

FRIDAY MORNING SESSION

P R O C E E D I N G S

THE CAUSE AND EFFECT WORKSHOP OF THE NATIONAL COMMISSION ON AIR QUALITY RECONVENED ON FRIDAY, OCTOBER 31, 1980, AND WAS CALLED TO ORDER AT 9:05 O'CLOCK A.M. BY MODERATOR THOMAS JOHNSON

MODERATOR THOMAS JOHNSON: I THINK WE CAN COME TO ORDER. THE FIRST ORDER OF BUSINESS TODAY, DICK WANTS TO MAKE A FEW COMMENTS, GIVE US SOME ADDITIONAL DIRECTIONS AND DISCUSS SOME OTHER MATTERS.

**NATIONAL COMMISSION ON AIR QUALITY
CARBON DIOXIDE WORKSHOP**

DR. RICHARD DENNY: JUST A FIRST POINT ABOUT LOGISTICS. CAROL PORTER IS PREPARING A LITTLE NOTE FOR ALL THOSE PEOPLE GOING BACK TO WASHINGTON ON THE 2:00 O'CLOCK, THE 2:28 EASTERN FLIGHT, ABOUT LOGISTICS.

I THINK IT IS ADDED THAT WE ARE NOT POSED TO GATHER IN THE LOBBY. THE BUS WHICH USES OR THE VAN, WHATEVER, WILL LEAVE AT ABOUT 3:00 OF 3:00, WHICH SHOULD GET US TO THE HOTEL WITH PLENTY OF TIME.

**DON CE SAR HOTEL
ST. PETERSBURG, FLORIDA
OCTOBER 29-31, 1980**

ALL THE OTHER PEOPLE WHO ARE NOT GOING TO WASHINGTON, SEE CAROL ABOUT SPECIFIC ARRANGEMENTS FOR TIMES TO GET THEIR RESPECTIVE FLIGHTS.

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FRIDAY MORNING SESSION YESTERDAY
 I THINK IT IS IMPORTANT TO POINT OUT A COUPLE OF
 FIRST IS THAT THE CARBON DIOXIDE WORKSHOP OF THE
 NATIONAL COMMISSION ON AIR QUALITY RECONVENED ON
 FRIDAY, OCTOBER 31, 1980, AND WAS CALLED TO ORDER
 AT 9:05 O'CLOCK A.M. BY MODERATOR THOMAS JORLING.
 MODERATOR THOMAS JORLING: I THINK
 WE CAN COME TO ORDER. THE FIRST ORDER OF BUSINESS
 TODAY, DICK WANTS TO MAKE A FEW COMMENTS, GIVE US
 SOME ADDITIONAL DIRECTIONS AND DISCUSS SOME OTHER
 MATTERS. ARE CERTAINLY AS COMPLEX AS AND ADDITIONALLY
 CHARGE MR. RICHARDE PENNA: JUST A FIRST
 POINT ABOUT LOGISTICS. CAROL PORTER IS PREPARING
 A LITTLE NOTE FOR ALL THOSE PEOPLE GOING BACK TO
 WASHINGTON ON THE 2:00 O'CLOCK, THE 2:10 EASTERN
 FLIGHT, ABOUT LOGISTICS. THE DISCUSSION THAT WE
 HAVE HEARD ON ALL I THINK IT IS 12:30 THAT WE ARE SUP-
 POSED TO GATHER IN THE LOBBY. THE BUS WILL LEAVE,
 OR THE VAN, WHATEVER, WILL LEAVE AT ABOUT QUARTER
 OF 1:00, WHICH SHOULD GET US TO THE AIRPORT IN
 PLENTY OF TIME. WE FEEL FOR TECHNICAL
 HAS ALSO DEBATE ALL THE OTHER PEOPLE WHO ARE NOT
 GOING TO WASHINGTON, SEE CAROL ABOUT SPECIFIC
 ARRANGEMENTS FOR TIMES TO GET THEIR RESPECTIVE
 FLIGHTS. SENSUS OR NO CONSENSUS, AND

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1 RECOMMENDATIONS BASED ON WHAT WENT ON YESTERDAY, I
2 THINK IT IS IMPORTANT TO POINT OUT A COUPLE THINGS.
3 FIRST IS THAT YESTERDAY'S SESSION, FROM THE STAND-
4 POINT OF THE COMMISSION, WE BELIEVE TO BE AN EXTREMELY
5 EXTREMELY PRODUCTIVE EXERCISE. THAT THERE IS NO
6 CONSENSUS, OUR THE COMMISSION IS CHARGED WITH LOOK-
7 ING AT A SERIES OF RATHER CONTROVERSIAL ISSUES.
8 AND THIS IS CERTAINLY COMPLEX. THE ISSUES THAT WE
9 ARE GOING TO BE DEALING WITH IN SOME GREAT DETAIL
10 -- P.S.D., NONATTAINMENT, MOBILE SOURCES AND THE
11 LIKE -- ARE CERTAINLY AS COMPLEX AS AND AS EMO-
12 TIONALLY CHARGED AND MAY BE OF FAR MORE IMMEDIATE
13 EMOTIONAL CONCERN TO THOSE PARTIES WHO ARE INTER-
14 ESTED IN IT. SO IF WE CAN TODAY, WHAT I WOULD
15 HOPE TO DO IS AND THE COMMISSION MEMBERS ARE GOING
16 TO HAVE TO CONSIDER ALL THE DISCUSSION THAT THEY
17 HAVE HEARD ON ALL THOSE ISSUES IN COMING UP WITH
18 THE FORMULATIONS. WHAT ARE THE ARGUMENTS ON EITHER
19 SIDE OF THE MATTER THIS PANEL, I THINK, HAS DONE A
20 COUPLE OF IMPORTANT THINGS. IT HAS LAID OUT, IT
21 HAS GIVEN US SOME FEEL FOR TECHNICAL ISSUES. IT
22 HAS ALSO DEBATED THE POLICY ISSUES. AND I THINK
23 THAT IS IMPORTANT, BECAUSE OUR COMMISSION MEMBERS
24 ARE GOING TO HAVE TO TAKE WHAT COMES OUT OF THIS,
25 BE IT CONSENSUS OR NO CONSENSUS, AND MAKE

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1 RECOMMENDATIONS TO CONGRESS.

2 OCCURRED. AND TO THE EXTENT THAT THERE IS SOME
3 SORT OF CONSENSUS ON ISSUES, IT MAKES IT A HECK OF
4 A LOT EASIER FOR OUR COMMISSION MEMBERS TO COME UP
5 WITH A POSITION. TO THE EXTENT THAT THERE IS NO
6 CONSENSUS, OUR COMMISSION MEMBERS HAVE GOT TO
7 EVALUATE THAT IN THE PROCESS JUST A COUPLE OF
8 MONTHS FROM NOW WHAT THEY ARE GOING TO RECOMMEND
9 ON THIS PARTICULAR ISSUE.

10 DRAFT DOCUMENT THIS ISSUE, AS I POINTED OUT, IS NO
11 DIFFERENT THAN MANY OTHERS THAT THEY ARE GOING TO
12 BE DEALING WITH WHERE THERE IS SOME WIDE DIVERGENCE
13 OF OPINION.

14 SO IF WE CAN TODAY, WHAT I WOULD
15 HOPE TO DO IS TRY TO REACH WHATEVER CONSENSUS MAY
16 BE POSSIBLE. TO THE EXTENT THAT WE CANNOT REACH
17 CONSENSUS ON VARIOUS ISSUES, WHAT WE WOULD LIKE TO
18 KNOW IS AT LEAST WHAT ARE THE ARGUMENTS ON EITHER
19 SIDE OF THE VARIOUS PROPOSITIONS THAT ARE BEING
20 ESPOUSED. AND IT INCORPORATES SOME

21 SOME OF YOU HAVE I THINK THAT WOULD BE QUITE IMPOR-
22 TANT TO OUR COMMISSION MEMBERS. A FINAL WORD
23 ABOUT A REPORT FROM THIS PANEL, AND THAT IS THAT
24 OTHER WORKSHOPS AND PANELS THAT WE HAVE HAD HAVE
25 PRODUCED REPORTS. AND THE REPORTS HAVE ROUGHLY

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1 BEEN A SUMMARIZATION OF THE DISCUSSION THAT POINT
 2 OCCURRED. AND AGAIN, TO THE EXTENT THAT THERE WAS
 3 ANY AGREEMENT ON A RECOMMENDATION OR CONCLUSION,
 4 THAT HAS BEEN HIGHLIGHTED. AND AGAIN, TO THE OVER
 5 EXTENT THAT THERE WAS A DISAGREEMENT, WE POINTED OUT
 6 WHAT THE ISSUE WAS AND WHAT THE VARIOUS SIDES OF
 7 THE TOPIC WERE. MODERATOR THOMAS MORLING OKAY.
 8 THE LANGUAGE THAT IS WHAT WE ARE INTENDING TO DO
 9 WITH THIS. AND ALL OF YOU WILL GET A COPY OF A
 10 DRAFT DOCUMENT BEFORE IT IS PUT IN FINAL FORM, FOR
 11 COMMENT, REVIEW, AND THE LIKE, JUST AS ALL THE
 12 OTHER PANELS THAT THE COMMISSION HAS HAD. YOU GET
 13 IT, I WILL MAKE WHAT WE WOULD HOPE TO DO THIS MORN-
 14 ING IS TRY TO GO THROUGH SOME LANGUAGE THAT WAS
 15 JOTTED DOWN LAST EVENING, LATE LAST EVENING, AS A
 16 PROPOSAL TO DISCUSS OPENLY THIS MORNING, AND SEE
 17 WHAT WE CAN WORK THROUGH. AN INITIAL COMMENT ABOUT
 18 SOME OMISSIONS. AND THIS IS JUST A VERY SKELETAL
 19 OUTLINE OF, WHERE WE THINK WE MIGHT GO ON SOME OF
 20 THE ISSUES. AND I THINK INCORPORATES SOME LANGUAGE WHICH
 21 SOME OF YOU HAVE BEEN ASKING TO SUBMIT IN THE LAST
 22 DAY. TO BE PUT AND IN WHAT ORDER. AND THAT NEEDS

23 WORK. THE FINAL POINT IS UNFORTUNATELY
 24 THIS MORNING I AM GOING TO HAVE TO DEPART
 25 AROUND 10:00 A.M. CLOCK, BECAUSE OF A CHANGE IN HIS

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1 SCHEDULE AND PLANE SCHEDULES. SO AT THAT POINT I
 2 WILL BE TAKING OVER AS MODERATOR. AND I WILL BEG
 3 YOUR INDULGENCE AT THAT POINT.
 4 SHOT AT THAT.

5 BUT WHY DON'T WE JUST TURN IT OVER
 6 TO TOM NOW AND SEE WHAT WE CAN GET THROUGH IN THE
 7 NEXT HOUR.

8 MODERATOR THOMAS JORLING: OKAY.

9 THE LANGUAGE THAT WE DO HAVE IS SKELETAL, AND IT
 10 REPRESENTS SOME HARD WORK AT A VERY UNLIKELY TIME
 11 FOR WORKING.

12 MODERATOR THOMAS JORLING: THE
 13 SECOND COMMENT IS ON THE INDUSTRIAL REVOLUTION-
 14 INDUSTRY INNOVATION AREA THAT I'VE HAD WRITTEN UP A PIECE OF
 15 IT, I WILL MAKE SOME INITIAL COMMENTS ABOUT IT AND
 16 SUGGEST A WAY OF PROCEEDING ON IT, MAKING SOME
 17 CAVEATS ABOUT -- THAT IS THE SECOND PAGE. I HOPE
 18 THERE IS ENOUGH.

19 MODERATOR THOMAS JORLING: LET ME MAKE AN INITIAL COMMENT ABOUT
 20 SOME OMISSIONS. ONE IS ON THE RESEARCH AREA. WE
 21 STILL HAVE, IN GOING BACK THROUGH THE SHEETS THAT
 22 WE HAD LAST NIGHT, A LITTLE BIT OF DIFFICULTY COM-
 23 ING UP WITH AN ITEMIZATION OF WHERE THE MONEY
 24 SHOULD BE PUT AND IN WHAT ORDER. AND THAT NEEDS
 25 WORK.

26 EDITH HAD DONE A PIECE WHICH GOT LOST IN OUR
 27 EFFORTS. WE RECOVERED IT AND THERE WILL BE AN
 28 DIDN'T HAVE ANY REAL GOOD WRITING TO WORK WITH. SO

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1 THAT THAT IS AN AREA THAT WE ARE GOING TO HAVE TO
 2 PAY SOME ATTENTION TO, AND PERHAPS A LITTLE DRAFT-
 3 ING SUBCOMMITTEE MIGHT BE PUT TOGETHER TO TAKE A
 4 SHOT AT THAT.

5 MR. DAVID SLADE: YOU COULD USE THE
 6 PROGRAM WE DEVELOPED, WHICH HAS BEEN DEVELOPED
 7 PRETTY MUCH BY THE COMMUNITY AND HAS PRIORITIES.
 8 WE HAVE AN OUTLINE OF ALL THE TOPS AND THINGS LIKE
 9 THAT. I WOULD BE HAPPY TO GIVE YOU THAT.

10 MODERATOR THOMAS JORLING: THE
 11 SECOND COMMENT IS ON THE INDUSTRIAL REVITALIZATION-
 12 INDUSTRIAL INNOVATION AREA THAT TONY HAS BEEN SPEAK-
 13 ING ABOUT SO WELL. HE HAD WRITTEN UP A PIECE LATE
 14 LAST NIGHT WHICH WE WERE NOT ABLE TO INTERPRET.
 15 THAT IS BEING --

16 MR. RICHARD PENNA: HANDWRITING.

17 MODERATOR THOMAS JORLING: -- BEING
 18 WORKED ON AND WOULD BE SUBSTITUTED IN THERE. -- I
 19 DON'T THINK THERE IS ANY REAL PROBLEM WITH THAT.
 20 IT IS JUST THAT I WANTED TO POINT OUT THAT THAT
 21 DESCRIPTION THERE IS BASICALLY RESERVING THE SPACE
 22 FOR A LONGER DOCUMENT.

23 MODERATOR THOMAS JORLING: IN THE INTERNATIONAL ACTIVITIES,
 24 EDITH HAD DONE A PIECE WHICH GOT LOST IN OUR
 25 EFFORTS. WE RECOVERED IT, AND THERE WILL BE AN

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1 ADDITIONAL PARAGRAPH WHICH I WILL READ OR, IF I AM
2 NOT HERE AND WE GET TO THAT AREA AFTER WE DO HAVE,
3 IT WILL BE INSERTED.

4 AND THEN ON THE LAND USE ONE, BILL
5 SOMMERS AND GEORGE WOODWELL ARE WORKING ON A
6 DESCRIPTION FOR THE DEFORESTATION-FORESTATION
7 PROBLEM THAT WOULD GO IN THERE.

8 NOW, WITH THOSE SORTS OF INITIAL
9 COMMENTS, I THINK IT WOULD BE NICE IF WE COULD
10 PROCEED IN SOME ORDERLY FASHION. AND MAYBE THAT
11 ORDERLY FASHION WOULD BE PROVIDED BY GOING TO THE
12 FIRST PAGE AND RECOGNIZING THE DIFFICULTY OF COM-
13 MITTEE DRAFTSMANSHIP, DISCUSS IT, TO SEE IF THERE
14 ARE SOME THINGS THAT NEED WORK. YES.

15 MR. ANTHONY SCOVILLE: I WOULD SUG-
16 GEST, AS A VERY START-OFF, YOU MIGHT WANT TO
17 RECOGNIZE -- AND I DIDN'T SEE IT HERE -- BUT THE
18 -- NUMBER ONE, THE EXISTENCE OF SOME OF THE -- OF
19 EXISTING RESEARCH EFFORTS, WHICH MAY LEAD YOU TO
20 THIS -- WHOSE PRELIMINARY DATA HAS LED TO THIS --
21 TO THESE -- THIS FIRST STATEMENT AS A CONCLU-
22 SION.

23 MODERATOR THOMAS JORLING: IN OTHER
24 WORDS -- BE VERY HELPFUL IF WE COULD GET THE COPY.

25 MR. ANTHONY SCOVILLE: YOU MIGHT
AND WE CAN DO

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1 ALSO WANT TO SET THE BASIS FOR THIS AS THE FACT
2 THAT THERE ARE SCIENTISTS, INCLUDING AT HOME AND
3 ABROAD, WHO BELIEVE THAT THIS IS A POTENTIALLY
4 SERIOUS ENOUGH PROBLEM TO HAVE IN FACT GOTTEN IT ON
5 THE AGENDA HERE. IN FACT, WHY DON'T WE GET THAT
6 STARTED?

7 AND I THINK THAT THAT WOULD FORM A
8 GOOD PREAMBLE, YOU SEE. AND THEN THAT WOULD BE
9 THE PLACE MAYBE TO PUT IN THIS THING ABOUT GERMAN
10 SCIENTIST. I THOUGHT THAT WAS GOING TO BE IN
11 HERE SOMEWHERE, BUT I DIDN'T SEE IT EXPLICITLY.

12 ME, TO START OF MODERATOR THOMAS JORLING: WHEN WE
13 GET TO THE INTERNATIONAL ACTIVITIES, I THINK FOR
14 PURPOSES OF CONTINUITY, SINCE I WILL BE LEAVING,
15 THE IDEAS OF CROSS-REFERENCING THE STATEMENT THAT
16 WAS READ FROM THE WEST GERMAN SCIENTIST AS A WAY
17 OF HIGHLIGHTING THAT THIS ISSUE IS NOT ONE THAT IS
18 EXCLUSIVELY --

19 SOME CASES. IN DR. JOHN LAURMANN: COULD I ASK YOU,
20 ON THIS PROCEDURAL MATTER, I HAVE BUT ONE COPY OF
21 THIS HERE. IT IS A WHOLE REVIEW OF THAT MEETING.
22 AND I WAS GOING TO GIVE IT AWAY, UNLESS YOU WANT A
23 COPY OF A PART OF IT.

24 MODERATOR THOMAS JORLING: I THINK
25 IT WOULD BE VERY HELPFUL IF WE COULD GET THE COPY,
AND WE CAN DO THAT THIS MORNING. AND THEN YOU

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1 WOULD --

2 GO TO THE SECOND

DR. JOHN LAURMANN: ARE WE READY TO

3 MR. RICHARD PENNA: WE HAVE XEROX-
4 ING CAPABILITIES HERE.

5 MODERATOR THOMAS JORLING: SO THAT
6 WOULD BE GOOD. IN FACT, WHY DON'T WE GET THAT
7 STARTED?

8 MR. ANTHONY SCOVILLE: I GUESS MY
9 POINT, TOM, YOU HAVE GOT A STATEMENT WHICH IS,
10 ESSENTIALLY, AS I UNDERSTAND, A CONCLUSION OF THIS
11 GROUP HERE. BUT IT WOULD BE USEFUL, IT SEEMS TO
12 ME, TO START OFF, BECAUSE BEFORE WE ANNOUNCE OUR
13 OWN CONCLUSION, TO ESSENTIALLY STATE SOME OF THE
14 REASONS WHY YOU GOT THERE, ONE OF WHICH IS THAT
15 THERE HAS BEEN SOME EXISTING RESEARCH IN THIS
16 COUNTRY, THERE IS AN EXISTING PROGRAM GOING, AND
17 THE OTHER OF WHICH IS THAT THERE ARE SCIENTISTS
18 AROUND THE WORLD WHO HAVE BEEN CONCERNED ENOUGH IN
19 SOME CASES, IN THE WEST GERMAN CASE EVEN, ACTUALLY
20 TO CALL FOR SPECIFIC POLICY STEPS BY THEIR GOVERN-
21 MENTS.

22 HERE, I AM QUITE HAPPY TO MAKE THAT FIRST PARAGRAPH
23 STRONGER. AND I AM WILLING TO SUBSCRIBE TO WORD-
24 ING WHICH CHANGES ARE LIKELY TO OCCUR. IN THAT

25 MODERATOR THOMAS JORLING: OKAY. I
THINK THAT PROVIDES A GOOD ADDITION. WE WILL DO
THAT.

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1 PERCENT SURE THAT THAT IS AN ACCURATE STATEMENT
2 GO TO THE SECOND PARAGRAPH? THERE ARE A FEW --
3 NOW, THERE MAY BE SOME DISPUTE -- IF YOU LOVE THAT

4 BETTER. MODERATOR THOMAS JORLING: IF YOU
5 REALLY WANT TO KNOW WHERE I AM READY TO GO --
6 (GENERAL LAUGHTER) -- WE CAN START ON PAGE 2.
7 ONE SENSE I AGREE WITH YOU, YES, SOME

8 MR. RAFF POMERANCE: TOM, I WOULD
9 JUST SUGGEST, AS A PROCEDURAL MATTER, THAT YOU
10 ALLOCATE -- I MEAN, AS I SUSPECT, YOU KNOW, WE
11 COULD SPEND ALL MORNING ON PAGE 1 AND END UP WITH
12 TEN MINUTES ON PAGE 2 OR SOMETHING. AND PAGE 2 --
13 PAGE 1 IS MORE -- I JUST --
14 I AM CONCERNED ABOUT -- THAT THAT WILL SAY THAT

15 MODERATOR THOMAS JORLING: I THINK
16 THIS COMMITTEE OR THIS GROUP OF PEOPLE, LET'S SAY,
17 IT WOULD BE MY SENSE THAT PAGE 1 COULD BE COM-
18 PLETED IN A HALF AN HOUR, AND THE REMAINING TIME
19 COULD BE DEVOTED TO THE TOUGHER THINGS, WHICH ARE
20 DETAILS OF WHAT WE NOW THINK WILL HAPPEN.
21 THE SPECIFICS OF THE PROPOSED ACTIONS.

22 MR. ANTHONY SCUVILLE: THEN WHAT
23 AND LET'S START WITH THAT ASSUMP-
24 TION AND SEE HOW CLOSE WE ARE.
25 IF YOU WANT TO SLANT IT, I MEAN, I THINK I WOULD

26 DR. JOHN LAURMANN: THERE IS ONE
27 BE WILLING -- I AM NOT ENOUGH OF A SCIENTIST TO
28 OTHER -- AS ONE OF THE FEW PHYSICAL SCIENTISTS
29 KNOW THAT MUCH ABOUT IT; I AM NOT A SCIENTIST AT
30 HERE, I AM QUITE HAPPY TO MAKE THAT FIRST PARAGRAPH
31 ALL.
32 STRONGER. AND I AM WILLING TO SUBSCRIBE TO WORD-
33 ING WHICH CHANGES "ARE LIKELY TO OCCUR," IN THAT
34 LIKELY BUT IT IS --
35 SECOND PARAGRAPH, TO "WILL OCCUR."

36 DR. DAVID ROSE: ALMOST SURE?
37 DR. JOHN LAURMANN: ALMOST SURELY.

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1 PERCENT SURE THAT THAT IS AN ACCURATE STATEMENT.
 2 NOW, THERE MAY BE SOME DISPUTE -- IF YOU LIKE THAT
 3 BETTER. AGAIN. CERTAINLY SOME CHANGES ARE CER-
 4 TAINLY GOING TO DR. WILLIAM ELLIOTT: I DON'T ARE IN
 5 ON SENSE I AGREED WITH YOU, JOHN, YES, SOME OF
 6 CHANGES WILL OCCUR. THAT IS CERTAINLY TRUE. OF
 7 FOSSIL FUEL OR DR. JOHN LAURMANN: THERE ARE NO
 8 LIMITS ON HOW LONG YOU HAVE TO WAIT IN THAT STATE-
 9 MENT. PHYSICAL SCIENTISTS HERE, PERHAPS YOU CAN
 10 USE "WILL OCCUR" DR. WILLIAM ELLIOTT: HAYES. BUT WHAT
 11 I AM CONCERNED ABOUT IS THAT THAT WILL SAY THAT
 12 THIS COMMITTEE OR THIS GROUP OF PEOPLE, LET'S SAY,
 13 ASCRIBES TO THE MANABE-WHETHER A WORLD. WHEN YOU
 14 SAY "WILL OCCUR," SOMEHOW YOU ARE ENDORSING THE
 15 DETAILS OF WHAT WE NOW THINK WILL HAPPEN. IS RIGHT.
 16 AND WHAT I AM MR. ANTHONY SCOVILLE: THEN WHAT
 17 ABOUT THE WORDS "HIGHLY LIKELY TO OCCUR"? I MEAN,
 18 IF YOU WANT TO SLANT IT, I MEAN, I THINK I WOULD AM
 19 BE WILLING -- I AM NOT ENOUGH OF A SCIENTIST TO
 20 KNOW THAT MUCH ABOUT IT; I AM NOT A SCIENTIST AT
 21 ALL. OPS HERE ARE NOT SPECIFIED. IT IS BASICALLY AN
 22 OPEN-ENDED STATEMENT BUT I THINK IT IS MORE THAN SIMPLY
 23 LIKELY BUT IT IS -- WILLIAM ELLIOTT: YES.

24 REALIZE THAT. DR. DAVID ROSE: ALMOST SURE?

25 DR. JOHN LAURMANN: ALMOST SURELY.

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1 THAT SOUNDS BETTER. LITTLE UNDERSTOOD NATURE WILL
2 OCCUR?

3 DR. WILLIAM ELLIOTT: WELL, LET ME
4 READ IT AGAIN. CERTAINLY SOME CHANGES ARE CER-
5 TAINLY GOING TO OCCUR. IS FOR ONE THING, THEY ARE
6 GOING TO OCCUR AND THE CHANGE IN THE CLIMATE IS
7 GOING TO OCCUR WHETHER YOU BURN ANOTHER DROP OF
8 FOSSIL FUEL OR NOT.

9 DR. WILLIAM SOMMERS: AS ONE OF THE
10 OTHER PHYSICAL SCIENTISTS HERE, PERHAPS YOU CAN
11 USE "WILL OCCUR" AND QUANTIFY THE CHANGES. I THINK
12 THAT IS WHAT IS DISTURBING. BECAUSE --

13 DR. JOHN LAURMANN: WHEN THEY START
14 TO QUANTIFY THE CHANGES, THEN, I "CAN'T" MAKE SUCH A
15 STATEMENT.

16 DR. WILLIAM ELLIOTT: THAT IS RIGHT.
17 AND WHAT I AM SAYING IS THAT IN THINKING BY SAYING
18 "WILL OCCUR" THERE IS AN IMPLIED MODIFICATION.

19 DR. WILLIAM SOMMERS: CHANGES OF AN
20 UNDETERMINED AMOUNT. YOU KNOW, ONE OF THE
21 PROBLEMS WITH MODERATOR THOMAS TORRING: IS THAT IF

22 CHANGES HERE ARE NOT SPECIFIED. IT IS BASICALLY AN
23 OPEN-ENDED STATEMENT THAT CHANGE WILL OCCUR.

24 DR. WILLIAM ELLIOTT: YES. I TEN-
25 REALIZE THAT. PHYSICAL EFFECT WHEN YOU DON'T --

26 MR. ANTHONY SCOVILLE: WHAT ABOUT

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1 CHANGES AS YET OF A LITTLE UNDERSTOOD NATURE WILL
 2 OCCUR? AND YOU HAVE GOT TO SUSTAIN INTER
 3 EST IN THIS PRO MODERATOR THOMAS JORLING: WELL,
 4 THE PROBLEM WITH THAT IS - BE A SOLID STATEMENT.
 5 GIVEN THE INFO DR. WILLIAM SOMMERS: I WOULD ACCEPT
 6 THAT. WE HAVE NOW.

7 DR. WILLIAM ELLIOTT: I WOULD ACCEPT
 8 THAT. QUESTION AS TO WHAT IS MOST EFFECTIVE, FROM MY
 9 POINT OF VIEW. MRS. RAFA POMERANCE: WHY DON'T YOU
 10 JUST SAY "HIGHLY OR EXTREMELY LIKELY TO OCCUR"? THE
 11 HARD SCIENCES. DR. WILLIAM SOMMERS: BECAUSE -- IT
 12 IS UP TO THE MODERATOR THOMAS JORLING: IT IS DAVID

13 ROSE'S ALTERNATIVE ACCEPTABLE, "ALMOST SURELY TO
 14 OCCUR"? DR. ANNA MARIE CROCKETT: I WOULD
 15 LIKE TO MAKE DR. MICHAEL GLANTZ: NO. SCIENTIST, I
 16 HAVE NOTICED MRS. RAFA POMERANCE: NO. SCIENTISTS
 17 ARE CAUTIOUS DR. MICHAEL GLANTZ: I DON'T SEE
 18 WHAT IS WRONG WITH THE STATEMENT THAT IS THERE.

19 IF I WERE READING THIS -- YOU KNOW, ONE OF THE
 20 PROBLEMS WITH THE CO₂ ISSUE IN THE PAST IS THAT IT
 21 IS LIKE REMOTE SENSING EARLY ON WAS OVERSTATED, OR
 22 CRYING WOLF. REALLY CONCUR.

23 IT IS A PROBLEM OF DRAWING ATTEN-
 24 TION TO SOME PHYSICAL EFFECT WHEN YOU DON'T
 25 WHEN THERE REALLY ARE NO SIGNS THAT YOU CAN

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1 ATTRIBUTE TO IT.

2 AND YOU HAVE GOT TO SUSTAIN INTER-
3 EST IN THIS PROBLEM FOR A LONG TIME. AND "ARE
4 LIKELY TO OCCUR" SEEMS TO BE A SOLID STATEMENT,
5 GIVEN THE INFORMATION AND THE DIVERSITY OF OPINION
6 THAT WE HAVE NOW.

7 DR. JOHN LAURMANN: IT IS A POLITI-
8 CAL QUESTION AS TO WHAT IS MOST EFFECTIVE, FROM MY
9 POINT OF VIEW. IF IT IS DESIRABLE FOR IMPACTS TO
10 HAVE A STRONG STATEMENT, IN MY PERSPECTIVE OF THE
11 HARD SCIENCES, I WOULD GO ALONG WITH THAT. BUT IT
12 IS UP TO THE PEOPLE WHO CAN JUDGE THAT BETTER THAN
13 I CAN.

14 DR. ANNA MARIE CROCETTI: I WOULD
15 LIKE TO MAKE ONE STATEMENT. AS A SCIENTIST, I
16 HAVE NOTICED THAT VERY OFTEN WHEN WE AS SCIENTISTS
17 ARE CAUTIOUS IN OUR STATEMENTS, JUSTIFIABLY SO,
18 EVERYBODY ELSE MISSES THE POINT, BECAUSE THEY
19 DON'T UNDERSTAND OUR QUALIFICATIONS. I JUST WANT
20 TO PUT THAT ON THE TABLE.

21 MR. THOMAS MCPHERSON: AS A NON-
22 SCIENTIST, I REALLY CONCUR.

23 MR. RICHARD AYRES: CAN I ASK A
24 QUESTION? I THINK THIS IS AN IMPORTANT DISCUSSION,
25 BECAUSE IT IS ONE OF THE CRITICAL POINTS FOR THE

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1 PUBLIC AND FOR THE COMMISSIONERS.

2 THIS STATEMENT, AS YOU HAVE IT NOW,
3 DOESN'T POINT IN A DIRECTION, EITHER. IT DOESN'T
4 POINT TO THE DIRECTION OF CHANGE. THIS SAYS THAT
5 THERE WILL BE CHANGE, BUT IT DOESN'T SAY WHAT
6 DIRECTION OR WHAT KINDS OF EFFECTS.

7 AND I GUESS THE -- WELL, THE NEXT
8 STATEMENT SAYS "POTENTIAL EFFECTS," BUT THAT AGAIN
9 DOESN'T REALLY POINT IN A DIRECTION. CAN A DIREC-
10 TION BE POINTED TO? DO YOU FEEL CONFIDENT ENOUGH
11 TO DO THAT? DOES IT MATTER WHETHER YOU DO POINT
12 IT IN THAT DIRECTION?

13 OR IS SAYING SOMETHING ABOUT CHANGE
14 A BIG ENOUGH POINT AND IMPORTANT ENOUGH POINT.

15 MODERATOR THOMAS JORLING: WELL,
16 IN THE WAY THE
17 LET ME SEE. THE THIRD PARAGRAPH HERE DESCRIBES THE
18 TYPES OF CHANGE. WE HAD DISCUSSIONS YESTERDAY
19 WHICH REFERRED THAT, WHILE SOME OF THOSE CHANGES
20 COULD BE BENEFICIAL OR HAVE BENEFICIAL OUTCOMES,
21 THAT IT WAS THE SENSE THAT THE NET WOULD BE ADVERSE,
22 THAT THE NET COLLECTION OF CHANGES WOULD BE ADVERSE
23 TO THE STABILITY OF HUMAN COMMUNITIES.

24 PERHAPS THAT THIRD PARAGRAPH COULD
25 BE AMENDED TO INCLUDE THAT THOUGHT, THAT THERE ARE
SOME BENEFITS, THAT IT IS THE SENSE OF THE GROUP

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1 THAT IN NET THEY ARE LIKELY TO BE ADVERSE.
 2 CAST YOUR MIND MR. RICHARD AYRES: THAT IS WHAT I
 3 WAS GETTING AT. IN THE ...
 4 WAS THE FAMOUS MODERATOR THOMAS JORLING: IS THAT
 5 AGREEABLE? IN 1937 ...
 6 IN SWITZERLAND DR. JOHN PERRY: I DON'T SEE ON WHAT
 7 BASIS YOU CAN SAY THAT ANY CHANGE IN CLIMATE IS
 8 IN NET GOING TO BE ADVERSE. I DON'T SEE HOW THAT
 9 COMES ABOUT. VOICE STATEMENTS THAT HAVE ...
 10 THE IMPRESSION AND AS TO SAYING SOMETHING ABOUT THE
 11 NATURE OF THE CHANGES, YOU CAN'T SAY THAT UNI-
 12 FORMLY. I MEAN, YOU CAN'T SAY THE CLIMATE WILL
 13 WARM, WITHOUT ANY QUALIFICATION, BECAUSE YOU ARE
 14 CHANGING -- YOU ARE GOING TO BE CHANGING SOMETHING
 15 IN THE WAY THE EARTH'S DYNAMIC, THE ATMOSPHERE'S
 16 DYNAMIC SYSTEM WORKS. ...
 17 AND YOU ARE GOING TO BE MOVING THE
 18 LONGITUDE OF LONG-WAVE SYSTEMS, AND UNDOUBTEDLY,
 19 IF YOU HAD A ONE-DEGREE GLOBAL WARMING, YOU COULD
 20 USE SOME PLACES ON EARTH WOULD PROBABLY GET COOLER.
 21 CONDITIONS ARE. MR. ANTHONY SCOVILLE: YES. BUT
 22 ARE YOU WRITING A SCIENTIFIC PAPER HERE, JOHN?
 23 DR. JOHN PERRY: NO. I AM JUST
 24 TRYING TO WRITE A CORRECT PAPER, WHICH I THINK IS
 25 IMPORTANT, ALSO. DR. IN IOWA, THAT IS ...

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1 ADVANTAGE OF THE BUT, YOU KNOW, FOR EXAMPLE, IF YOU
2 CAST YOUR MIND BACK, THE DECADE FROM 1810 TO 1820
3 WAS THE COLDEST IN THE LAST 200 YEARS, AND 1816
4 WAS THE FAMOUS YEAR WITHOUT A SUMMER.

5 BIOMES AND SO IN 1807 THEY DIDN'T HAVE A WINTER
6 IN SWITZERLAND. THERE WERE FLOWERS ALL WINTER. I
7 WAS JUST READING A BOOK ON IT.

8 SPECIES THAT SO IT IS VERY DIFFICULT TO MAKE
9 THESE UNEQUIVOCAL STATEMENTS THAT GIVE THE WORLD
10 THE IMPRESSION THAT A GROUP OF SCIENTISTS HAS SAT
11 DOWN AND SAID, YOU KNOW, WE ARE ALL GOING TO FRY.
12 OF A -- ALTHOUGH AND I FOR ONE FIND MYSELF VERY
13 UNCOMFORTABLE WITH SOME OF THE LANGUAGE.

14 RECTIFYING ERRORS DR. DAVID ROSE: MAY I RESPOND TO
15 THAT?

16 PAGE OF CLIMATE MODERATOR THOMAS JORLING: YES.

17 WORLD OR THE DR. DAVID ROSE: YOU HAVE A VERY
18 GOOD POINT, JOHN. BUT I FEEL IT SHOULD GO MORE
19 LIKE THIS: THAT THE AGRICULTURAL PATTERNS AND LAND
20 USE PATTERNS TEND TO OPTIMIZE ON WHATEVER THE CON-
21 DITIONS ARE.

22 RIDING SORT OF DR. JOHN PERRY: SURE.

23 THE DELIBERATE DR. DAVID ROSE: AND CONSEQUENTLY,
24 IF THERE IS A CERTAIN RAINFALL PATTERN, FARMING
25 PATTERN, AND SO ON, IN IOWA, THAT IS, PEOPLE TAKE

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1 ADVANTAGE OF THAT AND OPTIMIZE AGRICULTURE, NOTING
2 PERFECTLY, BUT THEY WORK AT IT. THE ENVIRONMENT IS,
3 THAT IS IN PRINCIPLE. DR. JOHN PERRY: SURE TO DO.

4 DR. DAVID ROSE: VI AND THE FOREST
5 BIOMES AND SO FORTH TEND TO, ALSO. AND IF THE AP-
6 CONDITIONS CHANGE FASTER THAN THE ECOSYSTEM CAN
7 CHANGE, THEN THE FLUCTUATIONS TEND TO DO IN THE
8 SPECIES THAT ARE THERE WITHOUT REPLACING THEM IN
9 TIME WITH OTHER ONES. DR. JOHN PERRY: BETTER GO BACK AND

10 TALK TO THE PEOPLE. DR. JOHN PERRY: RIGHT. OH THEN,
11 BECAUSE -- DR. DAVID ROSE: SO THERE IS A KIND

12 OF A -- ALTHOUGH THERE IS A S.C. AND THE AVERAGE
13 MAY BE ZERO IN THIS A.C. TRIPPLE, IT IS KINDS OF A
14 RECTIFYING EFFECT, SO TO SPEAK.

15 DR. JOHN PERRY: SURELY. IF THE
16 PACE OF CLIMATE CHANGE IS FASTER THAN THE NATURAL
17 WORLD OR THE HUMAN WORLD CAN ADAPT, YOU ARE GOING
18 TO HAVE STRESSES AND PROBLEMS. THIS PARTICULAR
19 POINT. I AM AF THE HUMAN WORLD CAN PROBABLY ADAPT
20 MUCH FASTER THAN THE NATURAL WORLD.

21 MR. DAVID SLADE: THERE IS AN OVER-
22 RIDING SORT OF AN ISSUE, JOHN, AND THAT IS THAT
23 THE DELIBERATE OR INADVERTENT DISLOCATION OF THE
24 ENVIRONMENT BY MAN IS TO BE AVOIDED AS A GENERAL
25 PRINCIPLE, WHETHER IT IS GOOD, BAD, OR INDIFFERENT.

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THE STABILITY OF IF MAN-INDUCED ACTIVITIES ARE GOING TO MUCK AROUND WITH WHATEVER THE ENVIRONMENT IS, THAT IS IN PRINCIPLE NOT A GOOD THING TO DO. MAJOR DISRUPTION IN MR. ANTHONY SCOVILLE: UNLESS YOU HAVE A PRETTY GOOD IDEA OF WHAT IS GOING TO HAPPEN. E CHANGES CAN BRING AN ADVANTAGE TO MAN. BUT IF WE GET INTO MR. DAVID SLADE: WHICH YOU NEVER WILL, PROBABLY.

DR. JOHN PERRY: BETTER GO BACK AND TALK TO THE PEOPLE WHO INVENTED THE PLOW THEN, BECAUSE CHANGES MAY HAVE BENEFICIAL ASPECTS, IT IS BELIEVED THAT DR. WILLIAM SOMMERS: MR. AYRES ASKED THE QUESTION, IF IT WAS CHANGED, OR AS A RESULT --

MODERATOR THOMAS JORLING: GEORGE. DR. GEORGE WOODWELL: I MUST SAY, TOM, I THINK WE ARE GOING TO HAVE A TERRIBLE TIME IF WE GET INTO THIS ARGUMENT, THIS PARTICULAR POINT. I AM AFRAID I CAN'T SUPPORT JOHN'S ARGUMENT IN ANY WAY. MR. ANTHONY SCOVILLE: WELL, WE

I THINK THAT IN A WORLD IN WHICH THE POPULATION IS GOING TO INCREASE BY 40 PERCENT IN 20 YEARS, IN WHICH THERE IS A REAL PROBLEM IN MAINTAINING PRODUCTIVITY OF AGRICULTURE, IN WHICH THERE IS PRESSURE ON ALL SORTS OF SOURCES, IN WHICH

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1 THE STABILITY OF RESOURCES IS A MAJOR RESOURCE IN
 2 ITSELF, CHANGING THE CIRCUMSTANCE UNDER WHICH
 3 THOSE RESOURCES REMAIN STABLE CONSTITUTES A MAJOR
 4 DISRUPTION, IN THE HUMANALOTHE CO₂ PROBLEM BY
 5 ITSELF ISN'T GOING TO BE HARD FOR ME TO ARGUE ANY OF
 6 THOSE CHANGES CAN BRING AN ADVANTAGE TO MAN. BUT
 7 IF WE GET INTO THAT DISCUSSION, WE ARE GOING TO BE
 8 LOST HERE. THAT ARE OPERATING, IT COULD HAVE SUB-
 9 STANTIAL NEGATIVE MODERATOR THOMAS COURLING: LET ME
 10 TRY TO READ THAT SENTENCE AGAIN. IS "WHILE SOME OF
 11 THESE CHANGES MAY HAVE BENEFICIAL ASPECTS, IT IS
 12 BELIEVED THAT THE NET CONSEQUENCES OF THESE CHAN-
 13 GES WILL BE ADVERSE TO THE STABILITY OF THE HUMAN
 14 COMMUNITY." AMENDMENT IS ACCEPTABLE, WHICH IS TO
 15 CHANGE THE WORD MR. THOMAS WALTZ: "SOME OF THESE
 16 CHANGES MAY HAVE BENEFICIAL ASPECTS. BUT IT IS
 17 BELIEVED THAT THE NET CONSEQUENCES OF THESE CHAN-
 18 GES WILL BE ADVERSE TO THE STABILITY OF THE HUMAN
 19 COMMUNITY." DR. MICHAEL GLANTZ: WAS THAT A YES
 20 OR A NO? MR. ANTHONY SCOVILLE: WELL, WE
 21 HAVE TO TAKE ACCOUNT OF THE STATEMENT HERE. YOU
 22 COULD SAY "THE RESULT OF THESE CHANGES, IN THE CON-
 23 TEXT OF OTHER EXPECTED EVENTS," SUCH AS THE ONES
 24 THAT HAVE BEEN NAMED, IN THE CONTEXT OF OTHER THE
 25 EVENTS THAT ARE ONGOING ANYWAY, YES, THE NET

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1 BENEFIT MAY BE NEGATIVE.

2 I DON'T THINK THAT IS -- BUT THEN YOU
 3 RECOGNIZE WHAT, AS IT SEEMS TO ME, HAS APPEARED SEV-
 4 ERAL TIMES, WHICH IS THAT THE CO₂ PROBLEM BY ITSELF
 5 ITSELF ISN'T GOING TO SET ANY ONE COURSE OF ACTION
 6 BUT IT BECOMES, SAY, A MAJOR CONTRIBUTOR TO DECI-
 7 SIONS AS YOU GO ALONG, OR IN CONJUNCTION WITH
 8 OTHER FORCES THAT ARE OPERATING, WHICH COULD HAVE SUB-
 9 STANTIAL NEGATIVE EFFECTS. IT COULD ALSO HAVE
 10 SOME ON ITS OWN ANYWAY, BUT IT IS MUCH HARDER TO
 11 DEAL WITH THEM UNDER THE OTHER PRESSURES.

12 MODERATOR THOMAS JORLING: CAN WE
 13 GO BACK TO THE SECOND PARAGRAPH AND ASK IF DAVID'S
 14 ADDENDUM, AMENDMENT IS ACCEPTABLE, WHICH IS TO
 15 CHANGE THE WORDS "ARE LIKELY TO" TO "ALMOST SURELY
 16 TO," AS A WAY OF BRIDGING THE GAP? (GENERAL HOUSEHOLD
 17 AFFIRMATIVE RESPONSE), OKAY. (ERA -- "OF PRESENT
 18 FEDERAL RESEARCH THEN I THINK WE CAN GO ON NOW. THOSE
 19 COORDINATED BY DR. MICHAEL GLANTZ WAS THAT A YES
 20 OR A NO? CLIMATE PROGRAM OFFICE."

