

## Earth Observing Laboratory System User Rate

### **Methodology:**

The calculated System User Rate (SUR) is not submitted formally to NSF for approval. Effective FY 2003, the SUR follows new guidelines established by Cliff Jacobs, Program Official, NSF, in his [01/18/02 guidance letter](#). Although NSF is setting this rate, we will continue to follow the methodology below as a courtesy to the NSF program official who sets the rates. Note that the NSF has chosen not to use the C-130 SUR methodology at this point.

The purpose for estimating and charging a System User Rate (SUR) is to ensure that each user of the Earth Observing Laboratory (EOL) observing facilities pays its fair share of the costs of maintaining these facilities and that funds are made available (through the SUR) for modest infrastructure (component) replacements, modernization, and upgrades as required. Typical EOL observing facilities include GPS-Loran atmospheric sounding system, airborne imaging microwave radiometer, integrated surface flux facility, integrated sounding system, Doppler radar, scanning aerosol backscatter Lidar, S-Band dual polarization radar and research aircraft.

If NCAR observing facilities are used in support of non-NSF sponsored activities, NCAR will collect the SUR based on NSF-approved rates. In cases where SUR use would be by non-NSF grantees, but in support of an ATM-supported activity, NSF must approve cosponsorship of all or part of the SUR charge.

Funds recovered through the SUR are held by NCAR in a separate account and reported in the Management Information Report available at the UCAR website noted below. Requests for the use of these funds must be submitted in writing to the NSF Program Official with detailed explanations of the planned use. Written approval by the NSF Program Official is required for the use of these funds.

### **Definitions:**

**Applied Indirect Costs:** The appropriate NCAR indirect cost rate that is routinely added to all modified total direct costs.

**BC (Base Funded Costs):** The annual costs, borne by NSF in the form of base (core and focused programs) funding to maintain and operate an observing system. These include all direct field support costs, development costs, a prorated share of the EOL Director's Office and Research Data Program (RDP) direct costs, and applied indirect costs. No equipment or applied indirect costs are included. Research and development costs are specifically excluded from the calculation.

**DA (Days Available):** The total normal workdays available in the fiscal year as established by NSF-ATM:

$$52 \text{ weeks} \times 5 \text{ days / week / system} = 260 \text{ days}$$

**Division Indirect Cost Budget:** The indirect cost budget that is allocated to each management unit (division) to cover the annual indirect labor and non-labor administrative expenses of that unit.

**Variances:** Not applicable for SUR, because SUR is not a cost recovery rate.

**Calculation:**

$$\text{SUR Rate} = \frac{\text{BC}}{\text{DA}}$$

**a. Standard Rate:** As calculated above.

**b. Alternate Rates:** There are significant variations in the complexity and duration of field programs. This in turn affects the labor effort that must be applied and the size of the base-funded field crew that is required. Accordingly, the methodology must include a way to adjust the SUR to reflect these higher or lower labor requirements.

Although not applied in recent years, previous analysis of actual NCAR field labor costs had indicated that alternate rates approximately 40% higher and 40% lower would cover the extreme cases of field effort. Therefore, an alternate lower rate of 60% of the Standard Rate and an alternate higher rate of 140% of the Standard Rate may be appropriate and applied, subject to NSF Program Official and Grants and Agreements Officer approval.