddy River Indian Reservation, Valley of Fire State Park, and a portion of the Lake Mead National Recreation Area are also located in the District's service territory.

The District serves a wide variety of customers including resorts, mining, residential, manufacturing, agriculture, water pumping, and retail. The District also experiences a large number of retired customers who enjoy our mild winters and regional recreational activities. Many of these will maintain seasonal homes inside the District. Currently there are approximately 12,500 active meters in the District.

The District continues to experience considerable growth with several projects in the process of developing. Thousands of new residences and several large industrial projects are planned for the area. The District is prepared to meet this new growth demand with a progressive approach. We will continue to rely heavily on our Boulder Canyon Project resources to meet this demand as well as expanding our involvement in other efforts including generation projects and purchase power agreements.

Residential and commercial load growth challenges the District in its effort to maintain high standards in regard to low rates, safety, reliability and customer service. The growth is largely tied to that of Las Vegas, which is only an hour drive away. New and expanded Mesquite gaming facilities and their associated industries and employees are also anticipated to make a significant contribution to the new load.

Some of the projects that are in the planning process in anticipation of this large growth are; additional transmission, distribution and transmission substations, new distribution lines, generation projects, and long term purchase power agreements. These projects are very costly and in order for the growth of the system to remain unsubsidized by the current customers rates, the District has implemented fees associated with new services in order to recover these costs. As the effect of an open market continues to evolve in the nation's utility industry, Overton Power District #5 strives to be an example of what a well managed nonprofit utility can offer a community and an individual customer. These benefits include reasonable costs and a high level of quality service with an eye to the future.

## Public Process

A board of directors oversees the District's operation. The board is made up of five elected officials from the community who serve four year terms in the office.

| Board of Directors | | |
|---|---|---|
| Member | Area Represented | Position |
| David Anderson | Mesquite | Chairman |
| Larry Moses | Logandale | Vice-Chairman |
| Gary Leavitt | Moapa | Secretary-Treasure |
| Craig Andersen | Bunkerville | Trustee |
| Mike Fetherston | Overton | Trustee |

As is required, the District has opened the Integrated Resource Plan to public input. The input was requested on April 17 & 18, 2007 at a public hearing. The District advertised the hearings in local newspapers. The Board of Directors also reviewed the Integrated Resource Plan on April 18, 2007. Public notices of the meeting are included in appendix A.

Approved?

## Contact Person

This Integrated Resource Plan was prepared by the following individuals. If any additional information is required please feel free to contact them.

