the enactment of this legislation and the accompanying appropriations legislation. It behooves all of us to act as expeditiously as possible to complete our consideration of this matter.

Mr. MOSHER. Mr. Speaker, I yield 3 minutes to the gentleman from California (Mr. GOLDWATER).

(Mr. GOLDWATER asked and was given permission to revise and extend his remarks.)

Mr. GOLDWATER. Mr. Speaker, I rise in support of the bill, the conference report in question. I do so, however, with certain reservations on sections 102 and 103, to which I will address myself at a later date.

However, in addressing myself to the conference report, I would like to recognize the chairman of the Committee on Science and Technology for the way the chairman conducted the conference, as well as the chairman's fairness in all these matters under consideration. They were very difficult. They tested, I am sure, most Members who are on the committee; but through the conflict and through the debate, the chairman allowed for free expression by all Members from the most senior to the most junior, with the chairman allowing the chips to fall where they may.

Personally speaking, I appreciate that, inasmuch as I had several matters which I considered important, certain matters such as the protection of proprietary information, other matters involving data banks and their use and matters involving privacy of potential employees for ERDA. In all these very sensitive areas, the chairman, as well as those on the committee in the conference, I thought were quite fair.

Mr. Speaker, I will support the ERDA conference report with reservations, however, on sections 102 and 103, to which I will speak later.

I think as it is written it is about as good as we can do at the moment, but that is not to say that we cannot do better. Obviously, time is wasting. There is a need to provide the necessary funds for ERDA to produce the energy independence which we all feel is necessary. Therefore, this bill at this point in time is about as good as we can expect. Hopefully, next year when we can pursue it again, we will refine it further; but it does represent an honest and I think sincere effort on the part of all that were involved in the committee and in the conference.

With the exception of sections 102 and 103, which raise questions other than the mere funding and authorization of ERDA, I think the bill is worthy of support.

Mr. Speaker, the distinguished chairman of our Science and Technology Committee, Mr. TEAGUE, and the distinguished chairman of my own Energy, Research, and Development Subcommittee, Mr. MCCORMACK, have summarized the conference bill in front of us today in detail. I would like to turn now and make specific aspects of this conference bill which are of real importance.

POSITIVE AND PREDICTABLE PROTECTION FOR PROPRIETARY INFORMATION

The first area of importance is the positive and predictable protection of proprietary information which this bill incorporates. I personally am very proud to have been a principal author of the two sections giving ERDA full authority to provide such protection, Sections 103 (v) and 312. Importantly, both sections are in the nature of amendments to the basic Nonnuclear Energy Research, and Development Act, so that this protection will be fully effective in the future.

A great deal of legal research and analysis and painstaking negotiations led to adoption of the language in those two sections. I want to commend my colleague, Representative KEN HECHLER, for his continuing contribution and effective participation in this effort. I believe we have perfected an excellent solution to an otherwise serious impediment to success in the ERDA programs.

Sections 103(v) and 312 both incorporate the same statutory scheme and almost identical language:

The information maintained by the Administrator under this section shall be made available to the public, subject to the provisions of section 552 of title 5, United States Code, and section 1905 of title 18, United States Code, and to other Government agencies in a manner that will facilitate its dissemination: *Provided*, That upon a showing satisfactory to the Administrator by any person that any information, or portion thereof, obtained under this section by the Administrator directly or indirectly from such person would, if made public, divulge (1) trade secrets or (2) other proprietary information of such person, the Administrator shall not disclose such information and disclosure thereof shall be punishable under section 1905 of title 18, United States Code: *Provided further*, That the Administrator shall, upon request, provide such information to (A) any delegate of the Administrator for the purpose of carrying out this Act, and (B) the Attorney General, the Secretary of Agriculture, the Secretary of the Interior, the Federal Trade Commission, the Federal Energy Administration, the Environmental Protection Agency, the Federal Power Commission, the General Accounting Office, other Federal agencies, or heads of other Federal agencies, when necessary to carry out their duties and responsibilities under this and other statutes, but such agencies and agency heads shall not release such information to the public. This section is not authority to withhold information from Congress, or from any committee of Congress upon request of the chairman.

The statement of the managers in the conference report does not contain any amplification of the statutory language. It was the conclusion of the conferees associated with the preparation of the provision that the statutory language was clear and unambiguous. If information is shown to include either trade secrets or other proprietary information, ERDA shall not disclose it and any disclosure shall be punishable under the existing provisions of the Criminal Code. Since detailed discussion of this direct and simple scheme could only serve to create interpretive risks in any Freedom of Information Act court challenge under these sections, the report is intentionally silent.

As a primary author of these sections, I do wish to associate myself with and strongly endorse the restatement of the conferees intentions in adopting these provisions which is contained in the following colloquy between Senator JACKSON and Senator FANNIN, chairman and ranking minority member, respectively, of the Senate conferees, during the Senate debate Tuesday on the conference report.

Mr. FANNIN. Mr. President, one of the many positive steps taken in the conference on H.R. 3474 was the adoption by the conferees of two provisions which give ERDA authority to provide positive and predictable protection for trade secrets and other proprietary information. Mr. Chairman, because of the importance of the two sections, 103(V) and 312, to our ERDA programs, I want to insure that our actions are understood. Would you agree with the following summary of our actions and their effect on those two sections?

The conferees adopted two provisions which provide positive and predictable protection for trade secrets and other proprietary information. Sections 103(V) and 312 provide such positive and predictable protection for the information acquired by ERDA in the loan guarantee program and in its central source of information or data bank, respectively.

The two sections include a simple and straightforward statutory scheme. Where any individual has information which ERDA is going to acquire under either program, the individual can make a showing to ERDA that the information is either a trade secret or is other proprietary information. In both cases, there is an existing body of case law to help ERDA in defining these two categories of information. Once the individual makes a satisfactory showing that his information falls into one or the other of the two categories, ERDA shall not disclose the information. Procedures are included for ERDA to make the information available to its own employees and to other agencies to carry out their responsibilities. Neither the employees nor other agencies are authorized to disclose the information, however, and so the protection is not avoided. ERDA cannot under these provisions withhold the information from Congress.

The conferees took this action because of a very serious problem which is developing in ERDA and which could have been exacerbated by the loan guarantee program and the data bank. Or conversely, the problem could seriously have inhibited the progress and success of the programs. Basically, the problem is that under existing law, primarily the Freedom of Information Act, court holdings have made Government protection of trade secrets and other proprietary information completely unpredictable. One recent case even held that a prior Government pledge of confidentiality or nondisclosure could not be honored, but rather the nondisclosure had to—be "tested" under another court holding.

As a result, industry is increasingly reluctant to share the results of its research and development cooperatively with the Government.

Our action here is intended to remedy that situation for ERDA so that this problem will not serve as an impediment to getting the full cooperation of industry in formulating programs and in getting the full participation of industry in conducting these programs. Our national energy research and development efforts are far too important to allow such an impediment to exist. That there could be a problem was well demonstrated in a letter of September 12, 1975, from the ERDA Administrator, Bob Seamans, to Chairman TEAGUE of the House Science and Technology Committee, Bob stated:

"Recent cases indicate that a court might under the Freedom of Information Act require disclosure of information considered to be proprietary by a company donating or otherwise providing such information to the Government. . . . This has led to a growing reluctance on the part of industry to provide proprietary information to the Govern-

ment even under a pledge of confidentiality, because it is not clear that the Government will be permitted to honor the pledge."

He added, in discussing a data bank provision in the House bill which did not have the current protection added by the conferees:

"We are seriously concerned that the obscure and contradictory language of (the provision) may be construed to apply to, and thus impact, all of ERDA's activities relating to the receipt, evaluation and utilization of privately generated information. Under these circumstances, we foresee a grave loss of confidence on the part of the entire energy industry in ERDA's ability to deal with private companies fairly and honorably."

