(b) *Benzidine manufacturer*—(1) *Applicability*. (i) These standards apply to:

(A) All discharges into the navigable waters of process wastes, and

(B) All discharges into the navigable waters of wastes containing benzidine from the manufacturing areas, loading and unloading areas, storage areas, and other areas subject to direct contamination by benzidine or benzidine-containing product as a result of the manufacturing process, including but not limited to:

(*1*) Stormwater and other runoff except as hereinafter provided in paragraph (b)(1)(ii) of this section and

(*2*) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to stormwater runoff or other discharges from areas subject to contamination solely by fallout from air emissions of benzidine; or to stormwater runoff that exceeds that from the ten year 24-hour rainfall event.

(2) *Analytical method acceptable*—Environmental Protection Agency method specified in 40 CFR Part 136.

(3) *Effluent standards*—(i) *Existing sources*—Discharges from a benzidine manufacturer shall not contain benzidine concentrations exceeding an average per working day of 10 μg/l calculated over any calendar month, and shall not exceed a monthly average daily loading of 0.130 kg/kkg of benzidine produced, and shall not exceed 50 μg/l in a sample(s) representing any working day.

(ii) *New sources*—Discharges from a benzidine manufacturer shall not contain benzidine concentrations exceeding an average per working day of 10 μg/l calculated over any calendar month, and shall not exceed a monthly average daily loading of 0.130 kg/kkg of benzidine produced, and shall not exceed 50 μg/l in a sample(s) representing any working day.

(4) The standards set forth in this paragraph (b) shall apply to the total combined weight or concentration of benzidine, excluding any associated element or compound.

(c) *Benzidine-based Dye Applicators*—(1) *Applicability*. (i) These standards apply to:

(A) All discharges into the navigable waters of process wastes, and

(B) All discharges into the navigable waters of wastes containing benzidine from the manufacturing areas, loading and unloading areas, storage areas, and other areas subject to direct contamination by benzidine or benzidine-containing product as a result of the manufacturing process, including but not limited to:

(*1*) Stormwater and other runoff except as hereinafter provided in paragraph (c)(1)(ii) of this section and

(*2*) Water used for routine cleanup or cleanup of spills.

(ii) These standards do not apply to stormwater runoff or other discharges from areas subject to contamination solely by fallout from air emissions of benzidine; or to stormwater that exceeds that from the ten year 24-hour rainfall event.

(2) *Analytical method acceptable*. (i) Environmental Protection Agency method specified in 40 CFR Part 136; or

(ii) Mass balance monitoring approach which requires the calculation of the benzidine concentration by dividing the total benzidine contained in dyes used during a working day (as certified in writing by the manufacturer) by the total quantity of water discharged during the working day.

(COMMENT: The Regional Administrator (or State Director, if appropriate) shall rely entirely upon the method specified in 40 CFR 136 in analyses performed by him for enforcement purposes.)

(3) *Effluent standards*—(i) *Existing sources*—Discharges from benzidine-based dye applicators shall not contain benzidine concentrations exceeding an average per working day of 10 μg/l calculated over any calendar month; and shall not exceed 25 μg/l in a sample(s) or calculation(s) representing any working day.

(ii) *New sources*—Discharges from benzidine-based dye applicators shall not contain benzidine concentrations exceeding an average per working day of 10 μg/l calculated over any calendar month; and shall not exceed 25 μg/l in a sample(s) or calculation(s) representing any working day.

(4) The standards set forth in this paragraph (c) shall apply to the total combined concentrations of benzidine, excluding any associated element or compound.

[FR Doc.77-902 Filed 1-11-77;8:45 am]

federal register

WEDNESDAY, JANUARY 12, 1977

PART V

FEDERAL ELECTION COMMISSION

ADVISORY OPINION REQUESTS

FEDERAL ELECTION COMMISSION

[Notice 1976-72, AOR 1976-112 through AOR 1976-115]

ADVISORY OPINION REQUESTS

Pursuant to 2 U.S.C. section 437f(c) and the procedures reflected in Part 112 of the Commission's Notice of Proposed Rulemaking, published on May 26, 1976 (41 FR 21590), advisory opinion requests 1976-112 through 1976-115 have been made public at the Commission. Copies of AOR 1976-112 through AOR 1976-115 were made available on December 29, 1976. These copies of advisory opinion requests were made available for public inspection and purchase at the Federal Election Commission, Public Records Division, at 1325 K Street, N.W., Washington, D.C. 20463.

Interested persons may submit written comments on any advisory opinion request within ten days after the date the request was made public at the Commission. These comments should be directed to the Office of the General Counsel, Advisory Opinion Section, at the Commission. Persons requiring additional time in which to respond to any advisory opinion requests will normally be granted such time upon written request to the Commission. All timely comments received by the Commission will be considered before the Commission issues an advisory opinion. Comments on pending requests should refer to the specific AOR number of the requests and statutory references should be to the United States Code citations rather than to the Public Law Citations.

A descriptive listing of each of the requests recently made public as well as the identification of the requesting party follows hereafter:

AOR 1976-112: May Democrats Abroad, a political organization of American citizens living overseas, be regarded as a political committee of the Democratic Party for purposes of 2 U.S.C. § 441a(a)(4) which allows unlimited transfers between and among political committees of the same political party.—Requested by Sheldon S. Cohen, Counsel to the Democratic National Committee, Washington, D.C.

AOR 1976-113: May a trade association with corporate members which has received solicitation approvals for 1976 regard such approvals as permitting a "follow-up" to a 1976 solicitation if such "follow-up" occurs early in 1977, but in the absence of solicitation approval for calendar year 1977.—Requested by James J. Butera, Counsel to the Savings Bankers Non-Partisan Political Action Committee, Washington, D.C.

AOR 1976-114: May excess campaign funds of a Member of Congress be used to pay for for telephone bills which exceed the amount of the Member's communication allowance for his Washington office.—Requested by Representative Joseph D. Early, U.S. House of Representatives, Washington, D.C.

AOR 1976-115: Whether various State bankers associations are sufficiently related to the American Bankers Association (ABA) so that political committees established by those associations are affiliated with BANK PAC, the separate segregated fund of the ABA, for purposes of 2 U.S.C. § 441a.—Requested by William H. Smith on behalf of BANKPAC, Washington, D.C.

DECEMBER 30, 1976.

VERNON W. THOMSON,
Chairman for the Federal Election Commission.

[FR Doc.77-910 Filed 1-11-77;8:45 am]

[Notice 1977-1]

CLEARINGHOUSE ADVISORY COMMITTEE

Establishment

In accordance with the provisions of the Federal Advisory Committee Act (5 U.S.C. App. I) and Office of Management and Budget Circular A-63 of March 1974, as revised and after consultation with OMB, the Federal Election Commission has determined that the establishment of the Federal Election Commission Clearinghouse Advisory Committee is in the public interest in connection with the performance of duties imposed on the Commission by law.

The Committee will advise the Commission, through the Chief of the Clearinghouse on Election Administration, on how best to allocate its resources in conducting research, in collecting and disseminating election information, and in providing technical assistance to state and local elections-related public officials.

The Advisory Committee will consist of 20 members with a balanced representation of state election officials, local election officials, and state legislation nominated by the Clearinghouse Chief and appointed by the Commission.

The Committee will function solely as an advisory body and in compliance with the provisions of the Federal Advisory Committee Act. Its charter will be filed in accordance with the Act, pursuant to a time waiver granted by OMB, on or before January 27, 1977.

Interested persons are invited to submit comments regarding the establishment of the Federal Election Commission Clearinghouse Advisory Committee. Such comments, as well as any inquiries, may be addressed to: Clearinghouse, Federal Election Commission, 1325 K Street, N.W., Washington, D.C. 20463.

JANUARY 4, 1977.

THOMAS E. HARRIS,
Vice Chairman for the Federal Election Commission.

[FR Doc.77-911 Filed 1-11-77;8:45 am]

[Notice 1976-73]

POLICY STATEMENT

Application of Contribution Limits to Contributions Made After General Election to Retire Debts Incurred With Respect to 1976 Election(s)

Several questions have been posed, both formally and informally, regarding application of the contribution limits in the Federal Election Campaign Act of 1971, as amended ("the Act"), to post-general election contributions made to retire campaign debts incurred in connection with a primary election and/or a general election occurring in 1976. Since these questions relate to candidates and campaigns other than presidential candidates who qualified for Federal funding under Chapters 95 or 96 of the Internal Revenue Code, this statement is not intended to comprehend and treat the separate issues raised by presidential campaigns which received Federal funding.

Proposed regulations, approved by the Commisison and submitted to the Congress on August 3, 1976 (published in the FEDERAL REGISTER on August 25), address the question of contributions made prior to a primary election and between a primary election and a general election. See § 110.1(a)(2). They do not specifically focus on contributions made after a general election for the purpose of retiring a campaign debt incurred with respect to that election except to provide that such contributions are subject to the limits of the Act stated in 2 U.S.C. 441a(a). See § 110.1(g)(2). The regulations do provide that contributions made after a primary for the purpose of retiring a debt incurred in connection with that primary are subject to the $1,000 (or $5,000 if donor is multicandidate committee) contribution limit applicable to the primary. The proposed regulations also state that contributions relating to a primary election already held may be made only to the extent that net debts outstanding from the primary are not exceeded by those contributions. Furthermore, the contributions must be designated in writing for retiring debts incurred with respect to the primary election. § 110.1(a)(2)(i).

Reporting under the Act is cumulative as to outstanding debts and obligations, contributions, and expenditures beginning with the pre-primary election period continuing through the post-general election period. Thus, in cases where a candidate participated in the general election, the Commission will generally regard debts outstanding after the general election as debts incurred with respect to the general election. Post-general election contributions made to the extent of the outstanding debt will be presumed to be made with respect to the general election and so treated for purposes of the contribution limits.

However, there may be situations where a candidate, or his or her campaign committee, finds it advantageous to raise funds from donors who have not "used up" their contribution limits from the primary. If the committee desires to utilize contribution limits still available as to both the primary and general election and can establish from reports filed under the Act (or supporting accounting records) the amount of the outstanding debt which was incurred with respect to a primary election, contributions may be designated in writing by the donor for retiring the primary-related debt. To the extent of the amount of the primary debt, as determined by the committee (subject to Commission audit or review), contributions made after the general election and designated in writing by the donor for the primary debt may be accepted and treated as primary election contributions for purposes of the contribution limits. A committee which allocates its outstanding debts in this manner should submit with its next report, and also with any future reports required by the Act and proposed regulations, separate supporting schedules itemizing the debts relating to the primary and general election. Each designated contribution in an amount which requires listing on a supporting schedule for itemized receipts (exceeding a calendar year aggregate of $100 if the receipt is a contribution from a person, but in any lesser amount if the receipt is a contribution/transfer from a political committee) should be disclosed on the itemized schedule with an annotation indicating the respective debt (primary, general, or both) for which the donor designated the contribution.

In the situation where the candidate or committee allocates its debt to the primary and general elections, contributions (made after the general election) may be designated for the general election debt and received and applied to retire that portion of the debt. If contributions designated for either debt (primary or general) and (1) made before sufficient funds are on hand to retire the respective debt for which designated but (2) received after sufficient funds are on hand to retire such debt, exceed the outstanding debt (as of the date of receipt) for which designated, the excess amount may be applied to retire any outstanding debts whether related to the primary or general election.

Additional contributions which are (1) designated and made before sufficient funds are on hand to retire both debts but (2) received after sufficient funds are on hand to retire both debts may be regarded as excess campaign funds and utilized in accordance with 2 U.S.C. § 439a. In the event the candidate or campaign committee desires to carry-over the excess (determined after all debts relating to the 1976 elections are retired) to a future campaign for Federal office, a last-received, first carried-over rule must be applied to identify the donors of the excess. Those donors must provide written authorization for regarding their contributions as made with respect to a future election and such contributions will be charged against the limits of 2 U.S.C. 441a as applied to contributions made with respect to the future election (primary or general).

Funds which are both donated and received after sufficient contributions are on hand to retire all campaign debts may be regarded as donations to an office account or as contributions related to a future election; in the latter situation the contribution would be subject to § 441a limits as applicable to the future election. Either described use of such funds donated is required to be authorized in writing by the donor before the funds may be retained for future use since donors should be made aware whether funds they have contributed are to be charged against the contribution limits of 2 U.S.C. 441a.

An example will illustrate application of the foregoing points. Assume a situation where a campaign committee has $10,000 of outstanding primary debts and $20,000 of outstanding general election debts as of day one. On day two the committee receives $10,000 of contributions (within the donors' limits) designated in writing for the primary debt. On day one contributor X mailed to the committee a contribution of $500 designated for the primary debt, but it is not received until day five. The contribution may be used for the general election debt. Assume the same facts except by day three the committee has received sufficient contributions to retire its general election debt; thus, by day five (when X's $500 is received) sufficient funds are on hand to retire all debts. The $500 received on day five would be regarded as excess campaign funds and may be utilized under 2 U.S.C. 439a or may be regarded as a contribution relating to a future election which would have to be counted against the limits applicable to that future election. The example may be further modified to illustrate an additional point. A donation made on day six and received on day six (or later) may not be regarded as excess campaign funds since when the donation was made all 1976 campaign debts were retired. Such a donation would be regarded as either a donation to an office account or as a "contribution" relating to a future election, depending on the circumstances under which it was made. Donor authorization (in writing), as described above, would be necesary before the funds could be retained for either use.

The Commission issues this policy statement under its authority to formulate policy with respect to the Act, see 2 U.S.C. 437c(b)(1) and 2 U.S.C. 437d(a)(9), and will incorporate the conclusions stated herein in proposed regulations for submission to the Congress under 2 U.S.C. 438(c).

VERNON W. THOMSON,
Chairman for the Federal Election Commission.

DECEMBER 30, 1976.

[FR Doc.77-909 Filed 1-11-77;8:45 am]

federal register

WEDNESDAY, JANUARY 12, 1977

PART VI

COMMODITY FUTURES TRADING COMMISSION

■

GENERAL REGULATIONS UNDER THE COMMODITY EXCHANGE ACT

Pending Legal Proceedings

Title 17—Commodity and Securities Exchanges

CHAPTER I—COMMODITY FUTURES TRADING COMMISSION

PART 1—GENERAL REGULATIONS UNDER THE COMMODITY EXCHANGE ACT

Notification of Pending Legal Proceedings

The Commodity Futures Trading Commission ("Commission") has adopted a new § 1.60 of the general regulations under the Commodity Exchange Act, as amended (the "Act"), 7 U.S.C. §§ 1-22 (Supp. V, 1975), which requires every contract market to notify the Commission of certain pending legal proceedings.

On September 7, 1976, the Commission published a proposal to adopt § 1.60 and invited interested persons to submit written comments on the proposed rule. 41 FR 37597 (September 7, 1976). As explained in the FEDERAL REGISTER notice accompanying the proposed rule, the basic purpose of section 1.60 is to assure that the Commission is apprised of all material legal proceedings involving contract markets and their officials, since these proceedings might have a substantial effect on the Commission's efforts to administer and enforce the provisions of the Act. For example, the Commission may wish to participate as amicus curiae, or to intervene, in legal proceedings involving contract markets or their officials, in order to assure that judicial interpretations of the Act or the Commission's regulations do not result in diverse or conflicting rulings with respect to the responsibilities of these persons. At the present time, contract markets are not required to report this type of information, and there is no assurance that the Commission would otherwise be informed of such litigation. After consideration of all the comments received, the Commission has decided to revise the proposed rule and to adopt § 1.60 in the form set forth below.

Proposed § 1.60(a) would have required every contract market to notify the Commission of all material litigation involving the contract market by filing with the Commission a brief written description of the proceedings that included certain information set forth in the proposed rule. One commentator suggested that contract markets be required to submit copies of the pleadings and other documents filed in the legal proceedings, rather than a summary of the proceedings. The Commission is persuaded that this approach would serve the purpose of the proposed rule, as well as relieve contract markets of the burden of preparing summaries that might be difficult to write and might be subject to misinterpretation. As adopted, therefore, § 1.60(a) has been changed to require contract markets to submit to the Commission copies of the complaint, answer and such further documents as may thereafter be requested by the Commission, filed in any material legal proceedings involving the contract market.

Similarly, proposed § 1.60(b)—which would have required contract markets to file a written description of certain legal proceedings involving any officer, director, or other official of the contract market—also has been adopted in a modified form so that contract markets will be required to submit copies of the pleadings and other requested documents filed in the proceedings covered by this section, rather than a summary. As adopted, § 1.60(b) also deletes the proposed exemption from the notification requirements for reparations proceedings instituted against any officer, director, or other official of the contract market. The Commission was persuaded by one commentator that this exemption was unnecessary, since a reparations complaint would not arise out of conduct by such persons "in their capacity as contract market officials," the type of proceeding with which § 1.60(b) is primarily concerned. Finally, those provisions in proposed § 1.60(b) requiring the contract market to submit certain information to the Commission if an officer, director, or other official is to be indemnified for any liabilities arising out of legal proceedings covered by § 1.60 have been adopted as a separate § 1.60 (d). Two commentators suggested that having those provisions in § 1.60(b) created some confusion about when the notice of indemnification must be submitted. To make it clear that the notice of indemnification is to be filed within 10 days after the contract market determines to indemnify an official, the Commission has adopted this notice requirement as a separate § 1.60(d). Otherwise, that requirement is substantially the same as proposed.

The Commission has adopted in a modified form the provisions of proposed § 1.60(c), requiring contract markets to notify the Commission of any proceedings known to the contract market to be contemplated by governmental authorities, other than investigations or enforcement actions which may be instituted by the Commission. As amended, this section requires that, to the extent known to the contract market, the notification is to provide: the name of the court or agency in which the proceedings may be brought; the anticipated date of the institution of the proceedings; the principal parties (including any officers, directors, or other officials of the contract market) which may be bringing or named in the proceedings; a description of the factual and legal basis which may be alleged to underlie the proceedings and the relief which may be sought therein. In addition, the Commission has added a new provision to § 1.60(c), as adopted, which requires that contract markets submit to the Commission copies of the complaint, answer and such further documents as may thereafter be requested by the Commission if formal proceedings are later initiated against the contract market by governmental authorities. These amendments are designed to eliminate any ambiguity created by proposed § 1.60 (c) and (a), which required contract markets to report all legal proceedings "contemplated" by governmental authorities, but only material legal proceedings actually instituted. The Commission believes it should be apprised of any legal proceedings which may be contemplated or instituted by governmental agencies against contract markets. One commentator said that the Commission should develop a liaison with other government agencies to discover "contemplated actions" rather than burden contract markets with reporting these actions. Although the Commission is concerned about imposing additional regulatory burdens on contract markets, it is not persuaded that a liaison with other government agencies would be a practical alternative to requiring contract markets to report these types of legal proceedings. To begin with, it would be very difficult to establish a liaison with every government agency that might institute legal proceedings against a contract market. And, since any liaison arrangement, by its nature, would be informal, there would be no assurance that the Commission would be apprised of all pending legal proceedings. Since contract markets usually would be the only other persons in a position to know about pending legal proceedings involving governmental authorities, the Commission believes the best way to assure that the Commission is apprised of these proceedings is to require that contract markets report them.

Proposed § 1.60(d), in addition to outlining the procedure to be followed in submitting the required notice of pending legal proceedings, provided that proceedings involving only claims for monetary relief would not be material for purposes of § 1.60 if the amount in controversy is less than $15,000. Several commentators said that this made § 1.60 too broad, and one commentators suggested that the Commission limit the notification requirements to:

(1) Actions against a contract market or its officials (in their capacity as such) alleging violation of duties under the Commodity Exchange Act or its Regulations; and

(2) Actions against a contract market or its officials (in their capacity as such) seeking equitable or monetary relief that, if granted in full or in part, would imperil the exchange's ability to operate.

Although this approach could cover many of the legal proceedings that would be considered material, the Commission is not persuaded that it should limit the notification requirement in this way. The Commission believes there are other types of legal proceedings that may be material for purposes of the rule—such as suits involving the antitrust laws—which apparently would not be reported under the test suggested by these commentators. Another problem with the suggested test is that it would not disclose legal proceedings instituted by the contract market, which may be just as important as suits against the contract market. On the other hand, the Commission did not intend to require contract markets to notify the Commission of all litigation in which the relief sought was something other than a money judgment for less than $15,000. Section 1.60(d) was intended only as a "safe-harbor provision," not a definition of "material" for purposes of the rule. The Commission believes that, as a practical matter, the determination of what litigation is "material" can only be made on a case-by-case basis and that, initially, it should be made by the contract market involved. Accordingly, the Commission has decided to adopt § 1.60(d) substantially in the form proposed, but has redesignated that provision as § 1.60(e) in the rule as adopted. However, the Commission plans to review the definition of material, after it has acquired some experience with the operation of § 1.60, and in this connection, the Commission would be particularly interested in receiving further comments on the types of legal proceedings which should be considered material.

In consideration of the foregoing, the Commodity Futures Trading Commission hereby amends Part I of Chapter 1 of Title 17 of the Code of Federal Regulations by adding a new § 1.60 as follows:

§ 1.60 **Pending legal proceedings.**

(a) Every contract market shall submit to the Commission copies of the complaint and answer (whether or not formally characterized as such) and such further documents as the Commission may thereafter request, filed in any material legal proceedings to which the contract market is a party or its property or assets is subject.

(b) Every contract market shall submit to the Commission copies of the complaint and answer (whether or not formally characterized as such) and such further documents as the Commisison may thereafter request, filed in any material legal proceedings instituted against any officer, director, or other official of the contract market, arising from conduct in such person's capacity as a contract market official and alleging violations of (1) the Act or any rule, regulation, or order thereunder; (2) the constitution, bylaws or rules of the contract market; or (3) the applicable provisions of state law relating to the duties of officers, directors, or other officials of business organizations.

(c) Every contract market shall notify the Commission in writing of any proceedings known to the contract market to be contemplated against the contract market by governmental authorities, other than investigations or enforcement actions which may be instituted by the Commission. To the extent that such information is available, the notification must include the name of the court or agency in which the proceedings may be brought; the anticipated date of the institution of the proceedings; the principal parties (including any officers, directors or other officials of the contract market) which may be bringing or named in the proceedings; a description of the factual and legal basis which may be alleged to underlie the proceedings and the relief which may be sought therein. If proceedings are later instituted against the contract market by governmental authorities, the contract market shall submit to the Commission copies of the complaint and answer (whether or not formally characterized as such) and such further documents as the Commission may thereafter request, filed in such proceedings.

(d) Every contract market shall notify the Commission if any officer, director or other official of the contract market is to be indemnified by the contract market for any amounts paid as settlements or judgments or amounts paid as fines or penalties in any legal proceeding referred to in paragraphs (a), (b) and (c) of this section. The notification must include information regarding the nature and amount of any such indemnification and a brief statement explaining the reasons why the official is to be indemnified for such liabilities.

(e) The documents required by this section shall be mailed to the Commission's headquarters in Washington, D.C. within 10 days after the effective date (February 15, 1977) of this section as to all matters referred to in pargaraphs (a), (b) and (c) of this section then pending, within 10 days after the initiation of legal proceedings referred to in paragraphs (a) and (b) of this section, within 10 days after the contract market determines to indemnify a contract market official as provided in paragraph (d) of this section, and within 10 days after the contract market becomes aware of the contemplated proceedings and within 10 days after formal initiation of any contemplated proceedings referred to in paragraph (c) of this section. For purposes of paragraph (a) and (b) of this section, legal proceedings are not "material" if the only relief sought is a money judgment for less than $15,000.

(Sec. 8a(5) of the Commodity Exchange Act, as amended, 7 U.S.C. 12a(5) (Supp V, 1975).)

Section 1.60 shall become effective February 15, 1977. However, interested persons may submit comments on the rule, which will be evaluated by the Commission in determining whether to amend the rule. All comments should be in writing and should be addressed to: Commodity Futures Trading Commission, 2033 "K" Street, N.W., Washington, D.C. 20581, Attention: Secretariat. Copies of all comments received respecting § 1.60 will be available for inspection at the Commission's offices in Washington, D.C.

Issued in Washington, D.C. on January 4, 1977.

By the Commission.

William T. Bagley,
Chairman, Commodity Futures Trading Commission.

[FR Doc.77-943 Filed 1-11-77;8:45 am]

federal register

WEDNESDAY, JANUARY 12, 1977

PART VII

DEPARTMENT OF COMMERCE

Patent and Trademark Office

■

IMPLEMENTATION OF PATENT COOPERATION TREATY

Proposed Rulemaking

DEPARTMENT OF COMMERCE

Patent and Trademark Office

[37 CFR Parts 1, 3, and 5]

IMPLEMENTATION OF PATENT COOPERATION TREATY

Notice of Proposed Rulemaking

Notice is hereby given that, pursuant to the authority contained in section 6, Title 35 of the United States Code, and Pub. L. 94-131, 89 Stat. 685, of November 14, 1975 which will come into force on the same day as the entry into force of the Patent Cooperation Treaty, the Patent and Trademark Office proposes to amend Title 37 of the Code of Federal Regulations by either amending or revising §§ 1.1, 1.4, 1.5, 1.8, 1.12, 1.14, 1.21, 1.23, 1.25, 1.26, 1.52, 1.55, 1.57, 1.58, 1.72, 1.75, 1.77, 1.78, 1.81, 1.83, 1.84, 1.104, 1.141, 1.146, 1.331, 5.1, 5.3, 5.11, 5.14, 5.15 and 5.17; and by adding new §§ 1.9, 1.61, 1.70, 1.318, 1.401, 1.412, 1.413, 1.414, 1.415, 1.421, 1.422, 1.423, 1.424, 1.425, 1.431, 1.432, 1.433, 1.434, 1.435, 1.436, 1.437, 1.438, 1.445, 1.446, 1.451, 1.455, 1.461, 1.465, 1.468, 1.471, 1.475, 1.481, 1.482, 3.56 and 3.57.

In view of the approaching entry into force of the Patent Cooperation Treaty, the Patent and Trademark Office is proposing certain amendments to the rules of practice in patent cases, forms for patent cases and the rules relating to secrecy of certain inventions and licenses to file applications in foreign countries. These proposed rules provide for the formal acceptance of international applications filed under the Patent Cooperation Treaty in the Patent and Trademark Office as a Designated Office, establish processing fees for international applications, clarify procedures before the Receiving Office and International Search Authority, and provide for other matters relating to the filing and processing of international applications.

All persons are invited to present their views, objections, recommendations or suggestions relating to the proposed rule changes to the Commissioner of Patents and Trademarks, Washington, D.C. 20231 on or before May 26, 1977 on which date a hearing will be held at 9:30 a.m. in Room 11C24, Building 3, 2021 Jefferson Davis Highway, Arlington, Virginia. All persons wishing to be heard orally at the hearing are requested to notify the Commissioner of Patents and Trademarks of their intended appearance. All comments received will be available for public inspection in Room 11E10 of Building 3, at 2021 Jefferson Davis Highway, Arlington, Virginia. If the Patent Cooperation Treaty implementation schedule permits, the period for comments may be extended. It is also possible that a further draft will be published for comment.