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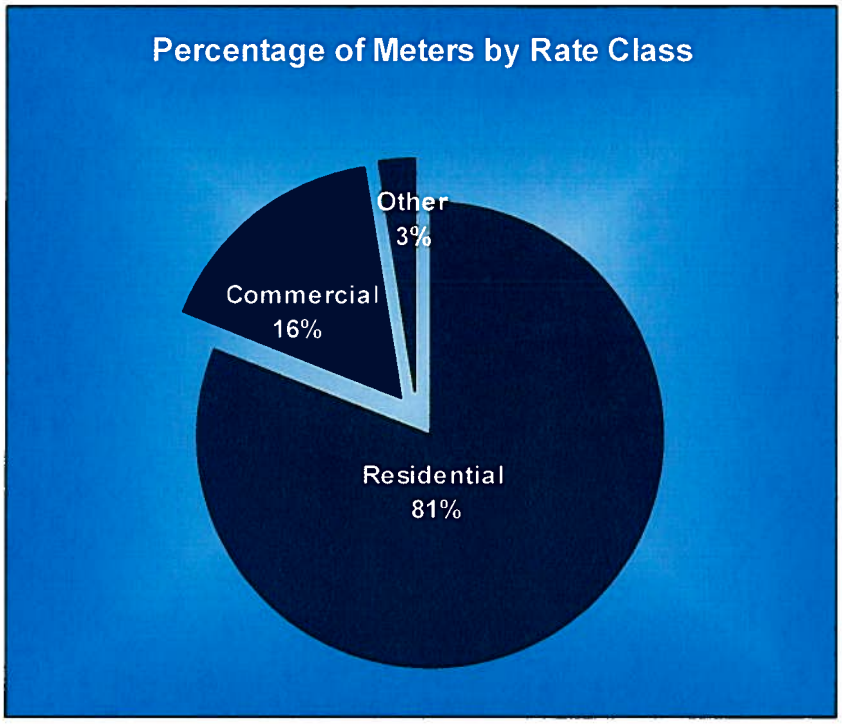
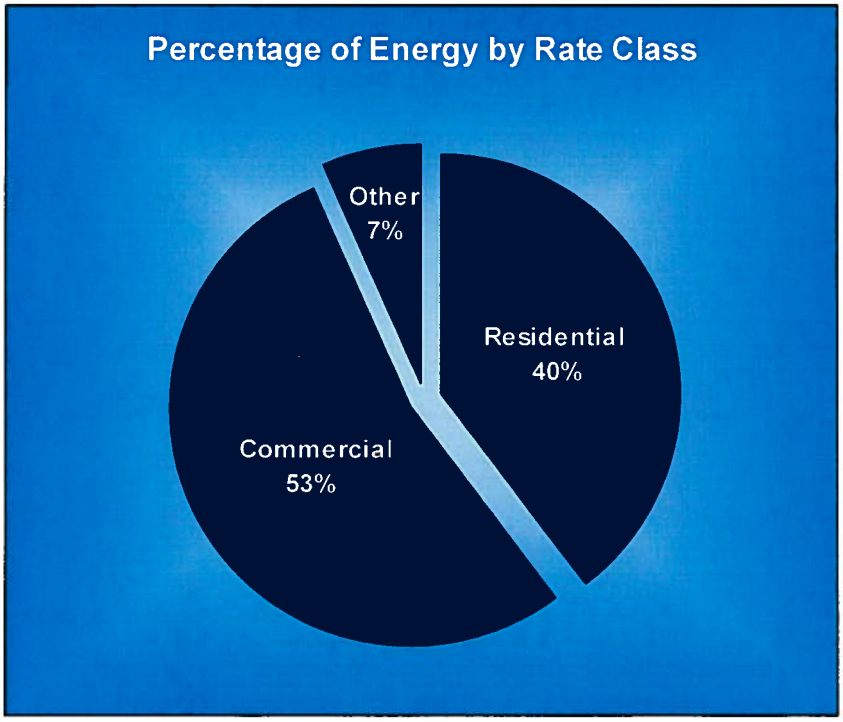
## System Profile

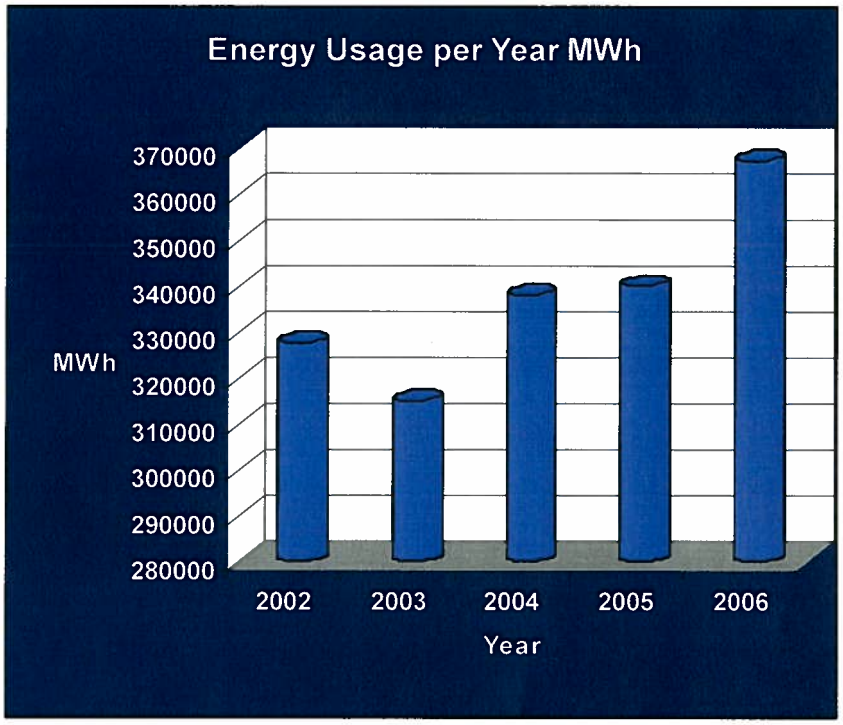
The following charts and graphs serve to illustrate the size and type of loads served, as well as the system profiles which dictate power supply options and demand side opportunities. These percentages are as of year 2006.

