SCIENCE

Note to Readers about Technical Comments

Beginning in 1998, summaries of technical comments will appear in the printed journal; full text and figures will appear only online.

This change will allow:

- **Free access** to the full text of technical comments and responses for all *Science* Online readers.
- **Quicker publication** of reviewed comments, criticisms, and responses.
- **Linkage between reports and comments,** which would notify readers that subsequent comments were published about a report (or article) in *Science*.
- **More comprehensive figures and tables** in the comments and more detailed discussion of methods and instrumentation.
- **Up-front coverage** in summaries of the comments and responses, which will appear in "This Week in Science" in the printed journal, with Web addresses for the full texts.
- **Continued full citation,** with technical comment titles and authors continuing to be listed in the printed Table of Contents, and authors continuing to be cited in the quarterly online index.

cyclotron. The plasma parameters obtained thus far are preliminary, and extensive simulations and experiments are needed to optimize them.

In the same section, it is also pointed out that an excellent vacuum will exist between the plasma and the wall, and the plasma will be positively charged. Therefore, the only electron heat loss will be through bremsstrahlung, and not through exchanges with the wall, as in Tokamaks.

The minimum size of a Tokamak with ignition cannot be determined from pulsed experiments. The International Thermonuclear Experimental Reactor (ITER) experiments, if successful, will decide this. Judging from the designed size of the ITER, a 10-gigawatt reactor is a reasonable estimate. In any case, even a 1-gigawatt reactor is currently viewed as commercially and technically unattractive.

Our CBFR will have only a wall power load from bremsstrahlung, absorbed as heat. The alpha particles will not hit the wall; instead, the magnetic fields will guide them into the inverse cyclotron to extract their kinetic energy.

The absence of rotating parts, any radioactivation, and most technical infrastructure connected with steam-generated electric power cannot help but simplify, and thus reduce, costs of maintenance.

N. Rostoker
M. W. Binderbauer
Department of Physics and Astronomy, University of California, Irvine, CA 92697–4575, USA
Hendrik J. Monkhorst
Department of Physics, University of Florida, Gainesville, FL 32611–8435, USA
E-mail: monkhors@qtp.ufl.edu

■

Fusion Panel Meeting

Andrew Lawler's News & Comment article "Fusion panel scored for tipping results" (14 Nov., p. 1219) ignores the main issue.

In six meetings over 6 months, a National Research Council (NRC) committee determined that some information relevant to its charge was best obtained from senior Department of Energy (DOE) officials responsible for the Science Based Stockpile Stewardship program. That was the purpose of the 6 December meeting Lawler describes, one quite in accord with NRC procedures. Lawler's article describes the meeting as between "physicist Steve Koonin of the California Institute of Technology in Pasadena, chair of the NRC panel, and DOE managers." The full committee and its NRC staff were in attendance.

Lawler also reports that "NRC Executive Officer William Colglazier says he was not aware of the meeting." Although Colglazier was not aware of the conversations at the meeting, he was fully aware that the meeting was to be held (indeed, it is on the 6 December agenda, reproduced in the committee's report), but could not attend because he lacked the DOE clearances for the level of classified information required for this study.

The headline of Lawler's article and the article itself also distort reality by implying that the committee prematurely revealed its findings. The senior DOE officials were told only that the committee to date had found nothing that would warrant stopping further work on the National Ignition Facility (NIF), but that its investigations were continuing. Given that every phase of the NIF project had been subject to continuous scientific and technical scrutiny, this observation was hardly revelatory. The committee also made it clear that its conclusions had not yet been formulated and that its report had yet to be written and peer-reviewed.

The main issue is the NRC report itself, which was vetted through the National Academy of Science's rigorous review process. The committee's primary task was to assess the technical statutes of the NIF project and to make technical recommendations that would increase the likelihood that a national goal endorsed by both the Administration and Congress would be achieved. We believe that the report does so, making the legal barriers to its use by the DOE antithetical to the national interest. Those who are interested can judge the report for themselves at www.nas.edu/cpsma/icf.htm.

Steven E. Koonin
Vice President and Provost and Department of Physics, California Institute of Technology, Pasadena, CA 91125, USA
E-mail: steve_koonin@caltech.edu
C. William Colglazier
Executive Officer, National Research Council, 2101 Constitution Avenue, NW, Washington, DC 20418, USA

Response: Koonin's and Colglazier's arguments are with each other, not with *Science*. The main issue in my article was not the quality of the report, but whether the NIF committee abided by NRC rules. Disclosure by NRC panels of preliminary results to sponsors is a violation of academy procedures, as Colglazier noted in the article and as he continues to affirm. He still maintains that "what was done [by the Koonin panel] was not what the Academy wants." Whether or not the preliminary findings were "hardly revelatory," Koonin and Colglazier acknowledge that the NIF panel provided them to DOE managers before they were seen by NRC reviewers.—**Andrew Lawler**

■

Lamp Enlightenment

Being professionally concerned with fluorescent lamp phosphors, I was interested to read the report on silica-based metal-free phosphors by W. H. Green *et al.*, "White phosphors from a silicate-carboxylate sol-gel precursor that lack metal activator ions" (20 June, p. 1826). Green *et al.* assert that mercury vapor plasmas are used in fluorescent lamps *because* the available phosphors *require* the short-wave 254-nanometer ultraviolet light (UV) excitation (emphasis mine). Of the two references cited for this assertion, Ropp (*1*) appears not to mention the matter, and Leverenz (*2*) asserts the converse.

The current suite of lamp phosphors was selected and adapted to the 254-nanometer excitation wavelength, not vice versa, in order to take advantage of the remarkable ability of the low-pressure mercury discharge to convert electrical energy to pho-