The proposed rules will not be promulgated until the Patent Cooperation Treaty and Pub. L. 94-131, 89 Stat. 685 come into force. This will occur three months after the necessary eight ratifications or accessions to the Treaty have occurred, four of which must be countries with major patent activity, PCT Article 63. The United States of America and the Federal Republic of Germany are two of the four major countries which have ratified the Treaty. Two additional major countries must yet ratify or accede to the Treaty before it can enter into force.

This proposal has been reviewed pursuant to E.O. 11821 and OMB Circular A-107 and determined to have no major inflationary impact.

The Patent Cooperation Treaty was published in the Official Gazette on July 14, 1970 at 876 O.G. 341-388. The implementing legislation, Pub. L. 94-131, was published in the Official Gazette on January 6, 1976 at 942 O.G. 177-185. The latest draft of the Administrative Instructions to be promulgated under Rule 89 of the Treaty by the World Intellectual Property Organization is being published in an Official Gazette in January of 1977.

The following comments are directed to the proposed changes and additions in the Patent Rules of Practice.

In order to distinguish which rules apply to national applications, which to international applications, and which to both, it is being proposed that Part I of 37 CFR be divided into 3 subparts. Subpart A would relate to "General Provisions" directed to both national applications and international applications and would include §§ 1.1 through 1.26. Subpart B would relate to "National Processing Provisions" directed to national applications only, and would include §§ 1.31 through 1.352. Subpart C would relate to "International Processing Provisions" under the Patent Cooperation Treaty and would include proposed new §§ 1.401 through 1.482. Within each subpart, where an exception as to the applicability of a rule to national and/or international applications occurs, a specific clarifying reference has been added. In all cases, the present numbering of rules has been maintained.

Section 1.1 provides a special "Box PCT" address to permit an early separation and routing of PCT related mail from other types of mail.

Section 1.4(a) is amended to refer to the added rules relating to international processing.

Section 1.5(a) is amended to indicate that international applications are to be identified by their international application numbers.

Section 1.8(a) is amended to exclude international applications and papers relating thereto from the certificate of mailing procedure.

New § 1.9 is added to distinguish between the terms "national application" and "international application" as used in these rules.

Section 1.12 is amended to refer specifically to the international application number.

Section 1.14(a) indicates the current practice as to application secrecy and also refers specifically to applications identified in international applications. Section 1.14(c) changes the reference from Atomic Energy Commission to the Energy Research and Development Administration.

An international-type search will be made in all national applications as indicated in § 1.104(c). New paragraph (w) to § 1.21 adds a fee to cover the cost of preparing an international-type search report where desired (PCT Art. 15(5)), although it is not required by the United States Patent and Trademark Office.

Section 1.23 includes a reference to international application processing fees to clearly indicate that such fees must be paid in United States currency.

Section 1.25(b) is amended to indicate that international application fees may be charged against deposit accounts.

Section 1.26 is amended to provide for refunding some portion of the international search fee during subsequent national examination where the prior art search is wholly or partly based on the earlier international search. The amount of the refund will be determined by the examiner in a manner similar to that indicated in the remarks directed to § 1.446 below. Such a refund will tend to make applicants' cost of using the PCT about the same regardless of whether the national or international application is filed initially.

In § 1.52, paragraphs (a) and (b) are amended to permit an application complying with the formal requirements of PCT Rule 11 to be formally acceptable as a national application. International applications arriving in the Patent and Trademark Office as a Designated Office under 35 U.S.C. 371 will be in PCT format and with the changed wording of this rule, will also be formally acceptable for national patentability examination.

Section 1.55 is amended to contain an additional paragraph (d) which states the position set forth in PCT Art. 11(3) and 35 U.S.C. 363 that the international filing date is in effect the national filing date except for the reservation under PCT Art. 64(4). This reservation was taken by the United States of America at the time it deposited its instrument of ratification.

Section 1.57 is amended to indicate that the signature on the Request of an international application will be accepted as the signature on the application.

Section 1.58 is amended slightly to remove any conflict with the formal requirements of the Patent Cooperation Treaty.

Section 1.61 is a new section which relates to the filing of an international application with the Patent and Trademark Office as a Designated Office for national patentability examination (35 U.S.C. 371). These requirements differ somewhat from those applying to the regular filing of national applications.

Section 1.70 is a new section which sets forth the requirements of an oath or declaration under 35 U.S.C. 371(c)(4).

Section 1.72 is amended to indicate that the abstract must be located on a separate sheet of paper. This change has been introduced in order to assure uniformity in information placement in international and regular applications that will aid in patent printing. Except for this change, national applications may continue to be filed in the present format.

Section 1.75, paragraph (c), is amended to provide for multiple dependent claims (PCT Rule 6.4). Paragraphs (f) and (g) have been added to incorporate current practice not previously stated in the rules.

Sections 1.77 and 1.78 have been amended to indicate the preferred order of arrangement of application elements including placement of the abstract after the claims as in PCT Art. 3(2) and section 208 of the Administrative Instructions.

Section 1.81 is amended to reflect the changes made in 35 U.S.C. 113 by Pub. L. 94-131 and to comply with PCT Rule 7.2.

Section 1.83 has been amended to remove the mandatory requirement that the drawing show every feature claimed. Such illustrations, however, continue to be strongly preferred and are absolutely essential where necessary for the understanding of the invention.

Section 1.84, which relates to the formal requirements for drawings, has been amended to provide for two alternative drawing sizes. One size is that currently in use and the other is the A4 size required by PCT Rule 11. However, all drawings in a particular application must be of the same size. Other changes have been incorporated to take into consideration the requirements of PCT Rule 11.

Section 1.104 is amended to include a new paragraph (c) relating to the international-type search. Note PCT Art. 15(5) and PCT Rule 41.

Section 1.141 has been amended to provide for including in a single application, inventions so linked as to form a single general inventive concept as in PCT Rule 13.1–13.3.

The rules for determining which inventions can be grouped together in a single application are more liberal in certain respects under the Patent Cooperation Treaty than they are currently in 37 CFR 1.141–1.146. The proposed amendment to § 1.141 extends the more liberal practice, which a Designated Office is required to apply to national applications that have been initially filed as international applications, to all national applications. Paragraph (a) removes the limit of five species of an invention. Paragraphs 1.141(c) (i) and (ii) generally include the wording of PCT Rule 13.2. Paragraphs 1.141 (c)(i) and (d), taken together, state that an application may include, in addition to an allowable independent claim to a product, one independent claim to one process specially adapted for the manufacture of the product as well as one independent claim for the use of the product. Paragraphs 1.141 (c)(ii) and (d), taken together state that an application may include, in addition to an allowable independent claim for a given process, one independent claim for one apparatus or means for carrying out the process. Such claims drawn to product, process of manufacture, process of use, or apparatus, are considered to be claims to different categories. Paragraph 1.141(e) includes generally the wording of PCT Rule 13.3 and is limited to applications where all of the claims are drawn to only one category.

Section 1.146 follows the revised wording of section 1.141 by removing the limit of five species and also removes the reference to a search of the generic claims.

Section 1.318 is a new section relating to the Office's notifying the International Bureau of the publication of a United States patent based on an unpublished international application in accordance with PCT Rule 48.5.

Paragraphs (a) and (c) of § 1.331 are amended to provide for recording of assignments of international applications which designate the United States of America.

Sections 1.401–1.482 relate to processing of international applications during the international processing stage when the United States Patent and Trademark Office acts as a Receiivng Office, International Searching Authority or a Designated Office prior to the acceptance of the international application as a national application for regular patentability examination.

Section 1.401 defines various expressions used in later rules.

Section 1.412 defines those applicants for which the United States Patent and Trademark Office will act as a Receiving Office and also sets forth the major functions of a Receiving Office.

Section 1.413 states that the United States Patent and Trademark Office will act as an International Searching Authority, subject to special agreement and appointment by the Assembly, and indicates some of the major functions thereof.

Section 1.414 states the conditions under which the United States Patent and Trademark Office will act as a Designated Office and defines the functions of the Office as a Designated Office.

Section 1.415 is included to clearly define the authority acting as the International Bureau.

Section 1.421 indicates who may file an international application with the United States Receiving Office.

Sections 1.422, 1.423 and 1.425 are similar to present §§ 1.42, 1.43 and 1.47 and have been added to indicate situations where a person other than the inventor may file an international application designating the United States. These situations include those where the inventor is dead, insane or legally incapacitated, cannot be found or reached, or refuses to sign.

Section 1.431 defines the requirements of an international application filed in the United States Receiving Office.

Section 1.432 relates to the designation of States and the payment of designation fees.

Section 1.433 indicates that only one copy of an international application need be filed and refers to those provisions of the Treaty and Administrative Instructions relating to the physical requirements for international applications.

Section 1.434 relates to the Request portion of an international application.

Section 1.435 calls attention to the PCT Rules relating to the description and also provides that international applications designating the United States must contain an indication of the "best mode" (PCT Rule 5.1(a)(v)).

Section 1.436 refers to the portions of the Treaty and its Regulations which relate to claims.

Section 1.437 relates to the drawings and includes reference to the procedure for receipt of late drawings.

Section 1.438 refers to the abstract requirements of an international application.

Section 1.445 sets forth the fees charged by the Patent and Trademark Office for processing international applications. The amounts of the fees are tentative. More complete and updated studies will be made before these rule changes are finally promulgated and the amounts of the fees will be adjusted accordingly. The fees will be set to reflect 100% recovery of actual cost.

Section 1.446 relates to refund of international application processing fees. It should be noted that since an international-type search will be made in prior filed U.S. national applications or, if an international search made in an international application by the International Searching Authority of Washington is followed by a national examination on such an application, a substantial portion of the international search fee (37 CFR 1.445(a)(2)) could be refunded in many instances. This refund will reduce PCT filing costs.

The examples use the maximum refund and should therefore not be considered to be typical for all applications.

	(A) National application filed first	(B) International application filed first
National filing fee for national application (35 U.S.C. 41)	$65	
Transmittal fee (sec. 1.445(a)(1))	35	$35
International fees:		
Basic fee (PCT rule 15.2(a))	45	45
Designation fees (3 countries) (PCT rule 15.2(b)(i))	36	36
Search fee (sec. 1.445(a)(2))	300	300
(Search fee refund based on international-type search sec. 1.446)	(−270)	
National filing fee (sec. 1.445(a)(4))		65
(Refund of search fee based on savings at national stage (sec. 1.26)		(−270)
Net international processing fees	146	146

The first fee column, labeled (A), relates to a situation where an applicant first files his national application in the Patent and Trademark Office and later, within the priority year, decides to file an international application with the same claims and designates 3 foreign countries. The total fees for the international application in the example would be $416. However, since the claims are the same as those in the national application in which the Office previously made an international-type search, a refund of $270 would be made as indicated in the table below. This would result in the PCT route fees actually costing the applicant $146.

The second fee column, labeled (B), relates to a situation in which the applicant files his international application initially and designates the United States of America as one of the Designated States. Here again the international application fees would be $416. Subsequently, not later than at the expiration of 20 months from the priority date, (in this example the international filing date, PCT Art. 2(xi)(c)), the applicant must pay his national fees in the Designated Offices (PCT Art. 22.1). The Patent and Trademark Office, as a Designated Office, may refund during patentability examination a portion of the international search fee under § 1.26. This practice will result in the total cost to the applicant being about the same regardless of whether the national or international application is filed first.

The following table is a draft of the criteria which the examiners may use to determine the amount of the international search fee which may be refunded as a result of an earlier international-type search. Similar criteria will be used for refunds under § 1.26. Current plans are to have the examiner making the international search merely indicate which category most nearly describes the situation in the application under consideration.

Criteria for refund

	Refund percentage of search fee	Refund based on $300 search fee
A. The prior international-type search was so complete that only an updating search was required	90	$270
B. The prior international-type search was directed to substantially the same invention. However, the claims in the international vary from the national application so that a search in at least one additional subclass but less than three additional subclasses is required	70	210
C. The prior international-type search was such that about a half of the search time of the international search was saved	40	120
D. The prior international-type search was of only small value. The claims of the international application were so different from the claims in the prior national application that the search of only a few subclasses was saved	25	75
E. The prior international-type search was of no value	0	[1]

[1] No refund.

Section 1.451 indicates the procedures to be used to file certified copies of priority documents. Paragraph (b) includes a procedure by which the Office will automatically forward a copy of the priority document to the International Bureau if a fee for copy preparation and a request for such service is filed with the international application.

Section 1.455 relates to who may act as applicant's representative in an international application, and indicates the International Authority to which powers of attorney and revocations thereof should be sent.

Section 1.461 covers the procedures for transmittal of the record copy to the International Bureau. It should be noted that the alternative procedure in paragraph (b) requires that applicants electing transmittal of the international application by themselves rather than by the receiving Office must file such applications before the expiration of 11 months from the priority date to permit sufficient time for the Receiving Office to process the applications before transmittal by the applicant takes place.

Section 1.465 relates to the time limits for processing based on the priority date that are set by the Treaty and its Regulations. This rule indicates which date is to be used if the original claimed priority date is either canceled or changed.

Section 1.468 refers to excusing failures to meet time limits during international processing.

Section 1.471 covers procedures for correcting or amending international applications.

Section 1.475 indicates to which International Authority changes in person, name or address to the applicant or inventor should be sent during various processing stages.

Section 1.481 relates to the International Searching Authority's finding a lack of unity of invention (multiple inventions) under PCT Rule 13 and the resulting invitation to pay additional fees. This section also relates to the filing of a protest on a holding of lack of unity of invention and the payment of additional fees.

Section 1.482 indicates that the International Searching Authority may determine the novelty and obviousness of generic or linking claims to decide if such claims properly link claims to different inventions.

PART 3

Sections 3.56 and 3.57 are proposed as oath and declaration forms which may be used when filing an international application with the United States Designated Office under 35 U.S.C. 371(c)(4).

PART 5

Section 5.1 relates to inspection of applications by defense agencies. Paragraph (a) indicates that the provisions of Part 5 apply to both national and international applications except as otherwise specifically indicated and that the filing of an international application designating a foreign country is considered to be a "foreign filing." In Paragraph (b) Atomic Energy Commission is changed to the Energy Research and Development Administration.

Paragraph (d) of § 5.3 is added to indicate that the record and search copies will not be forwarded to the Authorities or delivered to the applicant if the international application is under secrecy order.

Sections 5.11, 5.14, 5.15 and 5.17 indicate that a license for filing an international application which designates a foreign country is required in the same manner as a license to file a foreign application directly in a foreign country.

The following table of contents indicates the contents of the proposed subparts and the location of added sections and section headings.

PART 1—RULES OF PRACTICE IN PATENT CASES

FEES

Sec.
1.445 International application filing and processing fees.
1.446 Refund of international application filing and processing fees.

PRIORITY

1.451 The priority claim and priority document in an international application.

REPRESENTATION

1.455 Representation in international applications.

TRANSMITTAL OF RECORD COPY

1.461 Procedures for transmittal of Record Copy to the International Bureau.

TIMING

1.465 Timing of application processing based on the priority date.
1.468 Delays in meeting time limits.

AMENDMENTS

1.471 Corrections and amendments during international processing.
1.475 Changes in person, name, or address of applicants and inventors.

UNITY OF INVENTION

1.481 Unity of invention.
1.482 Holding of lack of unity of invention.

PART 3—FORMS FOR PATENT CASES

* * * * *

3.56 Oath to be filed with United States Designated Office under 35 U.S.C. 371 (c)(4).
3.57 Declaration to be filed with United States Designated Office under 35 U.S.C. 371(c)(4).

ATTENTION

The texts of the following proposed amendments are using ► ◄ arrows to indicate additions and [ ] brackets to indicate deletions.

The texts of the proposed amendments are as follows:

PART 1—RULES OF PRACTICE IN PATENT CASES

1. By revising § 1.1 to read as follows:

§ 1.1 All communications to be addressed to Commissioner of Patents and Trademarks.

All letters and other communications intended for the Patent and Trademark Office must be addressed to "Commissioner of Patents and Trademarks," Washington, D.C. 20231. When appropriate, a letter [may] ►should also◄ be marked for the attention of a particular officer or individual. ►Letters and other communications relating to international applications during the international stage and prior to the assignment of a national serial number should be additionally marked "Box PCT."◄

NOTE.—§§ 1.1 to 1.26 are applicable to trademark cases as well as to ►national and international◄ patent cases except provisions specifically directed to patent[s] ►cases◄. ►See § 1.9 for definitions of "national application" and "international application."◄

2. By revising paragraph (a) of § 1.4 to read as follows:

§ 1.4 Nature of correspondence.

(a) Correspondence with the Patent and Trademark Office comprises (1) correspondence relating to services and facilities of the Office, such as general inquiries, requests for publications supplied by the Office, orders for printed copies of patents or trademark registrations, orders for copies of records, transmission of assignments for recording, and the like, and (2) correspondence in and relating to a particular application or other proceeding in the Office. See particularly the rules relating to the filing ►, processing,◄ [and prosecution of applications] or other proceedings [(] ►of national applications in Subpart B,◄ §§ 1.31 to 1.352 ►; of international applications in Subpart C, §§ 1.401–1.482;◄ and ►of trademark applications,◄ §§ 2.11 to 2.189[)].

* * * * *

3. By revising paragraph (a) of § 1.5 to read as follows:

§ 1.5 Identification of application, patent or registration.

(a) When a letter concerns an application for patent, it should state the name of the applicant, the title of the invention, the serial number ►or international application number◄ of the application, the date of filing the same, and, if known, the group art unit and name of the examiner to which it has been assigned (see § 1.55).

* * * * *

4. By revising paragraphs (a) (1) and (xi) of § 1.8 to read as follows:

§ 1.8 Certificate of mailing.

(a) Except in the cases enumerated below, papers and fees required to be filed in the Patent and Trademark Office within a set period of time will be considered as being timely filed if (1) they are addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231, and deposited with the United States Postal Service with sufficient postage as first class mail prior to expiration of the set period, and (2) they are accompanied by a certificate stating the date of deposit (see forms, §§ 3.55 and 4.23). The person signing the certificate should have reasonable basis to expect that the correspondence would be mailed on or before the date indicated. The actual date of receipt of the paper or fee will be used for all other purposes. This procedure does not apply to the following:

(1) The filing of ►national◄ applications ►for patent◄ ;

* * * * *

► (xi) The filing of international applications for patent and papers relating thereto.◄

* * * * *

5. A new § 1.9 is added to read as follows:

►§ 1.9 Definitions.◄

►(a) A national application as used in this Chapter means a United States national application for patent which was either filed in the Office under 35 U.S.C. 111 or which resulted from an international application after compliance with 35 U.S.C. 371.◄

►(b) An international application as used in this Chapter means an international application for patent filed under the Patent Cooperation Treaty prior to entering national processing at the Designated Office stage.◄

6. By revising § 1.12 to read as follows:

§ 1.12 Assignment records open to public inspection.

The assignment records, relating to original or reissue patents, including digests and indexes, are open to public inspection and copies of any instrument recorded may be obtained upon payment of the fee therefor. Assignment records, digests and indexes, relating to any pending or abandoned application are not available to the public. Copies of any such assignment records and information with respect thereto shall be obtainable only upon written authority of the applicant or his assignee or attorney or agent or upon a showing that the person seeking such information is a bona fide prospective or actual purchaser, mortgagee or licensee of such application, unless it shall be necessary to the proper conduct of business before the Office or as provided by these rules. An order for a copy of an assignment should give the identification of the record. If identified only by the name of the patentee and number of the patent, or in the case of a trademark registration by the name of the registrant and number of the registration, or by name of the applicant and serial number ►or international application number◄ of the application, an extra charge will be made for the time consumed in making a search for such assignment.

7. By revising paragraphs (a) and (c) of § 1.14 to read as follows:

§ 1.14 Patent applications preserved in secrecy.

(a) Except as provided in § 1.11(b) pending patent applications are preserved in secrecy. No information will be given by the Office respecting the filing by any particular person of an application for a patent, the pendency of any particular case before it, or the subject matter of any particular application, nor will access be given to or copies furnished of any pending application or papers relating thereto, without written authority in that particular application from the applicant or his assignee or attorney or agent of record, ►unless the application has been identified by serial number in a published patent document or the United States of America has been indicated as a designated state in a published international application, in which case status information such as whether it is pending, abandoned or patented may be supplied, or◄ unless it shall be necessary to the proper conduct of business before the Office or as provided by this part. ►Where an application has been patented, the patent number and issue date may also be supplied.◄

* * * * *

(c) Applications for patents which disclose, or which appear to disclose, or which purport to disclose, inventions or discoveries relating to atomic energy are reported to the ►Energy Research and Development Administration◄ [Atomic Energy Commission] and the [Commission] ►Administration◄ will be given access to such applications, but such reporting does not constitute a determination that the subject matter of each application so reported is in fact useful or an invention or discovery or that such application in fact discloses subject matter in categories specified by secs. 151(c) and 151(d) of the Atomic Energy Act of 1954, 68 Stat. 919 (42 U.S.C. 2181).

* * * * *

8. By adding a new paragraph (w) to § 1.21 to read as follows:

§ 1.21 Patent and miscellaneous fees and charges.

* * * * *

►(w) For preparing an international-type search report in a national patent application .... $25.00.

NOTE: For fees relating to processing of international applications, see § 1.445.◄

9. By revising § 1.23 to read as follows:

§ 1.23 Method of payment.

All payments of money required for Patent and Trademark Office fees ►, including fees for the processing of international applications (§ 1.445),◄ should be made in United States specie, Treasury notes, national bank notes, post office money orders, or by certified check. If sent in any other form, the Office may delay or cancel the credit until collection is made. Money orders and checks must be made payable to the Commissioner of Patents and Trademarks. Remittances from foreign countries must be payable and immediately negotiable in the United States for the full amount of the fee required. Money sent by mail to the Patent and Trademark Office will be at the risk of the sender; letters containing money should be registered.

10. By revising paragraph (b) of § 1.25 to read as follows:

§ 1.25 Deposit accounts.

* * * * *

(b) Filing, issue, appeal, ►international-type search report, international application processing,◄ and petition fees may be charged against these accounts.

11. By revising § 1.26 to read as follows:

§ 1.26 Refund.

Money paid by actual mistake or in excess, such as a payment not required by law, will be refunded, but a mere change of purpose after the payment of money, as when a party desires to withdraw his application or to withdraw an appeal, will not entitle a party to demand such a return. ►Refund of a portion of any international search fee paid to the Patent and Trademark Office may be made where the prior art search made during the subsequent national examination of that application is wholly or partly based on the earlier international search made in the international application for which the search fee was paid. The amount of the refund will be as determined by the examiner according to the value of the prior international search made by the Patent and Trademark Office as an International Searching Authority, as 90 percent, 70 percent, 40 percent, 25 percent or 0 percent of the international search fee. If the amount of the refund is not a multiple of $10, it will be rounded off to the next higher multiple of $10. (Note § 1.446 for refund of the search fee in an international application.)◄ Amounts of ten cents or less will not be returned unless specifically demanded, within a reasonable time, nor will the payer be notified of such amount; amounts over ten cents but less than one dollar may be returned in postage stamps, and other amounts by check.

12. By revising paragraphs (a) and (b) of § 1.52 to read as follows:

§ 1.52 Language, paper, writing, margins.

(a) The ►application, any papers pertaining thereto, any amendments and the◄ [specification and] oath or declaration must be in the English language ►or be accompanied by a verified translation of the application and a translation of any other papers into the English language◄. All papers which are to become a part of the permanent records of the Patent and Trademark Office must be legibly written ►, typed,◄ or printed in permanent ink or its equivalent in quality. All of the application papers must be presented in a form having sufficient clarity and contrast between the paper and the writing ►, typing,◄ or printing thereon to permit the ►direct◄ production of readily legible copies in any number by use of photographic, electrostatic, photooffset, and microfilming processes. If the papers are not of the required quality, substitute typewritten or printed papers of suitable quality may be required.

(b) The application papers (specification, including claims, ►abstract,◄ oath[,] or declaration, ►and◄ papers as provided for in §§ 1.42, 1.43, 1.47, etc.) and also papers subsequently filed, must be plainly written on but one side of the paper. The size of all sheets of paper should be 8 to 8½ by 10½ to 13 inches (20.3 to 21.6 cm. by 26.6 to 33.0 cm.). A margin of ►at least approximately one inch (2.5 cm.)◄ [1½ inches (3.8 cm.)] must be reserved on the left-hand side ►of each page. The◄ [and on the] top of each page of the ►application◄ [specification], including claims ►must have a margin of at least approximately ¾ inch (2 cm.)◄ The lines ►of text◄ must not be crowded too closely together; typewritten lines should be ►1½ or◄ double spaced. The pages of the ►application◄ [specification], including claims ►and abstract◄ , should be numbered consecutively, starting with 1, the numbers being ►centrally located above or preferably, below, the text◄ [placed in the center of the bottom margins].

* * * * *

13. By adding paragraph (d) to § 1.55 to read as follows:

§ 1.55 Serial number and filing date of application.

* * * * *

►(d) The filing date of an international application designating the United States of America shall be treated as the filing date in the United States of America under PCT Article 11(3), except as provided in 35 U.S.C. 102(e).◄

14. By revising § 1.57 to read as follows:

§ 1.57 Signature.

►(a)◄ The application must be signed by the applicant in person. The signature to the oath or declaration ►under § 1.65◄ will be accepted as the signature to the application provided the oath or declaration ►under § 1.65◄ is attached to and refers to the specification and claims to which it applies. Otherwise the signature must appear at the end of the specification after the claims.

►(b) The signature to the oath or declaration under § 1.70 will be accepted as the signature to the application provided the oath or declaration under § 1.70 specifically refers to the specification and claims to which it applies.◄

►(c)◄ Full names must be given, including at least one given name without abbreviation together with any other given name or initial.

15. By revising § 1.58 to read as follows:

§ 1.58 Chemical and mathematical formulas and tables.

(a) The specification, including the claims, may contain chemical and mathematical formulas, but shall not contain drawings or flow diagrams. The description portion of the specification may contain tables; claims may contain tables ►either◄ [only] if necessary to conform to 35 U.S.C. 112 ►or if otherwise found to be desirable◄.

(b) All tables and chemical and mathematical formulas in the specification, including claims, and amendments thereto, must be on ►paper which is flexible, strong, white, smooth, non-shiny and durable◄ [pure white durable paper, the surface of which is calendered and smooth], in order to permit use as camera copy when printing any patent which may issue. A good grade of bond paper is acceptable; watermarks should not be prominent. India ink or its equivalent, or solid black typewriter ribbon ►should◄ [must] be used to secure perfectly ►dark◄ [black] solid lines.

