

**CALIFORNIA EDUCATIONAL FACILITIES AUTHORITY
COMMERCIAL PAPER PROGRAM**

EXECUTIVE SUMMARY

<p>Applicant: California Institute of Technology ("Caltech") Pasadena, CA Los Angeles County</p> <p>Facility Type: Private University</p> <p>Project Location: Pasadena, CA</p> <p>Accreditation: Western Association of Schools and Colleges</p> <p>Amount Requested: \$100,000,000</p> <p>Date Requested: September 25, 2008</p> <p>Resolution Number: 262</p>
<p>Use of Proceeds: Tax-exempt and taxable commercial paper notes will be issued to support various planned capital expenditures and improvements.</p>
<p>Type of Issue: Tax-exempt and taxable commercial paper issue Negotiated public offering, variable interest rates Final maturity is October 1, 2058 or such earlier date as may be required by Bond Counsel to ensure that interest on tax-exempt notes will be excluded from gross income for federal income tax purposes or to ensure compliance with Resolution No. 262</p> <p>Credit Enhancement: None</p> <p>Underlying Credit Rating: AAA (Moody's)</p> <p>Financial Advisor: Prager, Sealy & Co., LLC</p> <p>Bond Counsel: Orrick, Herrington & Sutcliffe</p>
<p>Environmental Benefits: It is Caltech's intention to design, build, and pursue certification of all new project buildings at a LEED Silver level or higher. Significant building renovation projects will also apply LEED standards throughout the course of the project. Similarly, Caltech will apply principles of sustainability and related best practices in its daily maintenance and operation.</p>
<p>Financial Overview: Caltech appears to have exhibited solid results supported by a steady revenue base. Caltech's financial strength appears to be sound with approximately \$2.7 billion in total net assets at the end of the review period.</p>
<p>Sources and Uses: A commercial paper note program is similar to a revolving lending facility. The total amount of commercial paper notes outstanding at one time may not exceed \$100,000,000. However, if commercial paper notes are paid off, other than with renewal notes, additional program capacity would become available (through the issuance of additional notes) to finance projects, subject to the overall limit of \$100,000,000 principal amount outstanding at any one time. Caltech has requested approval of projects with estimated costs of \$465,000,000. Commercial paper notes may be issued to finance such projects and pay costs of issuance.</p>
<p>Legal Review: Although disclosures were made by the applicant, the information disclosed does not appear to detrimentally affect the financial viability or legal integrity of the applicant.</p>
<p>Staff Recommendation: Staff recommends the Authority approve a Resolution to issue tax-exempt and taxable commercial paper notes for the California Institute of Technology in an amount not to exceed, from time to time, \$100,000,000, subject to the notes meeting the minimum program requirements, as specified in Resolution No. 262.</p>

STAFF SUMMARY AND RECOMMENDATION

California Institute of Technology (“Caltech”)

September 25, 2008

Resolution Number: 262

- I. PURPOSE OF FINANCING:** Caltech is in the midst of a significant multi-year capital improvement plan and is instituting this \$100 million commercial paper program to issue notes for projects to be completed under the capital plan. In addition, Caltech is planning to issue taxable commercial paper notes. The Authority has previously approved Resolution No. 2002-02 at the March 28, 2002 meeting, permitting the issuance of tax-exempt commercial paper notes to fund the financing needs of eligible projects. The taxable commercial paper notes will also be subject to the guidelines specified in Resolution No. 2002-02, except that they may be issued on a taxable basis.

Projects that may be financed with commercial paper notes include:

Astrophysics Laboratory – Caltech plans to construct a new laboratory for the Cahill Center for Astronomy and Astrophysics. The 100,000 square foot facility will create an environment for productive interaction among observers, instrument builders, and theorists.

Information Science and Technology (IST) Building – The Annenberg/IST Center will be an approximately 60,000 square foot building consisting of formal and informal assembly areas, classrooms, conference rooms, a library, and faculty and student offices.

Undergraduate Housing Renovation, Construction, and Temporary Housing – The Institute Undergraduate Housing project includes improvements to interior living spaces, work to exterior, repairs to historic fabric and details, structural and seismic improvements, electrical, HVAC, and plumbing improvements.

Chemistry Building – The new 60,000 square foot Chemistry and Chemical Engineering Laboratory will integrate chemistry and chemical engineering with other forefront areas of science and engineering research.