We believe we have acted responsibly to give ERDA full authority to provide positive and predictable protection for industry's trade secrets and other proprietary information in order that, as Bob Seamans stated so well, ERDA will have the "ability to deal with private companies fairly and honorably." We have done so by using a procedure which is an integral part of the Freedom of Information Act. That act includes a series of exemptions from the otherwise mandatory disclosure requirements of the law. One of these exemptions, exemption No. 3 (5 U.S.C. 552(b)(3)), simply covers "matters that are specifically exempted from disclosure by statute," meaning another statute. This exemption is intended to incorporate all other exemptions from disclosure in laws nondisclosure of particular information is specifically necessary for a particular program, notwithstanding the more generalized exemptions in the Freedom of Information Act—or in laws enacted prior to the act. There are over 100 such exemptions for specific programs in status today.

A June 1975 Supreme Court case, F.A.A. against Robertson, upheld a broad interpretation of this exemption. The court clearly stated that Congress must balance the public interests in disclosure under the Freedom of Information Act with the public interest in nondisclosure for a particular program. Once Congress has done so, the Supreme Court said, the courts cannot scrutinize the wisdom of that balance and in effect, there is predictable protection for that information. The program in the Robertson case was a special aircraft accident reporting system, including candid comments from pilots, airlines, and aircraft manufacturers. Protection of the information was necessary to insure full accident-related information outside of accident litigation, for safety purposes. We have now provided just that type of exemption for ERDA and we have done it in the way which the Supreme Court sanctioned—by striking a balance of information and nondisclosure in the national interest of insuring the cooperation and participation of American industry in ERDA's energy R. & D. program.

Mr. JACKSON. That is in accord with my understanding of the agreement.

I want to thank those two distinguished gentlemen for their strong bipartisan support of our efforts in this important area. I also appreciate the strong support which Messrs. TEAGUE, MCCORMACK, and MOSHER on the House side gave to our efforts.

In order to provide a complete legislative history for these two important provisions amending the Federal Nonnuclear Energy Research and Development Act of 1974, I want to briefly review the sequence of events which led to their adoption in the H.R. 3474 conference. The House passed version of H.R. 3474 contained a provision, section 307, establishing a new "central source of information" or data bank for energy resource and technology information. Another provision, section 308, added ERDA to the list of agencies eligible to receive energy information, including subpoenaed and proprietary data obtained by the Federal Energy Administration under the Energy Supply and Environmental Coordination Act, ESECA. The two sections stated:

SEC. 307. The Federal Nonnuclear Energy Research and Development Act of 1974 (88 Stat. 1878; 42 U.S.C. 5901) is amended by adding at the end thereof the following new section:

"SEC. 17. The Administrator shall establish, develop, acquire, and maintain a central source of information on all energy resources and technology, including proved and other reserves, for research and development purposes. This responsibility shall include the acquisition of proprietary information, by purchase, donation, or from another Federal agency, when such information will carry out the purposes of this Act. In addition the Administrator shall undertake to correlate, review, and utilize any information available to any other Government agency to further carry out the purposes of this Act. The information maintained by the Administrator shall be made available to the public, subject to the provisions of section 552 of title 5, United States Code, and section 1905 of title 18, United States Code, and to other Government agencies in a manner that will facilitate its dissemination."

SEC. 308. The Federal Nonnuclear Energy Research and Development Act of 1974 (88 Stat. 1878; 42 U.S.C. 5901) is amended by adding at the end thereof (after the new section added by section 307 of this Act) the following new section:

"SEC. 18. The Administration is, upon request, authorized to obtain energy information under section 11(d) of the Energy Supply and Environmental Coordination Act of 1974 (15 U.S.C. 796(d))."

As a result of a House floor amendment, section 307 was expressly made applicable to all nonnuclear energy technologies and programs in ERDA. My very grave concern about the potential impact on predictable protection of proprietary information was expressed in my remarks on the House floor during the debate on H.R. 3474 in June:

PROPRIETARY INFORMATION

Section 307 states that "the responsibility of the Administration, ERDA, to implement the data bank shall include the acquisition of proprietary information, by purchase, donation, or from another Federal agency, when such information will carry out the purposes of this act—the Federal Nonnuclear Energy R. & D. Act." The section continues, "the information maintained by the Administrator shall be made available to the public, subject to the provisions of 5 U.S.C. 552 and 18 U.S.C. 1905." Both the direction to acquire proprietary information and the restriction on disclosure imposed by the cited statutes were well intentioned in their original concept. The committee report states that ERDA is not directed nor allowed to acquire proprietary information which is "closely held and not for sale." Unfortunately, however, the current language of the section creates the very real possibility that ERDA might be required by court action to divulge and thereby compromise proprietary information in an action under the Freedom of Information Act, 5 U.S.C. 552. The situation is materially worsened by section 308, which would have the effect of allowing ERDA to obtain and place in the data bank confidential and proprietary information from the Federal Energy Administration which had been acquired by subpena.

The committee staff explored this possibility in individual discussions with the ERDA General Counsel and with representatives of the Freedom of Information Committee in the Justice Department's Office of Legal Counsel, and finally a meeting including the committee staff, Member staffs and attorneys from ERDA and Justice. It was apparent that ERDA's General Counsel was unable to interpret the legal intention of the committee regarding acquisition and protection of proprietary information because of the section's language. The General Counsel specifically was unclear as to the intended meaning of "proprietary" and suggested that the committee define it in its memorandum suggested a definition based on the court test in National Parks and Conservation Association against Morton discussed below.

In suggesting the possible definition, however, the memorandum reaffirmed ERDA's concern by concluding—

"Our furnishing of this definition does not indicate the Administration's concurrence in the language of Section 307. . . . In our opinion, the purpose of this sentence as currently worded remains obscure."

Equally apparent was the Justice Department's analysis that there was no predictable protection of any legitimately confidential or proprietary information, because of the current state of the law under 5 U.S.C. 552.

The thrust of the basic legal analysis supporting this concern was conducted with the assistance of the Justice Department and is reasonably straightforward. The Freedom of Information Act (5 U.S.C. 552) generally requires disclosure of all Government records upon request. There are a number of exemptions to the required disclosure. One of the exemptions, section 552(b)(4), exempts trade secrets and commercial or financial information which is privileged or confidential. Current Justice Department guidelines require disclosure of information even if within an exempt category; unless there is a strong justification for withholding—and Justice agrees. In the most recent case on point, *Charles River Park* v. *HUD*, Civil No. 73-1930, the District of Columbia Circuit Court of Appeals on March 10, 1975, indicates that there should be withholding if an exemption applies—citing 18 U.S.C. 1905—thus potentially altering the Justice guidelines.

Even so, qualification for exemption (b)(4) can be difficult. In *National Parks and Conservation Association* v. *Morton*, 498 F2d 765 (1974), D.C. Circuit Court stated that (b)(4) applied if it could be shown that disclosure was either likely, first, to impair government's ability to obtain necessary information; or second, to cause substantial harm to competitive position of person providing the information. The Court toughened the qualification in *Petkas* v. *Staats*, 501 F2d 887 (1974) by refusing to accept a government assurance of nondisclosure in a regulation requiring information, where filing the information was conditioned on confidentiality. The Cost Accounting Standards Board regulation in the case required defense contractors to submit disclosure statements setting forth their accounting procedures, and the suit was to obtain public disclosure of the statements filed by Lockheed, ITT and General Motors. The court held that the government assurance and the corporations' respective filings conditioned on confidentiality were not determinative, and remanded the case for testing by the national parks test, above. The Office of Legal Counsel, Justice Department advises that, as a result of the above cases, government protection of proprietary R. & D. information and its withholding under exemption (b)(4). In a Free-

dom of Information Act, FOIA suit is very unpredictable, at best.