(c) To facilitate camera copying when printing, the width of formulas and tables as presented should be limited normally to 5 inches (12.7 cm.) so that it may appear as a single column in the printed patent. If it is not possible to limit the width of a formula or table to 5 inches (12.7 cm.), it is permissible to present the formula or table with a maximum width of 10¾ inches (27.3 cm.) and to place it sideways on the sheet [, in which case the formula or table will appear printed across both columns of the page in the printed patent]. Typewritten characters used in such formulas and tables must be from a block (nonscript) type font or lettering style having capital letters which are at least ►0.08◄ [0.085] inch ►(2.1 mm.)◄ [(2.2 mm.)] high (e.g. elite type). Hand lettering must be neat, clean, and have a minimum character height of ►0.08◄ [0.085] inch ►(2.1 mm.)◄ [(2.2 mm.)]. A space at least ¼ inch (6.4 mm.) high should be provided between the formulas and tables and the text. Tables should have the lines and columns of data closely spaced to conserve space, consistent with high degree of legibility.

16. By adding a new § 1.61 to read as follows:

►§ 1.61 Filing of applications in the United States of America as a Designated Office.◄

►(a) To maintain the benefit of the international filing date, the applicant shall furnish to the United States Patent and Trademark Office a copy of the international application with any amendments, unless it has been previously furnished by the International Bureau or unless it was originally filed in the United States Patent and Trademark Office, a verified translation of the international application and a translation of any amendments into the English language if originally filed elsewhere in another language, the national fee (see § 1.445 (a)(4)) and an oath or declaration of the inventor (see § 1.70) not later than the expiration of 20 months from the priority date.◄

►(b) Where an International Searching Authority has made a declaration that no international search report will be established because the international application relates to subject matter which it is not required to search, or because the application fails to comply with the prescribed requirements to such an extent that a meaningful search could not be carried out, the time for performing the acts referred to in paragraph (a) of this section is two months from the mailing date of the declaration to the applicant.◄

17. By adding a new § 1.70 to read as follows:

►§ 1.70 Content of oath or declaration relating to content of and amendments to an application under 35 U.S.C. 371(c)(4).◄

►(a)(1) When an applicant of an international application, if the inventor, desires to enter the national stage under 35 U.S.C. 371, he must specifically identify the international application and any amendments thereto and state that he verily believes himself to be the original and first inventor or discoverer of the process, machine, manufacture, composition of matter, or improvement thereof, for which he solicits a patent; that he does not know and does not believe that the same was ever known or used in the United States of America before his invention or discovery thereof, and shall state of what country he is a citizen and where he resides and whether he is a sole or joint inventor of the invention claimed in his international application as filed or as amended. In every application the applicant must distinctly state that to the best of his knowledge and belief the invention has not been in public use or on sale in the United States of America more than one year prior to his international application, or patented or described in any printed publication in any country before his invention or more than one year prior to his international application, or patented or made the subject of an inventor's certificate in any foreign country prior to the date of his international application on an application filed by himself or his legal representatives or assigns more than twelve months prior to his international application. He shall state whether or not any application for patent or inventor's certificate on the same invention has been filed in any foreign country, either by himself, or by his legal representatives or assigns. If any such application has been filed, the applicant shall name the country in which the earliest such application was filed, and shall give the day, month, and year of its filing; he shall also identify by country and by day, month, and year of filing, every such foreign application filed more than twelve months before the filing of the international application.◄

►(2) This statement (i) must be subscribed to by the applicant, and (ii) must either (a) be sworn to (or affirmed) as provided in § 1.66, or (b) include the personal declaration of the applicant as prescribed in § 1.68.◄

►(b) If the international application was made as provided in §§ 1.422, 1.423 or 1.425, the applicant shall state his relationship to the inventor and, upon information and belief, the facts which the inventor is required by this section to state.◄

18. By revising paragraph (b) of § 1.72 to read as follows:

§ 1.72 Title and abstract.

* * * * *

(b) A brief abstract of the technical disclosure in the specification must be set forth ►on a separate sheet, preferably following the claims◄ [immediately following the title and preceding the disclosure in a separate paragraph] under the heading "Abstract of the Disclosure." The purpose of the abstract is to enable the Patent and Trademark Office and the public generally to determine quickly from a cursory inspection the nature and gist of the technical disclosure, and the abstract shall not be used for interpreting the scope of the claims.

19. By revising paragraph (c) of § 1.75 and adding paragraphs (f) and (g) as follows:

§ 1.75 Claim(s).

* * * * *

(c) ►One or more claims may be presented in dependent form, referring back to another claim or claims in the same application. Any dependent claim which refers to more than one other claim ("multiule dependent claim") shall refer to such other claims in the alternative only. A multiple dependent claim shall not serve as a basis for any other multiple dependent claim◄ [When more than one claim is presented, they may be placed in dependent form in which a claim may refer back to and further restrict a single preceding claim]. Claims in dependent form shall be construed to include all the limitations of the claim incorporated by reference into the dependent claim. ►A multiple dependent claim shall be construed to incorporate by reference all the limitations of the particular claim in relation to which it is being considered.◄

* * * * *

►(f) If there are several claims, they shall be numbered consecutively in Arabic numerals.◄

►(g) All dependent claims referring back to a single previous claim, and all dependent claims referring back to several previous claims, should be grouped together to the extent possible.◄

20. By revising § 1.77 to read as follows:

§ 1.77 Arrangement of application ►elements◄.

The ►elements of the application should appear in the following order◄ [following order of arrangement should be observed in framing the application]:

(a) Title of the invention; or an introductory portion stating the name, citizenship, and residence of the applicant, and the title of the invention may be used.

(b) [Abstract of the disclosure.] ►(reserved)◄

(c) Cross-references to related applications, if any.

(d) Brief summary of the invention.

(e) Brief description of the several views of the drawing, if there are drawings.

(f) Detailed description.

(g) Claim or claims.

(h) Signature. (See § 1.57.)

►(i) Abstract of the disclosure.◄

►(j) Drawings.◄

21. By revising paragraph (a) of § 1.78 to read as follows:

§ 1.78 Cross-references to other applications.

(a) When an applicant files an application claiming an invention disclosed in a prior filed copending ►national◄ application ►or international application designating the United States of America◄ of the same applicant, the second application must contain or be amended to contain in the first sentence of the specification following the title [and abstract] a reference to [the] ►such◄ prior application, identifying it by serial number and filing date ►or international application number and international filing date◄ and indicating the relationship of the applications, if the benefit of the filing date of [the] ►such◄ prior application is to be claimed. Cross-references to other related applications may be made when appropriate. (See § 1.14(b)).

* * * * *

22. By revising § 1.81 to read as follows:

§ 1.81 Drawings required.

►(a)◄ The applicant for patent is required by statute to furnish a drawing of his invention ►where necessary for the understanding of the subject matter sought to be patented;◄ [whenever the nature of the case admits of it:] this drawing must be filed with the application.

►(b)◄ Illustrations facilitating an understanding of the invention (for example, flow sheets in cases of processes, and diagrammatic views) may also be furnished in the same manner as drawings [and may be required by the Office when considered necessary or desirable].

►(c) When a drawing or illustration is not necessary for, but would facilitate, the understanding of the subject matter sought to be patented and the applicant has not furnished such a drawing or illustration, the Office may require its submission within a time period of not less than two months from the sending of a notice thereof.◄

23. By revising § 1.83 to read as follows:

§ 1.83 Content of drawing.

(a) The drawing ►should preferably◄ [must] show every feature of the invention specified in the claims. [However,] Conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation (e.g., a labeled rectangular box).

(b) When the invention consists of an improvement on an old machine the drawing ►should◄ [must] when possible exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.

24. By revising paragraphs (a), (b), (c), (d), (e), (f), (i), (j), and (l) of § 1.84 to read as follows:

§ 1.84 Standards for drawings.

(a) *Paper and ink*. Drawings must be made upon ►paper which is flexible, strong, white, smooth, non-shiny and durable.◄ [pure white paper of a thickness corresponding to] Two-ply or three-ply bristol-board ►is preferred◄. The surface of the paper ►should◄ [must] be calendered [and smooth] and of a quality which will permit erasure and correction with India ink. India ink, or it equivalent in quality, ►is preferred◄ [must be used] for pen drawings to secure perfectly black solid lines. The use of white pigment to cover lines is not ►normally◄ acceptable.

(b) *Size of sheet and margins*. The size of ►the sheets on which drawings are made may either be◄ [a sheet on which a drawing is made must be] exactly 8½ by 14 inches (21.6 by 35.6 cm.) ►or exactly 21.0 by 29.7 cm. (DIN size A4). All drawing sheets in a particular application must be the same size.◄ One of the shorter sides of the sheet is regarded as its top.

►(1) On 8½ by 14 inch drawing sheets,◄ the drawing must include a top margin of 2 inches (5.1 cm.) and bottom and side margins of one-quarter inch (6.4 mm.) from the edges, thereby leaving a "sight" precisely 8 by 11¾ inches (20.3 by 29.8 cm.). Margin border lines are not permitted. All work must be included within the "sight". The sheets may be provided with two one-quarter inch (6.4 mm.) diameter holes having their centerlines spaced eleven-sixteenths inch (17.5 mm.) below the top edge and 2¾ inches (7.0 cm.) apart, said holes being equally spaced from the respective side edges.

►(2) On 21.0 by 29.7 cm. drawing sheets, the drawing must include a top margin of at least 2.5 cm., a left side margin of 2.5 cm., a right side margin of 1.5 cm., and a bottom margin of 1.0 cm. Margin border lines are not permitted. All work must be contained within a sight size not to exceed 17 by 26.2 cm.◄

(c) *Character of lines*. All drawings must be made with drafting instruments or by a process which will give them satisfactory reproduction characteristics. Every line and letter must be ►durable, black or blue, sufficiently dense and dark, uniformly thick and well defined;◄ [absolutely black and permanent;] the weight of all lines and letters must be heavy enough to permit adequate reproduction. This direction applies to all lines however fine, to shading, and to lines representing cut surfaces in sectional views. All lines must be clean, sharp, and solid [, and fine] ►. Fine◄ or crowded lines should be avoided. Solid black ►or blue◄ should not be used for sectional or surface shading. Freehand work should be avoided wherever it is possible to do so.

(d) *Hatching and shading*. (1) Hatching should be made by oblique parallel lines ►spaced sufficiently apart to enable the lines to be distinguished without difficulty◄ [, which may be not less than about one-twentieth inch (1.3 mm.) apart].

(2) Heavy lines on the shade side of objects should ►preferably◄ be used except where they tend to thicken the work and obscure reference characters. The light should come from the upper left hand corner at an angle of 45°. Surface delineations should ►preferably◄ be shown by proper shading, which should be open.

(e) *Scale*. The scale to which a drawing is made ought to be large enough to show the mechanism without crowding when the drawing is reduced ► in size to two-thirds◄ in reproduction, and views of portions of the mechanism on a larger scale should be used when necessary to show details clearly; two or more sheets should be used if one does not give sufficient room to accomplish this end, but the number of sheets should not be more than is necessary.

(f) *Reference characters*. The different views should be consecutively numbered figures. Reference numerals (and letters, but numerals are preferred) must be plain, legible and carefully formed, and not be encircled. They should, if possible, measure at least one-eighth of an inch (3.2 mm.) in height so that they may bear reduction to one twenty-fourth of an inch (1.1 mm.); and they may be slightly larger when there is sufficient room. They ►should◄ [must] not be so placed in the close and complex parts of the drawing as to interfere with a thorough comprehension of the same, and therefore should rarely cross or mingle with the lines. When necessarily grouped around a certain part, they should be placed at a little distance, at the closest point where there is available space, and connected by lines with the parts to which they refer. They should not be placed upon hatched or shaded surfaces but when necessary, a blank space may be left in the hatching or shading where the character occurs so that it shall appear perfectly distinct and separate from the work. The same part of an invention appearing in more than one view of the drawing must always be designated by the same character, and the same character must never be used to designate different parts. ►Reference signs not mentioned in the description shall not appear in the drawing, and vice versa.◄

* * * * *

(i) *Views*. The drawing must contain as many figures as may be necessary to show the invention; the figures should be consecutively numbered if possible in the order in which they appear. The figures may be plain, elevation, section, or perspective views, and detail views of portions of elements, on a larger scale if necessary, may also be used. Exploded views, with the separated parts of the same figure embraced by a bracket, to show the relationship or order of assembly of various parts are permissible. When necessary, a view of a large machine or device in its entirety may be broken and extended over several sheets if there is no loss in facility of understanding the view. ►Where figures on two or more sheets form in effect a single complete figure, the figures on the several sheets should be so arranged that the complete figure can be assembled without concealing any part of any of the figures appearing in the various sheets◄ [(the different parts should be identified by the same figure number but followed by the letters, a, b, c, etc., for each part)]. The plane upon which a sectional view is taken should be indicated on the general view by a broken line, the ends of which should be designated by numerals corresponding to the figure number of the sectional view and have arrows applied to indicate the direction in which the view is taken. A moved position may be shown by a broken line superimposed upon a suitable figure if this can be done without crowding, otherwise a separate figure must be used for this purpose. Modified forms of construction can only be shown in separate figures. Views should not be connected by projection lines nor should center lines be used.

(j) *Arrangement of views.* All views on the same sheet ►should◄ [must] stand in the same direction and [should], if possible, stand so that they can be read with the sheet held in an upright position. If views longer than the width of the sheet are necessary for the clearest illustration of the invention, the sheet may be turned on its side so that the ►top of the sheet with the appropriate top margin◄ [two-inch (5.1 cm.) margin] is on the right hand side. One figure must not be placed upon another or within the outline of another.

* * * * *

(l) *Extraneous matter.* [An inventor's, agent's, or attorney's name, signature, stamp, or address, or other extraneous matter, will not be permitted upon the face of a drawing, within or without the margin, except that] Identifying indicia (►such as the◄ attorney's docket number, inventor's name, number of sheets, etc.) [should] ►not to exceed 2¾ inches (7.0 cm.) in width may◄ be placed ►in a centered location between the side edges◄ within three-fourths inch (19.1 mm.) of the top edge [and between the hole locations defined in paragraph (b) of this section]. Authorized security markings may be placed on the drawings provided they [be] ►are◄ outside the illustrations and are removed when the material is declassified. ►Other extraneous matter will not be permitted upon the face of a drawing.◄

* * * * *

25. By adding new paragraphs (c) and (d) to § 1.104 to read as follows:

§ 1.104 Nature of examination; examiner's action.

* * * * *

►(c) An international-type search will be made in all national applications filed on and after the date the United States Patent and Trademark Office is appointed as an International Searching Authority.◄

►(d) Any national application may also have an international-type search report prepared thereon at the time of the national examination upon specific written request therefor and payment of the international-type search report fee. See § 1.21(w) for amount of fee for preparation of international-type search report.◄

26. By revising § 1.141 to read as follows.

§ 1.141 Different inventions in one application.

►(a)◄ Two or more independent and distinct inventions may not be claimed in one application ►. However, a group in one application . However, a group of inventions which are so linked as to form a single general inventive concept such as those set forth in paragraphs (b), (c) or (d) of this section, are considered to be one invention under §§ 1.141–1.146◄ [except that more than one species of an invention, not to exceed five].

►(b) Different species of an invention◄ may be specifically claimed in different claims in one application, provided the application also includes an allowable claim generic to all the claimed species and all the claims to [each] species in excess of one are written in dependent form (§ 1.75) or otherwise include all the limitations of the generic claim.

►(c) Paragraph (a) of this section shall be construed as permitting the examination of claims of different categories in an application, in particular either of the following two groupings of claims of different categories:◄

►(i) in addition to an independent claim for a given product, the inclusion in the same application of one independent claim for one process specially adapted for the manufacture of the said product, or the inclusion in the same application of one independent claim for one use of the said product, or both; or◄

►(ii) in addition to an independent claim for a given process, the inclusion in the same application of one independent claim for one apparatus or means specifically designed for carrying out the said process.◄

►(d) If the product claim of subparagraph (i) of paragraph (c) of this section or the process claim of subparagraph (ii) of paragraph (c) of this section is not allowable, the examiner may withdraw from consideration the claims to the other categories. If subsequently such a product or process claim is found allowable, the examiner must also consider the merits of the claims to the other categories as indicated in subparagraphs (i) and (ii) of paragraph (c) of this section.◄

►(e) Subject to paragraph (a) of this section, and except where paragraph (c) of this section applies, there may be included in the same application two or more independent claims of one and the same category (i.e., product, process, apparatus, or use) which cannot readily be covered by a single generic claim.◄

27. By revising § 1.146 to read as follows:

§ 1.146 Election of species.

In the first action on an application containing a generic claim and claims restricted separately to each of more than one species embraced thereby, the examiner[, if of the opinion after a complete search on the generic claims that no generic claim presented is allowable,] shall require the applicant in his response to that action to elect that species of his invention to which his claims shall be restricted if no generic claim is finally held allowable. [However, if such application contains claims directed to more than five species, the examiner may require restriction of the claims to not more than five species before taking any further action in the case.]

28. By adding a new § 1.318 to read as follows:

►§ 1.318 Notification of national publication of a patent based on an international application.◄

►The Office will notify the International Bureau when a patent is issued on an application filed under 35 U.S.C. 371, and there has been no previous international publication.◄

29. By revising paragraphs (a) and (c) of § 1.331 to read as follows:

§ 1.331 Recording of assignments.

(a) Assignments, including grants and conveyances, of patents ►, national applications, or international applications which designate the United States of America◄ [or applications for patents] under 35 U.S.C. 261, will be recorded in the Patent and Trademark Office. Other instruments affecting title to a patent[or application for patent,] ►, a national application, or an international application which designates the United States of America◄, and licenses, even though the recording thereof may not serve as constructive notice under 35 U.S.C. 261, will be recorded as provided in this section or in the discretion of the Commissioner.

* * * * *

(c) An instrument relating to a patent should identify the patent by number and date (the name of the inventor and title of the inventinon as stated in the patent should also be given); an instrument relating to [an] ►a national application, or an international◄ application ►which designates the United States of America◄ should identify the application by serial ►number or international application◄ number and date of filing (the name of the inventor and title of the invention as stated in the application should also be given) but if an asignment is executed concurrently with or subsequent to the execution of the application but before the application is filed or before its serial ►number or international application◄ number and filing date are ascertained, it should adequately identify the application, as by its date of execution and name of the inventor and title of the invention; so that there can be no mistake as to the patent or application intended.

Proposed Subpart C

30. By adding a new § 1.401 to read as follows:

►§ 1.401 Definitions of Terms under the Patent Cooperation Treaty.◄

►(a) The abbreviation "PCT" or the term "Treaty" means the Patent Cooperation Treaty.◄

►(b) "International Bureau" means the World Intellectual Property Organization located at 32 chemin des Colombettes, Geneva, Switzerland.◄

►(c) "Administrative Instructions" means that body of instructions for operating under the Patent Cooperation Treaty referred to in PCT Rule 89.◄

►(d) "Request", when capitalized, means that element of the international application described in PCT Rules 3 and 4.◄

►(e) "International application", as used in this Subchapter is defined in § 1.9.◄

►(f) "Priority date" for the purposes of computing time limits under the Patent Cooperation Treaty is defined in PCT Art. 2 (xi). Note also § 1.465.◄

►(g) Other terms and expressions in this subpart C not defined in this section are to be taken in the sense indicated in PCT Art. 2 and 35 U.S.C. 351.◄

31. By adding a new § 1.412 to read as follows:

►§ 1.412 The United States Receiving Office.◄

►(a) The United States Patent and Trademark Office is a Receiving Office only for applicants who are residents or nationals of the United States of America.◄

►(b) The Patent and Trademark Office, when acting as a Receiving Office, will be identified by the full title "United States Receiving Office" or by the abbreviation "RO/US."◄

►(c) The major functions of the Receiving Office include:

(1) according of international filing dates to international applications meeting the requirements of PCT Art. 11(1), and PCT Rule 20;

(2) assuring that international applications meet the standards for format and content of PCT Art. 14(1), PCT Rules 9, 26, 29.1, 37, 38, 91, and portions of PCT Rules 3 through 11;

(3) collecting and, when required, transmitting fees due for processing international applications (PCT Rules 14, 15, 16); and

(4) transmitting the record and search copies to the International Bureau and International Searching Authority, respectively (PCT Rules 22 and 23).◄

32. By adding a new § 1.413 to read as follows:

►§ 1.413 The International Searching Authority of Washington.◄

►(a) Pursuant to appointment by the Assembly, the United States Patent and Trademark Office will act as an International Searching Authority for international applications filed with the United States Receiving Office, in accordance with agreement between the Patent and Trademark Office and the International Bureau (PCT Art. 16(3) (b)).◄

►(b) The Patent and Trademark Office, when acting as an International Searching Authority, will be identified by the full title "International Searching Authority of Washington," or by the abbreviation "ISA/US."◄

►(c) The major functions of the International Searching Authority include:

(1) approving or establishing the title and abstract;

(2) considering the matter of unity of invention;

(3) conducting international and internatonal-type searches and preparing international and international-type search reports (PCT Art. 15, 17 and 18, and PCT Rules 25, 33–45 and 47); and

(4) transmitting the international search report to the applicant and the International Bureau.◄

33. By adding a new § 1.414 to read as follows:

►§ 1.414 The United States Designated Office.◄

►(a) The United States Patent and Trademark Office will act as a Designated Office for international applications in which the United States of America has been designated as a State in which patent protection is desired.◄

►(b) The Patent and Trademark Office, when acting as a Designated Office during international processing will be identified by the full title "United States Designated Office" or by the abbreviation "DO/US."◄

►(c) The major functions of the United States Designated Office in respect to international applications in which the United States of America has been designated, include:

(1) Receiving various notifications throughout the International stage.

(2) Accepting for regular national patentability examination international applications which satisfy the requirements of 35 U.S.C. 371, and

(3) Conducting reviews under PCT Article 25 for those international applications declared withdrawn.◄

34. By adding a new § 1.415 to read as follows:

►§ 1.415 The International Bureau.◄

►(a) The International Bureau is the World Intellectual Property Organization located at Geneva, Switzerland. It is the international intergovernmental organization which acts as the coordinating body under the Treaty and the Regulations. (PCT Art. 2 (xix) and 35 U.S.C. 351(h).)◄

►(b) The major functions of the International Bureau include:

(1) Publishing of international applications and the International Gazette;

(2) Transmitting copies of international applications to Designated Offices;

(3) Storing and maintaining record copies; and

(4) Transmitting information to authorities pertinent to the processing of specific international applications.◄

35. By adding a new § 1.421 to read as follows:

►§ 1.421 Applicant for international application.◄

►(a) Only residents or nationals of the United States of America may file international applications in the United States Receiving Office.◄

►(b) Although the United States Receiving Office will accept international applications filed by any resident or national of the United States of America for international processing, an international application designating the United States of America will be accepted by the Patent and Trademark Office for the national stage only if filed by the inventor or as provided in §§ 1.422, 1.423 or 1.425.◄

►(c) International applications which do not designate the United States of America may be filed by the assignee or owner.◄

►(d) Any indication of different applicants for the purpose of different designated offices must be shown on the Request portion of the international application.◄

►(e) Changes in the person, name, or address of the applicant shall be made in accordance with PCT Rule 18.5.◄

36. By adding a new § 1.422 to read as follows:

►§ 1.422 When the inventor is dead.◄

►In case of the death of the inventor, the legal representative (executor, administrator, etc.) of the deceased inventor may sign the Request and other papers in an international application which designates the United States of America.◄

37. By adding a new § 1.423 to read as follows:

►§ 1.423 When the inventor is insane or legally incapacitated.◄

►In case an inventor is insane or otherwise legally incapacitated, the legal representative (guardian, conservator, etc.) of such inventor may sign the Request and other papers in an international application which designates the United States of America.◄

38. By adding a new § 1.424 to read as follows:

►§ 1.424 Joint inventors.◄

►Joint inventors must each sign the Request in an international application which designates the United States of America; the signature of either of them alone, or less than the entire number will be insufficient for an invention invented by them jointly, except as provided in § 1.425.◄

39. By adding a new § 1.425 to read as follows:

►§ 1.425 Filing by other than inventor.◄

►(a) If a joint inventor refuses to join in an international application which designates the United States of America or cannot be found or reached after diligent effort, the international application which designates the United States of America may be filed by the other inventor on behalf of himself and the omitted inventor. Such an international application which designates the United States of America must be accompanied by proof of the pertinent facts and must state the last known address of the omitted inventor. The Patent and Trademark Office shall forward notice of the filing of the international application to the omitted inventor at said address.◄

►(b) Whenever an inventor refuses to execute an international application which designates the United States of America, or cannot be found or reached after diligent effort, a person to whom the inventor has assigned or agreed in writing to assign the invention or who otherwise shows sufficient proprietary interest in the matter justifying such action may file the international application on behalf of and as agent for the inventor. Such an international application which designates the United States of America, must be accompanied by proof of the pertinent facts and a showing that such action is necessary to preserve the rights of the parties or to prevent irreparable damage, and must state the last known address of the inventor. The assignment, written agreement to assign or other evidence of proprietary interest, or a verified copy thereof, must be filed in the Patent and Trademark Office. The Office shall forward notice of the filing of the application to the inventor at the address stated in the application.◄

40. By adding a new § 1.431 to read as follows:

►§ 1.431 International application requirements.◄

►(a) An international application shall contain, as specified in the Treaty and the Regulations, a Request, a description, one or more claims, one or more drawings (where required), and an abstract (PCT Art. 3(2)).◄

►(b) An international filing date will be accorded by the United States Receiving Office, at the time of receipt of the international application, provided that:

(1) The applicant is a United States resident or national (35 U.S.C. 361(a), PCT Art. 11(1) (i)).

(2) The international application is in the English language (35 U.S.C. 361 (c), PCT Art. 11(1) (ii)).

(3) The international application contains at least the following elements (PCT Art. 11(1) (iii)):

(i) An indication that it is intended as an international application (PCT Rule 4.2),

(ii) The designation of at least one contracting State of the International Patent Cooperation Union,

(iii) The name of the applicant, as prescribed (note § 1.422),

(iv) A part on the face of it appears to be a description, and

(v) A part which on the face of it appears to be a claim (PCT Art. 11(1)).◄

►(c) Payment of the basic portion of the international fee (PCT Rule 15.2) and the transmittal and search fees (§ 1.441) shall be made in full at the time the international application papers required by paragraph (b) of this section are deposited. Failure to make full payment on the same date as the deposit of the international application papers required by paragraph (b) of this section will result in the international application being considered withdrawn (PCT Art. 14(3) (a)).◄

41. By adding a new § 1.432 to read as as follows:

►§ 1.432 Designation of States and payment of designation fees.◄

►(a) The names of Designated States shall appear in the Request upon filing and must be indicated as set forth in section 202 of the Administrative Instructions.◄

►(b) The designation fees may be paid upon filing of the international application, but must be paid at the latest before the expiration of one year from the priority date (PCT Rule 15.4(b)). Failure to timely pay the designation fee for a particular Designated State will result in the withdrawal of that designation (PCT Art. 14(3) (b)). Failure to timely pay at least one designation fee will result in the withdrawal of the international application (PCT Art. 14 (3) (a)).◄

42. By adding a new § 1.433 to read as follows:

►§ 1.433 Physical requirements of international application.◄

►(a) The international application and each of the documents that may be referred to in the check list of the Request (PCT Rule 3.3(a) (ii)) shall be filed in one copy only.◄

►(b) The physical requirements for international applications are set forth in PCT Rule 11 and Sections 201–208 of the Administrative Instructions.◄

43. By adding a new § 1.434 to read as follows:

►§ 1.434 The Request.◄

►(a) The Request shall be made on a standardized printed form (PCT Rules 3 and 4). Copies of such printed Request forms are available from the Patent and Trademark Office.◄ Letters requesting such forms should be marked "Box PCT."

