

# **IID's geothermal parcels present a lucrative potential**

**William Roller, Imperial Valley Press, 1-7-11**

A possible \$2 billion in annual revenue could be realized if land owned in part or wholly by Imperial Irrigation District proves to yield potential geothermal energy located there.

Tracts of land along the northeastern and southern shores as well as under the Salton Sea have been identified in a study known as the Summit Blue report, Carl Stills, IID energy manager of the geothermal energy resources planning section, said.

Stills pointed out the potential energy bonanza at IID's regular meeting Tuesday, yet he added a caveat.

"Having potential is no guarantee of a resource," Stills said. "At some point you must sink a bit to see what you actually have."

A geothermal energy resource is a hot brine taken out of the earth from a super saline reservoir comprised of liquefied minerals such as manganese, zinc, lithium, silica and rubidium, Stills noted.

The report cited a capacity of nearly 2,500 megawatts in Imperial County. But only if all 2,500 megawatts resources are located will the potential come to pass. But that could provide 5,200 jobs sustained over 20 years if full capacity proves out, Stills said.

Geothermal is basically the earth's ability to use the planet's own heat to produce energy, Stills said. But the nice thing about that is once a developer has a plant in place after locating a resource there is no need to replenish those resources as with fossil fuels, he added.

"With natural gas you have to continually go to the marketplace and buy gas," Stills said.

With geothermal once a developer finds resources, he gets to utilize it and then regenerate it back to the earth so it continually replenishes his reservoir without losing heat, Stills noted. Most resources prove out to a minimum of 30 years.

IID has 617 megawatts of existing geothermal energy that is sold to various contracts around Southern California, Stills said. These contracts are on partially or wholly owned by IID in conjunction with development partners. A 50-megawatt plant generates \$40 million to \$50 million in revenue annually. If all the 2,500-megawatt potential is exploited that could mean 50 50-megawatt plants. By comparison, the agriculture industry generates about \$1.5 billion annually.

IID is now pursuing several contracts. The first is in partnership with Southern California Public Power Authority and Los Angeles Department of Power and Water. The second is with RAM Power and GTherm as the developers. Three other contracts are also waiting approval with the first three likely completed by the end of the spring. Once that is completed, land is leased and they negotiate the power purchase agreement so construction can begin.

"Geothermal is environmentally friendly," Stills said. "As we learn more about geothermal, our strategy may change but it all comes down to mitigating the risk and whether we can do it at cost. But we're hoping we can do some good for the people of the Valley."