

AMENDMENT TO H.R. 3221
OFFERED BY MRS. MALONEY OF NEW YORK

In title VII, in subtitle B, at the end of subchapter
1 of add the following:

1 **SEC. ____ . STUDY OF ACTIONS TO IMPROVE THE ACCURACY**
2 **OF COLLECTION OF FEDERAL OIL, CONDEN-**
3 **SATE, AND NATURAL GAS ROYALTIES; RE-**
4 **VIEW OF ROYALTY PAYMENTS.**

5 (a) STUDY.—The Secretary of the Interior shall seek
6 to enter into an arrangement with the National Academy
7 of Engineering under which the Academy, by not later
8 than six months after the date of the enactment of this
9 Act, shall study and report to the Secretary regarding
10 whether the accuracy of collection of royalties on produc-
11 tion of oil, condensate, and natural gas under leases of
12 Federal lands (in eluding submerged and deep water
13 lands) and Indian lands would be improved by any of the
14 following:

15 (1) Requiring the installation of digital meters,
16 calibrated at least monthly to an absolute zero value,
17 for all lands from which natural gas (including con-
18 densate) is produced under such leases.

19 (2) Requiring that—

1 (A) the size of every orifice plate on each
2 natural gas well operated under such leases be
3 inspected at least quarterly by the Secretary;
4 and

5 (B) chipped orifice plates and wrong-sized
6 orifice plates be replaced immediately after
7 those inspections and reported to the Secretary
8 for retroactive volume measurement corrections
9 and royalty payments with interest of 8 percent
10 compounded monthly.

11 (3) Requiring that any plug valves that are in
12 natural gas gathering lines be removed and replaced
13 with ball valves.

14 (4) Requiring that—

15 (A) all meter runs should be opened for in-
16 spection by the Secretary and the producer at
17 all times; and

18 (B) any welding or closing of the meter
19 runs leading to the orifice plates should be pro-
20 hibited unless authorized by the Secretary.

21 (5) Requiring the installation of straightening
22 vanes approximately 10 feet before natural gas en-
23 ters each orifice meter, including each master meter
24 and each sales meter.

1 (6) Requiring that all master meters be in-
2 spected and the results of such inspections be made
3 available to the Secretary and the producers imme-
4 diately.

5 (7) Requiring that—

6 (A) all sampling of natural gas for heating
7 content analysis be performed monthly up-
8 stream of each natural gas meter, including up-
9 stream of each master meter;

10 (B) records of such sampling and heating
11 content analysis be maintained by the pur-
12 chaser and made available to the Secretary and
13 to the producer monthly;

14 (C) probes for such upstream sampling be
15 installed upstream within three feet of each
16 natural gas meter;

17 (D) any oil and natural gas lease for which
18 heat content analysis is falsified shall be subject
19 to cancellation;

20 (E) natural gas sampling probes be lo-
21 cated—

22 (i) upstream of the natural gas meter
23 at all times;

24 (ii) within a few feet of the natural
25 gas meter; and

1 (iii) after the natural gas goes
2 through a Welker or Y-Z vanishing cham-
3 ber; and

4 (F) temperature probes and testing probes
5 be located between the natural gas sampling
6 probe and the orifice of the natural gas meter.

7 (8)(A) Reinstating the requirement to file Fed-
8 eral Energy Regulatory Commission (FERC) Form
9 16 in April and September of each year for every
10 natural gas pipeline, including each intrastate pipe-
11 lines, in addition to the filing of FERC Form 2.

12 (B) Requiring—

13 (i) use of such FERC Form 2 to create
14 FERC Form 16 data for the years beginning
15 April and September, respectively, 1992, and
16 for each year thereafter; and

17 (ii) filing with the Federal Energy Regu-
18 latory Commission a FERC Form 16 for April
19 and September that is completed with such
20 data back to April 1992.

21 (9) Requiring that administrative jurisdiction
22 over all natural gas gathering lines, interstate pipe-
23 lines, and intrastate pipelines revert immediately to
24 the Federal Energy Regulatory Commission.

1 (10) Prohibiting the dilution of natural gas
2 with inert nitrogen or inert carbon dioxide gas for
3 royalty determination, sale, or resale at any point.

4 (11) Requiring that both the measurement of
5 the volume of natural gas and the heating content
6 analyses be reported only on the basis of 14.73 PSI
7 and 60 degrees Fahrenheit, regardless of the ele-
8 vation above sea level of such volume measurement
9 and heating content analysis, for both purchases and
10 sales of natural gas.

11 (12) Prohibiting the construction of bypass
12 pipes that go around the natural gas meter, and im-
13 posing criminal penalties for any such construction
14 or subsequent removal including, but not limited to,
15 automatic cancellation of the lease.

16 (13) Requiring that all natural gas sold to con-
17 sumers have a minimum BTU content of 960 at an
18 atmospheric pressure of 14.73 PSI and be at a tem-
19 perature of 60 degrees Fahrenheit, as required by
20 the State of Wyoming Public Utilities Commission.