►(b) The Check List portion of the request form should indicate each document accompanying the international application on filing.◄

►(c) All information, for example, addresses, names of States and dates, shall be indicated in the Request as required by PCT Rule 4 and Administrative Instructions 201 and 202.◄

►(d) International applications which designate the United States of America shall include:

(1) the name, address, and signature of the inventor, except as provided by §§ 1.422, 1.423 and 1.425;

(2) a reference to any copending national application or international application designating the United States of America, if the benefit of the filing date of the prior copending application is to be claimed.◄

44. By adding a new § 1.435 to read as follows:

►§ 1.435 The description.◄

►(a) Requirements as to the content and form of the description are set forth in PCT Rules 5, 9, 10, and 11 and Administrative Instruction 205, and shall be adhered to.◄

►(b) In international applications designating the United States of America the description must contain upon filing an indication of the best mode contemplated by the inventor for carrying out the claimed invention.◄

45. By adding a new § 1.436 to read as follows:

►§ 1.436 The claims.◄

►The requirements as to the content and format of claims are set forth in PCT Art. 6 and PCT Rules 6, 9, 10, and 11 and shall be adhered to.◄

46. By adding a new § 1.437 to read as follows:

►§ 1.437 The drawings.◄

►(a) Subject to paragraph (b) of this section, when drawings are necessary for the understanding of the invention, or are mentioned in the description, they must be part of an international application as originally filed in the United States Receiving Office in order to maintain the international filing date during the national stage (PCT Art. 7).◄

►(b) Drawings missing from the application upon filing will be accepted if such drawings are received within 30 days of the date of first receipt of the incomplete papers. If the missing drawings are received within the 30 day period, the international filing date shall be the date on which such drawings are received. If such drawings are not timely received all references to drawings in the international application shall be considered non-existent (PCT Art. 14(2), Administrative Instruction 310).◄

►(c) The physical requirements for drawings are set forth in PCT Rule 11 and shall be adhered to.◄

47. By adding a new § 1.438 to read as follows:

►§ 1.438 The abstract.◄

►(a) Requirements as to the content and form of the abstract are set forth in PCT Rule 8, and shall be adhered to.◄

►(b) Lack of an abstract upon filing of an international application will not affect the granting of a filing date. However, failure to furnish an abstract within one month from the date of the notification by the Receiving Office will result in the international application being declared withdrawn.◄

48. By adding a new § 1.445 to read as follows:

►§ 1.445 International application filing and processing fees.◄

►(a) The following fees and charges are established by the Patent and Trademark Office under the authority of 35 U.S.C. 376.

(1) A transmittal fee (see 35 U.S.C. 361(d) and PCT Rule 14) ________ $35.00.

(2) A search fee (see 35 U.S.C. 361(d) and PCT Rule 16) ________ $300.00

(3) A supplemental search fee when required (see PCT Art. 17(3) (a) and PCT Rule 40.2) ________ $200.00 per additional invention.

(4) The national fee, that is, the amount set forth as the filing fee under 35 U.S.C. 41(a)1.

(5) A special fee when required, see 35 U.S.C. 372(c) ________ $10.00 per claim.◄

►(b) The basic fee and designation fee portions of the international fee shall be as prescribed in PCT Rule 15.◄

49. By adding a new § 1.446 to read as follows:

►§ 1.446 **Refund of international application filing and processing fees.**◄

►(a) Money paid for international application fees, where paid by actual mistake or in excess, such as a payment not required by law or Treaty and its Regulations, will be refunded.◄

►(b) Refunds of a portion of the search fee may be made if the international search report is wholly or partly based on an earlier international or international-type search. (PCT Rules 16 and 41.) The amount of the refund will be as determined by the examiner according to the value of the prior international-type search or international search as 90 percent, 70 percent, 40 percent, 25 percent, or 0 percent of the international search fee. See § 1.26 for refund of a portion of the international search fee during subsequent national examination of the application.◄

►(c) Refund of the supplemental search fees will be made if such refund is determined to be warranted by the Commissioner or his designee acting under PCT Rule 40.2(c).◄

►(d) The international and search fees will be refunded if no international filing date is granted (PCT Rules 15.6 and 16.2).◄

50. By adding a new § 1.451 to read as follows:

►§ 1.451 **The priority claim and priority document in an international application.**◄

►(a) The claim for priority must be made on the Request (PCT Rule 4.10) in a manner complying with sections 201 and 202 of the Administrative Instructions.◄

►(b) Whenever the priority of an earlier United States national application is claimed in an international application, the applicant may request in a letter of transmittal accompanying the international application upon filing with the United States Receiving Office, that the Patent and Trademark Office prepare a certified copy of the national application for transmittal with the record copy to the International Bureau (PCT Art. 8 and PCT Rule 17). The fee for preparing a certified copy is stated in § 1.21 (b) and (d).◄

►(c) If a certified copy of the priority document is not submitted together with the international application on filing or a request and appropriate payment as in paragraph (b) of this section do not accompany the international application on filing, the certified copy of the priority document must be transmitted directly by the applicant to the International Bureau within the time limit specified in PCT Rule 17.1(a).◄

51. By adding a new § 1.455 to read as follows:

►§ 1.455 **Representation in international applications.**◄

►(a) Applicants of international applications may be represented by attorneys or agents licensed to practice before the Patent and Trademark Office or by a common representative (PCT Art. 49, Rules 4.8 and 90 and § 1.341).◄

►(b) Appointment of an agent, attorney or common representative must be effected either in the Request form, signed by all applicants, or in a separate power of attorney submitted either to the United States Receiving Office or to the International Bureau.◄

►(c) Powers of attorney and revocations thereof should be submitted to the United States Receiving Office until the issuance of the international search report in order to facilitate communications.◄

►(d) The addressee for correspondence will be as indicated in Section 108 of the Administrative Instructions.◄

52. By adding a new § 1.461 to read as follows:

►§ 1.461 **Procedure for transmittal of Record Copy to the International Bureau.**◄

►(a) Transmittal of the record copy of the international application to the International Bureau shall be made, at the option of the applicant, either by the United States Receiving Office or by the applicant. Subject to paragraph (b) of this section, any applicant who chooses to make such transmittal himself shall notify the United States Receiving Office to that effect in writing, by way of a notice filed together with the internatinal application. Such notice shall also state whether the applicant wishes to collect the record copy at the United States Receiving Office or to have the record copy mailed directly to him. The record copy of an international application which was filed without being accompanied by such notice will be transmitted to the International Bureau by the United States Receiving Office. (PCT Rule 22).◄

►(b) An applicant may transmit the record copy to the International Bureau as provided in PCT Rule 22.2 only if the international application is filed with the United States Receiving Office before the expiration of 11 months from the priority date.◄

53. By adding a new § 1.465 to read as follows:

►§ 1.465 **Timing of application processing based on the priority date.**◄

►(a) For the purpose of computing time limits under the Treaty, the priority date shall be defined as in PCT Art. 2 (xi).◄

►(b) When a claimed priority date is cancelled under PCT Rule 4.10(d) or considered not to have been made under PCT Rule 4.10(a), the priority date for the purposes of computing time limits will be the date of the earliest valid remaining priority claim of the international application, or if none, the international filing date.

►(c) When corrections under PCT Art. 11(2), Art. 14(2) or Rule 20.2(a) (i) or (iii) are timely submitted, and the date of receipt of such corrections falls later than one year from the claimed priority date or dates, the Receiving Office shall proceed under Rule 4.10(d).◄

54. By adding a new § 1.468 to read as follows:

►§ 1.468 **Delays in meeting time limits.**◄

►(a) Delays in meeting time limits during international processing of international applications may only be excused as provided in PCT Rule 82. For delays in meeting time limits in a national application see § 1.137.◄

►(b) In cases of unavoidable delay or loss in the mail during international processing of international applications, evidence may be offered only if the mail that was delayed or lost was registered by the postal authorities.◄

55. By adding a new § 1.471 to read as follows:

►§ 1.471 **Corrections and amendments during international processing.**◄

►(a) All corrections submitted to the United States Receiving Office must be in the form of replacement sheets and be accompanied by a letter that draws attention to the differences between the replaced sheets and the replacement sheets, except that the delegation of lines of text, the correction of simple typographical errors, and one addition or change of not more than five words per sheet may be stated in a letter and the United States Receiving Office will make the deletion or transfer the correction to the international application, provided that such corrections do not adversely affect the clarity and direct reproducibility of the application (PCT Rule 26.4).◄

►(b) Amendments of claims submitted to the International Bureau shall be as prescribed by PCT Rule 46.◄

56. By adding a new § 1.475 to read as follows:

►§ 1.475 **Changes in person, name, or address of applicants and inventors.**◄

►All requests for a change in person, name or address of applicants and inventors should be sent to the United States Receiving Office until the time of issuance of the international search report. Thereafter requests for such changes should be submitted to the International Bureau.◄

57. By adding § 1.481 to read as follows:

►§ 1.481 **Determination of Unity of Invention before the International Searching Authority.**◄

►(a) Before establishing the international search report, the International

Searching Authority shall determine whether the international application complies with the requirement of unity of invention as set forth in PCT Rule 13. If the International Searching Authority considers that the international application does not so comply, it shall inform the applicant accordingly and request the payment of additional fees. (Note § 1.441 and PCT Art. 17(3)(a) and PCT Rule 40.) ◄

►(b) The applicant will be given a time period in accordance with PCT Rule 40.3 to pay the additional fees due.◄

►(c) If the applicant disagrees with the holding of lack of unity of invention by the International Searching Authority, he may pay the additional fee under protest, that is accompanied by a request for refund and a statement setting forth his reasons for disagreement or why he considers the required additional fees excessive, or both (PCT Rule 40.2(c)).◄

►(d) Protests under paragraph (c) of this section will be examined by the Commissioner or his designee. In the event that the applicant's protest is determined to be justified, the additional fees or a portion thereof will be refunded.◄

►(e) An applicant who desires that a copy of the protest and the decision thereon accompany the international search report when forwarded to the designated offices, may notify the International Searching Authority to that effect any time prior to the issuance of the international search report. Thereafter, such notifications should be directed to the International Bureau. (PCT Rule 40.2(c).)◄

►(f) The international search report will be established only on those parts of the international application which relate to the invention first mentioned in the claims ("main invention") and those other parts of the international applications which relate to inventions for which additional fees have been timely paid (PCT Art. 17(3)(a) and PCT Rule 40.3).◄

58. By adding § 1.482 to read as follows:

►§ 1.482 Holding of lack of unity of invention.◄

►(a) The International Search Authority may not raise the objection of lack of unity of invention merely because an application contains several claims of the same category or several claims of different categories related as under PCT Rules 13.2 and 13.3.◄

►(b) Lack of unity of invention may exist in a single claim where the claim contains alternatives which are not linked by a single general inventive concept (PCT Rule 13.1).◄

►(c) Lack of unity of invention may be directly evident before considering the claims in relation to any prior art, or after taking the prior art into consideration, as where a document discovered during the search shows the invention claimed in a generic or linking claims lacks novelty or is clearly obvious, leaving two or more claims joined thereby without a common inventive concept. In such a case the International Searching Authority may raise the objection of lack of unity of invention (and limit the search to the invention first mentioned if no additional fees are paid).◄

►(d) Occasionally in cases which lack unity of invention, the examiner will be able to make a complete search for all inventions with negligible additional work, in particular when the inventions are conceptually very close and none of them requires a search in separate classification units. In those cases, the search for the additional inventions should be completed together with that for the invention first mentioned. All results should then be included in a single search report, and no objection of lack of unity should ordinarily be raised.◄

►(e) For unity of invention practice at the national stage see §§ 1.141–1.146.◄

PART 3—FORMS FOR PATENT CASES

59. By adding a new § 3.56 to read as follows:

►§ 3.56 Oath to be filed with United States Designated Office under 35 U.S.C. 371(c)(4).◄

►As a below named inventor, being duly sworn (or affirmed), I depose and say that: my residence, post office address and citizenship are as stated below next to my name;

I verily believe I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named below) of the invention entitled: ____________ described and claimed in international application number ____________ filed ____________ and as amended on ____ ________ (if any) for which I solicit a patent;

I do not know and do not believe the same was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to my international application, that the same was not in public use or on sale in the United States of America more than one year prior to my international application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of my international application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to my international application, and that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns except as follows: ____________________

____

Full name of sole or first inventor ____________

____

Inventor's signature ____________________

Date ____________

Residence ____________________________

Citizenship ___________________________

Post Office Address ____________________

____

Full name of second joint inventor, if any __

____

Inventor's signature ____________________

Date ____________

Residence ____________________________

Citizenship ___________________________

Post Office Address ____________________

____

(Supply similar information and signature for third and subsequent joint inventors)

Signatures: ____________________________

____

Sworn to and subscribed before me this ____ day of ____________, 19____.

____

(Signature of notary or officer)

[SEAL]

____

(Official character) ◄

60. By adding a new § 3.57 to read as follows:

►§ 3.57 Declaration to be filed with United States Designated Office under 35 U.S.C. 371(c)(4).◄

►As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated below next to my name;

I verily believe I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named below) of the invention entitled: ____________ described and claimed in international application number ________ filed ________ and as amended on ________ (if any), for which I solicit a patent;

I do not know and do not believe the same was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to my international application, that the same was not in public use or on sale in the United States of America more than one year prior to my international application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of my international application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to my international application, and that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns, except as follows: ________________

____

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor ____________

____

Inventor's signature ____________________

Date ____________

Residence ____________________________

Citizenship ___________________________

Post Office Address ____________________

____

Full name of second joint inventor, if any __

____

Inventor's signature ____________________

Date ____________

Residence ____________________________

Citizenship ___________________________

Post Office Address ____________________

____

PART 5—SECRECY OF CERTAIN INVENTIONS AND LICENSES TO FILE APPLICATIONS IN FOREIGN COUNTRIES

61. By revising § 5.1 to read as follows:

§ 5.1 **Defense inspection of certain applications.**

►(a) The provisions of this part shall apply to both national and international applications filed in the Patent and Trademark Office except as otherwise specifically indicated. The filing of an international application designating a foreign country is considered to be a filing in a foreign country within the meaning of Chapter 17 of Title 35, United States Code.◄

►(b)◄ In accordance with the provisions of 35 U.S.C. 181, patent applications containing subject matter the disclosure of which might be detrimental to the national security are made available for inspection by defense agencies as specified in said section. Only applications obviously relating to national security, and applications within fields indicated to the Patent and Trademark Office by the defense agencies as so related, are made available. The inspection will be made only by responsible representatives authorized by the agency to review applications. Such representatives are required to sign a dated acknowledgement of access accepting the condition that information obtained from the inspection will be used for no purpose other than the administration of 35 U.S.C. 181-188. Copies of applications may be made available to such representatives for inspection outside the Patent and Trademark Office under conditions assuring that the confidentiality of the applications will be maintained, including the conditions that: (1) All copies will be returned to the Patent and Trademark Office promptly if no secrecy order is imposed, or upon rescission of such order if one is imposed, and (2) no additional copies will be made by the defense agencies. A record of the removal and return of copies made available for defense inspection will be maintained by the Patent and Trademark Office. Applications relating to atomic energy are made available to the [Atomic Energy Commission] ►Energy Research and Development Administration◄ as specified in § 1.14 of this chapter.

62. By revising § 5.3 to read as follows:

§ 5.3 **Prosecution of application under secrecy order; withholding patent.**

Unless specifically ordered otherwise, action on the application by the Office and prosecution by the applicant will proceed during the time an application is under secrecy order to the point indicated in this section:

(a) ►National◄ applications under secrecy order which come to a final rejection must be appealed or otherwise prosecuted to avoid abandonment. Appeals in such cases must be completed by the applicant but unless otherwise specifically ordered by the Commissioner will not be set for hearing until the secrecy order is removed.

(b) An interference will not be declared involving ►national◄ applications under secrecy order. However, if an application under secrecy order copies claims from an issued patent, a notice of that fact will be placed in the file wrapper of the patent.

(c) When the ►national◄ application is found to be in condition for allowance except for the secrecy order the applicant and the agency which caused the secrecy order to be issued will be notified. This notice (which is not a notice of allowance under § 1.311 of this chapter) does not require response by the applicant and places the ►national◄ application in a condition of suspension until the secrecy order is removed. When the secrecy order is removed the Patent and Trademark Office will issue a notice of allowance under § 1.311 of this chapter, or take such other action as may then be warranted.

►(d) International applications under secrecy order will be processed up to the point where the record and search copies are ready to be forwarded. However, the copies will not be forwarded to the Authorities or delivered to the applicant.◄

63. Section 5.11 is revised to read as follows:

§ 5.11 **License for filing application in foreign country ►or for filing international application◄.**

(a) When no secrecy order has been issued under § 5.2, a license from the Commissioner of Patents and Trademarks under 35 U.S.C. 184 is required before filing any application for patent or for the registration of a utility model, industrial design, or model, in a foreign country, ►or filing an international application,◄ or causing or authorizing such filing, with respect to an invention made in the United States, if:

(1) The foreign application ►or international application◄ is to be filed ►,◄ or its filing caused or authorizer ►,◄ before [an] ►a national◄ application for patent is filed in the United States, or

(2) The foreign application ►or international application◄ is to be filed, or its filing caused or authorized, prior to the expiration of six months from the filing of the ►national◄ application in the United States.

(b) When there is no secrecy order in effect, a license under 35 U.S.C. 184 is not required if:

(1) The invention was not made in the United States, or

(2) The foreign application ►or international application◄ is to be filed, or its filing caused or authorized, after the expiration of of six months from the filing of the ►national◄ application in the United States.

(c) When a secrecy order has been issued under § 5.2, an application cannot be filed in a foreign country ►, nor can an international application be filed,◄ in any case except in accordance with § 5.5.

64. By revising paragraphs (b) and (c) of § 5.14 to read as follows:

§ 5.14 **Petition for license: corresponding U.S. application.**

*   *   *   *   *

(b) Two or more United States applications should not be referred to in the same petition for license unless they are to be combined in the foreign ►or international◄ application, in which event the petition should so state and the identification of each United States application should be in separate paragraphs.

(c) Where the application to be filed abroad ►or the international application◄ contains matter not disclosed in the United States application or applications, including the case where the combining of two or more United States applications introduces subject matter not disclosed in any of them, a copy of the application as it is to be filed in the foreign country ►or international application as it is to be filed in the Receiving Office◄ must be furnished with the petition. If, however, all new matter in the ►foreign or international◄ application to be filed is readily identifiable, the new matter may be submitted in detail and the remainder by reference to the pertinent United States application or applications.

65. By revising § 5.15 to read as follows:

§ 5.15 **Scope of license.**

(a) A license to file an application in a foreign country ►or to file an international application◄, when granted, includes authority to forward all duplicate and formal papers to the foreign country ►or international authorities◄ and to make amendments and take any action in the prosecution of the ►foreign or international◄ application, provided subject matter additional to that covered by the license is not involved. In those cases in which no license is required to file the foreign ►or international◄ application, no license is required to file papers in connection with the prosecution of the foreign ►or international◄ application not involving disclosure of additional subject matter. Any paper filed abroad ►or before an international authority◄ following the filing of a foreign ►or international◄ application which involves the disclosure of additional subject matter must be separately licensed in the same manner as ►a foreign or international◄ [an] application.

*   *   *   *   *

66. By revising § 5.17 to read as follows:

§ 5.17 **Who may use license.**

Licenses may be used by anyone interested in the foreign ►or international◄ filing for or on behalf of the inventor or his assigns.

Dated: December 23, 1976.

C. MARSHALL DANN,
Commissioner of Patents and Trademarks.

Approved:

BETSY ANCKER-JOHNSON,
Assistant Secretary for Science and Technology.

DATED: January 6, 1977.

[FR Doc.77-1024 Filed 1-11-77;8:45 am]

federal register

WEDNESDAY, JANUARY 12, 1977

PART VIII

FEDERAL ENERGY ADMINISTRATION

■

ADDITIONAL PRICE INCENTIVES FOR TERTIARY ENHANCED RECOVERY TECHNIQUES; FINDINGS CONCERNING ADJUSTMENTS TO THE COMPOSITE PRICE FOR DOMESTIC CRUDE OIL AS A PRODUCTION INCENTIVE

Proposed Rulemaking and Public Hearing

FEDERAL ENERGY ADMINISTRATION

[10 CFR Part 212]

ADDITIONAL PRICE INCENTIVES FOR TERTIARY ENHANCED RECOVERY TECHNIQUES; FINDINGS CONCERNING ADJUSTMENTS TO THE COMPOSITE PRICE FOR DOMESTIC CRUDE OIL AS A PRODUCTION INCENTIVE

Proposed Rulemaking and Public Hearing

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I. INTRODUCTION

The Federal Energy Administration ("FEA") hereby gives notice of a proposed rulemaking and public hearing to amend the Mandatory Petroleum Price Regulations (10 CFR Part 212) to implement in part section 122 of the Energy Conservation and Production Act ("ECPA," Pub. L. 94-385, August 14, 1976), by providing price incentives for the application of certain high-cost enhanced recovery techniques for domestic crude oil, generally known as "tertiary enhanced recovery" techniques. In addition, as of August 14, 1976, the effective date of ECPA section 122, the statutory composite price for domestic crude oil may be adjusted to provide a production incentive in an amount which is no longer limited to 3 percent per year. The FEA proposes to make the findings required to apply the full amount of the adjustment permitted as a production incentive under ECPA section 122.

II. BACKGROUND OF THE INCENTIVE

The crude oil pricing policy of the Energy Policy and Conservation Act ("EPCA," Pub. L. 94-163) provided in essence that, beginning in February 1976 and continuing through May 1979, the weighted average or "composite" first sale price of domestic crude oil should not exceed $7.66 per barrel, except as permitted to be adjusted, within the limits specified in EPCA, to account for inflation and to provide incentives for the production of domestic crude oil. Under the EPCA, FEA has authority to make classifications of crude oil, and to provide for the pricing thereof, so as to assure that the actual weighted average first sale price of all domestic crude oil does not exceed the statutory composite price as it may be adjusted. Pursuant to these authorities and requirements, set forth in section 401 of EPCA (which added section 8 to the Emergency Petroleum Allocation Act of 1973 ("EPAA," Pub. L. 93-159)), the FEA proceeded with a three-stage plan of implementation.

In the first stage (41 FR 4931, February 3, 1976), the FEA established a general two-tier ceiling price scheme, consisting of "old," or "lower tier," and "new" and "stripper well," or "upper tier," crude oil classifications, intended to result in attaining the prescribed composite price of $7.66 per barrel in February.

In the second stage (14 FR 15566, April 13, 1976), the FEA adopted regulations which provided for gradual monthly increases in the ceiling prices of the two tiers of crude oil. These gradual increases were intended to accomplish an adjustment to the composite price, within the limits set by EPCA for adjustments not requiring Congressional review, to account for the effects of inflation and as an incentive for maintaining and increasing domestic production.

The limitations upon adjustments to the composite price which the FEA could implement without Congressional review, as set forth in EPAA section 8(d), were that: (1) The increase as a production incentive could not exceed 3 percent per year; (2) the increase to take into account the effects of inflation could not exceed the rate of inflation as measured by the most recent first revision of the GNP deflator; and (3) the combined increase as a production incentive and to take inflation into account could not exceed 10% per year.

In its second stage proceeding, the FEA recognized that the full 3% production incentive adjustment to the composite price was required, largely in order to prevent erosion in the real dollar prices for upper tier crude oil as a result of a declining percentage of lower tier crude oil in the "mix" of lower tier and upper tier crude oil first sale prices from which the composite price is derived.

In the notice commencing the third stage proceeding (41 FR 18873, May 7, 1976), the FEA proposed amendments to the crude oil price regulations to provide additional production incentives that would have required adjustments to the composite price in excess of the limitations referred to above, to be submitted to Congress for review in accordance with (then) section 8(e) of EPAA. The categories of incentives which were proposed were those specified in EPAA section 8(d)(3), *viz.*: (1) Discovery and development of high cost and high risk properties; (2) application of enhanced recovery techniques; and (3) sustaining production from marginal wells. With respect to enhanced recovery, FEA proposed to allow upper tier prices for amounts of crude oil produced by application of certain high cost enhanced recovery techniques ("tertiary" recovery, as distinguished from "secondary" recovery) which were in excess of the amounts that would have been produced by conventional primary and secondary recovery methods. Comments were requested on this proposal, and upon other alternatives for providing an enhanced recovery incentive, as well as upon the other production incentives proposed.

Comments were received from over 50 interested parties, substantially confirming the need for additional production incentives. (The substance of such comments, as they relate to the instant proposals, will be discussed where appropriate.) However, prior to the completion of action on the third stage proceedings, Congress enacted the ECPA, on August 14, 1976. Section 122 of the ECPA amended EPAA section 8 with respect to adjustments to the composite price as a production incentive and concerning price incentives for the application of tertiary enhanced recovery techniques.

First, section 8(d)(1) of EPAA, as amended by ECPA, now contains only an overall 10 percent limitation upon the adjustment to the composite price, which may be made both to take into account the effects of inflation and as a production incentive. The former 3 percent limitation upon the production incentive adjustment, within the 10 percent overall limitation, has been removed.

Second, in connection with the added pricing flexibility afforded by removal of the 3 percent production incentive limitation, the Congress established as a matter of high priority the implementation of incentives for the application of "tertiary enhanced recovery techniques." Specifically, subsection (j) was added to EPAA section 8, which provides as follows:

(j) (1) As soon as practicable after the date of enactment of this subsection, taking into consideration the greater flexibility provided by the amendments relating to the production incentive adjustment under section 122 of the Energy Conservation and Production Act, the President shall promulgate such amendments to the regulation under section 4(a) (relating to price) as shall (A) provide additional price incentive for bona fide tertiary enhanced recovery techniques and (B) provide for the adjustment of differentials in ceiling prices for crude oil that are the result of gravity differentials which are arbitrary, discriminatory, applied on a regional or local basis without reasonably justification, or fail substantially to reflect current relative market valuations of such differentials.

(2) As used in the subsection, the term "tertiary enhanced recovery techniques" means extraordinary and high cost enhancement technologies of a type associated with tertiary applications including, to the extent that such techniques would be uneconomical without additional price incentives, miscible fluid or gas injection, chemical flooding, steam flooding, microemulsion flooding, in situ combustion, cyclic steam injection, polymer flooding, and caustic flooding and variations of the same. The President shall have authority to further define the term by rule.

