GB9B

Office of the President

TO MEMBERS OF THE COMMITTEE ON GROUNDS AND BUILDINGS:

ACTION ITEM – CONSENT

For Meeting of January 18, 2012

APPROVAL OF INTERIM FINANCING, SOLAR ENERGY RESEARCH CENTER, BERKELEY CAMPUS AND LAWRENCE BERKELEY NATIONAL LABORATORY

EXECUTIVE SUMMARY

The proposed project would construct a 39,000 GSF laboratory and office building at the Lawrence Berkeley National Laboratory (LBNL) to support solar energy research. The Solar Energy Research Center (SERC) would house research devoted to nanoscale photovoltaic and solar-to-fuel energy systems. SERC is located in the center of the LBNL. The $54.4 million dollar project is proposed to be funded from State lease revenue bonds ($30 million), external financing ($14.4 million), and grants ($10 million).

The Solar Energy Research Center was formerly named Helios Energy Research Center, East Site.

The Lawrence Berkeley National Laboratory (LBNL) and the Berkeley campus request approval for interim financing of $30 million plus related interest expense and financing costs in place of future state Lease Revenue Bonds that is expected to be re-appropriated in the 2012-13 state budget. The interim financing is expected to be repaid by the future sale of the bonds by the State Lease Revenue Bonds.

The solar energy research programs at LBNL received a significant boost this year when the lab was successful in bidding for the DOE's single national Solar to Fuel Energy Innovation Hub. As part of the successful bid for this $25 million per year project, Caltech committed to renovate an existing building on its campus, while the lab committed to accommodating this new program in the SERC building when it is completed.

Previous Actions

November 2006: Approval of 2007-2008 State Budget for Capital Improvements including Helios Energy Research Facility**.**

March 2007: Approval of project budget ($159,400,000) for Helios Energy Research Facility including the Energy Biosciences Institute (EBI), with state lease revenue bonds ($70,000,000) external financing ($74,400,000) and interim financing ($15,000,000), a larger project than approved in November 2006 to house additional programs, including the EBI.

May 2008: Approval of project budget ($198,246,000) with state lease revenue bonds ($70,000,000), external financing ($113,246,000), interim financing ($5,000,000) and standby financing ($10,000,000); certification of environmental impact report and approval of design.

November 2008: Action under interim authority – EIR decertified and design approval rescinded.

September 2009: Amend previously approved Helios Energy Research Facility project to construct two separate facilities (west site and east site); reduction of external financing from $113,246,000 to $98,846,000**;** conversion of $14,400,000 from external financing to interim financing for gifts. Only further Actions related to the Helios Energy Research Center East Site (Solar Energy Research Center) are listed below.

January 2011: Certification of the Solar Energy Research Center (SERC) Environmental Impact Report; approval of design of the Solar Energy Research Center; approval to replace $14,400,000 of gifts with external financing.

Proposed Action

- Interim Financing of $30 million plus related interest expense and financing costs

Issues

- The $30 million in state Lease Revenue Bonds were a part of the Helios Energy Research facility appropriation in the 2007 State Budget Act. Because of technical issues with the split of the original $70 million in state Lease Revenue Bond funding in 2009, the $30 million for the project will need to be re-appropriated in the 2012-13 State budget delaying the availability of state funds until the bonds are sold. The delay in the funding, the need to re-appropriate the funding in the 2012-13 budget and the need to start construction of the project are the reasons for the request for University interim financing of the project.

- In addition to the advancement of the interim financing for state-funded portion of the project costs, the passage of a corresponding trailer bill for interest expense and financing costs associated with the financing is necessary. There presently is no mechanism by which the SPWB is authorized to reimburse interest expense for interest expense and financing costs by the University.

- The Laboratory has promised the Department of Energy (DOE) use of the future facility. This promise was a key factor in the increase of research funding from $5 million a year to $12 million a year. Renewal of this $12 million annual funding commitment occurs in 2014.

- Interim financing by the University would allow the project to commence construction in early 2012 and reach successful completion by the spring of 2014. An additional year delay in constructing the facility could severely impact the budget due to escalation and extended support cost. Additionally, due to funding agreements, there is exists the potential for the delay to cancel the project. If the facility is not completed by 2014, it would be detrimental to the research program and future DOE funding.

