

Special Fund Research Recharge Centers Cost Accounting Guidelines

Introduction

Special Fund Research Recharge Centers (SRRCs) are expected to provide goods or services to federally funded grants and contracts. Thus, to comply with federal regulations, the cost accounting guidance in this document conforms with 2 CFR 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. Where 2 CFR 200 relies on institutional policies and procedures for application, the applicable UH policy or procedure will be referenced.

Fundamental Cost Accounting Principles

Although we will be referring to [2 CFR 200.468](#) – Specialized Service Facilities to identify important cost accounting guidance, fees paid for goods or services from SRRCs must be allowable, allocable, and reasonable in order to be charged to federal grants or contracts. Thus, costs used to establish SRRC fees must be allowable, allocable and reasonable. Throughout the document, we will reference other sections of 2 CFR 200 to identify costs that can be included or must be excluded from fee calculations.

Important Cost Accounting Guidance from 2 CFR 200.468

For all SRRCs:

- Costs of such services 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:
 - Does not discriminate between activities under Federal awards and other activities of UH, including usage by UH for internal purposes, and
 - Is designed to recover only the aggregate costs of the services.
- Cost of services must take into account any items of income or Federal financing that qualify as applicable credits under [2 CFR 200.406](#).
- Rates must be adjusted at least biennially and must take into consideration over/under-applied costs of the previous period(s).

Additional requirement for SRRCs identified as Specialized Service Facilities (SSFs):

- The costs of each service must normally consist of both its direct costs and its allocable share of all indirect (F&A) costs.

- NOTE: This applies only to the four UH SSFs (SOEST Ship Operations; SOEST Engineering; SOEST Computing; and IfA Job Order Services) and because the issue is limited to these SRRCs, the topic will not be covered in this document.

Additional Cost Accounting Guidance from 2 CFR 200, Appendix XI – Compliance Supplement

For all SRRCs:

- UH is allowed to retain up to 60 days of working capital for normal cash expenses out of over-applied costs or what we will refer to in this document as “surplus balance” or “surplus.” This will be discussed in more detail when we describe how to calculate working capital requirements.
- If UH transfers or borrows funds out of an SRRC for non-operating reasons, it must refund to the federal government its share of such transfers or borrowings.

Implications

- Fees must be charged based on actual usage. Thus, SRRCs should exercise care in determining the basis for charging fees. Fixed monthly fees draw the attention of auditors if, in their experience, such a method is inappropriate for the SRRC type.
- Fees for SRRCs should be based on its actual costs, which will be referred to as “historical costs” throughout this document. Auditors will generally look to the most recent fiscal year of historical costs as the basis for the next fiscal year’s fee calculations.
 - Increases in costs due to factors such as collective bargaining increases or fringe rate changes may be included in fee calculations. Documentation on how the increases were estimated should be retained in case of an audit.
- Fees charged to federal grants or contracts cannot include depreciation on equipment purchased on UH federal grants and contracts. Other SRRC costs that are paid from active UH federal grants and contracts (e.g., a center grant) also cannot be included in fee calculations.
- In addition to costs paid from UH federal grants and contracts, other “applicable credits” include any SRRC costs paid with UH funds that are not intended to be recovered via fees (a.k.a., “subsidy”) and any refunds, rebates or other cost adjustments received by UH that would lower costs paid by the SRRC.
- Fees for SRRCs should be calculated to break-even over time. Thus, SRRCs cannot generate profits.
 - Although 60 days of working capital may be retained out of a surplus balance, cash in excess of the 60 days (a.k.a., “net surplus”) should be used to reduce fees. Federal regulations require that this be done every two years (i.e., biennially). Thus, carrying forward net surplus balances indefinitely is not allowed.

- Similarly, carrying forward under-applied costs (a.k.a., “deficit balances” or “deficits”) indefinitely is not allowed. The federal government expects deficits to be recovered through fee increases or the UH unit should clear the deficit using UH funds.
- UH federal grants and contracts cannot be charged higher fees than other UH affiliated users or auditors will cite UH for discriminating against federal awards. This means that UH affiliated users, including students, cannot pay lower fees on other UH accounts (e.g., general funds; revolving funds; special funds) or receive services for free.