Infrastructure Costs Related to Research Buildings – Caltech plans to perform several infrastructure upgrades to support the capital construction of new research buildings. Renovations will include a new substation, chiller plant and distribution piping upgrades and tunnel extension, sewer, water, steam storm drains and utility connections.

Miscellaneous Deferred Maintenance and Renovation – Renovations consist of high priority maintenance and renovation projects identified as fire protection upgrades, campus-wide steam and compressed air distribution system upgrades and electrical distribution system upgrades.

Laboratory Renewal Projects – Renewal projects will include the rehabilitation or modernization of laboratory space for new and continuing faculty.

Campus Center – The new Campus Center will provide needed facilities for musical performances and theatre arts, as well as service centers for students, faculty, and staff.

Robinson Laboratory Renovation – Major renovations are planned to reshape the Robinson Laboratory as a major facility for research and instruction in global environmental science.

Biology Laboratory Renovations – Caltech plans to modernize space to accommodate the sharing of common research equipment and facilities for existing faculty

Humanities and Social Sciences Building – The intent of this new facility is to locate the facility nearby other Humanities and Social Sciences buildings to allow collaboration with colleagues.

Sculpture Gardens – A sculpture garden is planned and will adapt space for new artwork as well as updating the landscaping.

Voice & Data Networking Update – Project will improve and sustain Caltech’s voice and data networks. Proposed projects include targeted replacement or upgrade of telephone components, remediation of voice and data facilities and disaster preparedness of critical communications facilities.

Jorgensen Computing Facility – Renovation of the Jorgensen Computing Facility will house both the Applied Computational Mathematics and Control and Dynamical Systems departments.

Firestone Renovation – Caltech plans to renovate the Firestone building to provide an on-campus space for the Keck Institute of Space Studies.

Thomas Renovation – The complete building rehabilitation of the Franklin Thomas laboratory of Engineering is needed to meet the current and future research needs of the Mechanical and Civil Engineering groups.

Solar Energy Facility – In order to install photovoltaic power to several Caltech buildings, work such as tree trimming, removal and replacement, purchasing metering and metering equipment must be done.

Thermal Energy Storage – Caltech proposes to construct a three million gallon chilled water storage tank to take advantage of off-peak, reduced electrical rates.

Center for Advanced Computing Research – The planned expansion will add 4,300 square feet and potential IT load of 800 KW which will maximize efficiency.

Energy Conservation Projects – These proposed projects are intended to reduce energy consumption, green house gas emissions and other global warming potential emissions. Projects will include lighting retrofits and upgrades, purchase of energy star equipment, LEED EB projects, and upgrading utility equipment to high efficiency equipment.

Environmental Benefits:

It is Caltech's policy to design, build, and pursue certification of all new project buildings at a LEED Silver level or higher. Significant building renovation projects will also apply LEED standards throughout the course of the project. Similarly, Caltech will apply principles of sustainability and related best practices in its daily maintenance and operation.

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II. FINANCIAL ANALYSIS:

California Institute of Technology
Statement of Activities (\$000's)
Unrestricted

