

Service Center Policy and Procedure

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Today's Topics

- Federal Guidance
- Policy
 - Definitions
 - Policy
 - Roles and Responsibilities
- Procedure
 - Definitions
 - Procedure
 - Roles and Responsibilities
- Service Center Review

Federal Guidance

Federal Guidance

- 2 CFR, Part 220
 - Effective Prior to December 26, 2014
 - Cost Principles for Educational Institutions
 - Referred to as OMB Circular A-21 or A-21
- 2 CFR, Part 200
 - Effective December 26, 2014
 - Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards
 - Referred to as OMB Uniform Guidance or UG
- NOT-OD-13-053
 - FAQs for Costing of NIH-Funded Core Facilities

UG 200.468

Specialized Service Facilities

(a) The costs of services provided by highly complex or specialized facilities operated by the non-Federal entity, such as computing facilities, wind tunnels, and reactors are allowable, provided the charges for the services meet the conditions of either paragraphs (b) or (c) of this section, and, in addition, take into account any items of income or Federal financing that qualify as applicable credits under section 200.406 Applicable Credits.

UG 200.468

Specialized Service Facilities contd.

(b) The costs of such services, when material, must be charged directly to applicable awards based on actual usage of the services on the basis of a schedule of rates or established methodology that:

- (1) Does not discriminate between activities under Federal awards and other activities of the non-Federal entity, including usage by the non-Federal entity for internal purposes, and
- (2) Is designed to recover only the aggregate costs of the services. The costs of each service must consist normally of both its direct costs and its allocable share of all indirect (F&A) costs. Rates must be adjusted at least biennially, and must take into consideration over/under applied costs of the previous period(s).

UG 200.468

Specialized Service Facilities contd.

(c) Where the costs incurred for a service are not material, they may be allocated as indirect (F&A) costs.

(d) Under some extraordinary circumstances, where it is in the best interest of the Federal government and the non-Federal entity to establish alternative costing arrangements, such arrangements may be worked out with the Federal cognizant agency for indirect costs.

NOT-OD-13-053

FAQs for Costing of NIH-Funded Core Facilities

- Purpose
 - To provide answers to common questions raised regarding NIH-funded core facilities and other applicable research related facilities that support NIH grants.
- Not intended to:
 - Establish new policies or interpretations of applicable Federal guidance.
 - Represents broad guidance on the costing treatment of all institutional service or recharge centers.

Federal Guidance

- OMB Circular A-21
 - <https://www.gpo.gov/fdsys/granule/CFR-2012-title2-vol1/CFR-2012-title2-vol1-part220/content-detail.html>
- OMB Uniform Guidance
 - <https://www.gpo.gov/fdsys/granule/CFR-2014-title2-vol1/CFR-2014-title2-vol1-part200/content-detail.html>
- NOT-OD-13-053
 - <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-13-053.html>

Policy

Revised

- Converted to new format
 - Information is in different order
 - Added definitions and guidance
 - Separated procedure from policy
- Revised policy will be effective September 30, 2016

Scope

- Sets forth the California Institute of Technology policy on service centers. This policy applies to all Caltech service centers.
 - Does not apply to auxiliary services

Definitions

- Administrative staff
- Allocable costs (**new**)
- Allowable costs (**new**)
- Auxiliary services (**revised**)
- Consistent treatment (**new**)
- Direct cost (**new**)
- Direct personnel
- Equipment (**revised**)
- Equipment Depreciation (**revised**)
- External users (**new**)
- Facilities & Administrative (F&A) costs
- Internal users (**new**)
- Materials and supplies
- Membership fees (**new**)
- Necessary and reasonable (**new**)

Definitions

- Other expenses
- Prior year under / over recoveries (**new**)
- Projected usage base (**revised**)
- Reasonable costs (**new**)
- Service center (**revised**)
- Subsidy (**new**)
- Unallowable expenses (**revised**)