21 MODERATOR THOMAS JORLING: AT INTER-
 22 PRET THAT WAS A YES TO SUGGEST.

23 DR. MICHAEL GLANTZ: HA ALLS RIGHT.

24 NATIONAL CLIMATE DR. DAVID BURNS: YOU COULD PUT THE
 25 WORDS "GLOBALLY AVERAGED" IN FRONT OF THE WORD

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"WARMING."

MODERATOR THOMAS JORLING: REMEMBER, WE ARE TRYING TO BE THUS WITHOUT BEING CONSTRAINED TO REPRESENT THEIR INSTITUTIONAL HOMES.

MR. ANTHONY SCOVILLE: THAT WOULD MAKE -- I THINK THAT IS A PERFECTLY GOOD POINT, YES.

MODERATOR THOMAS JORLING: THAT TAKES US TO, I BELIEVE TO THE FOURTH PARAGRAPH. ANY COMMENTS ON RESEARCH?

DR. WILLIAM ELLIOTT: I WOULD LIKE TO ENTER A SMALL PIECE FOR DAVE SLADE HERE.

MR. DAVID SLADE: I HAVE JUST BROADENED THAT PIECE. I JUST BROADENED THAT. THAT IS A LITTLE HANDWRITTEN THING ON THE SIDE.

DR. WILLIAM ELLIOTT: YES.

MR. DAVID SLADE: "CONGRESS SHOULD GIVE THE -- ET CETERA, ET CETERA -- "OF PRESENT FEDERAL RESEARCH PROGRAMS IN THE D.O.E. AND THOSE COORDINATED BY D.O.E. UNDER THE AUSPICES OF THE NATIONAL CLIMATE PROGRAM OFFICE."

MR. THOMAS WALTZ: I HAVE AN ALTERNATIVE I WOULD LIKE TO SUGGEST.

MR. DAVID SLADE: THAT IS THE NATIONAL CLIMATE PROGRAM OFFICE?

MR. THOMAS WALTZ: YES. A NUMBER OF

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1 MODERATOR THOMAS JORLING: REMEMBER,
2 WE ARE TRYING TO DO THIS WITHOUT PEOPLE FEELING
3 CONSTRAINED TO REPRESENT THEIR INSTITUTIONAL
4 HOMES.

5 MR. THOMAS WALTZ: OKAY. I AM
6 TRYING TO SAY THE SAME THING, BUT I THINK THERE IS
7 A BETTER WAY OF SAYING IT.

8 MODERATOR THOMAS JORLING: OKAY.
9 GO AHEAD.

10 MR. THOMAS WALTZ: "THE STATURE OF
11 PRESENT FEDERAL CO2 RESEARCH PROGRAMS IN THE
12 NATIONAL CLIMATE PROGRAM, AND IN PARTICULAR, THE
13 ROLE OF D.O.E. AS LEAD AGENCY."
14 AND WILL POINT OUT THERE ARE TWO THINGS HERE. ONE IS
15 THE STATURE OF THE CARBON DIOXIDE PROGRAM AND THE
16 NATIONAL CLIMATE PROGRAM ITSELF, AND SECONDLY IS
17 THE ROLE OF D.O.E. AS THE LEAD AGENCY WITHIN THAT
18 PROGRAM FOR THE CARBON DIOXIDE RESEARCH.

19 MODERATOR THOMAS JORLING: LET ME
20 SEE IF I CAN GO OVER THIS A LITTLE BIT. MY SENSE
21 OF THE THING THAT THE MONEY THAT IS FLOWING INTO
22 RESEARCH IN ANY QUANTITIES THAT ARE RELEVANT IS
23 GOING INTO THE D.O.E. PROGRAM.

24 MR. DAVID SLADE: NOT QUITE TRUE.
25 D.O.E. IS A MAJOR ACTOR, BUT THERE ARE A NUMBER OF

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1 OTHER MAJOR ACTORS, AND WE COORDINATE IT UNDER THE
2 RECOMMENDATION TO THE COMMISSION, SUGGESTIONS OF
AUSPICES OF THE CLIMATE PROGRAM.
WHAT TO DO. THE COMMISSION MAY WANT TO CHANGE IT.

3 WHAT TOM HAS SUGGESTED IS PERFECTLY
4 FINE.
DR. MICHAEL GLANTZ: I WOULD LIKE
TO SEE AN EXPLICIT STATEMENT ON THE DISTINCTION

5 MODERATOR THOMAS JORLING: DOES
6 ANYBODY ELSE HAVE ANY COMMENTS ON THAT? DO YOU
7 HAVE THAT WRITTEN?
BETWEEN ESSENTIAL RESEARCH AND DESIRED RESEARCH
THAT IS INTERESTING BUT NOT NECESSARILY ADDRESSED
TO THE PROBLEM.

8 MR. THOMAS WALTZ: YES.
SOME OF THE RESEARCH AGENDA THAT I

9 MR. STEPHEN CONNOLLY: I AM GOING
10 TO RAISE THE QUESTION -- I HAVE NO PARTICULAR AXE
11 TO GRIND, BUT IS IT APPROPRIATE FOR THIS BODY TO
12 BE RECOMMENDING THE INCREASED EMPHASIS OR INCREASED
13 FUNDING TO SPECIFIC AGENCIES OR SPECIFIC PROGRAMS?
HAVE SEEN, NOT JUST THE ONE THAT YOU HAVE BEEN
WORKING ON, WHICH HAS PRIORITIES, BUT OTHER REPORTS
I HAVE SEEN, PET PROJECTS, JUST ABOUT EVERYTHING
UNDER THE SUN.

14 AND WILL PEOPLE RAISE A QUESTION ABOUT PEOPLE SIT-
15 TING IN THIS BODY AND HAVING THOSE SORTS OF RECOM-
16 MENDATIONS WRITTEN INTO THIS BODY'S RECOMMENDATIONS?
SUGGESTED A TIE-IN TACTIC OF Tying things to
RESEARCH YOU LIKE TO DO AND NEED TO DO TO THE CO2
ISSUE, PIGGYBACKING CO2 IN A WAY.

17 MR. DAVID SLADE: I AM NOT SURE IF
18 IT IS APPROPRIATE, BUT THE BACKGROUND IS THAT THE
19 CLIMATE PROGRAM OFFICE WAS CREATED UNDER AN ACT OF
20 CONGRESS, AND IT SPECIFICALLY IS EMPOWERED TO
21 AUTHORIZE AGENCIES TO TAKE LEAD ROLES IN VARIOUS
22 THINGS AND HAS DONE SO.
BUT IN RETROSPECT, AFTER ALMOST TWO
YEARS, OR A YEAR AND A HALF, AND HAVING SEEN SOME
OF THESE RESEARCH AGENDAS, WHICH ARE JUST NOW
COMING OUT, I AM NOT SURE THE CO2 PIC CAN CARRY
EVERYTHING, NOR SHOULD IT BE ASKED TO.

23 SO THAT IS THE BACKGROUND. YOU CAN
24 DETERMINE WHETHER OR NOT IT IS NECESSARY.
AND THERE ARE A LOT OF PET PROJECTS
AND AREAS OF INTEREST THAT ARE INTERESTING FROM A
SCIENTIFIC STANDPOINT, WHETHER IT IS SOCIAL
SCIENCE INTEREST OR NATURAL SCIENCE INTEREST OR

25 DR. DAVID ROSE: REMEMBER, THIS IS A
SCIENCE INTEREST OR NATURAL SCIENCE INTEREST OR

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RECOMMENDATION TO THE COMMISSION, SUGGESTIONS OF WHAT TO DO. THE COMMISSION MAY WANT TO CHANGE IT.

DR. MICHAEL GLANTZ: I WOULD LIKE TO SEE AN EXPLICIT STATEMENT ON THE DISTINCTION BETWEEN ESSENTIAL RESEARCH AND DESIRED RESEARCH. THAT IS INTERESTING BUT NOT NECESSARILY ADDRESSED TO THE PROBLEM.

SOME OF THE RESEARCH AGENDA THAT I HAVE SEEN, NOT JUST THE ONE THAT YOU HAVE BEEN WORKING ON, WHICH HAS PRIORITIES, BUT OTHER REPORTS I HAVE SEEN, PET PROJECTS, JUST ABOUT EVERYTHING UNDER THE SUN.

AT THE A.A.A.S.-D.O.E. MEETING I SUGGESTED A TIE-IN TACTIC OF TYING THINGS TO RESEARCH YOU LIKE TO DO AND NEED TO DO TO THE CO₂ ISSUE, PIGGYBACKING CO₂ IN A WAY.

BUT IN RETROSPECT, AFTER ALMOST TWO YEARS, OR A YEAR AND A HALF, AND HAVING SEEN SOME OF THESE RESEARCH AGENDAS, WHICH ARE JUST NOW COMING OUT, I AM NOT SURE THE CO₂ PIG CAN CARRY EVERYTHING, NOR SHOULD IT BE ASKED TO.

AND THERE ARE A LOT OF PET PROJECTS AND AREAS OF INTEREST THAT ARE INTERESTING FROM A SCIENTIFIC STANDPOINT, WHETHER IT IS SOCIAL SCIENCE INTEREST OR NATURAL SCIENCE INTEREST OR

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1 BIOLOGICAL SCIENCES, AND THAT THERE HAS TO BE A
 2 DISTINCTIONS BETWEEN WHAT IS ESSENTIAL AND WHAT IS
 3 DESIRABLE. AS A CATALYST FOR GLOBAL STRATEGIC
 4 PLANNING CAPABILITY AND THAT WILL CUT BACK ON THE AMOUNT
 5 OF MONEY THAT WOULD BE SUGGESTED FOR RESEARCH. ALL
 6 HAVE SEEN A \$700 MILLION LABELS ONE ONE SETS OF PEAR,
 7 RESEARCH SUGGESTEDS FOR THE TROPICAL COUNTRIES. ES
 8 THAT THIS KIND MODERATOR THOMAS JORLING: I THINK
 9 YOUR QUESTION IS DIRECTED AT THE -- SUBPARAGRAPH C
 10 HERE, WHICH WOULD BE THE SPECIFIC TOPICS AND BE
 11 PRIORITIES THAT WOULD BE RECOGNIZED. ESSENTIAL COM-
 12 PONENTS, TO BE AND MAYBE AN INTRODUCTION TO THAT
 13 IS THAT THE WORKSHOP HAS CONSIDERED THAT IN A
 14 SCARCE RESEARCH RESOURCE CLIMATE THAT MONEY BEE
 15 DIRECTED TOWARDS THOSE THINGS THAT NEED ANSWERING,
 16 OR SOMETHING TO THAT EFFECT. JUST FROM THE EXAMPLES
 17 USED, FIND OUT DR. MICHAEL GLANTZ: I AM HUNG UP
 18 ONE "ESSENTIAL" VERSUS "DESIRABLE," FRANKLY.

19 DR. DAVID BURNS: OR "INTERESTING."
 20 ARE A LOT OF TH MRS. DAVID SLADE: LET ME JUST POINT
 21 OUT THAT CONGRESSMAN BROWN'S OFFICE HAS OFFERED
 22 FOUR POINTS ON THE IMPORTANCE OF THE CO₂ ISSUE,
 23 EVEN IF CO₂ IS FOUND NOT TO BE GLOBALLY THREATEN-
 24 ING. YOU WANT TO TAKE A CRACK AT A SENTENCE THAT
 25 WOULD INCORPORATE AMONG THE THINGS HE SAYS, THAT WORK

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1 IN THIS ISSUE OFFERS THE OPPORTUNITY FOR FORGING
2 NEW INTERDISCIPLINARY AND INTERINSTITUTIONAL BONDS
3 THAT SERVE AS A CATALYST FOR GLOBAL STRATEGIC
4 PLANNING CAPABILITY AND THINGS OF THAT ORDER.

5 OTHER THOUGHTS SO I WOULDN'T BE TOO QUICK TO TALK
6 TO ONLY DIRECT THINGS. THIS ISSUE MAY DISAPPEAR,
7 AND YET THERE ARE STILL VERY DEFINITE ADVANTAGES
8 THAT THIS KIND OF A PROGRAM, WHICH IS SORT OF
9 UNIQUE --

10 DR. DAVID BURNS: I AGREE THAT WE
11 PROBABLY NEED DR. MICHAEL GLANTZ: THAT MAY BE
12 ESSENTIAL. THAT MAY BE ONE OF THE ESSENTIAL COM-
13 PONENTS, TO BREED INTERDISCIPLINARITY, YOU KNOW,
14 IN THE ACADEMIC WORLD. NUMBER OF SCIENTISTS ARE NOT
15 NOT PRESENT AT BUT I STILL THINK THAT THERE ARE
16 LIMITS THAT SHOULD BE PLACED ON SOME OF THE -- I
17 CAN READ THESE REPORTS, AND JUST FROM THE EXAMPLES
18 USED, FIND OUT WHO WAS AT THE MEETING AND IDENTIFY
19 THE PET PROJECTS. WAS POINTED OUT YESTERDAY THAT
20 IF YOU PROJECT AND WHAT I AM SAYING IS YES, THERE
21 ARE A LOT OF THINGS WE NEED TO KNOW, AND THERE ARE
22 OTHER SOURCES OF FUNDS FOR THOSE THINGS, BUT THE
23 CO2 PROGRAM SHOULDN'T BE SUPPORTING ALL OF IT. THE

24 MODERATOR THOMAS JORLING: MICHAEL,
25 DO YOU WANT TO TAKE A CRACK AT A SENTENCE THAT
WOULD INCORPORATE YOUR CONCERN? BE THAT, AS YOU

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1 BY YEAR, DECADE BY DECADE. DR. MICHAEL GLANTZ: OKAY. WHY
2 DON'T YOU GO ON, AND I WILL FIND A PLACE TO INSERT
3 IT. CO₂ PROBLEM.

4 MODERATOR THOMAS JORLING: ANY
5 OTHER THOUGHTS ON RESEARCH? I THINK IT MIGHT BE
6 HELPFUL TO PASS OVER A SPECIFIC LISTING DISCUSSION
7 HERE, GET THROUGH THE PAPER, AND THEN COME BACK
8 TO THAT, OR APPOINT SORT OF A --

9 DR. DAVID BURNS: I AGREE THAT WE
10 PROBABLY NEED NOT GO INTO THE DETAILS OF SPECIFIC
11 RESEARCH TOPICS. BUT NONETHELESS, THERE ARE A
12 COUPLE OF HANG-UPS THAT WILL BOTHER SOME PEOPLE,
13 INCLUDING, I THINK, A NUMBER OF SCIENTISTS WHO ARE
14 NOT PRESENT AT THIS MEETING.
15 RESULTS OF WHICH FOR EXAMPLE, WE REALLY NEED ON AN
16 URGENT AND HIGH PRIORITY BASIS MORE INFORMATION ON
17 SOURCES OF ATMOSPHERIC CARBON DIOXIDE.
18 STILL IN PROGRESS. IT WAS POINTED OUT YESTERDAY THAT
19 IF YOU PROJECT AND DRAW LINES, SURE, WE GET TO A
20 CERTAIN LEVEL OF ATMOSPHERIC CO₂. BUT WE NEED,
21 PROBABLY ON A CONTINUOUS BASIS, TO BE DOING ALL
22 KINDS OF ENERGY SCENARIO CONSTRUCTION AND CONTINU-
23 OUS REMONITORING THE MIX OF ENERGY USE AND THE
24 CHANGES IN ENERGY PATTERNS AROUND THE WORLD.
25 THINK, IN DOING BECAUSE IT COULD BE THAT, AS YEAR

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1 BY YEAR, DECADE BY DECADE, WE WILL HAVE A NON-
2 PROBLEM. IT IS CONCEIVABLE THAT THERE WILL NOT BE
3 A CO₂ PROBLEM.

4 IT IS NOT CERTAIN THAT THERE WILL BE
5 ANY PARTICULAR LEVEL OF ATMOSPHERIC CO₂ REACHED.

6 MODERATOR THOMAS JORLING: ESPE-
7 CIALLY IF WE ARE SUCCESSFUL IN IMPLEMENTING OTHER
8 POLICIES.

9 DR. DAVID BURNS: SECONDLY, THERE IS
10 ONE OTHER POINT I WANT TO MAKE, AND THAT IS THAT
11 IT IS VERY DISTURBING TO A NUMBER OF PEOPLE THAT
12 THERE IS NO CONFIRMATION THEORY.

13 TOGETHER, WE ARE ENGAGED, AS RAVELL SAID
14 DECADES AGO, IN A GEOPHYSICAL EXPERIMENT, THE
15 RESULTS OF WHICH COULD VERY WELL BE QUITE SIGNI-
16 FICANT FOR MANKIND.

17 NEVERTHELESS, THE EXPERIMENT IS
18 STILL IN PROGRESS. AND THERE IS NO CONFIRMATION
19 THAT THE -- OF THE DIRECTION OF THE RESULTS. SO I
20 THINK, AS AN URGENT PRIORITY, WE NEED TO GIVE
21 QUITE A LOT OF FUNDING TO WHATEVER CAN BE DONE TO
22 DETERMINE THE DIRECTION AND RESULTS OF THE EXPERI-
23 MENT.

24 MR. ANTHONY SCOVILLE: YES. BUT I
25 THINK, IN DOING THAT, ONE SHOULD ALSO, AS WE

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1 RECOGNIZE FURTHER DOWN HERE, THAT IT MAY BE HIGHLY
2 UNLIKELY, THAT WE SHOULD NOT WAIT TO TAKE ANY
3 ACTION UNTIL --

4 MR. DAVID SLADE: AND PERHAPS IN A
5 VERY GENERIC SENSE DR. DAVID BURNS: I DID NOT SAY
6 "WAIT," OR SOMETHING LIKE THAT, MIGHT BE APPRO-
7 PRIATE.

8 MR. ANTHONY SCOVILLE: BECAUSE I
9 THINK --

10 MODERATOR THOMAS JORLING: I THINK
11 ANY TIME THAT A DR. DAVID BURNS: THEY ARE PARALLEL
12 STATEMENTS.

13 RECOMMENDATIONS THERE ARE IMPLICATIONS WITH RESPECT
14 TO UNANSWERED QUESTIONS MODERATOR THOMAS JORLING: I THINK
15 WHAT YOU ARE SAYING IS THAT WHEN THE PEOPLE OR THE
16 STAFF, WHENEVER THAT SPECIFIC LIST GETS PUT
17 TOGETHER, YOU HAVE SPECIFICALLY STATED THAT THE
18 QUESTION OF IDENTIFICATION OF THE SOURCES OF CO₂
19 AND THE OBSERVATION OF THEM OVER TIME IS A HIGH
20 PRIORITY AMONGST THE ENTIRE SPECTRUM OF ENVIRON-
21 MENTAL AND SOCIAL RESEARCH THAT YOU SUG-
22 GESTED IS TESTING AND SEEKING TO CONFIRM THEORY.

23 DR. DAVID BURNS: THE CLIMATE CHANGE
24 THAT IS PRESUMED BY THE INJECTION OF ATMOSPHERIC
25 CO₂. IT SUGGESTS THAT ONLY SCIENTISTS CAN MAKE

26 MR. DAVID SLADE: JUST AS MY DIS-
27 RESPECTFUL SON SAYS, "WITH ALL DUE RESPECT" -- HE
28 DOES -- AND THEN SAYS A DISRESPECTFUL REMARK, I
29 DON'T THINK THIS GROUP IS SUITABLY CONSTITUTED TO

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1 SUGGEST RESEARCH PRIORITIES.

2 DR. DAVID BURNS: I AGREE.

3 MR. DAVID SLADE: AND PERHAPS IN A
4 VERY GENERIC SENSE OR REFERRING TO SOME OTHER
5 ACTIVITY, OR SOMETHING LIKE THAT, MIGHT BE APPRO-
6 PRIATE.

7 MODERATOR THOMAS JORLING: I THINK
8 ANY TIME THAT A GROUP IS ASSEMBLED TO MAKE POLICY
9 RECOMMENDATIONS THERE ARE IMPLICATIONS WITH RESPECT
10 TO UNANSWERED QUESTIONS THAT FLOW FROM THAT.
11 AND SO YOU JUST CAN'T SIMPLY SAY IT
12 IS NOT FOR THIS GROUP TO SAY, "STAND ASIDE ON
13 RESEARCH."

14 MR. DAVID SLADE: NO, NO, NO, NOT
15 STAND ASIDE ON RESEARCH. BUT SETTING OF RESEARCH
16 PRIORITIES AMONGST THE ENTIRE SUITE OF ENVIRON-
17 MENTAL AND SOCIAL RESEARCH THAT THIS EMBODIES, I
18 DO NOT THINK --

19 MODERATOR THOMAS JORLING: BUT I
20 THINK THE COMMITTEE IS DOING ITSELF A DISSERVICE
21 WHEN IT SUGGESTS THAT ONLY SCIENTISTS CAN MAKE
22 RESEARCH PRIORITIES.

23 DR. DAVID ROSE: I DON'T THINK THAT
24 IS WHAT HE SAID. FOR EXAMPLE, THE THINGS YOU ARE
25 SAYING ARE ALL VERY GOOD, BUT I THINK THEY ARE

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1 ALREADY ON DAVID'S LIST. CONSIDERATIONS ARE --

2 MR. DAVID SLADE: REGARDLESS OF MY
3 LIST, I JUST DON'T SEE OCEANOGRAPHERS AND, YOU KNOW,
4 THIS WHOLE SUITE OF THE SPECIFIC RESEARCH TOPICS
5 WE MAY WANT TO DR. JOHN LAURMANN: I DON'T FULLY
6 AGREE WITH THAT, BECAUSE THERE HAS TO BE AN INPUT
7 FROM THIS END OF THE COMMUNITY INTO THE SCIENTIFIC
8 WORLD IN ORDER TO RANK THE PRIORITIES PROPERLY.

9 SO SOMEWHERE OR OTHER THEM THAT AT LEAST COME TO MY
10 MIND, WHICH I MR. DAVID SLADE: THERE HAS TO BE
11 INPUT, AND A VERY IMPORTANT INPUT IS BEING SERVED
12 BY THIS GROUP BY, FOR THE FIRST TIME, REALLY FOCUS-
13 ING ON POLICY ISSUES.

14 BUT I DON'T SEE THAT THE HARD BUSI-
15 NESS OF SETTING RESEARCH PRIORITIES IS SOMETHING
16 THAT OUGHT TO -- THAT CAN BE RECOMMENDED, IN ALL
17 DUE HONESTY -- ECONOMIC AND POLICY DECISIONS THAT ARE
18 LIKELY TO OCCUR DR. JOHN LAURMANN: SOMEBODY HAS TO
19 DO IT SOMETIME. AT LEAST YOU SHOULD SAY THAT. SOME
20 BUT INTERSECTION BETWEEN THOSE TWO SETS, THEY AREN'T

21 ALWAYS SYNONYMOUS. MR. DAVID SLADE: THAT'S FINE.

22 MODERATOR THOMAS JORLING: EDITH'S
23 AND STILL NOT KNOW DR. EDITH BROWN WEISS: I THINK
24 THERE MAY BE, HOPEFULLY, A RATHER EASY WAY OUT OF
25 THIS BY SIMPLY SAYING SPECIFIC RESEARCH TOPICS

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1 IMPORTANT FOR POLICY CONSIDERATIONS ARE --

2 MR. ANTHONY SCOVILLE: YOU KNOW, I
3 THINK, EDITH, YOU ARE RIGHT. I THINK THAT MAYBE,
4 RATHER THAN SPECIFYING SPECIFIC RESEARCH TOPICS
5 WE MAY WANT TO SPECIFY TWO OR THREE BROAD CLASSES
6 OF RESEARCH WHICH ARE VERY IMPORTANT TO FOLLOW UP
7 WITH APPROPRIATE PEOPLE DEVELOPING THE SPECIFIC
8 TOPICS WITHIN THOSE CLASSES.

9 TWO OF THEM THAT AT LEAST COME TO MY
10 MIND, WHICH I BROUGHT UP YESTERDAY, AND WHICH I
11 GUESS, EDITH, YOU ALLUDED TO HERE EARLIER, FIRST
12 OF ALL THERE IS THE CLASSIC BASIC UNDERSTANDING OF
13 HOW THE PHYSICAL PROCESS WORKS.

14 THE SECOND ASPECT IS DOING RESEARCH
15 WHICH MAY -- WHICH IS IMPORTANT IN ORDER TO BE
16 ABLE TO MELD HOW CO₂ SHOULD AFFECT, GIVEN DECI-
17 SIONS OR ECONOMIC AND POLICY DECISIONS THAT ARE
18 LIKELY TO OCCUR IN THE FORESEEABLE FUTURE, AND
19 THOSE AREN'T EXACTLY -- ALTHOUGH THERE MAY BE SOME
20 INTERSECTION BETWEEN THOSE TWO SETS, THEY AREN'T
21 ALWAYS SYNONYMOUS.

22 I MEAN, YOU CAN KNOW NEWTON'S LAWS
23 AND STILL NOT KNOW THE DETAILED WORKINGS OF A
24 MECHANICAL SYSTEM AS RELATED TO SOLVING A SPECIFIC
25 ENGINEERING PROBLEM, FOR INSTANCE.

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1 FROM A POLICY STANDPOINT THE MOST IMPORTANT OUT-
2 IMPORTANT, EVEN IF WE CAN'T SAY THAT YOU SHOULD
3 BE, SAY, STUDYING THE -- THAT OCEAN MODELING IS
4 THE NUMBER-ONE PRIORITY, OR SOMETHING LIKE THAT.

5 SECONDLY, SOME CLARIFICATION OF THE POLICY
6 THERE ARE TWO BASIC DIMENSIONS OR CLASSES OF
7 RESEARCH THAT SHOULD BE CARRIED OUT. ONE, RESEARCH
8 ON VASTLY INCREASING OUR UNDERSTANDING AND ABILITY
9 TO DETECT THE EFFECTS THAT MAY BE OCCURRING.

10 AND THEN, SECOND OF ALL, SPECIFIC
11 RESEARCH TOPICS WHICH MUST BE ADDRESSED TO LIKELY
12 POLICY DECISIONS WHICH SOCIETY HAS TO MAKE OR IS
13 LIKELY TO MAKE OVER THE COMING YEARS.

14 MR. DAVID SLADE: THOSE TWO BROAD
15 CLASSES?

16 MR. ANTHONY SCOVILLE: YES. IT
17 SEEMS TO ME THAT WOULD COVER --

18 MR. DAVID SLADE: I WAS JUST WORRIED
19 THAT THIS WOULD GET INTO THE QUESTION OF DECIDING
20 WHETHER IT WAS MORE IMPORTANT TO LOOK AT SEA-AIR
21 FLUXES OR TERRESTRIAL AIR FLUXES.

22 I HOPE THAT WASN'T -- THAT IS THE
23 THAT IS A QUESTION OF ASKING CONGRESS TO GIVE
24 LEVEL OF DETAIL I WOULD NOT WANT TO SEE. THE LEVEL
25 THAT TONY TALKS TO SEEMS REASONABLE.

DR. JOHN PERRY: I SHOULD THINK THAT

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1 FROM A POLICY STANDPOINT THE MOST IMPORTANT OUT-
 2 PUTS YOU WOULD WANT FROM THE RESEARCH COMMUNITY
 3 WOULD BE, FIRST, THE RESULT OF MONITORING, TO
 4 VERIFY THE REALITY OF THE PROJECTIONS; AND
 5 SECONDLY, SOME CLARIFICATION OF THE DETAILED
 6 REGIONAL CLIMATIC IMPLICATIONS OF INCREASING CAR-
 7 BON DIOXIDE.

8 YOU KNOW, I THINK THOSE ARE TWO
 9 DESIDERATA THAT THE POLICY-ORIENTED GROUP COULD
 10 LEGITIMATELY ASK OF THE SCIENTIFIC COMMUNITY: TELL
 11 US IF IT IS REALLY HAPPENING. SHOW US THAT IT IS
 12 REALLY HAPPENING. AND ONCE YOU HAVE SHOWN US, CON-
 13 VINCE US THAT IT IS REALLY HAPPENING, GIVE US AN
 14 IDEA OF THE DETAILS THAT WE NEED TO KNOW TO EVALU-
 15 ATE HOW IMPORTANT IT IS TO US.

16 MODERATOR THOMAS JORLING: LET'S
 17 SEE IF WE CAN GO ON TO THE RATIONALE FOR THE
 18 POLICY ACTIONS. IT IS 9:30. THE CLOCK IS RUNNING.

19 MR. THOMAS WALTZ: TOM, I AM SORRY,
 20 BUT IN REREADING THIS SECTION HERE, I AM CONCERNED
 21 ABOUT SOMETHING STEVE SAID A MINUTE AGO. NOW,
 22 THAT IS A QUESTION OF ASKING CONGRESS TO GIVE
 23 SPECIFIC AUTHORIZATION IN LIGHT OF THE FACT THAT
 24 THE NATIONAL CLIMATE PROGRAM ACT HAS ALREADY GIVEN
 25 THIS AUTHORIZATION, OKAY, TO THE NATIONAL CLIMATE

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1 PROGRAM OFFICE, TO DELEGATE RESPONSIBILITIES, OKAY,
2 ROLE RESPONSIBILITIES, SUCH AS D.O.E. AS LEAD
3 AGENCY FOR CARBON DIOXIDE.

4 AND IN A SENSE, BY ASKING CONGRESS
5 TO GIVE SPECIFIC AUTHORIZATION, THERE IS AN IMPLI-
6 CIT IMPLICATION THAT THIS HASN'T BEEN DONE YET.
7 IT HAS BEEN DONE.

8 IF THERE IS SOME WAY WE COULD, SAY,
9 ASK CONGRESS TO REINFORCE THE --

10 DR. DAVID ROSE: REAFFIRM?

11 MR. THOMAS WALTZ: -- REAFFIRM,
12 YES.

13 MR. DAVID SLADE: "REINFORCE" IS A
14 BETTER WORD THAN "REAFFIRM."

15 MR. ANTHONY SCOVILLE: YES, BECAUSE
16 IT DOESN'T REALLY REAFFIRM THE CO₂ THAT EXPLICITLY.

17 WHAT YOU REALLY NEED TO DO IS TO PLUCK THIS OUT
18 OF -- WHAT YOU ARE SAYING IS: IS IT IMPORTANT TO
19 PLUCK THIS OUT OF ALL THE SPECTRUM OF POTENTIAL
20 CLIMATE PROGRAMS AND GIVE IT A SPECIAL IMPORTANCE?

21 AND I THINK THAT WOULD BE ONE --

22 MR. THOMAS WALTZ: BUT YOU WANT TO

23 DO IT IN A WAY THAT DOESN'T CONTRADICT WHAT HAS
24 ALREADY GONE BEFORE IT AND IT DOESN'T UNDERMINE --

25 MR. DAVID SLADE: YES.

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1 THINK, IN PARAGRAPH A, YOU COULD SORT OF
2 REWORK THAT LANGUAGE.

3 MODERATOR THOMAS JORLING: OKAY.
4 LET'S GO ON TO THE RATIONALE FOR POLICY ACTIONS.
5 THIS IS SORT OF A PRECEDENT TO THE SPECIFICS THAT
6 FOLLOW ON THE NEXT PAGE, ATTEMPTS AT DISTILLING
7 OUT OF A LOT OF OUR CONVERSATION --

8 DR. DAVID BURNS: TOM, I JUST HAVE
9 TWO SUGGESTIONS FOR LANGUAGE CHANGES. IN PARA-
10 GRAPH A IT SAYS "...IMPORTANT TO BEING INTERNA-
11 TIONAL DIALOGUE..."

12 I WOULD CHANGE THAT TO "ACCELERATE
13 INTERNATIONAL DIALOGUE," BECAUSE ACTUALLY DIALOGUE
14 HAS BEGUN. THERE WAS A WORLD CLIMATE PROGRAM --
15 A WORLD CLIMATE MEETING, ET CETERA. THERE HAVE
16 BEEN NUMBERS OF OTHER INITIATIVES TAKEN.

17 SO IT WOULD NOT BE CORRECT TO SAY
18 THAT IT HASN'T BEGUN.

19 SECONDLY, IN PARAGRAPH B, "GIVEN
20 THE EXISTING SCIENTIFIC UNCERTAINTIES AND THE DIF-
21 FICULTY OF RESOLVING THEM..." OKAY, THERE ARE
22 UNCERTAINTIES THAT ARE HARD TO RESOLVE, BUT THERE
23 IS ONE OTHER FACTOR, AND THAT IS THE LONG LEAD
24 TIME.

25 YOU ALLUDE TO THAT LATER ON, I

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1 PRETTY SLOW. I AGREE WITH THAT.
THINK, IN PARAGRAPH C. BUT YOU COULD SORT OF

2 EMPHASIZE THAT, THAT IT WILL TAKE TIME, AND THE
3 WHAT TONY SAID AND ADD "THROUGH EXISTING AND
TIME REQUIRED TO --

4 MODERATOR THOMAS JORLING: THAT IS
5 AREN'T ALWAYS THE ONLY ONES.
A GOOD THOUGHT.

6 MR. ANTHONY SCOVILLE: AND THAT
7 MR. STEPHEN CONNOLLY: SO YOU ARE
ALSO GIVES US A BASIS LATER ON, WHEN YOU HAVE THAT
SUGGESTING --

8 INTERNATIONAL SCIENTIFIC GROUP. THERE IS EMPHASIS
9 DR. DAVID BURNS: JUST ADDING "AND
OF -- THAT YOU HAVE GOT I.C.S.U. AND NOT JUST
THE LONG TIME REQUIRED TO RESOLVE -- THE DIFFI-

10 CULTIES AND LONG TIME REQUIRED TO -- THE DIFFI-
11 CULTY OR DIFFICULTIES OF" --
12 MR. RAFF POMERANCE: I WOULD SAY

13 THAT WE WERE INFORMED THAT THIS FIRST MEETING, FOR
MODERATOR THOMAS JORLING: OPTION
WHICH THERE WAS SO MUCH HOPE, WAS SIMPLY SUPPOSEDLY
SPACE.

14 A MATTER OF DIVIDING UP THE TURF. IT IS SUPPOSED
DR. DAVID BURNS: YES.

15 TO BE PLANNING FOR THIS BIG MEETING NEXT YEAR.
MR. ANTHONY SCOVILLE: GIVEN THE
16 AND ALL IT HAS BEEN HAS BEEN A
NOTION OF THE LONG TIME INVOLVED, AND KNOWING THE

17 TURE DISCUSSION. IT IS QUITE WORK TO ME THAT THIS
18 VISCOUSNESS OF INTERNATIONAL -- OF THE HIGH VIS-
FIRST MEETING IN VIENNA, OR WHEREVER, IN AUSTRIA,
COSITY OF INTERNATIONAL ORGANIZATIONS, I WOULD

19 IS NOT GOING TO LEAD TO VERY MUCH.
LIKE TO SAY "SHARPLY ACCELERATE INTERNATIONAL

20 DIALOGUE," BECAUSE I THINK THAT THAT -- IT IS NOT
21 SAID "NOVEL MECHANISMS," RAFF.
JUST AN ACCELERATION.

22 DR. JOHN PERRY: WHAT ON EARTH ARE
I THINK THAT THE POINT IS THAT
23 YOU TALKING ABOUT?
THERE SHOULD BE A REAL PUSH TO GET THEM TO START

24 MR. ANTHONY SCOVILLE: THE WHAT?
MAKING DECISIONS AND TO REALLY MOVE.

25 MODERATOR THOMAS JORLING: ALL
DR. DAVID BURNS: IT IS MOVING

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1 PRETTY SLOW. I AGREE WITH THAT.
RIGHT. ANY OTHERS? MITCH

2 MR. DAVID SLADE: I WOULD ENDORSE
3 WHAT TONY SAID AND ADD "THROUGH EXISTING AND
4 NOVEL MECHANISMS," BECAUSE THE EXISTING MECHANISMS
5 AREN'T ALWAYS THE ONLY ONES.

6 MR. ANTHONY SCOVILLE: AND THAT
7 ALSO GIVES US A BASIS LATER ON, WHEN YOU HAVE THAT
8 INTERNATIONAL SCIENTIFIC GROUP, THERE IS EMPHASIS
9 OF -- THAT YOU HAVE GOT I.C.S.U. AND NOT JUST
10 W.M.O. AND U.N.E.P. DOING IT.

11 MR. RAFE POMERANCE: I WOULD SAY
12 THAT WE WERE INFORMED THAT THIS FIRST MEETING, FOR
13 WHICH THERE WAS SO MUCH HOPE, WAS SIMPLY SUPPOSEDLY
14 A MATTER OF DIVIDING UP THE TURF. IT IS SUPPOSED
15 TO BE PLANNING FOR THIS BIG MEETING NEXT YEAR.

16 AND ALL IT HAS BEEN HAS BEEN A
17 TURF DISCUSSION. IT IS QUITE WORRISOME THAT THIS
18 FIRST MEETING IN VIENNA, OR WHEREVER, IN AUSTRIA,
19 IS NOT GOING TO LEAD TO VERY MUCH.

20 MR. DAVID SLADE: THAT IS WHY I
21 SAID "NOVEL MECHANISMS," RAFE.

22 DR. JOHN PERRY: WHAT ON EARTH ARE
23 YOU TALKING ABOUT?

24 MR. ANTHONY SCOVILLE: THE WHAT?

25 MODERATOR THOMAS JORLING: ALL

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1 RIGHT. ANY OTHERS? MITCH.

2 MR. MITCH TYSON: IF IT WAS IMPOR-
3 TANT ENOUGH TO MAKE A PARAGRAPH ENCOURAGING INTER-
4 NATIONAL DIALOGUE, MAYBE WE CAN HAVE A SECOND ONE
5 THAT FOLLOWS THAT, TALKING ABOUT DOMESTIC DIALOGUE.
6 SO MAYBE THERE IS SOMETHING THAT SAYS IN THE
7 MODERN ERA THERE HAS BEEN NO PRECEDENT FOR OUR
8 POLITICAL SYSTEM TO ADDRESS A PROBLEM OF SUCH A
9 LONG-RANGE NATURE, AND THAT WE HAVE TO RECOGNIZE
10 BECAUSE THE COSTS OF THE CO₂ PROBLEM ARE VERY FAR
11 AWAY IN TIME AND THE COSTS OF AVOIDING IT ARE VERY
12 NEAR IN TIME, THAT IT WILL BE VERY DIFFICULT TO
13 GET IT ON THE AGENDA.

14 I MEAN, IT IS CRITICAL THAT WE
15 RESTRUCTURE THE ENERGY DEBATE TO EXPLICITLY TAKE
16 INTO ACCOUNT LONG-TERM IMPACTS OF THE TRANSITION,
17 SUCH AS CO₂ COSTS.

18 MODERATOR THOMAS JORLING: AS A
19 SEPARATE PARAGRAPH IN THE RATIONALE?

20 MR. MITCH TYSON: YES. SOMETHING
21 BETWEEN A AND B.

22 MODERATOR THOMAS JORLING: DO YOU
23 WANT TO GO AHEAD, MITCH, AND PULL THAT TOGETHER?

24 MR. MITCH TYSON: YES. I WILL TRY.

25 MODERATOR THOMAS JORLING: ARE THERE

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1 ANY OTHERS ON THE FIRST PAGE? THAT A FAIR PORTION

2 MR. STEPHEN CONNOLLY: BY THE WAY,
3 COULD I ASK, IF WE ASK YOU TO WRITE SOMETHING AND
4 YOU AGREE TO IT, COULD YOU PUT YOUR NAME ON IT AND
5 WHERE -- AND MARK WHERE YOU WOULD LIKE IT TO BE
6 INSERTED.

7 MR. RAFE POMERANCE: I WOULD JUST
8 CHANGE THE WORD -- THIS DOESN'T MAKE IT ANY MORE
9 -- THE WORD "MAY" IN PARAGRAPH B TO "WILL,"
10 BECAUSE YOU HAVE THE WORDS "IT IS LIKELY," THAT
11 DOESN'T MEAN IT IS A SURE THING, BUT YOU WILL
12 HAVE TO TAKE ACTIONS IN LIGHT OF IMPERFECT KNOWL-
13 LEDGE OF THE EFFECTS.

14 MODERATOR THOMAS JORLING: WHICH
15 PARAGRAPH?

16 MR. RAFE POMERANCE: B.

17 MODERATOR THOMAS JORLING: ALL
18 RIGHT. I SEE IT.

19 MR. RAFE POMERANCE: "...IT IS
20 LIKELY THAT SOME POLICY ACTIONS WILL NEED TO BE
21 TAKEN...."

22 MR. ANTHONY SCOVILLE: I WOULD ALSO
23 CHANGE "SOME" TO "MANY," BECAUSE I THINK "SOME"
24 IMPLIES MAYBE ONE OR TWO, OR A VERY SMALL NUMBER,
25 WHEREAS IT MAY TURN OUT TO BE A FAIRLY SUBSTANTIAL

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1 FRACTION. AND I WOULD GUESS THAT A FAIR PORTION
 2 OF THE TOTAL NUMBER OF DECISIONS THAT ARE GOING TO
 3 HAVE TO BE MADE ARE GOING TO HAVE TO BE MADE UNDER
 4 THESE VERY DIFFICULT CIRCUMSTANCES. READY DONE, BUT
 5 IF YOU ARE WAIT AND THAT I THINK MAY BE TRUE EVEN
 6 AFTER YOU BEGIN TO DETECT THE FIRST EFFECTS OF THE
 7 WARMING, AFTER YOU, SAY, HAVE FOUND SOME SLIGHT TO
 8 RISE IN TEMPERATURE OR SOMETHING LIKE THAT. IS
 9 ALSO A CASE OF MODERATOR THOMAS JORLING: LET ME
 10 SUGGEST TWO ALTERNATIVES TO THAT OF ONE ISN'T
 11 STRIKE THE QUALIFIER TO "POLICY" AND JUST SAY
 12 "POLICY ACTIONS WILL," OR TO PUT IN THERE A
 13 VARIETY OF THEM JUST TO GET US TO GET US
 14 INTO A DEBATE WHETHER --

15 MR. ANTHONY SCOVILLE: STRIKE THE

16 WORD "SOME." DR. MICHAEL GLANTZ: YES. BUT IF

17 YOU WAIT UNTIL MODERATOR THOMAS JORLING: YES. IT

18 MAY BE A LONG DR. MICHAEL GLANTZ: I HAVE A QUES-

19 TION.

20 MODERATOR THOMAS JORLING: YES. THE

21 NOISE LEVEL, DR. MICHAEL GLANTZ: IN THE

22 THAT MEANS -- DO YOU WANT TO SAY "UNTIL CLIMATIC

23 CHANGES ARE MEASURABLE" OR DO YOU WANT TO SAY

24 "UNTIL MEASURABLE CLIMATIC CHANGE HAS OCCURRED" --

25 "CHANGES HAVE OCCURRED" EN CONNOLLY: NO. WHAT IS

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1 IS ATTRIBUTABLE IN OTHER WORDS, CLEARLY AND ONCE
2 THERE IS, IF THERE WERE FLOODING DUE TO THE --
3 COASTAL FLOODING DUE TO THE ANTARCTIC ICE SHEET,
4 YOU KNOW, WEST ANTARCTICA, IT IS ALREADY DONE, BUT
5 IF YOU ARE WAITING UNTIL YOU CAN MEASURE THESE
6 CHANGES, IT IS DIFFERENT IN TIMING.

7 OUT OF THE NOISE MR. STEPHEN CONNOLLY: IT SEEMS TO
8 ME IT IS NOT ONLY A CASE OF MEASURABLE BUT IT IS
9 ALSO A CASE OF BEING ABLE TO MEASURE THEM AND
10 ATTRIBUTE THEM WITH SOME DEGREE OF CERTAINTY, ISN'T
11 IT -- THAT THIS IS UNTIL CLIMATIC CHANGES HAVE
12 OCCURRED. DR. WILLIAM ELLIOTT: YES.