RECOMMENDATION

1. The President recommends to the Committee on Grounds and Building that the Regents:

   A. Authorize the President to obtain interim financing not to exceed $30,000,000 plus related interest expense and financing costs for the Solar Energy Research Center project in advance of expected state Lease Revenue Bond funds and subject to the following conditions:

      (1) The primary source of repayment of requested interim financing that includes the $30 million plus related interest expense and financing costs shall be from state Lease Revenue Bond proceeds and the alternate source of repayment shall be from available Lawrence Berkeley National Laboratory funds that will support either the interim financing or external finance issued by the Regents

      (2) Should the related trailer bill for interest expense and financing costs reimbursement not be passed by the state legislature, Lawrence Berkeley National Laboratory will consult with the Office of the President to begin immediate repayment of current interest expense and financing costs based on the construction amount drawn and interest expense and financing costs already capitalized

      (3) The interim financing is only authorized for a maximum period of up to 18 months after beneficial occupancy after which no further interest expense or financing costs shall be capitalized

      (4) The general credit of the Regents shall not be pledged.

      (5) Authorize the President to execute all documents necessary in connection with the above.

DESCRIPTION

The Lawrence Berkeley National Laboratory (LBNL) and the Berkeley campus request approval to provide interim financing for $30 million plus related interest expense and financing costs in advance of the expected re-appropriation of state lease revenue bonds that is expected to be repaid by the sale of State lease revenue bonds in the future. The January 2011 Regents items comprehensively describes the SERC facility, its expected use, and the budget.

In addition to the $30 million in State lease revenue bonds, SERC is financed through a $10 million grant from the State Public Utilities Commission and $14.4 million in external financing. A private gift of $14.4 million has been pledged as a fund functioning as an endowment (FFE). The FFE income would be used to defray the debt service on external financing. This pledge is contingent upon prompt commencement of construction and is at risk if construction is delayed further. The requested interim financing will allow construction to commence in 2012.

Background and Statement of Need

The Helios Energy Research Center was originally proposed in February 2007 as a single 88,000 ASF building, to be located in the hills east of UC Berkeley campus, at the southern edge of LBNL. The 2007 Budget Act included a $70 million appropriation of State lease revenue bonds for this joint project between LBNL and the Berkeley campus. In 2009, the Regents and the State of California approved splitting this project into separate facilities: Helios West, currently being constructed at the Northwest quadrant of the campus; and Helios East (SERC), to be constructed within the perimeter of LBNL. The proposal included a split of the $70 million in State lease revenue bonds; $40 million for Helios West and $30 million for Helios East. The State sold bonds for Helios West and that project is now under construction.

Delays in State Lease Revenue Bond Funding

Following the environmental review, site selection and design processes, the $30 million for the SERC project was to be included in an SPWB bond sale that was scheduled for University projects in November, 2011. In October 2011, the Department of Finance (DOF)- informed the University that SERC would not be included in the fall 2011 bond sale because it needed to be re-appropriated in the 2012-13 budget due to a technicality regarding the required bid by date.(1)

DOF has agreed that the $30 million of State lease revenue bonds will included in the Governor's budget to be re-appropriated in the State Budget for 2012-2013, subject to legislative approval. DOF has also proposed that the SPWB approve a Reimbursement Resolution at its January 2012 meeting. If approved, the Reimbursement Resolution will allow LBNL to bid and construct SERC in advance of the sale of state lease revenue bonds and passage of the re-appropriation in the 2012-13 budget. Separately the University is pursuing a legislative proposal to amend the government code to allow the reimbursement of interest expense and financing costs in addition to project costs.

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(1) Although the original project was split into two facilities, DOF and the University proceeded with the understanding that the mandated bid-by date of June 30, 2010 for both projects had been met with the initial bidding for Helios West project. State counsel subsequently concluded that bidding for the SERC project could not be considered as follow-on bid package and was required to meet the bid-by date independently. Therefore, with the expiration of the appropriation, the project had no active budget authority under which bonds could be sold.