Definitions

- Service center
 - An organizational unit that provides a specific service or product, or a group of services or products, to users principally within the Caltech academic and administrative community and recovers the cost of its operations through charges to its users.
 - Subject to a biennial review

Policy

- Only the allowable direct cost of providing services can be included in the projected expenses:
 - Labor and benefits (Direct personnel and Administrative staff)
 - Materials and supplies
 - Other expenses (equipment maintenance, rental costs, service contracts, equipment operating leases, professional services, etc.)
 - Equipment depreciation

Policy

- The following expenses should not be included in the projected service center expenses:
 - Capital cost of equipment
 - Unallowable expenses (bad debt, entertainment, etc.)
 - Facilities and administrative (F&A) recovery i.e. application of the F&A rate to the projected costs
 - Costs recovered through the F&A rate
- Also should not include any costs funded by federal sources or cost sharing expenses or related expenses such as depreciation on equipment purchased as part of cost sharing

Policy

- Rates must comply with federal regulations if the fees will eventually be charged back to federal awards directly or thru the F&A rate:
 - Rates must be based on cost recovery for allowable expenses only
 - Rates must not result in overcharging
 - Federal users must not subsidize the cost of goods or services provided to other users
 - There must be a beneficial relationship between the billing rates charged and the benefit being provided
 - Costs recovered through the billing rates cannot also be included in the Institute's general indirect cost rate
 - Costs recovered through the F&A rate cannot be included in the service center billing rates as a direct cost
- Rates applied to external users should include the application of the F&A rate and can include mark-up

Policy

- Customers must be charged based on actual usage and the appropriate billing rate
 - Record or log to track actual usage of services
 - Hand written, electronic, created using software designed to track usage, or some other documented methodology
 - Should include
 - Period for which the charge was incurred
 - Actual usage i.e. units, hours, minutes, etc.
 - Category, level or type of service provided
 - Billing rate charged

Policy

- Billing Rates based on “membership” type charging structure are unallowable.
 - What are membership fees?
 - Customer charges based on a flat fee and the fee does not reflect the relative benefits provided to the customers.
 - Example: All customers are charged \$1,000 per quarter for access to a facility regardless of amount of their actual use of the facility.

Policy

- Different types of services
 - Separate billing rates for each service that represents a significant activity for the center
 - Costs, revenues, surpluses, and deficits should be separately identified for each service
 - Surpluses or deficits should be carried forward as an adjustment to the billing rate for each separate service

Policy

- Internal Users
 - Primary service center customers.
 - Includes
 - Institute departments (including academic, research, administrative, and auxiliary) that purchases goods or services to support an Institute program or activity.
 - Investigators whose research is funded by grants to Caltech.

Policy

- External Users
 - A service centers' primary function is to share resources and provide services for internal users. Situations may arise, however, where the nature of a service center's products or services and other factors justify allowing external users limited access to these products or services.
 - A service center may charge a higher rate to an external user for the same type of service provided to internal users.

Policy

- Subsidies

- Types

- Service Center

- Reductions or discounts from standard billing rates for a group of users
 - Not charging a group of users

- Division Administration

- Intentionally elects to cover part of the costs of the service center so they can charge all users rates that are less than the breakeven rate
 - Agrees to cover the centers under recoveries so they don't have to adjust future rates to cover these deficits

Policy

- Subsidies contd.
 - The revenue lost due to any discount for the service center subsidies on the previous slide must be imputed as if the users were billed at the full rate for the services they received in order to determine the breakeven rate for the center.

Policy

- Alternative pricing structures
 - Different billing rates based on time-of-day, volume discounts, turn-around time, etc. are acceptable
 - Must have a sound basis for the difference and ability to segregate the costs for each of the different rates
 - Must not result in over recovery of the costs of the services.
 - Are not considered discounted pricing because the reduction is due to cost savings so these are not considered subsidies

Policy

- New service centers
 - Must provide their methodology and procedures for determining service center charges to internal and external users to the Office of Cost Studies for review to ensure they are compliant with this policy and federal guidance prior to authorization of the service center.