13 ALL OVER. BUT MR. STEPHEN CONNOLLY: -- TO ONE
14 CAUSE VERSUS ANOTHER?

15 ABOUT THE WEST DR. WILLIAM ELLIOTT: YES. IN
16 YEARS. DR. MICHAEL GLANTZ: YES. BUT IF

17 YOU WAIT UNTIL YOU CAN MEASURE THIS, YOU KNOW, IT
18 MAY BE A LONG TIME BEFORE YOU GET OUT OF THE NOISE
19 LEVEL?

20 MR. STEPHEN CONNOLLY: NOT ONLY THE
21 NOISE LEVEL, BUT EVEN AFTER YOU GET OUT OF THE
22 NOISE LEVEL YOU MAY NOT BE ABLE TO --

23 IS TO TRY TO DR. MICHAEL GLANTZ: I MEAN FOR
24 CO2; THAT'S RIGHT. TIME -- WELL, THIS IS ONE OF

25 THE PROBLEMS OF MR. STEPHEN CONNOLLY: NO. WHAT IT

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1 IS ATTRIBUTABLE TO. SO HOW DO YOU DEAL WITH THAT?

2 DR. WILLIAM ELLIOTT: I THINK WHAT
3 HE SAYS --

4 DR. MICHAEL GLANTZ: WHAT I AM
5 GETTING AT --

6 DR. WILLIAM ELLIOTT: -- WHEN IT IS
7 OUT OF THE NOISE LEVEL THAT MEANS IT IS ATTRIBUT-
8 ABLE TO SOMETHING, WHATEVER LEVEL THAT WOULD HAVE
9 TO BE,

10 DR. MICHAEL GLANTZ: BUT I AM SAY-
11 ING THAT THIS IS UNTIL CLIMATIC CHANGES HAVE
12 OCCURRED. CLEARLY, IF YOU WAIT UNTIL THEN, IT IS
13 ALL OVER. BUT YOU WANT TO SUGGEST THAT IT IS EVEN
14 MORE IMMINENT THAN THAT, BECAUSE WE ARE TALKING
15 ABOUT THE WEST ANTARCTIC ICE SHEET GOING IN 200
16 YEARS.

17 YOU KNOW, THAT IS 200 YEARS THAT
18 YOU HAVE TO MAKE SOME DECISIONS. DO YOU FOLLOW
19 MY POINT?

20 MR. STEPHEN CONNOLLY: I DO. WHAT
21 IS YOUR SUGGESTION?

22 DR. MICHAEL GLANTZ: MY SUGGESTION
23 IS TO TRY TO COME UP WITH WORDING TO BRING IT
24 BACK TO AN EARLIER TIME -- WELL, THIS IS ONE OF
25 THE PROBLEMS OF SOME RESEARCH I DID ON EL NINO AND

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1 PERUVIAN FISHERIES, THAT THE FORECAST IS MADE AT A
2 TIME WHEN THERE ARE NO VISIBLE EFFECTS. AND SO
3 THERE IS A TENDENCY NOT TO BELIEVE THE FORECAST.
4 JUST AROUND AND BY THE TIME YOU CAN SEE SOME
5 VISIBLE EFFECT, IT IS TOO LATE.

6 YOU ADD -- MR. STEPHEN CONNOLLY: TAKE A CRACK
7 AT IT. BUT I THINK THERE IS A PROBLEM.

8 SAY, "THERE ARE DR. MICHAEL GLANTZ: OKAY.

9 VIABLE TECHNOLOGICAL MODERATOR THOMAS JORLING: CAN WE
10 GO ON TO PAGE 2?

11 DR. JOHN LAURMANN: WHAT ABOUT
12 ITEM D? CAN WE CHANGE THAT A LITTLE BIT? I WOULD
13 SUGGEST THAT THERE ARE NO KNOWN ECONOMICALLY VIABLE
14 TECHNOLOGICAL FIXES THAT CAN PROVIDE -- ET CETERA.
15 THIS USE OF THE WORD "LIKELY" IS A LITTLE PERNI-
16 CIOUS. I DON'T LIKE IT.

17 MR. STEPHEN CONNOLLY: SAY THAT
18 AGAIN. ENOUGH.

19 DR. JOHN LAURMANN: I AM SUGGESTING
20 NOW "NO KNOWN ECONOMICALLY VIABLE TECHNOLOGICAL
21 FIXES THAT CAN PROVIDE PRACTICAL MEANS" --

22 MR. ANTHONY SCOVILLE: WELL, JOHN,
23 IN A SENSE, I THINK THE STATEMENT THAT YOU JUST
24 PROPOSED IS WEAKER THAN WHAT IS HERE, ALTHOUGH I
25 THINK THE WORD, THE QUALIFICATION "ECONOMICALLY

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1 VIABLE" IS -- WHEN YOU ADD THAT WORD "THERE ARE NO
 2 KNOWN,". PEOPLES WILL ALWAYS FALL BACK AND SAY,
 3 "YES, BUT SOMETHING WILLE SURELY OCCUR, YOU KNOW,
 4 JUST AROUND THE CORNER." BUT A ...
 5 ENERGY TO CATCH I THINK, I WOULD AGREE WITH YOU IF
 6 YOU ADD -- ADD THE ADJECTIVE "ECONOMICALLY VIABLE"
 7 THERE, BUT I STILLE THINK IT IS BETTER TO HAVE,
 8 SAY, "THERE ARE NOT LIKELY TO BE ECONOMICALLY
 9 VIABLE TECHNOLOGICAL FIXES," RATHER THAN "THERE ARE
 10 NO KNOWN." I JUST --
 11 DR. JOHN LAURMANN: WELL, THAT GETS
 12 INTO AN AREA THAT I AM QUITE UNABLE TO PROGNOSTI-
 13 CATE. SO IN THAT SENSE I PREFER A WEAKER STATE-
 14 MENT. BUT I THOUGHT THE WORDING I HAD ALSO HAS A
 15 FEELING OF STRENGTH TO IT, IN A DIFFERENT WAY.
 16 I DON'T KNOW.

17 MR. ANTHONY SCOVILLE: I AM NOT
 18 STRONG ENOUGH IN THAT AREA.

19 DR. JOHN LAURMANN: I REALIZE THE
 20 POINT YOU ARE MAKING

21 MR. ANTHONY SCOVILLE: I AM NOT
 22 THAT STRONG IN THAT.

23 SOMETHING -- GO AHEAD.
 24 DR. JOHN LAURMANN: IT IS QUITE AS

25 POSSIBLE.

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1 DR. DAVID ROSE: I LIKE THE PRESENT
2 WORDING. IT IS A STATEMENT OF OPINION, IN ANY
3 EVENT. YOU CAN'T SEE THE FUTURE. YOU ARE TALKING
4 ABOUT NOT ONLY ECONOMICS BUT ALSO MAKING MORE
5 ENERGY TO CATCH THE CO₂, THE FUEL, AND SO ON AND
6 SO FORTH.

7 MODERATOR THOMAS JORLING: CAN WE
8 GET A SENSE THAT IT IS -- JOHN, DO YOU FEEL
9 STRONGLY ABOUT THAT, OR --

10 DR. JOHN LAURMANN: NO, I DON'T FEEL
11 TOO STRONGLY ABOUT THAT.

12 MODERATOR THOMAS JORLING: ALL
13 RIGHT. PAGE 2. DOES ANYONE HAVE ANY PROBLEMS WITH
14 PARAGRAPH A? I DON'T THINK THEY WILL WITH THE
15 INTRODUCTION. DOES ANYONE HAVE ANY PROBLEMS WITH
16 PARAGRAPH A?

17 MR. JOHN HOFFMAN: I HAVE TWO ALTER-
18 NATIVES THAT I THINK MIGHT BE WORTH EXPLORING. THE
19 FIRST ONE WOULD BE SHIFTING NATIONAL RELIANCE ON
20 FOSSIL FUEL DEVELOPMENT TO CONSERVATION AS THE
21 BEST MEANS OF REDUCING THE RISKS OF FOREIGN-OIL
22 DEPENDENCE AND CO₂-RELATED CLIMATIC CHANGE.

23 AND THAT WOULD SORT OF COMBINE PART
24 OF 2 AND PART OF 1, SO THAT WE SEE CONSERVATION AS
25 A MECHANISM OF REDUCING THE RISKS BOTH OF THE OIL

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1 AND THE CO₂. AND NUMBER 2 IS: PROVIDING GREATER
 2 RESOURCES FOR DEVELOPING AND THEN THE SECOND ONE WOULD BE
 3 PROVIDING GREATER RESOURCES FOR DEVELOPING MORE
 4 EFFICIENT NONFOSSIL FUEL ALTERNATIVES WHICH COULD
 5 BE CRITICAL TO SUSTAINING THE WORLD AND U.S.
 6 ECONOMIES IN THE FACE OF CO₂-INDUCED CLIMATIC
 7 CHANGE.

8 AND I THINK THAT THOSE TWO SAY THE
 9 SAME THING, BUT SAY IT IN A WAY THAT IT DOESN'T COME
 10 OUT QUITE AS NEGATIVELY AS MINIMIZING CO₂ EMIS-
 11 SIONS. "IN THE FACT OF CLIMATE CHANGE," YOU WANT TO PREVENT
 12 CLIMATE CHANGE. I MEAN, I THINK THEY PROVIDE A MORE
 13 -- SORT OF MORE POSITIVE STATEMENT THAN THE THINGS
 14 YOU WERE GETTING AT.

15 DR. WILLIAM ELLIOTT: COULD YOU
 16 REPEAT THAT? I AM SORRY.

17 MR. JOHN HOFFMAN: OKAY. I WILL
 18 REPEAT BOTH OF THEM.

19 DR. WILLIAM ELLIOTT: YES, PLEASE.

20 MR. JOHN HOFFMAN: SHIFTING NATIONAL
 21 RELIANCE ON FOSSIL FUEL DEVELOPMENT TO CONSERVATION
 22 IS THE BEST MEANS OF REDUCING RISKS OF FOREIGN-
 23 OIL DEPENDENCE AND CO₂-RELATED CLIMATIC CHANGE.
 24 I HAVE REALLY WRITTEN THEM AS CONCLUSIONS AS
 25 OPPOSED TO RECOMMENDATIONS.

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1 WITH THE FIRST AND NUMBER 2 IS: PROVIDING GREATER
2 RESOURCES FOR DEVELOPING MORE EFFICIENT NONFOSSIL
3 FUEL ALTERNATIVES COULD BE CRITICAL TO SUSTAINING
4 THE U.S. AND WORLD ECONOMIES IN THE FACE OF CO₂-
5 INDUCED CLIMATIC CHANGE.

6 "FOREIGN-OIL DEPENDENCE, I THINK, HAVE MORE POLITICAL
7 APPEAL.

8 MR. RAFE POMERANCE: YOU CAN
9 INCREASE YOUR DR. WILLIAM ELLIOTT: YES. THE
10 SECOND ONE, I THINK THERE IS A VERY SLIGHT CORREC-
11 TION YOU MIGHT WANT TO MAKE IN THE SECOND ONE. "IN
12 THE FACT OF CLIMATE CHANGE," YOU WANT TO PREVENT
13 CLIMATE CHANGE.

14 MR. JOHN HOFFMAN: OKAY.

15 DR. WILLIAM ELLIOTT: IF IT HAS
16 HAPPENED, IT DOESN'T MATTER.

17 MR. JOHN HOFFMAN: OKAY. "IN THE
18 FACT OF EMERGING"

19 DR. WILLIAM ELLIOTT: YES.

20 MR. JOHN HOFFMAN: "CO₂-INDUCED
21 CLIMATIC CHANGE."

22 DR. WILLIAM ELLIOTT: THE FIRST ONE

23 STILL SEEMS -- MR. RAFE POMERANCE: YOU COULD SAY

24 IT WOULD HELP MR. RAFE POMERANCE: THE FIRST ONE

25 IS NOT CORRECT, BY THE WAY.

DR. WILLIAM ELLIOTT: I HAVE TROUBLE

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1 WITH THE FIRST ONE.

2 MR. RAFA POMERANCE: OUR PROBLEM IS
3 NOT OUR FOSSIL FUEL DEPENDENCE, IT IS AN OIL
4 DEPENDENCE. AND YOU REALLY CAN'T LET THAT PROVIDES
5 AN EXPLANATION MR. JOHN HOFFMAN: HI WELL, I SAID
6 "FOREIGN-OIL DEPENDENCE."

7 MR. RAFA POMERANCE: YOU CAN INCREASE
8 INCREASE YOUR FOSSIL FUEL DEPENDENCE AND GET RID OF
9 OF YOUR OIL DEPENDENCE. STATEMENT FOR NON-FOSSIL
10 TECHNOLOGY DEVELOPMENT DR. WILLIAM ELLIOTT: YES. YOU CAN
11 SWITCH FROM OIL TO COAL. HOFFMAN: YES.

12 MR. MITCH TYSON: COULD YOU REPEAT
13 IT ONE MORE TIME?

14 MR. JOHN HOFFMAN: WELL -- WELL, THE
15 FIRST STATEMENT MRS. RAFA POMERANCE: AT WHAT YOU WANT
16 TO DO IS TO REDUCE -- "LET'S GET OUT OF FOSSIL FUEL."
17 IT SAYS, "LET'S MR. JOHN HOFFMAN: "SHIFTING BETTER
18 NATIONAL RELIANCE ON FOSSIL FUEL DEVELOPMENT TO
19 CONSERVATION IS THE BEST MEANS OF REDUCING RISKS
20 OF FOREIGN-OIL DEPENDENCE AND CO₂-RELATED CLIMATIC
21 CHANGES." TO THE AGENDA, THE RISK OF CO₂."

22 MR. RAFA POMERANCE: YOU COULD SAY
23 IT WOULD HELP REDUCE RISKS OF FOREIGN-OIL DEPENDENCE,
24 DENCE AND MINIMIZE -- I THINK THAT IS IN ADDITION
25 TO WHAT IS STATED THERE, ISN'T IT? IT IS NOT A

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1 SUBSTITUTE.

THEN THE SECOND ONE GETS AT THE NOTION THAT BECAUSE THERE ARE THESE RISKS FROM

2 MR. JOHN HOFFMAN: WOULD SIGNIFICANTLY REDUCE RISKS OF FOREIGN-OIL DEPENDENCE --

3 HAD BETTER DEVELOP NOW THE ALTERNATIVES THAT PROVIDES
4 AN EXPLANATION IN THE SENSE OF THIS, -- OF WHY, THAT
5 YOU ARE ECONOMICALLY SOMETHING THAT CREATES A
6 COMPARATIVE ADVANTAGE FOR US, AND THAT REALLY SORT

7 DR. WILLIAM ELLIOTT: YOUR FIRST STATEMENT IS A STATEMENT FOR CONSERVATION. AND THE
8 SECOND STATEMENT IS A STATEMENT FOR NONFOSSIL
9 TECHNOLOGY DEVELOPMENT.
10 MR. ANTHONY SCOVILLE: LET ME ASK

11 ONE THING, BECAUSE I KNOW YOU MENTIONING OF THE
12 FOREIGN-OIL DEPENDENCE AT THIS POINT, WHILE IT IS

13 DR. WILLIAM ELLIOTT: AM I GETTING THE THRUST OF -- ONE OF THE FORCES THAT IS DRIVING
14 IT, IT SEEMS TO ME I GOT THE SENSE FROM MITCH THAT

15 MR. JOHN HOFFMAN: YES. WELL, THE FIRST STATEMENT IS REALLY GETTING AT THE NOTION OF
16 INSTEAD OF SAYING, "LET'S GET OUT OF FOSSIL FUEL,"
17 IT SAYS, "LET'S MOVE INTO CONSERVATION AS A BETTER
18 MECHANISM THAN FOSSIL FUEL FOR ACHIEVING THE TWO
19 GOALS THAT ARE DRIVING THE SYSTEM, FOREIGN-OIL
20 DEPENDENCE, AND THEN THE ONE THAT WE ARE TRYING
21 TO GET ONTO THE AGENDA, THE RISK OF CO₂."

22 SO IT IS COMBINING TWO THINGS. NEITHER OF THOSE STATEMENTS IS COR-
23 INSTEAD OF SAYING, "STOP THIS THING," IT IS SAYING,
24 "HERE IS A BETTER MECHANISM FOR GETTING AT THIS
25 GOAL OF REDUCED OIL DEPENDENCY."

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1 REAL PROBLEM IS THEN THE SECOND ONE GETS AT THE
2 NOTION THAT BECAUSE THERE ARE THESE RISKS FROM
3 CO₂, IF WE WANT TO HAVE AN EFFICIENT ECONOMY, WE
4 HAD BETTER DEVELOP NOW THE ALTERNATIVES.

5 AND SO IT LEADS INTO, YOU KNOW, THAT
6 THIS IS ECONOMICALLY SOMETHING THAT CREATES A
7 COMPARATIVE ADVANTAGE FOR US. AND THAT REALLY SORT
8 OF LINKS IN WITH YOUR REINDUSTRIALIZATION POLICY,
9 TOO.

10 MR. ANTHONY SCOVILLE: LET ME ASK
11 ONE THING, BECAUSE I KNOW THIS MENTIONING OF THE
12 FOREIGN-OIL DEPENDENCE AT THIS POINT, WHILE IT IS
13 TRUE THAT IT IS ONE OF THE FORCES THAT IS DRIVING
14 IT, IT SEEMS TO ME I GOT THE SENSE FROM MITCH THAT
15 ONE OF THE PROBLEMS OR THE MISCONCEPTIONS OF THE
16 CURRENT ENERGY DEBATE, THE WAY IT IS ACTUALLY
17 OCCURRING, IS LOOKING AT EVERYTHING AS A PROBLEM
18 OF SIMPLY GETTING O.P.E.C. OFF OUR BACK, JUST AS
19 IN INDUSTRIAL POLICY THE QUESTION IS HOW TO DEAL
20 WITH, YOU KNOW, THE JAPANESE AS THE PERSONIFICA-
21 TION OF ALL OUR ECONOMIC PROBLEMS.

22 NEITHER OF THOSE STATEMENTS IS COR-
23 RECT. AND IT SEEMS TO ME THAT MITCH MADE A VERY
24 IMPORTANT POINT OF WHICH FOREIGN-OIL DEPENDENCE IS
25 ONLY JUST AN OUTWARD SYMPTOM, WHICH IS THAT THE

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1 REAL PROBLEM IS THE - TRANSITION WHICH IS OCCURRING
2 TO NON FOSSIL USE TO FUELS. AND THE TERMS OF THE
3 ENERGY DEBATE URGENTLY NEED TO BE RECAST, OR HOW-
4 EVER EVER EMPHASIS WE HAD ON CONSERVATION BEFORE.
5 ALL OF THE CONS AND I THINK IF I INJECT THE FOREIGN-
6 OIL THING HERE AT THIS POINT, UNLESS --

7 MR. W. JOHN HOFFMAN: THAT IS A GOOD RE-
8 SUGGESTION. WE COULD MOVE THAT OVER TO THE PRE-
9 AMBLE AREA, WHERE WE SHOULD SAY NATIONAL ENERGY'S A
10 POLICY, FOREIGN-OIL DEPENDENCE, SOMETHING THAT
11 COULD GO AHEAD. WHAT YOU ARE SAYING?

12 DR. DAVID ROSE: I AGREE WITH YOU
13 THAT FOREIGN-OIL BUSINESS COULD BE A KIND OF A RED
14 HERRING IN HERE. YOU LOOK AT 1 AND 2, THEY ARE KIND

15 OF OPPOSITE SIDES. MR. ORAFE POMERANCE: YES.

16 DR. DAVID ROSE: IF YOU LOOK AT THE
17 POLICY FLUCTUATIONS OVER THE LAST TEN YEARS, THEY
18 HAVE GONE TO MORE IMPORTED OIL, TO GET OFF IMPORTED
19 OIL, TO GO TO NATURAL GAS, TO GET OFF NATURAL GAS,
20 ALL KINDS OF THINGS. SO, BY COMBINING THOSE TWO, YOU
21 -- WHAT YOU ARE SAYING, YES, WHILE WE WANT TO INCREASE
22 OUR STABILITY AND INDEPENDENCE AND SO ON, "JUST"
23 MINIMIZING OIL COULD PROVIDE THE WRONG FOCUS. REVA-
24 TION TO SIGNIFY WHAT YOU ARE REALLY TRYING TO SAY,
25 I THINK, IS THIS -- LET ME TRY IT OUT: WHATEVER

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1 POLICY WE HAD FOR -- I WILL CALL IT RATIONAL AND
 2 EFFECTIVE USE RATHER THAN CONSERVATION, WHICH I
 3 THINK IS A GOOD WORD BUT IS A LITTLE BIT TIRED --
 4 WHATEVER EMPHASIS WE HAD ON CONSERVATION BEFORE,
 5 ALL OF THE CONSIDERATIONS WE HAVE GOT HERE GIVE
 6 IT INCREASED EMPHASIS.

7 SO WHATEVER WE WERE THINKING BEFORE,
 8 WE HAVE EVERY INCENTIVE TO STIMULATE INCREASED
 9 ATTENTION TO CONSERVATION, BECAUSE IT REINFORCES A
 10 TREND WHICH IS ALREADY UNDER WAY BUT IS TO BE
 11 OBSERVED. IS THAT WHAT YOU ARE SAYING?

12 OR SUBSIDIZES, MR. JOHN HOFFMAN: YES. BUT IN
 13 PART WHAT I AM SAYING IS INSTEAD OF -- "LOOK, IF
 14 WE GO TO" -- IF YOU LOOK AT 1 AND 2, THEY ARE KIND
 15 OF OPPOSITE SIDES OF A COIN.

16 IF YOU ARE GOING TO GET AWAY FROM
 17 FOSSIL FUELS, MINIMIZE CO2 EMISSIONS, YOU ARE GOING
 18 TO HAVE TO INCREASE CONSERVATION: IT IS THE MOST
 19 PRACTICABLE ALTERNATIVE RIGHT NOW.

20 AND SO, BY COMBINING THOSE TWO, YOU
 21 -- WHAT YOU ARE URGING PEOPLE TO DO IS -- STATED
 22 IN A MORE POSITIVE FORM, YOU ARE SAYING, "SHIFT
 23 YOUR RELIANCE ON -- FROM FOSSIL FUEL TO CONSERVA-
 24 TION TO SIGNIFICANTLY REDUCE RISKS."
 25 NOW, I THINK PUTTING IN THE "FOREIGN-

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OIL DEPENDENCY" THING RAISES THE QUESTION.

FINALLY CAME TO THE CONCLUSION THAT, WHY NOT CALL A

MODERATOR THOMAS JORLING: JOHN,

LET ME -- I AM NOT SURE WHY YOU ARE SUGGESTING THAT
AS AN ALTERNATIVE AND NOT AN ADDITION.

THE FIRST POINT HERE IS A MUCH
BROADER THING THAN JUST THE DIRECT NOTION --

MR. RAFE POMERANCE: YES.

MODERATOR THOMAS JORLING: -- OF
FOSSIL FUELS AND THE PRODUCTION OF, SAY, ELECTRI-
CITY. IT IS -- THAT IS, THE GOVERNMENT LOOKS OUT
INTO THE FUTURE AND BUILDS TRANSPORTATION SYSTEMS,

OR SUBSIDIZES, OR WHAT HAVE YOU, AS IT GOES THROUGH
URBAN RENEWAL, AS IT DOES EVERYTHING THAT CAN

AFFECT ENERGY USE PROBLEMS, IT SHOULD SEEK TO
MINIMIZE CO₂ EMISSIONS.

AND THAT IS A BROADER CONCEPT THAN
THE ONE THAT YOURS IS A BETTER ARTICULATION OF.
THAT PROBLEM IS ACTUALLY OMITTED, IT IS SILENT IN

THIS PARTICULAR DISCUSSION. DOES ANYONE ELSE HAVE

SOME IDEAS OR VIEWS ON THAT? I DON'T SEE THEM AS
ALTERNATIVES.

MR. ANTHONY SCOVILLE: I THINK I
WOULD AGREE WITH YOU ON THAT, TOM, AS FAR AS THEY

ARE NOT MUTUALLY EXCLUSIVE. IF ANYTHING, THEY
REINFORCE -- I SORT OF SENSED FROM YESTERDAY -- I

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1 THE POINT THAT: MR. JOHN HOFFMAN: WELL, SURE, I
2 CAN BE CONVINCED OF ANYTHING.

3 MR. ANTHONY SCOVILLE: COULD YOU BE
4 CONVINCED THAT CO₂ IS NOT A PROBLEM?

5 MODERATOR THOMAS JORLING: WHY DON'T
6 YOU, LET ME SUGGEST, WORK IT UP AND WRITE IT UP
7 ON THE PAPER THERE AS A --

8 MR. JOHN HOFFMAN: OKAY.

9 MODERATOR THOMAS JORLING: -- AS AN
10 ADDITION. WHERE DID THAT RED PEN GO? I HAD IT
11 LAST NIGHT. THE RED MARKING PEN, RED FELT TIP.

12 MR. RICHARD PENNA: WHEN LAST SEEN,
13 IT WAS IN THAT ROOM. (INDICATING)

14 MODERATOR THOMAS JORLING: IT IS ON
15 THAT FIRST ROUND TABLE. AND WHILE JOHN IS DOING
16 THAT, WHY DON'T WE MAKE SOME OTHER COMMENTS.

17 DR. DAVID ROSE: COULD SOMEBODY
18 DEFINE FOR ME WHAT THEY MEAN BY "RENEWABLES"?

19 MR. STEPHEN CONNOLLY: IT IS
20 UNDEFINED.

21 DR. DAVID ROSE: DO YOU MEAN
22 "RENEWABLE," OR DO YOU MEAN "NONFOSSIL"?

23 MR. ANTHONY SCOVILLE: I THINK THE
24 MONOCULTURE AS
25 FEELING WAS THAT WE SHOULD TAKE A STAND AND
DECIDE, YESTERDAY. AT LEAST I THINK MITCH MADE

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1 THE POINT THAT: WHY NOT COME OUT AND SAY WHAT YOU
2 MEAN IS RENEWABLE, AND WHAT YOU MEAN BY "RENEWABLE"
3 IS BIOMASS SOLAR, THAT POSTURE AS OPPOSED TO
4 SIMPLY NONFOSSIL, WHICH ALSO GOES TO THE GAMUT OF,
5 SAY, FUSION TECHNOLOGY OR SOMETHING LIKE THAT.

6 DR. DAVID ROSE: WHAT YOU REALLY
7 MEAN IS SOLAR.

8 MR. ANTHONY SCOVILLE: SOLAR IN ITS
9 VARIOUS MANIFESTATIONS, YES. BUT I THINK YOU ALSO
10 INCLUDE THE BIOMASS EFFORTS --

11 DR. WILLIAM ELLIOTT: THAT IS SOLAR.

12 MR. ANTHONY SCOVILLE: BUT MOST
13 PEOPLE DON'T THINK OF IT AS SOLAR.

14 DR. DAVID ROSE: BUT ALSO, YOU WANT
15 TO REESTABLISH FORESTS AND GO BIOMASS AS WELL?
16 WHICH WAY WOULD YOU LIKE IT?

17 MR. ANTHONY SCOVILLE: WELL, THEY
18 ARE NOT INCOMPATIBLE, I DON'T THINK. BECAUSE THE
19 USE OF -- THE REFORESTATION, IF YOU USE FORESTS FOR
20 FUEL, IT IS NOT GOING TO CONTRIBUTE TO THE NET CO₂
21 PROBLEM.

22 DR. DAVID ROSE: ARE YOU PROPOSING
23 MONOCULTURE AS THINGS TO BURN?

24 MR. ANTHONY SCOVILLE: NO, NO. I
25 AM NOT GETTING THAT SPECIFIC. THERE ALSO ARE

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1 WAYS -- THERE ARE BIOMASS AREAS WHICH MAY OCCUR AS
 2 A RESULT OF, SAY, D.N.A. TECHNOLOGY, SAY, TENT YOU
 3 YEARS DOWN THE PIKE, WHICH WE DON'T EVEN KNOWS ABOUT
 4 NONNUCLEAR, RIGHT, I GUESS THAT MY ONLY PROBLEM
 5 WITH THE USE OF SIMPLY SOLAR IS THAT MOST PEOPERE
 6 DON'T ASSOCIATE SOLAR WITH THINGS LIKE, SAY, WELL,
 7 HYDROPOWER, FOR INSTANCE, OR WITH THE BIOMASS AT,
 8 EFFORTS.

9 DR. DAVID ROSE: ON IT IS ALL SOLAR.E,"

10 THAT IS A PRETT MR. ANTHONY SCOVILLE: I KNOW IT IS
 11 ALL SOLAR. AS A SCIENTIST, YOU AND I KNOW THAT.
 12 BUT THE PUBLIC DOESN'T THINK OF THAT. I MEAN, IT
 13 JUST DOESN'T COME ACROSS. WHEN YOU SAY "SOLAR,"
 14 THEY THINK OF FLAT-PLATE COLLECTORS, THEY THINK
 15 OF SOMETHING WHERE THE SUNS IS DIRECTLY HITTING
 16 SOMETHING AND BEING ABSORBED. SINCE YOU ARE
 17 ARGUING AGAINST AND THIS JUST DOESN'T, I DON'T
 18 THINK -- AFTER ALL, THE COMMISSION MEMBERS, THEY
 19 ARE FAR MORE CLUED IN TO WHAT THE PUBLIC THINKS
 20 AND MAYBE THEY CAN GIVE US AN OPINION AS TO WHAT
 21 THEY THINK THESE TWO TERMS MEAN. DOES THIS
 22 GROUP WISH TO ENGAGE BUT MY REACTION IS THAT THE WORD
 23 "RENEWABLE" IS BETTER?

24 MODERATOR THOMAS JORLING: LET ME

25 ASK, DAVE, IF YOUR CONCERN WOULD BE ALLAYED BY

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1 JUST SIMPLY SAYING RENEWABLE-SOLAR-BASED SOURCES?

2 DR. DAVID ROSE: WELL, AT LEAST YOU
3 MAKE CLEAR YOU MEANT. WHAT YOU MEAN IS NONFOSSIL-
4 NONNUCLEAR, RIGHT?

5 DR. WILLIAM ELLIOTT: YES. YOU ARE
6 EXCLUDING NUCLEAR AS WELL AS FOSSIL.

7 DR. DAVID ROSE: IF YOU MEAN THAT,
8 SAY SO.

9 MR. DEAN ABRAMSON: BUT "RENEWABLE,"
10 THAT IS A PRETTY WELL-UNDERSTOOD TERM NOW.

11 DR. DAVID ROSE: WHAT?

12 MR. DEAN ABRAMSON: "RENEWABLE" IN
13 THIS CLUSTER. AND I AGREE, IF YOU USE "SOLAR,"
14 I MEAN, IT IS CRAZY. YOU USE "SOLAR," FOLKS THINK
15 ABOUT FLAT-PLATE COLLECTORS AND THAT'S ALL.

16 DR. DAVID ROSE: SINCE YOU ARE
17 ARGUING AGAINST CO₂, WE WANT TO MAKE POSITIVE
18 RECOMMENDATIONS. WHY DON'T YOU SPECIFY NONFOSSIL?
19 AND IF YOU ALSO WANT TO SPECIFY NONNUCLEAR, THEN
20 DO THAT TOO.

21 MR. STEPHEN CONNOLLY: DOES THIS
22 GROUP WISH TO ENGAGE IN A DEBATE ON WHETHER TO
23 EXCLUDE NUCLEAR OR NOT?

24 DR. WILLIAM ELLIOTT: THEY HAVE
25 JUST DONE IT.

1 MR. STEPHEN CONNOLLY: THAT IS WHY
2 I AM ASKING THE GROUP.

3 MR. ANTHONY SCOVILLE: BUT THERE ARE
4 WAYS OF SAYING IT, FRANKLY.

5 MODERATOR THOMAS JORLING: TO GO
6 FINESSE IT.

7 MR. ANTHONY SCOVILLE: IN ONE CASE,
8 IT BRINGS PEOPLE OUT -- SMOKING OUT OF THE CORNER,
9 AND THE OTHER DOESN'T NECESSARILY ANTAGONIZE THEM.
10 I MEAN, TO BE VERY HONEST, WE KNOW THERE ARE WAYS,
11 AND THERE ARE WAYS.

12 YOU CAN STATE THE COAL PROBLEM IN
13 WAYS WHICH DON'T HAVE TO BRING EVERY SYN FUELS
14 ADVOCATE SMOKING OUT OF THE CORNER. YOU CAN DEAL
15 WITH IT AS A GENERIC PROBLEM OF FOSSIL FUELS AND
16 NOT DEAL WITH -- SINGLE OUT, SAY, THE SYN FUELS,
17 WHICH GETS EVERYBODY WHO BACKS SYN FUELS UP IN A
18 CORNER.

19 BUT I DON'T KNOW. I JUST SENSED
20 THAT THAT WAS WHAT WE FELT YESTERDAY, WAS THAT,
21 WHY NOT CALL A SPADE A SPADE AND SAY WHAT YOU MEAN?

22 DR. DAVID ROSE: THAT IS WHAT I AM
23 SAYING. THAT'S WHAT I WAS ASKING. WOULD JUST THROW

24 MODERATOR THOMAS JORLING: LET ME,
25 PROBABLY AS MY LAST ACT AS MODERATOR, REMIND US TO

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1 TAKE INTO CONSIDERATION THE DIFFICULTIES THAT THE
2 STENOGRAPHER HAS IN MULTIPLE CONVERSATIONS.

3 CAN WE AGREE THEN ON THE USE OF THE
4 PHRASE "RENEWABLE-SOLAR-BASED SOURCES OF ENERGY"?

5 MR. ANTHONY SCOVILLE: I WOULD GO
6 ALONG WITH THAT, YES.

7 DR. ANNA MARIE CROCETTI: I WOULD
8 JUST LIKE TO PUT MYSELF ON THE TABLE HERE. UNTIL
9 THIS MOMENT I HAD NOT REALIZED THAT BIOMASS WAS
10 INCLUDED UNDER THE CONCEPT OF SOLAR ENERGY, FOR
11 WHAT THAT IS WORTH.

12 MR. STEPHEN CONNOLLY: I WOULD JUST
13 LIKE TO PROPOSE ANOTHER ONE, WHICH IS SIMPLY TO
14 USE THE LANGUAGE "NONFOSSIL FUEL," AND LEAVE THE
15 DEBATE ABOUT SOLAR AND WHAT IS SOLAR AND WHAT
16 ISN'T AND WHETHER NUCLEAR IS INTENDED HERE TO
17 ANOTHER TIME, TO ANOTHER GROUP.

18 MR. ANTHONY SCOVILLE: OKAY, THEY

19 DR. DAVID ROSE: I THINK YOU WOULD
20 AGREE?
21 SHOOT YOURSELF RIGHT THROUGH THE FOOT WHEN YOU
22 PUT "RENEWABLE SOLAR" --

23 MR. RAFE POMERANCE: THIS IS AFTER
24 THE WORD "CONSERVATION," COMMA? I WOULD JUST THROW
25 IN THE WORDS "ENERGY EFFICIENCY" SOMEWHERE IN
THERE.

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1 PEOPLE WHEN WE DR. EDITH BROWN WEISS: THAT IS WHAT
2 CONSERVATION IS. MR. RAFF POMERANCE: BUT THE ENERGY

3 EFFICIENCY ONE? MODERATOR THOMAS JORLING: SPEAK
4 MORE LOUDLY, RAFF. STEPHEN CONNOLLY: I HAVE GOT

5 IT DOWN. NO ONE WANTS TO WASTE THE ENERGY, SO I
6 EFFICIENCY, MR. RAFF POMERANCE: INCREASED IMPROVEMENTS IN ENERGY

7 EFFICIENCY. MODERATOR THOMAS JORLING: EDITH.
8 MR. ANTHONY SCOVILLE: WELL, THAT IS

9 NOT CONSERVATION. MR. RAFF POMERANCE: ENHANCES IT
10 AT: "REDIRECT NATIONAL POLICY" IS NOT.

11 JUST AS YOU -- "ENERGY EFFICIENCY" IS AN ECONOMIC
12 TERM. "CONSERVATION" IS SORT OF AN ENVIRONMENTAL
13 TERM. AND YOU SPEAK TO DIFFERENT AUDIENCES.

14 MR. ANTHONY SCOVILLE: OKAY. I
15 THINK I RECOGNIZE WHAT YOU ARE SAYING, YES.

16 MODERATOR THOMAS JORLING: SUCCESS-
17 FULLY FINESSED? NO MATTER WHAT WE SAY WE ARE

18 MAKING SOME STATEMENTS WHICH WE DID NOT
19 AGREE TO MAKE, WHETHER WE LEAVE OUT -- AND WE

20 SIMPLY SAY "FOSSIL" MR. RAFF POMERANCE: WE AGREED WITH
21 THE ENERGY -- INCREASED -- OFF BETWEEN NUCLEAR

22 POWER AND FOSSIL MR. ANTHONY SCOVILLE: ARE WE GOING
23 TO HAVE "NONFOSSIL" INSTEAD OF "RENEWABLES"? I

24 MEAN, I WILL GO WITH THAT. I THINK YOU ARE RIGHT,
25 JOHN, THAT ALL RIGHT, UNNECESSARILY ANTAGONIZING POLICY

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1 PEOPLE WHEN WE DON'T HAVE TO. MAY NOT BE WILLING TO
2 LIVE WITH.

3 MR. RAFF POMERANCE: BUT THE ENERGY
4 EFFICIENCY ONE? SO I WOULD LIKE TO GIVE INCREASED
5 ATTENTION TO WHAT

6 MR. STEPHEN CONNOLLY: I HAVE GOT
7 IT DOWN. NO ONE WANTED TO SAY ANYTHING ELSE, SO I
8 WROTE IT DOWN. BY ADDING SOMETHING ELSE IN.

9 I WOULD LIKE TO MODERATOR THOMAS UORLING: EDITH.
10 INCREASED CONSERVATION

11 DR. EDITH BROWN WEISS: I DO HAVE
12 A PERSONAL PREFERENCE, THAT WE OUGHT TO LEAVE IT
13 AT: "REDIRECT NATIONAL POLICIES TO EMPHASIZE
14 INCREASED CONSERVATION AND ENERGY EFFICIENCY."

15 PRIORITY? ISN'T IT THINK WE ARE CAUGHT IN A CHARYB-
16 DIS AND A SCYLLA? (GENERAL LAUGHTER) I THOUGHT WE
17 WERE.

18 MR. JOHN HOFFMAN: WOULD YOU SPELL
19 IT? (GENERAL LAUGHTER) DR. EDITH BROWN WEISS: BUT HE WERE
20 ADDING, AS I UNDERSTAND

21 DR. EDITH BROWN WEISS: ABOUT IF WE DO
22 THE OTHER, BECAUSE NO MATTER WHAT WE SAY WE ARE
23 MAKING SOME STATEMENTS WHICH I AM NOT SURE WE
24 INTEND TO MAKE, WHETHER WE LEAVE OUT: -- AND WE AND
25 SIMPLY SAYS "FOSSIL FUELS," WHICH SAYS THAT IN THE
26 RELATIONSHIP TO THE TRADE-OFFS BETWEEN NUCLEAR
27 POWER AND FOSSIL FUELS WE WOULD GO TO NUCLEARY
28 POWER. EFFICIENCY IS A MATTER OF HIGH PRIORITY.

29 IF WE SAY "NONRENEWABLE/SOLAR," I
30 THEN THAT MAKES A STATEMENT ABOUT THE ENERGY POLICY

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THAT IN FACT THE COMMISSION MAY NOT BE WILLING TO
LIVE WITH THEM IS PRIMARILY A FOSSIL-FUEL COMBUSTION
THING.

SO I WOULD LIKE TO GIVE INCREASED
ATTENTION TO WHAT I THINK COULD BE THE YOU ARE AT --
DILUTING AT IN A SENSE TO -- I THINK YOUR STATEMENT
ABOUT CONSERVATION, BY ADDING SOMETHING ELSE IN, AND
I WOULD LIKE TO GIVE THIS AS A TOP PRIORITY -- OF
INCREASED CONSERVATION AND ECONOMIC EFFICIENCY AS
A TOP PRIORITY, THAT FITS A MATTER OF HIGH PRIORITY.
I HAVE TWO STATEMENTS, ONE SAYS: REDIRECT
NATIONAL POLICY DR. DAVID GROSE: IS A MATTER OF A HIGH
PRIORITY? ISN'T THAT WHAT WE ARE SAYING? AT YOU
DON'T LOSE THE DR. WILLIAM HELLIOTT: I THOUGHT WE
WERE THAT SAYS, IN EFFECT RECOGNIZED IN ITS
OWN RIGHT, THE DR. EDITH BROWN WEISS: BUT WE WERE
ADDING, AS I UNDERSTOOD, A STATEMENT ABOUT ENERGY.
THAT, WHEN THE MR. ANTHONY SCOVILLE: YOU MEANS
ABOUT NON FOSSIL? FOSSIL FUELS.

DR. EDITH BROWN WEISS: OKAY, AND
I AM SUGGESTING -- THAT REFERENCE TO THE KINDS OF
FUELS BE DELETED RATHER THAN SAY -- TO EMPHASIZE --
THE INCREASED CONSERVATION AND ECONOMIC ENERGY IF
EFFICIENCY IS A MATTER OF HIGH PRIORITY, NON-
FOSSIL, THEN MR. ANTHONY SCOVILLE: YES, BUT I
DON'T THINK YOU START OFF WITH THE VERY FIRST

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1 STATEMENT ON PAGE 1. THERE ABOUT THE FACT THAT THE
 2 CO₂ PROBLEM IS PRIMARILY A FOSSIL-FUEL COMBUSTION
 3 THING. AND IT IS IMPORTANT TO RECOGNIZE IN THE
 4 DEBATE THAT HOW CAN YOU IGNORE THE FACT THAT
 5 YOU CAN AT LEAST GO TO THE POINT OF DEALING WITH
 6 GOING ON TO NONFOSSIL ALTERNATIVES, EVEN YOU -- AND
 7 I THINK IT WISE THAT ONE DOESN'T SPECIFY WHICH OF
 8 THE NONFOSSIL ALTERNATIVES. WOULD BE ONE SENTENCE
 9 THAT WOULD READ AND IF YOU THINK IT IS MORE EFFEC-
 10 TIVE TO HAVE TWO STATEMENTS, ONE SAYS: URE DIRECTES
 11 NATIONAL POLICY TO STRONGLY EMPHASIZE INCREASED
 12 CONSERVATION, AND ALSO HAVE ANOTHER, SO THAT YOU
 13 DON'T LOSE THE IMPACT OF THAT, GO TO A SEPARATE
 14 STATEMENT THAT SAYS, IN EFFECT RECOGNIZED IN ITS
 15 OWN RIGHT, THE NONFOSSIL COMPONENT. I JUST HAVE
 16 IMPROVEMENTS BUT I DON'T THINK YOU CAN IGNORE
 17 THAT, WHEN THE WHOLE REASON FOR YOUR CONCERN IS
 18 THE COMBUSTION OF FOSSIL FUELS.

19 MODERATOR THOMAS JORLING: WELL, IS?
 20 LET ME SEE IF -- MR. RAFF POMERANCE: WHICH IS THAT
 21 THE GROUP ALSO MR. RAFF POMERANCE: I COULD I JUST --
 22 I HAVE GOT TO THROW IN A POINT THERE. BECAUSE IF
 23 YOU ARE GOING TO TALK ABOUT FOSSIL FUELS, NON- A
 24 FOSSIL, THEN YOU OUGHT TO AT LEAST RECOGNIZE THESE
 25 WITHIN THE FOSSILS THAT THERE ARE DIFFERENCES IN

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1 CO₂ PER UNIT OF B.T.U., SOMEWHERE IN THERE.

2 I MEAN, A TON OF COAL PRODUCES MORE CO₂ THAN A TON OF NATURAL GAS BECAUSE WE ARE TALKING ABOUT ALTER-
3 NATIVES, AND IT IS IMPORTANT TO RECOGNIZE IN THE
4 DEBATE THAT COAL PRODUCES, I DON'T KNOW, TWO TIMES
5 MORE THAN NATURAL GAS WHEN BURNED DIRECTLY.

6 MODERATOR THOMAS JORLING: MAYBE WE
7 HAVE AN ALTERNATIVE THAT SOLVES THIS PROBLEM. LET
8 ME TRY IT. THAT IS, THERE WOULD BE ONE SENTENCE
9 THAT WOULD READ: "REDIRECT NATIONAL POLICIES TO
10 EMPHASIZE INCREASED USE OF NONFOSSIL FUEL SOURCES
11 OF ENERGY," PERIOD; AND THEN A SECOND SENTENCE
12 WOULD BE: "REDIRECT NATIONAL POLICIES TO EMPHASIZE
13 INCREASED CONSERVATION AND ECONOMIC EFFICIENCY,"
14 OR IMPROVEMENTS -- HOW DID YOU SAY THAT?