21 (14) Requiring that all natural gas sold in the
22 USA will be on a MMBTU basis with the BTU con-
23 tent adjusted for elevation above sea level in higher
24 altitudes. Thus all natural gas meters must correct
25 for BTU content in higher elevations (altitudes).

1 (15) Issuance by the Secretary of rules for the
2 measurement at the wellhead of the standard volume
3 of natural gas produced, based on independent in-
4 dustry standards such as those suggested by the
5 American Society of Testing Materials (ASTM).

6 (16) Requiring use of the fundamental orifice
7 meter mass flow equation, as revised in 1990, for
8 calculating the standard volume of natural gas pro-
9 duced.

10 (17) Requiring the use of F_{pv} in standard vol-
11 ume measurement computations as described in the
12 1992 American Gas Association Report No. 8 enti-
13 tled Compressibility Factor of Natural Gas and
14 Other Related Hydrocarbon Gases.

15 (18) Requiring that gathering lines must be
16 constructed so as to have as few angles and turns
17 as possible, with a maximum of three angles, before
18 they connect with the natural gas meter.

19 (19) Requiring that for purposes of reporting
20 the royalty value of natural gas, condensate, oil, and
21 associated natural gases, such royalty value must be
22 based upon the natural gas' condensate's, oil's, and
23 associated natural gases' arm's length, independent
24 market value, as reported in independent, respected
25 market reports such as Platts or Bloomburghs, and

1 not based upon industry controlled posted prices,
2 such as Koch's.

3 (20) Requiring that royalties be paid on all the
4 condensate recovered through purging gathering
5 lines and pipelines with a cone-shaped device to push
6 out condensate (popularly referred to as a pig) and
7 on condensate recovered from separators,
8 dehydrators, and processing plants.

9 (21) Requiring that all royalty deductions for
10 dehydration, treating, natural gas gathering, com-
11 pression, transportation, marketing, removal of im-
12 purities such as carbon dioxide (CO₂), nitrogen (N₂),
13 hydrogen sulphide (H₂S), mercaptain (HS), helium
14 (He), and other similar charges on natural gas, con-
15 densate, and oil produced under such leases that are
16 now in existence be eliminated.

17 (22) Requiring that at all times—

18 (A) the quantity, quality, and value ob-
19 tained for natural gas liquids (condensate) be
20 reported to the Secretary; and

21 (B) such reported value be based on fair
22 independent arm's length market value.

23 (23) Issuance by the Secretary of regulations
24 that prohibit venting or flaring (or both) of natural
25 gas in cases for which technology exists to reason-

1 ably prevent it, strict enforcement of such prohibi-
2 tions, and cancellation of leases for violations.

3 (24) Requiring lessees to pay full royalties on
4 any natural gas that is vented, flared, or otherwise
5 avoidably lost.

6 (25)(A) Requiring payment of royalties on car-
7 bon dioxide at the wellhead used for tertiary oil re-
8 covery from depleted oil fields on the basis of 5 per-
9 cent of the West Texas Intermediate crude oil fair
10 market price to be used for one MCF (1,000 cubic
11 feet) of carbon dioxide gas.

12 (B) Requiring that—

13 (i) carbon dioxide used for edible purposes
14 should be subjected to a royalty per thousand
15 cubic feet (MCF) on the basis of the sales price
16 at the downstream delivery point without de-
17 ducting for removal of impurities, processing,
18 transportation, and marketing costs;

19 (ii) such price to apply with respect to gas-
20 eous forms, liquid forms, and solid (dry ice)
21 forms of carbon dioxide converted to equivalent
22 MCF; and

23 (iii) such royalty to apply with respect to
24 both a direct producer of carbon dioxide and
25 purchases of carbon dioxide from another per-

1 son that is either affiliated or not affiliated with
2 the purchaser.

3 (26) Requiring that—

4 (A) all carbon dioxide produced from Fed-
5 eral and Indian leases be analyzed for carcino-
6 genic benzene; and

7 (B) benzene produced with such carbon di-
8 oxide must be filtered out and removed safely
9 as necessary to prevent harm to the environ-
10 ment subjected to such benzene content, in
11 order to create a maximum permissible level
12 (MPL) of 5 parts per billion.

13 (27) Requiring that—

14 (A) royalties be paid on the fair market
15 value of nitrogen extracted from such leases
16 that is used industrially for well stimulation,
17 helium recovery, or other uses; and

18 (B) royalties be paid on the fair market
19 value of ultimately processed helium recovered
20 from such leases.

21 (28) Allowing only 5 percent of the value of the
22 elemental sulfur recovered during processing of hy-
23 drogen sulfide gas from such leases to be deducted
24 for processing costs in determining royalty pay-
25 ments.

1 (29) Requiring that all heating content analysis
2 of natural gas be conducted to a minimum level of
3 C₁₅.

4 (30) Eliminating artificial conversion from dry
5 BTU to wet BTU, and requiring that natural gas be
6 analyzed and royalties paid for at all times on the
7 basis of dry BTU only.

8 (31) Requiring that natural gas sampling be
9 performed at all times with a floating piston cylinder
10 container at the same pressure intake as the pres-
11 sure of the natural gas gathering line.