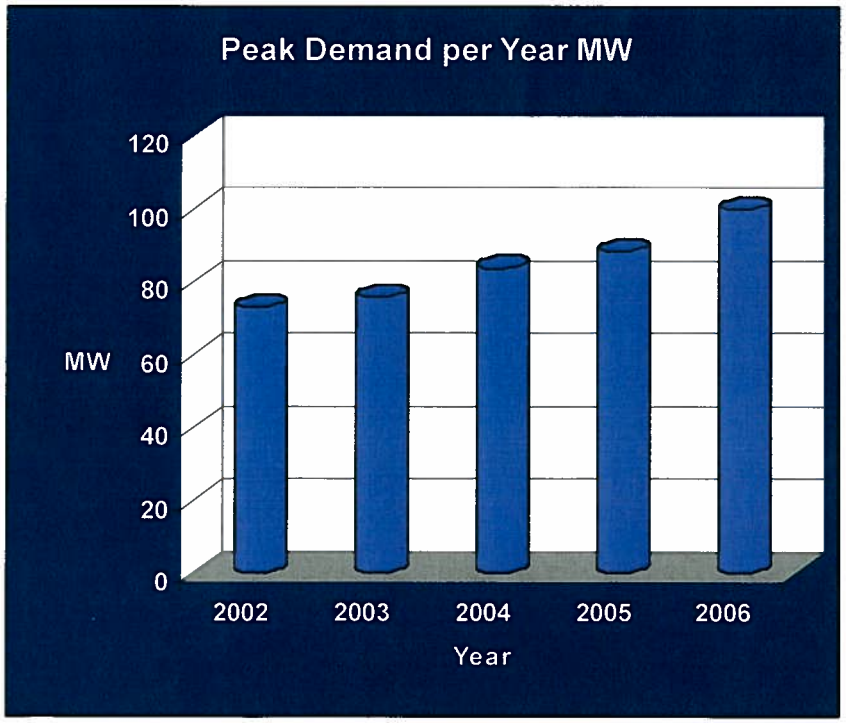


**Economic Development and Load Growth**

The number of meters in our system has doubled over the last ten years. In 1996 we served 6,312 meters at the close of 2006, we were serving 12,422 meters. Loads have risen in proportion to the number of new meters being added.



**Rate Structure**

Since 1984 the District has employed a rate schedule designed to reward low energy usage for residential customers and high load factor for industrial customers. It is likely that these features will be retained for the duration of this IRP though the rates may change.

Rate Schedule Effective November 1, 2004

**Residential**

| | |
|---|---|
| Customer Charge | $13.20 per Month |
| Energy Charge | |
| First 500 kWh | $ 0.065 per kWh |
| Next 1500 kWh | $ 0.078 per kWh |
| Over 2000 kWh | $ 0.097 per kWh |

**Irrigation**

| | |
|---|---|
| Customer Charge | $16.50 per Month |
| Demand Charge | |
| All kW | $7.47 per kW |
| Energy Charge | |
| All kWh | $ 0.069 per kWh |