	Fiscal Year Ended September 30,		
	2007	2006	2005
Operating activities:			
<i>Revenues:</i>			
Tuition and fees, net	\$ 24,701	\$ 20,865	\$ 19,393
Investment return	343,568	158,652	214,115
Gifts	30,540	28,677	27,383
Grants & contracts:			
Jet Propulsion Laboratory - direct	1,745,765	1,579,703	1,638,455
Other United States government - direct	172,764	155,425	164,641
Non-United States government - direct	16,918	13,783	10,491
Indirect cost recovery & management allowance	103,211	97,852	100,899
Auxiliary enterprises	35,493	34,124	34,546
Other	19,181	22,212	15,297
Net assets released from restrictions	91,082	30,821	87,545
Total revenues	<u>2,583,223</u>	<u>2,142,114</u>	<u>2,312,765</u>
<i>Expenses:</i>			
Instruction & academic support	218,341	211,688	211,286
Organized research:			
Jet Propulsion Laboratory	1,745,765	1,579,703	1,638,455
Other Institute research	224,579	200,908	185,170
Institutional support	60,383	66,121	64,135
Auxiliary enterprises	38,223	36,160	35,342
Total expenses	<u>2,287,291</u>	<u>2,094,580</u>	<u>2,134,388</u>
Increase in net assets from operating activities	295,932	47,534	178,377
Other changes in unrestricted net assets:			
Decrease in minimum pension liability	-	71	(1,110)
Redesignations & reclassifications of net assets	(13,625)	8,667	326
Loss on retirement of indebtedness	-	(5,201)	-
Total other changes in unrestricted net assets	282,307	51,071	177,593
Cumulative effect of change in accounting principle	(1,573)	(9,604)	-
Increase in unrestricted net assets	<u>280,734</u>	<u>41,467</u>	<u>177,593</u>
Changes in temporarily restricted net assets:			
Gifts	45,306	207,758	75,021
Investment return	5,276	3,132	1,341
Net assets released from restrictions	(91,082)	(30,821)	(87,545)
Redesignations & reclassifications of net assets	24,067	(8,146)	(3,001)
Increase (decrease) in temporarily restricted net assets	<u>(16,433)</u>	<u>171,923</u>	<u>(14,184)</u>
Changes in permanently restricted net assets:			
Gifts	32,532	17,065	16,734
Investment return	1,194	786	201
Other income	41	43	20
Redesignations & reclassifications of net assets	(10,442)	(521)	2,675
Increase in permanently restricted net assets	<u>23,325</u>	<u>17,373</u>	<u>19,630</u>
Increase in total net assets	287,626	230,763	183,039
UNRESTRICTED NET ASSETS, BEGINNING OF YEAR	<u>2,461,524</u>	<u>2,230,761</u>	<u>2,047,722</u>
UNRESTRICTED NET ASSETS, END OF YEAR	<u>\$ 2,749,150</u>	<u>\$ 2,461,524</u>	<u>\$ 2,230,761</u>

California Institute of Technology
Statement of Financial Position (\$000's)

	As of September 30,		
	<u>2007</u>	<u>2006</u>	<u>2005</u>
ASSETS:			
Cash and cash equivalents	\$ 7,979	\$ 13,251	\$ 10,260
Advances and deposits	5,180	4,531	2,854
Securities lending deposits	89,100	138,820	234,767
Accounts and notes receivable			
US government	175,500	158,332	156,396
Other	36,028	26,643	17,605
Contributions receivable, net	248,928	328,765	195,106
Investments, incl. securities pledged or on loan	2,327,838	1,971,561	1,780,900
Prepaid expenses and other assets	57,242	57,515	64,863
Deferred United States government billings	332,468	296,630	276,072
Property, plant and equipment, net	748,933	716,159	681,786
Total assets	\$ 4,029,196	\$ 3,712,207	\$ 3,420,609
LIABILITIES AND NET ASSETS:			
Accounts payable and accrued expenses	\$ 346,002	\$ 314,548	\$ 294,643
Securities lending deposits	89,100	138,820	234,767
Deferred revenue and refundable advances	31,465	28,526	26,730
Annuities, trust agreements and agency funds	106,697	97,735	91,324
Bonds and notes payable	347,935	347,700	242,906
Accumulated postretirement benefit obligation	358,847	323,354	299,478
Total liabilities	1,280,046	1,250,683	1,189,848
Net assets:			
Unrestricted	1,672,559	1,391,825	1,350,358
Temporarily restricted	457,120	473,553	301,630
Permanently restricted	619,471	596,146	578,773
TOTAL NET ASSETS	2,749,150	2,461,524	2,230,761
TOTAL LIABILITIES AND NET ASSETS	\$ 4,029,196	\$ 3,712,207	\$ 3,420,609

Financial Ratios

	Proforma (a)			
	<u>FYE 9/30/07</u>	<u>2007</u>	<u>2006</u>	<u>2005</u>
Debt service coverage (x)	1.29	1.30	1.14	2.90
Debt to expendable net assets (x)	0.21	0.16	0.19	0.15
Expendable net assets to operations (x)		0.93	0.89	0.77
Margin (%)		11	2	8

(a) Recalculates 2007 results to include the impact of this proposed financing

Financial Discussion:

Caltech appears to have exhibited solid results supported by a steady revenue base.

Caltech relies heavily on grants and contracts as a primary source of revenue. Such grants and contracts include the Jet Propulsion Laboratory, a federally funded research and development center managed by Caltech for the National Aeronautics and Space Administration. Together with other grants and contracts from U.S. and non-U.S. entities, these sponsored research dollars comprise 79% of total revenues in FY 2007 and appear to have increased approximately 10% over the previous fiscal year.