Congress directed that additional incentives for the application of tertiary recovery techniques be provided in recognition of the potential for increasing domestic production offered by such techniques. In the "Conference Report" on ECPA, the conferees stated as follows:

The second form of production which the conferees believe deserve special treatment, as a result of removal of the 3 percent limitation on the production incentive factor, is production resulting from application of certain enhanced recovery techniques. A special need to encourage expanded use of high cost, enhanced recovery techniques has led the conferees to provide that this category of production be given high priority consideration in distribution of any price increases which may be permitted by reason of the removal of the 3 percent limitation on the production incentive factor. (Sen. Rep. No. 94-1119, 94th Cong., 2nd Sess. 58 (1976).) * * *

The conferees are agreed that there exists great potential for augmenting domestic crude oil production through the application of enhanced recovery techniques. There is also general agreement that current economic circumstances would permit adjustments to the pricing mechanism contained in the Energy Policy and Conservation Act to give needed additional incentives for the application of high-cost enhancement techniques which today are not economical * * *.

* * * the conference substitute seeks to obtain the objective of providing additional price incentives for high-cost enhancement techniques by equipping the Administrator with greater flexibility to provide for such incentives within the framework of the existing price regulatory structure. In so doing, the conferees seek to maintain the integrity of the pricing policies contained in the Energy Policy and Conservation Act while at the same time providing the President with the means of targeting additional price incentives to those extraordinary and high-cost enhancement techniques commonly associated with tertiary applications which are uneconomical under today's pricing regimen. Accordingly, the conference substitute removes the 3 percent limitation on production incentive adjustments to afford the President a greater flexibility to respond to an improving economy by giving greater price incentives to optimize domestic production. The conferees have identified, as matter of high priority, correction of gravity differential problems in the current price regulatory mechanism and the creation of additional price incentives for the application of bona fide tertiary enhancement techniques.[1] Thus, the President is directed, taking into consideration the greater flexibility as attends the removal of the 3 percent limitation, to amend the regulation which pertains to the price of domestic crude oil at the earliest practicable time to provide for these Congressionally identified priorities. (Sen. Rep. No. 94-1119, 94th Cong., 2nd Sess. 71 (1976).)

It was also understood that, in view of the increased authority for adjustments in the composite price conferred by ECPA, the FEA would not, prior to March 15, 1977, submit for Congressional review any action proposing an increase in the composite price in excess of 10 percent. (See Sen. Rep. No. 94-1119, supra, at 72.) Accordingly, the proposed incentives are intended to be accomplished within the 10 percent limitation.

In the meantime, collection of actual first sale price data indicates that the actual weighted average first sale price of domestic crude oil has exceeded the ECPA limitations on that price. Accordingly, FEA on July 6, 1976, discontinued the gradual monthly increases in lower tier and upper tier crude oil ceiling prices. See 41 FR 27730, July 6, 1976.

The suspension on increases was continued on September 3, 1976 (41 FR 37311), and again on November 30, 1976 (41 FR 53333, December 6, 1976), pending further corrective action to bring actual weighted average prices of domestic crude oil in line with the statutory composite price requirements. In addition, in view of the current situation in which it appears that actual weighted average prices continue to be in excess of the statutory composite price (as adjusted), the FEA on December 31, 1976 further continued the suspension on increases for lower tier crude oil and reduced ceiling prices for upper tier crude oil by 20 cents per barrel, both actions to continue through March 1977 pending the outcome of a full review by Congress of the operation of the crude oil pricing limitations of the EPAA. As stated in the Notice announcing such actions (42 FR 1456, January 7, 1977), if no changes in current limitations on crude oil prices were to result from such Congressional review, a further extension of the price levels established in the December 31 Notice through July 1977 would result, based on current projections, in the elimination of overages of actual weighted average prices above the statutory composite price level.

[1] The conferees wish to emphasize that the use of the term tertiary is intended to refer to techniques of a generic class. It is not intended, in a chronological sense, to imply that traditional secondary applications must first be exhausted before use of these high cost and extraordinary enhancement techniques could qualify for additional price incentives.

III. Findings Concerning Composite Price Adjustments To Provide Production Incentives and Increases in the Price of "Old" Crude Oil

A. Composite Price Adjustment

Section 8(d) of the EPAA provides that an adjustment to the composite price as a production incentive may be made only upon a finding that the adjustment

* * * is likely to provide positive incentive for—

(A) The discovery or development of high cost and high risk properties (including new wildcat properties, and properties located on the Outer Continental Shelf, properties located north of the Arctic Circle, deep wells and deep horizons in onshore or offshore properties, and properties operated by independent producers);

(B) The application of enhanced recovery techniques to producing properties to obtain a level of production higher than would otherwise occur from those properties but for such adjustment; or

(C) Sustaining production from marginal wells, including production from stripper wells.

In the Notice adopting the second stage amendments to provide for gradual increases in the composite price, the FEA found that use of the full price adjustment as a production incentive (then limited to 3 percent) was likely to provide positive incentive for (1) the development of high cost/high risk properties, (2) the application of enhanced recovery techniques to producing properties to obtain a level of production higher than would occur from such properties in the absence of that price adjustment, and (3) sustaining production from marginal wells, including stripper wells.

FEA made the following findings concerning crude oil prices: (1) the upper tier price level provides an important incentive for producers operating properties producing crude oil below the base production control level ("BPCL") to undertake enhanced recovery programs and for the development of new oil-producing properties; (2) there would be an inevitable decline in the relative proportion of lower tier or "old" crude oil to total production; (3) because the adjusted statutory composite price limitation applies to the weighted average of the two tier levels, the decline in the proportion of lower tier crude oil would exert a significant downward pull on upper tier prices; (4) use of the maximum 3 percent production incentive was necessary to counteract this downward pull so that the upper tier price incentive would continue to be as effective an inducement to enhanced recovery from existing properties and as effective a stimulant to development of new oil-producing properties.

The FEA's analysis indicated that the full 3 percent adjustment to the composite price then available to provide a production incentive would be required to be used over the course of the 39-month program almost entirely to take account of the impact on the composite price of changes in the relative proportions of upper and lower tier crude oil.

Subsequent experience with the actual weighted average price of domestic crude oil, which has led to the requirement that the FEA suspend scheduled adjustments in the ceiling prices of such crude oil since July 1976 at least through March 1977 and has further required a 20 cent-per-barrel reduction in the prices of upper tier crude oil for the months of January through March of 1977, confirms the FEA's findings regarding the need to use the full production incentive adjustment. It also demonstrates that, without further adjustment to the composite price, it will be difficult to maintain existing incentives for present domestic production of crude oil and impossible to provide further price incentives for additional domestic production of crude oil. Since inflation continues to erode the current real prices of both upper and lower tier crude oil, and in view of the recent 20 cent per barrel reduction in ceiling prices for upper tier crude oil, the incentives even for maintaining current production are diminishing.

Since August 14, 1976, the effective date of section 122 of ECPA, the FEA has taken action to redefine and clarify the concept of "property," upon which BPCL determinations are based (41 FR 36172, August 26, 1976), to adjust gravity price differentials with respect to heavy California and Alaska crude oil (41 FR 48324, November 3, 1976), and to implement the exemption for stripper well crude oil mandated by ECPA section 121, including a redefinition of qualifying "stripper well property" (41 FR 48319, November 3, 1976). While it is not yet possible to quantify the precise effects of these actions upon the composite price, their combined effect is to increase the actual weighted average price of domestic crude oil. (The above-discussed measures regarding extension of the suspension on price increases and reduction of upper tier prices are, however, intended to account for these effects insofar as they are reflected in actual weighted average prices contained in data presently available to the FEA. The scope and duration of these corrective measures are based upon full use of the additional production incentive adjustments made available by ECPA.) The FEA also currently estimates that the effect upon the composite price of the incentives proposed herein for tertiary enhanced recovery projects will be as follows:

Year:	Percent
1976	0.0
1977	0.3
1978	0.9
1979	1.2

ECPA section 122 removed the specific 3 percent limitation on composite price adjustments for production incentives, effective August 14, 1976. In so doing, it made available as a production incentive an amount which varies inversely with the rate of inflation from quarter to quarter. That is, the amount available as a production incentive is the difference between the 10 percent overall limitation and the rate of inflation as measured by the "adjusted GNP deflator" provided for in EPAA section 8(d)(2). Applying the rate of inflation as measured by the adjusted GNP deflator for the second quarter of calendar year 1976 (5.1 percent), the amount of the production incentive permitted under the amended section 8 of the EPAA since August 14, 1976, has been 4.9 percent, or 1.9 percentage points greater than the 3 percent limitation on adjustments as a production incentive which applied when the second stage EPCA amendments were adopted.

Section 122 of the ECPA directs that, in view of the increased flexibility to provide production incentives, the FEA should proceed to implement adjustments to gravity price differentials and establish incentives for application of tertiary enhanced recovery techniques. As discussed above, appropriate gravity differential action has been taken, and by this Notice the FEA is proposing to implement the tertiary recovery incentive. However, the FEA's authority to adjust the composite price is not limited exclusively to providing for these particular incentives, but may be applied to provide production incentives generally. The FEA accordingly proposes to find that the above considerations, and the same factors which led it in the second stage EPCA proceedings to conclude that use was required of the full 3 percent production incentive then available, justify application of the full production incentive made available by ECPA beginning as of August 14, 1976, the effective date of section 122 of EPCA. This finding would be applicable to the continued use in the future of the full production incentive, as it may vary from time to time depending upon the rate of inflation.

The basis for the above findings and actions appears not only in the text of the EPAA, as amended by ECPA, but also in the legislative history of the ECPA. During consideration of the conference report on the amended bill which subsequently became enacted as the ECPA, Representative Brown engaged in the following colloquy with Representative Dingell, Chairman of the House Interstate Commerce Subcommittee on Energy and Power and an ECPA conferee:

> Mr. BROWN of Ohio. Mr. Speaker, I rise to engage the chairman of the subcommittee in a colloquy with reference to this legislation.
>
> Section 122 of this act deletes the 3 percent limitation of the Energy Policy and Conservation Act on crude oil price adjustments as a production incentive. Under this amendment to EPCA, the President may specify a fixed percentage figure as the production incentive—which, when added to the rate of inflation, is of course subject to the overall limitation of 10 percent contained in existing law. In the alternative, he may specify merely that the difference between 10 percent—or some other percentage less than 10 percent—and the rate of inflation is the production incentive, thus creating a flexible incentive that varies inversely with the rate of inflation.
>
> Section 8(d)(3) specifies certain findings which must be made before price adjustments as a production incentive may be made. The President, of course, would be required to support an alteration of the production incentive with initial findings. The conferees did not intend, however, that thereafter any new or additional findings under section 8(d)(3) be required each time the amount of the percentage price adjustment, which is permitted as a production incentive, changes automatically because of a change in the rate of inflation. Is my understanding in this regard correct?
>
> Mr. DINGELL. If the gentleman will yield, yes. That is correct.
>
> Mr. BROWN of Ohio. Section 122 adds a new subsection (j) to section 8 of the Emergency Petroleum Allocation Act of 1973, which directs the President to use the greater flexibility with respect to crude oil prices which is afforded by section 122 to provide additional price incentives for tertiary enhanced recovery techniques and to provide for certain adjustments of differentials in crude oil ceiling prices attributable to gravity differentials. Am I correct in stating that the two listed objectives are not the exclusive purposes for which the added pricing flexibility may be used by the President, and that the President's use of this added flexibility is not limited except to the extent that the priority objectives specified by section 122 must be met?
>
> Mr. DINGELL. This is a correct statement of the meaning of that provision. (122 Cong. Rec. H8582-83 (daily ed. August 10, 1976).)

As in the case of the second stage EPCA proceedings, the FEA proposes to implement section 122 of ECPA in a manner intended to provide to producers the greatest degree of timeliness and certainty with respect to future price levels as is possible under the constraints of the pricing policies of the EPAA, as amended, in order to stimulate overall domestic crude oil production to the maximum extent possible. The effects of particular regulatory actions and of variable factors which are not subject to FEA control upon overall price levels cannot be precisely known in advance, so that it is impossible to provide absolute assurance of future price levels. However, use of the full production incentive, effective August 14, 1976, and continued implementation of the full production incentive as it may change from quarter to quarter depending upon the rate of inflation, should help to relieve the downward pressures on current price ceilings and thus provide needed additional incentives to maintaining current production, as well as promote efforts to increase domestic crude oil production through tertiary enhanced recovery techniques and other activities identified in EPCA and the FEA's second stage EPCA rulemaking.

B. INCENTIVE FOR THE APPLICATION OF TERTIARY ENHANCED RECOVERY TECHNIQUES

Based upon the foregoing considerations, the FEA believes that use of the increased pricing flexibility afforded by the removal of the 3 percent limitation on adjustments to the composite price as a production incentive to implement this proposal to provide for a tertiary enhanced recovery incentive, as described in Section V., below, is likely to provide positive incentives for the application of enhanced recovery techniques to obtain a level of production higher than would otherwise occur in the absence of such incentives. The FEA proposes to so find.

In addition to the general findings required by EPAA section 8(d), EPAA section 8(b)(2) provides that an amendment to the Mandatory Petroleum Price Regulations which would increase the price of "old" crude oil from any properties may not be made, unless it is found that the amendment

(A) Will give positive incentives for (i) enhanced recovery techniques, or (ii) deep horizon development, for such properties; or

(B) Is necessary to take into account declining production from such properties, and

(C) Is likely to result in a level of production from such properties beyond that which would otherwise occur if no such amendment were made.

The proposed incentive for tertiary enhanced recovery would be applicable to properties producing lower tier, or "old" crude oil, as well as to properties producing upper tier crude oil. On the basis of the same considerations upon which the FEA proposes to make its findings concerning the production incentive price adjustment under EPAA section 8(d), it proposes also to find under EPAA section 8(b)(2) that any increase in the price of "old" crude oil which would result under this tertiary enhanced recovery incentive proposal will give positive incentives for enhanced recovery techniques and is likely to result in a level of production beyond that which would occur in the absence of the proposed amendments.

IV. The Need for Tertiary Enhanced Recovery Incentives

The Notice commencing the third stage EPCA proceeding took note of the major findings of a recently completed study undertaken for the FEA (the "Lewin Study") concerning the potential for and factors bearing upon the application of tertiary recovery techniques. It was noted that:

> Among the major findings of the study, which included a detailed analysis of the 245 reservoirs in 175 fields, are that in the three states studied:
>
> 43.3 billion barrels of crude oil are technically recoverable through the year 2000, by tertiary recovery;
>
> Price strongly affects the amount of crude oil that could be recovered through tertiary recovery, with upper tier prices (maintained in real terms) reducing potential tertiary recovery reserves from 43.3 billion barrels to 30.5 billion barrels; and lower tier prices (maintained in real terms) reducing that amount to 5.2 billion barrels;
>
> Failure to adjust lower tier and upper tier prices for inflation would result in further loss of potential tertiary reserves; and
>
> Considerable amounts of tertiary production can be realized—as much as .4 to .7 million barrels per day by 1980, 1 to 2 million barrels per day by 1985, and up to 3 million barrels per day by 1990.

While several comments suggested that the study may be overly optimistic in regard to the potential volume of crude oil producible from tertiary techniques within the time period covered, there was substantial consensus regarding the propositions that: (1) There are substantial stores of crude oil in place which could be recovered with the application of high-cost tertiary recovery techniques, and which cannot be recovered otherwise; (2) the investment required to apply such tertiary recovery techniques is substantial, and entails a high risk of failure; (3) the decision to invest in such techniques is in large measure a function of crude oil prices, as affecting potential return on investment made; (4) therefore, adequate price incentives for such investment are required; (5) the present regulations do not provide adequate incentives to apply such techniques; and (6) additional incentives are therefore needed. As previously noted, in making the encouragement of tertiary recovery techniques a matter of "high priority," Congress as well has recognized the great potential for tertiary recovery techniques and the need for additional incentives to stimulate domestic production through the use of such techniques.

The FEA is continuing to analyze and up-date the Lewin Study, and to analyze various other quantitative estimates of the amount of additional crude oil production which can be projected from the provision of incentives to encourage tertiary enhanced recovery projects. Revised estimates of the amounts of additional production will be provided in the near future, when available. However, the FEA believes that the major findings of the Lewin Study continue to be generally and qualitatively valid. It currently estimates that, if timely action is taken to provide an incentive for such production, it could result in additional tertiary production of as much as 300,000 barrels per day by 1979, and substantially more in the ensuing decade.

The FEA recognizes that there are substantial lead times involved in applying tertiary recovery techniques, amounting to from one to three years, and that the major production increment resulting from any currently provided incentives will therefore be realized after the expiration date of the 40-month control period provided for by the EPCA. From this fact one non-producer commenter in the third stage EPCA proceedings argued that any present change to the regulations is inherently incapable of providing any greater incentive to enhanced production than is now present in the prospect of realizing market prices during the post-control period. However, FEA is preliminarily of the view that a present change to the regulations is required, to: (1) Provide earlier stimulus to those projects which would result in incremental production before the end of the control period; (2) assure continuity of production on those properties whose economic limit would otherwise be reached during the control period; and (3) provide as much certainty in the investment environment for producers as is possible within the current strictures of the EPAA.

The increased production of crude oil by the end of the control period—currently estimated to be as much as 300,000 barrels per day by the end of that period—is not the full measure of the crude oil which might be lost in the absence of current action to provide an incentive. If such an incentive is not provided, producers might abandon those properties which would become uneconomic (under the present pricing constraints) during the control period, even though substantial additional production through the application of tertiary enhanced recovery techniques would be technically feasible. If such abandonment were to occur, or if application of such techniques were otherwise to be postponed beyond a time at which producers could take advantage of the economies of existing production, the result might be that such techniques would never be applied to recover the additional crude oil in place, even at post-control period market prices. This is because, as noted in the Lewin Study, even market prices may not be sufficient to justify the high start-up costs of recommencing full-scale operations on properties on which production has been discontinued. Such start-up costs can frequently be avoided or minimized if tertiary enhanced recovery techniques are applied before primary and/or secondary recovery methods are terminated. Thus, the projected long-term enhancement of domestic crude oil production as a result of tertiary recovery techniques is in part dependent upon maintaining continuity of production from properties which might otherwise become uneconomic during the control period.

The legislative history of section 122 of the ECPA indicates that Congress recognized that current incentives are necessary to prevent premature abandonment of properties which might otherwise become uneconomical under the current regulatory regime. In debate upon the "Montoya Amendment" (subsequently modified to become section 122 of ECPA), Senator Domenici stated as follows:

> The technology of secondary and tertiary recovery, although it is new in the sense that you are recovering oil that you would not otherwise get, everyone ought to know that basically lengthy delays in applying it can cause an abandonment of the wells and the fields that you would have applied secondary and tertiary recovery methods to.
>
> It is not as if we can wait 15 years and do it. The fact is that the wells that are now running dry but are in place are actually to be used in the injection of chemicals and water into those pools and fields, so delays can indeed cause abandonment or, looking down the road, can cause extremely high new opening costs to get into these fields with secondary and tertiary recovery processes.
>
> The intelligent thing is to let them use these as the pool begins to dry and, as that well is an active one, to put in the chemicals or use the water injection process, and we just want to maximize that opportunity during the next 10 years as we move from a composite price to an open market.
>
> In that period we could indeed lose millions of dollars, millions of barrels, and opportunities would literally go down the drain. (122 Cong. Rec. S9516 (daily ed. June 16, 1976).)

That this perception was shared by the conferees is evidenced by the portions of the Conference Report on ECPA quoted in section II., above. The conferees understood that "tertiary" techniques meant extraordinary and high-cost technologies, and specifically recognized that such techniques might be applied before traditional secondary applications were exhausted.

Finally, the FEA believes that it is important to facilitate current investment in future production to the maximum extent, and that providing in the current regulations for such incentives will promote a degree of stability and certainty in the investment environment. In the third stage EPCA proceeding, as in the case of other proceedings, the FEA received numerous comments to the effect that increased investment in production is significantly discouraged by the uncertainty surrounding the future course of regulation, which tends to promote a "wait-and-see" attitude. These apprehensions are also reported in the Lewin Study. Although FEA cannot provide absolute assurance against subsequent modifications, the regulatory treatment of tertiary recovery proposed herein signifies recognition by the Congress and the FEA of the importance of such techniques, and should therefore provide as much certainty and stability in the investment environment as is now possible.

Comment No. 1. FEA solicits comments upon the foregoing general considerations which support this proposal, and upon the particular amendments and alternatives discussed in section V. To the extent possible, quantified estimates should be provided with respect to potential tertiary recovery projects of: (1) The amount of additional crude oil which would be produced through the use of tertiary enhanced recovery techniques under the proposed amendments and under the various alternatives; (2) the timing of the production response under the proposed amendments and under the various alternatives, in volumes per year through 1980 and in five-year increments from 1980 through 1990; and (3) the extent to which such additional crude oil would otherwise be lower tier oil, and the extent to which it would otherwise be upper tier oil under current concepts governing the manner in which such quantities are determined.

In connection with the foregoing, the FEA requests that commenters bear in mind and take account of the effects upon them of the recent actions regarding: (1) The redefinition of the term "property," noted in Section III. A., above; and (2) the exemption of first sales of stripper well crude oil from price controls, which permits such oil to sell at unregulated market prices (41 FR 48319, November 3, 1976).

To some extent, these actions may accomplish the same result as would be accomplished under the proposal or one or more of the alternatives being considered in this Notice. For example, crude oil which qualifies as "stripper well crude oil" could receive a market price regardless of whether it is produced as a result of a qualifying tertiary enhanced recovery project. For another example, if the upper tier (as opposed to market) price alternative is adopted, that portion of former lower tier crude oil which now qualifies as upper tier crude oil because of redefinition of the term "property" would not receive any additional price incentive even if produced as a result of a qualifying tertiary enhanced recovery project. To the extent that these considerations would affect the amount of additional crude oil production which can be attributed to the instant proposal or to any particular alternative being considered in this Notice, estimates of the production response to the proposal or to the relevant alternative should be reduced.

V. Proposed Amendments and Alternatives

The FEA proposes to amend the crude oil price regulations to provide for a new category or classification of domestic crude oil, which would be permitted to be sold at market prices. Crude oil in this category, sometimes referred to in the ensuing discussion as "tertiary crude oil," would be that crude oil (1) which is produced as a result of a qualifying tertiary recovery project, and (2) which is incremental to (*i.e.*, in excess of) the amount of crude oil which could feasibly have been produced from the property in question through other than qualifying tertiary recovery methods.

Two categories of qualifying tertiary enhanced recovery projects are proposed. The use of certain specified tertiary recovery techniques would automatically qualify incremental production from the project to receive the incentive price, provided that the required amount of materials or processes (as specified in the regulations) are applied in conjunction with such techniques.

Use of certain other specified tertiary recovery techniques would qualify incremental production from the project for the incentive price only on a case-by-case basis, after prior review and approval by FEA. The basic criteria under which FEA would determine whether a project qualified would be that (1) the project must be uneconomical in the absence of the incentive, and (2) the project must involve a likely recovery of specified percentage of incremental production.

Producers applying either automatically or individually determined qualified techniques would be required to obtain certification as to the amount of incremental crude oil involved. Crude oil produced as a result of a qualifying project could not be sold as teritary crude oil unless and until a certification with respect to the project concerned had been received from the appropriate authority (in most cases the appropriate state agency, subject to FEA review) as to the amount of crude oil which would otherwise have been produced from the project in question by feasible primary or secondary recovery techniques.

The incentive would generally apply only to projects which are initiated after the effective date of the amendments adopted in this proceeding, and to expansion of existing projects which occur after the effective date of such amendments. However, existing projects may qualify for the incentive under limited circumstances, *viz.*, if there has been a material change of circumstances since the project was commenced and if the project would be abandoned in the absence of the incentive. However, any such existing project would be required to obtain prior certification, whether or not the project would have automatically qualified for the incentive if it had been commenced after the effective date of the amendments.

This proposal raises a number of significant and interrelated issues. The principal substantive issues include: (A) The types of enhanced recovery techniques which should qualify for the special pricing incentive; (B) the quantity of crude oil to which the special pricing treatment should be applied; and (C) the measure of the special pricing treatment which should be afforded to the quantities of crude oil thus determined. Related to these substantive issues are also significant issues concerning administrative feasibility. The FEA's major objective is, of course, to provide a meaningful incentive for the application of tertiary enhanced recovery projects to achieve additional domestic crude oil production, within the constraints of the crude oil pricing policies of the EPAA as amended. Thus, in the succeeding subsections of this section V. The specific issues and possible alternatives are identified for evaluation and comment.

Commenters should bear in mind that the effects of their comments with respect to one issue will vary depending on the resolution of other issues, and that the assumptions regarding these other issues should therefore be clearly stated. In particular, the following considerations should be addressed as fully as possible:

(1) Whether the recommended alternatives provide the most practicable and meaningful incentive, within the limitations of the law, for increased production through the application of tertiary recovery techniques; (2) whether they would provide the maximum feasible degree of certainty to producers as to the scope of pricing incentive which would be afforded; and (3) whether they are administratively feasible, including considerations of timeliness to facilitate the making of economic decisions and related determinations. Finally, as stated in section III., the FEA requests that, insofar as possible, commenters quantify their assessment of the amount and timing of additional crude oil production which could be expected to be elicited under the various alternatives.

A. Determination of What Constitutes a "Tertiary Enhanced Recovery Project"—1. *Substantive Issues.*—a. *Categories of Techniques Entitled to Incentive Price Treatment.* The FEA proposes two basic categories of enhanced recovery techniques which could qualify as "tertiary enhanced recovery projects." The first category consists of the following techniques, which would qualify automatically as tertiary enhanced recovery projects if the materials or processes applied are applied to the required extent (as specified in the proposed regulations): (1) Miscible fluid (*e.g.*, CO_2

LPG, natural gas, alcohol) displacement; (2) microemulsion, or micellar/emulsion, flooding; (3) in situ combustion; and (4) steam drive injection.

The second category consists of the following techniques, which would qualify only if they were previously certified by FEA to be uneconomical in the absence of the incentive under the particular circumstances of the project concerned, and only if they were certified to be likely to result in a specified incremental recovery of crude oil in place: (1) Cyclic steam injection; (2) alkaline (or "caustic") flooding; (3) polymer augmented waterflooding; (4) carbon dioxide augmented waterflooding; (5) immiscible carbon dioxide flooding; and (6) those techniques listed in the first category, above, if the materials or processes applied were not to be applied to the specified extent required for automatic qualification.

The broad standards under which FEA would make its determinations concerning this second category of techniques would be: (1) That the project must be likely to result in a recovery of at least an additional 5 percent of the original crude oil in place, over and above that which would be recovered as a result of primary or any feasible secondary techniques; and (2) that the project could not, as a matter of sound economics, reasonably be expected to be pursued in the absence of the incentives provided for tertiary crude oil.

The FEA is also considering a basic variation of this proposal, under which first category techniques would continue to qualify automatically; and second category techniques would qualify automatically for purposes of receiving upper tier prices, but would require certification if the producer sought to obtain market prices.

