

# Geysers Steamline

GEYSERS GEOTHERMAL ASSOCIATION

VOLUME XXII, NUMBER 1

Spring 2006



Calpine Power Plant

## Calpine Corporation Closes \$2 Billion DIP Financing

Calpine Corporation has received funding for its \$2 billion debtor-in-possession credit facility (DIP Facility). The new credit facility will help fund the company's operations as it works toward emerging from its Chapter 11 restructuring.

Deutsche Bank and Credit Suisse were co-lead arrangers for the new DIP Facility, which consists of:

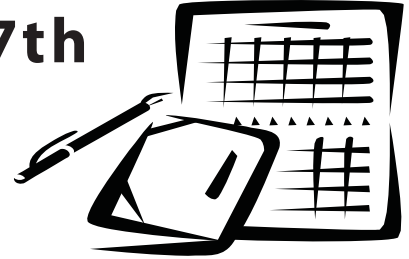
- \$1 billion Revolving Credit Facility, priced at LIBOR plus 225 basis points;
- \$400 million First-Priority Term Loan, priced at LIBOR plus 225 basis points;
- \$600 million Second-Priority Term Loan, priced at LIBOR plus 400 basis points.

The DIP Facility is secured by liens on all of the unencumbered assets of the Calpine debtors and junior liens on all of their encumbered assets, and will remain in place until the earlier of an effective Plan of Reorganization or December 20, 2007.

"Calpine is making good progress toward

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## GGA Dinner March 7th



Reserve your spot today for the GGA Annual Membership Spring

meeting on Tuesday, March 7<sup>th</sup> at the Los Robles Lodge behind Coddington in Santa Rosa. The Buffet includes Salmon and London Broil and costs \$32.00 per person.

Keynote speakers Harry Bain, Ted Wilmsen and Ken Williamson will discuss "The Legacy of Unocal in Geothermal and at The Geysers".

No-host bar begins at 6:00 pm.

Contact CharleneWardlow, Calpine, at (707) 431-6133 or e-mail at [charlene@calpine.com](mailto:charlene@calpine.com).

## Bottle Rock Project ranks #1 in CEC Awards

The California Energy Commission (CEC) announced the Notice of Proposed Awards for the Geothermal Program Solicitation. Of the nine Development proposals three were awarded Geothermal Resources Development Account (GRDA) grants totaling \$2,916,098. The Bottle Rock Power Plant Corporation's project "Increasing Steam Production from an Existing Well using Near-Horizontal Drilling Technology" was ranked number one with an average score of 95. The GRDA funding for this project is \$880,237. The Fort Bidwell Indian Community

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## *President's Message*

By Ron Suess



### *Constant Change*

The one constant in life is that change is inevitable. And change has struck at The Geysers again! Within the last few months, significant changes are emerging that have had and will have impact upon the geothermal community at The Geysers. Past changes have already steeled The Geysers geothermal community to endure and adapt to any change and still continue to succeed in providing a reliable source of renewable energy for the benefit of our customers and for the welfare of California. Now change has manifested itself again.

One big change that has just occurred is the Chapter 11 bankruptcy blanket that now enshrouds Calpine. Operation of Calpine's Geysers assets are critical to Calpine's successful emergence from Chapter 11 and essential to the industry's wellbeing at The Geysers. The impact of this action has already had an adverse effect with the announced elimination of thirty jobs at Calpine. Other tough measures may prove necessary for Calpine's long term success. I have confidence that Calpine's neighbors at The Geysers will do all that they can to work with and support Calpine during this season of challenge and change.

Another change created a sense of melancholy and yet a sense of satisfaction on a job well done when Unocal Geothermal recently closed its office forever. The wake held at the Santa Rosa office provided an opportunity to reminisce, re-establish past acquaintances, and feel the tinge of sadness of the significance of the occasion. Yet, it was proper to experience the gratification of a job well done. At the same

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### **CEC GRDA Grants**

and Mammoth Pacific LP projects were funded \$1,139,814 and \$896,047. Additionally a Planning project for the Town of Mammoth Lakes was awarded \$191,176 and a Mitigation project for Imageair, Inc was awarded \$292,726.