Further, 18 U.S.C. 1905 does not appear to have any effect in a FOIA suit. The statute, if applicable, would impose criminal penalties on government officials who disclosed confidential information in the possession of the government. At best, then it is a deterrent to unauthorized disclosure, but it only takes effect after the disclosure and the damage to the business concern. 18 U.S.C. 1905 has been virtually ignored by the courts in FOIA suits, except in the recent Charles River Park case above, because of a general exemption contained in the statute, "unless otherwise provided by law." Courts generally have interpreted the quoted passage as exempting disclosure under the Freedom of Information Act. Section 1905's penalties, therefore, would not be applied to an official who discloses proprietary information in response to a freedom of information suit.

The resulting possibility of divulging proprietary information should not be taken lightly. Dr. Seamans, ERDA Administrator, communicated his very real concern regarding the same possibility in a discussion of another section of the bill dealing with information dissemination, which was subsequently stricken in markup. He stated we are concerned that the language of the section may be construed in such a way as to prevent ERDA from accepting and utilizing proprietary information from industry which may be related to our programs. Equally as important is the possible interpretation of this section in such a way as to make industry reluctant to share proprietary information with us.

A recent Harvard Business Review article by Mr. Roger M. Milgrim, "Get the Most Out of Your Trade Secrets," volume 52, No. 6, November-December 1974 at page 105, reinforced the importance of trade secrets from the perspective of American industry. Mr. Milgrim, a New York attorney who had specialized in trade secret law and authored the standard legal text in the field, forcefully argues the need to protect our Nation's trade secrets. As he states:

"The cornerstone of many an enterprise's success, trade secrets often represent significant investment and confer important competitive advantage. Failing to understand or adequately protect them is playing Russian roulette with five loaded chambers. The odds are discouraging."

Mr. Milgrim goes on to argue that trade secrets, as a result of a May 1974 Supreme Court decision, are an increasingly attractive alternative to patents. He also documents their importance for licensing to foreign technology licensees and the resulting contribution to U.S. balance of payments, a contribution which he suggests may be as high as $1 billion per year. Mr. Milgrim offers one particularly relevant example of such licensing which is germane to our consideration of energy research, when he suggests at page 106 that recent events to world energy may heighten interest in U.S. technology.

"New notions of cost justification to ensure scrupulous use of limited energy. . . . For example, a new type of valve that precisely regulates liquid flow can improve fuel metering so much that it saves tons of fuel on a jet's takeoff and landing. Results in other applications are equally dramatic. But as recently as two years ago, potential users of the valve showed little enthusiasm for an innovation that required even slight changeover effort and expense. Not surprisingly, the valve manufacturer has recently experienced a new-found interest in both purchasing its product and becoming licensed under the manufacturing trade secret."

The message is clear. Trade secrets—technical proprietary information are of crucial importance to many American businesses. Dr. Seamans' concern that the threat of disclosure might serve to make industry reluctant to share its proprietary information is obviously well founded.

Despite the obvious seriousness of the concern over this issue, we are asked to legislate without any formal review of these arguments. There were no hearings, and however inadvertent or well intentioned, we are left with no adequate vehicle for legislating from a knowledgeable foundation on this issue at this point. Lest the Congress continue to legislate in a vacuum in this regard, and thereby enact a provision with all the potential or unclear direction which the ERDA General Counsel raised, for possible mandatory disclosure of proprietary information which Justice raised, and for resulting serious impact of ERDA's entire energy research program which Dr. Seamans raised, I strongly urge that the House, at a minimum, amend or strike the proprietary information portion of the section. If we must have a data bank, I urge that we insure that it will not serve to harm the ERDA relationship with industry.

I am not alone in suggesting that we in Congress act in such Freedom of Information issues. A June 13, 1975, article in the Washington Post, entitled "Freedom of Information," by Mr. Robert Blanchard, chairman of the communication department at American University, concluded that Congress must act to apply FOIA. He stated:

"The legislative and oversight powers of Congress provide the best means of balancing the dilemmas of secrecy and publicity. Congress, after all, is the creator of most agencies whose information is sought by the press and public. It has the powers of subpoena and the purse. Its procedures and publicity powers are quicker, more efficient, and relatively more flexible than the courts. It is the most representative branch.

"This means, of course, that appropriate committees of Congress must deal with freedom of information, and such related issues as privacy, on a continuing basis."

I agree with Mr. Blanchard. We should act now.

Let me summarize these points for you. I remain particularly concerned about the section 307 proprietary issue. The best legal advice available to us, that of the ERDA General Counsel and the Justice Department's Legal Counsel, strongly suggests that the current language in the section could result in mandatory disclosure by ERDA of legitimate proprietary information. At a minimum, the section results in a complete lack of predictability regarding ERDA's handling of such information. Such a result could seriously inhibit industry's willingness to share the fruits of its own independent energy research with ERDA. Others may disagree with the details of this legal analysis, but I feel strongly that we in Congress should positively act to resolve this issue and not throw it unresolved into ERDA's hands, and ultimately to the courts. ERDA's energy research must be done cooperatively with industry, just as we have always done in the space program with NASA. I am afraid that the current section 307 seriously threatens that cooperation.

Mr. Speaker, Dr. Seamans, Administrator of ERDA, echoed these very same concerns in a letter to Chairman Teague on September 18. He stated, in part:

The Energy Research and Development Administration (ERDA) is seriously concerned over the inclusion of Section 307 in the version of the ERDA Authorization Bill for FY 1976 passed by the House of Representatives. This Section requires ERDA to establish and implement an Energy Resources Data Bank on all energy resources and technology. The establishment of this Data Bank was not discussed at the hearings for this Bill, but was introduced in the markup by the Committee. For the reasons noted below, we recommend that this Section not be included in the ERDA Authorization Act and instead that the requirements for this Data Bank be submitted for consideration through the Congressional hearing process during which time ERDA and other Government agencies concerned with such data banks may present detailed recommendations. . . .

As a separate matter, we are also disturbed over the treatment accorded to "proprietary data" by Section 307. This Section provides that the Administrator is to acquire "proprietary information, by purchase, donation, or from another Federal agency." Proprietary information is generally understood to encompass privately developed information, which is maintained in confidence by its possessor because of the competitive advantage it confers. The open publication of such information destroys its proprietary character. Generally speaking, proprietary information is closely held and not available for sale or for open publication. When proprietary information is provided to the Government for regulatory or other purposes, the owner of the information generally obtains an agreement, either express or implied, that the Government will maintain it in confidence.

The Administrator is directed by Section 307 to make all the information in the Data Bank (including the proprietary information) available to the public, subject to the Freedom of Information Act (FOIA) and 18 U.S.C. 1905. These provisions are both obscure and contradictory. The FOIA requires disclosure of information acquired by the Government, whereas 18 U.S.C. 1905 imposes criminal penalties on Government employees for disclosing information submitted in confidence.

Further, the courts have not clearly delineated how the FOIA and 18 U.S.C. 1905 interact, but recent cases indicate that a court might under the FOIA require disclosure of information considered to be proprietary by a company donating or otherwise providing such information to the Government, notwithstanding 18 U.S.C. 1905. *This has led to a growing reluctance on the part of industry to provide proprietary information to the Government even under a pledge of confidentiality, because it is not clear that the Government will be permitted to honor the pledge.*

The House Report on H.R. 3474 (No. 94-294) states that ERDA is not directed or allowed to acquire proprietary information which is closely held and not for sale. While this language may be intended to clarify these contradictions, it appears contrary to the statutory language and the talent of Congress therefore becomes even more unclear. We do not know exactly what we are being asked to do.