Policy

- Ongoing service centers
 - Service centers with annual operating expenses or revenues of \$100,000 or more be subject to the formal biennial review and verification process.
 - Service centers with annual operating expenses or revenues of less than \$100,000 will be included in a high-level review process
 - These centers typically receive less scrutiny but are still required to comply with the same service center policy and regulatory guidelines as for any other service center.

Roles and Responsibilities

Service Center Management

- Ensure compliance with Caltech service center policy
- Ensure personnel are familiar with the policy
- Coordinates the review process with the OCS
- Establishes acceptable methodologies and processes necessary to track and bill based on actual usage and service received

Office of Cost Studies (OCS)

- Provides guidance and advice on service center practices including those that might be non-compliant or high risk
- Performs biennial reviews
- Verifies that the rates charged to federal users do not include an element of profit or subsidization of other users and complies with federal regulations and Caltech policy
- Advises Service Center Directors when rate should be adjusted

Procedure

New

- Separated procedure from policy and added new elements such as definitions and roles and responsibilities
- Will be effective September 30, 2016

Scope

- Describes the steps required to establish a service center and to develop a service center rate
- Discusses usage tracking, charging, and billing guidelines relevant to service centers consistent with the Caltech Service Center Policy
- Definitions and terms of the policy also apply to this procedure

Definitions

- Usage base (**revised**)

The usage base is the volume of work expected to be performed, expressed in units such as labor hours, machine hours, CPU time or any other reasonable measurements. Note, the usage base could be actual usage or budgeted projected usage.

- Tracking log (**new**)

A written or electronic log must be established and maintained by the service center to record actual usage of services. This log can be a handwritten log or an electronic log created with spreadsheet software or from a software used for this specific purpose.

Procedure

- New service centers
 - Divisions or departments that want to establish a new service center must work with Office of Cost Studies to calculate their breakeven rates for each service they plan to offer users
 - Must provide Cost Studies the methodology and procedures that the center plans to follow for determining all service center charges for review to ensure they are compliant with Caltech policy and federal guidance prior to authorization of the service center

Procedure

- New service centers
 - Developing the initial breakeven rate
 - Based on budgeted or projected
 - Revenues
 - Expenses
 - Usage base

Procedure

- Accounting, Monitoring, and Rate Determination:
 - Must be able to easily identify all accounts (PTAs) to capture all sources use to pay for the annual operating expenses
 - Must be able to identify all accounts used to capture income received by service center
 - Must be able to determine the activity level of each service provided
 - Must be able to map expenses and income associated with each service

Procedure

- Accounting, Monitoring, and Rate Determination contd.:
 - Determine Break-even rate for each service provided
 - Determine overall cost recoveries, and identify sources used to pay for any subsidized costs
 - Data supporting billing rates must be in a consolidated form that can be easily used to perform cost analysis and verify rate calculations

Procedure

- Treatment of Subsidies
 - Transfers of funds in and Transfers of funds out
- Treatment of Income
 - WIC (internal users)
 - Other Internal Charges and Credit Expenditures
 - Revenue (external users)
 - Reimbursements: Not income, but offset to expenses

Procedure

- Application of F&A Rate
 - No for Internal users (Institute will apply if appropriate during payment process)
 - Yes for external users
 - No for JPL (Institute will apply during payment process)

Service Center Review

Service Center Review

Overview

- Step 1: Preliminary** - Gathering required data and information
- Step 2: Financial Profile Analysis** - Allowable annual operating expenses & Income
- Step 3: Carry-forward Analysis** - annual and ITD deficits/surpluses
- Step 4: Income Analysis** - verify applied rate, identify quantity of each services provided
- Step 5: Breakeven Rate Calculations** - Determining cost of services provided

Service Center Review

Step 1 - Preliminary

Purpose

Verify that the applied billing rates charged to federal awards are in compliance with federal regulations

1. Do not result in overcharges
2. No service center is subsidizing the cost of services provided to other customers
3. There is an adequate cost basis and support to defend the applied billing rate for an audit
4. Endure that there is adequate tracking log to support customer billings
5. Performed at least once every 2 years

Service Center Review

What is cost basis?