With student tuition and fees, gifts, auxiliary enterprises and net assets released from restriction making up a combined 7% of total revenues, Caltech's other notable contribution to total revenues comes from returns on investments. Although returns on investments dipped slightly in FY 2006, overall it has grown from \$214.1 million in FY 2005 to \$343.5 million in FY 2007 or an increase of approximately 60%.

Caltech's financial strength appears to be sound with approximately \$2.7 billion in total net assets at the end of the review period.

Total net assets appear to have grown 23% over the three year review period, from \$2.2 billion in FY 2005 to \$2.7 billion in FY 2007. Contributing to this growth was a 29% increase in investments and a 19% increase in deferred United States government billings. Increases in investments were due to a significant contribution from a foundation controlled by a member of Caltech's Board of Trustees, as well as new endowment gifts and pledge payments.

Over the review period, debt to expendable net assets has remained low. With unrestricted and temporarily restricted net asset balance exceeding \$2.1 billion, the proforma debt to expendable net assets is a consistent 0.15x. Debt service coverage is currently 1.30x and with the proposed financing will remain relatively unchanged at 1.29x, indicating Caltech's likely ability to support the additional debt.

III. BACKGROUND:

General:

California Institute of Technology (“Caltech”) is a privately supported university and research institution located on a 124-acre campus in Pasadena. Founded in 1891, Caltech provides education and training services, primarily for students at the undergraduate, graduate and postdoctoral levels, and performs research, training and other services under grants, contracts and similar agreements with sponsoring organizations that are primarily departments and agencies of the government of the United States. Caltech is known worldwide as one of the outstanding schools of science and engineering.

Administration:

Caltech has a self-perpetuating Board of Trustees with 45 elected Trustees, plus the President of the Institution as an ex-officio member, as well as a number of Senior Trustees who govern Caltech. Currently, there are 14 Senior Trustees (voting members of the Board) and 20 Life Trustees (non-voting members).

Academic Programs:

Caltech is organized into six academic divisions: Biology; Chemistry and Chemical Engineering; Humanities and Social Sciences; Engineering and Applied Science; Geological and Planetary Sciences; and Physics, Mathematics and Astronomy.

Research is conducted at Caltech in the areas of developmental biology, neurobiology, molecular chemistry, material sciences, and aeronautics, among other disciplines. The majority of the research conducted at Caltech focuses on obtaining an understanding of the fundamentals of science and engineering, rather than focusing on the applications.

Caltech also operates a number of special research facilities, including several off-campus facilities. The largest off-campus facility operated by Caltech is the Jet Propulsion Laboratory (JPL), a world leader in planetary exploration. Caltech operates JPL for NASA under a cost reimbursement contract. JPL has a budget of approximately \$1.4 billion. The United States government owns JPL’s land, buildings, and equipment.

Accreditation and Affiliations:

Caltech is fully accredited by the Senior Accrediting Commission of the Western Association of Schools and Colleges (WASC). In 1999, WASC reaffirmed accreditation of the University following a comprehensive review and scheduled a reaffirmation visit for November 2008. The Accreditation Board of Engineering and Technology, Inc. (ABET) accredits Caltech’s Chemical Engineering and Engineering and Applied Science programs. ABET last affirmed Caltech’s accreditation in August 2002 with a reaffirmation in August 2008.

IV. OUTSTANDING DEBT (\$000's) :

<u>Issue:</u>	<u>Original Issue Amount</u>	<u>Amount Outstanding as of 09/30/07</u>	<u>Estimated Amount Outstanding After Proposed Financing</u>
Existing Debt:			
CEFA, Series 1994	\$ 30,000	\$ 30,000	\$ 30,000
CEFA, Series 1998	103,865	103,865	103,865
CEFA, Series 2006A	82,500	82,500	82,500
CEFA, Series 2006B	82,500	82,500	82,500
Line of Credit	54	54	54
Proposed:			
CEFA, Commercial Paper Notes 2008			100,000
(maximum amount outstanding from time to time)			<u>100,000</u>
Total		<u>\$ 298,919</u>	<u>\$ 398,919</u>

V. DUE DILIGENCE:

Due diligence has been completed with regard to the following items:

- Religious Due Diligence
- Legal Review
- Compliance with Section 94212(b) of the Education Code – California Environmental Quality Act

VI. STAFF RECOMMENDATION:

Staff recommends the Authority approve a Resolution to issue tax-exempt and taxable commercial paper notes for the California Institute of Technology in an amount not to exceed, from time to time, \$100,000,000 subject to the notes meeting the minimum program requirements, as specified in Resolution No. 262.