We are seriously concerned that the obscure and contradictory language of Section 307 may be construed to apply to, and thus impact, all of ERDA's activities relating to the receipt, evaluation and utilization of privately generated information. *Under these circumstances, we foresee a grave loss of confidence on the part of the entire energy industry in ERDA's ability to deal with private companies fairly and honorably.*

Because of these complexities, and the need to delineate carefully and precisely how the public and private interests are to be balanced so that we may properly carry out the intention of Congress, we suggest that Section 307 be stricken at this time and the whole subject matter be considered in subsequent hearings. If this is not acceptable, we urge that modifications be made to H.R. 3474 which will clarify that ERDA is authorized to protect from disclosure any genuinely proprietary information which it accepts under a pledge of confidence." (emphasis added)

Dr. Seaman's concern regarding industry's "growing reluctance" to share proprietary information with the Government can only be expected to become increasingly serious as more and more corporate counsels become aware of this problem. Based on recent legal statements on the subject, that is fast occurring. An address by a Washington attorney, James H. Wallace, before the Federal Bar Association conference on "Openness in Governments: A New Era," in Mary 1975, was entitled appropriately "Proper Disclosure and Indecent Exposure: Protection of Trade Secrets and Confidential Commercial Information Supplied to the Government." Mr. Wallace stated the problem quite succinctly as follows:

Allowing the public to monitor governmental decisionmaking does not necessarily require that the government facilitate competitive snooping. But, with increasing governmental activity and information gathering, the risk that valuable commercial information will fall into the hands of competitors is rapidly increasing. Businesses are alarmed at the prospect of federal proceedings—not only out of concern over government remedies, but also out of fear that valuable proprietary data will be lost. As the Attorney General candidly admitted, despite the Congressionally provided safeguards, [t]he risk that the confidentiality of information may be breached is "ever present."

(Address by the Honorable Edward H. Levi, Attorney General of the United States before the Association of the Bar of the City of New York, New York, N.Y. at 15, Apr. 28, 1975.)

An extremely detailed legal analysis of this problem appeared in the July 1975 volume of the Business Lawyer in an article entitled "Government Disclosure of Private Secrets Under the Freedom of Information Act" by James T. O'Reilly. In summation the author stated:

No confidentiality for proprietary information—and no confidence—may be the result.

He also pointed out an important factor regarding industrial research:

When a large investment in research cannot be brought to commercial fruition, because Government has disclosed its once-confidential innovation to competitors, the consumer pays for the loss in higher prices without a corresponding benefit—and *further research is deterred since Government may jeopardize its economic returns by premature disclosure.*" (Emphasis added)

The seriousness of this problem from the viewpoint of Government officials was expressed quite candidly by Normal J. Latker, Patent Counsel of the Department of Health, Education, and Welfare. While not officially representing a departmental view, Mr. Latker made the following comments in an address to the Academy of Pharmaceutical Sciences on November 19, 1975, entitled "The Protection of Intellectual Property Under the Fourth Exemption of the Freedom of Information Act." Mr. Latker summarized the current status of the law as follows:

The FOIA generally requires disclosure of all Government records upon request. There are a number of exemptions to the required disclosure. Of these exemptions, we are primarily interested today in number 4 which *appears* to exempt "trade secrets and commercial or financial information which is privileged or confidential." The leading case on the fourth exemption, National Parks and Conservation Association v. Morton, 498 Fed. 765 (1974), D.C. Circuit Court, states that the fourth exemption applies if it could be shown that disclosure was either likely, first, to impair the Government's ability to obtain necessary information or second, to cause *substantial* harm to a competitive position of a person providing the information. The Court toughened the qualification in Petkas v. Staats, 501 F. 2d 887 (1974) by refusing to accept a government assurance of nondisclosure in a regulation requiring information where filing the information was conditioned on confidentiality. The Cost Accounting Standards Board regulation in the case required defense contractors to submit disclosure statements setting forth their accounting procedures, and the suit was to obtain public disclosure of the statements filed by Lockheed, ITT, and General Motors. The court held that the Government assurance and the Corporations' respective filings conditioned on confidentiality were not determinative, and remanded the case for disposition in accordance with the test of the National Parks case noted above. Thus, a promise of confidentiality by the Government in and of itself may not prevent disclosure.

The Office of Legal Counsel of the Justice Department has advised that as a result of the above cases, *government protection of intellectual property and its withholding under the fourth exemption under a FOIA suit is very unpredictable, at best.*

Further, 18 U.S.C. 1905 does not appear to have any effect in a FOIA suit. This statute, if applicable, would impose criminal penalties on Government officials who disclose proprietary information in the possession of the Government. At best, then, it is a deterrent to unauthorized disclosure, but it only takes effect after the disclosure and the damage to the owner. 18 U.S.C. 1905 has been virtually ignored by the courts in FOIA suits because of a general exemption contained in the states, "unless otherwise provided by law." Courts generally have interpreted the quoted passage as exempting disclosure under the FOIA. Section 1905's penalties, therefore, would not be applied to an official who disclosed properietary information in response to a freedom of information suit. (emphasis added.)

Mr. Latker concluded in a particularly pessimistic note in light of the conferees subsequent action in adopting our provisions for ERDA:

Now when one compares the highly speculative benefits to be derived from permitting random access of research proposals to a few self-designated public interest groups against the measureable loss of intellectual property, investigator privacy, candor in decision making, effective evaluations and incentives for continued innovation, it is difficult to justify the present state of the law.

Although I and others in the Government believe this to be one of the more serious problems confronting our society, it has virtually had to beg for a forum. Both NASA and ERDA have brought this problem to Congress in the context of their research and as far as I can determine have made little progress toward resolution. The Association of American Medical Colleges has explained the problem to Congress in the context of NIH research in a much more comprehensive and articulate fashion than I have here, and have been equally unsuccessful. As far as I can determine, these organizations have been unable to separate to the satisfaction of Congress the issue of the need to protect most intellectual property in the hands of the Executive branch from Congress's preoccupation with opening the Executive's policy development process.

Admittedly there is an overlap, but not to the extent that the baby needs to be thrown out with the bath water.

At this point, it must be undeniably obvious to anyone who has the interest to pay attention to me this far that we do, in fact, have a problem. We had extensive testimony leading to this same conclusion in hearings on industrial energy conservation and on section 103 this fall. In short, industry is very well informed and very concerned, so there is no doubt about impact on ERDA programs in the absence of some congressional action.

Our next question was how to remedy this problem for ERDA, since the business of the Science and Technology Committee is not the Freedom From Information Act. Our business is energy research, and in fact, urgently accelerated energy research under ERDA to end our crippling dependence on foreign oil and achieve energy independence. To achieve that objective, ERDA must have the full cooperation and participation of American industry. Our concern, then, is that this proprietary information problem will inhibit that cooperation and participation and thereby seriously hinder our energy research efforts. In the end, energy independence could be made far more difficult to achieve and require far greater direct Government action.

The Freedom of Information Act includes exemption of interest, exemption No. 3. No. 3 is for all other exemptions from disclosure contained in other laws, where Congress determines that nondisclosure of particular information was specifically necessary for a particular program, notwithstanding the more generalized exemptions, such as No. 4, for all other information. There are over 100 exemptions for specific programs.

A June 1975 Supreme Court case on exemption No. 3, FAA against Robertson, upheld a broad interpretation of this exemption. The Court clearly stated that Congress must balance the public interests in disclosure under freedom of information against the need for confidentiality. Once Congress has done so, the Supreme Court said the courts cannot scrutinize the wisdom of the balance and, in effect, that there is predictable protection for that information. The program in that case was a special information system for the FAA in aircraft accident investigations, including candid comments from pilots, airlines, and aircraft manufacturers. Protection of the information was to insure complete information for aircraft safety, apart from court litigation.

The key paragraph in FAA against Robertson summarized the balancing requirement.