In July 2005, the CEC Geothermal Program released a Program Opportunity Notice to announce a new solicitation for geothermal projects. Up to \$3.9 million was available from the Geothermal Resources Development Account (GRDA) to fund GRDA projects. Based on the current GRDA fund condition statement, it is now estimated that up to \$3.4 million is available to fund projects, as grants or loans that relate to geothermal research, development and demonstration, geothermal planning, or environmental mitigation.

In accordance with the Geothermal Program 2005 Application Manual for the Geothermal Program Solicitation, each final application was screened for completeness, and reviewed by CEC staff and external technical consultants. Then, the CEC's Technical Advisory Committee (TAC) reviewed, evaluated, and scored completed applications submitted in response to the solicitation using the criteria prescribed in Program regulations. Based on the TAC's evaluation scores and suggested conditions on funding, the CEC's Research, Development and Demonstration Committee has made its proposed funding recommendations for this Program solicitation.

The full Commission considered and approved the RD&D Committee's recommendations during a publicly noticed Business Meeting at the CEC office in Sacramento on February 15, 2006 for GRDA awards.

# “Remembrances of Times Past at the Unocal Farewell Party” by Dorothy Beebee

It seemed like a high school reunion one Unocal “ex-pat” exclaimed.... friends from past Unocal offices pouring through the doors on Friday, January 13th, some we had not seen for over 15 years, hugs and exclamations, all of us with silver in our hair, some without any (silver or hair), but smiles of genuine enthusiasm and affection at seeing old friends again - “just like the old days” was a comment I heard so often.... Ken Williamson sure put together a grand farewell for the Santa Rosa Unocal office, .... Folks just stood there talking in the halls, ignoring the bare bookcases, and stacked storage boxes, exchanging news and remembrances, nibbling at a wonderful catered repast and viewing a long slide show loop to background music of the jungle birds pierced with shrieks of laughter over some remembered adventure or style of dress or hair.

There were photos of the tiny staff at the first Union geothermal office next to the Post Office in Coddington in 1977, to the growing company that moved over to Range Avenue (ah, those were the good ol’ days! ... before the first layoffs in ’86 and we all started looking over our shoulders....) I was just a newcomer, having only joined Union Geothermal in 1985. Folks and legends that I never knew had come and gone. Steve Lipman was just moving up and on, and Joel Robinson arriving to replace him .... Remember how every

one in Santa Rosa City Planning laughed off the idea of a wastewater pipeline up to The Geysers? There were slides of the engineers spearheading geothermal development in the Philippines, geophysicists in Java and Turkey, exploration geologists trudging through the incredible leech filled jungles in Sumatra and gingerly walking bamboo footbridges across raging torrents, or clambering up oxygen-starved volcanic peaks in Chile and Bolivia, all in the search for Steam, the elusive marketable steam ....

And of course there were the photos of the company picnics, the Christmas parties, the Halloween costumes, back when we women mostly all wore dresses and nylons to work, and geologists always kept a tie in their desk drawers in case the LA bosses came calling...

Photos of the move up to Fountaingrove and to Unocal

Place into that behemoth building on the hill, built to withstand an eight point magnitude earthquake, but not the diminishing steam at the Geysers.... Downsizing - (what a distasteful word), moving us back down the hill to the flatlands of N. Dutton Ave. Then came the sale of The Geysers, the staff disappearing daily, but somehow Ken managed to convince Houston to keep a Santa Rosa office open to support the overseas geothermal projects - until the sale of Unocal to Chevron finally forced the final

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# GGA BUSINESS DIRECTORY

## Support the businesses that support the GGA

The following businesses are Corporate Members who are the backbone of the GGA.  
Keep our organization strong by calling on them when you need the following services:

### CONSULTANTS & ENGINEERS

#### Blaydes and Assoc.

• Paula E. Blaydes  
1275 Fourth Street,  
#214  
Santa Rosa, CA 95404

#### Carlenzoli and Associates

• Leroy E. Carlenzoli  
325 Tesconi Circle  
Santa Rosa, CA 95401  
707 542-6465

#### Carlile•Macy

• Bruce Jarvis  
15 Third Street  
Santa Rosa CA 95401  
707 542-6451

#### Data Instincts

• Mark Millan  
9481 Vinecrest Road  
Windsor CA 95492  
707 836-0300

#### EGS, Inc

• Paul Brophy  
725 Farmers Lane,  
Suite 8  
Santa Rosa CA 95405

#### Kleinfelder

• Steve Korbay  
2240 Northpoint Pkwy  
Santa Rosa CA 95407  
707 571-1883

#### MHA Environmental Consulting

• Laurie McClenahan  
4 W. Fourth Ave, Ste 303  
San Mateo CA 94402  
650 373-1200

#### Nick Voegtly Safety & Loss Control

• Nick Voegtly  
11725 Loch Lomond Rd  
Middletown CA 95461  
707 349-7233

#### Ronald E. Suess Company (RES Co.)

• Ronald E. Suess  
1275 Fourth St., No. 105  
Santa Rosa, CA 95404  
707 541-0976

#### Roger Proett Company

• Roger Proett  
935 Baird Road  
Santa Rosa, CA 95409  
707 539-7238

#### Tecton Geologic, Inc.

• Alan Frazer  
5610 Skylane  
Blvd., Suite A  
Santa Rosa, CA 95403  
707 571-1700

#### ThermaSource, Inc

• Louis Capuano  
P.O. Box 1236  
Santa Rosa, CA 95406  
707 523-2960

#### Thomason Mechanical Corp.

• Bruce Perry  
2150 E. 37th Street  
Vernon, CA 90058  
310 639-3523

#### Trident Environmental & Engineering

• Joe Martin  
110 L Street  
Antioch, CA 94509  
925 706-6931

#### Two Phase Engineering

• Doug Jung  
3209 Franz Valley Road  
Santa Rosa, CA 95405  
707 523-4585

#### Veizades & Assoc. Inc.

• Harry Veizades  
One Hallidie Plaza, Ste  
838  
San Francisco CA 94102

### DRILLING SERVICES

#### Bill's Casing Tong Service

• Neil O'Shaughnessy  
P.O. Box 1723  
Marysville, CA 95901  
530 743-5424

#### Boart Longyear Co.

• Steve Barnwell  
2745 W. California Ave.  
Salt Lake City, UT  
84104

#### M-I Drilling Fluids

• Boyd Green  
P. O. Box 1369  
Cobb CA, 95426  
707 928-4676

#### Obie's Drill Pipe Service, Inc.

• Obie Sanders  
P.O. Box 647  
Middletown, CA 95461

#### Weatherford

• Rick Benton  
1000 Church Road  
Rio Vista CA 94571  
707 374-6493

### EQUIPMENT & MATERIAL SUPPLIERS

#### C-K Supply, Inc.

• Gene Kirkendall  
P.O. Box 550  
Lakeport, CA 95453  
707 263-7700

#### Jackson Equipment Co

• Wayne Jackson  
P.O. Box 669  
Middletown, CA 95461  
707 987-3660

#### Jim Jonas, Inc.

• Jim Jonas  
P.O. Box 277  
Lower Lake, CA 95457  
707 994-6535

#### Mahl Tool Tek, Inc

• Dan Mahl  
P.O. Box 2520  
Mill Valley CA 94941  
414 388-7494

#### Northern Energy

• James Gunnink  
285 Kinley Drive  
Healdsburg, CA 95448  
707 433-5581

#### Petrochem Inc.

• Brian Benson  
110 Corporate Place  
Vallejo CA 94590  
707 644-6968

#### Sierra Crane Company

• Doug Burgard  
2530 Burgard Lane  
Auburn, CA 95603  
916 663-3794

#### Rain for Rent

• Zane Smith  
390 W. Kentucky Ave.  
Woodland CA 95695  
530 662-1024

### STEAM SUPPLIERS & POWER PLANT OPERATORS

#### Calpine Corporation

• Charlene Wardlow  
10350 Socrates Mine Rd  
Middletown, CA 95461  
707 431-6000