The first category of techniques are proposed automatically to qualify on the basis of the FEA's tentative conclusion that such techniques are, as a class, properly characterized as involving "extraordinary and high cost enhancement technologies of a type associated with tertiary applications" which "would be uneconomical without additional price incentives," within the intendment of EPAA section 8(j) (ECPA section 122). Of course, this determination assumes that the materials and processes associated with these "first category" techniques are in fact applied to a substantial extent. Thus the "definitions" paragraph of the proposed regulation provides that the materials or processes must be applied to a specified extent in order for these techniques to qualify automatically (i.e., without certification) for the incentive. The second category of techniques are those which are generally regarded as tertiary applications, but which FEA has tentatively concluded cannot as a class be generally considered as uneconomical under the present regulatory provisions. However, provision is made for certification of these techniques as "tertiary enhanced recovery projects" eligible for additional incentives, in those circumstances in which there is a likelihood of significant incremental production and where the application of such techniques could not reasonably be expected to be undertaken in the absence of the additional incentives, i.e., where it is shown that in fact they "would be uneconomical without additional price incentives."

It should be noted that even though a certain technique may qualify automatically as a "tertiary enhanced recovery project," certification concerning the amount of incremental oil that could be derived from the project would be required for all projects. (This aspect of the proposal is discussed in more detail in section V.B.) The existence of this requirement might suggest that there is no substantial purpose to be served by permitting any technique to qualify automatically, since all proposed projects might be reviewed in their entirety during the process of determining the amount of incremental crude oil to be certified. However, the FEA is preliminarily of the view that adoption of certain "automatic qualification" criteria would avoid the necessity to undertake detailed and time-consuming economic analyses, in addition to analysis concerning the amounts of incremental crude oil which could be produced, in those cases in which it can be said as a rule that the techniques are clearly high cost and uneconomical. This would in turn facilitate earlier decisions and promote the earlier implementation of such projects. (However, because these automatically qualifying or "first category" techniques would not be subject to economic review on a case-by-case basis, the number and kinds of techniques which are assigned to this category, and the establishment of quantitative requirements regarding the extent to which the materials and processes must be applied in order for these techniques to receive automatic qualification, are intended to be conservative.)

Comment No. 2. The FEA requests comments upon the foregoing issue of automatic qualification, and particularly whether its identification of "automatic" techniques and and establishment of the specific quantitative requirements regarding the extent to which processes and materials must be applied in order to qualify automatically are both realistic and at the same time sufficiently conservative to preclude the automatic qualification of techniques which are generally economical under present conditions. In this connection, an alternative would be simply to describe the techniques which may constitute "tertiary enhanced recovery techniques," without providing any automatically qualifying techniques, and to determine on a case-by-case basis whether each particular project qualifies. While the FEA does not presently favor this alternative, for the reasons stated above, it solicits comments on such alternative. The FEA also requests comments upon whether it has properly assigned techniques to the "non-automatic" category, consistent with its intended conservatism.

b. *Additional Production Requirement for "Second Category" Techniques.* With respect to the second category of techniques, viz., those which would be subject to certification on a case-by-case basis, the FEA proposes to require, not only that they be shown to be uneconomical under the particular circumstances, but also that they have a likelihood of resulting in recovery of at least an additional specified percentage (e.g., 5 percent) of the original crude oil in place, beyond that which would have been recovered using any feasible non-tertiary means. The basic purpose of this admittedly rough criterion is to provide some reasonable assurance that the proposed project would in fact result in a significant amount of incremental crude oil production, which it is the purpose of the incentive to accomplish. The FEA recognizes that such a quantitative production criterion is arguably unnecessary if, as proposed, only incremental crude oil is permitted to receive the incentive price. Under such an approach, the investment in a tertiary recovery technique would have to be privately cost-justified on the basis of returns from such incremental production, so that the increased production should necessarily be sufficient to justify the increased investment. In fact, this is one of the reasons that the FEA is proposing the "incremental" approach. However, there are countervailing considerations.

The process of certifying projects as eligible for the incentive is likely to be time-consuming, and likely to delay potentially significant projects, even if limited to those projects applying second category techniques. Therefore, a criterion of additional production which would screen out the less effective projects and limit certification efforts to the more effective projects, may be a justifiable means of using limited administrative resources to accomplish the greatest production gains. It should also be noted that, if an approach is taken in which some current (non-incremental) production is permitted to receive the incentive price (an option discussed in section V.B.), such a production criterion appears even more necessary.

If a production criterion is applied, questions may remain as to the most appropriate way of expressing and applying it. Thus, in view of the administrative difficulties and time consumption inherent in the certification process, the FEA might simply limit eligibility to those projects which are clearly major undertakings, in terms of both the investment required and the likely incremental production.

This might be expressed in the form of an incremental production criterion which is substantially higher than the proposed 5 percent, or the regulations themselves might contain no specific numerical criterion, but might provide for discretionary authority under which FEA could deny certification on grounds of insufficient additional production, with nonbinding guidelines as to quantitative thresholds. Moreover, whatever approach is taken in this respect, it may be appropriate to define the production criterion in terms of increased rates of production, in lieu of or in addition to increased ultimate production. A possible justification for a "rate of production" criterion is that it would emphasize those projects which would bring additional crude oil production in the relatively near term, during the period in which the economy and national security is presumptively more sensitive to shortages of crude oil.

Comment No. 3. The FEA solicits comments upon the foregoing. In particular, it requests comments concerning whether any production criterion of the nature discussed above is feasible and realistic; if so, whether a different figure is more realistic than the 5 percent proposed; whether the production criterion should be established in terms of increased rates of production rather than increased total production, or in terms of both; and whether the criterion should be applied also to projects involving first category tertiary recovery techniques. Comments are also requested upon whether the regulations should more appropriately provide discretionary authority for FEA to deny the incentive to otherwise qualified projects on grounds of insufficient additional production, with non-binding guidelines as to these quantitative thresholds. Also, in connection with these comments, the FEA requests comments concerning the advisability of adopting a policy whereby only a few clearly large-scale projects would be certified, as opposed to certification of a number of "small" projects which may involve only marginal increases in total national crude oil production.

c. *Alternative: Automatic Qualification of "Second Category" Techniques for Modified (Upper Tier) Incentive Prices.* As previously indicated, there is a basic variation on the two category proposal to which the FEA is also giving consideration. This is an alternative in which second category techniques would be permitted to qualify automatically for purposes of receiving upper tier prices, but would be required to be certified to receive market prices for incremental crude oil resulting from the application of such techniques.

There are several possible advantages to this alternative. First, it would be likely to reduce somewhat the overall certification burden upon the FEA, and thus promote speedier resolution of those cases in which certification is required.

In addition, automatic qualification of second category projects would have practical significance only to the extent that the incremental or "tertiary" crude oil would otherwise have been "lower tier" crude oil. Thus, it would have significance only in those cases in which the FEA would otherwise (under the certification approach) have been called upon to determine whether the project would be economical at lower tier prices. While there may be some cases in which a project would be economical at lower tier levels, this is far less likely to be true than where the substantially higher upper tier prices would otherwise be received for incremental production. Thus, a general presumption that such projects would be uneconomical at lower tier prices may be justified, even if not universally true, and adoption of such a presumption might be warranted by the administrative savings involved.

It should also be noted that this alternative would avoid situations in which prices were permitted to increase from lower tier to market levels, even though an increase only to upper tier levels would be sufficient to make the project economical.

Finally, it should be noted that this alternative involves essentially only a redefinition of the particular property's BPCL, on the basis of a detailed and particularized review of data with respect to that property. That is, the producer would be required to obtain certification of the amount of incremental production which would result from the project, as in all other cases of projects which automatically qualify for the incentive. In the course of making that determination, the certifying authority would establish a non-tertiary production baseline. This baseline would be the amount of crude oil which could feasibly have been produced in the absence of the tertiary recovery project and would therefore reflect, on the basis of detailed justifying data, the certifying authority's determination of the actual production decline curve for the property or affected portion thereof. Under this approach, the result may well be that the imputed non-tertiary production curve would be below the BPCL or adjusted BPCL calculated pursuant to present Subpart D. FEA has recognized that the Subpart D BPCL calculations will often not reflect the actual current production decline for any particular property, but for general pricing purposes the use of a uniform method of calculation has been considered necessary. However, an undertaking to apply a tertiary enhanced recovery technique to increase production might appropriately be considered an occasion for refining BPCL calculations for the property concerned. It should be noted that this consideration alone might justify upper tier prices for incremental tertiary production, regardless of whether the particular project is otherwise economical, since it would merely be the occasion for implementing the BPCL function in a more particularized manner.

Comment No. 4. The FEA solicits evaluation and comment upon the above alternative. In particular, potentially affected producers should provide information, quantified to the extent possible, concerning any projects which are now or will be undertaken at lower tier price levels, and those which would be feasible if upper tier prices (as opposed to market prices) were permitted for tertiary crude oil which would otherwise be lower tier oil.

d. *Description of Qualifying Techniques (Generally).* With respect to the description of eligible techniques generally, the FEA recognizes that two of the techniques set forth in ECPA section 122 are not expressly provided for in the proposed definitions, viz. "gas injection" and "chemical flooding." The FEA has preliminarily determined that these terms do not have a sufficiently specific meaning within the industry to provide a usable definition of eligible tertiary techniques. To the extent that various enhanced recovery techniques potentially includable within these broad terms are of a kind eligible to be given the special pricing treatment contemplated by the ECPA, they are intended to be included in the more specific definitions proposed to be used in the regulations. FEA has been given the authority under ECPA section 122 to define the terms used therein, with the objective, of course, of fulfilling the basic purposes of that section.

The FEA understands that actual enhanced recovery projects do not always fall neatly into one or the other of the above categories of tertiary recovery techniques, nor are they neatly divisible between tertiary and non-tertiary methods. For example, a "steam drive" technique, which is a first category technique, may be combined in a single project with "cyclic steam injection," which is a second category technique. In such cases there may be some difficulty in determining the amount of crude oil production which is attributable to each technique. Moreover, it might be rational, and might avoid these administrative difficulties, if such combined technique projects were considered to be of a single category at some appropriate point, for example when more than one half of the wells are used to apply one particular technique. A problem in taking this approach at the outset is that it would have to address a number of possible variations and would increase the complexity of the regulations. It might also result in the adoption of thresholds which may prove to be inappropriate. Therefore, the FEA presently prefers to approach these possibilities on a case-by-case basis, in the context of specific factual settings. However, comments upon typical possibilities, their significance in actual practice, and possible criteria for determining the appropriate treatment for such projects, are invited.

FEA is also cognizant of the fact that tertiary recovery technologies are likely to continue to evolve, with the result that any descriptive list of techniques may become obsolete with the passage of time. It is not the FEA's intention, in setting forth specific techniques, to preclude application of the incentive to new techniques as they evolve to the point of technical feasibility, and FEA anticipates that appropriate amendments to the regulations would be made as and when such technologies evolve, if they are of a type which should be eligible for the incentive. The FEA is of the preliminary belief that such an approach is preferable to providing a "catch-all" category in the present regulations, because it will permit the receipt of public comment upon the appropriate characterization of new technologies, and because it would not encourage applications for certification for existing enhanced recovery techniques which are secondary and not tertiary recovery techniques.

Several comments in response to the third stage EPCA notice urged that all techniques for enhanced recovery, whether secondary or tertiary, be considered eligible for an additional incentive. Some adverted to the possibility that existing secondary recovery projects might be premateurely abandoned because of the existing price ceilings, although their point was largely that the entire system of ceilings and controls was inhibiting domestic production on all fronts. Others pointed out that waterflooding was by far the most productive in terms of extraction of additional crude oil in place, after primary production. The FEA appreciates these contentions, but the scope of this proposed rulemaking is limited to providing additional incentives for tertiary enhanced recovery techniques, consistent with the ECPA. In the Conference Report on ECPA, the conferees stated:

* * * The conferees could not however, agree to the provisions of the Senate amendment which would permit substantial price increases for commonplace secondary enhancement techniques such as water flooding and gas displacement. * * * (Sen. Rep. No. 94-1119, 94th Cong., 2nd Sess. 71 (1976).)

For this reason, although the incentive is designed to serve the functional purpose of promoting increased production, the FEA does not consider that it can adopt a purely functional definition which would permit all enhanced recovery techniques to qualify for the proposed incentive based upon the particular economic circumstances involved. Any price relief based upon economic hardship threatening abandonment of production in the case of non-tertiary techniques would have to come through the exceptions process or pursuant to a more general enhanced recovery incentive.

Comment No. 5. FEA requests comments as to whether the tertiary enhanced recovery techniques set forth above are sufficiently inclusive of techniques which are commonly understood to b) "tertiary" (as opposed to secondary) techniques and which are or which may in particular circumstances be considered extraordinary, high cost and uneconomical under the present system. Comments are also requested on the adequacy of the general description of each particular type of technique to sufficiently limit and describe that technique.

2. ADMINISTRATIVE ISSUES

As noted previously, a producer that proposes to implement a project involving a technique in the second category would be required to obtain certification that the proposed project is a "tertiary enhanced recovery project" qualifying for the incentive prior to pricing any crude oil as tertiary crude oil. (In addition, a producer applying a technique in either category would be required to obtain prior certification of the amount of incremental crude oil which will result from application of the process. This aspect of the proposed provisions, and the administrative issues pertaining specifically to this aspect of the certification process, are discussed in section V.B., below.)

The requirement for certification raises several issues, some of which have been mentioned in 1., above, in connection with the proposed broad substantive standards for certification. The basic administrative issues are: (1) Whether there are feasible alternatives to a certification process, which would avoid the disadvantages of such an approach; (2) whether, assuming some certification process is necessary, there are procedures other than or in addition to those proposed which would help to streamline the certification process; and (3) again assuming the necessity for a certification process, what should be the specific method and standards by which the FEA would determine whether a proposed project would be uneconomical in the absence of the incentive.

The FEA recognizes that there are a number of disadvantages inherent in a certification process, the principal one being the costs and time delays attendant upon any system of prior administrative review. As proposed, a producer proposing to implement a project involving a technique in the second category would be required, first, to obtain certification (in most cases from the appropriate state authority) of the amount of incremental crude oil which would be produced, and then to obtain certification from the FEA that the project is a "tertiary enhanced recovery project" qualifying for the incentive. In contrast, a producer implementing a project involving a technique in the first category would be required only to obtain certification (subject to FEA review) of the amount of incremental tertiary crude oil.

FEA is desirous of minimizing the costs and delays potentially involved in these certification procedures, to the extent that it can feasibly do so consistent with the need to assure that only meritorious projects are provided the incentive.

The requirement that techniques in the second category be certified is proposed because the disadvantages of other identified alternatives appear to outweight those involved in the certification process. Conceivably, the FEA could either permit all techniques, in both the first and second categories, to qualify automatically; or, as to techniques in the second category, it could attempt to set forth in the regulations a self-executing formula which producers could apply to determine whether their projects qualify. As stated, the FEA preliminarily believes that these alternatives have disadvantages which outweigh their potential advantages.

Based upon the FEA's preliminary assessment that techniques in the second category cannot be said to be generally uneconomical at all controlled price levels under present conditions, it appears that permitting these techniques automatically to qualify to receive the market price incentive would be unjustified, and contrary to the purpose and intent of ECPA. ECPA section 122 includes most of these techniques, but only "to the extent that such techniques would be uneconomical without additional price incentives." While the FEA does not construe this provision as prohibiting automatic qualification in appropriate cases, the purpose of the incentive is to elicit greater domestic production of crude oil, through the application of tertiary enhanced recovery techniques which would not and could not reasonably be expected to be undertaken under the present pricing regime. If a particular technique would be economical under the existing system, permitting crude oil produced as a result of such a technique to receive a higher market price would not appear to be consistent with the foregoing statutory objective. For these reasons, the FEA does not believe that automatic qualification of all techniques would be justified.

(However, as previously indicated, comments are requested on whether the specific techniques discussed are properly assigned to their respective categories.)

Also, as stated in section V.A.1.c., above, the FEA is considering an alternative which would permit second category techniques to qualify automatically for purposes of receiving upper tier prices, as opposed to market price incentives which would continue to require certification. The bases upon which such an alternative might be adopted are discussed in that section. As noted there, such an approach might substantially diminish the need to rely upon a certification process, and avoid the disadvantages of such a process.

A self-executing formula for determining whether a particular project is uneconomical could likewise conceivably avoid the need for certification of second category techniques. However, the FEA perceives several potentially serious disadvantages.

The first of these is that there is substantial doubt as to whether it is possible to provide a formula which is both uniform in its application and also responsive to the wide variation of circumstances in which different producers may find themselves. Inasmuch as producer investment decisions may vary substantially, depending upon the particular producer's views as to the best use of its capital and its current capital position, a generalized formula based, for instance, upon an assumed need to receive a specified rate of return upon investment, might unnecessarily preclude meritorious projects or qualify otherwise economical projects.

A second potential problem is that such a formula may not be sufficiently precise and detailed to avoid paralyzing uncertainties as to whether the FEA would subsequently agree with its application in any particular case. If a producer were subsequently held to have applied the formula improperly, it could be faced with a remedial order of substantial consequence. In order to avoid these uncertainties, it would be necessary to specify in detail all elements of the "rate base."

to specify the method of measurement of return, and to rigidly standardize accounting methods. To attempt to accomplish this in regulatory form likely would, in turn, postpone issuance of any regulations implementing the incentive far into the future.

Of course, in determining whether to certify a particular second category project, the FEA will necessarily have to apply some fairly specific methods and standards. Discussion of alternative methods which might be used in making such determinations is set forth subsequently in this section. However, the FEA does not presently contemplate that its determinations would be a matter of simply applying self-executing standards to specific facts, without regard to the totality of the circumstances in a particular case. Moreover, it believes that a preferable approach to the development of specific standards is to permit such standards to evolve with the FEA's accumulation of experience in the context of specific cases.

Finally, the application of flexible standards in the context of a prior certification process does not have the same risk of subsequent disallowance of the price incentive that exists in the case of a producer attempting to apply a formula without prior review by FEA. Greater producer assurance would result from a process in which specific prior approval is given to a particular project. For these reasons, the FEA presently favors an approach which would take the form of publication of guidelines, as and when appropriate, and prior review and approval pursuant to those guidelines, rather than the approach of setting forth a general formula in the regulations.

Comment No. 6. The FEA solicits comments upon whether a general formula approach would be feasible, and if so, what that formula and related specific requirements should be.

Comment No. 7. Comments and suggestions are also requested concerning the methods and standards under which the FEA should make its determinations as to whether a particular project should qualify, assuming that the certification process for second category techniques is retained. In this connection, several issues have been identified.

First is the question of what should be the method for determining whether a particular project would be uneconomical in the absence of the incentive. An obvious possibility is to apply a rate of return analysis, in which the FEA would determine whether the anticipated returns from incremental tertiary production sold at the applicable controlled price level would be reasonably adequate to compensate for the additional investment required. Such an approach would involve an assessment of the risks presented, in order to establish what would constitute a reasonable rate of return. For reasons previously stated, the FEA does not presently favor an absolute and uniform rate of return test. However, the beginning point in its analysis will in some part necessarily be general industry experience in this area. Therefore, the FEA requests comments concerning the criteria historically applied by producers in making these types of investment decisions, quantified to the greatest extent possible. Comments and suggestions are also requested concerning subsidiary but important issues such as whether the "rate base" should include only incremental investment, whether it should be limited to capital investment (defined as including only depreciable assets) or should also include incremental costs, either current or future or both, and similar matters. Suggestions in this matter should provide the reasoning underlying the positions taken.

Two points should be noted in connection with the foregoing. First, the FEA does not presently intend that any rate of return analysis would have a function other than that of permitting it to determine whether the proposed project is or is not economical. If it is determined not to be economical at the otherwise applicable ceiling price level, the producer would receive the market (or upper tier) price incentive; there would not be a price specially set by the FEA on the basis of its determination of what would provide a "fair return." In short, the certification process would not amount to a ratemaking proceeding. The reasons for this are esssentially administrative, and are discussed in section V.C. Second, it may be contended that the FEA should simply accept the representations of a producer that a project would not be undertaken unless the incentive is given, rather than engaging in analysis of the economics involved. Such an approach would undoubtedly minimize administrative costs and delays. However, since it is FEA's preliminary judgment that a number of projects would be economical, at least at upper tier price levels, and since the purpose of the incentive is generally to promote meritorious projects which are not economical under present conditions, the FEA believes that the application of its judgment will be necessary. However, for reasons discussed previously, the FEA would give substantial weight to a producer's assessment of its need, in determining whether the project "could reasonably be expected" to be undertaken in the absence of the incentive.

The FEA requests comments upon the foregoing, and upon whether there are feasible basic alternatives to a rate of return approach in determining whether a particular project is economical.

Comment No. 8. The FEA also requests comments and suggestions concerning ways of streamlining the certification process. In this connection, note should be made of the fact that the FEA has considered, but has tentatively decided against, centralizing certification responsibilities in one authority. It may be contended that such centralization should occur, in order to avoid the two-step process (for second category techniques) of obtaining certification (from appropriate state or federal authorities) of the amount of incremental crude oil involved, and then obtaining certification (from the FEA) that the project qualifies as a "tertiary enhanced recovery project." However, the FEA believes that centralizing both functions in FEA would result in administrative delays which would be unacceptable if other alternatives are available. The FEA does not presently have sufficient expertise to make in a reasonably expeditious manner the detailed technical analyses and determinations involved in determining the amount of incremental crude oil, in addition to undertaking the economic analyses required. On the other hand, it is FEA's understanding that the appropriate state and federal regulatory agencies do have this expertise, although their resources may vary. However, it is also FEA's understanding that such bodies do not traditionally undertake, and are not equipped to undertake, the sort of economic analysis discussed previously. Therefore, it does not appear feasible to merge the two functions in such authorities.

Of course, whether the proposed certification procedure will work depends vitally upon the resources and willingness of the appropriate authorities to undertake the technical analyses required in determining the amount of incremental crude oil which would result from a particular project. Copies of this proposal have been sent to those authorities that the FEA has preliminarily identified as possibly having the requisite expertise, for their analysis and comments. (These authorities are identified in section V.B., below.)

B. DETERMINATION OF QUANTITIES OF CRUDE OIL WHICH WOULD QUALIFY AS TERTIARY CRUDE OIL—INCREMENTAL VS. "CURRENT" OR "TOTAL" PRODUCTION

As proposed, only that crude oil which is produced as a result of the implementation of a "bona fide tertiary enhanced recovery project" and which is in excess of that amount of crude oil which would have been produced as a result of primary and any feasible secondary processes may receive the incentive price. In other words, the fact that crude oil is produced as a result of the application of qualifying tertiary recovery methods would not be sufficient to entitle that crude oil to receive the incentive price; only that crude oil which is in excess of what would have been obtained as a result of feasible non-tertiary methods would be so entitled.

The amount of such incremental crude oil would be required to be certified by the appropriate state or federal authority, subject to FEA review, prior to a producer's pricing any crude oil as tertiary crude oil. The incremental crude oil so determined would be expressed in terms of both the total incremental production over the life of the project and as a time-phased series of increments. Estimates of the amount of non-incremental production would also be expressed and certified on the same basis, and the producer could charge the incentive price only as and when production in any period exceeded the non-incremental production baseline.

The foregoing proposal generates a number of complicated issues and alternatives, substantive and administrative, which are discussed below and upon which the FEA seeks comments.

1. *Substantive issues.* The FEA recognizes that its proposal to permit only incremental crude oil to receive the incentive price might not provide adequate incentive for the implementation of all potentially valuable tertiary enhanced recovery projects. It also involves potentially significant administrative burdens. Therefore, the FEA is considering the following alternatives:

a. Permitting the incentive price for a proportion of total production from a property to which a qualifying tertiary recovery project will be applied, based upon an apportionment formula such as the ratio which the additional capital currently committed to the tertiary project bears to total capital invested in all production from that property. (A variation on this alternative might be to permit some amount of current production to qualify for the incentive price based upon the amount of additional capital committed to tertiary recovery. For example, it might be provided that X number of barrels per day may receive the incentive price for every Y thousand dollars committed to a qualifying teritary project.) Under this alternative a producer would be permitted to price a portion of the property's total production, both "current" (i.e., prior to actual production resulting from the tertiary recovery project) and "tertiary," at the incentive price.

b. Permitting the incentive price for all production "resulting from" the project, i.e., which is actually produced from the project area, regardless of whether such production, or a portion thereof, would have resulted had feasible non-tertiary techniques been applied. Under this alternative, no "current" (i.e., "pre-tertiary") production would receive the incentive price, but all production which actually results from the project after its implementation would.

c. Within the context of the "incremental" approach, permitting accelerated incentive pricing, i.e., imputing recovery of the total incremental amount disproportionately to earlier periods of production. Under this alternative, no "pre-tertiary" production would receive the incentive price, nor would a producer be entitled to receive the incentive price for all production occurring after implementation of the project; but the producer could receive the incentive price for a higher proportion of early production from the project than would be permitted under the proposed approach.

Each of the above alternatives raises a number of significant and complicated issues. Also, there are no doubt several possible variations of the above alternatives, as well as other possible approaches.

Comment No. 9. The FEA invites comments and suggestions on its proposal, the above alternatives, and other possibilities, in light of the observations made below.

The reasons for the FEA's proposal to permit only incremental oil to receive the incentive price are essentially three. First, it would not permit price increases until and unless an actual increase in production, over and above that which could reasonably be obtained in the absence of such price increases, occurs. Thus, it would correlate higher prices to the consumer with the benefits of increased production of domestic crude oil, which is the ultimate purpose underlying the incentive. Second, by requiring that the additional investment be justified entirely on the basis of returns solely attributable to that investment, there would be an automatic check on projects which would not be meritorious in themselves but which might otherwise be attractive in order to gain greater returns on non-teritiary production. Put another way, the "incremental" approach would tend to prevent effective price increases for current production that were out of proportion to the prospect of future tertiary production.

Finally, the "incremental" approach would tend to provide a continuing safeguard against possible token efforts at applying tertiary recovery techniques after a certification is given. If non-incremental crude oil were permitted to receive the incentive price, there would in certain cases be understandable inducements to reduce the scope of the continuing high cost tertiary effort if higher prices for non-tertiary crude oil could continue to be received. Since under the "incremental" approach a producer would be entitled to higher prices only for incremental crude oil, and since the volume of such incremental crude oil would be directly dependent, in theory at least, upon the magnitude of continuings efforts at tertiary recovery, there would be less need for FEA to monitor compliance with representations made at the time of certification.

However, the incremental approach has several potential disadvantages. Among the major substantive problems is that it takes no account of producers' needs to acquire the capital required for investment in tertiary recovery projects in advance of actually implementing and obtaining additional production from such projects. The lead time, from initial commitment to a tertiary project to its implementation and the eventual production response, is generally long, typically amounting to from one to three years. In the meantime, it would be necessary for producers to acquire and carry the costs of the necessary capital. One available method for raising such capital is to generate it internally, through current revenues. However, if this cannot be done at current price levels, that source of capital would not be available unless prices could be raised. An alternative method is to borrow the necessary capital. However, it would then likely be necessary to amortize and pay the current costs of such capital, which may be high in view of the risks involved. Thus, it is conceivable that adequate capital could not be raised in the absence of an increase in current prices.