The discretion vested by Congress in the FAA, in both its nature and scope, is broad. There is not, however, any inevitable inconsistency between the general congressional intent to replace the broad standard of the former regarding withholding Administrative Procedure Act and its intent to preserve, for air transport regulation, a broad degree of discretion on what information is to be protected in the public interest. In order to insure continuing access to the sources of sensitive information necessary to the regulation of air transport, Congress could not reasonably anticipate every situation in

which the balance must tip in favor of nondisclosure as a means of insuring that the primary, or indeed sole source of essential information, would continue to volunteer information needed to develop and maintain safety standards. The public interest be served by a society's free flow of relevant information to the regulatory authorities from the airlines, *Congress could appropriately conclude that the public interest was better served by guaranteeing confidentiality in order to secure the maximum amount of information relevant to safety. The wisdom of the balance struck by Congress is not open to judicial scrutiny.* (Emphasis added.)

So what we can do is specifically exempt information from disclosure where it is clear that it is in the national interest to do so for a specific program because it is important that the information be available to the Government. That is exactly what the conferees have done in adopting our statutory language in sections 103(v) and 312. Our next action was to consider various alternatives for such language.

One strongly endorsed alternative is the provision appearing in section 11(d) of ESECA and also in the Clean Air Act and the Federal Water Pollution Act. While such endorsement was obviously well-intentioned, careful legal analyses led to the conclusion that such a provision would not provide authority for positive and predictable protection. This is the result of a number of factors best explained in the following discussion keyed to the ESECA provision:

(d) Upon a showing satisfactory to the Federal Energy Administrator by any person that any energy information obtained under this section from such person would, if made public, divulge methods or processes entitled to protection as trade secrets or other proprietary information of such person, such information, or portion thereof, shall be confidential in accordance with the provisions of section 1905 of title 18, United States Code; except that such information, or part thereof, shall not be deemed confidential for purposes of disclosure, upon request, to (1) any delegate of the Federal Energy Administrator for the purpose of carrying out this Act and the Emergency Petroleum Allocation Act of 1973, (2) the Attorney General, the Secretary of the Interior, the Federal Trade Commission, the Federal Power Commission, or the General Accounting Office, when necessary to carry out those agencies' duties and responsibilities under this and other statutes, and (3) the Congress, or any committee of Congress upon request of the Chairman.

First, "Methods or processes" are only two of several categories of information defined as trade secrets, as is clear from the following discussion by Roger M. Milgrim in an article entitled "Get the Most Out of Your Trade Secrets" from the November–December 1974 Harvard Business Review:

WHAT IS A TRADE SECRET?

A trade secret is defined within the context of its use. Such matter must lend a competitive advantage, must be kept secret within an enterprise, and must not be generally known within an industry. A trade secret can, however, be known by a selective few within an industry and remain a protectable trade secret.

This is a capsulization of the definition of trade secrets given by the American Law Institute's influential *Restatement of the Law of Torts*, § 757, comment b (1939), which has been recognized in almost every major U.S. commercial jurisdiction.

In the past, trade secrets were developed in family proprietorship enterprises, where only the owner and one or two trusted employees knew the enterprise's trade secrets. Developing apace with industrial scale, modern law permits widespread dissemination and use of trade secret information without sacrifice of legal protection.

Frequently dozens and often hundreds of employees in an enterprise may know its trade secrets. Similarly, the enterprise may divulge some of its important trade secrets to independent contractors such as those who manufacture components for it and to suppliers of special products needed to apply the trade secrets.

Despite the recognized right to use secret information broadly in connection with a business enterprise, a clear burden is on the owner of a trade secret to use and maintain it in as much secrecy as is reasonable under the circumstances. Secrecy remains a key element of a legally enforceable trade secret. Failure to reasonably and adequately protect a trade secret's secrecy is the first and surest step to losing it.

The best way to define a trade secret is with examples of matter found protectable by the courts. The examples of judicially recognized trade secrets listed here are by no means exclusive. They are merely suggestive of the wide array of matter regularly used in business that may be entitled to trade secret protection.*

PROCESSES

For manufacturing chemicals, plastics, alloys, food stuffs. For refining and cracking petroleum and other minerals.

FORMULAS

For manufacturing medicines, cosmetics, food stuffs. For manufacturing industrial products such as inks, dyes, emulsions, coatings, and industrial cleaning compounds.

METHODS AND TECHNIQUES (KNOW-HOW)

For manufacturing industrial goods such as automotive, aerospace, and electronic equipment. For establishing, operating, and maintaining mass production lines. For making highly complex instruments and apparatus in which tolerances and specifications are not readily discernible.

Products.

Computer software.

Complex products that may not be readily reverse engineered or that may be leased only and not disassembled without breaching the terms of the lease.

Plans, designs, and patterns.

For aerospace equipment.

For industrial products.

Business information.

Customer lists, including special customer requirements and characteristics.

Cost and pricing data.

Market research.

New product plans.

Sources of supply.

Systems and methods.

Geophysical information such as mineral finds.

"Entitled to protection," how defined, what standard?

Second, "Shall be confidential in accordance"—section 1905. Section 1905 is not a withholding statute in a freedom of information suit, according to most reviewing courts, because it includes the phrase, "except as provided by law"; 1905 therefore cannot be used as authority to withhold. If 1905 is not authority to withhold, what is the meaning of "confidential in accordance with" it?

Third, "Shall not be confidential"—indicates that any protection that may exist is lost when the information is given to an official of the agency—ERDA—or to another agency.

Fourth, The above language does not contain any express indication of the congressional balancing of the competing policies of freedom of information and the protection of proprietary information—by ERDA—to insure cooperation and participation of the private sector in ERDA's energy research, development, and demonstration efforts. Such a statement of balancing is necessitated by the D.C. Circuit Court of Appeals and the June, 1975 U.S. Supreme Court holdings in F.P.A. against Robertson.

The difficulties posed by that statutory scheme have been recognized by agencies attempting to implement it. Discussion of the ESECA provision in an FEA ruling on treatment of confidential information received during the oil and gas reserves survey clearly demonstrates the difficulty of interpreting the statutory intent—See FEA ruling 1975–5, 40 F.R. 89, Wednesday, May 7, 1975, page 19300. Not surprisingly, FEA has been sued on the very issue of its ability to provide protection for such information.

EPA must also deal with this statutory scheme. In a recent proposed rulemaking, EPA commented as follows on the scheme.

Another important provision of the Clean Air Act is the language in sections 114 and 203 which requires the information gathered thereunder be available to the public unless its disclosure would divulge "methods or processes entitled to protection as trade secrets," and the similar language in section 307 concerning divulgence of "trade secrets or secret processes." EPA has given considerable attention to the question of whether the quoted phrases were intended to restrict confidential treatment to only such information as would disclose details of manufacturing methods or physical or chemical processes carried on by a business, or whether instead the phrase is a term of art encompassing other types of data which in many cases businesses regard as confidential, such as operating costs, profits and losses, details of transactions with others, plans for capital investment, marketing information, proposed new products, input and output rates, and similar information. In the proposed rule, the latter approach would be taken. EPA has noted that the meager legislative history concerning these provisions (like that concerning the similar language in section 308 of the Federal Water Pollution Control Act (FWPCA)) tends to indicate that Congress contemplated confidential treatment of all "trade secrets" or "proprietary data" except emission data. EPA has not been able to conclude that Congress intended either the Clean Air Act or the FWPCA to compel automatic disclosure of the vast amount of closely-held business information, production of which EPA may require under those statutes. Certainly the legislative histories give no indication that the drafters considered this possibility. Moreover, it is not apparent how automatic public availability of this information would further the overall purposes of either Act. (When such information is relevant to a matter in controversy in a proceeding under either Act, it could be made available, as

* For a complete listing of all decided cases attributing trade secret status to specific instances, see Roger M. Milgrim, *Trade Secrets* (New York, Matthew Bender & Co., 1967), § 2.09.

explained below.) Finally, many businesses would oppose EPA requests for information if they knew that EPA would immediately make it available to the public; this could seriously hamper EPA programs by requiring diversion of the Agency's resources to time-consuming and expensive efforts to compel the firms to provide the information, by use of court process. EPA is especially interested in comments on this issue. (40 F.R. 98, Tuesday, May 20, 1975, p. 21990.)