15 MR. STEPHEN CONNOLLY: I JUST HAVE
16 "IMPROVEMENTS IN ENERGY EFFICIENCY."

17 MR. RAFE POMERANCE: RIGHT. GOOD.
18 I THINK THERE HAS TO BE A THIRD.

19 MODERATOR THOMAS JORLING: WHICH IS?
PER B.T.U.

20 MR. RAFE POMERANCE: WHICH IS THAT
21 THE GROUP ALSO RECOGNIZES THAT -- I MEAN, FOSSIL
22 FUEL IS -- EACH FUEL IS DIFFERENT IN ITS CO₂ CON-
23 TENT PER B.T.U., AND AT LEAST YOU OUGHT TO HAVE A
24 RECOGNITION THAT THAT IS A FACTOR IN MAKING THESE
25 CHOICES.

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1 BECAUSE EACH THING IS INCREMENTAL.
2 I MEAN, A TON OF COAL IS DIFFERENT IN A UTILITY
3 BOILER THAN A TON OF NATURAL GAS.

4 MODERATOR THOMAS JORLING: DOESN'T
5 SOME OF THE FIRST SENTENCE THAT IS ON THE PAPER
6 HERE COVER THAT?

7 MR. RAFF POMERANCE: NO. WELL, IT
8 MAY. BUT I THINK IT IS IMPORTANT TO SAY THAT
9 SPECIFICALLY, BECAUSE ONCE YOU ARE TALKING ABOUT
10 FUEL CHOICES, THAT THAT DEGREE OF SPECIFICITY OF
11 FUEL CHOICES --

12 MODERATOR THOMAS JORLING: LET ME
13 JUST UNDERSTAND. MAYBE YOU ARE TALKING ABOUT THE
14 USE OF NONFOSSIL FUELS AND WHERE FOSSIL FUELS ARE
15 USED, THE MOST NON-CO₂-GENERATING OF THEM?

16 MR. RAFF POMERANCE: YES. EMPHASIS
17 SHOULD BE GIVEN TO THOSE, IN THE TRANSITION, TO
18 THOSE FOSSIL FUELS WHICH PRODUCE THE LEAST CO₂
19 PER B.T.U.

20 I AM NOT EVEN SAYING SOMETHING THAT
21 STRONG. IN DEVELOPING POLICY, TRANSITIONAL, THEN
22 POLICY --

23 MS. JEANNE MALCHON: IT SHOULD BE
24 CONSIDERED --

25 MR. RAFF POMERANCE: -- IT SHOULD

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1 BE CONSIDERED -- THE DIFFERENCE IN CO₂ OUTPUT INCREASED
 2 SHOULD BE CONSIDERED.
 3 AND THE OTHER MODERATOR THOMAS JORLING: OKAY. WILL DO
 4 YOU WANT TO TAKE A CRACK AT A SENTENCE THAT WOULD
 5 DO THAT? CO₂ PER SOMETHING -- B.T.U. OUTPUT.

6 MR. RAFA POMERANCE: ALL RIGHT. IN A

7 DR. EDITH BROWN WEISS: I AM NOT
 8 SURE I SHOULD RAISE THIS. I RAISE IT WITH HESITATION
 9 TANCY. THERE IS A FUNDAMENTAL ISSUE OF WHETHER
 10 THE PARTICIPANTS ARE GOING TO HAVE AGREED TO EVERY-
 11 THING IN THIS DOCUMENT OR NOT. YOU KNOW, I TRIED TO PUT
 12 YOUR ONE IN. AND IF WE ARE NOT, IT IS OKAY,
 13 BECAUSE I DON'T FEEL THAT I CAN PUT MY NAME TO A
 14 DOCUMENT THAT COULD BE INTERPRETED THAT I COULD
 15 FAVOR, FOR EXAMPLE, NUCLEAR POWER OVER THE USE OF
 16 NATURAL GAS, BECAUSE OF THE CO₂ ISSUE, AND IN FACT
 17 WOULD BE UNWILLING TO PUT MY NAME TO A DOCUMENT
 18 WHICH IMPLIED THAT I HAD DONE SO, ESPECIALLY WITH-
 19 OUT SOME CONSIDERATION OF THE TRADE-OFFS IN EACH
 20 PARTICULAR CIRCUMSTANCE. MORE EFFICIENT FOSSIL
 21 FUEL ALTERNATIVES NOW, IF THIS IS JUST A REPORT, THEN
 22 I THINK THAT SOLVES SOME OF -- THEN IT TAKES ON A
 23 DIFFERENT CHARACTER. CHANGE.

24 MODERATOR THOMAS JORLING: AS I SEE

25 IT NOW, THERE HAS EVOLVED A PROPOSAL FOR THREE.

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1 SENTENCES AT THIS POINT, ONE DEALING WITH INCREASED
 2 CONSERVATION, ONE DEALING WITH THE NONFOSSIL FUELS,
 3 AND THE OTHER ONE DEALING WITH, WITHIN THE FOSSIL
 4 FUEL AREA, PREFERENCE FOR THOSE WHICH HAVE THE
 5 LOWEST CO₂ PER SOMETHING -- B.T.U. OUTPUT.

6 CAN WE GET THOSE THREE WRITTEN IN A
 7 FORM THAT PEOPLE CAN THEN FOCUS ON AND DETERMINE
 8 WHETHER IN THAT THEY HAVE THE INFERENCE THAT EDITH
 9 HAS SUGGESTED?

10 MR. JOHN HOFFMAN: TOM, I HAVE GOT
 11 THE THREE THAT I THINK -- YOU KNOW, I TRIED TO PUT
 12 YOUR ONE IN. THE FIRST ONE IS REDUCING CO₂
 13 EMISSIONS SHOULD BE ONE CONSIDERATION OF EVERY
 14 U.S. ENERGY POLICY DECISION.

15 SECOND WOULD BE: SHIFTING NATIONAL
 16 RELIANCE ON FOSSIL FUEL DEVELOPMENT TO CONSERVA-
 17 TION REDUCES RISKS ASSOCIATED WITH CO₂-INDUCED
 18 CLIMATIC CHANGE.

19 AND THREE: PROVIDING GREATER
 20 RESOURCES FOR DEVELOPING MORE EFFICIENT FOSSIL
 21 FUEL ALTERNATIVES COULD BE CRITICAL TO SUSTAINING
 22 U.S. AND WORLD ECONOMIES IN THE FACE OF EMERGING
 23 CO₂-INDUCED CLIMATIC CHANGE.

24 THOSE THREE, I THINK, ARE THINGS
 25 THAT EVERYBODY COULD AGREE ON AND WHICH, I THINK,

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STILL GIVING MY LAST PREFERENCE AS I DO HAVE TO
TAKE US BACK A LITTLE BIT FROM GETTING INTO TOO
MANY NITTY-GRITTY DECISIONS ON WHETHER WE SHOULD
BE SUBSTITUTING FOSSIL FUEL OR NATURAL GAS FOR
COAL, OR -- I MEAN, THEY ARE MORE GENERAL.

AND I DON'T THINK THAT WE REALLY
KNOW ENOUGH OR HAVE EXAMINED THE ALTERNATIVES, THE
COSTS AND BENEFITS OF THE ALTERNATIVES, AND WE
SHOULD TRY AND KEEP OUR RECOMMENDATIONS ON A KIND
OF A MORE GLOBAL LEVEL THAN GETTING DOWN INTO --
BELOW THAT LEVEL THAT IS UP THERE.

AND I THINK THAT THOSE THREE THINGS
ARE THE SAME AS -- AS WHAT YOU HAVE GOTTEN IN THE
ORIGINAL FORMULATION BUT JUST SLIGHTLY DIFFERENT
FORM.

MODERATOR THOMAS JORLING: ANY
COMMENTS?

MR. DAVID SLADE: THERE IS NO INTER-
NATIONAL IMPLICATION IN THERE, UNLESS I HAVE MISSED
IT.

MR. JOHN HOFFMAN: THAT IS UNDER
INTERNATIONAL ACTIVITIES, I THOUGHT, UNDER C.

MR. MITCH TYSON: ON THE OTHER PAGE.

MR. DAVID SLADE: ON, ON THIS PAGE.

I SEE. OKAY.

MODERATOR THOMAS JORLING: I WOULD

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1 STILL, GIVING MY LAST PREFERENCE, AS I DO, HAVE TO
2 GET TO THE AIRPORT, IN PLACE OF NUMBER 1 ON THE
3 PAPER UP THERE, SUBSTITUTE NUMBER 1 ON THE PAPER
4 HERE, AND THEN ACCEPT 2 AND 3. DON'T THINK THERE IS

5 MR. JOHN HOFFMAN: WOULD YOU
6 DO THAT, IN THE FACE OF THE FACT THAT SOME PEOPLE
7 WOULDN'T ENDORSE IT? BECAUSE THEY WANTED TO

8 MR. MITCH TYSON: CAN WE DISCUSS
9 WHAT NUMBER 1 ON THE PAPER SAYS OR WHAT IT MEANS?

10 MODERATOR THOMAS JORLING: WHAT NOT
11 DOES IT MEAN?

12 MR. MITCH TYSON: WHAT DOES NUMBER 1
13 MEAN? -- "MINIMIZE" --

14 MODERATOR THOMAS JORLING: IT MEANS
15 AN AFFIRMATIVE DUTY TO MINIMIZE CO₂ -- MAY BE MANY

16 MR. MITCH TYSON: HOW SHALL A POLICY
17 MAKER TAKE THAT INTO ACCOUNT? -- BUT YOU

18 MODERATOR THOMAS JORLING: AT THE DIF-
19 FERENCE, IN MY JUDGMENT -- AND THAT IS THAT YOU

20 MR. MITCH TYSON: IS THIS JUST A
21 VAGUE TAKING INTO ACCOUNT --

22 MODERATOR THOMAS JORLING: -- IS,
23 THAT YOU ARE IMPLICITLY SEEKING TO MINIMIZE VERSUS
24 ONE THAT YOU CONSIDER. -- "MINIMIZE" -- AND

25 MR. MITCH TYSON: OKAY. YOU AND THE

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1 POLICY MAKER, WHEN FACED WITH TWO CHOICES, SHOULD
2 TAKE THAT CHOICE WHICH REDUCES THE CO₂ LEVEL.

3 MR. JOHN HOFFMAN: "YES." IF YOU
4 TAKE EDITH'S THING, I MEAN, I DON'T THINK THERE IS
5 ANYBODY HERE, FOR EXAMPLE, WHO WOULD BE IN FAVOR
6 OF BUILDING A NUCLEAR PLANT ON AN "EARTHQUAKE FAULT
7 OVER A FOSSIL FUEL PLANT BECAUSE THEY WANTED TO
8 MINIMIZE CO₂ EMISSIONS. AS CO₂ TAXES" -- IS WHAT I
9 ASSUME THAT MEANS "DESIGNED TO AFFECT ENERGY
10 USE PATTERNS."

11 MODERATOR THOMAS JORLING: I AM NOT
12 TRYING TO GET THAT CHOICE -- IT KIND OF
13 GIVES A PUSH TO MR. JOHN HOFFMAN: "YES. BUT I MEAN,

14 IF YOU READ THIS THING LITERALLY, "MINIMIZE" --
15 IT DOESN'T EVEN SAY "REDUCE," IT SAYS "MINIMIZE,"
16 OR IN GENERAL REDUCE -- I MEAN, THERE MAY BE MANY
17 CASES WHERE WE, AS YOU KNOW, SPECIFIC DECISIONS -- IF
18 WE GET THEM, MODERATOR THOMAS JORLING: BUT YOU

19 ARE ARGUING AGAINST ME AND NOT FACING WHAT THE
20 PROBLEM IS WITH THAT ONE, AND THAT IS THAT YOU SAID
21 JUST SIMPLY MAKE IT A CONSIDERATION IN THE U.S.
22 POLICY DECISIONS.

23 MR. JOHN HOFFMAN: OKAY. BE AT -- DO
24 YOU THINK IS MR. JEROME POMERANCE: "NO, NO. IN THIS
25 DOESN'T SAY -- THIS SAYS "SEEK TO MINIMIZE." AND
THEN THAT MEANS SORT OF THE BEST, TRY YOUR BEST.

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I MEAN IT IS NOT THE MOST -- THIS DOESN'T SAY "MUST MINIMIZE."

MR. RAFE POMERANCE: WELL, I THINK THE FIRST ONE IS -- IS IT SPECIFIC ENOUGH TO MEAN SOMETHING TO PEOPLE, TO KIND OF SUGGEST THE WAYS THEY WILL ALWAYS LISTEN TO YOU --

MR. MITCH TYSON: YES. BUT DOESN'T TION NOW?

IT SAY "DEVELOP NATIONAL POLICIES"? I MEAN, I HAVE TROUBLE UNDERSTANDING THE GRAMMAR -- "DEVELOP NATIONAL POLICIES SUCH AS CO2 TAXES" -- IS WHAT I ASSUME THAT MEANS -- "DESIGNED TO AFFECT ENERGY

MR. STEPHEN CONNOLLY: THERE ARE TWO THINGS THAT THE ONE ON THE PAPER SAYS. THE

MR. RAFE POMERANCE: IT KIND OF FIRST IS THAT IT MAKES AN EXPLICIT STATEMENT ON GIVES A PUSH TO THAT KIND OF ENERGY POLICY. THE FIRST LINE THAT CO2 EMISSIONS ARE CONSIDERED

MR. JOHN HOFFMAN: RAFE, WHAT I AN UNDESIRABLE CONDITION. THAT IS A POLICY STATEMENT OF THIS GROUP. WOULD ARGUE IS THAT THE SECOND AND THIRD ONES BECOME OUR MORE CONCRETE SUGGESTIONS THAT INDICATE

AND THE SECOND THING IT DOES IS -- THAT COULD ACTUALLY GET PEOPLE TO DO THAT, IF WE GET THEM, FOR EXAMPLE, TO THROW \$20 BILLION INTO CONSERVATION AS OPPOSED --

MR. RAFE POMERANCE: WELL, TOM SAID HE THOUGHT WE SHOULD ACCEPT NUMBER 2. I THINK NUMBER 2 IS FINE. MR. MITCH TYSON: HOW DOES A POLICY MAKER INTERPRET THE STATEMENT "SEEK TO MINIMIZE"?

MR. JOHN HOFFMAN: OKAY. WHAT DO YOU THINK IS IMPLIED IN THIS ONE, THE TOP ONE? WHAT IS IMPLIED IN THOSE THREE? I MEAN, WHAT ACTIONS SPECIFICALLY WOULD WE NOT TAKE?

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MR. RAFAEL POMERANCE: WELL, I THINK
THE FIRST ONE IS -- IS IT SPECIFIC ENOUGH TO MEAN
SOMETHING TO PEOPLE, TO KIND OF SUGGEST THE WAYS
IN WHICH WE ARE POTENTIALLY EXACERBATING THE SITUATION NOW?

MR. MITCH TYSON: THIS IS SUPPOSED TO BE RECOMMENDED

MR. ANTHONY SCOVILLE: TO THE FIRST --
MAKE RECOMMENDATIONS ON THE PAPER
HERE -- AT THINGS IN THAT WAY.

MR. STEPHEN CONNOLLY: THERE ARE
TWO THINGS THAT THE ONE THE PAPER SAYS. THE FIRST,
FIRST, IS THAT IT, MAKE AN EXPLICIT STATEMENT ON A LOT
THE FIRST LINE THAT "CO₂ EMISSIONS ARE CONSIDERED
AN UNDESIRABLE CONDITION. THAT IS A POLICY STATEMENT
OF THIS GROUP, WHEN YOU ARE CONSIDERING
REDUCING THINGS AND THE SECOND THING IT DOES IS
SIMPLY TO SAY THAT POLICIES SHOULD BE EXPLICITLY
SEEK TO MINIMIZE AND, I AM WONDERING WHETHER
THERE IS A SENSE OF THE GROUP THAT THERE IS ANY
THING WRONG WITH THAT LANGUAGE.

MR. MITCH TYSON: HOW DOES A POLICY
MAKER INTERPRET THE STATEMENT "SEEK TO MINIMIZE"? A
MISSING ELEMENT

MR. STEPHEN CONNOLLY: I THINK
PROBABLY ONE COULD APPLY THAT SAME TEST THAT YOU
JUST APPLIED TO ALMOST ANY STATEMENT THAT IS ON
THE PAPER.

MR. RICHARD PENNA: I THINK THE

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DISTINCTION HERE IS THE WORD "MINIMIZE" WAS PUT IN
HERE SPECIFICALLY TO BRING UP THE DISCUSSION YES --
FAIR --

MR. MITCH TYSON: WHY ISN'T THAT A
TERDAY, BECAUSE THE
SION OVER THE QUESTION OF RESTRICTION. AND THAT IS
OFF WITH --

MR. JOHN HOFFMAN: YES. LET'S START
WHY WE CHOSE "MINIMIZE"
MR. MITCH TYSON: THIS IS SUPPOSED
TO BE RECOMMENDATIONS TO THE COMMISSION, WHO WILL
OR "REDUCTION" FINE. IF YOU WANT "MINIMIZE" OR
MAKE RECOMMENDATIONS TO CONGRESS. CONGRESS ONLY
LET'S COME UP WITH SOME CREATIVE LANGUAGE.
LOOKS AT THINGS IN THAT WAY.

MR. JOHN HOFFMAN: WOULD YOU BE
TO SAY WAS THAT THE ELEMENT WAS WHEN YOU
HAPPY WITH THE WORD "REDUCE" INSTEAD OF "MINIMIZE"?
LOOK AT THE ACTIONS YOU HAVE RESEARCH AND POLICY
TO ME, "MINIMIZE," I MEAN, I DON'T THINK -- TO A LOT
ACTIONS. I MEAN, THERE IS A MISSING ELEMENT THERE.
OF PEOPLE "MINIMIZE" MEANS SOMETHING A LOT DIF-
THIS IS IMPORTANT, AND THAT IS PUTTING CO2 ON THE
FERENT THAN TO REDUCE.
AGENDA.

I MEAN, WHEN YOU ARE CONSIDERING
AND UNTIL YOU GET ON THE AGENDA
REDUCING THINGS, YOU ARE TRADING OFF. WHEN YOU
SUGGESTING POLICY ACTIONS AS A CONSTRAINTS. AND
ARE MINIMIZING, YOU HAVE A FEW CONSTRAINTS. AND
OTHERWISE YOU JUST GET, YOU KNOW, THOSE CONSTRAINTS
HAVE LANGUAGE WHICH YOU WANT TO ABOUT PUTTING
ARE THE ONLY THINGS PREVENTING YOU FROM TAKING ALL
IT ON THE AGENDA?
ACTIONS --

DR. JOHN PERRY: HOW ABOUT --

OF THE RATIONAL
MR. MITCH TYSON: I THINK THERE IS A
MISSING ELEMENT.

AN EXAMPLE. SUPPOSE THE CHOICE WAS THAT WE ARE
DR. JOHN PERRY: HOW ABOUT "CON-
TROL"?
TENDING TO SPENDING \$10 BILLION ON SOMETHING. A POSSIBLE
FUEL DEVELOPMENT THAT PRODUCES VERY LITTLE CO2. OR

MR. RICHARD PENNA: I THINK THE

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1 DISTINCTION HERE IS THE WORD "MINIMIZE" WAS PUT IN
2 HERE SPECIFICALLY TO REFLECT THE DISCUSSION YES-
3 TERDAY, BECAUSE THERE WAS A GREAT DEAL OF DISCUS-
4 SION OVER THE QUESTION OF REDUCTION. AND THAT IS
5 WHY WE CHOSE "MINIMIZE."

6 NOW, IF THIS GROUP WANTS "REDUCE"
7 OR "REDUCTION," FINE. IF NOT, THEN "MINIMIZE," OR
8 LET'S COME UP WITH SOME ALTERNATIVE LANGUAGE.

9 MR. MITCH TYSON: WHAT I WAS GOING
10 TO SAY WAS THAT THE MISSING ELEMENT WAS, WHEN YOU
11 LOOK AT THE ACTIONS, YOU HAVE RESEARCH AND POLICY
12 ACTIONS. I MEAN, THERE IS A MISSING ELEMENT THERE.
13 THIS IS IMPORTANT. AND THAT IS PUTTING CO₂ ON THE
14 AGENDA.

15 AND UNTIL CO₂ IS ON THE AGENDA,
16 SUGGESTING POLICY ACTIONS IS ABSURD.

17 MR. STEPHEN CONNOLLY: DON'T I
18 HAVE LANGUAGE WHICH YOU SUGGESTED, ABOUT PUTTING
19 IT ON THE AGENDA?

20 MR. MITCH TYSON: YES. THAT IS PART
21 OF THE RATIONALE.

22 MR. JOHN HOFFMAN: LET ME GIVE YOU
23 AN EXAMPLE. SUPPOSE OUR CHOICE WAS THAT WE ARE
24 GOING TO SPEND \$10 BILLION ON SOMETHING, A FOSSIL
25 FUEL DEVELOPMENT THAT PRODUCES VERY LITTLE CO₂, OR

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1 WE CAN SPEND \$5 BILLION ON A FOSSIL FUEL DEVELOP-
2 MENT THAT PRODUCES MORE CO₂ AND THE OTHER \$5
3 BILLION ON DEVELOPING SOLAR. THOSE ARE THE TWO
4 CHOICES.

5 I WOULD PREFER THE SECOND ALTERNA-
6 TIVE, BECAUSE I DON'T THINK THE DIFFERENCES WE
7 HAVE TALKED ABOUT IN CO₂ THAT WE ARE PRODUCING
8 WITH THESE ADJUSTMENTS IS APPRECIABLE, AND WE HAVE
9 A MUCH BETTER CHANCE IN THE FUTURE IN MINIMIZING
10 THE LONG-TERM CO₂ PRODUCTION BY GOING WITH THE
11 SOLAR.

12 THE WAY THIS THING READS, YOU WOULD
13 ALWAYS CHOOSE ONE. OR AT LEAST, THAT IS THE WAY I
14 WOULD INTERPRET IT.

15 MR. STEPHEN CONNOLLY: DO YOU WANT
16 TO SAY "MINIMIZE" OR "REDUCE ON A LONG-TERM
17 BASIS"?

18 MR. MITCH TYSON: IS THERE SOMETHING
19 THAT CAN BE THERE TO REFLECT THE FACT THAT THERE
20 MAY BE OCCASIONS, BECAUSE OF OTHER POLICY CON-
21 siderations, WHERE A POLICY MAKER MIGHT, IN FOLLOW-
22 ING THIS, STILL CHOOSE AN ACTION THAT INCREASES
23 CO₂?

24 MR. STEPHEN CONNOLLY: DOES THE
25 FORMULATION THAT I JUST SUGGESTED, "TO REDUCE ON A

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1 LONG-TERM BASIS, " CONVEY THAT NOTION? THE WAY IT
2 ORIGINALLY WAS. MR. MITCH TYSON: IT IS CLOSER.

3 MR. STEPHEN CONNOLLY: DID I HEAR A
4 DISSENT? THE "MINIMIZE" TO "REDUCE"?

5 MR. MITCH TYSON: WHY DON'T YOU
6 READ IT NOW. HOW DOES IT READ? HERE AS A WAY TO

7 GET AROUND THE MR. STEPHEN CONNOLLY: LET ME
8 FIGURE OUT WHAT IT SAYS.

9 MR. MITCH TYSON: "LONG-TERM
10 BASIS."

11 MR. STEPHEN CONNOLLY: "CONSIDER
12 AN INCREASE IN CO₂ EMISSIONS AN UNDESIRABLE CONDI-

13 TION AND EXPLICITLY SEEK TO REDUCE ON A LONG-TERM
14 BASIS CO₂ EMISSIONS IN NATIONAL POLICY, SEEK TO

15 REDUCE ON A LONG-TERM BASIS CO₂ EMISSIONS." IMPOR-
16 TANT DIFFERENCE MR. JOHN HOFFMAN: WOULD THIS BE NOW,

17 ACCEPTABLE? "REDUCING LONG-TERM CO₂ EMISSIONS
18 SHOULD BE A GOAL OF U.S. ENERGY POLICY"? IT IS

19 INCREASING BY MR. ANTHONY SCOVILLE: WHY NOT HAVE
20 THAT AS AN EXPLANATORY STATEMENT IN THIS, UNDER-

21 NEATH THAT? IF WE SAY "REDUCE," THAT MEANS THAT
22 YOU WANT TO GO DR. EDITH BROWN WEISS: WHAT I THINK THE

23 LANGUAGE IS REALLY FINE THE WAY IT IS. THE SAME
24 POINT. IT IS 300 MR. MITCH TYSON: WHICH IS THE WAY

25 IT IS? YOU KNOW, THAT IS A PRETTY LONG

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TIME HORIZON. DR. EDITH BROWN WEISS: THE WAY IT
ORIGINALLY WAS. IT DOES NOT GIVE ME ANY PROBLEMS.

PROBLEMS HAVE MR. MITCH TYSON: STEVE, WHY DID
YOU CHANGE THE "MINIMIZE" TO "REDUCE"? "CONTROL"
IS PREFERABLE, MR. STEPHEN CONNOLLY: BECAUSE WE
HAD A SUGGESTION FROM DR. PERRY HERE AS A WAY TO
GET AROUND THE WORD "MINIMIZE," WHICH WAS CAUSING
PEOPLE SOME PROBLEMS.

DR. JOHN PERRY: DID I SAY "REDUCE"?
THAT YOU ARE JUST MR. STEPHEN CONNOLLY: OH, YOU SAID
"CONTROL."

DR. JOHN PERRY: I SAID "CONTROL."
THAT IS A DIFFERENCE.

MR. MITCH TYSON: THAT IS BETTER FOR
DR. JOHN PERRY: THAT IS AN IMPOR-
TANT DIFFERENCE. BUT, I MEAN, AFTER ALL, YOU KNOW,
THE CO₂ CONTENT OF THE ATMOSPHERE, OR CONCENTRA-
TION, IS 335 PARTS PER MILLION NOW, AND IT IS
INCREASING BY SOMETHING UNDER ONE PART PER MILLION

PER YEAR. MR. RICHARD PENNA: -- IN A FIRST
PARAGRAPH, "CONSIDER IF WE SAY "REDUCE," THAT MEANS THAT
YOU WANT TO GO DOWN TO 0.6 OR 0.5 OR WHAT PER YEAR?
YOU KNOW, IF WE JUST STAY STEADY AT THE SAME
POINT, IT IS 300 YEARS BEFORE YOU DOUBLE.
YOU KNOW, THAT IS A PRETTY LONG

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1 TIME HORIZON. AND IT IS A LOT DIFFERENT FROM THE
2 EXPONENTIAL-GROWTH SCENARIO THAT MOST OF THE
3 PROBLEMS HAVE BEEN DISCERNED FROM. "SEEK TO CONTROL
4 LONG-TERM GROWTH AND SO I THINK THE WORD "CONTROL"
5 IS PREFERABLE, BECAUSE "REDUCE" IS SUCH A STRONG
6 CONSTRAINT.

7 MR. JOHN HOFFMAN: I THINK THAT IS
8 GOOD. MR. JOHN HOFFMAN: WHY NOT "CONTROL
9 THE GROWTH OF"? MR. ANTHONY SCOYILLE: I THINK THAT
10 "CONTROL" IN A DR. JOHN PERRY: YES. THAT IMPLIES
11 THAT YOU ARE JUST RECOGNIZING THAT CONTINUED EXPO-
12 NENTIAL GROWTH CAN GET YOU INTO TROUBLE. ANTHRO-
13 POGENIC SOURCES MR. JOHN HOFFMAN: IT IS BETTER
14 BECAUSE IT IS MORE PRECISE. YOU HAVE IT NOW, AND
15 THERE IS ANOTHER DR. JOHN PERRY: IT DOESN'T ASK FOR
16 SUCH A MONUMENTAL IMMEDIATE RESTRUCTURING OF OUR
17 FOSSIL-DEPENDENT SOCIETY. JIM IS JUST HANDING OUT
18 ON D. MR. RICHARD PENNA: JOHN, ARE YOU
19 SUGGESTING -- JOHN PERRY -- CONNOLLY: JOHN HOFFMAN,
20 HOW DO YOU, OR DR. JOHN PERRY: YES. PREPARED WITH THE
21 REST OF YOUR POINTS MR. RICHARD PENNA: -- IN A FIRST
22 PARAGRAPH, "CONSIDER AN INCREASE IN CO₂ EMISSIONS
23 AN UNDESIRABLE CONDITION AND EXPLICITLY SEEK THE
24 CONTROL OR SEEK TO CONTROL THE GROWTH OF CO₂
25 EMISSIONS "IN DEVELOPING" -- AND SO ON?
26 CONSERVATION MR. MITCH TYSON: IN THE LONG TERM.

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DR. JOHN PERRY: "SEEK TO CONTROL,"
AND MAYBE --

MR. RICHARD PENNA: "SEEK TO CONTROL
LONG-TERM GROWTH"?

DR. JOHN PERRY: YES.

MR. JOHN HOFFMAN: I THINK THAT IS
GOOD.

MR. ANTHONY SCOVILLE: I THINK THAT
"CONTROL" IN A WAY IS MORE PRECISE.

MR. DAVID SLADE: SOMEHOW YOU OUGHT
TO GET THE POINT IN ABOUT THE CONTROL OF ANTHRO-
POGENIC SOURCES AND SINKS. THIS IS STRICTLY
FOSSIL FUEL BURNING THE WAY YOU HAVE IT NOW, AND
THERE IS ANOTHER COMPONENT.

MR. RICHARD PENNA: WE HAVE SOME
ADDITIONAL LANGUAGE THAT JIM IS JUST HANDING OUT
ON D.

MR. STEPHEN CONNOLLY: JOHN HOFFMAN,
HOW DO YOU, OR DO YOU WISH TO PROCEED WITH THE
REST OF YOUR POINTS ON THE BOARD?

MR. JOHN HOFFMAN: I WOULD JUST
SUGGEST 2 AND 3, THAT WE REDIRECT --

MR. STEPHEN CONNOLLY: SHIFTING
NATIONAL RELIANCE FROM FOSSIL FUEL DEVELOPMENT TO
CONSERVATION REDUCES RISKS ASSOCIATED WITH CO2-

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INDUCED CLIMATE CHANGE.

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2 MR. ANTHONY SCOVILLE: THAT IS DIFFERENT THAN WHAT YOU HAVE GOT HERE, THE FIRST HALF OF THAT. BECAUSE IN ONE CASE YOU JUST SAY -- YOU ARE MAKING A STATEMENT OF FACT, AND IN THE OTHER CASE -- IN THIS CASE YOU ARE ACTUALLY ADVOCATING THAT THE REDUCTION SHOULD OCCUR.

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8 MR. JOHN HOFFMAN: I WROTE THEM AS CONCLUSIONS, BUT YOU COULD EASILY SHIFT --

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10 MR. ANTHONY SCOVILLE: SO ESSENTIALLY WHAT YOU HAVE TO DO IS DROP THE LAST HALF OF THAT 2 THERE, IF YOU WANT TO WRITE IT OUT AS A SEPARATE STATEMENT, TO "SHIFT NATIONAL RELIANCE ON FOSSIL FUEL DEVELOPMENT TO INCREASED CONSERVATION TO CONSERVATION AND ENERGY EFFICIENCY."

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16 BUT I THINK AS IT IS WRITTEN NOW --
17 I MEAN, THE POINT IS THAT YOU PRESUMABLY ARE ONLY GOING TO DO THAT IF IT HAS SOME BEARING ON REDUCING THE RISKS FROM THE CO₂, SO YOU DON'T HAVE TO STATE IT AS WRITTEN THERE. IT SIMPLY COMES AS A STATEMENT OF FACT."

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22 MR. JOHN HOFFMAN: ONE OF THE THINGS THAT I WOULD DO, IN TERMS OF STRUCTURING THESE POLICY ACTIONS, IS UP AT THE TOP I WOULD SAY "BECAUSE OF THE DANGERS POSED BY CO₂-INDUCED

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1 CLIMATIC CHANGE," AND BLAH, BLAH, BLAH.

2 IN OTHER WORDS, RELATE IT TO YOUR
3 PREAMBLE.

4 MR. ANTHONY SCOVILLE: YOU HAVE GOT
5 THAT ALREADY THERE.

6 MR. JOHN HOFFMAN: AND THEN YOU CAN
7 WRITE THESE POLICY STATEMENTS IN MORE SUCCINCT
8 LANGUAGE. BUT AS THEY ARE COMING OUT, SOMETIMES
9 I THINK THAT THAT RELATIONSHIP WILL BE, YOU KNOW --
10 THE WAY THIS THING IS WRITTEN UP CAN BE -- I THINK
11 THE STAFF SHOULD BE ABLE TO IMPROVE THE STRUCTURE
12 A LITTLE BIT SO THAT IT IS CLEANER AND CRISPER.

13 MR. RICHARD PENNA: STEVE CONNOLLY
14 IS MAKING A CHANGE THERE. CAN WE FOCUS ON THAT
15 FOR A MOMENT?

16 MR. STEPHEN CONNOLLY: "SHIFT IF
17 NATIONAL RELIANCE ON FOSSIL FUEL DEVELOPMENT TO AN
18 CONSERVATION AS A MEANS OF REDUCING RISKS ASSO-
19 CIATED WITH CO2-INDUCED CLIMATE CHANGE."

20 MR. ANTHONY SCOVILLE: ADD THE
21 "ENERGY EFFICIENCY" IN THERE, BECAUSE I THINK
22 RAFE MADE A GOOD POINT, THAT YOU HIT TWO DIFFERENT
23 AUDIENCES BY -- NO, IN 2, IN NUMBER 2, WHERE THE
24 WORD "CONSERVATION" IS, HAVE "CONSERVATION AND
25 ENERGY EFFICIENCY." I THINK RAFE MADE A GOOD

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1 POINT, THAT YOU HIT TWO DIFFERENT CONSTITUENCIES
2 BY DOING THAT.

3 MR. RICHARD PENNA: COULD WE HAVE
4 ONE DISCUSSION AT A TIME IN THE ROOM RIGHT NOW?
5 AND ONE SPEAKER ALSO. WE ARE HAVING DIFFICULTIES.
6 OKAY. STEVE, COULD YOU READ THAT, PLEASE?

7 MR. STEPHEN CONNOLLY: THE FORMULA-
8 TION IS NOW: "SHIFT NATIONAL RELIANCE ON FOSSIL
9 FUEL DEVELOPMENT TO CONSERVATION AND ENERGY
10 EFFICIENCY AS A MEANS OF REDUCING RISKS ASSOCIATED
11 WITH CO₂-INDUCED CLIMATE CHANGE."

12 MR. RICHARD PENNA: IS THERE AGREE-
13 MENT ON THAT LANGUAGE?

14 MR. STEPHEN CONNOLLY: I HAVE ONE --

15 MR. RAFE POMERANCE: IT DOESN'T --

16 MR. STEPHEN CONNOLLY: EDITH, IF
17 YOU WON'T RAISE THE QUESTION, WHICH I THINK IS AN
18 IMPORTANT QUESTION, YOU WERE RAISING --

19 DR. EDITH BROWN WEISS: OKAY.

20 MR. STEPHEN CONNOLLY: IS IT THE
21 SENSE OF THE GROUP THAT ONE HAS TO HAVE THIS LAN-
22 GUAGE IN HERE?

23 DR. EDITH BROWN WEISS: RIGHT.

24 MR. STEPHEN CONNOLLY: OR JUST FROM
25 HERE ON, HOW ABOUT "SHIFT THE CONSERVATION AND

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ENERGY EFFICIENCY"? TO SPLIT IT INTO TWO SEPARATE SENTENCES, TO GIVE DR. EDITH BROWN WEISS: PRECISELY. THAT IS MY QUESTION. I RATHER LIKE "REDIRECT AND NATIONAL POLICIES TO EMPHASIZE INCREASED CONSERVATION," BECAUSE THAT CUTS ACROSS ALL ENERGY SOURCES. AND I THINK IT IS A TERRIBLY IMPORTANT POINT, AND IT IS USEFUL FOR US TO MAKE IT, WITHOUT HAVING TO GET INTO THE -- AND I WOULD ONLY ECHO WHAT YOU JUST SAID. THAT IS MY CONCERN.

DR. DAVID ROSE: AND "ENERGY EFFICIENCY"? THAT YOU ORIGINALLY GAVE.

DR. EDITH BROWN WEISS: YES, AND "ENERGY EFFICIENCY."

MR. DEAN ABRAMSON: YES.

MR. RAFE POMERANCE: YES.

MR. STEPHEN CONNOLLY: SO IS THERE A SENSE THAT WE CAN STRIKE "NATIONAL RELIANCE ON FOSSIL FUEL DEVELOPMENT"?

MR. ANTHONY SCOVILLE: I GUESS I STILL DON'T HAVE -- I DON'T HAVE ANY REAL PROBLEMS WITH THE STATEMENT THAT IT IS THERE, AS IT IS WRITTEN THERE.

AND FRANKLY, PHILOSOPHICALLY, I HAPPEN TO AGREE WITH IT, AND WITH THE INCLUSION OF THE WORDS "ENERGY EFFICIENCY." I DON'T SEE ANY

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1 AND IF YOU WANT TO SPLIT IT INTO TWO SEPARATE
2 SENTENCES, TO GIVE HEIGHT AND EMPHASIS TO, ON THE
3 ONE HAND, CONSERVATION AND ENERGY EFFICIENCY, AND
4 ON THE OTHER HAND THE USE OF RENEWABLE RESOURCES,
5 THAT IS ALL RIGHT.
6 MORPHOUS THING. BUT I REALLY DON'T HAVE ANY PROBLEM
7 WITH IT THE WAY IT IS RIGHT NOW. THING AS NATIONAL
8 POLICY. I MEAN MR. STEPHEN CONNOLLY: YOU MEAN WITH

9 THIS LANGUAGE? NATIONAL POLICY. "GREATER
10 RESOURCES" MEAN MR. ANTHONY SCOVILLE: NO, I MEAN
11 THE LANGUAGE THAT YOU ORIGINALLY GAVE. THAT IS NOT

12 TRUE. ACTUALLY MR. RICHARD PENNA: THE LANGUAGE
13 DRAFTED ON THIS PAGE. THAT SUCH AND SUCH IS --

14 MR. ANTHONY SCOVILLE: YES. I ASK
15 ONE QUESTION, MR. STEPHEN CONNOLLY: WE MAY BE
16 BACK THERE. I HAVEN'T GOT IT IN FRONT OF ME.

17 MR. ANTHONY SCOVILLE: I MEAN, I
18 PERSONALLY WOULD PREFER TO SEE US BITE THE BULLET
19 AND COME OUT FOR THE RENEWABLE ENERGY RESOURCES.

20 I THINK, IN TERMS OF THE COMMIS- TO
21 SION'S OVERALL MANDATE, BEYOND THIS PROBLEM,
22 RENEWABLES -- MR. RICHARD PENNA: THAT'S CORRECT.

23 MR. JOHN HOFFMAN: I THINK THAT THIS
24 DOES IT, BUT IN FACT IT IS MORE OPERATIONAL. I
25 THINK THE THIRD THING IS A MUCH STRONGER

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RATIONALE THAN WHAT IS ON THIS THING.

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I MEAN, BY BREAKING IT INTO TWO POINTS, "PROVIDING GREATER RESOURCES," THAT IS SAYING SOMETHING THAT IS VERY CLEAR, AS OPPOSED TO "REDIRECTING NATIONAL POLICIES," SOME SORT OF AMORPHOUS THING.

THERE IS NO SUCH THING AS NATIONAL POLICY. I MEAN, THERE IS NO LAW THAT IS PASSED THAT IS CALLED NATIONAL POLICY. "GREATER RESOURCES" MEANS MONEY.

MR. ANTHONY SCOVILLE: THAT IS NOT TRUE. ACTUALLY YOU VERY OFTEN PASS A LAW SAYING IT IS A NATIONAL POLICY THAT SUCH AND SUCH IS --

MR. RAFE POMERANCE: COULD I ASK ONE QUESTION, JUST TO CLARIFY -- WE SORT OF AGREED ON 1. NOW WE ARE ARGUING BETWEEN THAT VERSION OF 2 AND THIS ONE.

MR. RICHARD PENNA: AND THIS VERSION, YES.

MR. RAFE POMERANCE: THEN WE GO TO 3; IS THAT RIGHT?

MR. RICHARD PENNA: THAT'S CORRECT.

MR. RAFE POMERANCE: I DON'T SEE A HELL OF A BIG DIFFERENCE BETWEEN THIS ONE AND THAT ONE. I THINK WE ARE ARGUING OVER --

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MR. RICHARD PENNA: WHICH FORM? --

MR. RAFF POMERANCE: WHO CARES?

MR. RICHARD PENNA: WHICH FORM IS
IS PREFERABLE? WE CAN SIT DOWN -- WHAT, DICK,

MR. RAFF POMERANCE: LET'S JUST
DECIDE. I DON'T SEE THAT IT IS A BIG DEAL. DOES
ANYBODY? I MEAN, I DON'T SEE --

MR. STEPHEN CONNOLLY: LET ME ASK
A BROADER QUESTION. IT SEEMS TO ME THAT THERE IS
A CONSENSUS AS LONG AS WE REMOVE THAT LANGUAGE --
IT SEEMS TO ME THAT WE HAD A CONSENSUS ON THE
NOTION HERE THAT WE WERE TALKING ABOUT, WHICH IS
FAIRLY WELL REFLECTED UNDER 3A, THE SECOND BULLET,
AND LET US WORK OUT THE LANGUAGE, WHETHER IT IS
BETWEEN THIS OR THAT. I DON'T -- I WOULD ADD ONE

MR. ANTHONY SCOVILLE: WELL, IT IS
REFLECTED IN THE FIRST LINE OF THE SECOND BULLET
OF 3A THERE. IS NOT GOING TO BE TERRIBLY EFFECTIVE.

MR. STEPHEN CONNOLLY: IT SEEMS TO
ME THAT WE DON'T HAVE TO HAGGLE OVER EVERY WORD,
AS LONG AS WE GET -- YOU KNOW, THERE WAS SOME CON-
CERN ABOUT THIS, AND THAT CONCERN SEEMS TO HAVE
CARRIED IN THE GROUP HERE.

MR. ANTHONY SCOVILLE: OKAY. BUT --

MR. RICHARD PENNA: WHY DON'T WE --

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1 OKAY. WITH THAT, WHY DON'T WE ALLOW STAFF TO
2 WORK UP SOME LANGUAGE ON THAT, WHICH THEN IS
3 NOT A NATIONAL MR. STEPHEN CONNOLLY: YOU WILL SEE
4 IT WHEN IT COMES AROUND AGAIN IN, WHAT, DICK,
5 THREE WEEKS? THAT.

6 MR. RICHARD PENNA: THREE, FOUR
7 WEEKS.

8 MR. DAVID SLADE: YOU DO HAVE TO
9 CONSIDER THEM. MR. RAFE POMERANCE: THE ONLY

10 THING YOU DON'T HAVE THERE IS, YOU DON'T SHIFT --
11 MAYBE I WILL JUST SAY, TAKE ONE WORD, IS THIS
12 "SHIFT NATIONAL POLICY TO CONSERVATION." E, DISCUSS
13 THAT, MAKE ANY DO YOU -- AND MEAN, YOU DON'T HAVE
14 A NOUN. IT IS GRAMMATICALLY -- I MEAN, SHIFT THEN
15 BREEZE, OR -- (GENERAL LAUGHTER) THE BIT. I WILL

16 READ, JUST EDIT MR. DAVID SLADE: I WOULD ADD ONE
17 THING, AND THAT IS SOMETHING TO THE POINT OF ALTER-
18 LEADERSHIP ROLE, BECAUSE REDUCING THE RISKS BY
19 U.S. POLICY IS NOT GOING TO BE TERRIBLY EFFECTIVE.
20 CO-INDUCED CLIBUT WE SHOULD BE TAKING A LEADER-
21 SHIP ROLE -- SOMETHING TO DO WITH REDUCING RISKS,
22 IN THAT SENTENCE. -- AND I THINK IT IS VIABLE,

23 IN TERMS OF THE MR. STEPHEN CONNOLLY: YOU MEAN
24 EXERCISING -- LIKE TO SUBSTITUTE THE WORD, IN THE
25 PLACE OF "NON-MR. ANTHONY SCOVILLE: MAINTAIN INTERNATIONAL
LEADERSHIP.

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MR. DAVID SLADE: I DYES. STEVEN THOUGH THERE IS AN INTERNATIONAL SECTION, THE PROBLEM IS NOT A NATIONAL ONE, AND NATIONAL INITIATIVES ARE NOT GOING TO DO A LOT ABOUT IT. SO YOU DO HAVE TO CONSIDER THAT.