12 (32) Requiring use of natural gas filters with a
13 minimum of 10 microns, and preferably 15 microns,
14 both in the intake to natural gas sampling con-
15 tainers and in the exit from the natural gas sam-
16 pling containers into the chromatograph.

17 (33) Mandate the use of a Quad Unit for both
18 portable and stationary chromatographs in order to
19 correct for the presence of nitrogen and oxygen, if
20 any, in certain natural gas streams.

21 (34) Require the calibration of all chro-
22 matograph equipment every three months and the
23 use of only American Gas Association-approved
24 standard comparison containers for such calibration.

1 (35) Requiring that natural gas stored during
2 the summer period and marketed during the winter
3 period—

4 (A) be sold on the basis of the purchase
5 price minus a maximum of \$0.50 per MMBTU
6 storage charges; or

7 (B) be subject to payment of royalties on
8 the basis of winter sales price minus \$0.50 per
9 MMBTU.

10 (36) Requiring payment of royalties on any
11 such natural gas stored on Federal or Indian lands
12 on the basis of corresponding storage charges for the
13 use of Federal or Indian lands, respectively, for such
14 storage service.

15 (37) Imposing penalties for the intentional non-
16 payment of royalties for natural gas liquids recov-
17 ered—

18 (A) from purging of natural gas gathering
19 lines and natural gas pipelines; or

20 (B) from field separators, dehydrators, and
21 processing plants,
22 including cancellation of oil and natural gas leases
23 and criminal penalties.

1 (38) Requiring that the separator, dehydrator,
2 and natural gas meter be located within 100 feet of
3 each natural gas wellhead.

4 (39) Requiring that BTU heating content anal-
5 ysis be performed when the natural gas is at a tem-
6 perature of 140 to 150 degrees Fahrenheit at all
7 times, as required by the American Gas Association
8 (AGA) regulations.

9 (40) Requiring that heating content analysis
10 and volume measurements are identical at the sales
11 point to what they are at the purchase point, after
12 allowing for a small volume for leakage in old pipes,
13 but with no allowance for heating content discrep-
14 ancy.

15 (41) Requiring that all natural gas produced
16 under such leases be at all times sold to public, in-
17 dustrial, storage, and private customers only on a
18 MMBTU basis of MCF (1000 CF) x MBTU (1000
19 BTU).

20 (42) Verification by the Secretary that the spe-
21 cific gravity of natural gas produced under such
22 leases, as measured at the meter run, corresponds to
23 the heating content analysis data for such natural
24 gas, in accordance with the Natural Gas Processors
25 Association Publication 2145-71(1), entitled "Phys-

1 ical Constants Of Paraffin Hydrocarbons And Other
2 Components Of Natural Gas”, and reporting of all
3 discrepancies immediately.

4 (43) Prohibiting all deductions on royalty pay-
5 ments for marketing of natural gas, condensate, and
6 oil by an affiliate or agent.

7 (44) Requiring that all standards of the Amer-
8 ican Petroleum Institute, the American Gas Associa-
9 tion, the Gas Processors Association, and the Amer-
10 ican Society of Testing Materials, Minerals Manage-
11 ment Service Order No. 5, and all other Minerals
12 Management Service orders be faithfully observed
13 and applied, and willful misconduct of such stand-
14 ards and orders be subject to oil and gas lease can-
15 cellation.

16 (45) Requiring that all oil and condensate pro-
17 duced from Federal and Indian lands must be stored
18 and measured in cylindrical tanks, and prohibiting
19 any distortion, such as squeezing or bending of a
20 storage tank, that hinders the true and honest meas-
21 urement of volume of condensate and oil.

22 (b) REVIEW OF ROYALTY PAYMENTS.—The Sec-
23 retary of the Interior, subject to the availability of appro-
24 priations, shall award a contract under which the con-
25 tractor shall—

1 (1) compare royalty payments made under Fed-
2 eral oil and gas lease provisions for covered lands
3 against data supplied to the Federal Energy Regu-
4 latory Commission;

5 (2) make such comparison retroactive to June
6 1, 1974, by integrating existing natural gas analog
7 charts or digital meter results (or both) for each
8 natural gas meter and multiplying the corresponding
9 standard volume results by heating content analysis
10 obtained from corresponding specific gravity meas-
11 urement relationship;

12 (3) determine whether the correct production
13 standard volume and total heating content analysis
14 was used to calculate such payments; and

15 (4) determine whether such payments were ade-
16 quate under the terms of such oil and gas leases, by
17 among other procedures comparing the reported roy-
18 alty values with respected published market price re-
19 ports, such as Platts or Bloomborgs.

20 (c) DEFINITIONS.—In this section:

21 (1) COVERED LANDS.—The term “covered
22 lands” means—

23 (A) all Federal onshore lands and offshore
24 lands that are under the administrative jurisdic-

1 tion of the Department of the Interior for pur-
2 poses of oil and gas leasing; and

3 (B) Indian onshore lands.

4 (2) SECRETARY.—The term “Secretary” means
5 the Secretary of the Interior.