As noted, endorsement of the ESECA-type provision was well intentioned. The conferees did not adopt it, however, because these potential interpretation problems might jeopardize the positive and predictable nature of the protection which was the ultimate objective of acting to give ERDA exemption (3) authority.

The provision eventually adopted by the conferees is a revision of another alternative, which utilized the more direct and simple scheme embodied in the current "the administration shall not disclose such information" clause. That revision was the subject of a meeting with Representative JOHN Moss, Democrat, of California, who was one of the primary authors of the Freedom of Information Act. The following statement summarizes that meeting:

SUMMARY OF MEETING OF REPRESENTATIVE JOHN E. MOSS WITH REPRESENTATIVE BARRY MR. GOLDWATER, JR., ON THE FREEDOM OF INFORMATION ACT, NOV. 10, 1975

1. We agreed that it is extremely important and in the national interest that ERDA have the full cooperation and participation of the private sector, particularly American industry, in the conduct of the national energy R&D effort. This cooperation and participation is essential to ensure the success of the national effort, by providing ERDA access to existing technology and access to past, present and future successes and failures in the private sector's energy R&D activities in order to most effectively manage the national effort.

2. We agreed that any lack of predictable protection of the private sector's proprietary information under the existing Freedom of Information Act exemption from mandatory disclosure for such information (5 U.S.C. 552 (b)(4)) could seriously inhibit private sector cooperation and participation with ERDA to the detriment of the national energy research and demonstration program.

3. Mr. Moss acknowledged Mr. Goldwater's conclusion, based on an independent staff legal analysis, that protection under exemption (b)(4) is neither predictable nor adequate because of recent court interpretations of the exemption.

4. Mr. Moss indicated that, as an original author of the Freedom of Information Act, it was his intent and understanding that exemption (b)(4) would authorize the withholding from disclosure under that Act of all "confidential information" protected by 18 U.S.C. 1905 in the criminal code. He further indicated that 18 U.S.C. 1905 was not intended as the authority to withhold such information under the Freedom of Information Act, but rather it was to be the test for what information was authorized to be withheld under the authority in exemption (b)(4). He expressed disappointment that recent court holdings have not correctly interpreted this connection and often have held to the contrary that 18 U.S.C. 1905 information is not necessarily protected under (b)(4), based on the adoption by the courts of various other tests for exemption (b)(4) coverage.

5. Mr. Moss indicated that exemption (b)(3), "specifically exempted from disclosure by statute" could be utilized to create a narrow statutory exemption in other statutes where Congress concludeded that there was a legitimate national interest to be effectuated by withholding a class of information. In so concluding, Congress must strike a reasonable and acceptable balance between that national interest and the national interest in public access to Federal government information effectuated by the Freedom of Information Act.

6. We agreed that, in light of the apparent state of unpredictability of protection for proprietary information under exemption (b)(4) and the need for ERDA to provide such predictable protection in order to ensure the full cooperation and participation of the private sector, Congress could conclude that there was a legitimate national interest in ERDA's having the specific authority to predictably protect proprietary information. Further, Congress could strike a reasonable and acceptable balance of that national interest and the national interest in freedom of information and create a (b)(3) exemption for ERDA for that purpose.

7. Finally, we reviewed a draft of a provision to authorize such a (b)(3) exemption for ERDA. Mr. Moss did not comment on the specific language, but did indicate that in concept the approach of the provision was acceptable and in accordance with the preceding discussion and, further, that he did not object to it. Subsequently, he indicated that the specific language could be improved, but again, that he had no fundamental objection to the approach represented by the draft provision. The statutory test for the class of information, consistent with basic FOIA principles, would, of course, be subject to judicial review under current FOIA procedure.

8. Mr. Moss emphasized that the proposed statutory language provides no authority to withhold information from Congress, or any committee or subcommittee of Congress. He also stated his belief that any Member of Congress should be able to have access to such information.

9. We agree that the above summary accurately reflects the substance of our meeting.

Signed,

JOHN E. MOSS,
BARRY M. GOLDWATER, JR.

Comments on the draft language were also requested from ERDA and the Justice Department. ERDA responded as follows in a letter of November 18, 1975, also commenting on the ESECA alternative:

DEAR MR. CHAIRMAN: Section 307 of H.R. 3474, the ERDA Authorization Bill for Fiscal Year 1976, requires ERDA to establish an Energy Resources Data Bank which would contain, to some extent, private energy resources and technology information. The ability of ERDA to protect proprietary rights in this information in view of the public disclosure requirements of this section and the impact of this section on the overall ERDA program led to Dr. Seamans' letter of September 18 which requested a modification to this provision. We are now aware that a similar problem exists in the proposed revision of section 103 of S. 598, the loan guarantee program for commercial demonstration facilities, and that alternative language which would clearly provide predictable protection for trade secrets and other proprietary information has been suggested. This alternative language (see enclosure) would provide the Administrator with specific authority to withhold from public release any information received under this section upon a satisfactory showing that public release would divulge trade secrets or other proprietary information. Further, the alternative language would permit access to such information by other Federal agencies and delegates of the Administrator for the purpose of carrying out the program authorized by section 103.

This alternative language would, in my opinion, alleviate the problems identified in the September 18 letter.

From discussion with members of your Committee's staff, it now appears that another possible solution being suggested for the protection of proprietary information would be to adopt the language of section 11 of the Energy Supply and Environment Coordination Act of 1974 (P.L. 93-319). However, this would not be satisfactory in my view as it utilizes 18 U.S.C. 1905 as its test for establishing the information entitled to be withheld from public release. As noted in Dr. Seamans' September 18 letter reliance on 18 U.S.C. 1905 for such a test has led to a growing concern on the part of industry over the possible public release of their proprietary information. Further, section 11 of P.L. 93-319 provides that the confidential status of proprietary information may be lost if such information must be provided to other Federal agencies. This provision, if applicable to the synthetic fuel commercial demonstration program, would place all the proprietary information received by ERDA under this program in jeopardy since such information may from time to time be required by other agencies.

For the above reasons, ERDA strongly supports the enclosed alternative language for the protection of proprietary information, instead of a number of other suggested provisions, for both the loan guarantee program of section 103 and the data bank of section 307 of H.R. 3474. We urge the adoption of this language if the conferees retain the requirement that ERDA obtain proprietary information under these sections.

Sincerely,

for R. TENNEY JOHNSON,
General Counsel.

ENCLOSURE: DRAFT PROVISION ON PROTECTION OF PROPRIETARY INFORMATION FOR SENATE SECTION 103 AND HOUSE SECTION 307 OF H.R. 3474

The information obtained by the Administrator under this section shall be made available in a manner which will facilitate its dissemination to other government agencies and to the public, subject to the provisions of section 552 of title 5, United States Code and section 1905 of title 18, United States Code; except that, in the national interest in the close cooperation and participation of the private sector in the successful conduct of energy research, development, and demonstration and the resulting need to provide predictable protection for proprietary information, the Administrator shall, under such regulations as he shall issue, withhold any information obtained under this section from public release upon a showing satisfactory to the Administrator that public release of such information would divulge trade secrets or other proprietary information of any person. Any delegate of the Administrator, for the purpose of carrying out this section, and any agency, when necessary to carry out that agency's duties and responsibilities, is authorized, upon request, to have access to any such withheld information; provided that such access does not constitute authority for public release of such information. This section is not authority to withhold information from Congress or any committee of Congress upon request of the Chairman.

The Justice Department responded as follows in a letter of November 18, 1975:

DEAR MR. CHAIRMAN: This is in response to your request for the views of the Department of Justice on a proposed provision of H.R. 3474, a bill "To authorize appropriations to

the Energy Research and Development Administration in accordance with Section 261 of the Atomic Energy Act of 1954, as amended, Section 305 of the Energy Reorganization Act of 1974, and Section 16 of the Federal Nonnuclear Energy Research and Development Act of 1974."