MR. RAFAEL POMERANCE: MIGHT YOU DON'T THINK WE OUGHT TO CONSIDER THEM.

MR. RICHARD PENNA: IS ALL RIGHT. MAY I PROPOSE THAT WHAT WE DO THEN IS MOVE ON FROM THIS POINT TO THE THIRD POINT THAT IS UP THERE, DISCUSS THAT, MAKE ANY CHANGES, AND KEEP MOVING.

MR. STEPHEN CONNOLLY: I HAVE TAKEN THE LIBERTY TO FORMULATE G3-A LITTLE BIT. I WILL READ, JUST EDITING: "PROVIDE GREATER RESOURCES FOR DEVELOPING MORE EFFICIENT NON FOSSIL FUEL ALTERNATIVES AS A MEANS OF ASSISTING AND SUSTAINING ALL U.S. AND WORLD ECONOMIES IN THE FACE OF EMERGING CO2-INDUCED CLIMATE CHANGES."

MR. ANTHONY SCOVILLE: I GUESS I WOULD LIKE, FRANKLY -- AND I THINK IT IS VIABLE, IN TERMS OF THE BROADER MANDATE OF THE COMMISSION -- I WOULD LIKE TO SUBSTITUTE THE WORD, IN THE PLACE OF "NON FOSSIL," THE WORD "RENEWABLES." STATEMENT ABOUT RENEWABLES, WHO WOULD NOT BE WILLING TO

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PUT THEIR NAME I THINK MITCH SAID YESTERDAY QUITE
 CLEARLY, WHY DON'T WE BITE THE BULLET AND TRY TO
 FIGURE OUT WHICH WAY WE REALLY SHOULD GO ALONG,
 WHICH WAY IT SHOULD GO? THE OTHER HAND ARE THOSE PERSONS
 MR. JOHN HOFFMAN: ARE YOU ABSOLUTELY
 LUTELY OPPOSED TO FUSION THEN? REI MEAN, YOU DON'T
 THINK WE OUGHT TO BE PUTTING MORE MONEY INTO
 FUSION? IN FACT MAYBE SHOULD BE

DR. EDITH BROWN WEISS: MAY I MAKE
 A COMMENT? AND THEY ARE NOT ABOUT TO AGREE TO

MR. ANTHONY SCOVILLE: HE ON A DEVELOP-
 MENTAL BASIS ONLY AT THIS STAGE.

MR. JOHN HOFFMAN: WELL, THAT WOULD
 THAT SAYS, THE DEVELOPING -- UP TO EITHER WE

MR. ANTHONY SCOVILLE: TO MEAN, IN THE
 THE SENSE OF KEEPING THE TECHNICAL OPTION GOING TO

MR. JOHN HOFFMAN: WELL, THAT IS ALL
 WE HAVE AT THIS POINT. EXPLANATIONS AS TO WHY

MR. RICHARD PENNA: EDITH.
 DR. EDITH BROWN WEISS: DON'T REALLY IT

SUGGEST THAT THERE IS SCYLLA AND CHARYBDIS HERE,
 AND A SERIOUS ONE. BECAUSE, IF WE ARE TO MAKE A
 STATEMENT ON THE ENERGY, ON THE ONE HAND ARE THOSE
 PEOPLE WHO COULD LIVE WITH RENEWABLES, THE STATE-
 MENT ABOUT RENEWABLES, WHO WOULD NOT BE WILLING TO

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PUT THEIR NAME TO A DOCUMENT WHICH SAID "SHIFTS FROM NONFOSSIL FUEL," WHICH COULD INCLUDE TRADE-OFFS ON THAT, NATURAL GAS VERSUS NUCLEAR-POWER.

ON THE OTHER HAND ARE THOSE PERSONS WHO FEEL QUITE STRONGLY, I THINK -- AND WE OUGHT TO HAVE SOME KIND OF CONSENSUS HERE, MAYBE AN SHOWING OF HANDS -- THAT NUCLEAR POWER OUGHT TO BE KEPT OPEN AS A VIABLE OPTION, IN FACT MAY BE SHOULD BE USED INSTEAD OF FOSSIL FUELS.

AND THEY ARE NOT ABOUT TO AGREE TO SOMETHING THAT SAYS REDIRECT IT TO THE USE OF RENEWABLE ENERGY SOURCES.

SO, I THINK THAT WE ARE FACED WITH A DILEMMA THAT WE OUGHT TO LIVE UP TO. EITHER WE HAVE A DOCUMENT THAT EVERYONE AGREES TO AND SIGNS, OR WE HAVE A DOCUMENT IN WHICH THERE IS GOING TO BE PART OF THIS GROUP THAT IS GOING TO HAVE ANNEDED ASTERISKS AND ONE OR MORE EXPLANATIONS AS TO WHY THEY DISSENT FROM THE STATEMENT. WELL, THERE IS A

FOURTH THING WE MR. MITCH TYSON: QUID DIDN'T THINK IT WAS THAT TYPE OF THING AT SAYS ALL ENERGY POLICY SHOULD CONSIDER MR. L. RICHARD PENNA: TNOUGHTS

MR. ANTHONY SCOVILLE: THE QUESTION IS: IS THERE REALLY THAT A STRONG AT DIVISION ON THE THING? ANY FORM OF NUCLEAR FUSION OR FISSON,

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DR. DAVID ROSE: YES. IF YOU REALLY MEAN TO SAY NONFOSSIL-NONNUCLEAR, THEN SAY SO. PUT IT CLEARLY. I THINK YOU SAID -- DEVELOP-

DR. DAVID BURNS: WELL, COULD I JUST SAY THAT I THINK THAT SAYING -- IF YOU SAY NONFOSSIL, THEN YOU HAVE KEPT THE FOCUS ON CO2.

IF YOU HAVE ANY OTHER PHRASE, THEN YOU REALLY ARE TALKING ABOUT OTHER MATTERS, MATTERS OTHER THAN CO2.

MR. RICHARD PENNA: AND IT SEEMS TO ME YOU HAVE THAT DEFINITIONAL PROBLEM WITH "RENEWABLE."

DR. DAVID ROSE: ONE WAY OUT OF IT WOULD BE TO POINT OUT THAT THIS PARTICULAR GROUP IS NOT TRYING TO MAKE A JUDGMENT AT THIS TIME ON THE SOLAR-NUCLEAR KIND OF BUSINESS, BECAUSE WE DIDN'T ACTUALLY WORK ON IT. WHAT YOU REALLY NEED IS NONFOSSIL --

MR. JOHN HOFFMAN: WELL, THERE IS A FOURTH THING WE COULD DO. WE COULD ADD A FOURTH THING, A SUGGESTION THAT SAYS ALL ENERGY POLICY SHOULD CONSIDER ALL ENVIRONMENTAL THOUGHTS, PERIOD.

AND THAT SAYS THAT THE PEOPLE WHO FEEL THAT ANY FORM OF NUCLEAR FUSION OR FISSION,

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THEY HAVE GOT THEIR THING OFF AND THE PEOPLE WHO THINK,
DON'T THINK THAT NUCLEAR FUSION OR FISSION CON-IF
STITUTE A THREAT THAT SHOULD PREVENT ITS DEVELOP-
MENT CAN LIVE WITH IT. IN WHAT COULD BE POTENTIALLY
EFFICIENT -- WE HAVE GOT TO ASK COMPROMISE? THE
MONEY ISSUE --

MR. DAVID SLADE: I DON'T THINK
THERE IS A NEED FOR COMPROMISE WITH NONFOSSIL, SAY
NONFOSSIL, AND MR. JOHN HOFFMAN: HOW WHAT SHE IS SAY-
ING THERE IS -- THE DIFFERENT --

MR. RAFE POMERANCE: WE THIS SAYSOULD
"PROVIDE GREATER RESOURCES." I DON'T THINK THAT
NUCLEAR POWER NEEDS GREATER RESOURCES. CA IT HAS FOSSIL
GOT PLENTY. THE WRONG TERM. WHAT YOU HAVE TO SAY IS
-- YOU HAVE TO MR. ANTHONY SCOVILLE: YES.

THE DIFFERENT MR. RAFE POMERANCE: SO THIS IS TE-
SAYING --

DR. DAVID ROSE: THEN IT IS A NON-
FOSSIL-NONNUCLEAR. MR. RAFE POMERANCE: -- GAS --

MR. RAFE POMERANCE: -- FINE. NO. -- WE
ARE MAKING A RECOMMENDATION MR. ANTHONY SCOVILLE: AFFINE.

MR. RAFE POMERANCE: WE ARE A PANEL
ADDRESSING AI -- YOU ARE RIGHT. WE ARE A PANEL
ADDRESSING CO2. MR. RAFE POMERANCE: ONCE YOU START FIGHTING OTHER
FIGHTS WITHIN THIS, THEN YOU LOSE YOUR CREDIBILITY.
I WOULD JUST AS SOON DROP THAT IS AN ISSUE THAT

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IS IN THERE. MR. JOHN HOFFMAN: WELL, 3, I THINK,
1 IS THE SINGLE MOST IMPORTANT THING YOU CAN DO, IF
2 YOU ARE CONCERNED ABOUT THE CO₂ PROBLEM, IS TO
3 INCREASE INVESTMENTS IN WHAT COULD BE POTENTIALLY
4 EFFICIENT -- WE HAVE GOT TO KEEP LOOKING AT THE
5 MONEY ISSUE -- EFFICIENT. ALL ENERGY POLICY SHOULD

6 CONSIDER ALL ENERGY MR. RAFF POMERANCE, "THEN YOU SAY
7 NONFOSSIL, AND THEN YOU HAVE TO HAVE A LINE ABOUT
8 RECOGNITION OF THE DIFFERENT -- SCOTILLE: THAT IS TOO

9 MR. JOHN HOFFMAN: WELL, YOU COULD
10 SAY NON-CO₂-PRODUCING -- STATEMENT. THAT DOESN'T
11 HAVE A LOT OF -- MR. RAFF POMERANCE: BECAUSE "FOSSIL
12 FUEL" IS THE WRONG TERM. WHAT YOU HAVE TO SAY IS

13 -- YOU HAVE TO RECOGNIZE THE DIFFERENCE BETWEEN
14 THE DIFFERENT FOSSIL FUELS, BECAUSE YOU ARE CATE-
15 GORIZING -- DRAFTED NOW ON 3? AND MAYBE WHAT WE
16 SHOULD DO ON THE

17 MR. JOHN HOFFMAN: IS NO, NO --

18 MR. RAFF POMERANCE: -- GAS --

19 MR. JOHN HOFFMAN: NO, NO. WE
20 ARE MAKING A RECOMMENDATION THERE, RAFF. AS IT IS,

21 THAT WE ONLY MR. RAFF POMERANCE: YES, BUT WE
22 DROPPED THAT SENTENCE.

23 MR. STEPHEN CONNOLLY: WE HAVE GOT
24 LANGUAGE THAT WE ARE MAKING IN THE GROUP IS THAT WE

25 ARE NOT LOOKING MR. RAFF POMERANCE: AS LONG AS THAT

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IS IN THERE. REAL POLITIC, I MEAN, IF NOBODY WANTS TO TALK ABOUT THE FACT THAT WE NEED RENEWABLES --
MR. STEPHEN CONNOLLY: AND YOU PROVIDED IT, SO I DON'T THINK WE NEED TO FIGHT THAT ONE.

MR. JOHN HOFFMAN: HOW ABOUT ADDING 4? LET'S GO BACK TO "ALL ENERGY POLICY SHOULD CONSIDER ALL ENVIRONMENTAL THREATS," AND LEAVING IT AS IS.

MR. ANTHONY SCOVILLE: THAT IS TOO -- THE POINT THAT I AM RAISING IS THAT THAT SOUNDS SORT OF LIKE A MOTHERHOOD STATEMENT. THAT DOESN'T HAVE A LOT OF -- TO LIMIT IT TO A SPECIFIC STATEMENT?

MR. RAFE POMERANCE: THAT'S ALL RIGHT.

MR. JOHN HOFFMAN: BUT EVERY RECOMMENDATION DOESN'T HAVE TO COVER THE OTHERS.

MR. RICHARD PENNA: DO WE HAVE ANY CONSENSUS AS DRAFTED NOW ON 3? AND MAYBE WHAT WE SHOULD DO ON THIS ONE, SINCE IT IS FAIRLY -- YOU ARE TALKING ABOUT

MR. STEPHEN CONNOLLY: COULD I RAISE A QUESTION FIRST WITH JOHN HOFFMAN? DID YOU INTEND THIS TO BE AS NARROWLY CONSTRUCTED AS IT IS, THAT WE ONLY OUGHT TO WORRY ABOUT SUSTAINING THE ECONOMIES?

MR. RICHARD PENNA: WELL, TO THE EXTENT THAT WE CAN MOVE THROUGH THESE THINGS

MR. JOHN HOFFMAN: I THINK A MAJOR MISTAKE THAT WE ARE MAKING IN THE GROUP IS THAT WE ARE NOT LOOKING AT REAL ECONOMICS. BUT IF THIS ISN'T

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GOING TO BE REAL POLITICAL, I MEAN, IF NOBODY WANTS
 TO TALK ABOUT THE FACT THAT WHAT WE NEED ARE NOT
 JUST RENEWABLES THAT COST \$60 A BARREL EQUIVALENT,
 BUT WE NEED RENEWABLES. MR. ANTHONY SCOVILLE: WELL, LET
 ME, AS PART OF MR. ANTHONY SCOVILLE, WHO SAYS
 THAT? OF US OBVIOUSLY WHO ARE VERY UNHAPPY ABOUT
 IT, AND I, EDITH MR. JOHN HOFFMAN: WELL, THAT COST
 \$30 A BARREL EQUIVALENT. WELL, I DON'T FEEL QUITE AS
 STRONGLY ABOUT MR. STEPHEN CONNOLLY: YES. BUT
 THE POINT THAT I AM RAISING IS THAT THERE ARE TILT
 THINGS IN JEOPARDY WHICH ARE OTHER THAN ECONOMIC.
 AND DO YOU WANT TO LIMIT IT TO A SPECIFIC STATE-
 MENT? TERM "NON FOSSIL" IMPLIED AN ENDORSEMENT OF
 FISSION POWER. MR. JOHN HOFFMAN: BUT EVERY RECOM-
 MENDATION DOESN'T HAVE TO COVER THE WHOLE PROBLEM.
 I MEAN, I THINK THAT WE HAVE DARNED GOOD THINGS
 HERE THAT RELATE TO THESE OTHER PROBLEMS THAT YOU
 ARE TALKING ABOUT. THERE ANY WAY, IF WE WENT WITH
 A STATEMENT LIKE THERE SHOULD BE AN AREA THAT IS
 MISSING. WE SHOULD STUDY HOW WE ARE GOING TO
 ADAPT TO ANY CHANGES THAT OCCUR ANYWAY. JORY BUT A
 HENT THAT WITH MR. RICHARD PENNA: WELL, TO THE
 EXTENT THAT WE CAN MOVE THROUGH THESE, I THINK WE
 CAN TALK ABOUT ADDITIONAL ISSUES, BECAUSE ID, WHAT
 WE HAVE HERE IS NOT CONCLUSIVE. BUT I THINK, IF

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WE DON'T GET MOVING, WE PROBABLY ARE NOT EVEN THIS
GOING TO GET PAST THIS AND I AM NOT SURE THAT THAT
IS A PRODUCTIVE USE OF OUR TIME. STANCE, DOES NOT
FIND HERSELF MR. ANTHONY OSKOVILLE ANYWELL, LET'S
ME, AS PART OF THIS NONFOSSIL DEBATE, THERE ARE
SOME OF US OBVIOUSLY WHO ARE VERY UNHAPPY ABOUT
IT, AND I, EDITH MR. - JUST SIMPLY COULD NOT PUT
THEMSELVES - AND I - WELL, I DON'T FEEL QUITE AS
STRONGLY ABOUT THAT THE WAY IT OUGHT TO GO BUT,
EDITH, DOES THAT I GUESS I WOULD SIDE WITH THE TILT
TOWARD RENEWABLE RESOURCES. NOW THERE ARE SOME WHO
SIMPLY COULD NOT PUT THEIR NAME TO THIS PAPER IF
THE TERM "NONFOSSIL" IMPLIED AN ENDORSEMENT OF YOU
FISSION POWER. TENCE OR TWO?

IT IS, I GUESS, AS BLUNT AS THAT.

AND EVEN IN THE CASE OF SOME FOSSIL FUELS, SUCH
AS GAS, NATURAL GAS, AS OPPOSED TO FISSION POWER.
LIEU OF THIS? IS THERE ANY WAY, IF WE WENT WITH
A STATEMENT LIKE THIS, WHICH SAYS "NONFOSSIL AND
LOW-CARBON CONTENT FUELS," OR HOWEVER YOU PUT IT,
BUT SAYS, BUT RECOGNIZES IN AN EXPLANATORY STATE-
MENT THAT WITHIN THE GROUP THERE WERE IN - AT THIS
STATEMENT DOES NOT IMPLY AN ENDORSEMENT ONE WAY OR
THE OTHER AMONG THE ALTERNATIVES, ALTERNATIVE
FORMS OF NONFOSSIL FUELS? CONNOLLY: IS THERE

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SO THAT IT IS VERY CLEAR THAT THIS IS NOT TO BE TAKEN AS A TILT EITHER PRO OR ANTI-NUCLEAR. SO THAT EDITH, FOR INSTANCE, DOES NOT FIND HERSELF SUDDENLY ON BOARD, IN ANY WAY ENDORSING A PRO-NUCLEAR STANCE, AND VICE VERSA.

MR. JOHN HOFFMAN: ABSOLUTELY.

MR. ANTHONY SCOVILLE: BECAUSE I DON'T AGREE, THAT IS A PROBLEM. AND I GUESS I HAVE MY OWN PREFERENCES TO THE WAY IT OUGHT TO GO. BUT, EDITH, DOES THAT SOLVE SOME OF YOUR PROBLEMS?

DR. EDITH BROWN WEISS: I CAN ONLY ANSWER IT WHEN I SEE SPECIFIC LANGUAGE.

MR. RICHARD PENNA: TONY, COULD YOU DRAFT UP A SENTENCE OR TWO?

MR. ANTHONY SCOVILLE: ALL RIGHT.

MR. STEPHEN CONNOLLY: ARE YOU TALKING ABOUT SOMETHING IN ADDITION TO THIS OR IN LIEU OF THIS?

MR. ANTHONY SCOVILLE: NO, IN ADDITION TO THAT. JUST SIMPLY AS AN EXPLANATION OF THAT ONE WOULD SAY, "THE PANEL FEELS THAT THIS STATEMENT SHOULD NOT BE CONSTRUED AS IN ANY WAY INDICATING A DECISION AS TO AMONG THE NONFOSSIL ALTERNATIVES."

MR. STEPHEN CONNOLLY: IS THERE

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MR. ANTHONY SCOVILLE: IN OTHER WORDS, THIS WOULD NOT CONSTITUTE BY ITSELF AN ENDORSEMENT OF THE PANEL OF SOLAR OR NUCLEAR, ONE WAY OR THE OTHER. BECAUSE THAT IS NOT GERMANE, REALLY, TO THE CO2 PROBLEM.

MR. JOHN HOFFMAN: I THINK THIS DOES NOT CONSTITUTE AN ENDORSEMENT OF ANY NONFOSSIL-FUEL ALTERNATIVE.

MR. ANTHONY SCOVILLE: ANY SPECIFIC, ALL RIGHT.

MR. JOHN HOFFMAN: ANY SPECIFIC, PARENTHESES ON THAT. THAT WILL SHOW THE WORLD HOW HARD IT IS TO GET AGREEMENT.

MR. STEPHEN CONNOLLY: WILL YOU DO IT?

MR. ANTHONY SCOVILLE: YES, I WILL.

MR. STEPHEN CONNOLLY: AND THEN WE WILL USE THIS, PLUS THAT ADDITIONAL SENTENCE THAT TONY WILL DRAFT. IS THAT IT?

MR. ANTHONY SCOVILLE: PLUS RAFE'S COMMENT ABOUT -- WHICH I GUESS HE HAS WRITTEN SOMEWHERE ELSE -- ABOUT THIS LOW CARBON THING.

MR. STEPHEN CONNOLLY: RAFE'S COMMENT IS AT THE DESK.

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NEXT 50 TO 50 Y MR. SRAFE POMERANCE: I OKAY. AND WHAT I SE
 THE NEXTE ONE? GARDING INDUSTRIAL INNOVATIONS SHOULD,
 IF AT ALL POSSI MR. RICHARD PENNA: WITHIN AND ZINTB,
 BEFORE WE CONSIDER THIS SENTENCE, OR AS WE CON-
 SIDER THIS SENTENCE, STONY HAS DRAFTED SOME CLAN-YES
 GUAGE WHICH, HAS IB INDICATED AT THE OUTSET, WE WERE
 NOT ABLE TO TYPE UP AND GET IN HERE. HUSO, TONY, T-
 DON YOU HAVE THAT? MINIMAL WHILE THE COST OF ELIMI-
 NATING AIR POLL MR. ANTHONY SCOVILLE: YES. THE
 FACT IS LARGE. MR. RICHARD PENNA: IF YOU COULD,
 READ THIS, AND WE CAN GESS THAT WOULD BE A REAL
 SPELLING OUT, MR. ANTHONY SCOVILLE: IT OKAY. YO AND I
 MIGHT ADD THAT THIS GOES A LITTLE BIT BEYOND THE
 CO2 PROBLEM SPECIFICALLY, BECAUSE I THINK THE COM-
 MISSION MAY WANT TO CONSIDER THESE HING THIS CON-ER-
 TEXT, THAT CO2 MISSON ENOFAA CLASS OF PROBLEMS AS IT
 WHICH IS A CLASS OF POLLUTANTS WHICH IT HAS TO DEAL
 WITH.

MR. RAPE POMERANCE: WHAT IS THE
 PHRASE THAT SAY AND I GUESS MY REMARKS, THIS WOULD
 BE AS SORT OF AN AMPLIFICATION TO WHAT WIS THERE IN
 B, WOULD BE: "OVER THE COMING DECADE, THE UNATION
 WILL UNDERTAKE A LARGE-SCALE EFFORT AT REVITALIZ-
 ING ALL SECTORS OF THE NATIONAL ECONOMY. THESE
 EFFECTS OF THIS EFFORT WILL BE FELT AND WILL SET
 THE TONES OF NATIONAL ECONOMIC DEVELOPMENT OVER THE

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1 NEXT 30 TO 50 YEARS. NATIONAL POLICIES AND PRIVATE
 2 ACTIVITIES REGARDING INDUSTRIAL INNOVATIONS SHOULD,
 3 IF AT ALL POSSIBLE, OCCUR SO AS TO MINIMIZE THE
 4 RELEASE OF CO2 AND OTHER ATMOSPHERIC POLLUTANTS.
 5 THE COST-EFFECTIVENESS OF INCORPORATING INCENTIVES
 6 TO PROMOTE THIS OBJECTIVE AT THE TIME CAPITAL
 7 INVESTMENTS -- OR MAYBE CAPITAL AND HUMAN INVEST-
 8 MENTS ARE MADE IS MINIMAL WHILE THE COST OF ELIMI-
 9 NATING AIR POLLUTANTS, INCLUDING CO2, AFTER THE
 10 FACT IS LARGE OR OFTEN INFEASIBLE." GETTING
 11 INCREDIBLY FRUSTRATED AT THAT WOULD BE A REAL
 12 SPELLING OUT, IN MY MIND, OF THIS D ITEM. YOU
 13 MIGHT WANT TO ELIMINATE THE REFERENCE TO OTHER
 14 POLLUTANTS. IT PROBABLY WOULD BE A LOT EASIER
 15 TO DEAL WITH THE I THINK IT IS SOMETHING THAT NEVER-
 16 THELESS THE COMMISSION MAY WANT TO CONSIDER AS IT
 17 FORMULATES ITS BROADER POLICIES -- THINGS AFTERWARDS.

18 MR. RAFF POMERANCE: WHAT IS THE
 19 PHRASE THAT SAYS WHAT TO DO? YOU MAY WANT TO REFERENCE --

20 MR. ANTHONY SCOVILLE: WHAT?

21 MR. RAFF POMERANCE: CAN YOU READ
 22 THE VERBS IN THERE? THAT THAT IS SOMETHING THAT

23 MR. ANTHONY SCOVILLE: LET'S SEE.

24 "NATIONAL POLICIES AND PRIVATE ACTIVITIES REGARD-
 25 ING INDUSTRIAL INNOVATIONS SHOULD, IF AT ALL THE

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1 POSSIBLE, OCCUR SO AS TO MINIMIZE" -- OR MAYBE
 2 "CONTROL," SINCE WE HAVE CHANGED OUR LANGUAGE --
 3 "CONTROL THE RELEASE OF CO2 AND OTHER ATMOSPHERIC
 4 POLLUTANTS. THE COST OF INCORPORATING INCENTIVES
 5 TO PROMOTE THIS OBJECTIVE AT THE TIME CAPITAL AND
 6 HUMAN INVESTMENTS ARE MADE IS MINIMAL WHILE THE
 7 COST OF ELIMINATING AIR POLLUTANTS, INCLUDING CO2,
 8 AFTER THE FACT IS LARGE OR OFTEN INFEASIBLE."

9 I THINK THIS IS ONE THING I SENSE,
 10 IS THAT A LOT OF INDUSTRIALISTS ARE GETTING
 11 INCREDIBLY FRUSTRATED AT -- THEY MAKE AN INVEST-
 12 MENT ONE WAY AND THEN, AFTER THE FACT, THEY ARE
 13 TOLD TO COME ALONG AND START A CONTROL ON IT.

14 IT PROBABLY WOULD BE A LOT EASIER
 15 TO DEAL WITH THE PROBLEM UP FRONT, WHEN YOU ARE
 16 INSTALLING THE CAPACITY THAN IT IS TO HAVE TO BE
 17 CONSTANTLY PUTTING BAND-AIDS ON THINGS AFTERWARDS.

18 AND THAT IS WHY I HAD THAT LAST
 19 SENTENCE THERE. NOW, YOU MAY WANT TO REFERENCE --
 20 YOU MAY WANT TO DELETE THE REFERENCES HERE TO
 21 OTHER ATMOSPHERIC POLLUTANTS AND THINGS LIKE THAT,
 22 ALTHOUGH I DO THINK THAT THAT IS SOMETHING THAT
 23 THE COMMISSION ITSELF MIGHT WANT TO REALIZE, THAT
 24 ITS ISSUES OF CLEAN AIR AND THINGS LIKE THAT SHOULD
 25 BE TIED INTO THE -- SHOULD ALSO FACTOR INTO THE

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1 INDUSTRIALIZATION EFFORT. POMERANCE: I AM OPPOSED
 2 TO A LOT OF THE BUT FOR OUR PURPOSES, WE MAY ONLY
 3 WANT TO ADDRESS JUST THE CO2 ASPECT OF IT. VERY
 4 MARGINAL INDUSTRY. MR. RICHARD PENNA: ONE SUGGESTION,
 5 POSSIBLE SUGGESTION, IS: WHAT ABOUT ADDING A GAGE
 6 FACTOR I AM AFRAID TO GET BACK INTO THIS -- BACK
 7 IN THE FIRST BULLET UNDER A SCIN THE PARENTHESIS
 8 WHERE WE SAY, "NATIONAL POLICIES, INCLUDING TAXES,
 9 SUBSIDIES, REGULATION, RESEARCH AND OTHER PROGRAMS,"
 10 AND INCLUDE IN THAT "INDUSTRIAL REVITALI-
 11 ZATION POLICIES"?

12 ANTHONY SCOVILLE: YOU HAVE GOT
 13 AN AILING -- NO MR. RAFAEL POMERANCE: THAT IS WHERE
 14 IT REALLY BELONGS. IS ELECTED OR WHETHER REAGAN
 15 IS ELECTED.

16 MR. JOHN HOFFMAN: YES. I THINK
 17 THAT REALLY MAKES SENSE, BECAUSE AS A BULLET IT
 18 STANDS OUT. IT IS AUTOMOBILE INDUSTRY WHERE --

19 MR. RAFAEL POMERANCE: RIGHT. WE POSE
 20 THE QUESTION FOR MR. JOHN HOFFMAN: I MEAN, WHY

21 DRAW THAT ONE OUT, LIKE A NATIONAL RAILROAD
 22 POLICY OR NATIONAL REVITALIZATION POLICY AND THE
 23 IMPACT FROM CO2?

24 MR. ANTHONY SCOVILLE: YES. BUT
 25 THE INDUSTRIAL REVITALIZATION POLICY CAN GO ALL
 26 OVER THE WHOLE THING, I MEAN, INCLUDE RAILROADS --

27 POSSIBILITY -- MR. JOHN HOFFMAN: WHY DON'T WE
 28 SAY -- DOES IT MATTER?

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MR. RAFF POMERANCE: I AM OPPOSED TO A LOT OF THE -- THE WHOLE CONCEPT OF SHOVIING ALL THAT MONEY INTO THOSE -- INTO A LOT OF VERY MARGINAL INDUSTRIES, YOU KNOW, THE INDUSTRIAL REVITALIZATION, WHY SHOULD WE ACKNOWLEDGE THAT IT IS A FACT OF LIFE? SEPARATELY, SIMPLY BECAUSE SOME OF THE MAJOR ECONOMIC

MR. ANTHONY SCOVILLE: BECAUSE I THINK IT IS GOING TO OCCUR. COMPLETE COHERENT PACKAGE OR WHETHER

MR. RAFF POMERANCE: THAT IS WHAT HAPPENS TUESDAY. GOING TO BE MADE WHICH DON'T EXPLICITLY HAVE

MR. ANTHONY SCOVILLE: YOU HAVE GOT AN AILING -- NO, IT IS NOT. IT IS GOING TO HAPPEN WHETHER CARTER IS ELECTED OR WHETHER REAGAN IS ELECTED. WE MAY INCREASE THE SAVINGS RATE AND EVERYTHING YOU HAVE GOT PROBLEMS IN THE STEEL INDUSTRY AND THE AUTOMOBILE INDUSTRY WHERE AND I THINK THAT

MR. STEPHEN CONNOLLY: LET ME POSE THE QUESTION FOR THE GROUP WHICH IS: DOES THE GROUP WISH TO HIGHLIGHT AS A SEPARATE BULLET POINT THAT INDUSTRIAL REVITALIZATION POLICY AND THE IMPACT FROM CO2, OR ITS IMPACT ON CO2? IT OUGHT TO BE, IF CO2 IS TO BE HANDLED AS A

DICK SUGGESTED, AS PART OF THE -- RAISED THE POSSIBILITY -- AS PART OF THE FIRST BULLET UNDER

A? OR DOES IT MATTER? SAYING IS THAT THERE IS

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1 SAY, ED? DID YOU SAY SOMETHING?

2 MR. RICHARD PENNA: SO WE HAVE ANY
3 SENSE TO KEEP IT SEPARATE OR --

4 MR. ANTHONY SCOVILLE: I GUESS I
5 WOULD ARGUE FOR IT SEPARATELY, SIMPLY BECAUSE SOME
6 OF THE MAJOR ECONOMIC DECISIONS IN THE COMING
7 DECADE, WHETHER DONE AS A COMPLETE COHERENT PACK-
8 AGE OR WHETHER IT IS DONE AS A SEQUENCE OF SEPARATE
9 POLICIES, ARE GOING TO BE MADE WHICH DON'T
10 EXPLICITLY HAVE THE WORD "ENERGY" ON THEM, BUT
11 NEVERTHELESS WE ARE GOING TO UNDERGO HUGE REINVEST-
12 MENTS IN THE ECONOMY.

13
14 WE MAY INCREASE THE SAVINGS RATE
15 AND EVERYTHING ELSE. AND WHETHER IT IS DONE PRI-
16 VATELY OR PUBLICLY OR WHATEVER IT MAY BE, AND I
17 THINK THAT THAT -- GIVEN THAT THAT IS PROBABLY ONE
18 OF THE MAJOR SOCIAL ACTIVITIES THAT IS GOING TO
19 GO ON, SOMEHOW THE CO₂ -- AND IT IS BEYOND JUST
20 SIMPLY ENERGY, THAT ONE OUGHT TO RECOGNIZE THE
21 POSSIBLE IMPACT OF CO₂ ON IT, AND THAT IT OUGHT TO
22 BE, IF CO₂ IS THAT IMPORTANT, IT OUGHT TO HAVE A
23 BEARING.

24 SETTLEMENT POLICY MAY WELL COME UP
25 IN THAT. BUT ALL I AM SAYING IS THAT THERE IS

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1 GOING TO BE SOMETHING PROBABLY TAGGED INDUSTRIAL
2 REVITALIZATION, OR WHATEVER IT IS -- IT IS EVEN
3 BEING DONE IN THE SENATE, IN THAT -- WE ARE
4 UNABLE TO DETERMINE.

5 MR. STEPHEN CONNOLLY: I THINK THE
6 ARGUMENT IS MADE AND WELL STATED. IF THERE IS NO
7 OBJECTION TO INCLUDING IT AS A SEPARATE BULLET
8 ITEM, IS THERE OBJECTION TO THE SPECIFIC LANGUAGE
9 WHICH TONY HAS SUGGESTED?

10 MR. JOHN HOFFMAN: I WAS STILL
11 THINKING, WHEN WE LOOK AT THE FIRST ONE, THE ENERGY
12 USE PATTERNS, WE COULD CHANGE THAT TO INCLUDING
13 INDUSTRIAL REVITALIZATION AND TRANSPORTATION, WHICH
14 WOULD BE YOUR TWO MOST IMPORTANT ONES.

15 MR. STEPHEN CONNOLLY: WHERE ARE YOU
16 SUGGESTING THAT? MR. RICHARD PENNA: OKAY. NOW,

17 LET'S MOVE ON MR. JOHN HOFFMAN: THAT WOULD BE AT
18 A, INSTEAD OF ENDING THE SENTENCE, THE PERIOD, WE
19 MAKE IT A COMMA, AND IT SAYS, "INCLUDING INDUSTRIAL
20 REVITALIZATION POLICY AND TRANSPORTATION," BECAUSE
21 THOSE ARE REALLY END USES IN THE SENSE THAT WE ARE
22 TALKING ABOUT.

23 MR. STEPHEN CONNOLLY: SO YOU ARE
24 GOING FOR NOT MAKING A SEPARATE BULLET ITEM?
25 MR. JOHN HOFFMAN: YES.

MR. RICHARD PENNA: IS THERE ANY?

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1 DISCUSSION ON WHICH OF THE TWO IS PREFERABLE, ANY
2 SHOWING OF HANDS? WE MAY GET TO -- LIKE

3 MR. STEPHEN CONNOLLY: WE ARE
4 UNABLE TO DETERMINE WHETHER THERE IS A CONSENSUS
5 HERE.

6 MR. DEAN ABRAMSON: WELL, I AM PER-
7 SUADED BY TONY'S ARGUMENT, THAT IT BE A SEPARATE
8 CATEGORY.

9 MR. STEPHEN CONNOLLY: IS THERE A
10 CONSENSUS ON THAT? --

11 MR. ANTHONY SCOVILLE: YES. I --

12 MR. STEPHEN CONNOLLY: THERE IS A
13 CONSENSUS ON IT. THEN IT SHALL BE INCLUDED AS A
14 SEPARATE ITEM.

15 MR. RICHARD PENNA: OKAY. NOW,
16 LET'S MOVE ON TO THE LANGUAGE.

17 MR. STEPHEN CONNOLLY: YES.

18 MR. RICHARD PENNA: DO PEOPLE HAVE
19 DIFFICULTIES WITH THE LANGUAGE?

20 MR. DEAN ABRAMSON: COULD IT BE
21 READ AGAIN, SLOWLY?

22 MR. RICHARD PENNA: YES. TONY, DO
23 YOU WANT TO GIVE IT TO TOM, AND MAYBE PUT IT UP ON
24 THE BOARD, AND WE CAN ALL CONSIDER IT?

25 MR. ANTHONY SCOVILLE: OKAY. IT IS

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A FAIRLY LONG STATEMENT, BECAUSE I THOUGHT THAT
THEY WANTED SOMETHING THAT COULD ACTUALLY -- LIKE
A PARAGRAPH TO GO IN THE REPORT, AS OPPOSED TO
SIMPLY INCREASING--WHERE TO PUT IN THE STUFF ABOUT "SHARPLY
INCREASE THE --
MR. RICHARD PENNA: WELL, "IF YOU
COULD DISTILL IT INTO A BULLET FORM LIKE THIS, WE
CAN ST-PAGE SOMEPLACE.

MR. DEAN ABRAMSON: BUT IS THE XEROX MACHINE ACCESSIBLE ACTUALLY? WE COULD GO ON
TO THE NEXT ONE AND

MR. ANTHONY SCOVILLE: YES. WE ARE ON THE SECOND PAGE, IT

MR. DEAN ABRAMSON: BULLETS AND COME BACK WHEN THERE ARE COPIES.
ARE CONSIDERING

MR. RICHARD PENNA: FINE. LET'S DO THAT. THE DIFFICULTY MAY BE HANDWRITING, AS YOU
WILL SEE AS WE MOVE ON.

MR. RAFF POMERANCE: WELL, I JUST THINK IT SHOULD BE C, INTERNATIONAL ACTIVITIES. WE
HAVE SOME LANGUAGE THAT TOM WILL, OR STEVE WILL, STEVE WILL
STEVE WILL PUT UP ON THE BOARD, THAT EDITH WEISS DRAFTED,
AND WHICH WAS NOT INCLUDED IN THIS DISCUSSION.

MR. RAFF POMERANCE: THESE NEED TO BE --
STEVE, EDITH SUGGESTED THE LANGUAGE THAT IS HERE IS ACCEPTABLE TO HER. WHY DON'T WE

MR. STEPHEN CONNOLLY: THAT MAKES IT PUT EDITH'S LANGUAGE
EASY. WE ARE FOREVER GRATEFUL. MR. STEPHEN CONNOLLY: ON THE BOARD?

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1 MR. RICHARD PENNA: WE ARE ON C,
INTERNATIONAL ACTIVITIES.

2
3 MR. RAFE POMERANCE: I WAS JUST
4 WONDERING WHERE TO PUT IN THE STUFF ABOUT "SHARPLY
5 INCREASE THE -- ACCELERATE INTERNATIONAL"

6 MR. DEAN ABRAMSON: THAT WAS ON THE
7 FIRST PAGE SOMEPLACE.

8 MR. STEPHEN CONNOLLY: WHERE ARE WE
9 RIGHT NOW?

10 MR. RICHARD PENNA: WE ARE ON THE
11 SECOND PAGE, ITEM C, INTERNATIONAL ACTIVITIES. WE
12 ARE CONSIDERING EITHER OF THE TWO BULLETS AND ARE
13 OPEN TO ANY SORT OF SUGGESTIONS AS TO COMMENTS,
14 LANGUAGE, MODIFICATIONS, AND THE LIKE. OR, HEARING
15 NONE, WE WILL MOVE ON.

16 MR. RAFE POMERANCE: WELL, I JUST
17 THINK IT SHOULD JIBE WITH A. WE MADE SOME RATHER
18 GOOD USE OF GOOD LANGUAGE, "TO SHARPLY ACCELERATE
19 INTERNATIONAL ACTIVITIES."

20 MR. STEPHEN CONNOLLY: WE WILL --
21 LANGUAGE TO SUGGEST --

22 MR. RAFE POMERANCE: THESE NEED TO
23 BE --
24 MR. RICHARD PENNA: WHY DON'T WE
25 PUT EDITH'S LANGUAGE BACK UP?

MR. STEPHEN CONNOLLY: ON THE BOARD?
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MR. RICHARD PENNA: ON THE BOARD.

MR. STEPHEN CONNOLLY: ALL RIGHT.

DR. MICHAEL GLANTZ: IS THIS MEANT TO BE A SCIENTIFIC BOARD? BECAUSE A LOT OF THE GROUPS THAT CLUSTER IN THE U.S. -- IF YOU ARE TALKING ABOUT INTERNATIONAL ACTIVITIES -- YES, FOLLOW ON.

MR. RICHARD PENNA: YOU ARE SAYING THAT THE -- IS WHAT? THE FIRST BULLET HERE, WITH SOME LANGUAGE?

DR. MICHAEL GLANTZ: IN THE FIRST SENTENCE, SAYS "THE U.S. SHOULD SUPPORT THE FORMATION OF AN INTERNATIONAL CARBON DIOXIDE ASSESSMENT BOARD." AND IT TALKS ABOUT IMPLICATIONS. AND I AM WONDERING WHETHER YOU ARE TALKING ABOUT PHYSICAL SCIENTISTS.

DR. DAVID BURNS: I WONDER IF I SHOULD INTERJECT FOR JUST A MINUTE. BECAUSE ONE OF THE THINGS THAT BOTHERS ME ABOUT THIS IS THAT IT APPEARS TO ME -- I APPROVE AND I MEAN I AGREE COMPLETELY THAT THERE SHOULD BE SUCH AN INTERNATIONAL BOARD TO SUGGEST THAT TAKES CARE OF THAT PROBLEM. IF WE ADD A SENTENCE AT THE END OF THAT SECTION, WHATEVER IT SAYS, TO READ AS FOLLOWS:

MR. THOMAS WALTZ: I HAVE SOME "I.C.S.U. IN THE MEANTIME SHOULD BE ENCOURAGED TO BROADEN ITS MEMBERSHIP TO INCLUDE APPROPRIATE REPRESENTATION BY THE SOCIAL SCIENCE DISCIPLINES

1 ESSENTIAL TO THE CONDUCT OF COMPREHENSIVE POLICY
2 FORMULATION AND ANALYSIS."

3 MR. RICHARD PENNA: UN THIS WOULD BE NY
4 IN ADDITION TO THE LANGUAGE WHICH IS GOING UP PER-
5 THERE? AS INMICAL TO ITS OWN NATIONAL SELF-
6 INTEREST, HOWE

7 MR. THOMAS WALTZ: MAYES, FOLLOW ON.

8 MR. RICHARD PENNA: BOOR YOU WOULD I-
9 AMEND THE FIRST BULLET, THE FIRST BULLET HERE, WITH
10 SOME LANGUAGE? OCESS, IN WHICH WE SLOWLY PERCEIVE
11 OVER TIME THAT MR. THOMAS WALTZ: IWELL, NO, IT HARM

12 STANDS AS A SENTENCE ITSELF AND CAN FOLLOW ON
13 BECAUSE -- UNLESS SOMEBODY DISAGREES WITH THE ROLE
14 OF I.C.S.U. THAT IS SUGGESTED. AND I DON'T THINK
15 ANYONE IS GOING TO DO THAT IN ANY DECISIVE WAY THE

16 CARBON DIOXIDE DR. DAVID BURNS: I WONDER IF I
17 COULD INTERJECT FOR JUST A MINUTE, BECAUSE ONE OF
18 THE THINGS THAT BOTHERS ME ABOUT THIS IS THAT IT
19 SEEMS TO ME -- I APPROVE AND, IN MEAN, I DISAGREE COM-
20 PLETELY, THAT THERE SHOULD BE SUCH AN INTERNATIONAL
21 GROUP. FAST AS IT CAN GET IT, WHETHER THE SOVIET
22 UNION KINES AND BUT I THINK THAT THE CONSTITUTION,
23 THE DISCIPLINES REPRESENTED, AND PARTICULARLY THE
24 BREADTH OF REPRESENTATION, IS VERY IMPORTANT ONAL
25 INTERESTS AS I THINK IT IS UNLIKELY, JUST AS SPEAK-
ING REALISTICALLY, THAT ANY COUNTRY IS GOING TO BE --

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WE HAVE A GLOBAL COMMENTS PROBLEM OF CLASSIC
DIMENSIONS RIGHT HERE.

AND I THINK IT IS UNLIKELY THAT ANY
COUNTRY IS GOING TO ACT IN A MANNER WHICH IT PER-
CEIVES AS INIMICAL TO ITS OWN NATIONAL SELF-
INTEREST, HOWEVER IT PERCEIVES THAT TO BE.

SO THAT MAYBE THE BOARD AS CONSTI-
TUTED WILL HAVE A VERY LONG LIFE AND A VERY SLOW
EDUCATIONAL PROCESS, IN WHICH WE SLOWLY PERCEIVE
OVER TIME THAT ALL ARE BENEFITED IF WE DO NOT HARM
THE ATMOSPHERE AND CHANGE THE CLIMATE.

