Solar Research Institute Starts Out in Partial Eclipse

That much sought after research plum—the proposed Solar Energy Research Institute (SERI)—will begin its life as little more than a seedling.

After months of wrangling within the Administration over the size and scope of the proposed facility, the Energy Research and Development Administration (ERDA) on 15 March finally issued a formal request for proposals, spelling out its vision of what the new institute should be. The matter of a permanent location for SERI, a question of intense interest to localities eager to snare this latest research prize (*Science*, 10 October 1975), has been deliberately left vague.

The scale of the new facility will be considerably less than in some of the previously discussed grandiose plans that had set would-be proposal writers drooling with anticipation. A committee of the National Academy of Sciences had recommended that the new institute build quickly to a staff of 630 professionals and an annual operating budget of \$48 million, and officials at ERDA had hoped to make a reasonably fast start as well. But skeptics at the Office of Management and Budget, ever alert for empire-building proclivities, are said to have forced a rethinking of the whole project. Their chief complaint, according to one wellplaced source, was that plans for the institute were "very ill defined"-little attention had been given to what the institute would do substantively and "too much attention was paid to what the site should look like." The OMB also felt that SERI's prime initial function should be to provide analytical support for the relatively thin management ranks in ERDA's solar programs, with research and development work deemed of secondary importance.

Robert L. Hirsch, who became ERDA's assistant administrator for solar, geothermal, and advanced energy systems in February, told a press conference that when he took over no one at ERDA had even bothered to focus on what specifically the institute would do in its first year of operation. When they did consider that issue—with OMB's skepticism in mind—they concluded that the institute should have a first-year operating budget of \$4 to \$6 million and a total professional staff of 49 to 76 persons. By the third year those figures might build to a budget of \$10 to \$20 million and a staff of 133 to 287 professionals. Such growth would not be guaranteed but would depend on the needs of ERDA, the performance record of the new institute, and the availability of funds.

ERDA's request for proposals emphasizes the importance of the quality of the personnel that would operate the new institute and deemphasizes the physical site that would serve as SERI's ultimate home should the institute become permanent. In fact, the request merely asks the competitors to propose a team of managers and operators and a facility to house the start-up operations, with an option for a larger site in the future. The possible future site is a prerequisite for consideration, according to ERDA, but "will *not* be an evaluation factor for use in selecting a SERI manager-operator and an initial facility" [emphasis ER-DA's]. The rationale for this uncertainty about a permanent site is that ERDA has not yet decided what research activities it wants performed at the central site; thus it does not know what climatic conditions it should seek.

As described in documents issued by ERDA, the mis-

sion of SERI will be to support ERDA's ongoing solar energy program, help establish an industrial base for solar energy, and foster widespread use of solar technology. In its initial phase (up to 5 years), it will concentrate on analytical work and certain research activities with a potential for quick payoff. The initial facility (presumably a building already in existence—there is no money for buildings in the ERDA budget) must provide sufficient office and laboratory space to accomplish the work, but no outside experimental area is required.

In the long term, SERI could develop by "phased growth" into ERDA's "lead solar laboratory" and "a national focus for interaction and collaboration between the government, industry and users on new and creative concepts and techniques." All competitors must propose a possible site to house these future activities as an option which ERDA may exercise within 5 years. This site must be within "reasonable commuting distance" of the initial facility (so that families do not have to be moved after relocation) and must contain "at least 300 usable contiguous acres," about two-thirds of which are suitable for outdoor experimentation. The site must also be "reasonably close, from a normal commuting standpoint, to residential communities, a major commercial airport, and an institution of higher education (with both undergraduate and graduate programs)." It is conceivable, according to Hirsch, that ER-DA might decide not to exercise its option on the future site and instead move the initial facility to some other permanent location, costs permitting.

The requirements seem loosely enough drawn to allow virtually any serious contender to submit a proposal. Thus far ERDA has received more than 800 inquiries about the proposed institute, though not all such inquiries are apt to lead to formal proposals. Hirsch said the SERI described "can be located almost anywhere in the country," in contrast to the "knee jerk reactions" of some people who concluded it must be located in the sunny southwest.

Proposals will be accepted from "any responsible organization," including nonprofit, commercial, or state and local entities.* The winner—chosen by ERDA Administrator Robert C. Seamans, Jr.—is to be announced in December, thus allowing SERI to begin operations by 1 January.

That schedule of events deftly removes the SERI decision from the political arena. Already various candidates in the presidential primaries have been implying that they'd like to see SERI placed in whatever state they happen to be campaigning in at the moment, and there has been speculation that President Ford, if faced with a serious challenge from Ronald Reagan for the Republican nomination, might be inclined to toss SERI to a state—such as Arizona whose conservative Republican leadership might play a crucial role in the nomination process. But with the Reagan candidacy seemingly fading, and with the decision on SERI now scheduled for after the November election, politics seems less likely to throw its cloud over the search for a new solar facility.—P.M.B.

^{*}Organizations that are already on the SERI master mailing list will receive copies of ERDA's request for proposals automatically. Others may request copies from Ray Fields, chairman of the Source Evaluation Board, Division of Solar Energy, ERDA, Washington, D.C. 20545. A preproposal conference will be held by ERDA on 15 April. Formal proposals must be submitted to ERDA by 15 July.