**Small General Service**

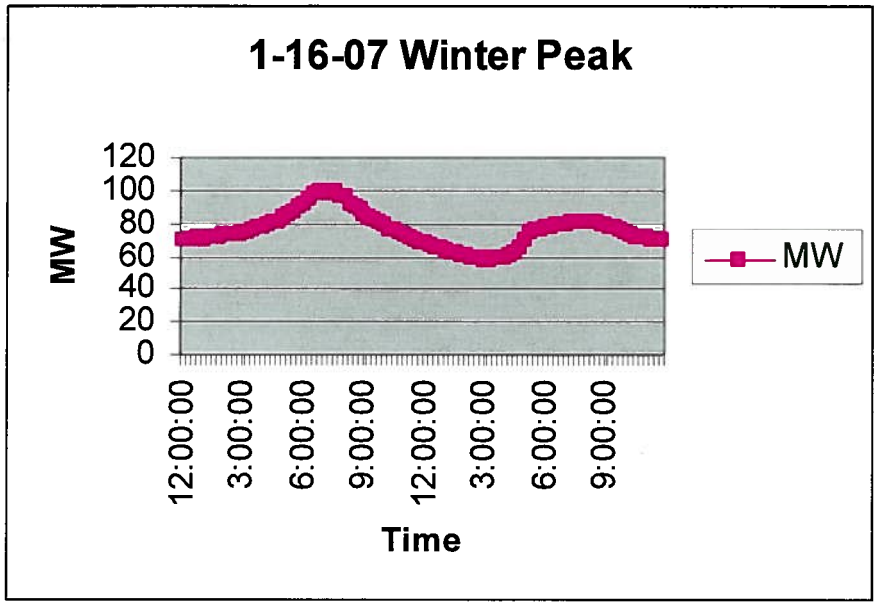
| | |
|---|---|
| Customer Charge | $16.50 per Month |
| Energy Charge | |
| First 1000 kWh | $ 0.087 per kWh |
| Next 1000 kWh | $ 0.094 per kWh |
| Over 2000 kWh | $ 0.101 per kWh |

**Irrigation**

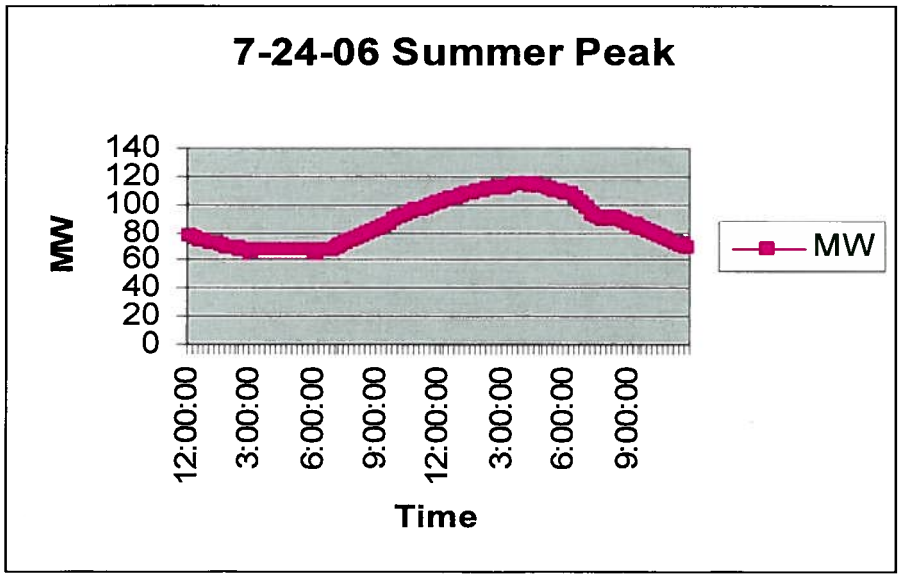
| | |
|---|---|
| Customer Charge | $22.00 per Month |
| Demand Charge | |
| All kW | $ 8.62 per kW |
| Energy Charge | |
| All kWh | $ 0.063 per kWh |

**System Peak**

Due to our geographic location we experience significant summer and winter peaks. These graphs show the District's primary meter readings at Tortoise substation our primary delivery point, during the winter and summer peak. If you compare total megawatt hour usage we would be considered a summer peaking system. These load curves follow closely a typical residential meter for these times of year. The winter curve demonstrates that the typical residential customer rises, prepares, and then leaves the home in the morning. The day slowly warms until residents return home in the evening and then retire.




Similarly in the summer, loads increase in the morning with preparations to depart, but in contrast to the winter curve, loads continue to rise as the temperature rises, finally dropping as the sun sets. This curve clearly illustrates the effect of the extreme temperatures in this region by almost doubling the demand on the system on a hot day.