BUT WHAT I AM REALLY TRYING TO SAY
IS THAT WHATEVER WE MAY DO IN THE UNITED STATES
PROBABLY WILL NOT AFFECT IN ANY DECISIVE WAY THE
CARBON DIOXIDE SITUATION, AND OUR OWN PARTICULAR
MIX OF ENERGY POLICIES MAY NOT AFFECT WHETHER
BRAZIL DOES OR DOES NOT GO TO BREEDER REACTORS,
WHETHER FRANCE CONTINUES ITS OWN BREEDER REACTOR
PROGRAM, WHETHER CHINA MINES AS MUCH COAL AND BURNS
IT AS FAST AS IT CAN GET IT, WHETHER THE SOVIET
UNION MINES AND EXPORTS COAL, ARE REALLY UNLIKELY
TO BE AFFECTED BY THESE POLICIES.

THEY WILL BE AFFECTED BY NATIONAL
INTERESTS AS PERCEIVED. SO THAT I THINK THAT WE
HAVE TO UNDERSTAND THE ROLE OF THIS BOARD WILL BE

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LIMITED AND PROBABLY EDUCATIONAL. THAT IS ALL I AM TRYING TO SAY.

DR. DAVID ROSE: WELL, THE U.S. GOVERNMENT HAS HAD DIFFERENT VIEWS ABOUT THIS SORT OF THING. FOR EXAMPLE, JUST THE OPPOSITE ARGUMENT WAS USED ABOUT THE NUCLEAR REPROCESSING VIABILITY OF THE NUCLEAR INDUSTRY IN THE U.S.

IT WAS GENERALLY THOUGHT THAT IF THE NUCLEAR INDUSTRY IN THE U.S. WAS CONTROLLED IN VARIOUS WAYS, AS WAS PROPOSED IN 1977, THAT WOULD BE A GREAT EXAMPLE FOR THE REST OF THE WORLD AND THEY WOULD FOLLOW SUIT.

DR. DAVID BURNS: YES. YOU DON'T

DR. DAVID ROSE: AND YOU ALL KNOW WHAT HAPPENED.

DR. DAVID BURNS: NUCLEAR WAS A SLIGHTLY DIFFERENT CASE, BECAUSE WE DID HAVE A LITTLE MORE LEVERAGE THERE, WHICH IS --

DR. DAVID ROSE: AND YOU KNOW HOW TO EFFECTIVE IT WAS, YES, AND YOU KNOW HOW MUCH IT ACCOMPLISHED.

DR. DONALD KING: I THINK YOU ARE SUPPORTING HIS ARGUMENT.

DR. DAVID ROSE: OF COURSE. WILL

MR. RICHARD PENNA: ALL RIGHT. WHY

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1 LIMITED AND PROBABLY EDUCATIONAL. THAT IS ALL I
2 AM TRYING TO SAY.

3 MODIFICATION. DR. DAVID ROSE: WELL, THE U.S.
4 GOVERNMENT HAS HAD DIFFERENT VIEWS ABOUT THIS SORT
5 OF THING. FOR EXAMPLE, JUST THE OPPOSITE ARGUMENT
6 WAS USED ABOUT THE NUCLEAR REPROCESSING VIABILITY
7 OF THE NUCLEAR INDUSTRY IN THE U.S.

8 COOPERATIVE RESEARCH. IT WAS GENERALLY THOUGHT THAT IF THE
9 NUCLEAR INDUSTRY IN THE U.S. WAS CONTROLLED IN
10 VARIOUS WAYS, AS WAS PROPOSED IN 1977, THAT WOULD
11 BE A GREAT EXAMPLE FOR THE REST OF THE WORLD AND
12 THEY WOULD FOLLOW SUIT.

13 DR. DAVID BURNS: YES. YOU DON'T

14 WANT "EMISSIONS OF CO2 LEVELS"
15 DR. DAVID ROSE: AND YOU ALL KNOW
16 WHAT HAPPENED.

17 DR. DAVID BURNS: NUCLEAR WAS A
18 SLIGHTLY DIFFERENT CASE, BECAUSE WE DID HAVE A
19 LITTLE MORE LEVERAGE THERE, WHICH IS --

20 DR. DAVID ROSE: AND YOU KNOW HOW
21 EFFECTIVE IT WAS, YES, AND YOU KNOW HOW MUCH IT
22 ACCOMPLISHED. ANOTHER FEW PARTS PER MILLION --

23 DR. DONALD KING: I THINK YOU ARE
24 SUPPORTING HIS ARGUMENT.

25 DR. DAVID ROSE: OF COURSE. WILL

MR. RICHARD PENNA: ALL RIGHT. WHY

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1 DON'T WE FOCUS ON THE LANGUAGE THAT IS UP HERE AND
2 THEN SEE IF WE CAN AGREE ON THAT AND THEN ADD THE
3 MODIFICATION.

4 DR. JOHN PERRY: EXCUSE ME. WE HAD
5 A RECOMMENDATION MR. STEPHEN CONNOLLY: THIS IS THE

6 LANGUAGE THAT EDITH CAME UP WITH LAST NIGHT. "AS
7 A TOP PRIORITY, THE U.S. SHOULD UNDERTAKE TO
8 ENTER INTO INTERNATIONAL AGREEMENTS TO FOSTER
9 COOPERATIVE RESEARCH AND SHALL UNDERTAKE, IN COOPER-
10 ATION WITH OTHER COUNTRIES, INTERNATIONAL MEASURES
11 -- UNDERTAKE, IN COOPERATION WITH OTHER COUNTRIES,
12 INTERNATIONAL MEASURES AIMED AT CONTROL OF CO2
13 EMISSIONS."

14 MR. STEPHEN CONNOLLY: I DON'T
15 REMEMBER THE DR. EDITH BROWN WEISS: HE YOU DON'T
16 WANT "EMISSIONS" ON THERE, DO YOU? ISN'T IT
17 "CONTROLLING CO2 LEVELS"?

18 DR. JOHN PERRY: I DON'T REMEMBER.
19 IT WAS ON ONE OF MR. STEPHEN CONNOLLY: "LEVELS"?

20 MAYBE DON REMEM MR. DEAN ABRAMSON: WHY NOT ABOUT
21 "EMISSIONS"?

22 INTERNATIONAL ACTIVITIES AND RESEARCH
23 ACTIVITIES AND MR. DAVID SLADE: WE REALLY WANT TO
24 CONTROL LEVELS, AS DAVID POINTED OUT YESTERDAY.
25 YOU CAN SUPPORT ANOTHER FEW PARTS PER MILLION --

MR. STEPHEN CONNOLLY: I CAN'T DO
WHAT? LOVE IT, REALLY. AND IT WAS A LITTLE MORE

EXPLICIT. THE MR. RAFF POMERANCE: FRANCE WILL HER
HAVE TO THE TERM "AGREEMENT," IS A LITTLE OF A WORD

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1 MR. STEPHEN CONNOLLY: BILL, CAN'T
2 DO WHAT?

3 DR. JOHN PERRY: EXCUSE ME, WE HAD
4 A RECOMMENDATION DRAFTED THAT WAS SOMETHING LIKE
5 THAT, AND IT DISAPPEARED SOMEHOW OVERNIGHT. WHERE
6 DID THIS ONE COME FROM?

7 MR. STEPHEN CONNOLLY: THIS IS
8 EDITH'S.

9 DR. JOHN PERRY: THAT IS EDITH'S?
10 I HAVE NO PROBLEM WITH IT. IT SOUNDS VERY MUCH
11 LIKE THE ONE THAT WAS DRAFTED.

12 MR. STEPHEN CONNOLLY: I DON'T
13 REMEMBER THE OTHER DRAFT, JOHN. IS THERE ANYTHING
14 THAT SHOULD BE IN HERE THAT ISN'T?

15 DR. JOHN PERRY: I DON'T REMEMBER.
16 IT WAS ON ONE OF THESE LITTLE PIECES OF PAPER.
17 MAYBE DON REMEMBERS. I HAD SOMETHING IN IT ABOUT
18 SUPPORT OF INTERNATIONAL ACTIVITIES AND RESEARCH
19 ACTIVITIES AND ALL THAT. AND IT WAS A BIT MORE
20 EXPLICIT, BECAUSE IT MENTIONED THE WORLD CLIMATE
21 PROGRAM AND THE -- THINGS LIKE THAT.

22 DR. DONALD KING: I THINK EDITH
23 WOULD LOVE IT, REALLY. AND IT WAS A LITTLE MORE
24 EXPLICIT. THE ONE THING THAT I GUESS WOULD BOTHER
25 ME WAS THE TERM "AGREEMENT," IS A LITTLE OF A WORD

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OF ART INCLUDED IN THIS? WE APPARENTLY LOST A
PIECE OF PAPER MR. STEPHEN CONNOLLY: WHERE?

DR. DONALD KING: THAT SAYS, YOU
KNOW, CONVENTIONS AND THINGS, AND THAT WOULD HAVE
TO BE CHANGED TO SOMETHING LIKE "ARRANGEMENTS," OR
ELSE LOOK AT THE ONE THAT JOHN --

DR. EDITH BROWN WEISS: "ARRANGE-Y"?
MENTS" IS BETTER.

MR. JOHN HOFFMAN: IS THIS A SUBSTI-
TUTE OR AN ADDITION TO WHAT WE HAVE GOT DOWN ONE
THE PAPER HERE?

DR. JOHN PERRY: I HOPE IT IS, AN
ADDITION. LOOK AT THE IMPACTS OF CO₂ ON THE BIO-

SPHERE AND ON DR. EDITH BROWN WEISS: IT IS NOT
A SUBSTITUTE. AND ON THE OTHER END OF IT YOU ARE

SAYING "AND TO MR. JOHN HOFFMAN: SO IT IS A ROL
BULLET?" AND THEY DON'T SEEM TO -- YOU KNOW,

ONE IS TO FIND MR. STEPHEN CONNOLLY: THAT IS INTEN-
DED AS AN ADDITION. THE OTHER IS TO TAKE THE ACTION

AT THE SAME TIME MR. JOHN HOFFMAN: OKAY. WHAT I AM
SAYING?

ELSE --

MR. STEPHEN CONNOLLY: YES.

MR. RICHARD PENNA: ANYTHING ELSE

ON THIS?

MR. STEPHEN CONNOLLY: -- THAT OUGHT

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TO BE INCLUDED IN THIS? WE APPARENTLY LOST A
PIECE OF PAPER OVERNIGHT.

MR. RAFE POMERANCE: I THINK IT IS
GOOD. ACTUALLY, THERE IS QUIET.

DR. MICHAEL GLANTZ: WAIT A MINUTE.
THERE IS AN AIM AT CONTROLLING IT, THEN WE'VE DONE
OF THAT RESEARCH.

MR. RICHARD PENNA: "HIGH PRIORITY"?

DR. EDITH BROWN WEISS: "HIGH
PRIORITY"?

DR. MICHAEL GLANTZ: THERE IS ONE
PROBLEM I HAVE WITH IT, AND THAT IS THAT YOU HAVE
THIS "ATTEMPT TO FOSTER COOPERATIVE RESEARCH," I
GUESS TO LOOK AT THE IMPACTS OF CO₂ ON THE BIO-
SPHERE AND ON SOCIETY. AND ON THE OTHER END OF IT YOU ARE
SAYING "AND TO COME UP WITH MEASURES TO CONTROL
CO₂ LEVELS." AND THEY DON'T SEEM TO -- YOU KNOW,
ONE IS TO FIND OUT MORE ABOUT IT SO THAT YOU CAN
TAKE AN ACTION, AND THE OTHER IS TO TAKE THE ACTION
AT THE SAME TIME. DO YOU UNDERSTAND WHAT I AM
SAYING?

MR. STEPHEN CONNOLLY: YES.

DR. MICHAEL GLANTZ: YOU DON'T TELL

SEEM -- THAT WE ARE GOING TO BE TRYING TO
SIMPLE, PARSIMONIOUS

MR. STEPHEN CONNOLLY: WE HAVE TWO

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1 TO BE INCLUDED IN THIS? WE APPARENTLY LOST A YOU
2 PIECE OF PAPER OVERNIGHT.

3 MR. RAFA POMERANCE: I THINK IT IS
4 GOOD. ACTUALLY, THERE IS A QUIET. IF YOU KNOW
5 ENOUGH ALREADY DR. MICHAEL GLANTZ: WAIT A MINUTE.

6 THERE IS AN ATTEMPT AT CONTROLLING CO2, THEN MAYBE SOME
7 OF THAT RESEARCH MR. RICHARD PENNA: "HIGH PRIORITY"?

8 DR. EDITH BROWN WEISS: "HIGH PRIORITY"? UNTIL THE RESEARCH IS DONE TO GO INTO
9 SOMETHING MORE

10 DR. MICHAEL GLANTZ: THERE IS ONE
11 PROBLEM I HAVE WITH IT, AND THAT IS THAT YOU HAVE
12 THIS "ATTEMPT TO FOSTER COOPERATIVE RESEARCH," I
13 GUESS TO LOOK AT THE IMPACTS OF CO2 ON THE BIO-TO
14 SPHERE AND AN SOCIETY. ALREADY BEEN JOINED AND
15 RESOLVED EARLY AND ON THE OTHER END OF IT YOU ARE
16 SAYING "AND TO COME UP WITH MEASURES TO CONTROL
17 CO2 LEVELS." AND THEY DON'T SEEM TO -- YOU KNOW,
18 ONE IS TO FIND OUT MORE ABOUT IT SO THAT YOU CAN
19 TAKE AN ACTION, AND THE OTHER IS TO TAKE THE ACTION
20 AT THE SAME TIME. DO YOU UNDERSTAND WHAT I AM
21 SAYING?

BUT IS THERE A DIFFICULTY WITH THAT?

22 MR. STEPHEN CONNOLLY: YES.

23 DR. MICHAEL GLANTZ: YOU DON'T TELL

24 SEEM WHAT WE ARE DOING IS, WE ARE TRYING TO BE

25 SIMPLE, PARSIMONIOUS MR. STEPHEN CONNOLLY: WE HAVE TWO

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TYPES OF ACTIVITIES UNDER ONE BULLET, IS WHAT YOU ARE SAYING.

DR. MICHAEL GLANTZ: WELL, IT PREJUDGES -- I MEAN, IT SAYS THAT IF YOU KNOW ENOUGH ALREADY WHAT THE IMPACTS ARE AND YOU ARE GOING TO AIM AT CONTROLLING CO₂, THEN MAYBE SOME OF THAT RESEARCH ISN'T NEEDED.

MR. DAVID SLADE: NO, MICKEY. YOU CAN'T WAIT UNTIL THE RESEARCH IS DONE TO GO INTO SOMETHING MORE POSITIVE.

MR. JOHN HOFFMAN: CONTROL OF ULTIMATE CO₂ LEVELS.

MR. STEPHEN CONNOLLY: IT SEEMS TO ME THAT THAT ISSUE HAS ALREADY BEEN JOINED AND RESOLVED EARLIER IN THE DISCUSSIONS OF THE GROUP THIS MORNING.

AND IF THERE IS SOMETHING THAT MAY CAUSE A PROBLEM OF ORGANIZATION IS THAT TWO TYPES OF ACTIVITIES ARE PUT RIGHT NEXT TO EACH OTHER. IN SO YOU SEE THE JUXTAPOSITION.

MR. ANTHONY SCOVILLE: NO.

MR. STEPHEN CONNOLLY: I WILL TELL YOU, WHAT WE ARE DOING IS, WE ARE TRYING TO BE SIMPLE, PARSIMONIOUS.

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PROBABLY IN APPROPRIATE MR. JOHN HOFFMAN: MAYBE WE SHOULD
PUT "CONTROLLING ULTIMATE CO₂ LEVELS," AND INDICATE THAT WE DON'T KNOW WHAT THAT LEVEL IS, AND THAT IS THE PURPOSE OF THE RESEARCH.

IT IS SUGGESTED MR. ANTHONY SCOVILLE: DO YOU WANT THE TERM "LONG-TERM" THERE? IT IS A CONCEPT THAT MODIFIES

MR. STEPHEN CONNOLLY: BECAUSE WE USED THE WORD "LONG-TERM" BEFORE. BY THE WAY, WHERE THERE ARE WORDS LIKE THIS USED, WE WILL GO BACK, IN PREPARING IT, AND MAKE AN EFFORT TO MAKE THE USAGE CONSISTENT THROUGHOUT, THE MODIFIERS AND SO FORTH. I THINK THEY SHOULD BECOME -- BUT I

REALLY QUESTION MR. RICHARD PENNA: SO OKAY, SAY DO WE HAVE CONSENSUS TO THAT AS AN ADDITION TO THE BULLET UNDER C? MR. RICHARD PENNA: YES. IT IS A

PANEL. I THINK MR. JOHN HOFFMAN: YES. PANEL TELLING

THE COMMISSION, MR. RICHARD PENNA: OKAY. THEN, IF WE CAN, TURN TO -- WE HAVE AN ADDITION FROM TOM WALTZ TO THE FIRST BULLET WHICH SAYS "I.C.S.U. IN THE MEANTIME SHOULD BE ENCOURAGED TO BROADEN ITS MEMBERSHIP TO INCLUDE APPROPRIATE REPRESENTATION BY SOCIAL SCIENCE DISCIPLINES ESSENTIAL TO THE CONDUCT OF COMPREHENSIVE POLICY FORMULATION AND RE ANALYSIS." INCLUDE SOCIAL SCIENTISTS, BUT NOT THE

TYPES OF CERTAIN DR. WILLIAMS ELLIOTT: I THINK IT IS

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PROBABLY INAPPROPRIATE FOR THE NATIONAL COMMISSION
 ON AIR QUALITY TO TELL I.C.S.U. WHAT ITS MEMBER-
 SHIP SHOULD BE. DR. JOHN PERRY: THIS PERHAPS WILL
 NEED A LITTLE MR. THOMAS WALTZ: IT IS NOT TELLING
 THEM, IT IS SUGGESTING. OR I THINK IT IS APPROPRIATE.
 HAVE BEEN ESTAB MR. DAVID SLADE: THIS IS A CONCERN
 THAT MODIFIESE I.C.S.U.'S TRADITIONAL WAY OF DOING
 BUSINESS. AND I THINK TOM JUST WANTS TO ENSURE
 THAT THESE KINDS OF PEOPLE BECOME PART OF THAT
 ACTIVITY'S ARE NOT IN THE I.C.S.U. FAMILY IS BECAUSE
 THE SOCIAL SCIE DR. WILLIAM ELLIOTT: IT'S OKAY TO
 HAVE IT. NOT THINK THEY SHOULD BECOME -- BUT I
 REALLY QUESTION THE APPROPRIATENESS OF SAYING THAT
 I.C.S.U. NOT -- TRUE.

MR. RICHARD PENNA: YES TO IT IS A
 PANEL. ARE THINK ON THIS ISSUE IT IS ON A PANEL TELLING
 THE COMMISSION, OR SUGGESTING TO THE COMMISSION,
 WHAT IT SHOULD RECOMMEND TO CONGRESS. AL AND THE
 COMMISSION MEMBERS CAN TAKE THIS AND PASS IT ON OR
 NOT PASS IT ON. MR. THOMAS WALTZ: LET ME GIVE YOU
 SOME BACKGROUND BUT WE WOULD LIKE THE COLLECTIVE
 WISDOM OF THIS GROUP ON THIS ISSUE. THIS IS SOME-
 HOW GOING TO DR. WILLIAM ELLIOTT: IT MAY BE
 WISE TO INCLUDE SOCIAL SCIENTISTS, BUT NOT THE
 TYPES OF CERTAIN ECONOMISTS THAT HAVE NOT BEEN AS

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1 INCLUDED IN THE DISCUSSIONS. THAT IS FINE, TO
2 POINT THAT OUT.

3 DR. JOHN PERRY: THIS PERHAPS WILL
4 NEED A LITTLE ELABORATION. I.C.S.U. IS A HOLDING
5 COMPANY, IF YOU WILL, FOR INTERNATIONAL UNIONS THAT
6 HAVE BEEN ESTABLISHED, SOME OF THEM FOR A VERY,
7 VERY LONG TIME, OF SCIENTISTS IN VARIOUS DISCI-
8 PLINES.

9 THE PRIMARY REASON WHY SOCIAL
10 SCIENTISTS ARE NOT IN THE I.C.S.U. FAMILY IS BECAUSE
11 THE SOCIAL SCIENTISTS, NEAR AS I CAN TELL, ARE NOT
12 -- HAVE NOT ORGANIZED THEMSELVES INTERNATIONALLY.

13 DR. EDITH BROWN WEISS: THAT IS
14 REALLY NOT TRUE.

15 DR. JOHN PERRY: WELL, TO WHAT
16 EXTENT ARE THEY ORGANIZED INTERNATIONALLY?

17 MR. MICHAEL GLANTZ: THERE ARE
18 INTERNATIONAL ORGANIZATIONS, POLITICAL SCIENCE,
19 ECONOMICS, AND SO FORTH.

20 MR. THOMAS WALTZ: LET ME GIVE YOU
21 SOME BACKGROUND WHICH I THINK WILL HELP AND ALLAY
22 SOME OF YOUR FEARS, YOU KNOW, THAT THIS IS SOME-
23 HOW GOING TO BE PERCEIVED AS SOME KIND OF AN
24 ASSAULT. I DON'T THINK SO.

25 I THINK IT IS GOING TO BE SEEN AS

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1 REINFORCING SOMETHING THAT IS ALREADY UNDER WAY.
 2 TWO POINTS: ONE, TOM MALONE, WHO IS
 3 THE FOREIGN SECRETARY OF THE ACADEMY, AND THE --
 4 I GUESS THE ACADEMY REPRESENTATIVE ON I.C.S.U.'S
 5 DIRECTORSHIP, OR WHATEVER, HAS ENCOURAGED ME TO
 6 TALK TO THE PEOPLE AFFILIATED WITH THE -- I THINK,
 7 IT IS CALLED THE ASSOCIATION OF NATURAL RESOURCE
 8 AND ENVIRONMENTAL ECONOMISTS, WHICH IS ONE SUCH
 9 ORGANIZATION THAT SHOULD BE AFFILIATED.

10 AND I AM NOT SAYING THAT IS THE ONLY
 11 ONE, BUT THAT IS THE ONE WE ARE STARTING THE PRO-
 12 CESS WITH. COMMUNITIES OR O.E.C.D., TO INDICATE
 13 THAT THERE ARE HE HAS ENCOURAGED ME TO HAVE THAT
 14 ASSOCIATION GET IN TOUCH WITH I.C.S.U. AND REQUEST
 15 AN ASSOCIATE MEMBERSHIP WITH THEM, BECAUSE THAT IS
 16 ALL THEY CAN GET.

17 THEY CANNOT EVEN GET A FULL MEMBER-
 18 SHIP AT THIS POINT. IT WILL BE TWO YEARS YET
 19 BEFORE I.C.S.U. HAS A MEETING IN WHICH THAT WILL
 20 BE ON THE AGENDA, YOU KNOW: SHALL WE ALLOW THESE
 21 GROUPS TO BECOME FULL MEMBERS IN OUR ORGANIZATION?
 22 I HAVE EVERY REASON TO BELIEVE THAT
 23 WILL TAKE PLACE. BUT IT IS VERY IMPORTANT THAT WE
 24 REINFORCE THIS PROCESS. OKAY? SO HARD THAT I WOULD
 25 LIKE TO STRIKE MR. DEAN ABRAMSON: WHAT ARE THE

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1 PRESENT U.S. MEMBERS, JUST THE ACADEMY?

2 DR. JOHN PERRY: THE ACADEMY IS THE
3 NATIONAL HEARING BODY, YES, TO I.C.S.U.

4 MR. DEAN ABRAMSON: SO FORMALLY THE
5 U.S. MEMBERSHIP IS REFLECTED THROUGH THE ACADEMY?

6 DR. JOHN PERRY: YES, I BELIEVE SO,
7 YES.

8 DR. HERMANN RAHN: AND ALSO IN ALL
9 THE OTHER COUNTRIES.

10 MR. DAVID SLADE: WE MIGHT ADD ONE
11 WORD IN THE PARENTHESES, AFTER U.N.E.P., PERHAPS
12 "EUROPEAN COMMUNITIES OR O.E.C.D.," TO INDICATE
13 THAT THERE ARE ALSO MULTINATIONAL AS WELL AS INTER-
14 NATIONAL GROUPS.

15 MR. RAFF POMERANCE: YES. WELL,
16 THEN HAVE WE AGREED ON C?

17 MR. RICHARD PENNA: HAVE WE AGREED
18 ON THE LANGUAGE AS TOM PROPOSED IT?

19 DR. DAVID BURNS: AGAIN, I HAVE
20 ANOTHER COMMENT WHICH HAS TO GET INTO THE RECORD
21 SOMEHOW, AND THAT IS: IT HAS BEEN BROUGHT HOME TO
22 ME REPEATEDLY FOR THE PAST TWO YEARS, THE DIFFI-
23 CULTY OF INTERDISCIPLINARY WORK.

24 IN FACT, IT IS SO HARD THAT I WOULD
25 LIKE TO STRIKE THE WORD "INTERDISCIPLINARY" AND

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HAVE "MULTIDISCIPLINARY," BECAUSE YOU CAN CERTAINLY HAVE A MULTIDISCIPLINARY MEETING, BUT REAL INTERDISCIPLINARY EXCHANGE, PARTICULARLY ACROSS BARRIERS OF PHYSICS, PHYSICAL SCIENCE AND SOCIAL SCIENCE, IS EXCEEDINGLY DIFFICULT.

IS HAPPENING. AND THAT IS WHAT WE ARE TALKING ABOUT. AND SOMEWHERE WE OUGHT TO TAKE COGNIZANCE OF THE DIFFICULTY IN DOING IT.

DR. DAVID ROSE: I WOULD LIKE TO DISSENT WITH THAT, BECAUSE THAT IS LOOKING FOR THE COLLAR BUTTON OUT IN THE MIDDLE OF THE FLOOR WHERE THE LIGHT IS GOOD INSTEAD OF UNDER THE DRESSER, WHERE IT REALLY ROLLED.

KNOW. INDEED, I AGREE WITH YOU, THE PROBLEM IS INTERDISCIPLINARY. AND THAT IS WHERE THE DIFFICULTY IS. THAT IS WHY IT IS A PROBLEM.

DR. DAVID BURNS: IT SURE IS.

DR. DAVID ROSE: THE PROBLEM -- IT IS THE CONNECTIVE TISSUE THAT IS THE PROBLEM, AND THE PROBLEMS FALL APART AT THE JOINTS, JUST LIKE OVERCOOKED TURKEYS, THEY FALL APART AT THE JOINTS.

MR. RAFE POMERANCE: I DON'T THINK THIS IS -- WE HAVE GOT TO RESOLVE THIS OTHER ITEM, THE LAND USE BUSINESS. AND THIS IS NOT -- I MEAN, WHAT ABOUT THE REST OF US, POLITICIANS, NONACADEMICS,

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YOU KNOW? WHERE DO WE FIT IN? JUST PUTTING IT
ASIDE -- IN D. THE PHOTOCOPY --

MR. THOMAS WALTZ: RIGHT HERE, RIGHT
NOW, THIS IS THE PROCESS. I MEAN, THIS IS IT.
IF YOU DON'T FEEL FIT IN, THEN I DON'T KNOW WHAT
IS HAPPENING.

MR. RICHARD PENNA: OKAY. BECAUSE

MR. RAFE POMERANCE: I WANT TO JUMP
INTO EVERY ONE OF THESE. I WOULD MOVE THAT THE
N.G.O.'S HAVE TO BE INVITED TO THESE MEETINGS OF
I.C.S.U. AND SO FORTH.

MR. RICHARD PENNA: OKAY. WHY DON'T

MR. STEPHEN CONNOLLY: N.G.O.'S?

MR. RAFE POMERANCE: NONGOVERNMENTAL
ORGANIZATIONS. WHO TRUSTS THE SCIENTISTS? YOU
KNOW.

MR. RICHARD PENNA: OKAY.

MR. RICHARD PENNA: LET'S MOVE ON.
HEARING NOTHING ELSE ON ITEM C, DO WE --

MR. DEAN ABRAMSON: WE DO HEAR. WE
HEARD SOCIAL SCIENTISTS AND N.G.O.'S. ISN'T THAT
WHAT YOU WERE SAYING?

MR. RAFE POMERANCE: LET IT GO.
WHATEVER ANYBODY WANTS. IF YOU WANT SOCIAL
SCIENTISTS, FINE. I JUST THINK WE OUGHT TO MOVE
ON.

MR. RICHARD PENNA: WE ARE STILL IN
THE PROCESS OF TRANSCRIBING TONY'S LANGUAGE BACK

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1 IN B, SO I PROPOSE THAT WE MOVE ON TO D. AND WHAT
2 WE HAVE IN D, THE PHOTOCOPY --

3 DR. WILLIAM SOMMERS: WE ARE IN THE
4 PROCESS OF TRANSCRIBING GEORGE'S PENMANSHIP INTO
5 READABLE ENGLISH.

6 MR. RICHARD PENNA: OKAY. BECAUSE
7 WE --

8 DR. GEORGE WOODWELL: I WILL READ
9 IT.

10 MR. RICHARD PENNA: OKAY. WHY DON'T
11 YOU READ IT. YOU ALL HAVE A COPY IN FRONT OF YOU.

12 DR. GEORGE WOODWELL: IT HAS BEEN
13 MODIFIED SINCE THIS COPY WAS MADE.

14 MR. RICHARD PENNA: OKAY.

15 DR. GEORGE WOODWELL: IF I MAY, I
16 WILL READ THE WHOLE THING.

17 1. AS FORESTS OF THE EARTH CONTAIN
18 MORE THAN TWICE AS MUCH CARBON AS IS CURRENTLY
19 HELD IN THE ATMOSPHERE, PERIOD.

20 2. CHANGES IN THE STORAGE OF CAR-
21 BON IN FORESTS AFFECT THE CO₂ CONTENT OF THE
22 ATMOSPHERE IN BOTH THE SHORT TERM OF DAYS TO WEEKS
23 AND IN THE LONGER TERM OF YEARS.

24 3. WE WILL DUMP THAT NEXT SENTENCE,
25 JUST DROP IT ENTIRELY, AND START: THE LARGER

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1 SOURCE OF CARBON DIOXIDE AT THE MOMENT IS COMBUS-
2 TION OF FOSSIL FUELS. THE PRECISE CURRENT CONTRI-
3 BUTION FROM THE BIOTA IS NOT KNOWN.

4 THE LARGER SOURCE OF CARBON DIOXIDE
5 AT THE MOMENT IS COMBUSTION OF FOSSIL FUELS. THE
6 PRECISE CURRENT CONTRIBUTION FROM BIOTA IS NOT
7 KNOWN.

8 4. WE HAVE MODIFIED THIS SOMEWHAT.
9 THE ROLE OF FORESTS IN THE TOTAL CO₂ BUDGET AND IN
10 AFFECTING THE CO₂ CONTENT OF THE ATMOSPHERE IS SO
11 LARGE AS TO REQUIRE THAT ANY POLICY DESIGNED TO
12 MITIGATE THE CO₂ PROBLEM SUPPORT PATTERNS OF MANAGE-
13 MENT OF FORESTS THAT ARE CONSISTENT WITH THE OVER-
14 ALL OBJECTIVES.

15 MR. JOHN HOFFMAN: MY RESPONSE THEN
16 IS THAT IT SHOULD GO IN THE PREAMBLE, I THINK,
17 EARLIER. AND THEN WHAT WE HAVE HERE, WE SHOULD
18 TAKE -- ALL THESE THINGS ARE JUSTIFICATIONS FOR
19 THIS BULLET.

20 YOU KNOW, IF WE ARE GOING TO HAVE
21 RECOMMENDATIONS, I MEAN, YOU KNOW, AND WE ARE DIS-
22 CUSSING IT IN THE RECOMMENDATION SECTION, I DON'T
23 DISAGREE WITH ANYTHING YOU SAID.

24 IT IS JUST THAT IT SEEMS TO ME THOSE
25 ARE ALL THINGS THAT MAKE THIS A GOOD STATEMENT.

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1 VARIOUS OTHER MR. DAVID SLADE: GEORGE, THE
 2 FOREST ISSUE -- MR. DAVID SLADE: IS THIS AN INJUNC-
 3 TION AIMED AT DR. WILLIAM ELLIOTT: EN YOUR OPENING
 4 SENTENCE, I THINK, SHOULD INCLUDE EXPLICITLY THE
 5 SOILS, BECAUSE I THINK THAT IS WHAT YOU MEAN. IF
 6 YOU TAKE THE LIVING CARBON AND THE CARBON IN THE
 7 TREES DOES NOT EXCEED -- SLADE: WELL, THIS IS
 8 ADVICE TO OUR DR. WILLIAM SOMMERS: WELL, "WE
 9 DISCUSSED THAT IT ALSO INCLUDES THE LITTER, AND THINK
 10 VARIOUS OTHER IMPORTANT DIFFERENCE HERE.

11 DR. WILLIAM ELLIOTT: YES. I JUST
 12 THINK THAT A SENTENCE IN THERE SAYING "INCLUDING
 13 THE SOIL," BECAUSE YOU COULD --

14 DR. GEORGE WOODWELL: AL WE COULD
 15 RESTORE THAT LINE THAT WE DROPPED. I WROTE IT
 16 ORIGINALLY -- RECOGNIZING --

17 DR. WILLIAM ELLIOTT: YES, I AM
 18 GOING TO ARGUE DR. GEORGE WOODWELL: I SEE THE
 19 POINT. WE CAN SAY, "FORESTS OF THE EARTH, INCLUD-
 20 ING THE ORGANIC MATTER OF THEIR SOILS," COMMA.

21 DR. WILLIAM ELLIOTT: OR YOU COULD
 22 JUST SAY "THEIR SOILS." I DON'T KNOW WHAT I MEAN,
 23 "FORESTS OF THE EARTH AND THEIR SOILS."

24 DR. WILLIAM SOMMERS: THERE IS MORE
 25 THAN JUST THE SOILS. THERE IS THE LITTER AND

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1 VARIOUS OTHER THINGS.

2 MR. DAVID SLADE: IS THIS AN INJUNC-
3 TION AIMED AT THE UNITED STATES ESSENTIALLY OR AT
4 OTHER COUNTRIES PRIMARILY?

5 DR. GEORGE WOODWELL: IT DOESN'T
6 MATTER, DAVE.

7 MR. DAVID SLADE: WELL, THIS IS
8 ADVICE TO OUR CONGRESS. AND I CAN'T SAY, "CONGRESS,
9 YOU GO OUT AND TELL BRAZIL NOT TO" -- WELL, I THINK
10 THERE IS AN IMPORTANT DIFFERENCE HERE.

11 IF THIS IS A NATIONAL POLICY, IT IS
12 FINE. BUT IT IS NOT A MAJOR ISSUE IN CO₂ IN TERMS
13 OF U.S. FORESTS, I DON'T BELIEVE.

14 IT IS AN INTERNATIONAL ISSUE WITH
15 OTHER COUNTRIES. AND WE SHOULD BE A LITTLE
16 CAUTIOUS --

17 DR. GEORGE WOODWELL: DAVE, I AM
18 GOING TO ARGUE WITH YOU THAT ALL ENVIRONMENTAL
19 PROBLEMS ARE MADE OF SMALL INCREMENTS. AND THE
20 U.S. CONTRIBUTION TO THE CO₂ PROBLEM IS --

21 MR. DAVID SLADE: NO. I JUST WANT
22 SOME CLARIFICATION. THIS IS A U.S. POSITION FOR
23 ITSELF THAT YOU ARE ESPOUSING?

24 DR. GEORGE WOODWELL: WELL, I WOULD
25 BE GLAD TO ADVANCE IT FOR THE WORLD.

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1 MR. JOHN HOFFMAN: WELL, I WOULD
2 SUGGEST THAT WE MOVE INTERNATIONAL ACTIVITIES TO
3 BE THE LAST THING, SO THAT IT EMBRACES -- BY PUT-
4 TING THE LAND USE POLICY BELOW IT, IT SEEMS LIKE
5 IT -- THE INTERNATIONAL ACTIVITIES WOULD INCLUDE
6 THE FOREST AREAS AND THESE ISSUES, AND THESE ARE
7 THINGS THAT WE MIGHT PROMOTE IN THESE AGREEMENTS
8 OR DISCUSSIONS, AND SO ON, AND SO THAT SHOULD BE
9 THE LAST THING THAT WE HAVE DOWN AND --

10 MR. THOMAS WALTZ: I THINK THAT IS A
11 GOOD IDEA, YES.

DR. DAVID ROSE: NO.

12 DR. GEORGE WOODWELL: WHAT IS THE
13 POINT?

MR. STEPHEN CONNOLLY: GEORGE, WHAT

14 MR. JOHN HOFFMAN: JUST ORGANIZING
15 IT SO THAT THE LAND USE POLICY GOES ABOVE THE
16 INTERNATIONAL, SO PEOPLE REALIZE THE INTERNATIONAL
17 APPLIES TO EVERYTHING ABOVE IT.

DR. GEORGE WOODWELL: YES. I DON'T

18 DR. WILLIAM ELLIOTT: LAND USE IS
19 PART OF INTERNATIONAL.

DR. DONALD KING: I WAS JUST WONDER-

20 MR. RICHARD PENNA: JUST REVERSE C
21 AND D. SO IS IT USEFUL TO ADD

22 MR. STEPHEN CONNOLLY: WAS MORE
23 SAID THAN THAT JUST NOW?

24 MR. JOHN HOFFMAN: NO.

25 DR. DONALD KING: NO.

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1 DR. DAVID ROSE: MENO. THE ACTION IS
2 SUPPORTING THE MR. STEPHEN CONNOLLY: YOU ARE JUST
3 MAKING THOSE ITEMS UNDER LAND USE POLICY, AND
4 THOSE ITEMS UNDER INTERNATIONAL ACTIVITIES. INTER-
5 NATIONALLY TO MR. JOHN HOFFMAN: AG YES, SOMETHING

6 OF THAT NATURE, DR. DAVID ROSE: EN YES. THE THING?

7 MR. STEPHEN CONNOLLY: WAND WE HAT BE
8 WEREN'T SAYING ANYTHING ABOUT MOVING GEORGE'S OUT
9 OF LAND USE AND INTO INTERNATIONAL ACTIVITIES? YES.

10 MR. JOHN HOFFMAN: LL NO. WE COULD SAY
11 SOMETHING ABOUT DR. DAVID ROSE: LD NO. EK -- TO BOTH

12 UNILATERALLY AND DR. DONALD KING: Y NO. K TO MAKE CON-
13 STRUCTIVE CHANG MR. STEPHEN CONNOLLY: GE GEORGE, WHAT

14 ABOUT THE LANGUAGE HERE OF "FORESTS AND FOREST ECOSYSTEMS OF THE EARTH"? BUT IT MEAN, THAT GETS SOILS,
15 ECOSYSTEMS OF THE EARTH"? BUT IT MEAN, THAT GETS SOILS,
16 LITTER, THE WHOLE BIT THAT TO "SUPPORT PATTERNS OF
17 MANAGEMENT OF DR. GEORGE WOODWELL: IS YES. WI DON'T
18 LIKE "ECOSYSTEMS" IN THIS CONTEXT.

19 DR. DONALD KING: O LI WAS JUST WONDER-
20 ING, THIS SEEMS TO ME, GEORGE, TO BE A STATEMENT
21 OF FACT AND A CONCLUSION. SO IS IT USEFUL TO ADD
22 ANOTHER LINE THAT SAYS, AS YOU KNOW, THE SOILS SHOULD
23 GO OUT AND TRY TO DO SOMETHING ABOUT THIS? SOME-
24 THING LIKE THAT I THINK THAT IS KIND OF -- DO WE
25 NEED AN ACTION ON THIS? IAN SOMMERS: "SUPPORT AND

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FOSTER"?

DR. WILLIAM SOMMERS: THE ACTION IS SUPPORTING THE CONCEPT IN ENERGY POLICY. THAT OKAY?

DR. DONALD KING: WOULD IT BE USEFUL, FOR EXAMPLE, TO SUPPORT U.S. EFFORTS INTERNATIONALLY TO IMPROVE FOREST MANAGEMENT, SOMETHING OF THAT NATURE, TO PUT ON THE END OF THE THING?

DR. WILLIAM SOMMERS: WOULD THAT BE CONSISTENT WITH "OTHER"?

MR. RAFF POMERANCE: YES. OH, YES.

MR. STEPHEN CONNOLLY: WE COULD SAY SOMETHING ABOUT THE "U.S. SHOULD SEEK -- TO BOTH UNILATERALLY AND INTERNATIONALLY SEEK TO MAKE CONSTRUCTIVE CHANGES IN FORESTRY PRACTICES."

DR. GEORGE WOODWELL: WELL, I WROTE ORIGINALLY "ESTABLISH," BUT THAT DREW SOME OBJECTIONS. WE MODIFIED THAT TO "SUPPORT PATTERNS OF MANAGEMENT OF FORESTS THAT ARE CONSISTENT WITH THE OVERALL OBJECTIVE."

MR. STEPHEN CONNOLLY: WELL, THERE ARE PEOPLE LOOKING FOR SOME SPECIFIC POLICY RECOMMENDATION FOR THE U.S. ABOUT FOREST MANAGEMENT IS -- AND THAT PERHAPS WE SAY "THE U.S. SHOULD SUPPORT AND FOSTER," OR "THE U.S. SHOULD FOSTER," SOME-VALID THING LIKE THAT?

DR. WILLIAM SOMMERS: "SUPPORT AND

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1 FOSTER"?

2 STATEMENTS HERE, WHILE THEY ARE, I AM SURE,
TECHNICALLY CORRECT

3 MR. STEPHEN CONNOLLY: IS THAT OKAY?

4 OF OUT OF SYNC WITH THE STYLE OF THE REST OF THE
DOCUMENT

5 DR. DONALD KING: HOW ABOUT "THE
IMPROVEMENT OF MANAGEMENT"?

6 DR. GEORGE WOODWELL: WE CAN GO ON
AND EXPLICITLY SAY -- WE CAN EVEN MAKE IT QUANTI-
TATIVE, IF YOU WANT.

7 MR. ANTHONY SCOVILLE: YES. WE SO
DREW BACK ON PAGE 1 FROM CITING SPECIFIC RESEARCH

8 WE CAN RESOLVE THE CO₂ PROBLEM
9 BASED ON OUR CURRENT KNOWLEDGE OF THE SCALE OF THAT
10 PROBLEM BY REALLY FAIRLY SMALL MANIPULATIONS IN
11 INDUSTRIAL RELEASES, TOTAL USE OF FOSSIL FUELS,
12 AND IN THE TRANSFORMATIONS WE MAKE IN FORESTS, IF
13 WE CAN DO THOSE WORLDWIDE, MAKE THOSE CHANGES
14 WORLDWIDE. I GUESS I THINK THIS MIGHT BE

15 USED -- THESE ROUGHLY FIRST THREE AND A HALF STATE-
16 MENTS -- IF I READ IT CORRECTLY, WILL BE VERY GOOD
17 EXPLANATION AS AN ELABORATION ON LAND USE POLICY
18 FOR THE STATE TO INCLUDE. BUT I THINK IT WOULD BE SOMEWHAT
19 HERE, IF WE WANTED.

20 MR. ANTHONY SCOVILLE: LET ME ASK
21 YOU, I THINK THE POINT ABOUT FOREST MANAGEMENT IS
22 -- AND THAT PERHAPS THE COORDINATION OF FOREST
23 MANAGEMENT WITH ENERGY POLICY IS AN EXTREMELY VALID
24 POINT. AND I JUST AM
25 RELUCTANT, FOR EXACTLY THE SAME REASONS THAT WE

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1 STATEMENTS HERE, WHILE THEY ARE, I AM SURE,
2 TECHNICALLY CORRECT, IS THE TONE OF THEM IS SORT WAS
3 OF OUT OF SYNC WITH THE STYLE OF THE REST OF THE
4 DOCUMENT.

MR. JOHN HOFFMAN: YES, I MEAN --

5 MR. THOMAS WALTZ: IT IS MORE LIKE
6 RESEARCH STUFF RATHER THAN POLICY.

7 MR. ANTHONY SCOVILLE: YES. WE SO
8 DREW BACK ON PAGE 1 FROM CITING SPECIFIC RESEARCH
9 TOPICS, AND YET I GET THE FEELING -- YOU KNOW, AND
10 YET SUDDENLY WE ARE POSING OURSELVES AS A GROUP OF
11 PEOPLE WHO CAN MAKE THESE FAIRLY SCIENTIFIC ASSERT-
12 TIONS, WHICH WE IN EFFECT DREW BACK FROM IN OTHER
13 AREAS TO DO THAT.