This is a general overview of the federal requirements and deliberately excluded external sales and reserve accounts for clarity.

Fees for non-UH affiliated users, which for the purposes of this document are defined as users that are not using a UH account to pay for SRRC services, can be higher than UH affiliated user fees. In addition, surplus and deficit analyses are affected by reserve accounts. These issues will be covered under the External Sales and Reserve Account sections of this document.

Usage Basis

2 CFR 200 does not explicitly define what would be considered appropriate usage bases.

Auditors expect that SRRCs perform one or more of the following services:

<u>Type of Service</u>	<u>Usage Basis Examples</u>
Build something	<ul style="list-style-type: none"> ● Per finished item ● Labor hours used plus materials
Analyze something	<ul style="list-style-type: none"> ● Per test
Perform something	<ul style="list-style-type: none"> ● Labor hours used ● Labor hours used plus materials ● Animal cage days used ● Ship days used
Allow use of something	<ul style="list-style-type: none"> ● Machine hours used ● Per account/line/device per month used

Considerations:

- Usage should be able to be tracked and result in the equitable allocation of costs among all users. Ideally, someone with basic understanding of the science or activity involved should be consulted for determining the appropriate usage unit of measure.
- Estimates of fiscal year usage units should be realistic. SRRCs should not project ideal conditions to achieve break-even on paper. This will only result in the SRRC being required to explain and adjust for variances at renewal.
- SRRCs should be consistent in the way that they bill users for services provided. If the methodology is to track and bill labor hours and charge the actual costs of materials separately, this should be done for all customers. SRRCs should not offer custom billing options or it could

be accused of being inconsistent by auditors and will raise questions about whether a federal award was charged incorrectly for services provided relative to other users, including other federal awards.

Operating Costs

Costs charged to SRRCs must be allowable, allocable and reasonable because the fees will ultimately be charged to a UH federal grant or contract. Thus, SRRC operating costs will be similar to costs incurred on a federal grant or contract.

Per 2 CFR 200, these would include costs such as:

- Salaries and fringe benefits of technical staff
- Supplies
- Long distance phone charges
- Computing costs (including costs of any specialized software needed for fee calculations, SRRC management, and invoice preparation)
- Professional services
- Rental costs of equipment
- Specialized service costs (SRRCs can be customers of other SRRCs depending on the service provided)
- Taxes (e.g., excise taxes)
- Transportation costs (refers to freight, shipping and postage)
- Travel costs

SRRC fees are direct costs. Thus, costs that are normally treated as indirect costs (F&A) incurred on behalf of the SRRC should be treated as direct costs provided that they are necessary for operating the SRRC and are charged directly to the SRRC account. These include:

- Salaries and fringe benefits of administrative or clerical staff
- Office supplies
- Postage
- Local telephone costs
- Memberships
- Subscriptions
- Depreciation
- Insurance
- Interest
- Maintenance and repair costs
- Training and education costs of SRRC staff

Unallowable Costs

Unallowable costs should be excluded from the calculation of SRRC fees.

For brevity, we will highlight selected cost items whose default treatment is Unallowable or Unallowable with exceptions (a.k.a., “Expressly unallowable costs”). Please note that the exceptions are for costs budgeted in a particular grant or contract and require approval from the federal sponsor. An SRRC is not a grant or contract. Thus, under most circumstances, it will not qualify for such exceptions.

Expressly unallowable costs include the following:

<u>Selected Cost Item</u>	<u>2 CFR 200 Reference</u>
Alcoholic beverages	§200.423
Alumni/ae activities	§200.424
Bad debts	§200.426
Commencement and convocation costs	§200.429
Contingency provisions	§200.433
Contributions and donations	§200.434
Entertainment costs	§200.438
Fines, penalties, damages and other settlements	§200.441
Fund raising and investment management costs	§200.442
Goods or services for personal use	§200.445
Idle facilities	§200.446
Lobbying	§200.450
Losses on other awards or contracts	§200.451
Organization costs	§200.455
Selling and marketing costs	§200.467
Student activity costs	§200.469
Telecommunication costs and video surveillance costs (See Public Law 115-232 , section 889 for more information)	§200.471

Cost Accounting 101

If an SRRC charges more than one fee, it will need methodologies for assigning costs to each of the fee types.