1. Identifying the cost components that contribute to the cost of the services
2. Identifying the quantity of each cost component that is needed to provide the service
3. Determining methodology for how the billing rate was calculated
4. Identifying the charging structure for billing the customer (dollar per unit of _____)
5. Verifying the existence and availability of relevant support documentation in an easy to use form to support the determination of the cost of services

Service Center Review

What initial information needed from the service center to perform the review?

1. Name of the service center and responsible contact person
2. PTAs used to capture all operating expenses, income, and subsidies
3. Description of all services provided and work performed by the center
4. Applied rates for each service provided
 - The costs that are included in the billing rate

Service Center Review

What initial information needed from the service center to perform the review? Contd.

5. Understanding of service center business practices and financial objectives
 - What does the center do with the year-end balance?
 - Subsidized vs. carry-forward with rate adjustments
6. Basis for mapping operating expenses and income to specific services provided if there is no information in the financial system that can demonstrate that connection

Service Center Review

What initial information is needed from the service center to perform the review?

7. Identification of all capital equipment used in the service center, especially if the depreciation expenses are included in the applied billing rate
8. Types of customers (internal Caltech (sponsored , non-sponsored), external)
9. Physical location of the service center
10. Most of this information should be obtainable from the Questionnaire responses we receive from the centers

Service Center Review

Step 2-Financial Profile

Use COGNOS to obtain ORACLE financial transaction details for all PTAs associated with the service center, and summarize into major cost categories

SERVICE CENTER RATE REVIEW

Name of Service Center: **Quantum Processor Fabrication Shop**
 Manager or Contact Person: **Dr. Zeus**
 PTAs: **Whoknows.shop-1-OARCHG.QuantumShop**
 Period: **FY2015 and FY2016 Year-End**
 Location: **Olympus- Room Penthouse**

Financial Data:	Calculations	FY2015 Actuals	FY2016 Actuals
Allowable Expenses			
Labor with Staff Benefits	A	\$ 241,363	\$ 298,722
Materials & Supplies	B	\$ 71,720	\$ 34,316
Other Expenses (Travel)	C	\$ -	\$ -
Equipment Depreciation	D	\$ 11,212	\$ 9,343
Prior Year-Carryforwards	E	\$ 41,077	\$ 88,339
Total Allowable Expenses	F=SUM(A:E)	\$ 365,373	\$ 430,720
Unallowable Expenses	G	\$ -	\$ -
Total Operating Expenses	H=F+G	\$ 365,373	\$ 430,720
Total Revenues	I	\$ (277,034)	\$ (420,231)
Subsidy Amount	J	\$ -	\$ -
Year-end Balance (Carry-forward Amount)	K=F+I	\$ 88,339	\$ 10,489

Rate Assessment:	Calculations	FY2015 Actuals	FY2016 Actuals
Cost Recoveries, with Equipment Depreciat	L=-I/F	76%	98%

Applied Billing Rate			
Rate Charged per Hour	If Applicable = M	Per Hour	Per Hour
Internal Users	M1	\$ 120	\$ 125
External Users	M2	n/a	n/a

CFW adjustment reflected

There should be no unallowable expenses charged To service center PTA

No subsidies- FY16 rate adjusted to liquidate prior year deficits from CFW adjustment



Service Center Review

Step 3-Carry-forward Analysis

1. If the service center has a year-end deficit that will not be subsidized by Caltech (e.g., Division), that deficit must be carried over to the following year, and the billing rate adjusted upward so that the deficit amount can be liquidated over the next 1 to 2 years period.

Service Center Review

2. In general, rate adjustments to recover deficits from more than 2 years in the past should be avoided to prevent current customers from subsidizing the costs of services provided to customers more than 2 years ago.
3. Deficits should be covered either through subsidies from other sources or by adjusting rates.