I GUESS I THINK THIS MIGHT BE ?

14 USED -- THESE ROUGHLY FIRST THREE AND A HALF STATE-
15 MENTS, IF I READ IT CORRECTLY, WILL BE VERY GOOD
16 EXPLANATION, AS AN ELABORATION ON LAND USE POLICY,
17 FOR THE STAFF TO INCLUDE. TERM DAYS AND WEEKS, AND
18 THINGS LIKE THAT BUT I THINK IT WOULD BE SOMEWHAT
19 JUST OUT OF STYLISTICALLY OUT OF SYNC WITH WHAT IS
20 BEING SAID THROUGHOUT THE REST OF IT. LIKE THAT,
21 EVEN THOUGH WE AND MAYBE WE WANT ONLY ROUGHLY THE
22 LAST STATEMENT, OR LAST HALF STATEMENT THERE, TO BE
23 THE ACTUAL POLICY RECOMMENDATION. AND I JUST AM
24 RELUCTANT, FOR EXACTLY THE SAME REASONS THAT WE

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1 DIDN'T ENDORSE SPECIFIC RESEARCH -- THE LEVEL OF
2 DETAIL DOESN'T MR. RICHARD PENNA: I THINK THAT WAS
3 JOHN'S POINT.

4 MR. JOHN HOFFMAN: YES, I MEAN --

5 MR. ANTHONY SCOVILLE: I GUESS I
6 MISSED THAT, JOHN.

7 MR. RICHARD PENNA: STATEMENT, WHY NOT TAKE AS
8 FOLLOWS. MR. RICHARD PENNA: ST GEORGE. GLOBAL

9 CO2 BUDGET AND DR. GEORGE WOODWELL: I WOULD AGREE
10 WITH THAT. AND PERHAPS WE SHOULD CONSIDER MOVING
11 IT UP INTO THE FIRST PARAGRAPH, MOVING THOSE
12 EXPLANATORY PARAGRAPHS UP INTO THE FIRST EXPLANA-
13 TORY PARAGRAPH, WAY UP ABOVE. AND THE STAFF MIGHT
14 LIKE TO DO THAT. CONSISTENT WITH THE OVERALL

15 MR. RICHARD PENNA: ON PAGE 2?

16 MR. ANTHONY SCOVILLE: BUT EVEN IN
17 THE PREAMBLE WE AREN'T AS EXPLICIT AS THIS. I
18 THINK YOU HAVE GOT A NUMBER OF STATEMENTS WHICH ARE
19 LIKE CO2 CONTENT IN SHORT-TERM DAYS AND WEEKS, AND
20 THINGS LIKE THAT, AND WE SORT OF TRIED TO STEER
21 AWAY FROM SPECIFIC REFERENCES TO THE PRECISE UNDER-
22 STANDING OF THE TIME LAGS AND THINGS LIKE THAT,
23 EVEN THOUGH WE PERHAPS ALL HAVE OUR HUNCHES AND
24 SUPPOSITIONS ABOUT THEM. THINGS THAT HAVE COME UP,

25 BUT WHETHER WE AS A BODY WERE JUST
QUALIFIED TO MAKE THAT SORT OF STATEMENT --

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1 RECOMMENDATIONS MR. THOMAS WALTZ: THE LEVEL OF
2 DETAIL DOESN'T SEEM APPROPRIATE TO ANY PART OF
3 THIS.

4 AND MAYBE AT THE TOP OF THE RECOM-
5 MENDATION PART MR. RICHARD PENNA: STEVE.

6 THINGS THAT WE MR. STEPHEN CONNOLLY: I HAVE AN
7 IDEA. AS A POLICY STATEMENT, WHY NOT TAKE 4 AS
8 FOLLOWS: "SINCE THE ROLE OF FORESTS IN THE GLOBAL
9 CO₂ BUDGET AND AFFECTING THE CO₂ CONTENT OF THE
10 ATMOSPHERE IS SO LARGE, U.S. POLICY SHOULD BE
11 DESIGNED TO MITIGATE THE CO₂ PROBLEM BY DEVELOPING
12 A POSTURE BOTH HERE AND ABROAD PATTERNS OF
13 FOREST MANAGEMENT -- PATTERNS OF MANAGEMENT AND
14 FORESTS THAT ARE CONSISTENT WITH THE OVERALL
15 OBJECTIVE"?

16 DR. GEORGE WOODWELL: THE LAST FEW
17 WORDS ARE A BIT WEAK IN YOUR SENTENCE, BUT IT IS
18 FINE WITH ME. THAT THERE IS A U.S. POLICY ON

19 TROPICAL FOREST MR. JOHN HOFFMAN: I WOULD LIKE TO
20 PROPOSE THAT WE ASK THE STAFF TO DEVELOP A PREAMBLE
21 OR A PROBLEM STATEMENT SECTION IN WHICH WE PUT THIS
22 KIND OF STATEMENT AND SOME OF THE OTHER STATEMENTS
23 THAT DAVE ROSE EARLIER BROUGHT UP ABOUT CAPITAL
24 SCARCITY, SOME OF THE THINGS THAT HAVE COME UP,
25 AND REALLY SOME OF THE THINGS, TONY, THAT YOU JUST
WROTE HERE, AS KIND OF A PREFACE TO THE

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1 RECOMMENDATIONS, AND THAT WE KEEP THE RECOMMENDA-
2 TIONS THEMSELVES SHORTER.

3 AND MAYBE AT THE TOP OF THE RECOM-
4 MENDATION PART WE SAY SOMETHING, "BECAUSE OF THE
5 THINGS THAT WE HAVE SAID IN THE PREAMBLE, THESE ARE
6 OUR RECOMMENDATIONS," AND THEN THOSE ARE SHORT AND
7 CRISP AND UNDERSTANDABLE.

8 BECAUSE WE ALL TEND TO WANT TO THAT
9 EXPLAIN OUR RECOMMENDATIONS. AND IT SEEMS TO ME
10 THAT SHOULD BE DONE IN ANOTHER PLACE IN THE DOCU-
11 MENT.

12 DR. GEORGE WOODWELL: EXCELLENT.

13 MR. RICHARD PENNA: BILL AND THEN

14 DAVE.

15 DR. GEORGE WOODWELL: I LIKE THAT.

16 DR. WILLIAM ELLIOTT: I JUST WANTED

17 TO POINT OUT THAT THERE IS A U.S. POLICY ON WERE
18 TROPICAL FORESTS BEING DEVELOPED. THERE IS A TASK
19 FORCE REPORT THAT HAS JUST BEEN ISSUED, I GUESS
20 WITHIN THE LAST COUPLE OF MONTHS.

21 IT DOES ADDRESS PARTLY THE CO2
22 ISSUE. IT DOES RECOMMEND U.S. POLICIES. I DON'T
23 KNOW THAT THEY HAVE BEEN ADOPTED. BUT I DON'T
24 THINK WE WANT TO GO INTO IT, BUT THE STAFF MIGHT
25 WANT TO LOOK AT THAT AND AT LEAST ACKNOWLEDGE ITS

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1 EXISTENCE? -- THIS IS, YOU KNOW, A VERY ROUGH
 2 CUT, AS YOU ALL DR. WILLIAM SOMMERS: AND THE STATE-
 3 MENT WAS ORIGINALLY WRITTEN WITH THE WORD "SUP-
 4 PORT" IN THERE, WHICH ALLOWS THE COMMISSION TO TAKE
 5 UP ON THE STUFF THAT IS COMING DOWN THE PIKE, AND
 6 SUPPORT IT OR NOT, AS CHOSEN.

7 MR. DAVID SLADE: AT OUR RECENT
 8 RESEARCH PROGRESS MEETING, IT WAS POINTED OUT THAT
 9 THERE ARE A WIDER VARIETY OF ANTHROPOGENIC SOURCES
 10 AND SINKS. THE FOREST CERTAINLY IS PROBABLY THE
 11 LARGEST, BUT THERE ARE MANY MORE WHICH IN AGGRE-
 12 GATE APPARENTLY DO MAKE A VERY LARGE DIFFERENCE,
 13 AND THEREFORE I SORT OF, RATHER THAN JUST CON-
 14 STRAINING ON FOREST CUTTING AND A LITTLE ABOUT
 15 REGROWTH, RATHER SOMETHING TO THE EFFECT THAT WOULD
 16 ENCOURAGE THE MANAGEMENT OF ANTHROPOGENIC SOURCES
 17 AND SINKS SUCH AS -- BECAUSE I THINK THERE WERE
 18 SOME MONSTROUS FIGURES FOR ALL THESE THINGS ADDED
 19 TOGETHER. THAT IS THE LANGUAGE ON THE PAPER

20 HERE. AND I THINK JUST THE FORESTS ALONE
 21 IS NOT QUITE ENOUGH. WE CAN SAY "CONTROL OF CO₂," AS

22 MR. RICHARD PENNA: WHAT I WOULD
 23 LIKE TO DO IS FOCUS BACK ON TOM'S LANGUAGE, MAP-
 24 ACKNOWLEDGING THE "BACKGROUND MATERIAL THAT IS HERE,
 25 AND, YOU KNOW, SHIFTING IT AROUND, AND RECOGNIZING

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1 WE HAVE GOT THAT THIS IS, YOU KNOW, A VERY ROUGH
2 CUT, AS YOU ALL UNDERSTAND.

3 SO WHAT WE WILL DO IS ALLOW THE
4 STAFF TO WORK THIS IN WHERE WE WANT IT. BUT I
5 THINK, UNDER SPECIFIC RECOMMENDATIONS, LET'S GO
6 BACK TO THE LANGUAGE THAT STEVE HAS.

7 MR. STEPHEN CONNOLLY: I THINK --
8 SHALL I READ THAT AGAIN? SLADE: NOT REALLY. I

9 STILL THINK THAT MR. RICHARD PENNA: YES. TAL ANTHRO-
10 POGENIC SOURCES MR. STEPHEN CONNOLLY: "SINCE THE
11 ROLES OF FORESTS IN THE GLOBAL CO₂ BUDGET AND IN
12 AFFECTING THE CO₂ CONTENT OF THE ATMOSPHERE IS SO
13 LARGE, U.S. POLICY SHOULD BE DESIGNED TO MITIGATE
14 THE CO₂ PROBLEM BY DEVELOPING AND FOSTERING BOTH
15 HERE AND ABROAD PATTERNS OF MANAGEMENT OF FORESTS
16 THAT ARE CONSISTENT WITH THE OVERALL CO₂ -- OVER-
17 ALL OBJECTIVES." MR. DAVID SLADE: LET ME WRITE

18 SOMETHING AND I THINK WE WILL USE A DIFFERENT LAN-
19 GUAGE THERE. THAT IS THE LANGUAGE ON THE PAPER
20 HERE. I MIGHT ARGUE WITH YOU, BECAUSE --

21 BUT WE CAN SAY "CONTROL OF CO₂," AS
22 WE HAVE ELSEWHERE. GEORGE WOODWELL: -- THE POINT

23 IS THAT THE INFO DR. EDITH BROWN WEISS: WHAT HAP-
24 PENS TO "SOIL," "SOIL MANAGEMENT"? ENOUGH TO COM-

25 PETE WITH THE DR. GEORGE WOODWELL: SHE WOULD LIKE

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1 TO ADD INTO THAT "FORESTS, INCLUDING THEIR SOILS,"
2 OR SOMETHING TO COMPETE WITH THOSE TWO FACTORS.

3 MR. STEPHEN CONNOLLY: ALL RIGHT.
4 I THINK WE HAVE A RESOLUTION ON THIS. FIND ANOTHER
5 SOURCE OR SINK

6 MR. RICHARD PENNA: DO WE HAVE? IS
7 THAT AGREEABLE TO THE PEOPLE?

8 MR. JOHN HOFFMAN: YES?

9 MR. DAVID SLADE: NOT REALLY. I
10 STILL THINK THAT THE QUESTION OF THE TOTAL ANTHRO-
11 POGENIC SOURCES AND SINKS ARE NOT ADDRESSED BY
12 FORESTS OR FORESTS AND SOILS.

13 IT IS GETTING THERE, AND IT IS GOING
14 TO BE A GOOD PART OF IT, BUT IT STILL IS NOT
15 ADDRESSED FULLY.

16 DR. WILLIAM SOMMERS: THAT COULD BE
17 COVERED ADDITIONALLY.

18 MR. DAVID SLADE: LET ME WRITE
19 SOMETHING AND THEN YOU COULD DO WHAT YOU WANT.

20 DR. GEORGE WOODWELL: DAVE, I AM
21 AFRAID I MIGHT ARGUE WITH YOU, BECAUSE -- ONLY
22 TALKING ABOUT MR. DAVID SLADE: GOOD. SOILS. I

23 DR. GEORGE WOODWELL: -- THE POINT
24 IS THAT THE INFLUENCE OF THE FOREST VEGETATION OF
25 THE EARTH IS SO LARGE, IT IS LARGE ENOUGH TO COM-
PETE WITH THE FOSSIL FUEL RELEASES. AND THERE IS

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1 NO OTHER SET OF SOURCES OR COMBINATION OF SOURCES
2 THAT IS GOING TO COMPETE WITH THOSE TWO FACTORS.

3 AND THERE IS NO POSSIBILITY THAT
4 THE UNITED STATES OR ANYONE ELSE WILL FIND ANOTHER
5 SOURCE OR SINK OF THOSE -- AT THAT SCALE INDI-
6 VIDUALLY OR IN SUM.

7 MR. DAVID SLADE: BILL?

8 DR. WILLIAM ELLIOTT: YES.

9 MR. DAVID SLADE: DO YOU REMEMBER
10 THE DETAIL OR HOW MANY GIGATONS THAT LUGO SPOKE
11 TO? WAS IT DOMINATED BY FORESTS?

12 DR. WILLIAM ELLIOTT: YES. BUT WE

13 MR. DAVID SLADE: WAS IT DOMINATED?

14 DR. WILLIAM ELLIOTT: I'M SORRY. I
15 WAS THINKING ABOUT SOMETHING ELSE. YOU MEAN IN
16 THE --

17 MR. DAVID SLADE: HIS PROJECTIONS
18 OVER THE NEXT 20 YEARS IN TERMS OF --

19 DR. WILLIAM ELLIOTT: OF WHAT MIGHT
20 COME OUT IF WE -- YES, WHAT HE WAS CERTAINLY
21 TALKING ABOUT WAS THE FORESTS AND THEIR SOILS. I
22 MEAN, YOU GET --

23 MR. DAVID SLADE: BUT NOT OTHER LAND
24 USE PRACTICES AS CONSTITUTING AN IMPORTANT SOURCE
25 OR SINK?

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BE DISCOURAGED, DR. WILLIAM ELLIOTT: I THINK THE FORESTS ARE SO DAMN LARGE -- ARE WHAT, 90 PERCENT OF THE TOTAL CARBON, AND THE TROPICAL FORESTS ARE 50 PERCENT, I GUESS, IN ROUND NUMBERS, YES.

MR. RICHARD PENNA: DAVE, I TAKE IT YOU ARE GOING TO --

MR. DAVID SLADE: I AM GOING TO LOOK AT WHAT HE SAID HERE.

MR. STEPHEN CONNOLLY: HE IS EITHER GOING TO DO IT OR HE IS NOT GOING TO DO IT, AND WE WILL TAKE A LOOK AT IT.

MR. RICHARD PENNA: YES. BUT WE WANT AGREEMENT ON THE LANGUAGE AS STEVE READ, POSSIBLY AS MODIFIED --

MR. STEPHEN CONNOLLY: RIGHT.

MR. RICHARD PENNA: -- BY DAVE, WHETHER HE DOES IT.

MR. STEPHEN CONNOLLY: WHAT ELSE DO WE HAVE TO TALK ABOUT?

MR. RICHARD PENNA: WELL, THAT LEAVES US, I THINK, WITH TWO OTHER ITEMS, AND THEN OPEN THE FLOOR FOR ANY OTHER ADDITIONS.

MR. RAFE POMERANCE: I THINK THIS SECOND ITEM IN D, DEVELOPMENT AREAS THAT WOULD BE AFFECTED BY CO2-INDUCED CHANGES IN SEA LEVEL SHOULD

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BE DISCOURAGED, I SUSPECT THE TIME LAG ON THE
DEGLACIATION OF WEST ANTARCTICA IS VERY LONG. AND
THAT IS ONE OF THE MORE SPECULATIVE ISSUES THAT I
THINK WOULD PROBABLY UNDERMINE CREDIBILITY TO CALL
FOR THAT AT THE MOMENT. "50 YEARS" THERE WOULD

DR. DAVID BURNS: I AGREE. WE
SHOULD JUST DROP THAT.

MR. STEPHEN CONNOLLY: IS THERE A
CONSENSUS TO DROP THAT?

DR. MICHAEL GLANTZ: YES.

DR. WILLIAM SOMMERS: YES.

MR. ANTHONY SCOVILLE: YES.

DR. GEORGE WOODWELL: YES.

MR. RAFE POMERANCE: FOR OTHER
REASONS, IT SHOULD HAPPEN. (GENERAL LAUGHTER)

MR. RICHARD PENNA: WE HAVE ONE

OTHER ITEM. WE HAVE IN FACT TWO ITEMS. EDITH
WANTS TO RAISE A POINT. BUT I SUGGEST WE GO BACK
TO THE REINDUSTRIALIZATION ISSUE THAT -- WHICH I

MR. ANTHONY SCOVILLE: CAN I GO
THROUGH THAT? BECAUSE I HAVE HAD A NUMBER OF COR-
RECTIONS SUGGESTED TO ME WHICH SEEM GOOD. AND ALSO
IN LIGHT OF OUR DISCUSSION ON THE LAND USE THING,
I WOULD LIKE TO JUST SUGGEST A SLIGHT REORGANIZA-
TION OF THIS THING.

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1 "MINIMIZE" IN A FIRST OF ALL, I THINK IT IS APPRO-
 2 PRIATE TO TAKE THE, "ROUGHLY" THE FIRST TWO SEN-
 3 TENCES OF THIS PARAGRAPH AND PUT IT INTO SORT OF
 4 GENERAL EXPLANATION OF WHY WE ARE RAISING IT, SO
 5 THAT DOWN TO THE WORDS "50 YEARS" THERE WOULD
 6 ESSENTIALLY GO IN THE EXPLANATORY THING, WHICH
 7 ESSENTIALLY PROVIDES A LITTLE BIT OF A BASIS FOR,
 8 WHY WE EVEN MADE A POLICY RECOMMENDATION FURTHER
 9 ON. IN OUR OWN REPORT.

10 ALSO, RAFE SUGGESTED, UP IN THE VERY
 11 FIRST SENTENCE OF THAT EXPLANATORY STEP, WOULD
 12 SHOULD SAY THE NATION "MAY" INSTEAD OF "WILL"
 13 UNDERTAKE, "BECAUSE IT ISN'T A COMPLETELY FOREGONE
 14 CONCLUSION, EVEN THOUGH I HAVE A FEELING THAT SOME-
 15 THING IS GOING TO HAPPEN EVEN THOUGH WE DON'T QUITE
 16 KNOW PRECISELY WHAT IT IS.

17 OKAY. WITH THAT ORGANIZATIONAL
 18 CHANGE, THERE ARE SOME WORDS AS YOU GO THROUGH
 19 THERE WHICH I WOULD LIKE TO CHANGE, AND WHICH I
 20 THINK WOULD MAKE IT WORK A LITTLE BETTER. TO WHAT
 21 WE ARE DOING, I WOULD LIKE TO GO: "NATIONAL
 22 POLICIES AND PRIVATE ACTIVITIES REGARDING INDUS-
 23 TRIAL INNOVATIONS SHOULD, IF AT ALL POSSIBLE" --
 24 I GUESS -- "BE DESIGNED SO AS TO MINIMIZE" -- AND
 25 I THINK WE USED THE WORD "CONTROL" RATHER THAN

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1 "MINIMIZE" IN A FIRST OF ALL, I THINK IT IS APPRO-
 2 PRIATE TO TAKE THE, "ROUGHLY" THE FIRST TWO SEN-
 3 TENCES OF THIS PARAGRAPH AND PUT IT INTO SORT OF
 4 GENERAL EXPLANATION OF WHY WE ARE RAISING IT, SO
 5 THAT DOWN TO THE WORDS "50 YEARS" THERE WOULD
 6 ESSENTIALLY GO IN THE EXPLANATORY THING, WHICH
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 14 CONCLUSION, EVEN THOUGH I HAVE A FEELING THAT SOME-
 15 THING IS GOING TO HAPPEN EVEN THOUGH WE DON'T QUITE
 16 KNOW PRECISELY WHAT IT IS.

17 OKAY. WITH THAT ORGANIZATIONAL
 18 CHANGE, THERE ARE SOME WORDS AS YOU GO THROUGH
 19 THERE WHICH I WOULD LIKE TO CHANGE, AND WHICH I
 20 THINK WOULD MAKE IT WORK A LITTLE BETTER.

21 I WOULD LIKE TO GO: "NATIONAL
 22 POLICIES AND PRIVATE ACTIVITIES REGARDING INDUS-
 23 TRIAL INNOVATIONS SHOULD, IF AT ALL POSSIBLE" --
 24 I GUESS -- "BE DESIGNED SO AS TO MINIMIZE" -- AND
 25 I THINK WE USED THE WORD "CONTROL" RATHER THAN

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"MINIMIZE" IN A PREVIOUS SENTENCE, SO I THINK I WOULD USE THE WORD "CONTROL" THERE -- "THE RELEASE OF CO2," PERIOD.

AND SCRATCH OUT THAT BUSINESS ABOUT "AND OTHER ATMOSPHERIC POLLUTANTS." THE COMMISSION MAY WANT TO DEAL WITH OTHER ATMOSPHERIC POLLUTANTS FOR ITS OWN SAKE, AND I THINK SHOULD CONSIDER IT, BUT WE ARE NOT ADDRESSING OTHER ATMOSPHERIC POLLUTANTS IN OUR OWN REPORT.

THEN I GO ON: "THE COST OF INCORPORATING INCENTIVES TO PROMOTE THIS OBJECTIVE AT THE TIME CAPITAL AND HUMAN INVESTMENTS" -- INSTEAD OF SAYING "ARE MADE," I WOULD JUST WRITE "ARE BEING MADE IS MINIMAL WHILE THE COST OF ELIMINATING CO2 AFTER THE FACT WILL BE LARGE IF NOT INFEASIBLE."

THAT LAST SENTENCE MAY READ A LITTLE BETTER THAT WAY, WITH THOSE SLIGHT CHANGES THERE. I THINK IT IS RIGHT TO ELIMINATE THE REFERENCES TO OTHER POLLUTANTS, BECAUSE IT IS NOT GERMANE TO WHAT WE ARE DOING, EVEN THOUGH I HAPPEN TO THINK, OR HOPE THAT THE COMMISSION WILL CONSIDER THIS AS PART OF THEIR OVERALL RECOMMENDATIONS.

MR. RICHARD PENNA: OKAY. DISCUSSION.

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1 DR. GEORGE WOODWELL: WELL, I GUESS
COSTS ARE HARDLY INFEASIBLE --

2 DR. MICHAEL GLANTZ: PROHIBITIVE.

3 DR. GEORGE WOODWELL: -- BUT I THINK
4 WE CAN CLEAN THAT UP.

5 MR. STEPHEN CONNOLLY: I HAVE A
6 PROBLEM WITH THIS STATING THAT "THE COSTS OF
7 INCORPORATING INCENTIVES TO PROMOTE THIS OBJECTIVE
8 AT THE TIME CAPITAL AND HUMAN INVESTMENTS ARE MADE
9 ARE MINIMAL," THAT SEEMS LIKE A PRETTY BLANKET
10 STATEMENT.

11 WE WANT TO SAY THAT THESE COSTS
12 MADE AT THE TIME OF INVESTMENT, AS COMPARED TO
13 HAVING TO BE MADE LATER, ONCE THE INVESTMENT IN
14 THE CAPITAL EQUIPMENT IS MADE, ARE LESSER, ARE
15 DRASTICALLY LESSER, OR SOMETHING. BUT TO SIMPLY
16 STATE THEY ARE MINIMAL --

17 MR. RICHARD PENNA: ARE MINIMAL IN
18 COMPARISON TO --

19 DR. DAVID ROSE: MUCH LESS.

20 MR. THOMAS WALTZ: I WOULDN'T SAY
21 "MINIMAL." I WOULD SAY "MUCH LESS."
22

23 MR. RICHARD PENNA: OKAY. FINE.

24 MR. ANTHONY SCOVILLE: BUT I THINK
25 THE IMPORTANT POINT IS THAT IT IS PROBABLY EASIER

1 TO ADDRESS THESE PROBLEMS WHEN THE TRANSITIONS
2 ARE BEING MADE RATHER THAN HAVING TO UPROOT AND
3 DISRUPT EVERYTHING LATER ON.

4 AND I THINK THAT IS AN IMPORTANT
5 POINT TO MAKE.

6 MR. JOHN HOFFMAN: COULD I SUGGEST
7 SOME ALTERNATIVE WORDING. AND ONE WOULD BE "OVER
8 ALL NATIONAL POLICIES AND PRIVATE ACTIVITIES," JUST
9 SO THAT PEOPLE GET THE NOTION THAT WE ARE CON-
10 CERNED ABOUT IT, AS A COMPREHENSIVE WHOLE WE WANT
11 TO DO THAT. BUT WE ARE NOT SUGGESTING THAT NOBODY
12 EVERY BUILD A FACILITY THAT HAS A LOT OF CO₂
13 EMISSIONS.

14 MR. STEPHEN CONNOLLY: AND I THINK
15 MAYBE WE NEED ANOTHER WORD THERE,
16 BUT SOMEHOW I THINK IT IS REALLY IMPORTANT THAT --

17 MR. ANTHONY SCOVILLE: WELL, THAT IS
18 WHY I HAD THE WORDS "IF AT ALL POSSIBLE."

19 MR. JOHN HOFFMAN: I DIDN'T LIKE
20 THAT EITHER. "IF POSSIBLE, BE DESIGNED TO CONTROL
21 THE RELEASE OF CO₂," AND THEN I WOULD SUGGEST,
22 INSTEAD OF HAVING THAT WHOLE SENTENCE, "REDUCE THE
23 EXPOSURE OF THESE INVESTMENTS TO RISKS -- TO RISKS
24 ASSOCIATED WITH WHAT MAY BECOME NECESSARY MITIGA-
25 TION POLICIES."

SO WE HAVE SOME, YOU KNOW, IT GETS

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TO THE SAME POINT, THAT THERE IS AN EXPOSURE
CREATED. BUT I DON'T THINK THAT WE REALLY NEED
ANOTHER SENTENCE LIKE THAT.

MR. ANTHONY SCOVILLE: I GUESS I
DON'T THINK IT CONVEYS IT AS EFFECTIVELY AS THAT.

MR. STEPHEN CONNOLLY: I THINK BOTH
OF THEM ARE IMPORTANT NOTIONS. ONE IS THAT THERE
ARE COSTS OF -- LET'S USE THE WORD "RETROFITTING"
OR "MITIGATING," BUT JOHN'S POINT THAT HE RAISES
IS THAT INVESTMENTS MADE, EVEN IRRESPECTIVE OF
COSTS, WILL BE AT RISK.

MR. ANTHONY SCOVILLE: ALL RIGHT.

MR. STEPHEN CONNOLLY: AND I THINK
THAT IS A VALUABLE --

MR. ANTHONY SCOVILLE: OKAY. I SEE
WHAT YOU -- OKAY. YES. YOU WANT TO MAKE IT
FAIRLY SIMPLE. IT WAS A LITTLE COMPLICATED, I
THINK. BUT ALL RIGHT, FINE. I SEE YOU POINT, WHAT
YOU ARE GETTING AT THERE.

MR. RICHARD PENNA: OKAY. ARE THERE
-- IS THERE ANY OTHER DISCUSSION ON THIS POINT?

MR. ANTHONY SCOVILLE: I HAVE NO
OBJECTION TO THE OVERALL -- TO ADDING THE WORDS
"OVERALL NATIONAL POLICIES," ALTHOUGH WE MAY NEVER
GET AN OVERALL POLICY. THAT IS THE ONLY PROBLEM.

1 IT MAY BE SORT OF LIKE A WHOLE SORT OF SET OF
2 POLICIES ADDRESSING INDIVIDUAL ITEMS THAT WILL
3 COME ALONG. AND THAT WOULD BE MY ONLY PROBLEM
4 WITH --

5 MR. JOHN HOFFMAN: HOW ABOUT "AS A
6 WHOLE"?

7 MR. ANTHONY SCOVILLE: WE MAY NOT
8 END UP WITH A FIVE-YEAR PLAN. THAT'S THE --

9 MR. JOHN HOFFMAN: WELL, SAY "WHEN
10 POSSIBLE." INSTEAD OF "IF AT ALL POSSIBLE," MAYBE
11 "WHEN POSSIBLE." I SEE WHAT YOU ARE GETTING AT.

12 MR. ANTHONY SCOVILLE: THE REASON I
13 HAD "IF AT ALL POSSIBLE" IS BECAUSE "IF POSSIBLE"
14 JUST MEANS -- WELL, YES, IF YOU CAN DO IT EASILY.

15 BUT THE FACT IS THAT WE ARE HERE
16 TODAY BECAUSE WE THINK THAT THIS PROBLEM IS REASON-
17 ABLY SERIOUS, AND SO THEREFORE IT SHOULD BE GIVEN
18 MORE THAN JUST "IF POSSIBLE."

19 IF IT IS AT ALL POSSIBLE TO BRING
20 INTO EFFECT, THAT'S WHY I PUT THAT THERE, TO BE A
21 LITTLE STRONGER ON IT.

22 AND AS I SAID, THE ONLY PROBLEM I
23 HAVE WITH THE "OVERALL NATIONAL POLICIES," I KNOW
24 WHAT YOU ARE TALKING ABOUT, BUT I DON'T THINK THIS
25 COUNTRY IS GOING TO COME UP WITH A FIVE-YEAR PLAN

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OR THE EQUIVALENT, AND THE SENATE WILL MISS THE POINT. OKAY. OR REDIRECTING EMPHASIS AWAY FROM THE USE OF FOSSIL

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3 MR. STEPHEN CONNOLLY: DO YOU HAVE ANY OBJECTION TO USING THE SAME LANGUAGE THAT WAS USED ELSEWHERE, SO IT WOULD SAY SOMETHING LIKE: "BE DESIGNED SO AS TO ASSIST IN THE LONG-TERM CONTROL OF CO2 LEVELS"?

8 MR. ANTHONY SCOVILLE: NO. SURE. LET'S KEEP THE LANGUAGE, CONSISTENT LANGUAGE THROUGHOUT. I AGREE. EMPHASIZE CONSERVATION AND

11 MR. RICHARD PENNA: OKAY. AGREEMENT ON THIS? CARBON DIOXIDE EMISSIONS AS A VERY SERIOUS

13 MR. ANTHONY SCOVILLE: AND ON THE LAST SENTENCES, WE ARE GOING TO HAVE JOHN'S SENTENCE ADDED ON, ABOUT THE RISKS, THE COSTS, INVESTMENTS, OR RISKS THING THERE. NOW MY

17 MR. RICHARD PENNA: YES. OKAY, WE HAVE NOW COMPLETED WHAT IS ON HERE. -- EDITH HAD A POINT THAT SHE WOULD LIKE TO RAISE. AND THEN, AFTER THAT, WE CAN GO THROUGH ANY OTHER ITEMS THAT PEOPLE MAY BELIEVE WERE LEFT OFF THIS. EDITH. ME.

22 DR. EDITH BROWN WEISS: THIS IS REALLY MY LAST COMMENT AT THE MEETING. AND I WILL TRY TO MAKE IT BRIEF. BUT I DO WANT TO GO BACK, AS A FINAL THING BEFORE WE LEAVE IT, TO THESE

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1 STATEMENTS ABOUT REDIRECTING OUR ENERGY POLICIES
 2 AWAY FROM -- OR REDIRECTING EMPHASIS AWAY FROM THE
 3 USE OF FOSSIL FUELS.

4 AND I WANT TO SUGGEST TWO THINGS.
 5 ONE, SUBSTITUTE LANGUAGE, AND THEN I WANT TO PUT ON
 6 A DIFFERENT HAT AND MAKE WHAT I THINK IS A SLIGHTLY
 7 NEW ARGUMENT.

8 THE SUBSTITUTE LANGUAGE WOULD READ,
 9 REALLY IN ADDITION TO THE OTHER ONE: "REDIRECT
 10 NATIONAL POLICIES TO EMPHASIZE CONSERVATION AND
 11 INCREASED ENERGY EFFICIENCY AND EXPLICITLY TO INTE-
 12 GRATE CARBON DIOXIDE EMISSIONS AS A VERY SERIOUS
 13 COST IN CHOOSING AMONG ALTERNATIVE ENERGY SOURCES."

14 MR. JOHN HOFFMAN: I THINK THAT IS
 15 COMPLETELY REDUNDANT --

16 DR. EDITH BROWN WEISS: NOW MY
 17 ARGUMENT --

18 MR. JOHN HOFFMAN: -- WITH THE
 19 FIRST POINT. I MEAN, LIKE, YOU CAN'T HAVE RECOM-
 20 MENDATIONS --

21 DR. EDITH BROWN WEISS: EXCUSE ME.

22 I HAVE THE FLOOR, AND I WOULD LIKE TO MAKE MY
 23 ARGUMENT FOR IT. AND TO DO THAT I WOULD LIKE TO
 24 PUT ON THE HAT OF A PRIVATE PRACTITIONER AND NOT A
 25 PROFESSOR OF LAW.

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AND I WOULD LIKE TO BE IN EITHER A
NEW YORK OR WASHINGTON-BASED FIRM REPRESENTING THE
NUCLEAR INDUSTRY, LOBBYING FOR IT HERE, LOBBYING
FOR IT IN BRAZIL, AND WITH INTERNATIONAL CLIENTS,
AND LOBBYING FOR IT IN WESTERN EUROPE.

AND LET ME SAY WHAT I WOULD DO WITH
YOUR STATEMENT. I WOULD SAY, "HERE IS THE NATIONAL
COMMISSION ON AIR QUALITY, A WORKSHOP THAT THEY
HELD," TO MY CLIENT. "THERE IS A VERY SERIOUS
ENVIRONMENTAL PROBLEM. THERE IS A VERY SERIOUS
CARBON DIOXIDE PROBLEM, WHICH THE ENVIRONMENTALISTS
SAY WE HAVE TO TAKE ACTION ON IMMEDIATELY OR WE
ARE GOING TO HAVE LONG-TERM EFFECTS.

"NOW, THAT MEANS THAT WE HAVE TO
REDIRECT EVERYTHING." I WOULD TAKE OUT THAT ONE
ITEM WHICH IS ALWAYS GIVEN IN A PRESS RELEASE, AND
I WOULD SAY, "THEY SAID WE HAVE TO DIRECT OUR
ATTENTION AWAY FROM FOSSIL FUELS. WE HAVE TO
SHIFT FROM FOSSIL FUELS."

NOW, I REALIZE THIS COULD BE
RENEWABLES, AND RENEWABLES ARE GOOD. BUT IF THIS
IS POST-AUGUST IN NAIROBI, I WOULD SAY WE HAVE JUST
HAD THE U.N. CONFERENCE ON RENEWABLE RESOURCES,
AND COUNTRIES FROM ALL OVER THE WORLD HAVE AGREED
THAT IT IS VERY DESIRABLE AND WE NEED MUCH MORE

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1 INVESTMENT BEFORE WE WILL EVER BE ABLE TO GET SUFFICIENT ENERGY FROM THESE RENEWABLE RESOURCES TO
 2 MEET OUR GREAT ENERGY GAP. WHICH IS UNFORTUNATELY
 3 I DON'T THINK NOW, WE HAVE THE WAR IN IRAN AND
 4 IRAQ, AND MAYBE IT IS STILL CONTINUING. I HOPE FULLY IT ISN'T. BUT WE HAVE THIS PRESSING ENVIRONMENTAL PROBLEM. -- TAKING THE PROVISO APPROACH, WHICH
 5 I WOULD ADVOCATE SO IF YOU ARE ENVIRONMENTALISTS,
 6 AND SINCE RENEWABLES ARE NOT YET ON TRACK, AND, YES,
 7 WE SHOULD INVEST IN RENEWABLES, I URGE THAT WE IN
 8 FACT GO FORWARD WITH CERTAIN FUSION TECHNOLOGY,
 9 AND I URGE THAT YOU CONSIDER IT AS AN ENVIRONMENTAL
 10 MATTER IN NUCLEAR POWER. GROUP DOES NOT, HOWEVER,
 11 EITHER EXPLICITLY AND I WOULD PUT THAT RIGHT UP, AND
 12 I THINK YOU OUGHT TO CONSIDER THAT IN MAKING THAT
 13 STATEMENT. NOT SPECIFICALLY GERMANE TO THE CO₂

14 PROBLEM," WHICH DR. GEORGE WOODWELL: WHAT ARE YOU
 15 GOING TO DO WITH IT? ER, I APPRECIATE EDITH'S ARGUMENT ABOUT WHAT

16 MR. RICHARD PENNA: AS THE LANGUAGE, I
 17 DON'T THINK THERE IS THE CLAUSE THERE, BUT AS I
 18 RECALL THERE WAS SOMETHING THAT PARENTHETICALLY
 19 SAID SOMETHING ABOUT -- THIS EITHER CONSTITUTES
 20 A -- MENT CALL AS TO HOW YOU -- I GUESS I WOULD
 21 PREFER TO GO TO

22 MR. ANTHONY SCOVILLE: WELL, OKAY, RE
 23 YES. EDITH AND I HAD A DISCUSSION ABOUT THIS. AND

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1 THINK THAT THIS STATEMENT, AS IT STARTED OUT, GOES
 2 MUCH FURTHER TOWARD ACTUALLY HAVING A POSITIVE --
 3 THRUST TOWARD ALTERNATIVES, WHICH IS UNFORTUNATELY
 4 I DON'T THINK CONTAINED IN -- I UNDERSTAND EDITH'S
 5 POINT AS THE LAWYER ADVOCATE, AND I GUESS I WOULD
 6 FEEL, ALTHOUGH I AM NOT AN EXPERIENCED LAWYER, THAT
 7 THE STATEMENT -- TAKING THE PROVISIO APPROACH, WHICH
 8 I WOULD ADVOCATE, WILL ADDRESS THAT PROBLEM TO COM-
 9 ANYBODY WHO IS SOPHISTICATED ENOUGH TO READ THE
 10 REPORT. RECOMMENDATION STARTS TO COVER OTHER ELE-
 11 MENTS OF OTHER AND I WOULD PROPOSE THE FOLLOWING
 12 STATEMENT, WHICH WOULD BE TACKED ONTO THAT, WHICH
 13 WOULD SIMPLY SAY, "THE GROUP DOES NOT, HOWEVER, W
 14 EITHER EXPLICITLY OR IMPLICITLY ENDORSE ANY, PAR-
 15 TICULAR NONFOSSIL FORM OF ENERGY, SINCE SUCH A
 16 CHOICE IS NOT SPECIFICALLY GERMANE TO THE CO₂ AM
 17 PROBLEM," WHICH I THINK COVERS THE RESERVATIONS.
 18 SIMPLY TO SAY: HOWEVER, I APPRECIATE EDITH'S ARGU-
 19 MENTS ABOUT WHAT A LAWYER COULD POSSIBLY DO TO AMONG
 20 COULD POSSIBLY DO TO THAT -- TAKING THAT STATEMENT
 21 OUT OF CONTEXT. MR. ANTHONY SCOVILLE: COULD I --

22 AND I GUESS IT IS SOMEWHAT OF WOULD
 23 JUDGMENT CALL AS TO HOW YOU -- I GUESS I WOULD
 24 PREFER TO GO THIS WAY, BECAUSE I THINK IT IS A MORE
 25 STRONGER STATEMENT ABOUT ACTUALLY GETTING OUT AND

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1 DOING SOMETHING, AS OPPOSED TO SIMPLY CONSIDERING
2 CO₂, EVEN EXPLICITLY, IN ENERGY DEBATES. BUT --

3 MR. JOHN HOFFMAN: I WOULD LIKE TO
4 AGREE WITH THAT. AND ALSO, I THINK THAT WHAT YOU
5 RECOMMENDED REALLY OVERLAPS WITH THE FIRST RECOM-
6 MENDATION, WHERE WE TALK ABOUT TAXES, SUBSIDIES,
7 REGULATIONS AND RESEARCH PROGRAMS.

8 I MEAN, YOU HAVE TO KEEP THE RECOM-
9 MENDATION AT LEAST RELATIVELY DISTINCT. I MEAN,
10 IF EACH RECOMMENDATION STARTS TO COVER OTHER ELE-
11 MENTS OF OTHER RECOMMENDATIONS, IT IS GOING TO BE
12 VERY CONFUSING.

13 MR. STEPHEN CONNOLLY: EDITH, COULD
14 YOU STATE YOUR SUGGESTED MODIFICATION AGAIN, JUST
15 THE LANGUAGE? I AM A LITTLE CONFUSED.

16 DR. EDITH BROWN WEISS: YES. I AM
17 NOT SURE ANYBODY ELSE PICKED UP ON IT, BUT IT WAS
18 SIMPLY TO SAY: "AND EXPLICITLY TO INTEGRATE CO₂
19 EMISSIONS AS A VERY SERIOUS COST IN CHOOSING AMONG
20 ALTERNATIVE ENERGY SOURCES."

21 MR. ANTHONY SCOVILLE: COULD I --

22 MR. STEPHEN CONNOLLY: WHERE WOULD
23 YOU INSERT THAT?

24 DR. EDITH BROWN WEISS: WELL, I CON-
25 WOULD HAVE SUBSTITUTED IT.

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1 REALLY MAJOR CONCEPTS. MR. STEPHEN CONNOLLY: WOULD YOU WOULD
2 HAVE SUBSTITUTED IT? WHICH VARY BETWEEN COAL

3 AND NATURAL GAS. DR. DAVID ROSE: FOR WHICH ONE
4 ENERGY ROUTE OR DR. EDITH BROWN WEISS: WHICHEVER

5 ONE -- IT REFERS TO REDIRECTING -- I DON'T SEE
6 HOW THAT MITIGATES. MR. ANTHONY SCOVILLE: THAT IS 3.

7 NUCLEAR, WHICH MS. JEANNE MALCHON: I AM SORRY, BUT,
8 YOU KNOW, HAS SOMEBODY ON THE COMMISSION WHO -- I

9 DON'T KNOW WHAT THAT SAYS. BROWN WEISS: RIGHT.
10 DR. EDITH BROWN WEISS: OKAY. THEN

11 IT SHOULD NOT BE THERE. --

12 MR. STEPHEN CONNOLLY: OR IT SHOULD
13 BE -- REASON IT DOES IS BECAUSE IT ALLOWS, FOR

14 EXAMPLE, THERE DR. EDITH BROWN WEISS: THEN IT IS
15 NOT ADEQUATELY PHRASED. ALLOWS FOR OTHER THINGS, BUT

16 YOU DON'T -- YOU MS. JEANNE MALCHON: -- I DON'T KNOW
17 WHAT IT SAYS. ITSELF TO RENEWABLES AND TARGETED YOUR-

18 SELF, I THINK DR. EDITH BROWN WEISS: THAT IS SAYS
19 IS THAT WHEN YOU ARE DECIDING AMONG THE MIX OF ENERGY

20 ENERGY ALTERNATIVES -- OR WHAT IT IS DESIGNED TO
21 SAY -- WHEN YOU ARE CHOOSING BETWEEN RENEWABLES,

22 WHEN YOU ARE CHOOSING BETWEEN NATURAL GAS, WHEN
23 YOU ARE CHOOSING BETWEEN COAL, OIL AND NUCLEAR AT

24 POWER, THAT A VERY IMPORTANT FACTOR THAT YOU CON-
25 sider -- AND THERE ARE TRADE-OFFS IN ALL OF THIS --

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1 REALLY MAJOR COSTS TO CONSIDER ARE THE IMPACTS,
2 THE AMOUNT OF EMISSIONS, WHICH VARY BETWEEN COAL
3 AND NATURAL GAS, IN CHOOSING WHETHER TO GO ONE
4 ENERGY ROUTE OR ANOTHER.

5 MS. JEANNE MALCHON: I DON'T SEE
6 HOW THAT MITIGATES THE POTENTIAL EMPHASIS ON
7 NUCLEAR, WHICH I UNDERSTOOD, FROM YOUR ARGUMENT,
8 WAS THE THRUST OF YOUR REVISION.