Comment No. 10. The FEA solicits comments upon the actual significance of the above concerns regarding capital formation in today's environment. Such comments should be specific and quantified, to the extent possible.

A second substantive consideration is that the proposed incremental approach places the entire risk of failure of a project upon the producer. This, in turn, may discourage investment in many potentially valuable but speculative projects. Although this risk factor would certainly be considered in determining the appropriate rate of return for purposes of establishing (for second category techniques) whether a particular project is uneconomical, this may be small consolation to a producer whose project experiences a substantial shortfall and who is not in a position to spread his risk among several projects. FEA cannot remove all risk, or even the major burden of the risk, from producers. However, in order to elicit substantial response to the incentive it may be desirable to permit earlier recovery of investment than would occur under the proposed incremental approach.

It should be noted that only the first alternative listed above is responsive to issues regarding the need of producers to acquire capital in advance of implementation of a project. All of the listed alternatives may be characterized as providing a degree of risk mitigation, albeit in different degrees.

However, each of the three alternatives has its own disadvantages, which may ultimately persuade FEA to adhere to its proposed incremental approach. Thus, the first alternative, which permits a producer to price some of its "current" (pre-tertiary) production at the incentive price, would have none of the above discussed advantages of the incremental approach. At a minimum, this approach would pose complex issues in arriving at an apportionment formula that would assure that unjustified benefits to non-tertiary production, out of proportion to the risks and risk capital involved, were not created. In this connection, it should also be borne in mind that every increase in price for any "current" crude oil will further aggravate the existing downward pressure on ceiling prices of other current production. Since an increase in prices would not be strictly tied to additional production under this approach, the impact upon total production could conceivably be negative. Moreover, it is not clear that such an approach would substantially minimize the administrative concerns, discussed in section V.B.2., surrounding the incremental approach. It is not clear, for example, that a definite and uniform self-executing formula can be adopted which would avoid the need for a certification process.

As with the case of a self-executing formula for determining whether a project is economical, it would likely require great and complex specificity as to the elements to be incorporated in the formula. It would also have to provide sufficient certainty in application that it would not result in after-the-fact contrary determinations by FEA. *Comment No. 11.* However, the FEA invites comments and suggestions regarding possible formulae for implementing this alternative.

The second alternative would apparently avoid some of the administrative concerns pertaining to the proposed approach, by avoiding the need to differentiate between incremental production and that production which would have occurred through the use of feasible non-tertiary methods. Under this approach, all production resulting from the application of a qualifying technique would receive the incentive price. However, it does not appear that this alternative would obviate the need for a certification process altogether.

In the first place, those projects applying second category tertiary recovery techniques would have to be evaluated to determine whether they meet the incremental production criterion discussed in section V.A.1.b., unless that criterion is dispensed with. In addition, such second category projects would have to be evaluated to determine whether they would be economical without the incentive, and for this purpose it would be necessary to predict incremental recovery. Also, it would still be necessary, in those cases in which a property is subject to both tertiary and non-tertiary modes of recovery, to distinguish that portion of total production which is attributable to the tertiary technique. A possible compromise in this respect might be to assign production to tertiary technique on the basis of capital apportionment, along the lines of that discussed above with respect to the first alternative. However, such an approach is subject to the same qualifications as discussed above with respect to the first alternative.

The second alternative also presents the possibility of encouraging some inefficient uses of the incentive. Although it would not permit a producer to increase the price of crude oil prior to implementation of the tertiary recovery project, it would permit increased prices for crude oil which would have been produced even in the absence of such a project. This, in turn, could result in the undertaking of projects which would not be justified in terms of the additional production of crude oil, because it would present an opportunity to price other crude oil at higher prices.

The third alternative, which is a variation of the incremental approach, would in theory limit crude oil receiving the incentive price to incremental crude oil, but would permit such crude oil to be attributed to the early periods following implementation of the tertiary recovery project. The proposed "incremental" approach differs from this alternative in that it would permit only that production occurring after recovery of the certified non-incremental crude oil for the specified period to be priced at the incentive price. Under the third alternative, producers might be allowed to price a disproportionately high amount of "early" crude oil as incremental tertiary crude oil. This would presumably permit faster recovery of capital investment and result in a commensurate reduction of the risk to producers, making the undertaking more attractive. However, the rate of acceleration would have to be sufficiently limited that it would not result in incentives to abandon such projects prematurely, before any substantial incremental production actually occurs, or effectively remove all risk from the producer. *Comment No. 12.* The FEA requests suggestions as to possible formulae to accomplish these purposes, and comments regarding the effectiveness of this posisble approach. Suggested formulae should be accompanied by specific analyses of the manner in which they would operate in practice.

2. *Administrative issues.* As proposed, the amount of incremental crude oil which would be produced as a result of a qualifying tertiary enhanced recovery project would be determined and certified, and only such crude oil would be eligible to receive the incentive price as tertiary crude oil. The certification would be made by appropriate state or federal authority, subject to FEA review, and would be expressed in terms of both the life of the project and as a series of time-phased increments during the life of the project.

Crucial to the practicability of this proposed approach are the willingness and resources of existing state and federal regulatory authorities, other than the FEA, to make the required determinations. Therefore, as previously indicated, the FEA has forwarded copies of this notice to the authorities which it has preliminarily identified as possible certifying authorities, for their specific comments and suggestions. Copies have also been sent to and comments requested from the Interstate Oil Compact Commission ("IOCC"), an organization comprised of representatives from most if not all of the state agencies. These authorities, and the properties over which they would have jurisdiction for certification purposes, are as follows:

Authority	*Properties in*
Alabama State Oil and Gas Board.	Alabama.
Alaska Department of Natural Resources, Division of Oil and Gas.	Alaska.
Arizona Oil and Gas Conservation Commission.	Arizona.
Arkansas Oil and Gas Commission.	Arkansas.
California Department of Conservation, Division of Oil and Gas.	California.
Colorado Oil and Gas Conservation Commission.	Colorado.
Florida Department of Natural Resources, Bureau of Geology, Oil and Gas Section.	Florida.
Georgia Department of Natural Resources.	Georgia.
Idaho Department of Lands.	Idaho.
Illinois Department of Mines and Minerals, Oil and Gas Division.	Illinois.
Indiana Department of Natural Resources, Oil and Gas Division.	Indiana.
Iowa Geological Survey	Iowa.
Kansas Corporation Commission, Oil and Gas Conservation Division.	Kansas.
Kentucky Department of Mines and Minerals, Oil and Gas Division.	Kentucky.
Louisiana Department of Conservation.	Louisiana.
Maryland Geological Survey.	Maryland.
Michigan Department of Natural Resources.	Michigan.
Mississippi State Oil and Gas Board.	Mississippi.
Missouri State Oil and Gas Council.	Missouri.
Montana Board of Oil and Gas Conservation.	Montana.
Nebraska Oil and Gas Conservation Commission.	Nebraska.
Nevada Department of Conservation and Natural Resources, Division of Oil and Gas Conservation.	Nevada.
New Mexico Oil Conservation Commission.	New Mexico.
New York Department of Environmental Conservation, Bureau of Minerals.	New York.
North Carolina Department of Natural and Economic Resources, Division of Resource Planning and Evaluation.	North Carolina.
North Dakota Geological Survey.	North Dakota.
Ohio Department of Natural Resources.	Ohio.
Oklahoma Corporation Commission, Oil and Gas Conservation Division.	Oklahoma.
Oregon Department of Geology and Mineral Industries.	Oregon.
Pennsylvania Department of Environmental Resources, Division of Oil and Gas.	Pennsylvania.
South Carolina State Development Board, Division of Geology.	South Carolina.
South Dakota Geological Survey.	South Dakota.
Tennessee Department of Conservation, Division of Geology.	Tennessee.
Texas Railroad Commission, Oil and Gas Division.	Texas.
United States Geological Survey.	Federal lands.
Utah Oil, Gas and Mining Board.	Utah.
Virginia Department of Labor and Industry, Division of Mines and Quarries.	Virginia.
Washington Department of Natural Resources.	Washington.
West Virginia Department of Mines, Oil and Gas Division.	West Virginia.
Wyoming Oil and Gas Conservation Commission.	Wyoming.

Such authorities have been identified on the basis of FEA's preliminary determination that they are likely to have the required expertise to make the determinations called for. They are taken from the 1976 Directory of State Oil and Gas Agencies, published by the IOCC. However, the FEA is not totally familiar with the extent of the resources available or which could feasibly be made available to such authorities; and there may also be other authorities capable of performing this function. Comments and suggestions in this regard are solicited.

The FEA has considered, but has tentatively rejected, the alternative of centralizing all certification functions in the FEA. The reasons for not proposing such centralization are discussed in section V.A.2. However, the FEA does propose to review all certification decisions concerning the amount of incremental crude oil eligible for the incentive price, and to provide that such certifications would not become "final" until there has been at least an opportunity for such review. A certification would become "final" after sixty (60) calendar days from the date of notification to the producer of FEA's receipt of the certification and supporting documentation, unless within that period the FEA questions or challenges the certification or some portion thereof. A producer would not be entitled to rely upon such a certification unless and until it becomes "final."

The essential reason for retention of a review function is to provide the FEA with the means and express authority to fulfill its overall responsibility for the operation of the incentive program. It is not contemplated that the FEA would ordinarily seek to substitute its judgment for the technical expertise of existing authorities; its review would be intended simply to provide a final check against any errors, omissions or apparent anomalies. It would also tend to promote at least rough uniformity among geographical areas.

Comment No. 13. The FEA recognizes that this two-step certification procedure presents the prospect of additional delay in implementing tertiary enhanced recovery projects. While the FEA presently believes that some such delays may be a necessary cost of promoting other objectives, it requests comments and suggestions concerning ways in which this process can be streamlined. In addition, as previously indicated, the FEA will be considering administrative factors among others in determining whether the "incremental" approach is the most desirable.

Comment No. 14. Evaluation and comments are also requested concerning the administrative feasibility of making the determinations called for. Several comments in response to the third stage EPCA proceeding argued that distinguishing the amount of crude oil attributable to tertiary recovery techniques from that attributable to other methods is extremely difficult, if not impossible. Under the proposal, the certifying authority would be called upon to project the amount of production which could have been obtained without application of the qualifying tertiary recovery project, both from continuation of production methods actually used prior to or in addition to the project and from any other non-tertiary methods which could have been (but have not been) applied. The "incremental" crude oil eligible for pricing as tertiary crude oil would be total crude oil production above these amounts. The FEA recognizes that these calculations may be complicated, and it requests comments on whether they can be accomplished within available resources and in a reasonably expeditious manner. However, FEA is preliminarily of the view that it should not be impossible to make these determinations, nor does it expect absolute precision in doing so.

The FEA also recognizes that, at least in theory, a determination of what non-tertiary methods would be feasible might involve economic analysis. For example, a particular secondary method of recovery might be or become uneconomic, even if technically feasible, because quantities of crude oil which could be produced thereby would not be sufficient to cover marginal costs. However, it is not FEA's intention to require the certifying authorities to undertake this kind of analysis. It proposes to call upon certifying authorities to consider only the technical feasibility of various non-tertiary recovery methods, and to base its projections accordingly. In other words, the non-incremental production baseline would include quantities producible from non-tertiary projects which are technically feasible, even if they would not be economical. Of course, this may result in a somewhat artificial situation, since in these cases it can be said that a portion of the "non-incremental" crude oil would not have been produced but for the tertiary enhanced recovery project. However, since non-tertiary recovery methods are generally less costly than tertiary methods, and since the quantities of crude oil necessary to make such methods economical are therefore comparatively small, the amount of crude oil thus "artifically" considered non-incremental may not be significant. On the other hand, if the certifying authorities were not to consider potential production from other methods, the result might frequently be that potential production from economical non-tertiary methods would be given an unwarranted incentive.

Comment No. 15. The FEA requests evaluation and comment upon the validity of the above observations concerning imputed production from non-tertiary methods. If they are considered not to be valid, suggestions are requested as to how potential production from non-tertiary methods which are economically feasible can be determined and accounted for. A possible solution, which would further complicate the certification process and is thus not presently favored, would be for the certifying authority to certify several quantities conditionally, subject to FEA determination as to whether a particular non-tertiary method would be economical.

Comment No. 16. Comments are also requested upon whether it is feasible to make the determinaion of incremental crude oil both in terms of total ultimate incremental production and in terms of a series of time-phased (monthly or quarterly) increments. The purpose of determining incremental production over a series of several time periods is simply to account for the fact that the additional production may occur in the form of an increased rate of production, as well as increased total production, and to permit incentive pricing of the incremental production as it occurs. Since the determination of incremental crude oil will presumably be based upon production curves, this approach preliminarily appears feasible to the FEA.

C. PRICE TO WHICH TERTIARY CRUDE OIL IS ENTITLED.

As proposed, tertiary crude oil, as determined under methods discussed in the preceding sections, would be entitled to be sold at a market clearing price. *Comment No. 17.* However, the FEA is also considering, and requests comments upon the alternative of permitting tertiary crude oil to be sold at upper tier prices. (In addition, as discussed in section V.A.1.c., the FEA is considering the alternative of permitting upper tier prices for "second category" tertiary enhanced recovery techniques, and market prices for "first category" techniques and for those second category techniques which can be shown to be otherwise uneconomical in specific situations. This alternative will not be specifically discussed here.)

In the third stage EPCA proceeding, the FEA sought and received many comments upon the alternatives of upper tier price versus market price. A substantial number strongly urged market price, contending that it is necessary to allow all of the stimulus the market can provide. It was also urged that provision of a market price would provide a more reliable investment climate, by producing greater investor confidence that the price of tertiary crude oil would be relatively free from the potential of future price "rollbacks," and would facilitate transition to uncontrolled prices generally. Under the EPCA, the FEA cannot provide absolute assurance against the necessity for revision of prices for tertiary crude oil, inasmuch as such crude oil has not been exempted from the composite price limitations of that Act and inasmuch as the pricing of any category of domestic crude oil must take into account and balance the impacts upon other categories. However, the FEA views these more subjective factors pertaining to investment decisions as real and legitimate, and it believes they are entitled to weight in its determination of which price level to select.

On the other hand, many commenters urged upper tier prices, stressing the need for substantial incentives. While many among this group did not specifically object to market prices, implying rather that upper tier prices would be sufficient, some commenters did object to market prices on the grounds of administrative difficulties. Principally, they argued that the creation of a third class of crude oil would make an already complex system of entitlements more complicated. However, such objections were lacking in specificity. Finally, some were concerned that market level prices would exert an undue downward pressure upon crude oil in the other tiers and thus be counterproductive. This concern was shared by some of those who favored market prices, in that their support for such prices was conditioned upon removing tertiary crude oil from the composite price computation.

In determining whether to adopt the market price as proposed or the upper tier alternative, the FEA will take into consideration a number of factors. First, it will attempt to determine, at least in general terms, the amount of crude oil which would be elicited from each approach. Obviously, upper tier prices will not provide any additional incentive for tertiary recovery on properties which are presently producing all upper tier oil. They may provide sufficient incentive for such techniques on properties producing lower tier oil, although market prices may produce an incentive for even greater recovery. *Comment No. 18.* The FEA therefore requests that producers provide their best estimates of their probable responses to each alternative, including the extent to which additional production would otherwise be lower tier oil and the extent to which it would otherwise be upper tier oil. The FEA seeks specific quantification, to the extent possible. In making these estimates, producers should take into account the effects of recent developments, such as the redefinition of the term "property" (41 FR 36172, August 26, 1976) and modification of criteria for determining whether a property qualifies as "stripper well property" (41 FR 48319, November 3, 1976), which may have the effect of increasing permissible prices of crude oil which would formerly have been considered "old" or "lower tier" crude oil.

To the extent that prices for crude oil produced from a property which is a candidate for a tertiary enhanced recovery project would no longer be affected by one or the other of the alternatives discussed herein because of these other developments, producers' estimates of production response to the applicable price incentive alternative discussed herein should be reduced.

The FEA recognizes that the Lewin study indicated, under the assumptions and conditions there stated, that more additional crude oil can be elicited at market prices than at upper tier prices. It also recognizes that many commenters believed the analysis of the production response to upper tier prices (as opposed to market prices) to be somewhat overly optimistic. It is largely on the strength of these observations, confirmed by many comments, that the FEA has proposed market prices. However, the FEA desires as much detail from producers as possible in order to check these conclusions against the current situation and to balance them against the possible disadvantages of a market price.

Second, the FEA will attempt to determine the impact of the two alternatives upon the composite price, and hence the impact upon permissible prices for other domestic crude oil. For this purpose as well the above production response data are requested, together with an estimate of the years in which the increased production will occur. As previously indicated in section III., the FEA currently estimates that the impact of a market price for tertiary crude oil upon the composite price would be as follows:

	Percent
1976	0
1977	.3
1978	.9
1979	1.2

However, the FEA wishes to test the validity of these data against producer estimates of how much increased production can be expected and whence (lower or upper tier) it would come.

Commenters are asked to bear in mind that the actual incentive price of tertiary crude oil, whether it be upper tier or market, must be included in the computation of the actual weighted average price of all domestic crude oil. The FEA does not have authority, under present law, to disregard the actual price of tertiary crude oil or to use an imputed value for such crude oil in making its composite price determinations.

Third, the FEA will consider the administrative difficulties involved in each approach. *Comment No. 19.* Commenters are requested to detail their concerns arising out of the implications for the entitlements program and any other problems of administration which they foresee with respect to each alternative. They are also requested to assess whether these concerns are of such magnitude that they would deter implementation of tertiary enhanced recovery projects or otherwise outweigh the benefits of the particular alternative considered. However, FEA does not presently believe that using market prices will present any new or different problems with respect to the entitlements program, since the recent exemption of stripper well crude oil has already necessitated the adoption of similar adjustments to the entitlements program to account for domestic crude oil permitted to be sold at market prices. See 41 FR 37599 (September 7, 1976) (proposal to implement stripper well oil exemption), and 41 FR 48319 (November 3, 1976) (final action implementing exemption). Similar adjustments have also been required for Naval Petroleum Reserves crude oil.

One alternative which the FEA has considered, but has tentatively decided against, is a "ratemaking" approach, i.e., an approach in which the FEA would specially set prices for crude oil derived from a qualifying project based upon its assessment of what would constitute a "reasonable rate of return" on investment in the tertiary recovery project. In theory, such an approach has some considerable appeal, but in practice it appears to the FEA to present unacceptable difficulties.

In theory, a ratemaking approach would permit the FEA to finely tune permissible prices to the economics involved, such that sufficient incentives are given but unjustified windfalls are prevented. However, the practical difficulties are many and significant. First, setting the price would require detailed and time-consuming proceedings, as a result of which many possible projects would likely encounter significant delays in the FEA. While it is true that the FEA may be engaging essentially in a "rate of return" analysis, for purposes of determining whether a project involving a "second category" tertiary enhanced recovery technique would be economical without the incentive, such an analysis would be required only for such "second category" techniques; and even as to such techniques the need for this analysis could be limited to those cases in which the producer seeks more than an upper tier price if the alternative discussed in section V.A.1.c. is adopted. Under that alternative, the implementation of a project involving a "second category" technique would automatically entitle incremental crude oil to receive upper tier prices, and only if market prices were sought would an economic analysis be required. Thus, under the proposed approach only a selected few cases would require this sort of analysis. Moreover, the need for detailed examination of every element of the calculation, not only of the "rate base" but also of the projected return, should not be as great under an approach in which the analysis is used as a check against meritless cases, in contrast to an approach in which the FEA would then be required to establish a specific return and determine how it would be realized.

Second, as history with ratemaking proceedings seems to establish, such proceedings are never really finished. Since an established price would necessarily be based upon estimates of future production, and other estimates and assumptions which may not be realized or may be exceeded, there would be constant (and often legitimate) pressure to increase or decrease prices which have been set. Thus, setting prices in this fashion would likely involve unacceptable consumption of time and undesirable delay. It would also tend to increase producer uncertainty and promote a "wait-and-see" attitude concerning even meritorious projects, or it may promote halting and piece-meal project implementation. In contrast, under the proposed approach a producer would have to accept a substantial portion of the risks, but should be encouraged to do so by reasonable assurance that increased prices within the broad general constraints of the upper tier or market limits will not be dependent upon prior administrative approval.

There are other considerations against adopting the ratemaking approach, such as the compliance and entitlement program difficulties which may be increased under a system in which there is a proliferation of lawful crude oil price "ceilings." For all of these reasons the FEA has preliminarily determined that this approach should not be pursued.

Comment No. 20. The FEA recognizes that to forego a strict rate of return approach for determining permissible prices may be to encourage the application of "second category" techniques at the expense of "first category" techniques, since under a single incentive price there would be a greater return from projects which are only marginally uneconomic under present conditions than from those projects which are clearly uneconomic because of their higher costs. However, the probability of this occurrence should be reduced to the extent that "first category" techniques promise greater additional crude oil recovery. In any event, on a preliminary basis it does not appear to FEA that the need to avoid these situations is sufficient to outweigh the practical disadvantages of adopting a rate of return approach. However, commenters are invited to provide their views as to whether the provision of a single incentive price applicable to all projects would cause producers to apply inefficient methods, and if so whether the magnitude of this effect would be sufficient to warrant the approach of setting a specific incentive price for each project.

D. EVENTS OCCURRING AFTER PROJECT IMPLEMENTATION—EFFECT OF PRIOR CERTIFICATION OF A PROJECT

As proposed, a "final" certification once given to a project would be subject, nevertheless, to certain express and implied continuing conditions. This would be true both for FEA certification that a particular project involving application of a "second category" tertiary recovery technique is a qualifying "bona fide tertiary enhanced recovery project," and also for the certification, required for all projects involving either first or second category techniques, of the amount of tertiary crude oil which may receive the incentive price.

Both the determination that a "second category" technique qualifies and the determination of the amount of incremental crude oil resulting from an eligible project would be expressly conditioned upon the producer's implementing the project, and continuing to implement the project, at the times and to the extent represented in its requests for certification. Such representations would be deemed to be incorporated in the certification, unless the certification expressly sets forth different conditions.

If a producer is found not to have adhered to such representations or express conditions, the certification would be subject to retroactive revocation or modification, as the FEA may determine to be appropriate. In addition, a project involving a "first category" technique must in fact meet the applicable requirements concerning the extent to which the processes or materials must be applied in order to qualify automatically, or be subject to retroactive disallowance of the incentive price. These conditions would be in addition to the condition that such certifications may be revoked or modified retroactively, if the producer is determined not to have sought certification in good faith, or not to have pursued the project in good faith. Moreover, a certification would be revocable or modifiable retroactively for any material error of which the producer knew or should have known, or which it caused. Any such revocation or modification would make a producer subject to appropriate remedial orders.

The above conditions are believed to be necessary because the certifications provided for under the proposed approach will of necessity be based not upon accomplished and verifiable facts, but rather upon the intentions of the producers. Since the producer is in the best position both to know what will be required and to control project implementation, it seems reasonable to require adherence to the material representations made by the producer in seeking certification as a condition to receiving the incentive price. These considerations are relevant even though the incentive price would apply only to incremental crude oil resulting from a particular project. The determination of the amount of incremental crude oil depends substantially upon the determination of what the actual production decline curve would have been in the absence of the project. Thus, in theory at least, the extent to which a producer receives the incentive price would directly depend upon the amount of production in excess of this curve, and the amount of such incremental production would in turn be directly dependent upon the extent to which the producer continues to apply the tertiary recovery processes. In this sense, there would be a continuing natural incentive for the producer to proceed diligently with the project after certification. Nevertheless, the projection of a production decline curve is only an estimate which could be erroneous. Thus, it conceivably could happen that a producer could receive the incentive price for a substantial quantity of crude oil without applying substantial efforts at tertiary recovery, primarily because of an overly pessimistic production decline projection. Hence, the condition that the producer actually proceed in accordance with its representations as to its proposed tertiary recovery activities.

The FEA recognizes that the above proposed requirements could create anomalous situations in which a producer might be induced to continue economically unsound actions with respect to projects that do not prove to be successful, in order to avoid the risk of revocation, unless there are means for effecting a rational adjustment. Of course, modification short of revocation may be appropriate in proper cases, and prospective pricing adjustments to remedy any past omissions might also be appropriate in some cases.

Comment No. 21. The FEA is concerned to avoid these anomalous situations, and also to avoid imposing unrealistic conditions upon producers, while at the same time meeting the objective of preventing unwarranted and unintended windfalls as a result of substantial miscalculation. Therefore, it requests comments and suggestions regarding alternative means of accomplishing these purposes.

It should be noted that nothing in the proposed regulations would prevent a producer from seeking recertificaton based upon the then known circumstances, and this is an obvious possible route to take. However, it would entail additional time and possible production delay, and could in practice amount to a series of "inverse" rate proceedings in which eligible quantities rather than prices are adjusted. Or it may be possible to adopt, either in the regulations or in the certifications or in both, a minimum level of proposed actions (a "flexibility factor") below which a producer could not go without seeking recertification. Another possibility is to make the failure to adhere to representations prima facie grounds for total prospective disallowance of the incentive price, subject to the producer's ability to show why no or a lesser disallowance is justified, and without prejudice to retroactive disallowance in the event the FEA determines that the producer has not proceeded in good faith.

The FEA recognizes the complexity of these considerations, and of the procedural issues they present, and requests the assistance of commenters in seeking to resolve them in the most productive manner.

Comment No. 22. In connection with the foregoing, the FEA also solicits comments as to the appropriate role to be played by the initial certifying authorities in monitoring post-certification actions of the producers, and in making any required post-certification determinations and adjustments.

It should also be noted that receipt of a certification cannot be construed as vesting in the recipient an unqualified right to receive a particular incentive price, even if nothing in the producer's conduct or circumstances amounts to "cause" (in the above-discussed senses) for revocation or modification. The price for tertiary crude oil, like that of other domestic crude oil which is not exempt from price controls, remains in principle subject to alteration, in order to effect compliance with the pricing requirements of the EPCA and other legislation, current or future. The FEA fully intends to preserve the incentive intact to the extent it feasibly can do so without jeopardizing the fundamental goals of national energy policy and the requirements of law; but under present law it cannot provide absolute assurance against any changes in the incentive regardless of future circumstances.

E. APPLICABILITY OF THE INCENTIVE TO EXISTING PROJECTS

Generally, the incentive is proposed to be made applicable only to projects which are initiated after the effective date of the proposed amendments (i.e., after the date of issuance of the amendments as a final rulemaking), and after receipt of the various required certifications discussed in the preceding sections. It would also be applicable to expansions of existing projects, if such expansions are undertaken after the effective date of the proposed amendments and after receipt of the required certifications. However, an existing project may be certified prospectively if: (1) It would be abandoned in the absence of the incentive; (2) because of a material and not reasonably foreseeable changes of objective circumstances; and (3) viewed prospectively under the facts and circumstances existing at the time certification is sought, it is eligible for certification under the criteria applicable to new projects. An existing project which is applying a first category technique would be required to obtain FEA certification as if it were a second category project. For these purposes, a project (or expansion) would be considered initiated at the time of the first expenditure or binding obligation for capital necessary to implement the project (or expansion).