#### Northern California Power Agency

• Steve Eney  
P.O. Box 663  
Middletown, CA 95461  
707 987-4033

### SPECIAL SERVICES

#### A-1 Milmac

• Kevin Dunne  
460 Calbot Road  
San Francisco, CA  
94080

#### Action Sanitary, Inc.

• Jerry L. Campo  
P.O. Box 492  
Lower Lake, CA 95457  
707 994-5068

#### Alliance Cooling Products

123 West North Street  
Healdsburg, CA 95448  
707 431-0108

#### Babin & Seeger, LLP

• Martin L. Seeger IV  
3550 Round Barn Blvd  
Santa Rosa, CA 95403  
707 526-7370

#### Geothermal Resources Council

• Ted J. Clutter  
2001 Second St., Suite  
5  
Davis, CA 95616

#### Morgan Stanley

• Leon Ballew  
3558 Round Barn Blvd,  
Suite 201  
Santa Rosa, CA 95403  
707 524-1000

#### Northern Industrial Construction

• Frank Karp  
P.O. Box 1352  
Kelseyville CA 95451  
707 279-0381

#### Turbocare

• Dave Stenson  
184 Malbert Street  
Perris, CA 92570  
800 659-5908

#### Univar

• Dave Wiley  
2256 Junction Avenue  
San Jose, CA 95131  
800 659-5908

#### Valley Engineers, Inc.

• Bruno Dietl  
P.O. Box 12227  
Fresno CA 93777  
559 237-9173

**ACTION ALERT**

# **DOE Geothermal Program Budget**

Dear GGA Member:

**The GGA, GRC, Geothermal Energy Association (GEA), and the U.S. Geothermal community need your help to thwart the Administration's plan to terminate the U.S. Department of Energy (DOE) Geothermal Program in Fiscal Year 2007. With the GEA and the GRC, the GGA urges you to contact your Senators and Representatives, to urge their opposition to this plan.**

A SAMPLE LETTER IS PROVIDED BELOW. PLEASE MODIFY THE LETTER TO YOUR SATISFACTION, THEN FAX IT ON YOUR LETTERHEAD AS SOON AS YOU CAN.

To find your senators' contact information, go to: [http://www.senate.gov/general/contact\\_information/senators\\_cfm.cfm](http://www.senate.gov/general/contact_information/senators_cfm.cfm)

To find your representatives' contact information, go to: <http://www.House.Gov/>

February 27, 2006

Dear .....

I urge you to oppose the Administration plan to terminate the U.S. Department of Energy (DOE) Geothermal Program as of Fiscal Year 2007.

To help the Nation secure its energy future, DOE geothermal research must continue. I support a continued geothermal research program to address our near-term need to expand domestic energy production, and our long-term need to find technological breakthroughs that will revolutionize geothermal power production.

Near-term research needs include improving our limited and outdated knowledge of the country's geothermal resource base, and helping geothermal developers explore for new, untapped resources. The geothermal industry also needs help with drilling technologies and power cycle techniques to help raise efficiencies and reduce cost. And for the long-term, research must continue to unlock the vast potential of deeper and more complex geothermal systems across the West. I also support regular reviews of the DOE Geothermal Program to ensure that its research efforts produce real results.