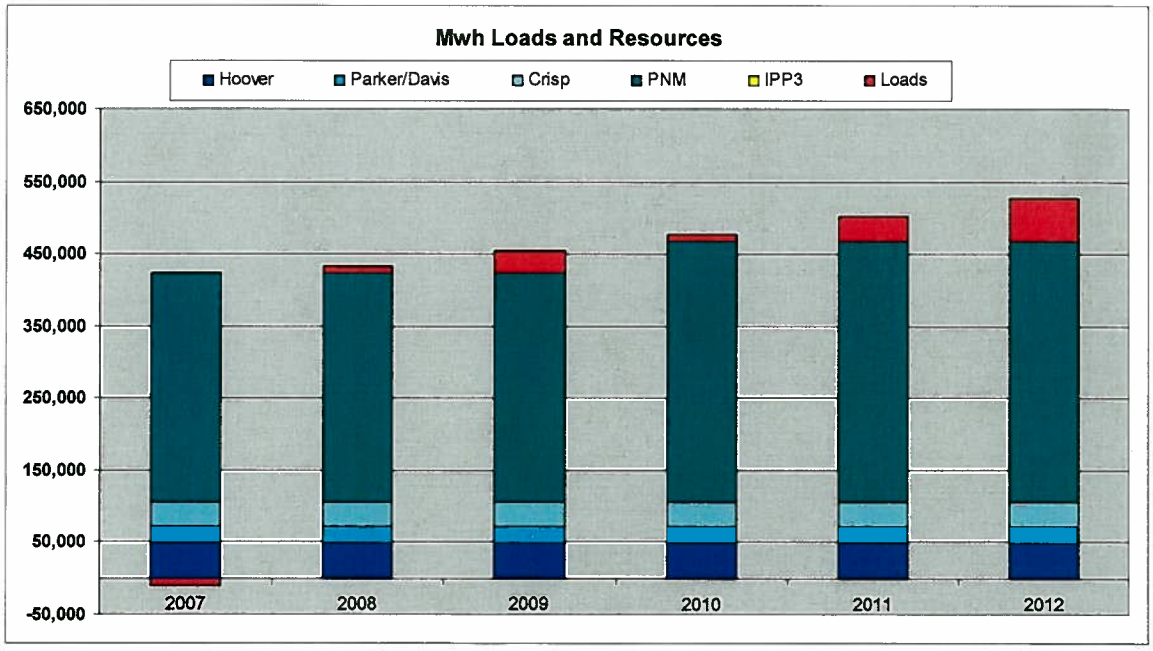
## Load Forecasting

Overton Power District #5 is currently conducting a Load Study and Long Range Planning Study. Based on these two studies the District will formulate load forecasts for the next ten years and work plans necessary to meet these projected loads.

A conservative growth rate over the next five years would be 5% annually and an aggressive growth would be 10% annually.

Overton Power District is dependant on power providers for both transmission and generation though we are continually evaluating this for cost effectiveness and reliability. We currently utilize long term power contracts including Public Service Company of New Mexico. Supplemental power is provided by an open ended agreement with Nevada Power / Sierra Pacific.

The following graph illustrates the District's anticipated load growth at 7% annually over the current and following five years. Additionally, this graph illustrates the District's reliance on Public Service Company of New Mexico.




## Power Supply

We are currently investigating alternate suppliers including Intermountain Power Project #3 located in central Utah. Construction of a 25MVA natural gas generating facility is also being considered. There is also a possibility that a major high voltage transmission project might be constructed from central Nevada and / or central Utah to southern Nevada. This would also provide favorable conditions for short term firm power contracts and greatly increasing reliability.

## Demand Side Planning

Recently the District implemented a net-metering policy to encourage our customers that would like to install the many small electric generator products that are entering the market. Most of the District's efforts of conservation are internal to the District and are implemented on a policy level.

## Action Plan

Explore policy and procedures to determine implementation feasibility. Currently the District is exploring the feasibility of installation of a 25MW gas turbine generator. Though not renewable it has considerably less harmful emissions than coal generation. The District is also participating on a panel to consider feasibility and implementation of green energy resources. A kingpin in this exploration of green energy resources is the conducting of a public survey to determine the amount of public support for such efforts. The District is also encouraging the City of Mesquite to adopt more efficient building standards.