Direct assignment

The simplest method is called direct assignment. In this situation, a purchase can be assigned to a fee type with nearly 100% certainty.

Timesheets and usage data

For costs that are directly related to the activity such as the salary and fringe of technical staff or materials and supplies, effort or usage data will need to be tracked.

For example:

- Timesheets should be maintained for each SRRC technical staff to track the hours spent on each fee type for the entire fiscal year.
- For materials or supplies, the quantities used per fee type should be maintained for the entire fiscal year.
- Depreciation, interest and maintenance and repairs should be allocated to fee types based on equipment usage logs maintained for the entire fiscal year.

The examples are not prescriptive. Ideally, someone with basic understanding of the science or activity involved should be consulted for determining the appropriate data to track for cost allocation purposes.

Time and motion studies

If contemplating using a time and motion study in lieu of maintaining detailed records, SRRCs should carefully pick a time period (e.g., a month) that is representative of the level of business amongst all fee types. All timesheet and usage data needed to do cost allocations should be collected during that time period. Finally, the time and motion data should be updated at least every two years to ensure that current data is being used for fee calculations.

Pool and allocate

If an SRRC chooses to include the costs of administrative support as part of the fees, this is the methodology that would be used.

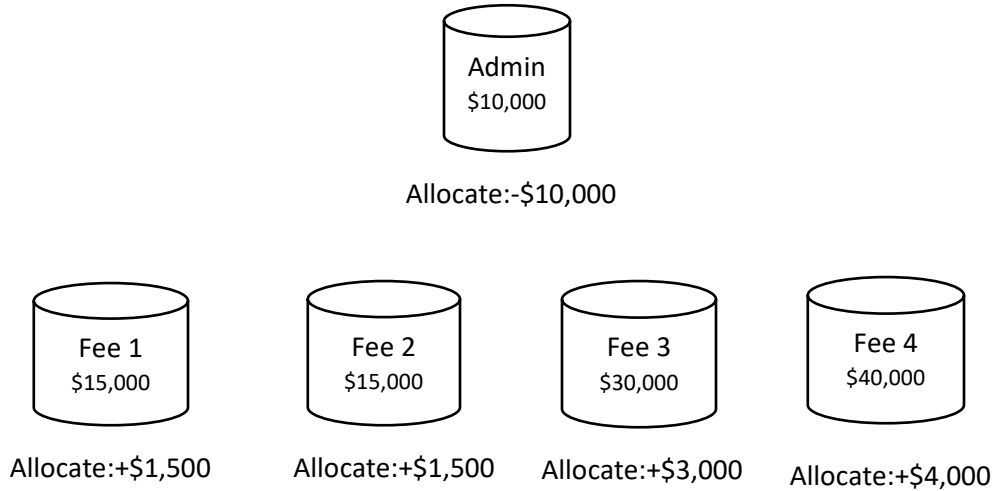
For example, an SRRC has total costs of \$110,000. The amounts charged to the SRRC for the salaries and fringe benefits of administrative and clerical staff, offices supplies, and local telephone costs totaling \$10,000 are separated from the direct costs of providing services to create an Admin Pool.

Through the use of direct assignment, timesheets and usage data, the \$100,000 of direct costs were allocated to the fee types as follows: Fee 1 - \$15,000; Fee 2 - \$15,000; Fee 3 - \$30,000; and Fee 4 - \$40,000.

The Admin Pool costs can be allocated to the fee types based on their relative total direct costs. For example, Admin Pool costs allocable to Fee 1 is computed as follows: $\$10,000 \times \frac{\$15,000 \text{ Fee 1 direct costs}}{\$100,000 \text{ total direct costs}} = \$1,500$.

The final Fee 1 cost is \$16,500. Normally, the SRRC sells 10,000 units of Fee 1 during a fiscal year. The resulting rate is: $\$16,500 / 10,000 \text{ units} = \1.65 .