The project has prequalified 160 trade contractors and is currently on hold awaiting the release to bid. The financial and reputational losses to the University of California and LBNL could be severe if the SERC construction schedule is delayed an additional year awaiting the bond sale. Potential financial and reputational losses include:

- $12 million in annual DOE research funding.
- $1 million in escalation and extended support costs.
- Reputational consequences with the DOE including negatively impacting the University's annual performance review by DOE. A negative review could impact UC's annual performance fee.
- Loss of future pledges from the associated private donor.

The delay also puts the project at risk of cancellation. Financial consequences of cancelling the project include:

- $8 million in spent costs.
- Loss of $10 million CPUC grant.
- Loss of $14.4 million private gift pledged as funds functioning as an endowment and contingent upon construction commencement.

Project Description

The approved project will construct a 39,000 GSF laboratory and office building to support solar energy research. The facility would house research devoted to nanoscale photovoltaic and solar-to-fuel energy systems. SERC is proposed to be located in the center of Lawrence Berkeley National Laboratory at the previous site of recently demolished Building 25A and Trailers 44, 44A and 44B.

CEQA Classification

The Environmental Impact Report (EIR) was certified by the Regents in January 2011. A challenge was filed in February 2011 by *Save Strawberry Canyon*, a non-profit organization. This petition was denied on November 4, 2011.

Financial Feasibility/Other Financial Terms

The campus and Lab would need to convert interim financing to long-term external financing a Regents external financing action in the event the state does not execute a state Lease Revenue Bond issuance to reimburse the interim financing.

In that circumstance, the source of repayment of the debt service and related requirements shall be from the annual payout from the gift established for this program and a Facility Occupancy Charge to the extent DOE or other LBNL-funded programs occupy the facility. The Facility Occupancy Charge will be based on Facilities Capital Cost of Money (FCCM) calculation and depreciation in accordance with Contract 31 Clause H.4a and Federal Acquisition Regulation (FAR) 31.205-36 and 31.205-11. LBNL will cover any shortfall with unrestricted funds, including available Fee and Royalty income.

*Debt Service Funding Plan (includes $30 million in external financing for state lease revenue bonds if project is not re-appropriated in 2012-13 budget)		
	Debt Service	Funding Plan
Annual Debt Service ($44.4 million)	$3,668,000	
Facility Occupancy Charge (Avg. FCCM and Deprecation)		$2,685,000
Gift Endowment Annual Avg. Payout Amount @ 4.75%		$ 592,000
Unrestricted Funds (Performance Fee/Royalty Income)		$ 224,000
STIP Interest on Accumulated Unrestricted Funds		$ 167,000
Total	$3,668,000	$ 3,668,000

**Debt service based on external financing if lease revenue bonds are not sold within 18 months of project completion (does not include interest expense and financing costs on the $30 million)*

Gift Endowment

A private gift of $14.4 million has been pledged as a fund functioning as an endowment (FFE). The pledge is contingent upon start of construction.

LBNL Unrestricted Funds

Approximately $4.3 million of performance fee per year is given to the LBNL Director for the Director's discretionary use of which approximately $3.4 million is available. In addition, the Lab annually earns approximately $1.3 million in Royalty Income which can be used for any research related purpose.

STIP Interest

STIP interest on the accumulated unrestricted balance created from withholding for servicing SERC debt.

Additional financial feasibility information may be found on Attachment 2.

Risks

Utilizing University resources for SERC for interim financing poses certain risks to the University.

- The re-appropriation for this project is expected to be included in the 2012-13 Governor's Budget. The re-appropriation needs to be passed by the State Legislature for the 2012-13 budget to be included as a state lease revenue bond project. There is a risk that the re-appropriation will not materialize thus LBNL will be responsible for repayment of all the interim financing including related interest expense and financing costs associated with the project that is approved by this action.

- In addition, the Office of the President and the DOF are also pursuing a trailer bill to reimburse interest expense and financing costs for the interim financing that the University is authorizing to LBNL for the project. Even if the project is re-appropriated in the 2012-13 budget, there is a risk that the interest expense and financing costs associated with the project that the University will capitalize with interim financing will not be reimbursed and thus LBNL and the University will be responsible for all those costs.