Specifically, you desire our comments on the November 17, 1975 draft provision on protection of proprietary information. In this connection this Department has worked informally with members of the staff of the House Science and Technology's Subcommittee on Energy Research, Development, and Demonstration.

The draft provision under consideration is an attempt to avoid the legal uncertainties involved in protecting from public disclosure proprietary information by creating a statutory exemption which would be within the scope of Exemption 3 of the Freedom of Information Act (5 U.S.C. § 552(b)(3)). This exemption was recently considered by the Supreme Court in *F.A.A. v. Robertson*, — U.S. —, 95 S. Ct. 2140 (1975). In our view, the draft provision would be helpful in obviating these uncertainties. It clearly states that the Administrator of ERDA and any other agencies involved may not release such proprietary information after a showing satisfactory to the Administrator that the information is indeed proprietary in character. Although there may be occasional questions as to what constitutes "proprietary information" in specific instances, this term reflects a concept familiar in federal law.

Therefore, although the draft provision may not avoid all uncertainties regarding the availability of the information involved, it nonetheless represents a significant progress. The creation of a statutory exemption that meshes with Exemption 3 of the Freedom of Information Act (5 U.S.C. § 552(b)(3)) avoids the need for ERDA to determine the often difficult questions as to whether the proprietary information sought to be protected falls within either Exemption 4 (5 U.S.C. § 552(b)(4)) or 18 U.S.C. § 1905. As long as the information to be withheld qualifies under the terms of the proposed statutory exemption, it would be covered by Exemption 3 of the Freedom of Information Act and thus would not be subject to mandatory disclosure.

The Department of Justice defers to the Energy Research and Development Administration, the agency primarily concerned with the subject matter, as to whether as a matter of policy this provision should be enacted.

Sincerely,

MICHAEL M. UHLMANN,
Assistant Attorney General,
Office of Legislative Affairs.

In summary, I believe that the conferees have acted effectively and responsibly to strike the required balance and give ERDA full authority to provide positive and predictable protection for trade secrets and other proprietary information. That authority will insure the full cooperation and participation of American industry in ERDA's critical energy R. & D. programs. I sincerely believe that all of the conferees can take great pride in this action. Our Nation's energy future and eventual energy independence will be well served by the result.

DATA BANK DUPLICATION

The original House provision, section 307, establishing a data bank was significantly modified by the conferees. The original House language is quoted above. That language was a source of concern to me because of the many existing Federal energy data banks. I summarized my difficulties with that aspect of the section in June as follows:

Section 307 mandates a data bank of either fossil or all nonnuclear energy resources and technology, as discussed above. Under either interpretation, ERDA would be required to duplicate the existing data bank activities of many Federal agencies, particularly those in the Interior Department and the Federal Energy Administration. Then Secretary of the Interior Morton communicated his concern that the Section would result in duplication of the efforts of several agencies. Since there were no formal hearings on the need for a new data bank within ERDA, it is difficult to refute Secretary Morton's assertion, as well as those of other informed energy officials who have supported the view. In the absence of a clear need for an ERDA data bank, as supported in appropriate hearings, I cannot justify the basic concept of a data bank, regardless of scope. I urge my colleagues to support my efforts to preclude any duplication of existing capabilities, facilities or organizations.

Let me cite some figures for you on the existing data banks. Each of these was established and is being maintained in response to statutory direction to the agency to do so. The Interagency Task Force on Energy Information in its July 1974 report identified and described 46 separate agencies conducting one or more activities relating to or using energy related data. Those agencies were conducting over 257 separate programs which make direct reference to energy related data. Forty-three separate computerized data bases or data files containing some form of energy related data were identified. The task force recommended that there be a significant effort to coordinate and link the existing systems. A report on the progress of the task force is due this month.

Some of those existing systems are truly massive. For example, the Bureau of Mines has 109 people and a fiscal year 1975 budget of $2.34 million for fuels data collection and analysis. Duplicating the data bank would cost an estimated $8 to $10 million. The Federal Energy Administration has some 200 people working on energy data and the Federal Power Commission has 75 people starting up its gas and electrical power data bank at a cost of $2 million and a projected annual operating budget of $1.5 to $2 million. All of these efforts are in the fossil fuel-related information area.

To require or allow ERDA to duplicate these efforts is not only sheer folly, it is clearly irresponsible. Putting ERDA in the same business would undoubtedly result in hiring away those in the existing energy information organizations. The duplication would not only be fiscally wasteful, but it would also degrade the current capability.

Now, if there are problems with the adequacy or validity of the data, the more reasonable approach is to make those agencies do their job. ERDA should not duplicate those efforts. ERDA already is required by the Solar and Geothermal Research, Development and Demonstration Acts, Public Law 93-473 and Public Law 93-410, to establish information data banks in those two areas, where none now exist. ERDA originally projected a cost of $1 million in fiscal year 1976 to start up these data banks. ERDA now has advised that the cost will be revised upward in its June 30 plan. Clearly, expanding the requirement would result in greatly increased costs and a wholly unjustified drain on the resources required to implement the solar and geothermal plans. Duplication of other existing capabilities simply cannot be accepted. I urge your support for my amendment to preclude duplication.

Dr. Seamans, in his letter of September 18 to Chairman TEAGUE on the data bank section, stated the problem as follows:

Two distinct types of energy information—resources and technology—are contemplated for the Energy Resources Data Bank. As to energy technology information, ERDA is presently required by various provisions of the Energy Reorganization Act of 1974 and the Federal Nonnuclear Energy Research and Development Act of 1974 to collect and disseminate energy technology information to the public. We have established the ERDA Technical Information Center at Oak Ridge, Tennessee, as the central data bank for the energy information required for both ERDA use and public dissemination. We do not see the need for the establishment of an additional collection of energy technology information.

The second type of information for the Energy Resources Data Bank concerns energy resources including "proved and other reserves." The purpose of assigning to ERDA the requirement to collect and maintain such information, which is basically used for regulatory or administrative action rather than for research and development, is unclear. Further, similar data banks already exist within the Government and the new Data Bank contemplated by Section 307 would be duplicative and costly. For example, the Department of the Interior collects data on coal reserves; the Geological Survey and other agencies are required to inventory geothermal resources by the Geothermal Energy Research, Development and Demonstration Act of 1974; the National Oceanic and Atmospheric Administration, and other agencies are required to inventory solar energy resources by the Solar Energy Research, Development and Demonstration Act of 1974; and the Federal Energy Administration has collected oil and gas reserves information as required by the Energy Supply and Environment Coordination Act of 1974. While the latter Act expired on June 30, 1975, it is our understanding that its special provisions for acquiring energy resources information are being proposed for renewal. When specific energy resource information is necessary for our research, development or demonstration mission, such information is available to us from other Government agencies which have the existing capability and need for acquiring and maintaining such information. Therefore, we consider the requirement for ERDA to collect and maintain its own independent Energy Resources Data Bank as both unnecessary for our mission and duplicative of other similar extensive Federal efforts.

It appears that this problem is not getting any better with time. The interagency task force published an update of its 1974 report in November. The report, entitled "Energy Information in the Federal Government," included a new Federal energy information locator system. Probably most indicative of the magnitude of the current Federal effort in energy information is the fact that the report itself is 1,000 pages long.

Fortunately, I hope, the Senate conferees have forced adoption of a compromise version of the section which should alleviate some potential for duplication. The conferees language reads as follows:

The Administrator shall promptly establish, develop, acquire, and maintain a central source of information on all energy resources and technology *in furtherance of the Administrator's research, development, and demonstration mission* carried out directly or indirectly under this Act. When the Administrator determines that such information is

needed to carry out the purposes of this Act, he may acquire proprietary and other information (A) by purchase through negotiation or by donation from any person, or (b) from another Federal agency. (emphasis added).