## Power System Efficiency Criteria

The reduction of both peak demand and energy usage is important to the District. The District will continue to evaluate and implement new policies and procedures that encourage conservation. The District seeks programs that adhere to four principles.
1) Programs should result in a reduction in energy usage.
2) Load shifting programs must improve system load factor.
3) Demand side program life cycle costs must compete with supply side resources.
4) Rate class cross-subsidization will not be allowed.

Additional programs that might be considered are; high efficiency heat pump rebates, commercial re-lamping, window stripping and replacement.

The District strives to maintain a low loss system. One of the keys to accomplish this is to the ordering of low impedance transformers. All new single phase pad mount transformer are specified 3% impedance or less. The District is also implementing power factor correction that should increase system wide efficiency. The District is preparing system modeling required to optimize power factor correction schemes.

**Time Line of Plan 2007 to 2012**

2008 Integrated Resource Plan Annual Report to include:
- -Results of Long Range Planning Study
- -Result of Public Green Power Survey
- -Results of City of Mesquite Collaborations
- -Results of Gas Generator Study
- -Calculations of the Energy Savings for power factor correction
- -Calculation of Energy Savings from building standards raised
- -Calculation of Energy Supplied from Green Power

2009 Integrated Resource Plan Annual Report to include:
- -Progress on implementation of Long Range Planning Study
- -Progress of power factor correction scheme
- -Green Power Implementation Plan, Goals, Costs

2010 Integrated Resource Plan Annual Report to include:
- -Progress on implementation of Long Range Planning Study
- -Progress of power factor correction scheme
- -Progress of Green Power Plan

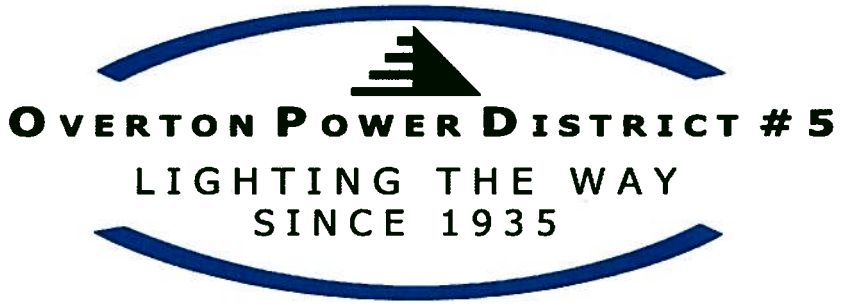
2011 Integrated Resource Plan Annual Report to include:
- -Progress on implementation of Long Range Planning Study
- -Progress of power factor correction scheme
- -Progress of Green Power Plan

2012 Integrated Resource Plan Annual Report to include:
- -Progress on implementation of Long Range Planning Study
- -Progress of power factor correction scheme
- -Calculations of the Energy Savings for power factor correction
- -Calculation of Energy Savings from building standards being raised
- -Calculation of Energy Supplied from Green Power

**Environmental Considerations**

Due largely to economic forces, including scarcity of power supply, costs continue to rise. In view of this and the increasing energy demand it is becoming obvious that the alternative energy sources and conservation must be implemented. As energy costs continue to rise, conservation and expensive alternative technology will become more and more competitive.

This area has experienced such rapid growth that a large portion of our residential load is connected to these new and thus more efficient homes. New appliances and product materials used in these homes produce a considerable energy savings.




P.O. Box 395
Overton, Nevada 89040

Appendix A

Desert Valley Times
FREE
Celebrating the Virgin Valley
www.dvmv.com



# 3 MGD+ 1, Mesquite F

CLIFF JENKINS
Secretary/treasurer
Don Carlos Jewelers Men's League

The second half of the season is now in the books with .3MGD + 1 taking it. It will bowl Mesquite Ford, first half champion, Wednesday night for the overall championship.

## Overton Power District #5

### Public Notice

Integrated Resource Plan will be present for public comment on April 17th at the Overton Power District, Mesquite Office at 1:00pm and again at Overton Power District, Overton office on the 18th at 1:00pm. Interested parties should come to the front desk and ask for Layne.

Moapa Valley
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## Overton Power District No. 5

Integrated Resource Plan will be presented for public comment on April 17th, at the Overton Power District, Mesquite Office at 1:00 p.m. and again at the Overton Power District, Overton Office on the 18th at 1:00 p.m. Interested parties should come to the front desk and ask for Layne.