To help achieve energy independence, the Nation needs development of clean, sustainable geothermal resources. To do that, we need DOE's technological and financial support of cutting-edge geothermal energy research. Please do not allow the Administration to kill the DOE Geothermal Program in its Fiscal Year 2007 budget.

Sincerely,

## **Geysers Geothermal Association Financial Report - 2005**

### REVENUES

Memberships		
Corporate	\$5,900	
Individual	<u>\$1,545</u>	\$7,445
Functions		
Dinners/BBQ		\$4,692
TOTAL REVENUES		<u>\$12,137</u>

### EXPENSES

Printing Services		
Membership Directory	\$0	
Newsletter Printing	\$626	
Newsletter Production	<u>\$780</u>	\$1,406
Functions		
Dinners/BBQ		\$4,354
Community Service		
Scholarships	\$2,000	
Donations	<u>\$0</u>	\$2,000
Business Services		
PO Box, Postage	\$307	
Office Supplies	\$ 60	
Web Site Fees & Maint.	<u>\$540</u>	\$907
Other		\$ 78.69
Taxes (2004 & 2005)		\$1,621
TOTAL EXPENSES		<u>\$10,367</u>

**INCOME/ (LOSS)** \$1,770

GGA Account Balance  
as of 12/31/06 \$8,469.94

*~Ralph Aviles, GGA Finance Officer*

## **GGA Mission Statement**

*The GGA is dedicated to dealing with issues related to the geothermal industry at The Geysers and serving as an educational and exchange forum for our members. We also strive to promote public understanding of the contributions our industry makes to Lake and Sonoma Counties and the State through working committees set up to address health, safety, legislative and environmental issues.*

**Attention GGA Members:**

## **Fred Haley Memorial Scholarship**

The Geysers Geothermal Association is pleased to announce the availability of the Fred Haley Memorial Scholarship for \$1,000 that will be awarded to one high school senior whose parent(s) are directly involved and spend a majority of their working time in Geysers Geothermal related work. The scholarship program is one of the ways the Geysers Geothermal Association endeavors to be of service to the geothermal community.

Selection of recipients will be based upon the student's academic record, student activities, and citizenship. Please note that there is no formal application form for applying for this scholarship.

Your application must include:

1. A current transcript through seven semesters of high school.
2. A listing of student activities including offices held.
3. A listing and brief elaboration of activities away from school including work experience, volunteer programs, etc. (Make sure home address is also included).
4. A statement of verification by the applicant's school counselor.
5. A one-page statement (essay) by the applicant.
6. A brief statement by the parent(s) describing their work relationship to The Geysers Geothermal Field.

Applications must be postmarked by April 14, 2006. Successful recipients will be notified by May 12, 2006.

Applications or questions should be addressed to:

Scholarship Committee  
Geysers Geothermal Association  
P.O. Box 6501  
Santa Rosa, California 95406

## **Anderson Springs Group Gets Funding**

At the Lakeport Board of Supervisors February meeting three groups Calpine, NCPA and the county have committed to fund the Anderson Springs Geothermal Impact Mitigation Committee's approved projects.



Anderson Springs formed a geothermal impact mitigation committee last year as residents say supposed injection-induced earthquakes have caused damage to community and private property in Anderson Springs. Reportedly floors have buckled, windows

have broken and the creekside pool has cracked.

Calpine, through its Community Investment Funds, has committed \$35,000 annually to both Anderson Springs and the Cobb communities. NCPA has committed \$30,000 and, as Lake County has also made their commitment.

NCPA will use its funds to mitigate damage to private property that was directly caused by earthquakes from geothermal production. It already has approved replacing windows and floors in several homes.

Calpine wants their CIF monies used for community benefit, as does the county, so they are sharing the cost of repairing the creekside pool, with Calpine pitching in \$40,000 and the county \$38,700. Other projects also have been approved.

Joan Clay, chair of the ASGIMC, said she's grateful that all three groups Calpine, NCPA and the county have stepped up to help rebuild their community.