Service Center Review

Caltech

SERVICE CENTER RATE REVIEW

Carry-forward Analysis (Dummy figures shown for illustration purposes only)

Name of Service Center: Quantum Processor Fabrication Shop
 Manager or Contact Person: Dr. Zeus
 PTAs: Whoknows.shop-1-OARCHG.QuantumShop

	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
Allowable Operating Expenses	\$ 665,937	\$ 601,350	\$ 732,776	\$ 557,107	\$ 447,173	\$ 324,296	\$ 342,381
Total Revenue	\$ (662,543)	\$ (578,533)	\$ (691,622)	\$ (595,755)	\$ (434,814)	\$ (277,034)	\$ (420,231)
Year-end Balance	\$ 3,394	\$ 22,817	\$ 41,154	\$ (38,648)	\$ 12,359	\$ 47,262	\$ (77,850)
Prior year CFW	0	\$ 3,394	\$ 26,211	\$ 67,365	\$ 28,717	\$ 41,076	\$ 88,338
CFW into the Next Year	\$ 3,394	\$ 26,211	\$ 67,365	\$ 28,717	\$ 41,076	\$ 88,338	\$ 10,488

If the CFW is covered by the division, then there will be no CFW amount into the following year

Service Center Review

Step 4-Income Analysis

The purpose of the income analysis is to:

1. Identify the quantity of each of the services that were provided to customers during the year
2. Verify that the quantity of services provided for each transaction multiplied by the service billing rate equals the charges recorded in the financial system
3. Verify that the total income recorded is based on applied rates that have been reviewed by Cost Studies, and reflect actual usage based on actual data tracked by the service center

Service Center Review

The purpose of the income analysis is

4. To show that the applied billing rate complies with federal regulations and Caltech's service center policies


Service Center Review

Example of Credit Expenditure Transactions

Transaction showing recording of credit expenditures in the service center PTA for 3 hours of labor charges related to fabricating a Quantum Processor at a billing rate of \$120 per hour

ORACLE GRANT: Module via COGNOS

QTY of Service - Date
 Applied Billing Rate – WIC #
 Service Description
 Customer Information- PTA
 Service Center Name



PTA	Period	Year	Expenditure Type	Supplier Name	Invo	Cost Comment	Expenditure
Whoknows-1- OARCHG.QuantumShop	APR-FY2016	2016	Credit Expenditures			Organization Name REQ; Quantum Processor SHOP, DATE: 03-17-14 to 03-23-14 Ref: WIC-92836 Req: Customer Name Qty: 3 hours fabricate Quantum Processors @ \$120/hr Rate PTA:XYZ.30120-1-ENDOW.301200	\$ (360.00)

Web Internal Charges (WIC)

Customer PTA	
Other Internal Charges	\$ 360.00

Service Center PTA	
Credits Expenditures	(\$360.00)

Step 5-Breakeven Rate Calculation

Caltech

SERVICE CENTER RATE REVIEW

Name of Service Center: Quantum Processor Fabrication Shop
Manager or Contact Person: Dr. Zeus
PTAs: Whoknows.shop-1-OARCHG.QuantumShop

Period: FY2015 and FY2016 Year-End
Location: Olympus- Room Penthouse

		FY2015 Actuals	FY2016 Actuals
Total Allowable Expenses	A	\$ 365,373	\$ 430,720
Recharge Activities (Hours)	B	2,312	3,362
Calculated Break-even rate	C=A/B	\$ 158	\$ 128
Applied Billing Rate	D	\$ 120	\$ 125
Total Revenue	E	(277,034)	(420,231)
Percent Recovery	F=-E/A x 100%	76%	98%

Financial Profile

Income Analysis

Rate Acceptable
(Below B/E Rate)