- Should State lease revenue bonds not materialize, the University would then make a long term financing commitment through external financing. LBNL would subsequently come forward with a Regents action to convert interim financing to external financing should the State not sell lease revenue bond for the project within 18 months after project completion.

- Should both State lease revenue bonds not materialize and DOE curtail funding at LBNL such that SERC became surplus to Lab operations, LBNL would need to find a new source of revenue in lieu of the SERC occupancy charge, including securing a non-DOE tenant for all or a portion of the building. While this scenario is very unlikely, there is a risk the University could be responsible for debt service on the facility until a non-DOE tenant or other revenue sources were developed.

ATTACHMENTS

Attachment 1: Funding Plan
Attachment 2: LBNL Debt Service Funding Plan

ATTACHMENT 1

FUNDING PLAN

Total Cost: $54,400,000 to be funded from State lease revenue bonds ($30,000,000), external financing ($14,400,000) and grant funds ($10,000,000)

State: $30,000,000
State lease revenue bonds of $30,000,000 planned for re-appropriation in 2012-13

PUC Grant: $10,000,000
As of November 2011:

Grant in Hand	$ 3,000,000
PUC Grant	$ 7,000,000
Total	$10,000,000

- Previously received approval for standby financing for $10 million in order to meet Regental policy to have funds on hand for bid advertisement and award.

External Financing: $14,400,000
- Previously received approval for external financing to accommodate a $14.4 million pledge that donors have designated as a fund functioning as an endowment (FFE).

ATTACHMENT 2

LBNL DEBT SERVICE FUNDING PLAN

LAWRENCE BERKELEY NATIONAL LABORATORY	
Project Name	**Solar Energy Research Center**
Project ID	**12501**
Total Estimated Project Costs	**$54,400,000**

PROPOSED SOURCES OF FUNDING	
External Financing	**$14,400,000**
Standby Financing	**$10,000,000**
Interim Financing	**$30,000,000**
Total	**$54,400,000**

LBNL DEBT SERVICE FUNDING PLAN

Year	CRT and SERC Occupancy fee (1)	Endowment Annual Total Return Payout Amount @ 4.75% (2)	Total	Total LBNL Debt Service (3)	Delta Revenue - Debt	Annual Unrestricted Funds (4)	Annual Unrestricted Funds towards CRT and SERC Debt Service	Remaining Unrestricted Fund Balance with STIP Interest Earnings
1	$10,288,608	$741,932	$11,030,540	$(13,578,039)	(2,547,498)	$4.7M	$3,589,962	$1,063,313
5	$10,465,213	$695,385	$11,160,598	$(13,578,039)	(2,417,440)	$4.7M	$3,589,962	$5,487,797
10	$11,435,915	$641,286	$12,077,201	$(13,578,039)	(1,500,837)	$4.7M	$3,589,963	$15,585,997
15	$10,113,255	$591,396	$10,704,651	$(13,578,039)	(2,873,388)	$4.7M	$3,589,962	$23,982,098
20	$8,790,595	$545,387	$9,335,982	$(13,578,039)	(4,242,057)	$4.7M	$3,589,962	$25,978,742
25	$7,467,935	$502,958	$7,970,893	$(13,578,039)	(5,607,146)	$4.7M	$3,589,962	$20,929,512
30	$4,382,505	$463,829	$4,846,335	$(13,578,039)	(8,731,704)	$4.7M	$3,589,962	$0
33	$3,871,371	$0	$3,871,371	$0	$3,871,371	$0	$0	$12,125,247
	$284,827,821	$17,772,243	$302,600,063	$(407,341,160)	$(104,741,097)	$141M	$107,698,865	

1. Occupancy fee is set by depreciation and cost of capital calculation known as FCCM. FCCM rate is set by the Treasury Secretary and historically tracks 5-year notes. Reimbursement assumes a slightly increasing FCCM rate over the life of the debt.
2. $14.4M gift from Simons' Foundations.
3. LBNL Debt service for external financing for CRT ($119.9M) and SERC ($44.4M and includes $30M if lease revenue bonds are not appropriated).
4. Net of operating expenses.