*~ resource Record-Bee 2/14/06 article*

# Calpine Visitor Center Closes

The sign on the door of Calpine's Visitor Center yesterday (*February 2*) was one that many Middletown and Lake County groups had hoped they would never see an announcement that the center has been closed.

In addition to closing the 6,500 square foot Geothermal Visitor Center which the company touted as "a model of energy efficient design [that Calpine built] to show our concern for the environment," and has since hosted many local and area-wide meetings and events pink slips were handed out at the center and up at The Geysers.

According to a report Wednesday (*February 1*) from Calpine, the company is "reducing activities and curtailing expenditures in certain noncore

areas and business units," which has resulted in approximately 300 layoffs companywide.

Twenty to 25 people locally, between the Visitor Center and The Geysers, are reported to have been laid off as of Wednesday (*February 1*).

What will happen to the visitor center along with the artifacts, photos, records and displays it contains remains to be seen. It also remains to be seen who in the future will own the geothermal operations at The Geysers, which is a large part of the security used by Calpine to receive \$2 billion to fund their reorganization.

"The operations will continue," said Robertson.

*~excerpt from Record-Bee 2/03/06 article  
by Terre Logsdon*

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## **Calpine**

emerging from Chapter 11 as a profitable and competitive power company," said Calpine Chief Executive Officer Robert P. May. "This new \$2 billion credit facility provides Calpine with the needed liquidity to rebuild and strengthen our company, and assure customers that they can continue to rely on Calpine for clean, reliable electricity."

Calpine and many of its subsidiaries filed to reorganize under Chapter 11 on December 20, 2005, in the U.S. Bankruptcy Court for the Southern District of New York. More information on Calpine's restructuring is also available on the company's web site, [www.calpine.com](http://www.calpine.com).

A major power company, Calpine Corporation supplies customers and communities with electricity from clean, efficient, natural gas-fired and geothermal power plants. Calpine owns, leases and operates integrated systems of plants in 21 U.S. states and in three Canadian provinces. Calpine was founded in 1984.

*~Calpine News Release 2/24/06*

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## **Unocal Farewell**

closing of the doors and a significant chapter in geothermal history...

It was amazing how many 35mm slides we scanned in preparation for this slide show of memorabilia, and Ken had a story for every one of them! (Now I wish I'd had kept a tape recorder going next to the light table!) It was fascinating how at the farewell party we all watched the slides loop over and over again, hungry for remembering a bit of the past, a glimpse of old work mates, forgotten forays and projects and, yet everyone is living so totally in the present.... but now without Unocal. Thanks Ken, it was a grand farewell to the final chapter of Unocal's immense geothermal legacy!

Ken is donating the Unocal photo albums to the GGA archives, but they will be on view for all to see again at the upcoming GGA membership dinner on March 7<sup>th</sup>. Also, I bet that some of those slides and stories are going to show up in his presentation on that night... See you there!!!

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## **GGA President Note:**

that this marked the end of an era. Unocal's presence in the geothermal industry was no more.

Nevertheless, Unocal's legacy has been indelibly imprinted upon The Geysers. The forty years legacy that Unocal Geothermal (nee Union Oil) has left will be felt and visible at The Geysers for a long, long time. Thank you, Unocal Geothermal!

It seems entirely appropriate to celebrate Unocal's Geysers legacy at the GGA's Spring Membership Dinner on 07 March 2006 at the Los Robles. A trio of former Unocal Geothermal officials will recount Unocal's geothermal legacy. I'm certain this will be

done in an entertaining fashion and should make for an evening to remember. So make your reservation right away and pass along an invitation to others outside of the GGA membership to attend so they can enjoy a fine dinner and an exciting review of an historical Geysers legacy.

It is changes like these that steel the will and the character to flex and manage the elements of change when confronted by it. We at The Geysers will do exactly that, namely, endure and prosper and build upon the legacy left by those that have helped build our solid foundation at The Geysers.

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Kathy Eneby

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