Service Center Review-

Centers With Multiple Billing Rates

Centers providing multiple services using multiple rates are more challenging

1. Need to identify allowable operating costs supporting each type of service provided during the year (e.g., actual usage of resources)
2. Need to identify income that was received from each type of service provided during the year
3. Must determine the actual quantity of each of the services that was provided
 - So that the quantity multiplied by the appropriate applied billing rate for each of the services totals to the annual income received

Service Center Review-

Centers With Multiple Billing Rates

Schedule 1- FY2016- Distribution of Operating Costs *(Dummy figures for illustration purposes only)*

Services	%Total Labor Hours	Labor Costs	Non-Labor Cost	Prior Year CFW	Total Costs	Activity (Actual Quantity)	Calc B/E Rate	Applied Billing Rates
A	B	C	D	E	F=C+D+E	G	H=F/G	I
Service A	28.60%	\$ 105,578	\$ 7,994	\$ (2,010)	\$ 111,562	892	\$ 125	\$ 120
Service B	25.30%	\$ 93,395	\$ 7,071	\$ (1,778)	\$ 98,688	198	\$ 498	\$ 475
Service C	15.84%	\$ 58,474	\$ 4,427	\$ (1,113)	\$ 61,788	21	\$ 2,942	\$ 2,900
Service D	0.06%	\$ 221	\$ 17	\$ (4)	\$ 234	0.25	\$ 936	\$ 920
Service E	13.60%	\$ 50,205	\$ 3,801	\$ (956)	\$ 53,050	13	\$ 4,081	\$ 4,000
Service F	10.80%	\$ 39,869	\$ 3,019	\$ (759)	\$ 42,129	14	\$ 3,009	\$ 3,000
Service G	5.80%	\$ 21,411	\$ 1,621	\$ (408)	\$ 22,624	25	\$ 905	\$ 900
Total Allowable Costs (Actuals)	100.00%	\$ 369,153	\$27,950	\$ (7,028)	\$ 390,075	1,163.25		

Supporting Data from Usage Log

Rates Acceptable (Below B/E rate)

Schedule 2 -Financial Profile

Centers with Multiple Billing Rates

Caltech		
Service Center Rate Review Financial Profile		
Name of Service Center: Service Center XYZ Manager or Contact Person: Dr. ABC PTAs: ABC.000001-1-OARCHG.00001 Period: FY2016 Year-End Location: None 215		
Financial Data: (Exclude Unallowable Expenses)	Calculations	FY2016 Actuals
Allowable Expenses		
Labor with Staff Benefits	A	\$ 369,153
Materials & Supplies	B	\$ 27,950
Other Expenses	C	\$ -
Equipment Depreciation (if applicable)	D	\$ -
Prior Year-Carryforwards (CFW) (if applicable)	E	\$ (7,029)
Net Allowable Allowable Expenses	F=sum(A:E)	\$ 390,074
Unallowable Expenses	G	\$ -
Total Operating Expenses	H=F+G	\$ 390,074
Total Revenue	I	\$ (384,488)
Year-end Balance (next year CFW)	J=F+I	\$ 5,586
Cost Recovery Rate	K=-I/F	99%
Subsidy Amount	L	\$ 5,586

Service Center Review

Centers with Multiple Billing Rates

- There are many different ways to calculate the breakeven rates
 - The approach may be unique to the specific service center depending on information the center is tracking to support the cost basis and income of the services provided to the centers' customers.
- Customer charges
 - Must be based on actual recorded data reflecting actual customer usage of the services.
- Consult the Cost Studies Office
 - If there are questions regarding how to calculate breakeven rates or information needed to support a rate calculation.

Service Center Review

Challenges

1. Turn-around times on requested information
2. Insufficient data
3. Year-end balances
4. Identification of subsidies
5. Comingling of service center and non-service center activities within the same PTA
6. Extended lag time between usage data and receipt of income

Next Steps

- An email will be sent with the URL for the approved policy when it is available on the web.
 - Review the policy
 - Contact Office of Cost Studies if you have questions

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