9 DR. EDITH BROWN WEISS: RIGHT.

10 MS. JEANNE MALCHON: AND THAT IS
11 THE CONNECTION I DON'T --

12 DR. EDITH BROWN WEISS: YOU KNOW,
13 THE REASON IT DOES IS BECAUSE IT ALLOWS, FOR
14 EXAMPLE, THERE ARE NOT THE HIGH EMISSIONS FOR
15 NATURAL GAS, AND IT ALLOWS FOR OTHER THINGS, BUT
16 YOU DON'T -- YOU HAVEN'T TARGETED -- YOU SEE, WHEN
17 YOU OPEN YOURSELF TO RENEWABLES AND TARGETED YOUR-
18 SELF, I THINK PEOPLE WILL SAY THAT I THINK IT IS
19 AN OPTION TO GO, THAT YOU CANNOT FULLFIL THE ENERGY
20 GAP WITH RENEWABLES AT THE PRESENT TIME.

21 WE, ON THE ONE HAND, ARE SAYING
22 IT IS A VERY SERIOUS PROBLEM, WE HAVE TO ACT NOW,
23 AS A POLICY MATTER. AND ONCE YOU HAVE SAID THAT
24 YOU CANNOT, IN TERMS OF SHIFTING YOUR USE AWAY,
25 IT SEEMS TO --

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1 THE FIRST ONE, MS. JEANNE MALCHON: AS I UNDERSTAND
 2 ALL THIS. I JUST DON'T UNDERSTAND THE LANGUAGE,
 3 THAT YOU ARE PROPOSING. AND I AM PROBABLY MISSING
 4 SOMETHING, SOMEWHERE.

5 MR. ANTHONY SCOVILLE: MAY I -- WHERE

6 DR. EDITH BROWN WEISS: IF IT SHOOT
 7 DOESN'T FLY, IT DOESN'T FLY. AND I AM -- THAT IS
 8 IT. EITHER WAY."

9 MR. RICHARD PENNA: FIRST DAVID, FI-
 10 THEN JOHN, THEN TONY, DAVID. THOUGH WE SHOULD TRY

11 DR. DAVID ROSE: I GUESS I AM NOT
 12 ENOUGH OF A POLITICIAN OR A STATESMAN OR A DIPLO-
 13 MAT OR SOMETHING TO DISTINGUISH ALL THE NUANCES.

14 MS. JEANNE MALCHON: WE CAN'T HEAR.

15 MR. STEPHEN CONNOLLY: PLEASE SPEAK
 16 UP. AND THE SECOND ONE, GOING INTO

17 DR. DAVID ROSE: IT IS HARD FOR ME
 18 TO DISTINGUISH ALL THE NUANCES IN THESE PHRASES.
 19 BUT I HAVE A FEELING THAT ANY OF THESE THINGS THAT
 20 ARE MADE, IF THEY ARE MADE BRIEFLY WITHOUT A LOT OF
 21 FOOTNOTES AND EXPLANATIONS AND SO ON, ARE LIABLE
 22 TO BE INTERPRETED MANY, MANY WAYS. TONY.

23 AND THAT IS, YOU HAD ONE, AND I THINK
 24 OTHERS ARE GOING TO MAKE OTHERS. FOR EXAMPLE, IF
 25 ONE TALKED ABOUT LET'S EMPHASIS RENEWABLES, AS WITH

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THE FIRST ONE, THEN ALSO SPEAKING AS -- NOT AS A MEMBER OF THIS COMMITTEE BUT AS A PRIVATE CITIZEN, AND NOT A LAWYER, BECAUSE I AM NOT ONE, BUT I COULD SAY, "AHA, WHAT THEY HAVE GOT IS A HIDDEN BIAS IN HERE THAT I CAN DEVELOP IN TERMS OF WHERE THEY ARE READING -- COMING FROM AND THEREBY SHOOT DOWN THEIR STATEMENT TOO, OR MAKE SOMETHING OUT OF IT EITHER WAY."

SO I DON'T SEE HOW WE ESCAPE DIFFICULTIES OF INTERPRETATION, ALTHOUGH WE SHOULD TRY TO MINIMIZE THEM, MINIMIZE THE POSSIBILITY OF IT.

MR. RICHARD PENNA: JOHN.

MR. JOHN HOFFMAN: WELL, I THINK THAT CONSIDERING THE COSTS OF CO₂ IS REALLY WHAT THE FIRST BULLET WAS THAT WE RETAINED FROM THE ORIGINAL THING. AND THE SECOND ONE, GOING INTO CONSERVATION, SUGGESTED AN IMMEDIATE PROGRAM.

THIS THIRD ONE IS AIMED AT GETTING MORE RESOURCES FOR A LONG-TERM ISSUE. AND I THINK THEY ARE DISTINCT RECOMMENDATIONS AND SHOULD BE KEPT THE WAY THEY ARE.

MR. RICHARD PENNA: TONY.

MR. ANTHONY SCOVILLE: I GUESS I -- WELL, OBVIOUSLY I WOULD TEND TO SUPPORT JOHN'S, BUT I THINK IT IS -- THE COST SIMPLY IS COVERED IN THE

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FIRST BULLET. BUT WHAT I WOULD LIKE TO REMIND YOU
IS THAT SOMEWHERE AROUND HERE THERE IS -- AND I
THINK RAFE WAS PREPARING IT -- A SHORT REMARK ON
THE USE OF -- IF YOU HAVE TO USE FOSSIL FUELS,
USING LOW-CARBON FOSSIL FUELS. AND I DON'T KNOW
WHERE IT IS.

MR. STEPHEN CONNOLLY: DEB IT IS RIGHT
HERE.

MR. ANTHONY SCOVILLE: BECAUSE,
WITHOUT THAT, I AGREE WITH THE PROBLEM THAT EDITH
IS EXPRESSING. BUT HER CONCERN ABOUT THE TRADE-
OFF BETWEEN NATURAL GAS AND OCCASIONAL USE OF
NATURAL GAS IS SAY PREFERABLE TO, SAY, NUCLEAR,
IS SOMEWHAT GOTTEN AT IF YOU RECOGNIZE THAT THERE
IS PROVISION OF HOW AND WHEN YOU USE FOSSIL FUELS,
IF YOU HAVE TO. MR. DEAN ABRAMSON: JUST A COMMENT.

MR. STEPHEN CONNOLLY: WELL, LET'S
HEAR THAT LANGUAGE. THE NUCLEAR OPTION EITHER, BUT

THAT DEBATE HAS MR. ANTHONY SCOVILLE: YES. THAT
ANY SUBTLETY OF MR. STEPHEN CONNOLLY: DURING POLICY
DELIBERATIONS, THE DIFFERENCE IN CO₂ EMISSIONS PER
B.T.U. OF DIFFERENT FOSSIL FUELS SHOULD BE CON-
SIDERED. I MEAN, THE EXPERTS ARE OUT OF IT,

AND THEY HAVE MR. ANTHONY SCOVILLE: YES. OKAY.
I WOULD LIKE TO ASK --

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MR. STEPHEN CONNOLLY: DOES THAT ADDRESS ANY OF YOUR CONCERNS?

DR. EDITH BROWN WEISS: WHERE WOULD IT BE AT? IS IT ADDED ON TO IT? I AM SORRY.

MR. STEPHEN CONNOLLY: IT WOULD BE SOMEWHERE -- TRUE ALL AROUND THE WORLD, BY THE WAY.

MR. JOHN HOFFMAN: ADDED TO NUMBER 1, I THINK. IF WE WENT ON AND WE DIDN'T REALLY RESOLVE THIS.

MR. STEPHEN CONNOLLY: SOMEWHERE, TO NUMBER 1. SHE IS REALLY TRYING TO SAY SOMETHING. I DON'T KNOW.

DR. EDITH BROWN WEISS: I HAVE AT CONCERNS, AND I HAVE DISCUSSED THEM. AND I THINK THE MATTER HAS TO REST AT SOME POINT.

MR. RICHARD PENNA: DEAN, YOU HAD UNDERSTAND WHAT SHE IS TRYING TO SAY. I JUST DO NOT UNDERSTAND. MR. DEAN ABRAMSON: JUST THE COMMENT.

I AM NOT ANXIOUS TO SIGN ON SOMETHING THAT EXPLICITLY ENDORSES THE NUCLEAR OPTION EITHER, BUT THAT DEBATE HAS GOTTEN WELL PAST THE POINT THAT ANY SUBTLETY OF A STATEMENT BY A GROUP OF ANY EXPERTS ANY PLACE IS GOING TO MAKE ANY ONE DAMN BIT OF DIFFERENCE. THINK, WHICH IS THAT, EDITH, IF YOU WOULD DRAFT SOMETHING I MEAN, THE EXPERTS ARE OUT OF IT, AND THEY HAVE BEEN FOR SEVERAL YEARS. AND IT IS JUST NOT GOING TO MATTER. YOU BACK IN WASHINGTON,

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1 TO TRY TO -- MR. ANTHONY SCOVILLE: COULD I
2 ASK --

3 DR. EDITH BROWN WEISS: I WOULD BE
4 HAPPY TO DO THAT

5 MR. DEAN ABRAMSON: BUT I DON'T
6 WANT TO SIGN ANYTHING THAT IS IMPLICIT --

7 DR. EDITH BROWN WEISS: I AM NOT
8 SURE THAT IS TRUE ALL AROUND THE WORLD, BY THE WAY.

9 MR. THOMAS WALTZ: I THINK IT WOULD
10 BE A SHAME IF WE WENT ON AND WE DIDN'T REALLY
11 RESOLVE THIS, BECAUSE IT MAY BE A SUBTLE POINT TO
12 SOME, BUT EDITH IS REALLY TRYING TO SAY SOMETHING.
13 I DON'T KNOW, MAYBE YOU COULD SIT DOWN TOGETHER AT
14 SOME POINT, OR MAYBE ON THE SIDE RIGHT NOW, AND
15 SEE IF YOU COULD WORK THAT OUT.

16 MS. JEANNE MALCHON: I THINK I
17 UNDERSTAND WHAT SHE IS TRYING TO SAY. I JUST DO
18 NOT UNDERSTAND, FROM MY POINT OF VIEW, THE LAN-
19 GUAGE SHE PROPOSED SAYS IT.

20 MR. THOMAS WALTZ: COULD YOU SIT
21 WITH HER AND SEE IF YOU CAN

22 MS. JEANNE MALCHON: I --
23 MENTS BACK.

24 MR. STEPHEN CONNOLLY: I HAVE A
25 SUGGESTION, I THINK, WHICH IS THAT, EDITH, IF YOU
WOULD DRAFT SOMETHING UP AND PUT A NOTATION ON IT
EXPLICITLY WHERE YOU THINK IT OUGHT TO GO, IN LIEU
OF WHAT. WE CAN WORK WITH YOU BACK IN WASHINGTON,

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1 TO TRY TO --

MR. STEPHEN CONNOLLY SPEAK UP,

2 PLEASE.

DR. EDITH BROWN WEISS: I WOULD BE

3 HAPPY TO DO THAT. I DO HAVE SOME HESITANCY,

4 BECAUSE I AM NOT SURE THAT MY VIEW REPRESENTS THE

5 VIEW OF THE BODY, I MEAN, IN THE SAME WAY IN

6 WHICH I HAVE DISSENTED FROM THE VIEWS OF THE BODY.

7 DR. WILLIAM ELLIOTT: AS I THINK I

8 UNDERSTAND WHAT SHE IS SAYING, AND I THINK I LIKE

9 HER STATEMENT BETTER THAN THE ONE THAT EXISTS.

10 AND I AT LEAST WILL BE GLAD TO ENDORSE -- BUT

11 MR. STEPHEN CONNOLLY: LET ME

12 CLARIFY WHAT MY SUGGESTION IS. WE WILL GO BACK

13 AND TRY TO DRAW TOGETHER A DRAFT DOCUMENT, WHICH

14 WILL ONLY BE THAT. AND WHAT I WOULD SUGGEST IS

15 THAT AFTER WE GET THE LANGUAGE WORKED OUT WHICH IS

16 SATISFACTORY TO YOU IN WHICH WE THINK WE CAN

17 ADDRESS THE QUESTIONS YOU HAVE RAISED, WE WILL PUT

18 BOTH ALTERNATIVES ON THE PAPER AND LET PEOPLE TAKE

19 A LOOK AT THEM, AND THEN WE WILL GET WRITTEN COM-

20 MENTS BACK.

MR. RICHARD PENNA STEVE --

21 DR. DAVID ROSE: COULD I ASK HER TO

22 READ IT AGAIN, SO WE COULD -- SINCE WE ARE

23 SERIOUSLY CONSIDERING --

24 DR. EDITH BROWN WEISS: -- I AM NOT

25 SURE -- IT IS NOT IMBEDDED IN CONCRETE, BY THE WAY.

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TO THE ENERGY EFFICIENCY STATEMENT, USE THIS ONE AS WELL, AND TONY'S ADDITIONAL LANGUAGE ABOUT NOT ENDORSING ONE OR THE OTHER? OF GREATER RESOURCES BE ADDRESSED

MR. RICHARD PENNA: JOHN, THEN DON.

MR. JOHN HOFFMAN: IT SEEMS TO ME THAT IF WE WERE GOING TO AMEND ANYTHING IT WOULD BE AMENDING THE NUMBER 2 THERE, TO DEAL WITH THE ISSUE OF WITHIN ENERGY EFFICIENCY WHAT YOU WANT IS THE FACT THAT YOU ARE SAYING CO₂ SHOULD BE CONSIDERED A COST. THERE ARE ENVIRONMENTAL PROBLEMS.

WE SHOULD RECOGNIZE I MEAN, IT HAS NOTHING TO DO WITH THE ALTERNATIVES. METHODS OF PRODUCING ENERGY, CURRENT ENVIRONMENTAL

MR. ANTHONY SCOVILLE: SHE IS SAYING WITHIN ENERGY PRODUCTION AS WELL. CONSERVE CO₂ USING ALTERNATIVE

MR. JOHN HOFFMAN: YES.

DR. DAVID ROSE: YES. WOULD LIKE TO

GO BACK ON NUMBER MR. JOHN HOFFMAN: BUT THAT DOESN'T IN ANY WAY -- THE CO₂ WOULDN'T AFFECT ANY NON -- THE CHOICE BETWEEN ANY NONFOSSIL FUEL ALTERNATIVE. I MEAN, SINCE THERE IS NO CO₂ FROM EITHER OF THEM, IT IS JUST NOT GOING TO HAVE A BEARING ON WHETHER YOU GO WITH SOLAR OR NUCLEAR. SOURCES. EVERYBODY

SAID THAT WAS MR. RICHARD PENNA: DON KING. THAT IS

REALLY WHAT YOU DR. DONALD KING: MAYBE JUST AT THE END OF NUMBER 3 THERE YOU SAY SOMETHING LIKE

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"BECAUSE THERE ARE SERIOUS OR ENVIRONMENTAL CONSEQUENCES FOR CONVENTIONAL FORMS OF ENERGY, WE WOULD PROPOSE THAT THE PROVISION OF GREATER RESOURCES BE ADDRESSED PRINCIPALLY TO ALTERNATIVE ENERGY SOURCES"

WHAT I AM SAYING IS THAT WE ARE SAYING THAT WE HAVE A PROBLEM WITH CONVENTIONAL ENERGY SOURCES. THAT IS NUCLEAR AND THAT IS FOSSIL FUEL AS WELL.

AND THERE ARE DIFFERENT KINDS OF PROBLEMS, BUT THERE ARE ENVIRONMENTAL PROBLEMS. WE SHOULD RECOGNIZE THOSE. THERE ARE PROBLEMS WITH CURRENT METHODS OF PRODUCING ENERGY, CURRENT ENVIRONMENTAL PROBLEMS, AND WE WOULD THEREFORE RECOMMEND WE TRY TO FIND WAYS THAT CONSERVE CO2 USING ALTERNATIVE SOURCES.

MR. JOHN HOFFMAN: I WOULD LIKE TO GO BACK ON NUMBER 3. WHAT YOU ARE SAYING, THE US ORIGINAL ENDORSEMENT WE CAME OUT TO WE ARE NOT ENDORSING ANYTHING.

MR. JOHN HOFFMAN: PUTTING IT ON NUMBER 3, IT WOULD AND WHAT I THINK WE COULD SUBSTITUTE IN IS: OF "ALL EXTERNAL COSTS SHOULD BE CONSIDERED WHEN CHOOSING BETWEEN ENERGY SOURCES." EVERYBODY SAID THAT WAS A TOO MOTHER AND APPLE PIE, BUT THAT IS REALLY WHAT YOU ARE GETTING AT. IF YOU ARE CONCERNED ABOUT THE EXTERNAL COSTS OF NUCLEAR NOT BEING AT

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WEIGHED. COSTS THAT ARE ASSOCIATED WITH ANY FORM,
BE IT NUCLEAR OR IT SEEMS TO ME THAT ANYBODY WHO IS
FOR NUCLEAR CAN'T SAY THEY DON'T WANT TO CONSIDER
EXTERNAL COSTS. AND IT GETS AT WHAT YOU WANT OF
THE ENVIRONMENT

MR. ANTHONY SCOVILLE: YES. BUT --

MR. JOHN HOFFMAN: -- AND THEN WE CAN

KEEP THAT OTHER SENTENCE. THIS MEANS THAT WE
DON'T ENDORSE ANY.

ANTHONY SCOVILLE: ALL RIGHT.

CAN GO ALONG WITH MR. ANTHONY SCOVILLE: IN OTHER

WORDS, BASICALLY TAKE THE CHOICE THAT STEPHEN HAD,
WHICH IS TAKE BOTH STATEMENTS, SO THAT ON THE ONE
HAND YOU HAVE A RECOGNITION OF THE FACT THAT
ENERGY -- DEVELOPMENT OF ENERGY RESOURCES IS NECES-
SARY, AND THAT DEVELOPMENT OF NONFOSSIL ENERGY
RESOURCES SHOULD BE ENCOURAGED, BUT AT THE SAME
TIME, THAT IN MAKING THAT CHOICE THAT THE -- WE
HAVE THE CAVEAT THAT EDITH HAS PUT UP THERE, PLUS
THIS NONENDORSEMENT THING HERE. THAT WHAT WE DO

IS WE TAKE THE MR. JOHN HOFFMAN: PUTTING IT ON

NUMBER 3, IT WOULD SAY IN A SENSE, "ALL EXTERNAL
COSTS OF ANY ENERGY INVESTMENT SHOULD BE CON-
SIDERED. THIS STATEMENT DOESN'T MEAN THAT WE
ENDORSE ANY PARTICULAR FORM."

SO WE HAVE MADE IT EXTREMELY CLEAR
TO THE WORLD THAT NOT ONLY DO WE HAVE TO LOOK AT

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EXTERNAL COSTS THAT ARE ASSOCIATED WITH ANY FORM,
BE IT NUCLEAR OR SOLAR -- YOU KNOW, SOME PEOPLE
WANT TO PUT SOLAR SATELLITES UP AND SHOOT MICRO-
WAVES DOWN, AND THERE HAS BEEN A DISCUSSION OF
THE ENVIRONMENTAL EFFECTS OF THAT. WE ARE GOING.

SO WE ARE SAYING -- IT COVERS BOTH
SIDES AND THE EXTERNAL COSTS. I'VE FOUND THE

LANGUAGE. MR. ANTHONY SCOVILLE: ALL RIGHT. I

CAN GO ALONG WITH THAT. OCCUPIED MORE TIME AND HAS

GREATER PROBLEMS. MR. RICHARD PENNA: EDITH. THINK WE

SHOULD FACE UP DR. EDITH BROWN WEISS: I HAVE NO

COMMENT. I HAVE SAID MINE. THIS STAGE THAT WHERE

WE ARE IS, TO MR. RICHARD PENNA: AV STEVE, DO YOU WANT-

ABOUT A -- SOME MR. STEPHEN CONNOLLY: I HAVE NO I-

SENSE WHETHER THERE IS AN AGREEMENT OF THE GROUP,

OR IF SO, ON WHAT. THAT WE EXPLICITLY, THE GROUP DOES

NOT WANT TO GO MR. RICHARD PENNA: STEVE, I THINK

YOUR SUGGESTION IS A PROPER ONE, THAT WHAT WE DO

IS WE TAKE THE DISCUSSION HERE, TRY TO DRAFT SOME

LANGUAGE IN ALTERNATIVE FASHIONS, SEND IT OUT FOR

DISCUSSION -- SEND IT OUT FOR WRITTEN COMMENT BACK

FROM THE PARTICIPANTS, TO SEE WHAT WE HAVE AT THAT

POINT. MR. ANTHONY SCOVILLE: IS THAT WHERE

WE ARE AT OR NO IF WE DO NOT HAVE CONSENSUS, WE DO

NOT HAVE CONSENSUS. STEPHEN CONNOLLY: THAT IS THE

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SUGGESTION ON THE
MR. ANTHONY SCOVILLE: I THINK WE
ARE CLOSER TO CONSENSUS, OR NEARLY CONSENSUS, THAN
WE THINK WE ARE. AND YET I THINK IT IS A MAJOR
POINT WHICH, ONCE WE HAVE ALL SCATTERED, IT IS
VERY HARD TO GET A SENSE OF WHERE WE ARE GOING.

I THINK IT IS AN IMPORTANT POINT TO
RESOLVE IT NOW, EVEN IF WE CAN'T QUITE FIND THE
LANGUAGE. BECAUSE THIS IS REALLY -- THIS IS THE
ISSUE THAT HAS REALLY OCCUPIED MORE TIME AND HAS
GREATER PROBLEMS AND DIFFICULTIES, AND I THINK WE
SHOULD FACE UP TO THE DECISION AS BEST WE CAN.

I SENSE AT THIS STAGE THAT WHERE
WE ARE IS, TO HAVE NUMBER 3, TO HAVE THE STATEMENT
ABOUT A -- SOME STATEMENT ABOUT ALL THE EXTERNALI-
TIES OF ALL THE ENERGY SYSTEMS IN THERE, AND A
THIRD STATEMENT THAT WE EXPLICITLY, THE GROUP DOES
NOT WANT TO GO ON RECORD AS ENDORSING ANY ONE OR
THE OTHER -- EITHER IMPLICITLY OR EXPLICITLY
ENDORSING ANY PARTICULAR NONFOSSIL-FOSSIL ALTERNA-
TIVE, AND THAT MESSAGE MUST COME THROUGH LOUD AND
CLEAR.

MR. STEPHEN CONNOLLY: IF I MAY --

MR. ANTHONY SCOVILLE: IS THAT WHERE
WE ARE AT OR NOT?

MR. STEPHEN CONNOLLY: THAT IS THE IT

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1 SUGGESTION ON THE FLOOR. THERE SEEMS TO BE A CON-
2 SENSUS SOMEWHERE AROUND THAT.

3 WHAT I WOULD LIKE TO DO, IT SEEMS
4 TO ME THAT THE ONLY QUESTION, WHETHER YOU USE
5 JOHN'S LANGUAGE OR WHETHER YOU USE EDITH'S LAN-
6 GUAGE, IS WITH RESPECT TO THE COSTS, THE EXTERNALI-
7 TIES ISSUE.

8 MR. STEPHEN CONNOLLY: TONY, YOU
9 AND WHAT WE COULD DO IS WE COULD
10 PUT LANGUAGE FROM EACH OF YOU IN BRACKETS ON THE
11 DRAFT THAT COMES BACK AND LET YOU TAKE A LOOK AT
12 IT.

13 MR. ANTHONY SCOVILLE: LET ME ASK
14 YOU: ARE WE -- I GATHER WE ARE GOING TO HAVE A
15 SHORT LUNCH AND THEN WE ALL TAKE OFF AT ROUGHLY
16 2:00 O'CLOCK OR 1:30?

17 MR. STEPHEN CONNOLLY: ABOUT HALF
18 ARE LEAVING AT 12:30.

19 MR. RICHARD PENNA: HALF THE GROUP
20 LEAVES AT 12:30.

21 MR. ANTHONY SCOVILLE: THIS IS WHAT,
22 FOUR SENTENCES? CAN WE -- CAN SOMEBODY GO OFF IN
23 A CORNER FOR FIVE MINUTES AND, WHILE EVERYBODY
24 ELSE IS GETTING THEIR LUNCH, AND COME BACK AND --
25 SO WE GET TO IT BEFORE WE ALL LEAVE?

ONCE WE SCATTER, THEN ESSENTIALLY IT

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1 IS NO LONGER THE CONSENSUS OF A GROUP, TO BE VERY
2 HONEST, IT IS WHAT THE STAFF PUTS TOGETHER. AND I
3 WOULD THINK IT IS VERY IMPORTANT POINT FOR THE
4 GROUP, AND OBVIOUSLY A LOT OF PEOPLE ARE CONCERNED
5 ABOUT IT. I THINK WE SHOULD MAKE THE STATEMENT
6 RATHER THAN --

MR. RICHARD PENNA: I HESITATE TO

7 MR. STEPHEN CONNOLLY: TONY, YOU
8 ARE IN CHARGE.

9 MS. JEANNE MALCHON: MAY I JUST
10 SAY THAT AS A -- I AM JUST TRYING TO APPROACH IT
11 AS AN ELECTED OFFICIAL, WHICH I AM, ALBEIT ON THE
12 LOCAL LEVEL. AND I THINK THE "ALL EXTERNAL COSTS"
13 IS MORE DIRECTION TO ME AS A LOCAL OFFICIAL THAN
14 SPECIFICALLY THE COSTS OF CO₂.

15 DR. EDITH BROWN WEISS: RIGHT.

16 MS. JEANNE MALCHON: I THINK THIS
17 SAYS MORE TO ME, AS AN ELECTED OFFICIAL.

18 MR. THOMAS WALTZ: HOW DO YOU FEEL
19 ABOUT THIS? DOES THAT MEET YOUR -- DOES THAT
20 SPEAK TO THE FUNDAMENTAL POINT, THAT IS, THE FUNDA-
21 MENTAL ISSUE?

22 DR. EDITH BROWN WEISS: I GUESS MY
23 RESPONSE IS: UNTIL I SEE IT WRITTEN OUT, I CAN'T
24 ANSWER THAT.

25 MR. THOMAS WALTZ: OKAY. WE CAN

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PROBABLY WORK THAT OUT TODAY.

MR. STEPHEN CONNOLLY: CAN TONY AND JOHN HOFFMAN AND EDITH TRY TO GET SOME LANGUAGE DOWN AND EITHER AGREE, OR AGREE TO DISAGREE?

MR. ANTHONY SCOVILLE: ALL RIGHT.

MR. RICHARD PENNA: I HESITATE TO EVEN RAISE THIS, BUT ARE THERE ANY ADDITIONAL ITEMS THAT WE HAVE NOT RAISED THAT OUGHT TO BE, GIVEN THE FACT THAT WE HAVE ABOUT HALF AN HOUR TOTAL BEFORE HALF THE GROUP DISINTEGRATES?

MR. DAVID SLADE: YES, THERE IS ONE ADDITIONAL ITEM. THIS IS THE 300TH MEETING I HAVE ATTENDED, AND THIS IS ONE OF THE MORE STIMULATING ONES OF THOSE MANY MEETINGS.

AND I THINK THAT THE COMMISSION AND THE STAFF DID A VERY GOOD JOB.

DR. DAVID BURNS: NOT ONLY IS IT STIMULATING, BUT IT IS UNIQUE. AND I THINK THE UNIQUENESS OF IT NEEDS TO BE PUT ON THE RECORD.

THIS, I BELIEVE -- DAVE, CORRECT ME, OR ANYONE ELSE IN THE ROOM WHO KNOWS OF SOMETHING TO THE CONTRARY -- THIS, I BELIEVE, IS THE FIRST TIME THAT A GROUP HAS RECOMMENDED SPECIFIC POLICY CHANGES IN THE U.S. NATIONAL POLICY AS A RESULT -- RELATED TO CO₂.

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1 THERE HAVE BEEN MEETINGS THAT HAVE
 2 DISCUSSED -- THERE HAVE BEEN SCIENTIFIC MEETINGS
 3 OF EVERY DESCRIPTION, LOOKING AT SOURCES, SINKS,
 4 MODELING, ECOLOGICAL AND EVEN SOCIETAL CONSEQUEN-
 5 CES AND SO ON. ON THE DETAILS OF THE DISAGREEMENT
 6 DIMENSION AND THERE HAVE BEEN MEETINGS TO DIS-
 7 CUSS RESEARCH THAT NEEDS TO BE DONE. BUT I DON'T
 8 KNOW OF ANY MEETING THAT HAS SPECIFICALLY RECOM-
 9 MENDED PUBLIC POLICY ACTIONS. IT YOURSELVES TO ARZES
 10 SPELLING OUT THE AND I THINK THAT ONE OUGHT TO STEP
 11 BACK FOR JUST A MINUTE. THE ASSUMPTION HAS BEEN
 12 MADE IN THE MEETING THAT THERE -- THAT WE CANNOT
 13 WAIT, THAT WE DON'T HAVE TIME TO WAIT, BEFORE TAKING
 14 CERTAIN ACTIONS, THEREFORE WE ARE GOING TO RECOM-
 15 MEND THAT WE GO AHEAD AND TAKE ACTIONS.

16 NOW, I THINK THAT JUST THE FRANK
 17 RECOGNITION OF THE ASSUMPTIONS THAT ARE BEING MADE
 18 SHOULD BE -- SHOULD GET ON THE RECORD. THAT IS ALL

19 MR. RICHARD PENNA: ANYTHING ELSE?

20 MR. THOMAS WALTZ: OUR DISCUSSIONS
 21 BEGAN WITH THE QUESTION: DO WE CARE? AND I FEEL
 22 AT LEAST THAT WE HAVE ANSWERED THAT QUESTION VERY
 23 WELL.

24 DR. ANNA MARIE CROCKETTI: MAY I MAKE
 25 ONE COMMENT? I HAVE SAT THROUGH PANELS LIKE THIS

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MUCH TOO MUCH.

AND THE THING THAT I HAVE NOTICED IS THAT THERE IS USUALLY AN INCREDIBLE AMOUNT OF AGREEMENT WHICH IS ASSUMED AND NEVER STATED, AND THE DISCUSSION OR THE DETAILS OF THE DISAGREEMENT OR THE DIMENSIONS OF THE DISAGREEMENT.

AND IT HELPS THE COMMISSION AN UNBELIEVABLE AMOUNT IF YOU WOULD SIMPLY SOMEHOW OR OTHER GET YOURSELVES TO COMMIT YOURSELVES TO AREAS SPELLING OUT THE AREAS OF AGREEMENT.

THE STATEMENT JUST MADE IS A PERFECT EXAMPLE. I KNOW THAT PRACTICALLY EVERYBODY IN THIS ROOM IS CONVINCED THAT THIS IS A VERY, VERY SERIOUS PROBLEM. THAT IS NEVER SAID ANYWHERE IN A LANGUAGE THAT WOULD COME ACROSS TO THE COMMISSION.

ALL RIGHT, IT IS ASSUMED. THE NOTION THAT WE CANNOT WAIT UNTIL IT IS A SCIENTIFIC CERTAINTY, THAT A SCIENTIFIC CERTAINTY IS ESTABLISHED BEFORE WE CAN DO THE POLICY CHANGES IS CRYSTAL CLEAR TO ANYBODY WHO HAS BEEN HERE.

HOWEVER, THERE IS ONE COMMISSIONER WHO HAS BEEN HERE WHO DIDN'T KNOW THAT BECAUSE HE AIN'T A SCIENTIST. I BEG AND PLEAD THAT YOU CONSIDER THIS COMMENT.

IT IS A DEADLY BLOCK TO US TO WORK,

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1 BECAUSE YOU GUYS WILL NOT COME OUT AND SAY, "HERE
2 WERE 20 PEOPLE" -- OR WHATEVER NUMBER YOU WERE --
3 "AND WE REALLY ALL AGREE ON THIS. AND WE ARE NOW
4 TAKING OFF ON THE IMPLICATIONS OF THIS."

5 DR. DAVID BURNS: DR. CROCETTI, I
6 MIGHT JUST RESPOND BRIEFLY BY SAYING --

7 DR. ANNA MARIE CROCETTI: IT IS VERY
8 EMOTIONAL --

9 DR. DAVID BURNS: -- THAT WHILE I
10 THINK --

11 DR. ANNA MARIE CROCETTI: -- I BEG
12 YOUR PARDON.

13 DR. DAVID BURNS: -- THAT WHILE I
14 THINK YOU MIGHT GET A MAJORITY OF AGREEMENT ON IT,
15 I DON'T BELIEVE THAT YOU WOULD GET UNANIMOUS AGREE-
16 MENT ON IT IN THE SCIENTIFIC COMMUNITY. I --

17 DR. ANNA MARIE CROCETTI: I DON'T
18 CARE ABOUT THE SCIENTIFIC COMMUNITY.

19 MS. JEANNE MALCHON: WE ARE TALKING
20 ABOUT THIS PANEL.

21 DR. ANNA MARIE CROCETTI: WE ARE
22 TALKING ABOUT THIS GROUP THAT IS HERE. WE ARE NOT
23 DOING A REVIEW, WHITHER ARE WE GOING AND WHERE ARE
24 WE IN A SCIENTIFIC ASSESSMENT SENSE.

25 WHAT WE HAVE ASKED IS TO GET PEOPLE

FROM DIFFERENT DISCIPLINES AND DIFFERENT INVOLVE-
MENTS TO COME TOGETHER AND TELL US WHAT YOU AGREE
ON AND WHAT YOUR PROBLEMS ARE. AND YOU HAVE ONLY
MADE VERY VAGUE STATEMENTS ABOUT: THIS IS A VERY,
VERY URGENT, SERIOUS PROBLEM.

MR. THOMAS WALTZ: I WOULD LIKE TO
THROW OUT AN IDEA, WHICH I REALLY DON'T BELIEVE,
ALL I HAVE HEARD FROM ALL THE PHYSICAL SCIENTISTS,
NATURAL SCIENTISTS I HAVE EVER TALKED TO, AND IT
GOES SOMETHING LIKE THIS: THAT THE KIND OF MAN-
MADE CHANGE IN THE CLIMATE SYSTEM WHICH WE ARE
TALKING ABOUT WHICH COULD RESULT FROM CO₂ IS SIMPLY
PROFOUND IN ITS CHARACTER.

NOW, I DON'T WANT TO GO ON AND
ELABORATE ON WHAT I MEAN BY THAT, BUT IT IS PRO-
FOUND.

AND SECONDLY, WE ARE TALKING ABOUT
A PHYSICAL MANIFESTATION CALLED A CLIMATE, WHICH
TENDS TO LAST A VERY LONG TIME, OR CHANGES THAT
TEND TO LAST A VERY LONG TIME.

AND WE ARE TALKING ALSO ABOUT,
HOPEFULLY, A LONG SURVIVAL TIME FOR THE HUMAN
RACE AND FUTURE GENERATIONS.

AND WE ARE CONCERNING OURSELVES
WITH BEQUEATHING TO OUR FUTURE, OUR FUTURE

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GENERATIONS, OUR CHILDREN, CHILDREN'S CHILDREN,
SO ON AND SO FORTH, SOME KIND OF ENTIRELY UNCERTAIN
OR NEARLY ENTIRELY UNCERTAIN BUT PROFOUND CHANGE
IN THIS CLIMATE THAT WE LIVE IN. YOU. I AM NOT SAY

DR. ANNA MARIE CROCKETT: ALL I AM
ASKING YOU IS TO SAY THAT, INCORPORATE IT SO THAT
WE CAN SAY, "WE GOT OURSELVES A BUNCH OF EXPERTS,
AND BY GOD, THEY REALLY ALL ENDORSE THIS KIND OF
POINT OF VIEW AND THINK IT IS VERY IMPORTANT. AND
THEY HAD DISAGREEMENT ABOUT A, B, C, D ON THE E, WE
DETAILS ON THIS AND THAT AND THE OTHER THING, BUT
THEY THINK THIS IS THE WAY TO LOOK AT IT. THEY
FEEL THAT IT IS REASONABLE TO ASSUME THAT IF THERE
IS NO INTERVENTION CERTAIN CHANGE WILL HAPPEN. WE
CANNOT SPELL OUT YET WHEN AND HOW MUCH, BUT THE
NATURE OF THE CHANGE WILL BE OF THIS KIND, AND
THEREFORE IT BEHOOVES US, IF WE ARE INTERESTED IN
THE VALUES, TO INTERVENE AT THIS POINT AND TRY TO
PREVENT IT." MR. STEPHEN CONNOLLY: -- AFTER WE

AND I THINK THERE IS NOBODY HERE
WHO WOULD DISAGREE WITH THAT, AS LONG AS YOU SAY
YOU DON'T KNOW EXACTLY WHEN THE CHANGES WILL HAP-
PEN, THE DIRECTION AND THE QUANTITY, BUT THAT YOU
ALL AGREE THERE WILL BE THIS UNLESS SOMETHING IS
DONE TO INTERVENE. WHO DON'T KNOW ANYTHING ABOUT

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1 THAT IS NEVER REALLY STATED. ALL I
2 CAN TELL YOU THAT ONE COMMISSIONER HERE TOLD ME
3 THAT HE THOUGHT NOBODY AGREED ON ANYTHING ON THIS
4 PANEL. THAT IS ALL I CAN TELL YOU. I AM NOT SAY-
5 ING THIS IS TRUE.

6 MR. THOMAS WALTZ: WHEN DID HE SAY
7 THAT?

8 DR. ANNA MARIE CROCKETT: THIS
9 MORNING. AND I THINK THIS IS A VERY SERIOUS COM-
10 MENT, BECAUSE IF HE THINKS THAT WE DON'T AGREE, WE
11 ARE LOSING SOMEBODY TO SUPPORT THE, YOU KNOW,
12 PUTTING THIS OUT AS THE RECOMMENDATION.

13 MR. STEPHEN CONNOLLY: WE WILL HAVE
14 A BETTER IDEA OF WHETHER PEOPLE AGREE ON THINGS
15 AFTER WE HAVE PUT TOGETHER -- AND WHAT THEY AGREE
16 ON --

17 DR. ANNA MARIE CROCKETT: WELL, FOR
18 INSTANCE --

19 MR. STEPHEN CONNOLLY: -- AFTER WE
20 HAVE PUT TOGETHER THE SUMMARY AND CIRCULATED IT
21 TO THE FOLKS AND GET RESPONSES TO IT.

22 DR. ANNA MARIA CROCKETT: I HAVE
23 BEEN AT WORKSHOPS WHERE PEOPLE HAVE COMMENTED ON
24 CRITERIA DOCUMENTS ON AIR POLLUTION AND THINGS,
25 AND ALL THE PEOPLE WHO DON'T KNOW ANYTHING ABOUT

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1 THE PARTICULAR TOPIC THOUGHT NOBODY AGREED ON ANY-
2 THING AND FELT NOTHING HAD TO BE DONE.

3 WHEN EVERYBODY AGREED, OF COURSE, IT
4 IS A TERRIBLE POLLUTANT, SOMETHING HAS GOT TO BE
5 DONE IMMEDIATELY. BUT THEY NEVER BOTHERED TO SAY
6 IT.

7 I THINK EVERYTHING YOU HAVE SAID
8 SHOULD BE INCORPORATED. I WILL NOW SHUT UP. BUT I
9 WANT TO BEG YOU TO CONSIDER THIS WHEN YOU WRITE
10 YOUR FINAL VERSION.

11 MR. DAVID SLADE: JUST ONE OPERA-
12 TIONAL QUESTION. DOES BEING A MEMBER OF THIS PANEL
13 AND HAVING OUR NAMES ON THE PANEL IMPLY THAT WE
14 ENDORSE THE ENTIRE PANEL REPORT?

15 MR. RICHARD PENNA: IF THERE ARE
16 SPECIFIC DISSENTS OR DISAGREEMENTS, WE WOULD HOPE
17 THAT YOU WOULD INDICATE THOSE.

18 MR. DAVID SLADE: SO YOU ARE SAYING
19 YES, UNLESS OTHERWISE NOTED?

20 MR. RICHARD PENNA: UNLESS OTHERWISE
21 NOTED. SO WHAT WE --

22 MR. STEPHEN CONNOLLY: WELL, I
23 WOULD RATHER STATE IT, PROPOSE THIS AS AN ALTER-
24 NATE STATEMENT, WHICH IS THAT THERE WAS A GENERAL
25 CONSENSUS AMONG THOSE PRESENT.

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1 NOW, ONE CAN HAVE A CONSENSUS WITH
2 ONE OUT OF TWENTY BEING OPPOSED; ONE COULD HAVE
3 A CONSENSUS WITH TWENTY, WITH UNANIMITY. BUT ONE
4 CAN ALSO PROBABLY HAVE A CONSENSUS WITH FIFTEEN
5 OUT OF TWENTY SUPPORTING SOMETHING.

6 BUT AFTER ONE GETS PAST FIVE OR SIX
7 OR SEVEN OPPOSING --

8 MR. DAVID SLADE: YOU MEAN, LIKE,
9 I WORK FOR THE PRESIDENT, HE HAS CERTAIN POLICIES --

10 MR. ANTHONY SCOVILLE: YES.

11 MR. DAVID SLADE: -- AND, YOU KNOW,
12 THAT KIND OF STUFF.

13 MR. STEPHEN CONNOLLY: I DON'T WANT
14 TO SUGGEST THAT BECAUSE IT IS THERE AND YOU ARE
15 HERE THAT THAT IS UNANIMITY. I DON'T THINK THAT
16 IS FAIR.

17 MR. ANTHONY SCOVILLE: DAVE, YOUR
18 PROBLEM IS SLIGHTLY DIFFERENT, ISN'T IT? IT IS
19 ALMOST A LEGAL PROBLEM. YOU DON'T WANT TO HAVE
20 THE ASSUMPTION THAT YOUR ASSENT TO THIS REPORT
21 IMPLIES AN ENDORSEMENT --

22 MR. DAVID SLADE: YES.

23 MR. ANTHONY SCOVILLE: -- BY THE
24 D.O.E.

25 MR. DAVID SLADE: OF COURSE.

MR. ANTHONY SCOVILLE: SO WHY SHOULDN'T YOU SAY IN YOUR THING, SAYING THAT THIS -- THE ASSENT, AS A MEMBER OF THIS PANEL, DOES WILL NOT IN ANY WAY INCORPORATE A STATEMENT THAT THIS IS THE POLICY OF THE AGENCIES, OR WHEREVER WE COME FROM. BE AFFECTED BY YOUR EFFORTS OF THE LAST TWO DAYS. AND AGAIN

MR. STEPHEN CONNOLLY: IS IT SAFE TO SAY THAT THOSE WHO WERE HERE WERE HERE AS FINAL INDIVIDUALS, AND THAT THEIR AFFILIATIONS ARE LISTED ONLY -- IT IN. WE HAVE 35 COPIES COMING DOWN OF THE LANGUAGE

MR. ANTHONY SCOVILLE: YES. PUT TOGETHER IN RES

MR. STEPHEN CONNOLLY: CONCERN AS A MATTER OF IDENTIFICATION? THAT OUT, THAT SHOULD DO IT.

MR. DAVID SLADE: THAT IS FINE. IT NEEDS TO BE SAID

MR. ANTHONY SCOVILLE: THAT'S WHAT I AM GETTING AT, EXACTLY. PRESSURE, THAT THE PARTICIPANTS IN THE

MR. RICHARD PENNA: LEONARD. WELL TOGETHER WITH

MR. LEONARD SCHINE: I JUST WANT TO EXPRESS MY APPRECIATION FOR THE WORK THAT YOU HAVE DONE. THE COMMISSIONERS, AS YOU, HAVE DIFFERENT POSITIONS AND VIEWPOINTS. AND DR. CROCETTI SPEAKS FOR HER OWN INDIVIDUAL POINT OF VIEW. THINK I

PROBABLY SPEAK SOME OF US HAVE OTHER POINTS OF VIEW. AND WE THANK YOU VERY MUCH, I AM SURE THEY WILL JOIN ME ON THAT, FOR YOUR EFFORT.

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(WHEREUPON, AT 12:01 O'CLOCK P.M.,
FRIDAY, OCTOBER 31, 1980, THE MEETING
WAS ADJOURNED)

... at the attached procedure
... held on October 29-
... a true and accurate record thereof and
... original transcript thereof.

Neal R. Gross
Neal R. Gross

NEAL R. GROSS
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C E R T I F I C A T E

This is to certify that the attached proceedings in the aforecaptioned matter were held on October 29-31, 1980 and that this is a true and accurate record thereof and that this is the original transcript thereof.

Neal R. Gross
NEAL R. GROSS

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