The method could also be used to allocate other costs such as memberships, subscriptions, insurance, and training and education costs if they benefit multiple fee types. However, if a cost can be directly assigned to a specific fee type, the cost should be assigned directly.



Documentation

To aid future SRRC staff that will be tasked with fee calculations and for the central offices that will be reviewing new and renewal applications, the SRRC should document the allocation methodologies selected. The document should be submitted to the SRRC committee and a copy kept on file for internal use by the SRRC.

External Sales

As mentioned under Fundamental Cost Accounting Principles, non-UH affiliated users are defined as users that are not using a UH account to pay for SRRC services. Non-affiliated users can be charged higher rates than UH-affiliated users.

Here are some recommended methods to calculate higher rates for non-UH affiliated users.

Option #1: Research F&A rate markup

Under this option, the calculated UH affiliated rate is marked up by the federally negotiated on-campus research F&A rate. For example, the Fee 1 rate from the *Pool and allocate* section under Cost Accounting 101 is \$1.65. The current on-campus research F&A rate is 45.5%. The non-UH affiliated user rate can be calculated as follows: $\$1.65 \times 1.455 = \2.40 .

Option #2: Fully costed rate

Under this option, the costs used to calculate the UH affiliated rate will be increased by any subsidies and depreciation on federally funded equipment.

For example, the Fee 1 rate doesn't take into account \$10,000 of subsidies and depreciation on federally funded equipment and related admin costs. The "full costs" are \$26,500. The non-UH affiliated user rate can be calculated as follows: $\$26,500/10,000 \text{ units} = \2.65 .

Option #3: Market rates

Under this option, the rate is set at the current market rate. For example, the type of service performed for Fee 1 goes for \$3 per unit of service in the free market. The non-UH affiliated user rate should be set at \$3.

Please note that this option would be used if a commercial vendor provides the same type of services. The rates should be the same or UH could be accused of unfair competition. Another situation where this option would be used is if the equipment was funded by the federal government and the award has a term and condition requiring that rates for services to external users involving the federally funded equipment cannot be lower than those offered by vendors.

Reserve Accounts

A reserve account would be setup either to record transfers of equipment depreciation from the SRRC operating account and/or to record revenue and related expenses of external sales. Removing depreciation and any excess revenues over expenses for external sales from the operating account will exclude them from the surplus/deficit analysis.

Depreciation

Annually, depreciation should be transferred from the operating account to the reserve account.

Depreciation must be properly calculated. All of the following criteria must be met:

- Depreciation cannot be claimed on equipment purchased on UH federal grants and contracts or on equipment transferred into UH and inventoried as federally funded assets
- Depreciation must be based on historical costs and depreciated using the useful lives under [AP A8.550, Attachment 2](#) (NOTE: Asset type code is assigned by the Capital Asset Accounting Office)
- Depreciation may not be claimed on fully depreciated equipment or on retired or disposed equipment

Please note that future equipment purchases should be made from the reserve account to the extent of funds available. An SRRC will need to find other means of financing such as an investment of research and training revolving funds (RTRF) or an equipment acquisition grant to make up the difference. Depreciation should only be calculated on the non-federally funded portion and included in the fee calculation.

CAVEAT: If RTRF is loaned to the SRRC and the creditor such as the dean/director or central unit (e.g., Vice Provost for Research and Scholarship) expects to be paid back, depreciation may not be claimed on the portion of equipment paid by the loan. Instead, the annual loan payment should be included in the operating account as part of the rate calculation. Annually, the loan payment should be transferred from the operating account to the account designated by the creditor.

External sales

The reserve account should be used to record payments and any advance payments from non-UH affiliated users as revenue at the higher non-UH affiliated user rate.

To record expenses in the reserve account, the SRRC operating account will bill the reserve account for services at the UH affiliated user rate.

The actual costs of providing the service such as personnel costs and supplies should be recorded in the operating account.