There are a number of existing enhanced recovery projects which involve the application of techniques meeting the definitions discussed in section V.A.1.a. The FEA does not propose to consider such projects to be qualifying projects, except as discussed above, essentially for the reason that their very existence implies that they have been considered feasible in the absence of the incentive by the producers who have invested in them. The producers may have invested in these projects for a variety of reasons, sufficient in their minds to justify the project. To the extent that the expectations and assumptions upon which these decisions were based have generally been realized, the FEA believes that there should be no need to provide additional incentives. If, however, there has been a material and not reasonably foreseeable change of circumstances such that the producer would be forced to abandon the project, then provision of the incentive would be appropriate if the project would otherwise qualify for certification.

Comment No. 23. The FEA requests commenters' views on the foregoing limitations regarding existing projects, with particular reference to producer claims of intended abandonment and the requirement for "changed circumstances." The FEA recognizes that the objective of increasing total domestic crude oil production would be furthered by preventing producer abandonment of existing projects prior to exhausting production therefrom, and that provision of the incentive may help to prevent or delay such abandonment. It may also be argued that only those projects whose continuation is sensible and meritorious would be permitted to receive the incentive, since they would have to qualify on a prospective basis for certification, and that a "changed circumstances" requirement is therefore unnecessary. However, the "changed circumstances" requirement is intended to take account of two matters. First, it is intended to prevent the FEA from having to rely exclusively on producer claims of intended abandonment, and to require producers to justify their position with reference to reasonably objective and demonstrable facts. Second, it is intended to recognize that a producer who has already "sunk" substantial investment costs in a project is in a different economic position than one who has yet to decide whether to incur such costs, and to prevent use of the incentive simply to recover such sunk costs. While these considerations may be implicit in determining whether to certify a "second category" technique as being uneconomical in the absence of the incentive, they would not otherwise be considered with respect to "first category" techniques.

It may be, however, that the concerns which have motivated the FEA to propose a "changed circumstances" rule either are not significant or do not justify the time and administrative problems involved in making a "changed circumstances" determination, at least where continuation of the project would otherwise qualify for certification if viewed as a new project. Or there may be other and better methods of meeting these concerns. The FEA solicits comments and suggestions in this regard, and also with respect to whether there is substantial reason to believe that the incentive is necessary for existing projects.

VI. OTHER MATTERS

A. QUALITATIVE ASSESSMENT OF THE ENVIRONMENTAL IMPACTS OF THE PROPOSED AMENDMENTS

The probable impacts on the environment of the proposed amendments have been reviewed, and the FEA has concluded that the short-term effects (within the next six months) of the amendments will not significantly affect the quality of the environment. Within this period the FEA will have completed and made available for public comment an Environmental Impact Statement ("EIS"), which is presently in preparation, concerning any environmental consequences of actions which may be taken to the proposed amendments. FEA will then have an opportunity to incorporate conclusions based upon the EIS into any final regulations or revisions thereof, to account for any changes indicated by environmental considerations, prior to any substantial action being taken pursuant to such regulations.

The potential long-term effect of the proposed amendments will be increased prices for certain crude oil, a possible related slight decrease in consumption of crude oil and derivative products, and more extensive and intensive application of the techniques described in section V.A.1.a. to properties which will already have been in production (through primary and secondary means) prior to the implementation of tertiary techniques in response to the incentive provided herein. The latter effect may in turn involve the increased consumption of some chemicals, such as carbon dioxide, surfactants, and the like, which may be discharged into the environment; possible increased demands on resources such as water; and possible increase in emissions from power sources.

However, these will be realized in significant or measurable degree, if at all, only after a substantial period of time from the date of this proposal. As noted in the preceding sections, the lead times required to plan a project, accumulate capital, and commence application is substantial, amounting to from one to three years. As the notice commencing the third stage EPCA proceedings noted, even the more readily available techniques are not put into operation immediately, but require as much as one year in determining technical feasibility and parameters. It is possible that expansion of an existing project might be accomplished in less time, but this can be attributed to the proposed incentive only when done pursuant to certification as provided in the proposed regulations, and such certification would not occur until several months after the regulations become final. Accordingly, the FEA has determined that there will be no measurable short-term environmental impacts as a result of the proposed amendments, and that the final regulations will reflect or be amended to reflect any necessary changes dictated by environmental considerations prior to any substantial action having been taken pursuant thereto.

Pursuant to section 7(c)(2) of the Federal Energy Administration Act of 1974, Pub. L. 93-275, a copy of this proposed rulemaking has been submitted to the Administrator of the Environmental Protection Agency ("EPA") for his comments concerning the impact of this proposal on the quality of the environment. EPA comments have been received. In a letter to the Federal Energy Administration on December 2, 1976, EPA stated:

> [T]he Environmental Protection Agency has reviewed the Federal Energy Administration's draft notice of proposed rulemaking setting forth revisions to 10 CFR Part 212 "Additional Price Incentives for Tertiary Enhanced Recovery Techniques." The rulemaking revisions propose measures which will encourage the use of tertiary recovery techniques to increase domestic oil production. Waste streams from these techniques have the potential to cause significant environmental degradation unless innovative control technology or closed systems are incorporated into facility designs. In addition, if the use of tertiary recovery results in any discharge of pollutants to the waters of the United States, a National Pollutant Discharge Elimination System permit will be required for such discharge under the provisions of Section 402 of the Federal Water Pollution Control Act of 1972. We encourage FEA to address these concerns in the context of both the public hearing and final rulemaking on this proposal.

The FEA invites relevant observations or comments upon the matters noted in the foregoing EPA comments. Commenters should also be cognizant of the fact that the EPA is presently engaged in a rulemaking proceeding under the Safe Drinking Water Act, Pub. L. 93-523, directed toward eventual implementation of a permit system for certain underground injection activities. See 41 FR 36730, August 31, 1976.

B. CONFORMING AMENDMENTS

If the proposed amendments are adopted, the FEA intends to adopt necessary collateral amendments to the Mandatory Petroleum Allocation and Price Regulations to reflect the amendments proposed today, such as the entitlements provisions and the producer certification (of sales to purchasers) provisions. These conforming amendments are not set forth verbatim herein, as the FEA believes they will be of a relatively ministerial nature. The FEA understands that the necessity to alter the entitlements provisions has been one of the reasons assigned for opposing the market price approach to the incentive, but it does not understand such opposition to be directed at the formal aspects of adapting the entitlements provisions. The conforming amendments would largely parallel those proposed to be accomplished with respect to stripper well crude oil (41 FR 37599, September 7, 1976).

C. DRAFTING CONSIDERATIONS

Appended to this Notice are proposed regulations intended to implement the matters proposed by the FEA and discussed herein. They are complex in structure, but are intended to reflect FEA proposals on the wide variety of issues discussed in section V. In view of their complexity, however, they may have unintended consequences in application which potentially affected persons may be able more readily to ascertain. Therefore, the FEA urges close scrutiny of the proposed regulations. FEA would welcome identification of any potential problems, and suggestions as to how they may be avoided, as well as suggestions concerning ways in which the proposed regulations can be simplified.

VII. WRITTEN COMMENT PROCEDURES

Interested persons are invited to participate in this rulemaking by submitting data, views or arguments with respect to the proposals set forth in this notice to Executive Communications, Room 3309, Federal Energy Administration, Box JV, Washington, D.C. 20461.

Comments should be identified on the outside envelope and on documents submitted to FEA Executive Communications with the designation "Additional Price Incentives for Tertiary Enhanced Recovery Techniques; Findings Concerning Adjustments to the Composite Price for Domestic Crude Oil as a Production Incentive." Fifteen copies should be submitted. All comments received by Tuesday, March 1, 1977, before 4:30 p.m. will be considered by the Federal Energy Administration before final action is taken on the proposed regulations.

Any information or data considered by the person furnishing it to be confidential must be so identified and submitted in writing, one copy only. The FEA reserves the right to determine the confidential status of the information or data and to treat it according to that determination.

VIII. PUBLIC HEARINGS

FEA has determined that in addition to holding a public hearing in this proceeding in Washington, D.C., public hearings will also be held in FEA Regions VI (Dallas, Texas) and IX (San Francisco, California).

1. *National Hearings.* The Washington, D.C. hearing (the "National hearing") will be held beginning at 9:30 a.m. on Thursday, March 3, 1977 and continued, if necessary, on Friday, March 4, 1977, in Room 2105, 2000 M Street, NW., Washington, D.C. 20461, in order to receive comments from interested persons on the matters set forth herein. Any person who has an interest in the proposed amendments issued today, or who is a representative of a group of class of persons that has an interest in today's proposed amendments may make a written request for an opportunity to make oral presentation. Such a request should be directed to Executive Communications, FEA, and must be received before 4:30 p.m. on Tuesday, February 15, 1977. Such a request may be hand delivered to Room 3309, Federal Building, 12th and Pennsylvania Avenue, NW., Washington, D.C., between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. Requests should be submitted in accordance with the "Request Procedures" set forth below.

2. *Regional Hearings.* The San Francisco regional hearing will be held at 9:30 a.m., Thursday, February 24, 1977, at the location specified below, and will be continued, if necessary, on Friday, February 25, at the same location. The Dallas regional hearing will be held at 9:30 a.m., Monday, February 28, 1977, at the location specified below, and will be continued, if necessary, on Tuesday, March 1, 1977 at the same location. Any person who has an interest in the proposed amendments issued today or who is a representative of a group or class of persons that has an interest in the proposed amendments issued today may make a written request for an opportunity to make an oral presentation. Such a request should be directed to FEA at the address given below for the appropriate Region, and in accordance with the "Request Procedures" set forth below. Requests must be received before 4:30 p.m. on Monday, February 7, 1977.

Region	Submit requests to testify to—	Hearing location
VI. Dallas, Tex.	FEA, Attention: Mr. Gary Andrews, 2626 West Mockingbird Lane, Dallas, Tex. 75235.	Executive Inn, Jubilee Room, 3232 West Mockingbird Lane, Dallas, Tex.
IX. San Francisco, Calif.	FEA Regional Administrator, Attention: R. Laffel, External Affairs Division, 111 Pine St., San Francisco, Calif. 94111.	Tishman Bldg., Room 2575, 525 Market St., San Francisco, Calif.

3. *Request procedures.* The following request procedures are applicable to both the National and Regional Hearings. Persons requesting an opportunity to make an oral presentation should submit their written requests to the appropriate address for the region in which they wish to appear. Requests should be labeled both on the document and on the envelope "Additional Price Incentives for Tertiary Enhanced Recovery Techniques; Findings Concerning Adjustments to the Composite Price for Domestic Crude Oil as a Production Incentive."

The person making the request should be prepared to describe the interest concerned, if appropriate, to state why he is proper representative of a group or class of persons that has such an interest, and to give a concise summary of the proposed oral presentation and a phone number where he may be contacted through Thursday, February 17, 1977. Each person selected to be heard will be so notified by the FEA before 4:30 p.m., Thursday, February 17, 1977 and must, if feasible, submit 100 copies of his statement to Regulations Management, FEA, Room 2214, 2000 M Street, N.W., Washington, D.C. 20461, before 9:00 a.m. on Wednesday, March 2, 1977, for the National hearing, and to the location of the hearing on the day the statement is scheduled to be presented, for the Regional hearings.

4. *Hearing procedures.* The FEA reserves the right to select the persons to be heard at these hearings, to schedule their respective presentations, and to establish the procedures governing the conduct of the hearings. The length of each presentation may be limited, based on the number of persons requesting to be heard.

An FEA official will be designated to preside at the hearings. These will not be judicial or evidentiary-type hearings. Questions may be asked only by those conducting the hearings, and there will be no cross-examination of persons presenting statements. Any decision made by the FEA with respect to the subject matter of the hearings will be based on all information available to the FEA. At the conclusion of all initial oral statements, each person who has made an oral statement will be given the opportunity, if he so desires, to make a rebuttal statement. The rebuttal statements will be given in the order in which the initial statements were made and will be subject to time limitations.

Any person who wishes to ask a question at the National or Regional hearings may submit the question, in writing, to the presiding officer. The presiding officer, will determine whether the question is relevant, and whether the time limitations permit it to be presented for answer.

Any further procedural rules needed for the proper conduct of the hearings will be announced by the presiding officer.

A transcript of the hearings will be made and the entire record of the hearings, including the transcript, will be retained by the FEA and made available for inspection at the Freedom of Information Office, Room 2107, Federal Building, 12th and Pennsylvania Avenue, NW, Washington, D.C., between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. Any person may purchase a copy of the transcript from the reporter.

Emergency Petroleum Allocation Act of 1973, Pub. L. 93-159, as amended, Pub. L. 93-511, Pub. L. 94-99, Pub. L. 94-133 and Pub. L. 94-163, and Pub. L. 94-385; Federal Energy Administration Act of 1974, Pub. L. 93-275, as amended, Pub. L. 94-385; Energy Policy and Conservation Act Pub. L. 94-163, as amended, Pub. L. 94-385; E.O. 11790, 39 FR 23185.)

The Federal Energy Administration has determined that this document does not contain a major proposal requiring preparation of an Inflation Impact Statement under Executive Order 11821 and OMB Circular A-107.

In consideration of the foregoing, it is proposed to amend Part 212 of Chapter II, Title 10, Code of Federal Regulations as set forth above.

Issued in Washington, D.C., January 6, 1977.

MICHAEL F. BUTLER,
General Counsel,
Federal Energy Administration.

1. Section 212.73 is amended in paragraph (a) to read as follows:

§ 212.73 Lower tier ceiling price rule.

(a) *Rule.* Except as provided in § 212.74 with respect to new crude oil; except as provided in Subpart C of this part for exempt items; except as provided in § 212.75 for incremental crude oil resulting from the implementation of a qualified tertiary enhanced recovery project; and except as provided in § 212.76 for certain crude oil produced from unitized properties, no producer may charge a price higher than the lower tier ceiling price for any first sale of domestic crude oil.

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§§ 212.75–212.77 renumbered as 212.76–212.78.

2. Sections 212.75, 212.76 and 212.77, are renumbered §§ 212.76, 212.77 and 212.78, respectively.

3. A new § 212.75 is adopted, to read as follows:

§ 212.75 Incremental crude oil resulting from the implementation of a qualified tertiary enhanced recovery project.

(a) *Rule.* (1) Notwithstanding the provisions of § 212.73(a), and subject to the procedures and limitations hereinafter provided in this § 212.75, first sales of incremental crude oil resulting from the implementation or expansion of a qualified tertiary enhanced recovery project are exempt from the ceiling price limitations of this subpart.

(2) No domestic crude oil shall be eligible for pricing in accordance with paragraph (a)(1) of this section, unless the producer has obtained the required certifications pursuant to paragraph (d) of this section, and unless such oil is sold in accordance with the determinations and conditions of such certifications.

(b) *Applicability of rule to existing tertiary enhanced recovery projects.* (1) Except as provided in subparagraph (2) of this paragraph (b), only crude oil which is produced from a qualified tertiary enhanced recovery project initiated after the effective date of this section and after receipt of the required certifications, or crude oil produced from a qualified expansion, initiated after the effective date of this section and after receipt of the required certifications, of a previously existing tertiary enhanced recovery project, may qualify for pricing in accordance with paragraph (a) of this section. For purposes of this paragraph (b), a project or expansion is initiated at the time of the first expenditure or incurrence of a binding obligation for capital necessary for the project or expansion.

(2) Incremental crude oil produced from a project, or expansion thereof, which was initiated prior to the effective date of this section or prior to receipt of the required certifications, may qualify for pricing in accordance with paragraph (a) of this section only if:

(i) The producer affirms that he intends to abandon the project in the absence of permission to price production therefrom in accordance with paragraph (a) of this section;

(ii) There has been a material and not reasonably foreseeable change of circumstances since the time that the project or expansion was initiated; and

(iii) The project is certified under the criteria and pursuant to the procedures provided in paragraph (d) of this section. For purposes of determining eligibility for certification, an existing project shall be examined prospectively, on the basis of the circumstances existing at the time such certification is sought. Notwithstanding any other provision of this section, an existing project must be certified as being uneconomical under the otherwise applicable price ceiling, and as otherwise qualifying as a tertiary enhanced recovery project, whether or not such certification would have been required at the time the project (or expansion) was initiated.

(c) *Definitions.* For purposes of this section:

A "qualified tertiary enhanced recovery project" is a project for the enhanced recovery of crude oil, to the extent that such project involves the application of one or more of the following techniques (provided, that the expansion of a project existing on the effective date of this section and already applying one of these techniques shall be considered a bona fide tertiary enhanced recovery project only if such expansion is certified pursuant to paragraph (d) of this section as being uneconomical under the otherwise applicable ceiling price and as otherwise qualifying):

(1) Miscible fluid displacement, i.e., an oil displacement process in which gas or alcohol is injected into an oil reservoir, at pressure levels such that the injected gas or alcohol and reservoir oil are miscible. The process may include the concurrent, alternating, or subsequent injection of water. The injected gas may be natural gas, enriched natural gas, a liquefied petroleum gas slug driven by natural gas, or carbon dioxide. However, if the injected fluid is less than 25 percent of the reservoir pore volume being served by the injection well or wells (in the case of gas injection), or is less than 10 percent of the reservoir pore volume being served by the injection well or wells (in the case of alcohol injection), such technique shall be considered a "qualified tertiary enhanced recovery project" only if certified pursuant to paragraph (d) of this section as being uneconomical under the otherwise applicable price ceiling and as otherwise qualifying as a tertiary enhanced recovery project. Gas cycling, i.e., gas injection into gas condensate reservoirs, is not a miscible fluid displacement technique within the meaning of this section.

(2) Steam drive injection, i.e., the continuous injection of at least 50 percent quality steam into one set of wells (injection wells) to effect oil displacement toward and production from a second set of wells (production wells).

(3) Microemulsion, or micellar/emulsion, flooding, i.e., an augmented waterflooding technique in which a surfactant system is injected in order to enhance oil displacement toward producing wells. A surfactant system normally includes a surfactant, hydrocarbon, consurfactant, an electrolyte and water, and polymers for mobility control. If the size of the micellar slug (not including the polymers) is less than 10 percent of the reservoir pore volume being served by the injection well or wells, this technique shall be considered a "qualified tertiary enhanced recovery project" only if certified pursuant to paragraph (d) of this section as being uneconomical under the otherwise applicable price ceiling and as otherwise qualifying as a tertiary enhanced recovery project.

(4) In situ combusion, i.e., combustion of oil in the reservoir, sustained by continuous air injection, to displace unburned oil toward producing wells. If such combustion is not to be continued until at least 15 percent of the reservoir volume being served by the injection well or wells has been burned, such technique shall be considered a "qualified tertiary enhanced recovery project" only if certified pursuant to paragraph (d) of this section as being uneconomical under the otherwise applicable price ceiling and as otherwise qualifying as a tertiary enhanced recovery technique.

(5) If certified pursuant to paragraph (d) of this section as being uneconomical at the otherwise applicable price ceiling and as otherwise qualifying, polymer augmented waterflooding, i.e., augmented waterflooding in which organic polymers are injected with the water to improve areal and vertical sweep efficiency.

(6) If certified pursuant to paragraph (d) of this section as being uneconomi-

cal under the otherwise applicable price ceiling and as otherwise qualifying, cyclic steam injection, i.e., the alternating injection of steam and production of oil with condensed steam from the same well.

(7) If certified pursuant to paragraph (d) of this section as being uneconomical under the otherwise applicable price ceiling and as otherwise qualifying, alkaline (or "caustic") flooding, i.e., an augmented waterflooding technique in which the water is made chemically basic as a result of the addition of alkali metals.

(8) If certified pursuant to paragraph (d) of this section as being uneconomical under the otherwise applicable price ceiling and as otherwise qualifying, carbon dioxide augmented waterflooding, i.e., injection of carbonated water, or water and carbon dioxide, to increase waterflood efficiency.

(9) If certified pursuant to paragraph (d) of this section as being uneconomical under the otherwise applicable price ceiling and as otherwise qualifying, immiscible carbon dioxide displacement, i.e., injection of carbon dioxide into an oil reservoir to effect oil displacement under conditions in which miscibility with reservoir oil is not obtained.

"Certifying authority" means, with respect to certifications concerning the amount of incremental crude oil which will result from implementation of qualified tertiary enhanced recovery project, the federal or state governmental or regulatory body to whom the FEA has delegated responsibility for making the determinations required by paragraph (d) of this section for the property involved, or, in the absence of such delegation, the FEA. With respect to certifications concerning whether a project qualifies as a "qualified tertiary enhanced recovery project," the term means the FEA. The FEA shall in all events have an original power to perform the functions of a certifying authority, notwithstanding any delegation.

"Incremental crude oil" (resulting from the implementation of a qualified tertiary enhanced recovery project) means the amount of crude oil which is or will be produced as a result of the operation of such a project and which is in excess of the amount of crude oil which could have been produced from the property through technically feasible non-tertiary methods. As applied to expansion of existing tertiary enhanced recovery projects, the term means the amount of crude oil which is or will be produced as a result of the expanded project and which is in excess of the amount of crude oil which would have been produced in the absence of such expansion. The actual amount of incremental crude oil shall be determined pursuant to paragraph (d) of this section.

(d) *Certification requirements and procedures*. A producer desiring to initiate a tertiary enhanced recovery project, or to expand an existing project, shall obtain final certification of the amount of incremental and nonincremental crude oil which will result from the implementation of such project, prior to charging any price in excess of the ceiling which would otherwise be applicable to such crude oil under § 212.73(a) or § 212.74(a). In addition, such producer shall obtain certification that the project (or expansion) is a qualified tertiary enhanced recovery project, except to the extent that such certification is not required under paragraph (c) of this section by reason of the technique applied. (However, notwithstanding that such certification is not required by reason of the technique applied, prices in excess of the ceiling price which would be applicable but for this § 212.75 may be disallowed under subparagraph (5)(ii) of this paragraph (d).) The general procedures to be followed in obtaining such certifications, and the limitations and conditions upon any such certifications, are set forth in the ensuing subparagraphs. As used herein, the term "certifying authority" shall signify the authority determined to be appropriate for the particular certification being sought, as provided in paragraph (c) of this section.

(1) The producer shall submit an application for certification to the certifying authority. The producer shall have the burden of establishing entitlement to certification, and shall submit all data, required by these regulations or guidelines issued pursuant thereto or reasonably demanded by the certifying authority, necessary to enable the certifying authority to determine whether it can make the findings and certifications required by subparagraph (2) of this paragraph.

(2) (i) The certifying authority shall determine whether any and how much crude oil qualifies for pricing in accordance with paragraph (a) of this section. In making such determination, the certifying authority shall apply the criteria set forth in subparagraph (2)(ii) of this paragraph and any guidelines issued pursuant to paragraph (e) of this section. The certifying authority shall exercise its independent judgment, and may refuse certification or grant certification in whole or in part. It shall base its decision upon the data submitted to it by the producer, but in determining whether to deny certification or to limit certification to an amount less than that requested by the producer may rely upon any other reliable information available to it and made known to the producer.

(ii) In determining whether and to what extent to certify a project, the certifying authority shall determine: (A) Whether the project or expansion thereof qualifies as a qualified tertiary enhanced recovery project within the meaning of paragraph (c) of this section; and (B) the estimated amount of incremental and non-incremental crude oil (as defined in paragraph (c) of this section) which will result from such project or expansion. The amount of incremental and non-incremental crude oil shall be expressed in terms of both the total amount of incremental and non-incremental recovery over the life of the project and as a series of time-phased (per month or quarter) incremental and non-incremental production estimates, commencing with the time that the project is estimated to begin producing incremental crude oil. The certifying authority shall not certify a project as a qualified tertiary enhanced recovery project unless it is determined that: (*1*) Under all the circumstances, the producer could not reasonably be expected to undertake (or expand) the project in the absence of an ability to charge prices for the expected incremental crude oil in accordance with pargaraph (a) of this section, because the project would not be economical under the otherwise applicable ceiling price; and (*2*) the project (or expansion) is estimated to result in a recovery of incremental crude oil in an amount of at least 5 percent of the original crude oil in place.

(3) If the certifying authority determines to certify the project and an amount of incremental crude oil as above, it shall so provide in writing. Such certification shall specifically include the amount of incremental crude oil, expressed in time-phased increments as provided in subparagraph (2)(ii), of this paragraph, and the amount of non-incremental crude oil which will be produced during the same periods. By separate memorandum, the certifying authority shall concisely recite the data relied upon, the criteria applied, and the reasoning and methodology by which its conclusion was reached. The producer shall thereupon forward to the FEA the certifying authority's determination and certification, its supporting memorandum, and all documents and data submitted by the producer in support of its application as well as any other data relied upon by the certifying authority.

(4) The FEA shall have the plenary power to review the certifying authority's action and to make such modifications or de novo determinations, or to remaind for further consideration, as it determines to be proper on the basis of the record before it or any other information available to it. The FEA shall act upon the matter, if at all, within 60 days of its acknowledgement to the producer of receipt of the materials specified in subparagraph (3) of this paragraph. If the FEA does ont notify the producer in writing of any adverse action within such 60-day period, the producer may treat the certifying authority's certification as final. An "adverse action," within the meaning of the preceding sentence, is any negative determination (including a reduction in amounts or change in timing of incremental oil production), proposed negative determination, any challenge to or question concerning the propriety of the certification or the adequacy of the materials to support such certification, or any demand for additional information. Notwithstanding any of the foregoing, no certification shall be final unless and until all other certifications required under this § 212.75 have been made.

(5) (i) A producer may charge the price permitted for incremental crude oil under paragraph (a) of this section

only after receipt of and strictly in accordance with the terms of a final certification. In particular, the producer may not treat any crude oil as incremental crude oil until the amount of crude oil produced during a particular period exceeds the amount of non-incremental crude oil established for that period in the certification.

(ii) A final certification shall be subject to revocation or modification, at any time and either retroactively or prospectively or both, as and to the extent that the FEA determines to be appropriate: (A) If the producer fails to implement its proposed project at the times and to the full extent specified as the basis upon which such certification was given (and the producer's representations in applying for certification shall be deemed to be the specified basis for certification unless the certifying authority specifies otherwise); or (B) if the producer does not implement the project in good faith; or (C) if certification was given on the basis of a material error of which the producer knew or should have known, or to which the producer contributed. Notwithstanding that a particular project is not required to obtain certification as a qualified tertiary enhanced recovery project under this § 212.75, prices charged under the provisions of paragraph (a) of this section for crude oil from that project may be disallowed, on the same grounds and to the same extent as provided in the preceding sentence, as if such project had been certified on the basis that the producer would meet the applicable quantitative criteria set forth in paragraph (c) of this section for the technique in question and that the producer would otherwise implement the project as described in its application for certification of the amount of incremental crude oil to be derived from such project.

(e) *Additional procedures and criteria.* The FEA may from time to time publish or otherwise make available to certifying authorities, producers and the public, additional procedures to be followed and criteria to be applied in making the determinations provided for in paragraph (d) of this section.

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