The emphasized language is intended to limit the Administrator to nonduplicative energy information collection and analysis. I firmly believe that nonduplication is the intent of the Committee on Science and Technology, based on the discussions in the committee on April 23, 1975. On that date, as the transcript clearly shows, the committee without objection accepted a unanimous consent request by Mr. ESCH to the effect that "it was the intention of the committee that to the maximum extent feasible there be a coordination of the data bank—among the various agencies—so there would not be duplication with those of Interior and others."

I also believe that it was the sense of the conference committee that there be no duplication of existing energy information activities. Section 309 of the conference bill clearly states that the Administrator "shall coordinate nonnuclear programs of the administration with the heads of relevant Federal agencies in order to minimize unnecessary duplication of programs, projects, and research facilities." The data bank is such a project and, based on the task force reports and ERDA comments, I would find, as I am sure the majority of the conferees would agree, that very little, if any, duplication of existing energy information activities can be justified as necessary. I hope that ERDA will adhere to these respective intents in its implementation of the now-narrowed statutory mandate to establish the data bank.

FISCAL RESPONSIBILITY

The Science and Technology Committee report on H.R. 3474 included a strong statement supporting the principle of fiscal responsibility in ERDA's accelerating energy R. & D. program

(1) BALANCING AN ACCELERATED R&D PROGRAM WITH FISCAL RESPONSIBILITY

Our Nation's energy shortcomings will not be solved by a single, spectacular breakthrough. Rather the solution lies in marshalling many smaller, individual achievements into a comprehensive energy package. Some elements of this package are already well underway; e.g. fossil energy and nuclear power. The Science and Technology Committee has undertaken to foster the development of other promising energy sources, such as solar and geothermal, which have long been known but also long neglected. To so foster these other sources and significantly accelerate their development and commercial availability, the Committee has substantially increased authorizations in associated program areas, to totals in some nonnuclear R&D areas as much as two to three times ERDA requests. Such authorizations specifically were made in the solar, geothermal and conservation programs. In each of these program areas, the Committee strongly believes that these substantially increased authorizations can be effectively and productively utilized within administrative, managerial and technical constraints for R&D of the technologies in FY 76 and the Transition Period.

Additionally, the Committee views the funds devoted to energy R&D as a national investment. Our original energy R&D investment will return generous dividends. For example, each R&D dollar spent returns more than seven dollars in the economy over an 18-year period. This statistic is based on the runout effect of aerospace technology. The runout effect of energy R&D should be even more dramatic. Thus, the money that leaves the Treasury in the coming few years for these programs should stimulate continued prosperity and constructive growth. And eventually the initial cost will be recouped through the taxes on the increased productivity which it generates.

The Committee, however, is aware of the perennial problems faced in any accelerated R&D program; e.g., additional money alone does not guarantee success. While money can spur progress, there is a limiting point beyond which additional funds cannot be spent effectively. After that limiting point, money is wasted rather than invested. Overfunding, in fact, can be counterproductive to the extent that a finite R&D management pool in ERDA is taxed to manage marginally effective or potentially non-productive R&D and senior management attention and focus on truly promising programs is reduced. The Committee, of course, is also aware that energy R&D funding must reflect overall national priorities and budget constraints. The Committee, therefore, recognizes that the funding for the significantly increased nonnuclear energy R&D programs must reflect a careful balancing of an accelerated R&D program and fiscal responsibility.

While the additional funds authorized by the Committee in the significantly increased program areas were based on the belief that they could be used effectively, supporting information and testimony for such substantial R&D acceleration is necessarily limited and, to a degree, speculative. The Committee therefore relies on the judgment of ERDA in expending this money, in the significantly increased program areas. If further scrutiny reveals that a particular topic in those program areas does not warrant continued pursuit, then the Members expect ERDA to exercise restraint and not feel bound to expend the full amount authorized and appropriated. Various provisions of the authorization bill and existing procedures provide for reprogramming within program areas and for retention of appropriated funds without fiscal year limitation until expended. The Committee expects ERDA to utilize these provisions fully in the exercise of such fiscal responsibility in those program areas. ERDA, of course, must satisfy all requirements for notification to the Committee in any exercise of restraint and utilization of reprogramming procedures.

The Committee believes the nonnuclear portions of the ERDA authorization enables us to begin an accelerated but sensible energy R&D program. The cumulative effect of many small and diverse achievements will be an American economy free from foreign manipulation and capricious perturbation. In the end we will be a stronger and more independent Nation because of it.

Because the Fossil Fuel Subcommittee voiced concern over the fiscal responsibility comments as applied to ERDA's fossil fuel research program, the committee view was limited to nonfossil programs. I addressed their concerns in an additional view.

FISCAL RESPONSIBILITY

The Committee report contains an express view on the need to balance the accelerated energy R&D program with fiscal responsibility. The view was adopted in the Energy Research, Development, and Demonstration Subcommittee in response to total increases of two and three times the ERDA request which were finally authorized for solar, geothermal and conservation. The Subcommittee action was a recognition that there is an inherent and unavoidable degree of speculation regarding the exact totals and the specific program accelerations which can effectively be employed in so substantially accelerating any R&D program. Dependence on ERDA's judgment as the acceleration evolves to proceed in a fiscally responsible manner in obligating these authorized (and appropriated) funds, therefore, is the only available mechanism for balancing fiscal responsibility with this R&D acceleration. The Subcommittee specifically charged ERDA with that responsibility.

The Committee view in the report reflects that charge of responsibility and, further, directs ERDA to utilize available reprogramming and retention procedures in exercising fiscal restraint where accelerated research can no longer be justified. The Committee, however, does not intend that this guidance be used to negate the clear and obvious mandate that ERDA accelerate its program in *each* of the specified program areas. Its single and only intention in the view is that the acceleration in each area be affected in a fiscally responsible way.

The specific language in the view refers only to "significantly increased program areas," which is defined for purposes of the discussion as solar, geothermal, and conservation areas. I am advised that this language and reference are intended to limit the Committee's view to the non-fossil programs under the Committees nonnuclear authorization jurisdiction, thereby excluding the fossil energy R&D programs from its application. I understand that opponents of the view's application to fossil research are concerned that the view could be used by ERDA or the Office of Management and Budget to justify arbitrarily reducing expenditures in fossil research. Such misuse of the Committee's clear direction is not the effect of the view and would not be tolerated by the Committee in its oversight of ERDA.

I also understand that opponents believe that the fossil programs do not include the acceleration which the Committee has authorized in the nonfossil programs. Although the Committee did not substantially increase the ERDA fossil request, the fossil research programs do, in fact, equate to significantly accelerated R&D programs. Fossil programs have increased from approximately $73 million in FY 74 to $105 million in FY 75 to the $435 million in FY 76 which this Committee authorized, and which the Senate will probably increase another $75 million more. Opponents respond to these facts by arguing that the fossil programs are far better defined and therefore not subject to considerations of fiscal restraint discussed above. I am unable to agree. The fossil programs have clearly been significantly accelerated in the past 12 months, and just as clearly, ERDA should be directed to incorporate the ethic of fiscal responsibility and, where appropriate, fiscal restraint in its implementation of the fossil programs.

I urge my colleagues in the House to support the view that fiscal responsibility and the guidance included in the Committee view should apply equally to all nonnuclear programs. In light of the current economic conditions in the nation and the severely limited Federal budget, the Congress must insure that those funds which are authorized are used effectively. Although I strongly endorse the need for an accelerated research effort to aggressively pursue technical alternatives to continued dependence on foreign oil, I cannot justify any attempt to ignore the coextensive requirement for fiscal responsibility in all of our budget actions. The balance must be struck on a continuing basis in ERDA's energy R&D program. I intend to establish this view in the floor debate on H.R. 3474 and I urge your support. I would also urge ERDA to fully consider fiscal responsibility in all of its nonnuclear research because I have no doubt the majority of the Committee supports this view. Unjustified