For example, a non-UH affiliated user received 500 units of Fee 1. The user is billed as follows: 500 x \$2.40 = \$1,200. The SRRC operating account bills the reserve account for 500 units at \$1.65 each for a total of \$825. When the check is deposited, the difference between \$1,200 and \$825 or \$375 is the net external sales income that can be kept by the SRRC.

In the simplified example, the operating account “breaks even” (i.e., \$825 of revenue - \$825 of expense = \$0). In real life, variances are expected to occur due to timing differences between recording of expenses and receipt of revenues.

	Operating account			Reserve account		
	Exp	Rev		Exp	Rev	
Salary & fringe - 1)	562.5	825	3)	825	1,200	4)
Supplies - 1)	187.5					
Admin costs - 1)	75					
	825	825		825	1,200	

2)
5/10/20xx
To: ABC Corp
500 units x \$2.40 = \$1,200
Please make check to
University of Hawaii

- 1) SRRC incurs costs to perform 500 units of service for non-UH affiliated user
- 2) SRRC bills non-UH affiliated user for \$1,200 (500 units at non-UH fee of \$2.40 per unit)
- 3) SRRC bills reserve account for the services provided to the non-UH affiliated user for \$825 (500 units at UH fee of \$1.65 per unit)
- 4) SRRC deposits check from non-UH affiliated user

Working Capital and Surplus/Deficit Analysis

To perform a surplus/deficit analysis, the 60-day working capital requirement must first be calculated and then subtracted from the ending cash balance for the most recent fiscal year.

To calculate the working capital requirement, we take the average of the two most recent fiscal years of expenses less any depreciation, capital costs or debt service and divide the average by 6. The working capital requirement is then compared to the ending cash balance.

If the working capital requirement is more than the ending cash balance, there is no surplus balance to use for offsetting future rates.

If the ending cash balance is more than the working capital requirement, then the difference or “net surplus” should be used to reduce future rates.

If the ending cash balance is negative, a working capital calculation should not be done. There may already be a deficit situation. If there are unpaid invoices that will be paid next fiscal year and that will offset the deficit, then the deficit should not be used to increase future rates and the information and conclusions should be documented in the SRRC renewal application. However, if there are no outstanding invoices, the deficit amount should be used to increase future rates.

See Attachment 1 for a working capital and surplus/deficit analysis example.

Attachment 1
Working Capital and Surplus/Deficit Analysis Example

<u>Object Code</u>	<u>Budget Cat</u>	<u>Actual Expenditures</u>		<u>Average</u>	<u>Working Capital (1/6 of Average)</u>
		<u>FY 2022</u>	<u>FY 2023</u>		
2087-RCUH-Wages	B100	97,595.58	131,890.54		
2097-RCUH-Fringe Benefits	B100	36,536.86	48,859.32		
3015-Oper Supp, Scientific	B600	291,856.59	356,995.92		
3502-Membership Dues, Individual	B600	-	90.00		
4450-Transp, US & Terr (E, NR)	B600	-	133.00		
4550-Per Diem, US & Terr (E, NR)	B600	1,480.50	2,301.58		
4580-Per Diem, Foreign (E, NR)	B600	-	750.05		
4851-Oth Travel, US&Terr (E, NR)	B600	22.29	158.07		
4852-Oth Travel, Foreign (E, NR)	B600	-	273.27		
5700-Rent-Others	B600	569.05	602.88		
5810-R&M, Mach & Eq, Spec	B600	19,448.91	93,618.91		
7100-Svc, Non-St Emp-Other	B600	32,250.00	-		
7200-Other Current Expenditures	B600	-	500.00		
7217-Computer Software License Fees	B600	3,595.00	-		
7230-Registration Fee-Staff	B600	-	1,889.46		
7249-RCUH Revolving Acct Fee	B600	14,017.27	18,503.81		
TBD-Depreciation	B700	-	10,497.20		
Subtotal		497,372.05	667,064.01		
Less adjustments					
Depreciation (TBD)	B700	-	10,497.20		
Capital costs		-	-		
Debt service		-	-		
Subtotal adjustments		-	10,497.20		
Eligible base		497,372.05	656,566.81	576,969.43	96,161.57
				FY 2023 end cash	86,919.35
				Surplus/deficit	N/A